WOOD AND LURIN PLANNED RESIDENTIAL DEVELOPMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT

Prepared for:
CITY OF RIVERSIDE, CALIFORNIA
Community & Economic Development Department, Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522

Prepared by:
EDP Solutions, Inc.
2355 Main Street, Ste. 100
Irvine, CA 92614

FEBRUARY 2023
STATE CLEARINGHOUSE NO. 2022070337

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ACRONYMS AND ABBREVIATIONS

°C	degrees celsius
µg/m³	micrograms per cubic meter
AB 52	California Assembly Bill 52
ACM	asbestos-containing material
AF	acre-feet
amsl	above mean sea level
AQMP	Air Quality Management Plan
APN	Assessor's Parcel Number
ATCM	airborne toxic control measure
BACM	best available control measure
BACT	best available control technology
Basin	South Coast Air Quality Basin
BFE	base flood elevation
bgs	below ground surface
BMPs	Best Management Practices
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGS	California Geological Survey
CH_4	methane
CHRIS	California Historical Resources Inventory System
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
CUP	Conditional Use Permit
dB	decibel
dBA	A-weighted decibels
EIR	Environmental Impact Report
ESA	Environmental Site Assessment
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act of 1973
FMMP	Farmland Mapping and Monitoring Program
gal/day	gallons per day
GHG	greenhouse gas
GWP	global warming potential
Handbook	Air Quality and Land Use Handbook: A Community Health Perspective (CARB 2005)
HAPs	hazardous air pollutants
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan

HFCs	hydrofluorocarbons
Hot Spots Act	Air Toxics Hot Spots Information and Assessment Act of 1987
HP	horsepower
HPLV	High Pressure Low Volume
HVAC	heating, ventilating, and air conditioning
ICU	intersection capacity utilization
I	Interstate
LBP	lead-based paint
LCFS	Low Carbon Fuel Standard
LEED	Leadership in Energy and Environmental Design
LEV	Low Emission Vehicle
LID	low impact development
LOS	level of service
LSTs	localized significance thresholds
MACT	maximum available control technology
MBTA	Migratory Bird Treaty Act of 1918
MCC	Material Culture Consulting
mgd	million gallons per day
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
MPO	metropolitan planning organization
MT	metric tons
MT CO_2e	metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
NALs	numeric action levels
NCCP	Natural Community Conservation Plan
NESHAP	national emissions standards for HAPs
NH_3	ammonia
NHPA	National Historic Preservation Act of 1966
NHTSA	National Highway Traffic and Safety Administration
NOP	Notice of Preparation
NO_2	nitrogen oxide
NO_x	nitrogen oxide
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
Pb	lead
PDF	project design feature
PFCs	perfluorocarbons
$PM_{2.5}$	particulate matter less than 2.5 micrometers in aerodynamic diameter
PM_{10}	particulate matter less than 10 micrometers in aerodynamic diameter
ppb	parts per billion
PRC	Public Resources Code
PWS	public water supplier
REC	recognized environmental conditions
ROG	reactive organic gas
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SC	Standard Condition
SCAB	South Coast Air Basin

SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison Company
SCS	Sustainable Communities Strategy
SF	square feet
SF_6	sulfur hexafluoride
SIP	state implementation plan
SO_2	sulfur dioxide
SO_3	sulfur trioxide
SO_4	sulfates
SoCalGas	Southern California Gas Company
SO_x	sulfur oxides
SP	Specific Plan
SR	State Route
SRA	Source Receptor Area
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
SWRCB	Storm Water Resources Control Board
TACs	toxic air contaminants
TAZ	transportation analysis zone
TIA	Traffic Impact Analysis
tpy	tons per year
TTCP	traditional tribal cultural places
TUA	traditional use area
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UTRs	utility tractors
UWMP	Urban Water Management Plan
VdB	velocity levels expressed in decibel notation
VMT	vehicle miles traveled
VOC	volatile organic compounds
WDR	Waste Discharge Requirements
Williamson Act	California Land Conservation Act of 1965
WQC	Water Quality Certification

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1. Executive Summary

This Draft Environmental Impact Report (EIR) evaluates the environmental effects that may result from the construction and operation of the proposed Wood and Lurin Planned Residential Development Project (proposed Project). This EIR has been prepared in conformance with State and City of Riverside environmental policy guidelines for implementation of the California Environmental Quality Act (CEQA).

The EIR is being circulated for review and comment by the public and other interested parties, agencies and organizations for 45 days in accordance with Section 15087 and Section 15105 of the CEQA Guidelines. During the 45-day review period, the Draft EIR will be available for public review at the City's website: https://riversideca.gov/cedd/planning/development-projects-and-ceqa-documents or physically at the following location:

City of Riverside, Community & Economic Development Department,
Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522

A Notice of Availability of the Draft EIR was published concurrently with distribution of this document.

Project Applicant
The applicant for the Project is:

Coastal Commercial Properties
1020 2nd Street
Encinitas, CA 92024
Contact: Brett Crowder
Email: brett@coastalcomproperty.com

Lead Agency
Written comments related to environmental issues in the Draft EIR should be addressed to the Lead Agency:

Judy Egüez, Senior Planner
City of Riverside, Community & Economic Development Department, Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522
Email: JEguez@riversideca.gov

1.1 PROJECT LOCATION

The proposed Wood and Lurin Planned Residential Development Project ("Project" or "proposed Project") is located in the southern portion of the City of Riverside. The Project site is bordered by Krameria Avenue to the north and Lurin Avenue to the south. The southern portion of the Project site extends west to Wood Road and east to a private ingress and egress drive aisle on the same alignment as Dant Street.

Regional access to the Project site is provided by Interstate 215 (I-215) to the east of the site and State Route 91 (SR-91) to the northwest. Local access to the site is provided via Van Buren Boulevard and Wood Road.

The Project site consists of three parcels totaling 18.92 acres (Assessor's Parcel Numbers [APNs] 266-130-016, 266-130-024, and 266-130-023). In addition, the Project site is located in Section 29 Southwest of Township 3 South, Range 4 West of the San Bernardino Baseline and Meridian, and within the Riverside East USGS Quadrangle.

1.2 PROJECT DESCRIPTION SUMMARY

The Project would develop a Planned Residential Development consisting of 96 single family residential units, resulting in an overall density of 5.07 dwelling units per gross acre. The Project includes a 61,909 square foot lot for common recreational uses and a 10-foot-wide multi-purpose recreational trail within the landscaped setback along the eastern side of Wood Road.

The proposed single family residential tract would be accessed from both Krameria Avenue and Lurin Avenue. The proposed onsite street system would include 5-foot-wide concrete sidewalks and pedestrian street crossings to provide for safe pedestrian circulation. The proposed Project would provide garage, driveway, and on-street parking.

The following entitlements are requested for implementation of the Proposed Project: 1) Tentative Tract Map (TM 38094) to subdivide 18.92-acres into 96 single-family residential lots and lettered lots for common open space and private streets; 2) Planned Residential Development Permit (PRD) for the establishment of detached single-family dwellings, common open space and private streets; 3) Design Review (DR) of Project plan; 4) Agricultural Preserve Diminishment (AP) to diminish the Woodcrest Agricultural Preserve No. 7; and 5) Environmental Impact Report (EIR).

1.3 PROJECT OBJECTIVES

The following objectives have been identified in order to aid decision makers in their review of the proposed Project and its associated environmental impacts.

- Provide high quality residential development that is consistent with the General Plan, Orangecrest Specific Plan, and Zoning Code.
- Implement the residential provisions of the Specific Orangecrest Specific Plan Overlay intended to take effect upon diminishment of Woodcrest Agricultural Preserve No. 7 on the site.
- Establish a well-planned community that provides visual and functional compatibility with adjacent residential neighborhoods.
- Create a walkable and bikeable environment near existing bus routes.
- Provide housing to assist the City in meeting its Regional Housing Need Allocation (RHNA) as identified by Southern California Association of Governments (SCAG) and assist in reducing the housing shortage in southern California.
- Provide housing in areas that have existing family services, such as schools.

1.4 SUMMARY OF ALTERNATIVES

Section 6.0, *Alternatives*, of this EIR analyzes a range of reasonable alternatives to the proposed Project. The alternatives that are analyzed in detail in Section 6.0 are summarized below.

Alternative 1: No Project/No Build. Pursuant to Section 15126.6(e)(2) of the CEQA Guidelines, the EIR is required to "discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time the environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services." Therefore, under this alternative, no development would occur on the Project site, and it would remain in its existing condition with one vacant aged residential building.

The No Project/No Build Alternative would not have the potential to impact biological resources, cultural resources, or tribal resources. Also, this alternative would not generate noise, vibration, or Vehicle Miles Traveled (VMT). Thus, significant VMT impacts that would occur by the proposed Project would not occur by the No Project/No Build Alternative, and mitigation that would be required by the proposed Project would not be required by this alternative. Therefore, implementation of the No Project/No Build Alternative would eliminate the significant and unavoidable VMT impact and eliminate the need for mitigation.

However, the No Project/No Build Alternative would not meet any of the Project objectives. This alternative would not implement the General Plan and Orangecrest Specific Plan for the Project site; would not establish a community that would provide visual and functional compatibility with adjacent residential neighborhoods, would not create a walkable and bikeable environment near existing bus routes, and would not provide housing assist in meeting the City's Regional Housing Need Allocation (RHNA) or provide housing in areas that have family services, such as schools.

Alternative 2: No Project/Existing Zoning.

As discussed above, based on Section 15126.6(e)(2) of the CEQA Guidelines, the EIR is required to discuss the existing conditions at the time the notice of preparation is published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved. Section 15126.6(e)(3)(B) of the CEQA Guidelines states that, "the no project alternative means 'no build' wherein the existing environmental setting is maintained." This includes development consistent with existing land use and zoning designations. The site has a zoning designation of R-1-13000-SP - Single Family Residential and Specific Plan (Orangecrest) Overlay Zones and in the OSP-RA-SP – Residential Agricultural and Specific Plan (Orangecrest) Overlay Zones. Overlay Planning Area 107-B (the 3.7-acre northern portion of the site) provides for development consistent with R-1-8500 - Single Family Residential Zone upon diminishment of Woodcrest Agricultural Preserve No. 7. Overlay Planning Area 107-C (southern portion of the site) provides for approximately 10.4 acres of development consistent with R-1-13000 - Single Family Residential Zone upon diminishment of Woodcrest Agricultural Preserve No. 7 to the west and approximately 4.8 acres of development consistent with R-1-13000 - Single Family Residential Zone (no agricultural preserve) to the east.

Therefore, under this alternative, Woodcrest Agricultural Preserve No. 7 would not be diminished on the 14.1-acre portion of the site (within Overlay Planning Area 107-B and C) and would be developed with commercial farming uses. The remaining 4.8-acre southeastern portion of the site would be developed with 16 single-family residences. The number of units on the 4.8-acre portion of the site is based on the zoning code and Orangecrest Specific Plan base allowable dwelling units per gross area (not including PRD allowable increases) per Municipal Code Section 19.100.040, Residential development standards, Table 19.100.040.A, *Residential Development Standards: Single-family Residential Zones*, which provides a

maximum density of 3.4 units per acre for areas zoned R-1-13000. The No Project/Existing Zoning Alternative would decrease the number of residential units by 83 percent compared to the proposed Project.

The No Project/Existing Zoning Alternative would reduce the overall vehicular trips and vehicle miles traveled from the Project site because fewer residents would reside on the site; however, the VMT per capita would remain the same. Within the Riverside County Traffic Analysis (RIVTAM) traffic model, VMT per capita remains relatively the same throughout the entire traffic analysis zone (TAZ), as explained in the methodology of the *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled* and *Level of Service* for the City of Riverside. Any single-family residential project within the same TAZ as the proposed Project would have the same VMT per capita as the proposed Project; and would have the same limited feasibility to implement mitigation that would substantially reduce VMT. Therefore, VMT impacts would remain significant and unavoidable. In addition, consistent with the proposed Project, the No Project/Existing Zoning Alternative would remove vegetation, disturb site soils, and generate construction vibration. Therefore, although on a smaller portion of the site, implementation of the same mitigation measures would be required to reduce impacts related to biological resources, cultural resources, construction vibration, and tribal cultural resources to a less than significant level.

The No Project/Existing Zoning Alternative would meet the Project objectives, but not to the same extent as the proposed Project. would provide fewer housing units to meet the City's RHNA allocation, and fewer residences in an area that has family services, such as schools.

Alternative 3: Reduced Project Alternative. Under this alternative, a reduction in the number of residential units would be built. The reduced number of units is based on the zoning code and Orangecrest Specific Plan base allowable dwelling units per gross area (not including PRD allowable increases) per Municipal Code Section 19.100.040, Residential development standards, Table 19.100.040.A, *Residential Development Standards: Single-family Residential Zones*, which provides a maximum density of 5.1 units per acre for areas zoned R-1-8500 and a maximum density of 3.4 units per acre for areas zoned R-1-13000.

Thus, under this alternative the 3.7-acre northern portion of the site with the allowable R-1-8500 zoning (with implementation of the Orangecrest Specific Plan and diminishment of the Woodcrest Agricultural Preserve No. 7) would be developed with 19 single-family residences; and the southern 15.1-acre portion of the site that is zoned R-1-13000 would be developed with 51 single-family residences (with implementation of the Orangecrest Specific Plan and diminishment of the Woodcrest Agricultural Preserve No. 7). A total of 70 single-family residences would be developed by the Reduced Project Alternative, which is 26 fewer residences (a 27% reduction) than would be developed by the proposed Project. This alternative would provide development consistent with the General Plan and Orangecrest Specific Plan.

The Reduced Project Alternative would reduce the overall vehicular trips and vehicle miles traveled from the Project site because fewer residents would reside on the site; however, the VMT per capita would remain the same. Within the RIVTAM traffic model, VMT per capita remains relatively the same throughout the entire TAZ, as explained in the methodology of the *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled* and *Level of Service* for the City of Riverside. Any single-family residential project within the same TAZ as the proposed Project would have the same VMT per capita as the proposed Project; and would have the same limited feasibility to implement mitigation that would substantially reduce VMT. Therefore, VMT impacts would remain significant and unavoidable. In addition, consistent with the proposed Project, the Reduced Project Alternative would remove vegetation, disturb site soils, and generate construction vibration. Therefore, implementation of the same mitigation measures would be required to reduce impacts related to biological resources, cultural resources, construction vibration, and tribal cultural resources to a less than significant level.

The Reduced Project Alternative would meet the Project objectives, but not to the same extent as the proposed Project. The Reduced Project Alternative would provide fewer housing units to meet the City's RHNA allocation, and fewer residences in an area that has family services, such as schools.

Environmentally Superior Alternative: CEQA requires a lead agency to identify the "environmentally superior alternative" when significant environmental impacts result from a proposed Project. The Environmentally Superior Alternative for the proposed Project would be the No Project/No Build Alternative. The No Project/No Build alternative would avoid the significant and unavoidable impacts of the Project and would not be required to implement the mitigation measures related to biological resources, cultural resources, vibration, and tribal cultural resources that are identified in Chapter 5.0 of this EIR. However, this alternative would not implement the City's General Plan or the Orangecrest Specific Plan and would not provide additional housing within the City to meet the City's RHNA allocation or assist in reducing the housing shortage in southern California.

Additionally, CEQA Guidelines Section 15126.6(3)(1) states:

> *The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. (Emphasis added).*

Therefore, pursuant to CEQA, because the No Project/No Build Alternative has been identified as the Environmentally Superior Alternative, the Environmentally Superior Alternative among the other alternatives would be the Reduced Project Alternative because it would allow for development of the site and would meet some of the Project objectives compared to the No Project/No Build Alternative.

1.5 SUMMARY OF IMPACTS

Table 1-1 summarizes the conclusions of the environmental analysis contained in this EIR. The level of significance of impacts after the City's standard Conditions of Approval and proposed mitigation measures are applied are identified as significant and unavoidable, less than significant, and no impact. Relevant standard conditions of approval are identified, and mitigation measures are provided for all potentially significant impacts.

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Table 1-1: Summary of Impacts, Mitigation Measures, and Level of Significance

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
5.1 Biological Resources				
Impact A: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	• City Municipal Code Section 16.72.040, MSHCP Mitigation Fee • City Municipal Code Section 16.40.040, Threatened and Endangered Species Fees	Potentially Significant	**Mitigation Measure BIO-1: Burrowing Owl.** Prior to commencement of construction activities (i.e., demolition, earthwork, clearing, and grubbing), a 30-day pre-construction survey for burrowing owls shall occur in accordance with the Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan. The results of the single one-day survey shall be submitted to the City Planning Division, for review and acceptance, prior to obtaining a grading permit. If burrowing owl are not detected during the pre-construction survey, no further mitigation is required. If burrowing owl are detected during the pre-construction survey, a Burrowing Owl Protection and Relocation Plan shall be prepared for and approved by the Regional Conservation Authority (RCA) and the Wildlife Agencies prior to initiating ground disturbance. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey shall again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed and shall be submitted to the City Planning Division, for review and acceptance.	Less than Significant
Impact B: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish		No Impact	None Required	No Impact

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
and Wildlife or U.S. Fish and Wildlife Service?				
Impact C: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		No Impact	None Required	No Impact
Impact D: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		Potentially Significant	**Mitigation Measure BIO-2: Nesting Birds.** To the extent possible, vegetation removal shall occur outside of the general bird nesting season, which is February 15 through September 15; and January 1 through August 31 for raptors. If vegetation removal, site clearing, and grubbing) must occur during the general bird nesting season, a qualified biologist shall perform a pre-construction survey of potential nesting habitat to confirm the absence of active nests belonging to migratory birds and raptors afforded protection under the Migratory Bird Treaty Act and Fish and Game Code. The pre-construction survey shall be performed no more than three days prior to the commencement of construction activities. The results of the pre-construction survey shall be documented by the qualified biologist. If construction is inactive for more than seven days, an additional survey shall be conducted. If the qualified biologist determines that no active migratory bird or raptor nests occur, the activities shall be allowed to proceed without any further requirements. If active nests of birds are found during the surveys, a species-specific no-disturbance buffer zone shall be established by a qualified biologist around active nests until said qualified	Less than Significant

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
			biologist determines that all young have fledged (i.e., no longer reliant upon the nest).	
Impact E: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		Less than Significant	None Required	Less than Significant
Impact F: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?		Potentially Significant	**Mitigation Measure MM BIO-1: Burrowing Owl.** Listed previously.	Less than Significant
Cumulative		Potentially Significant	Mitigation Measures BIO-1 and BIO-2	Less than Significant
5.2 Cultural Resources				
Impact A: Would the Project a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?		Less than Significant	None Required	Less than Significant
Impact B: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		Potentially Significant	**Mitigation Measure MM CUL-1: Archaeological Monitoring.** At least 30 days prior to application for a grading permit and before any grading, excavation, and/or ground disturbing activities take place, the developer/applicant shall retain a Secretary of Interior Standards qualified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources. The Project archaeologist, in consultation with consulting tribes, the Developer, and the City, shall develop and implement an Archaeological Monitoring Plan to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the Project site. Details in the plan shall include:	Less than Significant

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
			a. Project grading and development scheduling; b. The development of a rotating or simultaneous schedule in coordination with the developer/applicant and the Project archaeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation, and ground-disturbing activities on the site, including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists; c. The protocols and stipulations that the Applicant, tribes, and project archaeologist/paleontologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits, or nonrenewable paleontological resources that shall be subject to a cultural resources evaluation; d. In conjunction with the Archeological Monitor(s), the Native American Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources; e. Treatment and final disposition of any cultural and paleontological resources, sacred sites, and human remains if discovered on the project site; and f. The requirements (including scheduling and timing) of a preconstruction Cultural Sensitivity Training.	

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
			Mitigation Measure MM CUL-2: Native American Coordination. Prior to grading permit issuance, if there are any changes to Project site design and/or proposed grades, the Applicant and the City shall contact consulting tribes to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the City, developer/applicant, and consulting tribes to discuss any proposed changes and review any new impacts and/or potential avoidance/preservation of any identified cultural resources on the Project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place any cultural and paleontological resources that are identified on the Project site if the site design and/or proposed grades should be revised. In the event of inadvertent discoveries of archaeological resources, work shall temporarily halt until agreements are executed with consulting tribe, to provide tribal monitoring for ground disturbing activities. **Mitigation Measure CUL-3: Native American Monitor:** Prior to issuance of grading permit, the developer/permit applicant shall engage each of the consulting tribe(s) regarding Native American Monitoring. The developer/permit applicant shall provide evidence to the City that they have reached an agreement with each of the consulting tribe(s) regarding the following: a. The treatment of known cultural resources; b. The treatment and final disposition of any tribal cultural resources, sacred sites, human remains or archaeological	

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
			and cultural resources inadvertently discovered on the Project site; c. Project grading, ground disturbance (including but not limited to excavation, trenching, cleaning, grubbing, tree removals, grading and trenching) and development scheduling; and d. The designation, responsibilities, and participation of professional Tribal Monitor(s) during grading, excavation and ground disturbing activities. If the developer/permit applicant and the consulting tribe(s) are unable to reach an agreement regarding compensation, the mitigation measure shall be considered satisfied if the developer/permit applicant provides sufficient documented evidence that they have made a reasonable good faith effort to reach an agreement, as determined by the City with the consulting tribes with regards to items a-d, as listed above). **Mitigation Measure MM CUL-4: Treatment and Disposition of Cultural Resources.** In the event that Native American cultural resources are inadvertently discovered during the course of grading for this Project, the following procedures will be carried out for treatment and disposition of the discoveries: 1. **Consulting Tribes Notified:** within 24 hours of discovery, the consulting tribe(s) shall be notified via email and phone. The developer shall provide the city evidence of notification to consulting tribes. Consulting tribe(s) will be allowed access	

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
			to the discovery, in order to assist with the significance evaluation. **2. Temporary Curation and Storage:** During the course of construction, all discovered resources shall be temporarily curated in a secure location on site or at the offices of the Project archaeologist. The removal of any artifacts from the Project site will need to be thoroughly inventoried with tribal monitor oversight of the process; and **3. Treatment and Final Disposition:** The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The Applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same: a. Preservation-in-place of the cultural resources, if feasible as determined through coordination between the project archeologist, developer/applicant, and consulting tribal monitor(s). Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources in perpetuity; b. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed,	

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
			with an exception that sacred items, burial good and Native American human remains are excluded. No cataloguing, analysis, or other studies may occur on human remains and grave goods. Any reburial process shall be culturally appropriate. List of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV report shall be prepared by the project archeologist and shall be filled with the City under a confidential cover and not subject to a Public Records Request. The Tribe(s) should be able to access these areas in the future through enforceable agreement; c. If reburial is not feasible, a curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation; and d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the Project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the	

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
			property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Riverside, Eastern Information Center, and consulting tribes. **Mitigation Measure CUL-5: Cultural Sensitivity Training.** The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. Only construction personnel who have received this training can conduct construction and disturbance activities in sensitive areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.	
Impact C: Would the Project disturb any human remains, including those interred outside of formal cemeteries?	• California Health and Safety Code Section 7050.5 • Public Resources Code Section 5097.5	Less than Significant	**Condition of Approval: Discovery of Human Remains.** In the event that human remains (or remains that may be human) are discovered at the Project site during grading or earthmoving, the construction contractors, Project Archaeologist, and/or designated Native American Monitor shall immediately	Less than Significant

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
	• Public Resources Code Section 5097.98		stop all activities within 100 feet of the find. The Project proponent shall then inform the Riverside County Coroner and the City of Riverside Community & Economic Development Department immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b) unless more current State law requirements are in effect at the time of the discovery. Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). The coroner shall contact the NAHC to determine the most likely descendant(s). The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The Disposition of the remains shall be overseen by the most likely descendant(s) to determine the most appropriate means of treating the human remains and any associated grave artifacts. The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The County Coroner will notify the Native American Heritage Commission in accordance with California Public Resources Code 5097.98. According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American	

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
			cemeteries is a felony (Section 7052). The disposition of the remains shall be determined in consultation between the Project proponent and the MLD. In the event that the Project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).	
Cumulative		Potentially Significant	Condition of Approval Discovery of Human Remains and Mitigation Measures MM CUL-1 through CUL-5	Less than Significant
5.3 Noise				
Impact A: Would the Project generate a substantial temporary or permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	• City Municipal Code Section 7.25.010, Exterior Sound Level Limits • City Municipal Code Section 7.30.015, Interior Noise Level Limits • City Municipal Code Section 7.35.020, Exemptions	Less than Significant	None Required	Less than Significant
Impact B: Would the Project generate excessive groundborne vibration or groundborne noise levels?		Potentially Significant	**Mitigation Measure MM NOI-1: Construction Vibration:** Construction plans, and specifications, and permits for the Project shall specify that bulldozers (greater than 80,000 pounds) shall not be used within 68 feet of offsite residential structures and vibratory rollers shall not be used within 120 feet of offsite residential structures. The City will ensure plans and specifications include requirements during plan check prior to grading permit issuance. Construction activity that must occur within 120 feet of the offsite residential structures would need to be performed with small rubber-tired or alternative equipment that does not exceed	Less than Significant

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
			the vibration threshold of 0.2 in/sec PPV at offsite residences. The site shall be staked (or other visible demarcation) to mark the limits for bulldozing and vibratory rolling activities while equipment is in use.	
Cumulative		Less than Significant	None Required	Less than Significant
5.4 Transportation				
Impact A: 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 Required	Less than Significant
Impact B: Would the Project would conflict and be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?		Significant	**Mitigation Measure MM T-1 Implement Subsidized or Discounted Transit Program:** The Project will implement a subsidized transit pass program. The Project applicant shall establish an account in the amount of $50,000, to be administered by the Homeowners Association (HOA) to provide free or reduced cost transit passes to Project residents for a period of at least 10 years from project occupancy. Implementation of the subsidized transit pass program by the HOA shall be included in the Project Covenants, Conditions and Restrictions (CC&R's), and the fund shall be established prior to occupancy of the first unit of the Project. The program shall provide up to $60 for a Riverside Transit Agency monthly pass or up to $100 for a Metrolink monthly pass to qualified residents who request transit reimbursement from the HOA. Residents who participate in the subsidized transit pass program would also be eligible to receive reimbursement for use of a ride sharing service (i.e., Uber or Lyft) for an emergency ride home.	Significant and Unavoidable

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
			The HOA shall provide an annual report of the transit pass program that includes the number of reimbursement requests, the amount disbursed to residents, and the remaining amount in the transit pass account. If the program experiences low participation, the City shall have the discretion to direct the HOA to redirect the funds for implementation of another measure intended to reduce VMT by Project residents. Such measures could include, but are not limited to, offsite or onsite pedestrian, bicycle or transit improvements, funding toward a bikeshare station on or near the site, implementation of further traffic calming measures, or other feasible and implementable TDM measures. The subsidized transit pass program will be administered by the Project Homeowners Association (HOA) and would rely on a fund, established by the Project applicant, to purchase transit passes for Project residents. **Mitigation Measure MM T-2 Implement Commute Trip Reduction Marketing:** The Project will implement a CTR marketing program via information provided by the HOA and will educate residents about their travel choices beyond driving such as carpooling, transit, walking and bicycling. The Project HOA shall provide up to date travel information in a publicly accessible location, such as a website or on-site bulletin board. The CTR Marketing program shall provide information on the Subsidized Transit Pass program as well as other travel options such as transit routes and schedules, bikeway maps, and location of nearby bike and carshare stations. The information shall be reviewed and updated as needed and no less than every six months.	

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Standard Conditions of Approval / Mitigation Measures	Significance after Mitigation
Impact C: 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)?		Less than Significant	None Required	Less than Significant
Impact D: Would the Project would not result in inadequate emergency access?		Less than Significant	None Required	Less than Significant
Cumulative		Significant	No Feasible Measures	Significant and Unavoidable
5.5 Tribal Cultural Resources				
Impact A: Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in public resources code section 5020.1(k)?	• California Health and Safety Code Section 7050.5 • California Public Resources Code Sections 21073 et seq. (AB 52) • California Public Resources Code Sections 5097.9-5097.99	Potentially Significant	**Condition of Approval: Discovery of Human Remains.** Listed previously. **Mitigation Measure MM CUL-1: Archaeological Monitoring.** Listed previously.	Less than Significant
Impact B: Would the Project cause a substantial adverse change in the significance of 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, that considers the significance of the resource to a California Native American tribe?		Potentially Significant	**Mitigation Measure MM CUL-3: Native American Monitor:** Listed previously. **Mitigation Measure MM CUL-4: Treatment and Disposition of Cultural Resources.** Listed previously. **Mitigation Measure MM CUL-5: Cultural Sensitivity Training.** Listed previously.	Less than Significant
Cumulative		Potentially Significant	Condition of Approval Discover of Human Remains, Mitigation Measures CUL-1 through CUL-5.	Less than Significant

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2. Introduction

This Draft Environmental Impact Report (EIR) evaluates the environmental effects that may result from the construction and operation of the proposed Project.

This EIR has been prepared by the City of Riverside in its capacity as Lead Agency, as that term is defined in Section 15367 of the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.) and in conformance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.). This EIR has been prepared to identify, analyze, and mitigate the significant environmental effects of the proposed Project. "Project," as defined by the State CEQA Guidelines, means:

> the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: (1)…enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100–65700." (14 Cal. Code of Reg. § 15378(a).)

The EIR analyzes buildout at a project level of detail, based upon the entitlement applications that are being considered by the City, compared to the existing conditions.

CEQA requires each EIR to reflect the independent judgment of the Lead Agency, including but not limited to the thresholds of significance used to analyze Project impacts, analyses and conclusions regarding the level of significance of impacts both before and after mitigation, the identification and application of mitigation measures to avoid or reduce Project-related impacts, and the consideration of alternatives to the proposed Project. In preparing this EIR, the City of Riverside has employed CEQA and environmental technical specialists; however, the analyses and conclusions set forth in this EIR reflect the independent judgment of the City as Lead Agency.

2.1 PURPOSE OF AN EIR

CEQA requires that all state and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority prior to taking action on those projects. Pursuant to the provisions of CEQA Guidelines Section 15121(a), this EIR is intended as an informational document to inform public agency decision makers and the general public of the significant environmental effects of the proposed Project, identify possible ways to avoid or minimize those significant effects, and describe reasonable alternatives to the Project that might avoid or lessen significant environmental effects. Thus, this EIR is intended to aid the review and decision-making process.

The CEQA Guidelines provide the following information regarding the purpose of an EIR:

- Project Information and Environmental Effects. An EIR is an informational document that will inform public agency decision-makers and the public generally of the significant environmental effect(s) of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information that may be presented to the agency (CEQA Guidelines Section 15121(a)).
- Standards for Adequacy of an EIR. An EIR should be prepared with a sufficient degree of analysis to enable decision makers to make an intelligent decision that takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible.

> Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure (CEQA Guidelines Section 15151).

As a public disclosure document, the purpose of an EIR is not to recommend either approval or denial of a project, but to provide information regarding the physical environmental changes that would result from an action being considered by a public agency to aid in the agency's decision-making process.

2.2 EIR SCOPE AND CONTENT

Impacts Found to Be Potentially Significant. The City determined that an EIR should be prepared for the Wood and Lurin Planned Residential Development Project from the determinations of the Initial Study. As a result, a Notice of Preparation (NOP) was circulated between July 19, 2022 and August 18, 2022 for the required 30-day review period. The purpose of the NOP was to solicit early comments from public agencies with expertise in subjects that are discussed in this Draft EIR. The NOP and written responses to the NOP are contained in Appendix A of this Draft EIR. The City of Riverside also held a scoping meeting for the Project to solicit oral and written comments from the public and public agencies. The public scoping meeting was held on August 3, 2022. No comments were received during the meeting. Topics requiring a detailed level of analysis evaluated in this EIR have been identified based upon the Initial Study and the responses to the NOP. The City determined through the initial review process that impacts related to the following topics are potentially significant and required a detailed level of analysis in this EIR:

- Biological Resources
- Cultural Resources
- Noise
- Transportation
- Tribal Cultural Resources

Impacts Found Not to Be Significant. CEQA Guidelines Section 15126.2(a) states that "[a]n EIR shall identify and focus on the significant effects on the environment". Topics that have been determined not to be significant and therefore are not discussed in detail in the EIR were identified based upon the responses to the NOP and a review of the Project by the City of Riverside. The City determined through the Initial Study and NOP process that impacts related to the following topics are not potentially significant and are not required to be analyzed in this EIR:

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems
- Wildfire

CEQA Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons that various possible effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. A summary is provided in Section 7 of this EIR, *Effects Found Not Significant.* As allowed by CEQA Guidelines Section 15128, statements related to the above listed topic areas are provided in the Initial Study, which is Included as Appendix A.

2.3 EIR PROCESS

Notice of Preparation/Initial Study

Pursuant to the requirements of CEQA, the City of Riverside, as Lead Agency, prepared a Notice of Preparation (NOP) for the proposed Project, which was distributed on July 19, 2022 for a 30-day public review and comment period that ended on August 18, 2022. The NOP requested members of the public and public agencies to provide input on the scope and content of environmental impacts that should be included in the EIR being prepared. Comments received on the NOP are included in Appendix A and summarized in Table 2-1, which also includes a reference to the EIR section(s) in which issues raised in the comment letters are addressed.

Table 2-1: Summary of NOP/Initial Study Comment Letters

Comment Letter and Comment	Relevant EIR Section
State Agencies	
State Native American Heritage Commission, July 22, 2022	
This letter states that compliance with AB 52 applies to any project for which a notice of preparation, notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015. In addition, if the project involves the adoption of an amendment to a general plan or a specific plan, or the designation of proposed designation of open space, on or after March 1, 2015, it may also be subject to Senate Bill 18. The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed Project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. A brief summary of portions of AB 52 and SB 18, as well as the NAHC's recommendations for conducting cultural resource assessments is provided. Examples of mitigation measures that, if feasible, would avoid or minimize significant adverse impacts to tribal cultural resources are also provided.	Section 5.5, *Tribal Cultural Resources*
Organizations	
Yuhaaviatam of San Manuel Nation, August 23, 2022	
This letter states that the Project has been reviewed and it is located outside of Serrano ancestral territory and, as such, the tribe will not be requesting consultation or to participate in the scoping, development, or review of documents for the Project.	Section 5.5, *Tribal Cultural Resources*

Public Scoping Meeting

Pursuant to Section 15082(c)(1) of the CEQA Guidelines, the City of Riverside hosted a public scoping meeting for members of the public and public agencies to provide input as to the scope and content of the environmental information and analysis to be included in the EIR for the proposed Project. A virtual scoping meeting was held on August 3, 2022 at 6:00 p.m. via Zoom. The meeting was attended by one person, who was the Project Applicant, and no issues or concerns were raised.

Public Review of the Draft EIR

The City of Riverside issued a Notice of Completion with the Governor's Office of Planning and Research, State Clearinghouse, indicating that this EIR has been completed and is available for review. A Notice of Availability of the Draft EIR was published concurrently with distribution of this document. The Draft EIR is

being circulated for review and comment by the public and other interested parties, agencies and organizations for 45 days in accordance with Section 15087 and Section 15105 of the CEQA Guidelines. During the 45-day review period, the Draft EIR is available for public review digitally on the City's website: (https://riversideca.gov/cedd/planning/development-projects-and-ceqa-documents) or physically at the following locations:

City of Riverside
Community & Economic Development Department
Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522

Riverside Public Library
20010-B Orange Terrace Parkway
Riverside, CA 92508

Written comments related to environmental issues in the Draft EIR should be addressed to:

Judy Egüez, Senior Planner
City of Riverside, Community & Economic Development Department
Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522
Email: JEguez@riversideca.gov

Final EIR

Upon completion of the 45-day review period, written responses to all comments related to the environmental issues in the Draft EIR will be prepared and incorporated into a Final EIR. The written responses to comments will be made available to the public agencies, and posted on the City's website as part of the Final EIR, at least 10 days prior to the public hearing at which the certification of the Final EIR will be considered. These comments, and their responses, will be included in the Final EIR for consideration by the City, as well as other responsible agencies per CEQA. The Final EIR may also contain corrections and additions to the Draft EIR, and other information relevant to the environmental issues associated with the Project. The Final EIR will be available for public review prior to its certification by the City. Notice of the availability of the Final EIR will be sent to all who commented on the Draft EIR.

2.4 ORGANIZATION OF THIS DRAFT EIR

The Draft EIR is organized into the following Sections. To help the reader locate information of interest, a brief summary of the contents of each chapter of this Draft EIR is provided. Refences are provided at the end of each Section and chapter of the Draft EIR.

- **Table of Contents:**
- **Section 1 Executive Summary:** According to the California Code of Regulations (CCR) Title 14, Section 15123, "An EIR shall contain a brief summary of the proposed actions and its consequences. The language of the summary should be as clear and simple as reasonably practical.
  The summary shall identify:
  (1) Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect;
  (2) Areas of controversy known to the lead agency including issues raised by agencies and the public; and

(3) Issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects."

Additionally, the Executive Summary within this document establishes Project Objectives.

- **Section 2 Introduction:** This section provides an overview of the purpose and use of the EIR, the scope of this EIR, a summary of the legal authority for the EIR, a summary of the environmental review process, and the general format of the document.
- **Section 3 Project Description:** This section provides a detailed description of the proposed Project, its objectives, a list of Project-related discretionary actions, and a list of agencies expected to use the EIR for Project consideration.
- **Section 4 Environmental Setting:** This section provides a discussion of the existing physical environmental conditions within the Project area.
- **Section 5 Environmental Impact Analysis:** This section includes a summary of the existing statutes, ordinances and regulations that apply to the environmental impact area being discussed; the analysis of the Project's direct and indirect environmental impacts on the environment, including potential cumulative impacts that could result from the proposed Project; any applicable Project design features; standard conditions and plans, policies, and programs that could reduce potential impacts; and the feasible mitigation measures that would reduce or eliminate the significant adverse impacts identified. Impacts that cannot be mitigated to less than significant are identified as significant and unavoidable.

  This section also summarizes the significant and unavoidable impacts that would occur from implementation of the proposed Project and provides a summary of the environmental effects of the implementation of the proposed Project that were found not to be significant. Additionally, this section provides a discussion of various CEQA-mandated considerations and other CEQA topics including growth-inducing impacts and the identification of significant irreversible changes that would occur from implementation of the proposed Project.

  Refences are provided at the end of each chapter in section
- **Section 6 Alternatives:** This section describes and analyzes a reasonable range of alternatives to the proposed Project and satisfies Section 15126.6 of the CEQA Guidelines. The CEQA-mandated No Project Alternative is included along with alternatives that would reduce one or more significant effects of the proposed Project. As required by the CEQA Guidelines, the environmentally superior alternative is also identified.
- **Section 7 Effects Found Not Significant:** This section includes topics that have been determined not to be significant, and therefore, are not discussed in detail in the EIR. These topics were identified based upon the responses to the NOP and a review of the Project by the City of Riverside.

Section 8 EIR Preparers: This section lists authors of the Draft EIR and City staff that assisted with the preparation and review of this document. This section also lists other people that were contacted for information that is included in this EIR document.

2.5 INCORPORATION BY REFERENCE

In accordance with Section 15150 of the CEQA Guidelines and to reduce the size of the report, the following documents are hereby incorporated by reference into this EIR and are available for public review at the City of Riverside Community & Economic Development Department, Planning Division, located at 3900 Main

Street, 3rd Floor Riverside, CA 92522. A brief summary of the scope and content of these documents is provided below.

City of Riverside General Plan: The City of Riverside General Plan provides strategic, long-range planning guiding growth for the City's land uses. Each element of the General Plan addresses a certain aspect of the City's growth and development. The individual elements identify goals and policies for existing and future conditions within the City. The following elements comprise the City's General Plan:

- Land Use and Urban Design Element
- Circulation and Community Mobility Element
- Housing Element
- Arts and Culture Element
- Education Element
- Public Safety Element
- Noise Element
- Open Space and Conservation Element
- Air Quality Element
- Public Facilities and Infrastructure Element
- Park & Recreation Element
- Historic Preservation Element

The General Plan is utilized throughout this document as a fundamental planning document governing development within the City. Background information and policy information from the General Plan is cited in various sections of this EIR. The GP 2025 is available online at: https://riversideca.gov/cedd/planning/city-plans/general-plan-0

City of Riverside General Plan Final EIR: The City of Riverside General Plan 2025 Final Program Environmental Impact Report (GP 2025 FPEIR) was certified in 2007. The GP 2025 FPEIR provided a first tier analysis of the potential environmental effects of the adoption and implementation of the proposed General Plan, adoption and implementation of the comprehensive update of the Zoning Code and Subdivision Code, an amendment to the Noise Code, and adoption and implementation of the Citywide Design and Sign Guidelines. The GP 2025 FPEIR contains information regarding the environmental setting within the City and is available online at: https://riversideca.gov/cedd/planning/city-plans/general-plan-0.

City of Riverside Orangecrest Specific Plan: The Orangecrest Specific Plan was adopted by the Riverside County Board of Supervisors in 1984 and was later annexed into the City of Riverside. The Specific Plan provides for an integrated community of residential, commercial, schools, and parks. The Project site is located within the Orangecrest Specific Plan area and planned land uses for the site are provided. Land use and regulatory information from the Specific Plan is cited in various sections of this EIR. The Orangecrest Specific Plan is available online at: https://riversideca.gov/cedd/planning/city-plans/specific-plans-0.

Riverside Municipal Code: The City of Riverside Municipal Code consists of regulatory, penal, and administrative ordinances of the city. The Municipal Code guides the City's control of land uses, in concert with General Plan goals, objectives, and policies. The City's Zoning Code (Title 19 of the Municipal Code) identifies land uses permitted and prohibited according to the zoning category of particular parcels. The Municipal Code and Zoning Code are utilized throughout this document as a regulatory document governing development and land use activities within the City. Regulatory information from the Municipal Code and Zoning Code is cited in various sections of this EIR. The Municipal Code is available online at: http://www.riversideca.gov/municode/.

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3. Project Description

3.1 PROJECT LOCATION AND BACKGROUND

The proposed Wood and Lurin Planned Residential Project ("Project" or "proposed Project") is located in the southern portion of the City of Riverside, as shown on Figure 3-1, *Regional Location*. The Project site is bordered by Krameria Avenue to the north and Lurin Avenue to the south. The southern portion of the Project site extends west to Wood Road and east to a private ingress and egress drive aisle on the same alignment as Dant Street.

Regional access to the Project site is provided by Interstate 215 (I-215) to the east of the site and State Route 91 (SR-91) to the northwest. Local access to the site is provided Van Buren Boulevard and Wood Road.

The Project site consists of three parcels totaling 18.92 acres (Assessor's Parcel Numbers [APNs] 266-130-016, 266-130-024, and 266-130-023). In addition, the Project site is located in Section 29 Southwest of Township 3 South, Range 4 West of the San Bernardino Baseline and Meridian, and within the Riverside East USGS Quadrangle.

The Project site has been previously disturbed and is generally undeveloped and vacant, except for a vacant single-family residence and associated shed structure that is located at the southeast corner of the project site, along Lurin Avenue. The undeveloped area includes sparse vegetation of shrubs and trees. The Project site is shown on Figure 3-2, *Aerial View*.

3.2 SITE LAND USE AND ZONING

The Project site has been previously disturbed and is generally undeveloped and vacant, except for a vacant single-family residence and associated shed structure that is on the northwest corner of Lurin Avenue and Dant Street. The undeveloped area includes sparse vegetation of shrubs and trees. The Project site is shown on Figure 3-2, *Aerial View*.

General Plan Designation: The northern portion of the Project site (APN 266-130-024 and a portion of 266-130-023) has a General Plan land use designation of MDR - Medium Density Residential that allows up to 6.2 units per acre or 8 units per acre with a Planned Residential Development (PRD); and the southern portion of the site (a portion of APN 266-130-023 and all of APN 266-130-016) has a General Plan land use designation of LDR - Low Density Residential that allows up to 4.1 units per acre or 6 units per acre with a PRD. The Project site is also within the Orangecrest Specific Plan Planning Areas 107-C and 107-B (Figure 3-3, *Existing General Plan Designations*).

Zoning: The site has a zoning designation of R-1-13000-SP - Single Family Residential and Specific Plan (Orangecrest) Overlay Zones and in the OSP-RA-SP – Residential Agricultural and Specific Plan (Orangecrest) Overlay Zones. Overlay Planning Area 107-B (northern portion of the site) provides for development consistent with R-1-8500 - Single Family Residential Zone upon diminishment of Woodcrest Agricultural Preserve No. 7 and Overlay Planning Area 107-C (southern portion of the site) provides for development consistent with R-1-13000 - Single Family Residential Zone upon diminishment of the existing Woodcrest Agricultural Preserve No. 7 over the southwestern portion of the site (Figure 3-4, *Existing Zoning Designation and Specific Plan Planning Areas*).

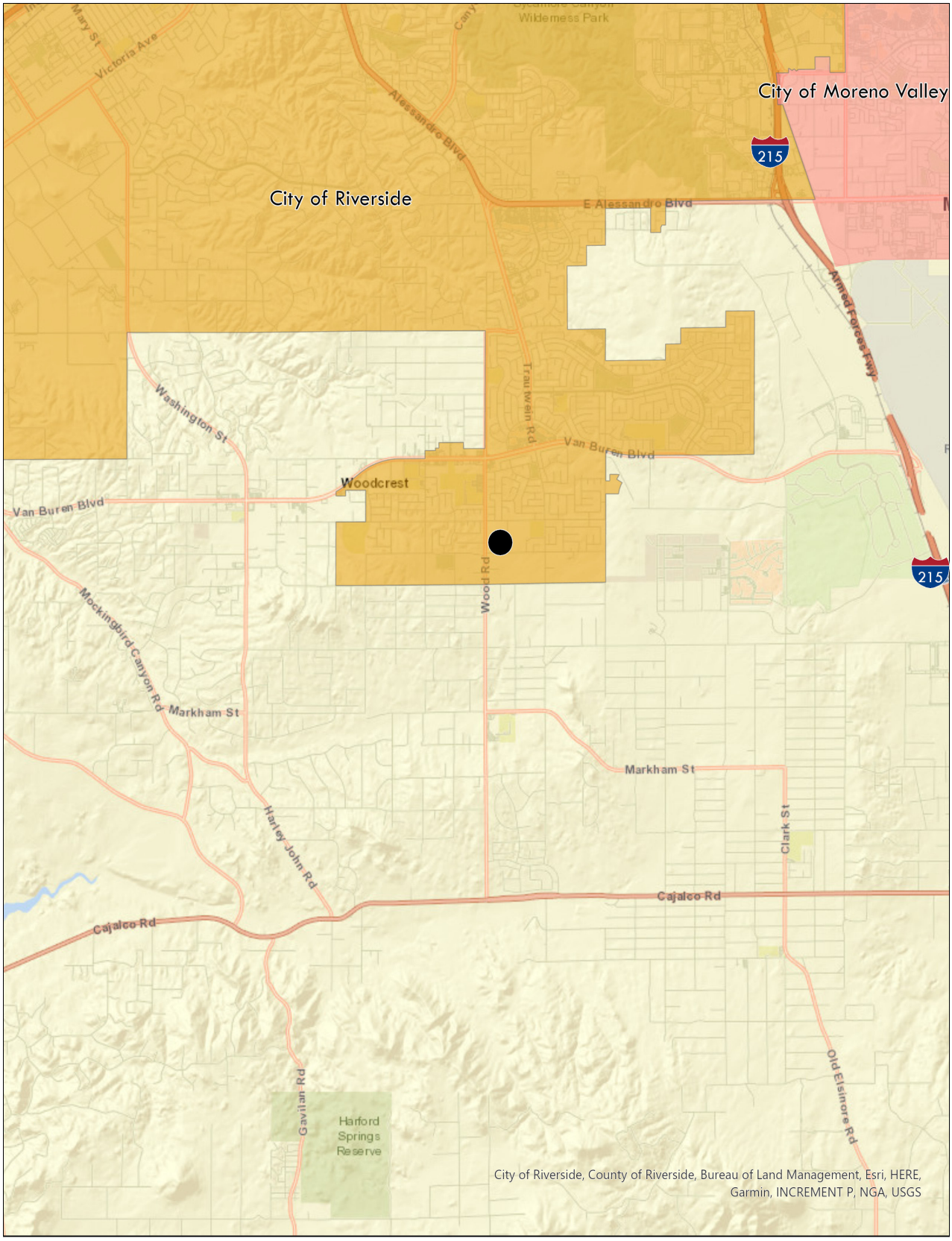
3.3 SURROUNDING LAND USE AND ZONING

The Project site is located within an urbanizing area that is either developed with residential uses or planned for residential development. The existing General Plan land use designations and zoning designations of the site and adjacent areas are listed in Table 3-1.

Table 3-1: Site and Surrounding Land Use and Zoning Designations

	Existing Land Use	General Plan Designation	Zoning Designation
Project Site	Vacant/One Single Family Residence	Medium Density Residential (MDR)/Low Density Residential (LDR)	R-1-13000-SP – Single Family Residential and Specific Plan (Orangecrest) Overlay Zones; OSP-RA-SP – Residential Agricultural and Specific Plan (Orangecrest) Overlay Zones
North	Single Family Residential	Medium Density Residential (MDR)	R-1-7000-SP - Single Family Residential Zone and Specific Plan (Orangecrest) Overlay Zones
East	Single-Family Residential	Medium Density Residential (MDR)/Low Density Residential (LDR)	R-1-8500-SP – Single Family Residential and Specific Plan (Orangecrest) Overlay Zones; R-1-13000-SP – Single Family Residential and Specific Plan (Orangecrest) Overlay Zones
South	New Single Family Residential (previously Vacant)	Low Density Residential (LDR)	R-1-13000-SP – Single Family Residential and Specific Plan (Orangecrest) Overlay Zones
West	Single Family Residential	Medium Density Residential (MDR)/Low Density Residential (LDR)	R-1-8500-SP – Single Family Residential and Specific Plan (Orangecrest) Overlay Zones; R-1-13000-SP – Single Family Residential and Specific Plan (Orangecrest) Overlay Zones

Regional Location



● Project Site

N

Wood and Lurin Planned Residential Development Project Draft EIR

Figure 3-1

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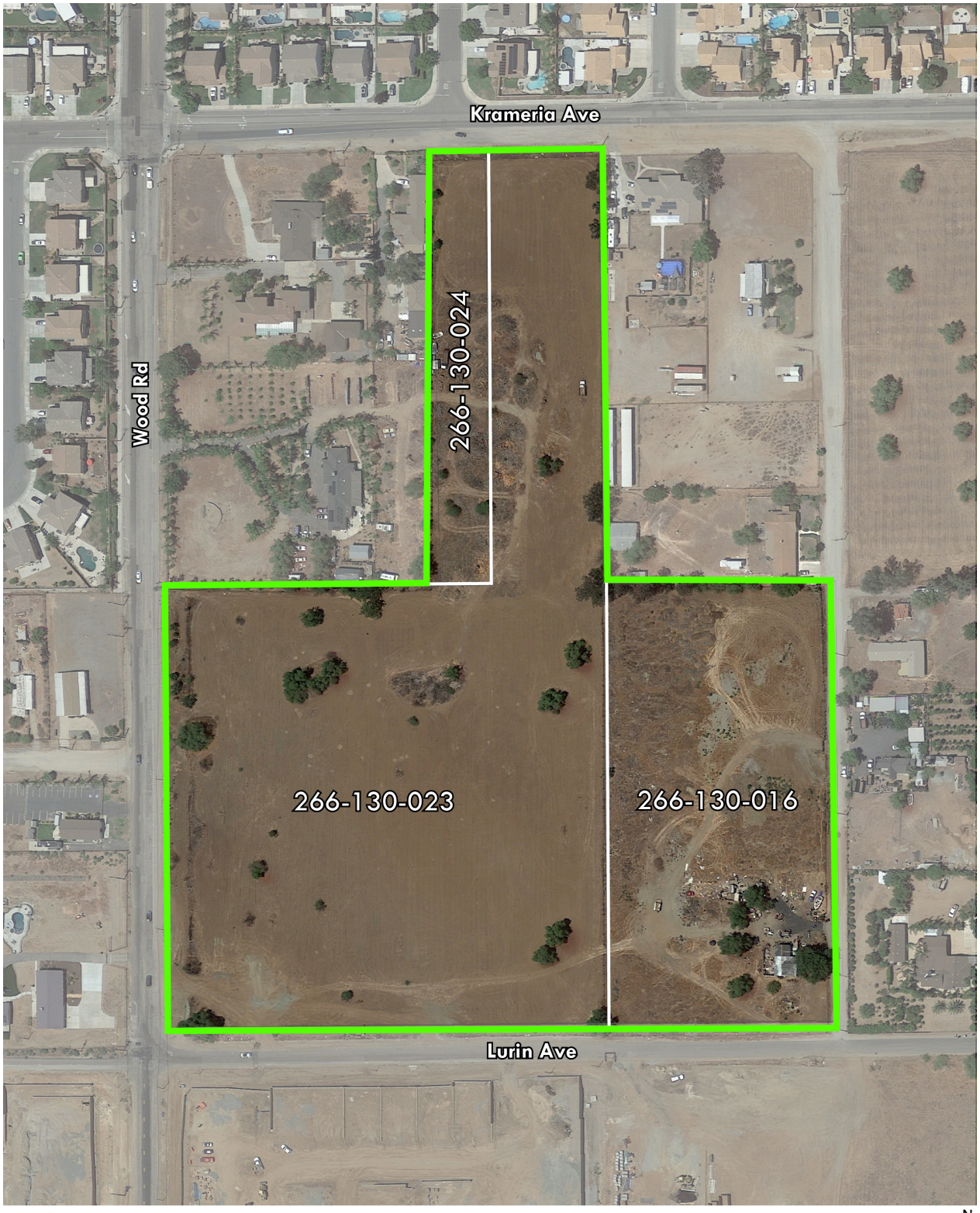
Aerial View


Krameria Ave
Wood Rd
266-130-024
266-130-023
266-130-016
Lurin Ave
Project Site
N

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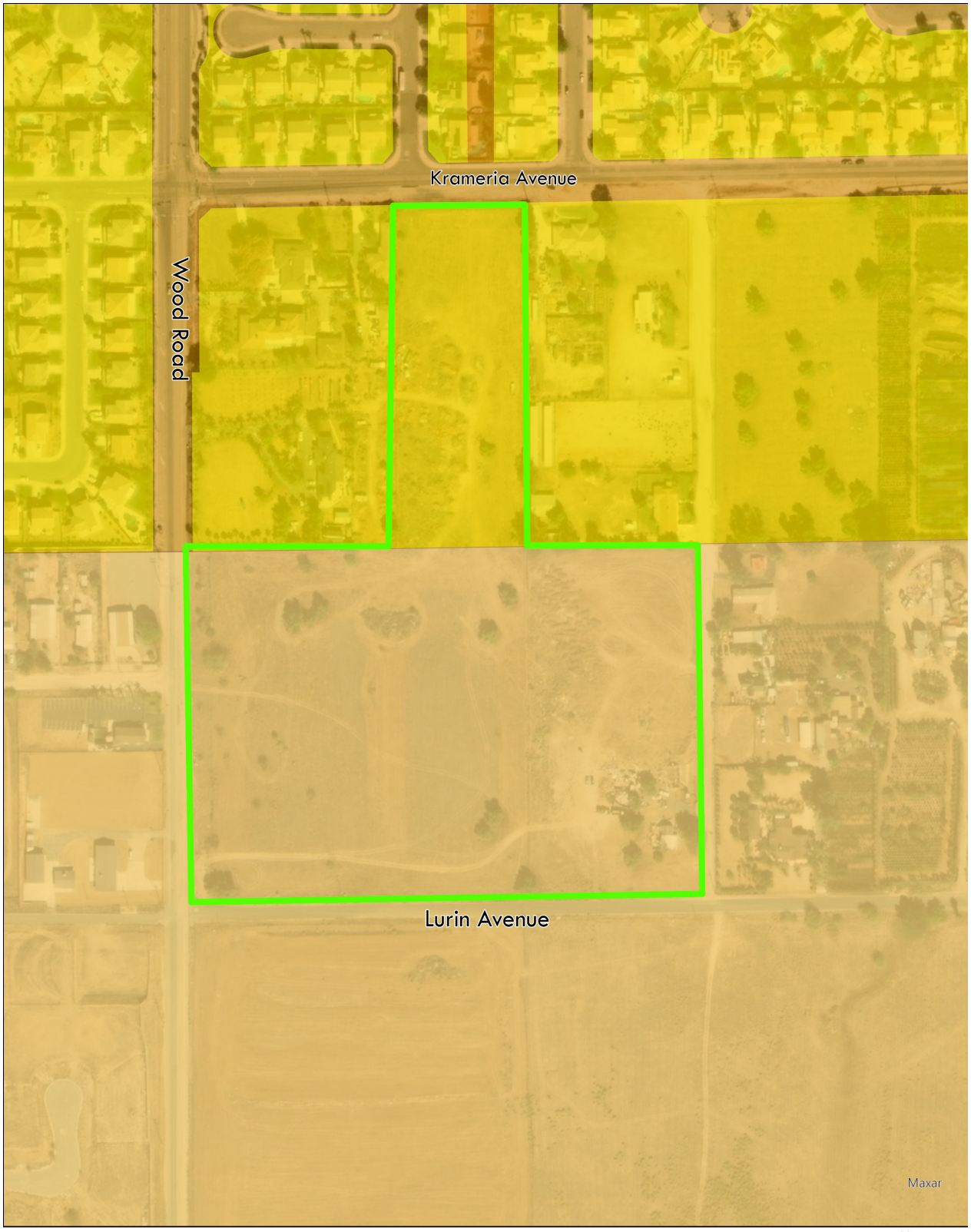
Existing General Plan Designations



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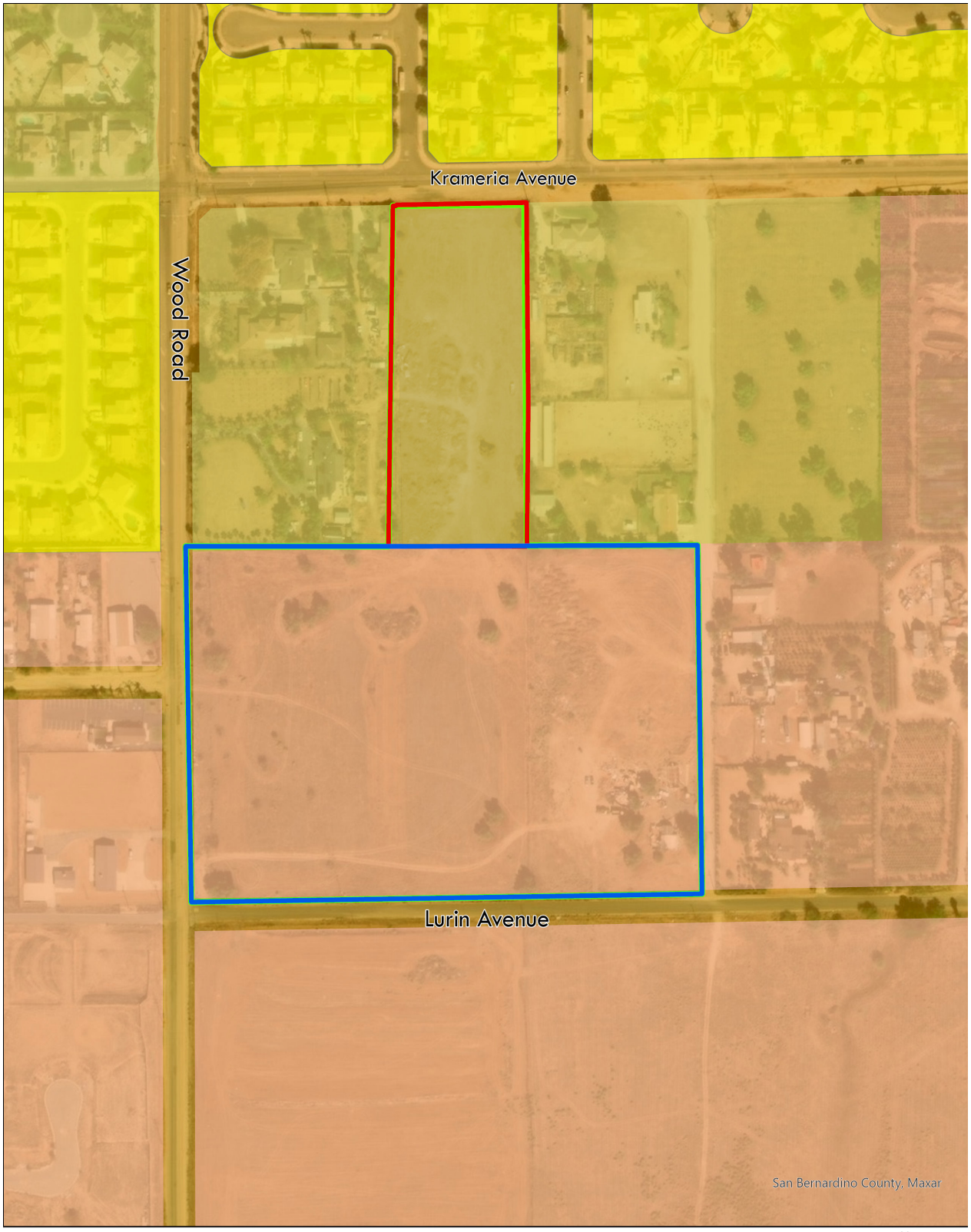
Existing Zoning Designation and Specific Plan Planning Areas



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3.4 DESCRIPTION OF THE PROJECT

Project Overview

The following environmental review and entitlements are requested for implementation of the proposed Project: 1) Tentative Tract Map (TM 38094) to subdivide 18.92-acres into 96 single-family residential lots and lettered lots for common open space and private streets; 2) Planned Residential Development Permit (PRD) for the establishment of detached single-family dwellings, common open space and private streets; 3) Design Review of Project plans; 4) Agricultural Preserve Diminishment (AP) to diminish the Woodcrest Agricultural Preserve No. 7; and 5) Environmental Impact Report (EIR). Refer to Figure 5, *Conceptual Site Plan*.

The Project consists of 96 single-family residential units, resulting in an overall density of 5.07 dwelling units per gross acre. Residential lot sizes would range from 4,250 to 5,995 square feet. The Project includes a 61,909 square foot lot for common recreational uses and a 10-foot-wide multi-purpose recreational trail, within the landscaped setback, along the eastern side of Wood Road, as shown on Figure 3-5, *Conceptual Site Plan*.

Single Family Residential

The proposed 96 single-family residences would include three different two-story floor plan options. As shown in Table 3-2, the residences would range in size from 2,651 to 3,121 square feet and would provide 4 or 5 bedrooms and 3.5 or 4 bathrooms. Each residence would have a front porch and rear yard/private open space area. Minimum setbacks for each parcel would be 13-foot front building setbacks (not including any proposed porch structures) and 5-foot side building setbacks.

Table 3-2: Project Summary

	Number of Units	Square Footage	Bedrooms	Bathrooms
Plan 1 Units	32	2,651	4	3.5
Plan 2 Units	32	2,844	4	3.5
Plan 3 Units	32	3,121	5	4

Architectural Design

The proposed two-story single-family residences would be a maximum of 35 feet in height and designed with Modern Agrarian, Coastal, and Santa Barbara architectural elements with multi-level pitched rooflines, and earth tone color schemes. The residences would incorporate vertical and horizontal siding, shingle siding, stone veneer, stucco finishes, decorative gables and columns, detailed roof elements, porch details, accent tiles, shutters, iron railings, corbel details, and decorative windows and doors in the exterior design. Figure 3-6, Conceptual *Elevations*, illustrate the proposed exterior elevations for Plans 1 through 3.

Solar Panels

Consistent with the 2019 CA Building Energy Efficiency Standards (Title 24 Part 6), the Project would include photovoltaic (PV) solar panels on the rooftop of each residence to offset its energy demand.

Circulation

The Project would be accessed from both Krameria Avenue and Lurin Avenue. The proposed onsite street system would include 5-foot-wide concrete sidewalks and pedestrian street crossings to provide for safe pedestrian circulation. As shown on the conceptual site plan (Figure 3-5), the location of the proposed open space recreation area and surrounding street system prohibits straight cut-through traffic and is designed to

be traffic calming, as both left and right-turns are required to drive through the site. The Project also includes a 35-foot setback along Wood Road that would include a 10-foot-wide multi-purpose trail.

Parking

The proposed Project would provide garage, driveway, and on-street parking. Each residence would have a minimum of a two-car garage and a minimum of two driveway parking spaces. The Project would also provide 110 on-street parking spaces for residences and visitors.

Recreation and Open Space

The Project would provide onsite open space and recreational areas including:

- A 61,909 square foot common open space recreation area in the center of the site that would include an open turf play area, a tot lot with playground equipment, 2 half-court basketball courts, park benches, picnic tables, overhead trellis, and landscaping; and
- A 10-foot-wide multi-purpose recreational trail within the landscaped setback along the eastern side of Wood Road.

Landscaping

The proposed Project would install ornamental trees along Wood Road, Krameria Avenue, Lurin Avenue, the interior Project streets, and in the common open space areas throughout the Project site (see Figure 3-7, *Conceptual Landscaping Plan*). The proposed landscaping includes a variety of drought tolerant shrubs, ground covers, and City-approved street tree species ranging from 24- to 36-inch box specimens.

Conceptual Site Plan

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Elevations

Plan 1

Plan 2

Plan 3

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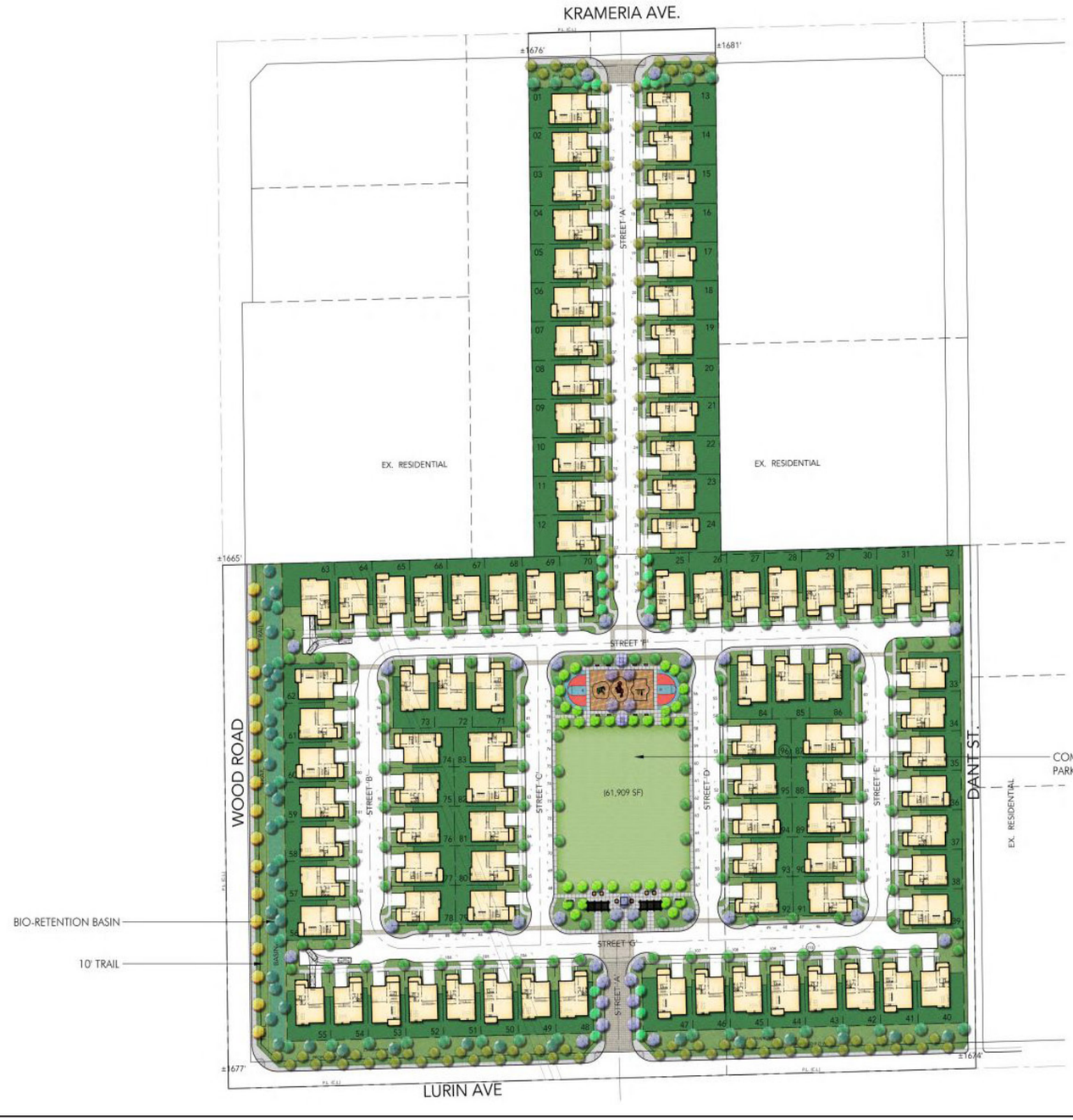
Conceptual Landscape Plan



PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT
	CERCIS CANADENSIS 'FOREST PANSY' / FOREST PANSY EASTERN REDBUD	24" BOX
	CUPANIOPSIS ANACARDIOIDES / CARROT WOOD	24" BOX
	HANDROANTHUS IMPETIGINOSUS / PINK TRUMPET TREE	24" BOX
	LAGERSTROEMIA INDICA X FAURIEI 'NATCHEZ' / NATCHEZ CRAPE MYRTLE	24" BOX
	OLEA EUROPAEA 'WILSONII' / WILSON OLIVE	36" BOX
	PINUS ELDARICA / AFGHAN PINE	24" BOX
	PLATANUS X ACERIFOLIA 'BLOODGOOD' / BLOODGOOD LONDON PLANE TREE	24" BOX
	PROSOPIS CHILENSIS 'THORNLESS' / THORNLESS CHILEAN MESQUITE	48" BOX
	PRUNUS CERASIFERA 'ATROPURPUREA' / PURPLE-LEAF PLUM	24" BOX
	RHUS LANCEA / AFRICAN SUMAC	24" BOX

N

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Walls and Fences
The Project site would be bound by a 6-foot-high decorative masonry wall with an 8-inch pilaster cap and the single family residences would be separated by 5-foot, 6-inchhigh vinyl fences. In addition, decorative masonry walls would be installed at all returns between the residences and the property lines.

Water and Sewer
The proposed Project would install onsite 8-inch water and sewer lines that would be located within each of the residential streets and serve each of the proposed residences. The new onsite water lines would connect to the existing 12-inch water line in Wood Road and the existing 8-inch and 24-inch lines Krameria Avenue. The new onsite sewer lines would connect to the existing 8-inch sewer line in Lurin Avenue.

Drainage
The Project would install an onsite stormwater drainage system that would convey runoff to catch basins throughout the site, t conveying flows to two proposed bioretention basins to treat and infiltrate runoff. One bioretention basin would be located in the western portion of the site adjacent to Wood Road and the other would be located in the southern portion of the site along Lurin Avenue. The basins would connect to a detention pipe system to discharge runoff to the existing storm drain line within Wood Road. In an addition, a basin culvert would provide an overflow outlet to Wood Road.

Construction
Project construction would include demolition, grubbing, grading, excavation, and re-compaction of soils, utility, and infrastructure installation, building construction, roadway pavement, and architectural coatings. The construction includes approximately 32,380 cubic yards of cut and 39,590 cubic yards of fill, resulting in 7,210 cubic yards of imported fill. Maximum excavation depth is anticipated to be approximately 4-feet below the existing ground surface. Construction activities are anticipated to last approximately 18 months as detailed on the table below and would occur within the hours allowable by the City of Riverside Municipal Code Section 9.09.030, which states that construction shall occur only between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday, and between 8:00 a.m. and 5:00 p.m. on Saturday. No construction would occur on Sundays and legal holidays.

Table 3-3: Construction Schedule

Construction Phase	Working Days
Demolition	5
Site Preparation	10
Grading	30
Building Construction	300
Paving	20
Architectural Coatings	20

3.5 PROJECT OBJECTIVES

The following objectives have been identified in order to aid decision makers in their review of the proposed Project and its associated environmental impacts.

- Provide high quality residential development that is consistent with the General Plan, Orangecrest Specific Plan, and Zoning Code.

- Implement the residential provisions of the Specific Orangecrest Specific Plan Overlay intended to take effect upon diminishment of Woodcrest Agricultural Preserve No. 7 on the site. Establish a well-planned community that provides visual and functional compatibility with adjacent residential neighborhoods.
- Create a walkable and bikeable environment near existing bus routes.
- Provide housing to assist the City in meeting its Regional Housing Need Allocation (RHNA) as identified by Southern California Association of Governments (SCAG) and assist in reducing the housing shortage in southern California.
- Provide housing in areas that have existing family services, such as schools.

3.6 GOVERNING DOCUMENTS AND INTENDED USES OF THE EIR

Development and operation of the Wood and Lurin Planned Residential Project will be governed by the following:

- The City of Riverside General Plan, as amended, which establishes policies governing land use, circulation, housing, noise, and safety throughout the City.
- The City of Riverside Orangecrest Specific Plan, as amended, which establishes additional parcel specific land use and development guidelines for the Project site and adjacent areas.
- The City of Riverside Municipal Code; which establishes permitted uses within different zoning designations and development standards for the various zones throughout the City.

This EIR is intended to serve as the primary environmental document for all actions associated with the proposed Project, including all discretionary approvals requested or required to implement the Project. In addition, this EIR is the primary reference document in the formulation and implementation of a mitigation and monitoring program for the proposed Project.

This EIR examines the potential environmental impacts of the proposed Project and will be considered by the City and others in adopting and implementing the Project. The function of the EIR is to enable the City of Riverside, other responsible agencies, and interested parties to evaluate the environmental impacts of the proposed Project and make informed decisions with respect to the requested entitlements.

3.7 DISCRETIONARY APPROVALS AND PERMITS

The following discretionary approvals and permits are anticipated to be necessary for implementation of the proposed Project:

CITY OF RIVERSIDE

- Tentative Tract Map (TM 38094) – for the proposed subdivision of land to create 96 residential parcels
- Planned Residential Development (PRD) – for the review and approval of the proposed Project's consistency with City requirements for PRDs
- Design Review – for the proposed site design and building elevations
- Diminishment of Woodcrest Agricultural Preserve No. 7. per the Orangecrest Specific Plan Environmental Impact Report (EIR) – for the preparation of an Environmental Impact Report for the proposed Project

OTHER PUBLIC AGENCIES

The following public agencies will use this EIR when considering the Project:

- Santa Ana Regional Water Quality Control Board (RWQCB), Santa Ana Region – National Pollutant Discharge Elimination System (NPDES) Construction General Permit
- RWQCB, Santa Ana Region – Storm Water Pollution Prevention Plan (SWPPP)
- RWQCB, Santa Ana Region – Section 401 Water Quality Certification-Waste Discharge Requirement (WDR)
- South Coast Air Quality Management District (SCAQMD) – Dust Control Plan

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4. Environmental Setting

4.1 INTRODUCTION

The purpose of this section is to provide a "description of the physical environmental conditions in the vicinity of the Project, as they exist at the time the Notice of Preparation (NOP) is published, from both a local and a regional perspective" pursuant to CEQA Guidelines Section 15125(a). In addition to the summary below, detailed environmental setting descriptions are provided in each subsection of Section 5 of this Draft EIR.

4.2 PROJECT LOCATION

The Project site is located on an 18.92-acre site that is northeast of the intersection of Lurin Avenue and Wood Road. As depicted on Figure 3-1, *Regional Location*, in Section 3.0, *Project Description*, the Project is in the southeastern portion of the City of Riverside in northwestern Riverside County. Northwestern Riverside County is situated within the Peninsular Ranges Geologic Province and opens to the east onto the San Jacinto Valley. The City of Riverside is central to many popular areas and attractions of Southern California, including Los Angeles County, Orange County, Palm Springs, and the Angeles and San Bernardino National Forests. The Temescal Mountains are approximately 3.5 miles south of the Project site. The Santa Ana River is approximately eight miles northwest of the Project site and is the major drainage conveyance feature in the region. The river system flows generally from northeast to southwest, emptying into the Pacific Ocean near Newport Beach and Huntington Beach.

As depicted on *Figure 3-2*, *Aerial View* in Section 3.0, *Project Description*, the Project site is bordered by Krameria Avenue to the north and Lurin Avenue to the south. The southern portion of the Project site extends west to Wood Road and east to a private ingress and egress drive aisle on the same alignment as Dant Street. Further north, the Project site narrows center between existing residential properties located along Wood Road, Krameria Avenue, and a private ingress and egress drive aisle on the same alignment as Dant Street. The Project site consists of three parcels (Assessor's Parcel Numbers [APNs] 266-130-016, 266-130-024, and 266-130-023). In addition, the Project site is located in Section 29 Southwest of Township 3 South, Range 4 West of the San Bernardino Baseline and Meridian, and within the Riverside East USGS Quadrangle.

4.3 PROJECT SITE DESCRIPTION

The Project site includes approximately 18.92 acres and consists of three parcels. The western, larger parcel is located on the northeast corner of Wood Road and Lurin Avenue and has been previously disturbed and is vacant. The eastern, smaller parcel is on the northwest corner of Lurin Avenue and Dant Street and is developed with a vacant single family residence and associated shed structure. Both parcels include sparse vegetation of shrubs and trees. An aerial of the Project site is provided as Figure 3-3, *Aerial View*, in Section 3.0, *Project Description*. The Project site is bounded by roadways and residential uses to the north and west, and east; and approved single family residential uses to the south. Community facilities near the Project site include Mark Twain Elementary School approximately 0.2-mile to the east at the intersection of Krameria Avenue and Cole Avenue, Martin Luther King High School (grades 9-12) approximately 0.3 mile to the northwest at 9301 Wood Road, and Bethesda Revival Center religious facility directly west of the Project site at the intersection of Wood Road and Woodcrest Lane.

The northern portion of the Project site (APN 266-130-024 and a portion of APN 266-130-023) has a General Plan land use designation of MDR - Medium Density Residential that allows up to 6.2 units per acre

or 8 units per acre with a Planned Residential Development (PRD); and the southern portion of the Project site (a portion of APN 266-130-023 and all of APN 266-130-016) has a General Plan land use designation of LDR - Low Density Residential that allows up to 4.1 units per acre or 6 units per acre with a PRD. The Project site is also within the Orangecrest Specific Plan Planning Areas 107-C and 107-B (Figure 3-3, *Existing General Plan Designations* in Section 3.0, *Project Description*).

The site has a zoning designation of R-1-13000-SP - Single Family Residential and Specific Plan (Orangecrest) Overlay Zones and in the OSP-RA-SP – Residential Agricultural and Specific Plan (Orangecrest) Overlay Zones. Overlay Planning Area 107-B (northern portion of the site) provides for development consistent with R-1-8500 - Single Family Residential Zone upon cancellation of Woodcrest Agricultural Preserve No. 7. Overlay Planning Area 107-C (southern portion of the site) provides for development consistent with R-1-13000 - Single Family Residential Zone (Figure 3-4, *Existing Zoning Designation and Specific Plan Planning Areas* in Section 3.0, *Project Description*).

4.4 BIOLOGICAL RESOURCES

The Project site contains approximately 0.93 acre of disturbed/developed area. Vegetation found in these areas consists of non-native plant species and scattered ornamental trees that include tumbleweed (*Amaranthus albus*), oats (*Avena spp.*), brome spp. (*Bromus spp.*), mustard (*Hirschfeldia incana*), stinknet (*Oncosiphon piluliferum*), common phacelia (*Phacelia distans*), Russian thistle (*Salsola tragus*), Peruvian pepper tree (*Schinus mole*).

The remainder of the Project site contains ruderal areas that have been disturbed by weed abatement activities, vehicle use, and dumping of firewood and debris. Species observed within the ruderal areas include common fiddleneck (*Amsinckia intermedia*), citrus trees (*Citrus spp.*) mustard, horseweed (*Erigeron bonariensis*), prickly lettuce (*Lactuca serriola*), white horehound (*Marrubium vulgare*), Peruvian pepper tree, and Siberian elm (*Ulmus parvifolia*). The Project site does not include any special status plant species.

General wildlife species documented on the Project site or within the vicinity of the site include mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), Anna's hummingbird (*Calypte anna*), and desert cottontail (*Sylvilagus audubonii*). The Project site does not include any special status species or related habitats.

The Project site is located within the Lake Mathews/Woodcrest Area Plan of the Western Riverside County MSHCP. The Project site is not located within a Criteria Cell or Cell Group. The Project site is not located within any plan-defined areas requiring surveys for narrow endemic plant species, criteria area plant species, amphibian species, or mammalian species. However, the Project site is within the Western Riverside County MSHCP burrowing owl (*Athene cunicularia*) survey area.

4.5 CULTURAL RESOURCES

Historic Resources

Consistent with the regional pattern of settlement, the Project site was used as an agricultural field from at least the early 1900s until the late 1970s. The Historic Resources Assessment describes that the Project site was originally part of a larger agricultural area that was subdivided, and that the site was part of the holdings of the Dant ranching family for about a decade (1936-1947).

The onsite residential structure (located at 16725 Dant Street [APN 266-130-016]) was built in 1927. The single-family residence has a detached garage and is primarily constructed of wood. The Historic Resources Assessment describes that the residential structure is of common design and has been extensively modified

by the enclosure of the front porch and inappropriate repair, replacement, or modification of character-defining features, including windows and window openings, main entry, eaves, and wall cladding. The Historic Resources Assessment determined that the structure retains no historic integrity and is not considered a historic resource.

Archaeological Resources

The records search of the California Historic Resources Inventory System that was conducted for the Project identified 28 previously identified prehistoric resources (all bedrock milling features) within 1-mile radius of the Project site. Nine of these were located within between 0.25 to 0.5 mile from the Project site. None of the previously recorded resources are located within the Project site.

Previous Site Ground Disturbances

A majority of the Project site is highly disturbed from previous agricultural activity, development, and land maintenance activities. Historically, the Project site was used as a citrus grove orchard and a residential use. Piles of cut trees were present in the northernmost portion, remnants of a modern irrigation system, and current disking by machinery is evident by overturned soil was observed during the cultural and paleontological field survey. The Phase I Cultural Resources Assessment review of historic aerial photographs identified the site as previously plowed, used as a citrus grove, and then regularly disked.

4.6 NOISE

Existing Noise Levels

To determine the existing noise level environment, short-term noise measurements were taken at four locations on or near the Project site on April 27, 2021. The location of the noise measurements are shown in Figure 5.3-1 in Section 5.3, *Noise*. The existing ambient noise levels on the site range from approximately 46.6 to 69.3 Leq dBA. The existing ambient noise at the Project site is generally characterized by traffic noise along Lurin Avenue, Wood Road, and Krameria Avenue and Earth moving equipment that was in use south of Lurin Avenue.

The existing ambient noise from vehicular traffic was modeled using the Federal Highway Administration (FHWA) Traffic Noise Prediction Model (FHWA-RD-77-108) and was determined to as high as 73.9 dBA at a distance of 50 feet from the centerline from Van Buren Boulevard. However, the existing traffic noise levels along Krameria, which boarders the Project site to the north, are approximately 62.1 dBA.

The nearest airport is March Air Reserve Base/Inland Port Airport (March ARB/IPA), which is located approximately 3.5 miles northeast of the Project site. The Project site is located outside of the 60 dBA noise contour; therefore, MARCH ARB is not considered as a source that contributes to the existing ambient noise levels on the Project site.

Existing Vibration Levels

Aside from periodic construction work that may occur in the vicinity of the Project area, other sources of groundborne vibration include heavy-duty vehicular travel (e.g., refuse trucks and delivery trucks) on the roadways that are adjacent to the Project site. Trucks traveling at a distance of 50 feet typically generate groundborne vibration velocity levels of around 63 VdB (approximately 0.006 in/sec PPV), and these levels could reach 72 VdB (approximately 0.016 in/sec PPV) when trucks pass over bumps in the road.

4.7 TRANSPORTATION

Roadways

The Project site is undeveloped and areas around the Project site are partially developed. As a result, the intersections and roadway segments in the Project vicinity currently operate with limited traffic during the a.m. and p.m. peak hours and at a satisfactory LOS. Wood Road and Krameria Avenue are considered arterial roadways and Lurin Avenue and Dant Street are considered local roadways, per the 2025 General Plan. The City's nearest intersection with a 24-hour volume count available is Wood Road and Van Buren, which is approximately 0.4 mile north of the Project site. On October 7, 2020 the intersection had a 24-hour traffic count of 39,887 trips.

Transit

The Riverside Transit Agency (RTA) currently provides bus services in the city and western Riverside County. RTA Bus Route 22 is located along Wood Road, with stops adjacent to the Project site. Route 22 provides services between the Perris Station Transit Center, which is a Metrolink stop to the southeast of the site and downtown Riverside, which is to the northwest of the site. Route 22 provides service 7 days per week, between 5:46 am and 8:18 pm.

Pedestrian and Bicycle Facilities

There are no existing bicycle lanes or pedestrian facilities adjacent to the Project site. However, sidewalks are located throughout the newly developed single-family tracts that are located to the north of the site across Krameria Avenue and to the west of the site across Wood Road. Sidewalks to the north of the Project site along Krameria Avenue provide access to Mark Twain Elementary School 0.2 mile to the east and Wood Road provides access to commercial uses along Van Buren Boulevard 0.4 mile to the north.

4.8 TRIBAL CULTURAL RESOURCES

The region that the Project is within has historically been situated between the Native American territories of the Cahuilla people and the Luiseño people. The Project site falls within the western region of the Cahuilla tribe's traditional territory. Migration of Shoshone peoples from the Great Basin into the desert and coastal Southern California regions occurred approximately 1000 to 600 years B.P. Both the Cahuilla and Luiseño ethnographic groups derived from this migration. Presently, there are six federally recognized Luiseño tribes with associated reservations within Southern California.

A Sacred Lands File search was requested from the NAHC on February 3, 2021. The NAHC responded stating that there are no known/known sacred lands within 0.5 mile of the Project area. The Phase I Cultural Resources Assessment describes that the CHRIS records search identified 28 prehistoric resources, and seven historic resources within one mile of the site. All of the known prehistoric resources include bedrock milling features. Nine prehistoric resources, all bedrock milling features, are located within 0.25-mile to 0.5-mile of the Project site.

4.9 PROJECTS CONSIDERED IN CUMULATIVE ANALYSIS

Cumulative impacts refer to the combined effect of the proposed project's impacts with the impacts of other past, present, and reasonably foreseeable probable future projects. Both CEQA and the CEQA Guidelines require that cumulative impacts be analyzed in an EIR. As set forth in the CEQA Guidelines Section 15130(b), "the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of

occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone."
CEQA Guidelines Section 15130(b)(1) states that the information utilized in an analysis of cumulative impacts should come from one of the following, or a reasonable combination of the two:

- A list of past, present, and probable future projects producing related or cumulative impacts, including those projects outside the control of the lead agency; or
- A summary of projections contained in an adopted local, regional, or statewide plan or related planning document that describes or evaluates conditions contributing to the cumulative effect.

As further detailed under Section 5, Introduction to Impacts, Table 5-1 includes the projects have been considered in the cumulative analysis for this Project that meet the description under CEQA Guidelines Section 15130(b)(1).

REFERENCES

California Department of Conservation's California Important Farmland Finder Map. Accessed: https://maps.conservation.ca.gov/dlrp/ciff/

Geotechnical Evaluation, prepared by Leighton and Associates, Inc. (GEO 2021) (Appendix F)

Hernandez Environmental Services. "General Biological Assessment and MSHCP Consistency Analysis for Assessors Parcel Numbers 266-130-016, 266-130-023, and 266-130-024." January 2021. Appendix B

Historic Resources Assessment, prepared by JM Research and Consulting, 2021 (Appendix C)

Phase I Cultural Resources Assessment, prepared by Material Culture Consulting, Inc. (MCC 2021) (Appendix D)

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5.0 Environmental Impact Analysis

This Chapter focuses on evaluating the significant environmental effects of the proposed Project, which is described in Chapter 3, *Project Description*. This Chapter describes the existing physical environmental setting (also referred to as "baseline") for each environmental topic, and the impacts that would result from implementation of proposed Project. Because existing federal, state, and local regulations will also shape how the proposed Project is implemented, and provide requirements for avoiding and reducing environmental impacts, a discussion of relevant regulations, plans, programs, and policies pertinent to each environmental issue addressed in each environmental topic section is provided. Additionally, as necessary, feasible mitigation measures are identified to reduce the significant impacts of the proposed Project.

Environmental Topics

The following sections in this chapter analyze the environmental topics listed below:

5.1 Biological Resources
5.2 Cultural Resources
5.3 Noise
5.4 Transportation
5.5 Tribal Cultural Resources
5.6 Mandatory CEQA Findings of Significance

This EIR evaluates the direct and indirect impacts resulting from construction and ongoing operations of the proposed Project. Under CEQA, EIRs are intended to focus their discussion on significant impacts and may limit discussion of other impacts to a brief explanation of why the impacts are not significant. The Initial Study/Notice of Preparation (NOP) that was prepared for the proposed Project and the responses received were used to help determine the scope of the environmental issues to be addressed in the EIR. Consistent with CEQA Guidelines Section 15128, issues considered potentially significant are addressed in this EIR. Issues areas that would not be impacted or would be less than significantly impacted are not addressed beyond the discussion contained in Section 2.2, *EIR Scope and Content* and the Initial Study, which is included as Appendix A.

Format of Environmental Topic Sections

Each environmental topic section generally includes the following main subsections:

- **Regulatory Setting:** This subsection describes applicable federal, state, and local plans, policies, and regulations that the proposed Project must address, and will shape its implementation.
- **Environmental Setting:** This subsection describes the existing physical environmental conditions (environmental baseline) related to the environmental topic being analyzed.
- **Thresholds of Significance:** This subsection sets forth the thresholds of significance (significance criteria) used to determine whether impacts are "significant."
- **Methodology:** This subsection provides a description of the methods used to analyze the impact and determine whether it would be significant or less than significant.
- **Environmental Impacts:** This subsection provides an analysis of the impact statements for each identified significance threshold. The analysis of each impact statement is organized as follows:

- A statement of the CEQA threshold being analyzed.
- The EIR's conclusion as to the significance of the impact.
- An impact assessment that evaluates the changes to the physical environment that would result from the proposed Project.
- An identification of significance comparing identified impacts of the proposed Project to the significance threshold with implementation of any existing regulations, prior to implementation of any required mitigation.
- A discussion of potential cumulative impacts that could occur from implementation of the proposed Project and other cumulative projects.
- A list of any existing regulations that reduce potential impacts.
- For each impact determined to be potentially significant, feasible mitigation measure(s) to be implemented are provided. Mitigation measures include enforceable actions to:
    - avoid a significant impact;
    - minimize the severity of a significant impact;
    - rectify an impact by repairing, rehabilitating, or restoring the effected physical environment;
    - reduce or eliminate the impact over time through preservation and/or maintenance operations during the life of the Project; and/or
    - compensating for the impact by replacing or providing substitute resources or environmental conditions.
- Actions to be taken to ensure effective implementation of required mitigation measures.

Environmental Setting/Baseline

The "Environmental Setting" subsections describe current conditions regarding the environmental resource area reviewed. CEQA Guidelines Section 15125 states that "An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the NOP is published, or if no notice of preparation is published, at the time the environmental analysis is commenced, from both a local and regional perspective. The environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to gain an understanding of the significant effects of the proposed project and its alternatives."

A NOP for the proposed project was distributed on July 19, 2022 for a 30-day public review and comment period that ended on August 18, 2022. This time period consists of the baseline. The baseline conditions relevant to the environmental issues being analyzed are described within each subsection of this chapter. CEQA Guidelines and case law recognize that the date for establishing an environmental baseline cannot be rigid (see CEQA Guidelines Sections 15146, 15151, and 15204). In some instances, environmental conditions, such as biological resources, may vary from year to year, and in some cases, it is necessary to consider conditions over a range of time periods. Also, in some cases, (such as in Section 5.1, *Biological Resources*), discussion of baseline conditions is also provided in the impacts analyses to provide context for the impact in the most reader-friendly format and organization.

Thresholds of Significance/Significance Criteria

The "Thresholds of Significance" subsections provide the specific thresholds of significance by which impacts are judged to be significant or less than significant in this EIR. These include identifiable quantitative or qualitative standards or sets of criteria pursuant to which the significance of each given environmental effect can be determined. Exceedance of a threshold of significance normally means the effect will be determined to be "significant" (CEQA Guidelines Section 15064.7(a)). However, an iron-clad definition of a "significant" effect is not always possible because the significance of an activity may vary with the setting (CEQA Guidelines Section 15064(b)). Therefore, a Lead Agency has the discretion to determine whether to classify an impact described in an EIR as "significant," depending on the nature of the area affected. The thresholds of significance used to assess the significant of impacts are based on those provided in Appendix G of the CEQA Guidelines.

Impact Significance Classifications

The following classifications are used throughout the impact analysis in this EIR to describe the level of significance of environmental impacts:

- **No Impact:** No adverse effect on the environment would occur, and mitigation measures are not required.
- **Less than Significant Impact:** The impact does not reach or exceed the defined threshold (criterion) of significance. Therefore, no mitigation is required.
- **Less than Significant Impact with Mitigation Incorporated:** The impact reaches or exceeds the defined threshold (criterion) of significance, and mitigation is therefore required. Feasible mitigation measures, including standard conditions of approval and applicable plans, programs, and policies, when implemented, will reduce the significant impact to a less-than-significant level.
- **Significant Impact:** A significant impact is defined by Section 15382 of the CEQA Guidelines as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself "shall not be considered a significant effect on the environment … [but] may be considered in determining whether the physical change is significant." As defined in this EIR, a significant impact exceeds the defined significance criteria and therefore requires mitigation.
- **Significant and Unavoidable Impact:** The impact reaches or exceeds the defined threshold (criterion) of significance, and mitigation is therefore required. However, application of all feasible mitigation measures, standard conditions of approval, and applicable plans, programs, and policies would not reduce the impact to a less-than-significant level, and a significant and unavoidable impact would remain.

While CEQA requires that an EIR identify all feasible mitigation to avoid or reduce the significant impacts of a project, it also permits public agencies to approve a project even though it would result in one or more significant unavoidable environmental effects. For a Lead Agency to approve a project with one or more significant unavoidable impacts, it must first prepare a statement of overriding considerations, which identifies the specific economic, legal, social, technological, or other benefits of the project, including region-wide or statewide environmental benefits, that outweigh its significant unavoidable effects, and thereby warrant its approval (Public Resources Code Section 21083; CEQA Guidelines Section 15093). The

statement of overriding considerations must be supported by substantial evidence in the record (CEQA Guidelines Section 15093(a)).

Cumulative Impacts

Cumulative impacts refer to the combined effect of the proposed project's impacts with the impacts of other past, present, and reasonably foreseeable probable future projects. Both CEQA and the CEQA Guidelines require that cumulative impacts be analyzed in an EIR. As set forth in the CEQA Guidelines Section 15130(b), "the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone." The CEQA Guidelines direct that the discussion should be guided by practicality and reasonableness and focus on the cumulative impacts that would result from the combination of the proposed project and other projects, rather than the attributes of other projects which do not contribute to cumulative impacts. According to Section 15355 of the CEQA Guidelines, 'cumulative impacts' refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

a) The individual effects may be changes resulting from a single project or a number of separate projects.

b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Therefore, the cumulative discussion in this EIR focuses on whether the impacts of the proposed Project are cumulatively considerable within the context of impacts caused by other past, present, and reasonably foreseeable future projects.

Additionally, pursuant to the CEQA Guidelines Section 15130(a)(1), an EIR should not discuss cumulative impacts that do not result at least in part from the project being evaluated in the EIR. Thus, cumulative impact analysis is not provided for any environmental issue where the proposed project would have a less than significant impact environmental impact. Analysis of cumulative impacts is, however, provided for all project impacts that are evaluated within this EIR.

CEQA Guidelines Section 15130(b)(1) states that the information utilized in an analysis of cumulative impacts should come from one of the following, or a reasonable combination of the two:

- A list of past, present, and probable future projects producing related or cumulative impacts, including those projects outside the control of the lead agency; or
- A summary of projections contained in an adopted local, regional, or statewide plan or related planning document that describes or evaluates conditions contributing to the cumulative effect.

The cumulative analysis for biological resources, noise, and transportation relies on adopted local, regional, or statewide plans to be implemented to reduce the cumulative effects on the environment from development projects and growth throughout the region. This includes Western Riverside County Multiple Species Habitat Plan (MSHCP) for biological resources, and the Riverside County Transportation Analysis Model (RIVTAM) includes cumulative (2040) scenarios to calculate project VMT and traffic noise. The cumulative analysis for cultural resources, noise, and tribal cultural resources relies on a list of projects.

Different types of cumulative impacts occur over different geographic areas. For example, the geographic scope of the cumulative biological resources or tribal cultural resources, where cumulative impacts occur over a regional area, is different from the geographic scope considered for cumulative traffic impacts are based upon all development within the traffic analysis zone (TAZ). Because the geographic scope and other parameters of each cumulative analysis discussion can vary, the cumulative geographic scope is described for each environmental topic. Table 5-1 provides a list of cumulative projects considered in the cumulative environmental analysis, as appropriate. Figure 5-1 shows the locations of the cumulative projects.

Table 5-1: Cumulative Projects List

Project Number	Project and Location	Distance from Proposed Project Site	Description
1	Van Buren Boulevard and Little Court	1.5 miles	10,700 square foot (SF) retail, 10,000 SF daycare, 2,500 SF drive-thru restaurant, 10,000 SF office, and 8,000 SF medical office
2	P18-0255 17815 Van Buren Blvd	1.6 miles	4,400 SF commercial building and drive-thru restaurant
3	P19-0022, P19-0024, P19-0026, P19-0027, P19-0028 19260 Van Buren Boulevard	0.8 mile	4,139 SF restaurant and drive-thru
4	P19-0042 18451 Van Buren Boulevard	1.04 miles	4,300 restaurant and 9,920 SF office building
5	P17-0688 and P17-0689 18806 Van Buren Boulevard	0.8 mile	5,440 SF automated car wash
6	P20-0018, P20-0019, P20-0020 & P20-0021 19331 Lurin Avenue	840 feet	138 lot residential development
7	P20-0385, P20-0386, P20-0387 & P20-0388 18875 Lurin Avenue	850 feet	41-unit residential development
8	P20-0013, P20-0014, P20-0015 & P20-0016 19811 Lurin Avenue	0.6 mile	81 lot residential development
9	P20-0372, P20-0373, P20-0374 & P20-0376 18233 Van Buren Blvd	1.4 miles	3,713 SF retail and 2,385 SF drive-thru restaurant
10	P18-0836, P18-0840, P18-0841 & P18-0842 Both sides of Wood Road south of Lurin Avenue and north of Newsome Road and Doving Lane	Adjacent (directly south)	90 lot residential development
11	P05-0325 16780 Taft Street Northwest corner of Taft and Mariposa	0.4 mile	104 lot residential development

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Van Buren Blvd
Krameria Ave
Lurin Ave
Mariposa Ave
Taft St
Wood Rd
Cole Ave
Baron St
1
2
3
4
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6
7
8
9
10
11
Google Earth
Project Site
X
Cumulative Project
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5.1 Biological Resources

5.1.1 INTRODUCTION

This section addresses potential environmental effects of the Project related to biological resources. The information and analysis herein rely on the *General Biological Assessment and MSHCP Consistency Analysis* (Biological Assessment), Hernandez Environmental Services, January 2021 (Bio 2021) (Appendix B).

Biological Resources Terminology

- **Endangered Species.** The term "endangered species" means any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose protection under the provisions of this Act would present an overwhelming and overriding risk to man.
- **Threatened Species.** The term "threatened species" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- **Special-Status Plant Species**.
    - Listed as state endangered, threatened, or rare and/or listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) (listed species), or candidates for future listing.
    - Considered by the California Native Plant Society to be "rare, threatened, or endangered in California" (CRPRs 1 and 2).
    - Considered a locally significant species, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context, such as within a county or region, or is so designated in local or regional plans, policies, or ordinances.
- **Special-Status Wildlife Species**.
    - Listed as threatened or endangered ("listed species") or candidates for future listing under the federal FESA or CESA.
    - Designated as a species of concern by the CDFW.
    - Fully protected species under California Fish and Game Code Sections 3511, 4700, 5050, and 5515.
    - Species protected by 14 CCR Division 1, Subdivision 2, Chapter 5 (fur-bearing animals), Section 460 (for example, kit fox).

5.1.2 REGULATORY SETTING

5.1.2.1 Federal Regulations

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 defines an endangered species as "any species which is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA, unless properly

permitted, it is unlawful to "take" any endangered or threatened listed species. "Take" is defined in Section 3(18) of FESA as: "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action which could affect a federally listed plant or animal species, the property owner and agency are required to consult with USFWS pursuant to Section 7 of the FESA if there is a federal nexus, or consult with USFWS and potentially obtain a permit pursuant to Section 10 of the FESA in the absence of a federal nexus. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects individuals as well as any part, nest, or eggs of any bird listed as migratory. In practice, federal permits issued for activities that potentially impact migratory birds typically have conditions that require pre-disturbance surveys for nesting birds. In the event nesting is observed, a buffer area with a specified radius must be established, within which no disturbance or intrusion is allowed until the young have fledged and left the nest, or it has been determined that the nest has failed. If not otherwise specified in the permit, the size of the buffer area varies with species and local circumstances (e.g., presence of busy roads, intervening topography, etc.), and is based on the professional judgment of a monitoring biologist. A list of migratory bird species protected under the MBTA is published by USFWS.

5.1.2.2 State Regulations

California Endangered Species Act

Under the California's Endangered Species Act (CESA) (Fish and Game Code § 2050 et seq.), California Species of Special Concern are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. Informally listed species are not protected per se but warrant consideration in the preparation of biological resource assessments. For some species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest areas. The California Department of Fish and Wildlife (CDFW) administers CESA and enforces relevant statutes from the California Fish and Game Code and Title 14 of the California Code of Regulations (CCR).

Natural Community Conservation Planning Act

The statutory framework (Fish and Game Code § 2800 et seq.) for natural community conservation plans (NCCP), which provide long-term, landscape-scale protection for natural vegetation communities and wildlife diversity. It supports collaborative planning and approval by local governments, state and federal agencies, environmental organizations, landowners, and members of the public.

California Rare Plant Ranks (CRPR)

The California Native Plant Society (CNPS) maintains a list of special-status plant species based on collected scientific information. Although CNPS's designations have no legal status or protection under federal or state endangered species legislation (CNPS 2015), three designations meet the criteria of Section 15380 of the CEQA Guidelines—CRPR 1A, plants presumed extinct; CRPR 1B, plants rare, threatened, or endangered in

California and elsewhere; and CRPR 2, plants rare, threatened, or endangered in California, but more numerous elsewhere.

California Fish and Game Code, Sections 3503.5, 3511, 3515

Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Activities that result in the abandonment of an active bird of prey nest may also be considered in violation of this code. In addition, California Fish and Game Code, Section 3511 prohibits the taking of any bird listed as fully protected, and California Fish and Game Code, Section 3515 states that is it unlawful to take any non-game migratory bird protected under the MBTA.

Native Plant Protection Act of 1977

This act (Fish and Game Code § 1900 et seq.) directed CDFW to "preserve, protect and enhance rare and endangered plants in this State." It gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. CESA, which came later, entered all "rare" animals as "threatened" species, but not rare plants. Thus, there are three listings for plants in California: rare, threatened, and endangered. Because rare plants are not included in CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the project proponent.

5.1.2.3 Regional & Local Regulations and Policies

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The Western Riverside County MSHCP is a comprehensive, multijurisdictional habitat conservation planning program for western Riverside County, California. The Western Riverside County MSHCP provides coverage/take authorization for some species listed under the federal or state Endangered Species Act (ESA) as well as non-listed special-status plant and wildlife species. It also provides mitigation for impacts to special-status species and their associated habitats.

Through agreements with the USFWS and California Department of Fish and Wildlife (CDFWG), 129 listed and special-status plant and animal species receive some level of coverage under the Western Riverside County MSHCP. Of the 129 covered species, the majority have no additional survey needs or conservation requirements. However, several of the species covered under the Western Riverside County MSHCP have additional survey requirements in specific areas of the County.

The Project site is located within the Western Riverside County MSHCP boundaries. The City of Riverside is a permittee under the Western Riverside County MSHCP and, therefore, is afforded coverage for impacts to listed species covered by the plan. The City is required to document consistency with the Western Riverside County MSHCP in conjunction with any discretionary approvals for a development project, which has been provided in the Biological Assessment included as Appendix B.

Stephens' Kangaroo Rat Habitat Conservation Plan

The City is located within the boundary of the adopted HCP for the endangered Stephens' kangaroo rat (SKR-HCP) administered by the Riverside County Habitat Conservation Agency (RCHCA). The SKR-HCP mitigates impacts from development on the SKR by establishing a network of preserves and a system for

managing and monitoring them. The SKR-HCP initially established Core Reserves for the conservation of key SKR populations. Outside of the Core Reserves, the SKR-HCP established a fee assessment area by which individual projects are granted coverage under the HCP by payment of SKR fees. The MSHCP, through its goals for SKR, reaffirms the conservation goals of the SKR-HCP, while expanding the coverage area outside of the original coverage boundaries of the SKR-HCP. Neither the SKR-HCP nor MSHCP requires project-specific SKR surveys for sites located outside of the existing Core Reserves. Instead, payments of SKR fees are sufficient to obtain take authorization for SKR, unless specific lands are targeted for conservation by SKR-HCP or MHSCP. The Project site is not located within a Core Reserve; however, it is within the SKR fee assessment area. The project proponent is required to pay the Stephens' Kangaroo Rat Preservation fee in effect at the time a grading permit is issued which is collected per Riverside Municipal Code Section 16.40.040.

City of Riverside General Plan

The City's General Plan Land Use and Urban Design and Open Space and Conservation Elements of the General Plan 2025 seek to preserve existing natural resources in the City. Objectives and Policies that relate to biological resources and would apply to the Project include the following:

Policy LU-7.4: Continue to participate in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

Policy OS-5.2: Continue to participate in the MSHCP Program and ensure all projects comply with applicable requirements.

Policy OS-5.4: Protect native plant communities in the General Plan Area, including sage scrub, riparian areas, and vernal pools, consistent with the MSHCP.

City of Riverside Urban Forest Tree Policy

The City of Riverside Urban Forest Tree Policy Manual provides guidelines for the preservation and protection of the City of Riverside's tree heritage. The Manual provides guidelines for the planting, pruning, preservation and removal of all trees in City rights-of-way and recreational facilities.

City of Riverside Municipal Code

Section 16.72.040, MSHCP Mitigation Fee. This municipal code section requires that a Local Development Mitigation Fee shall be paid prior to the issuance of building permits for developments.

Section 16.40.040, Threatened and Endangered Species Fees. This municipal code section requires that development fees be collected to serve to mitigate the impacts of development upon threatened and endangered species.

5.1.3 ENVIRONMENTAL SETTING

The Project site is located within the Lake Mathews/Woodcrest Area Plan of the Western Riverside County MSHCP. The Project site is not located within a Criteria Cell or Cell Group. The Project site is not located within any plan-defined areas requiring surveys for narrow endemic plant species, criteria area plant species, amphibian species, or mammalian species. However, the Project site is within the Western Riverside

County MSHCP burrowing owl (*Athene cunicularia*) survey area. A habitat assessment conducted for burrowing owl determined that the site does not provide suitable habitat for the species.

Plant and Habitat Communities
The Project site is comprised of disturbed/developed and ruderal areas and onsite soils are mapped as fine sandy loam, as described below.

Disturbed/Developed. The Project site contains approximately 0.93 acre of disturbed/developed area. These areas are located within the southeastern portion of the site and are characterized by an existing single-family residence and access roads. Vegetation found in these areas consists of non-native plant species and scattered ornamental trees. Common plant species observed include tumbleweed (*Amaranthus albus*), oats (*Avena spp.*), brome spp. (*Bromus spp.*), mustard (*Hirschfeldia incana*), stinknet (*Oncosiphon piluliferum*), common phacelia (*Phacelia distans*), Russian thistle (*Salsola tragus*), Peruvian pepper tree (*Schinus molle*).

Ruderal. The Project site contains approximately 17.995 acres of ruderal areas. These areas appear to be continually disturbed by weed abatement activities, vehicle use, and dumping of firewood and debris. Graded dirt roads are present throughout the site. These areas are primarily dominated by non-native grasses with scattered ornamental trees and shrubs. Species observed within these areas include common fiddleneck (*Amsinckia intermedia*), citrus trees (*Citrus spp.*) mustard, horseweed (*Erigeron bonariensis*), prickly lettuce (*Lactuca serriola*), white horehound (*Marrubium vulgare*), Peruvian pepper tree, and Siberian elm (*Ulmus parvifolia*).

Soils
The USDA Web Soil Survey identifies three soil classes on the Project site that include:

- Fallbrook sandy loam (FaD2), 8 to 15 percent slopes, eroded;
- Fallbrook fine sandy loam (FfC2), 2 to 8 percent slopes, eroded; and
- Monserate sandy loam (MmB0, 0 to 5 percent slopes.

Wildlife
General wildlife species documented on the Project site or within the vicinity of the site include mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), Anna's hummingbird (*Calypte anna*), and desert cottontail (*Sylvilagus audubonii*).

Special-Status Plant Species
Special status plant species are uncommon or limited in that they: 1) are only found in the region; 2) are a local representative of a species or association of species not otherwise found in the region; or 3) are severely depleted within their ranges or within the region. Rare plant species include those species listed by California Native Plant Society (CNPS) with a California Rare Plant Rank (CRPR) of 1, 2, or 3 or federally and state listed endangered and threatened species. Species with CRPR of 4 may be considered rare if a population is locally uncommon, at the periphery of the species' range, sustained heavy losses, shows unusual morphology, or occurs on unusual substrates (CNPS 2020b). Focused surveys are concentrated on the identification of CRPR 1, 2, and 3 species.

The Biological Assessment details that 19 plant species are listed as state and/or federal Threatened, Endangered, or Candidate species; and are required to be reviewed under the Narrow Endemic Plant section of the Western Riverside MSHCP; or are 1B.1 listed plants on the California Native Plant Society

(CNPS) Rare Plan Inventory. Table 5.1-1 lists these special-status plant species and identities that there is no potential for these species to occur on the Project site due to lack of habitat.

Table 5.1-1: MSHCP Special-Status Plant Species Potential to Occur

Species Name	Common Name	Status	Species Habitat	Potential to Occur
Abronia villosa var. aurita	Chaparral sand-verbena	CRPR 1B.1	Found in sandy areas of chaparral, coastal scrub, and desert dunes habitats.	No habitat for this species is present on the Project site. This species is not present.
Allium munzii	Munz's onion	FE/ST CRPR 1B.1	Found in chaparral, coastal scrub, valley and foothill grasslands, cismontane woodland, and pinyon and juniper woodland	No habitat for this species is present on the Project site. This species is not present.
Ambrosia pumila	San Diego ambrosia	FE CRPR 1B.1	Habitat includes wetlands in chaparral, coastal sage scrub, valley and foothill grassland.	No habitat for this species is present on the Project site. This species is not present.
Arenaria paludicola	Marsh sandwort	FE/SE CRPR 1B.1	Habitats include freshwater marsh, marsh and swamp, and wetland.	No habitat for this species is present on the Project site. This species is not present.
Astragalus hornii var. hornii	Horn's milk-vetch	CRPR 1B.1	Habitats include alkali playa meadows, seeps, and wetlands.	No habitat for this species is present on the Project site. This species is not present.
Atriplex coronata var. notatior	San Jacinto Valley crownscale	FE CRPR 1B.1	Habitat includes playas, valley and foothill grassland, and vernal pools.	No habitat for this species is present on the Project site. This species is not present.
Parish's brittlescale	Atriplex parishii	CRPR 1B.1	Habitat includes shadescale scrub, alkali sink, riparian, playas, vernal pools and wetland	No habitat for this species is present on the Project site. This species is not present.
Berberis nevinii	Nevin's barberry	FE/SE CRPR 1B.1	Typically found on steep, north facing slopes or in low grade sandy washes. Habitat includes chaparral, woodland, coastal scrub, and riparian scrub.	No habitat for this species is present on the Project site. This species is not present.
brodiaea filifolia	thread-leaved brodiaea	FT/SE CRPR 1B.1	Found in chaparral, cismontane woodlands, coastal sage scrub, valley and foothill grasslands, vernal pools, and wetland.	No habitat for this species is present on the Project site. This species is not present.
Centromadia pungens ssp. laevis	Smooth tarplant	CRPR 1B.1	Habitats include alkali playa, chenopod scrub, meadows and seeps, riparian woodlands, wetlands, and valley and foothill grasslands	No habitat for this species is present on the Project site. This species is not present.
Chloropyron maritimum	Salt marsh bird's -beak	FE/SE	Habitats it is found in include coastal dunes, marsh and swamps, salt marsh, and wetland. It is limited to the higher zones of salt marsh habitat.	No habitat for this species is present on the Project site. This species is not present.

Species Name	Common Name	Status	Species Habitat	Potential to Occur
Chorizanthe parryi var. parryi	Parry's spineflower	CRPR 1B.1	Habitat includes coastal scrub, chaparral, cismontane woodland, valley and foothill grassland.	No habitat for this species is present on the Project site. This species is not present.
Dodecahema leptoceras	Slender - horned spineflower	FE/SE CRPR 1B.1	Habitat includes chaparral, cismontane woodland, and coastal scrub (alluvial fan sage scrub).	No habitat for this species is present on the Project site. This species is not present.
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	FE/SE CRPR 1B.1	Found in sandy soils on river floodplains or terraced fluvial deposits. Its habitat includes chaparral and coastal scrub.	No habitat for this species is present on the Project site. This species is not present.
Horkelia cuneata var. puberula	Mesa horkelia	CRPR 1B.1	Habitat includes chaparral, cismontane woodland, and coastal scrub.	No habitat for this species is present on the Project site. This species is not present.
Lasthenia glabrata ssp.coulteri	Coulter's goldfields	CRPR 1B.1	Habitat includes alkali playas, marsh, swamp, salt marsh, vernal pool, and wetland.	No habitat for this species is present on the Project site. This species is not present.
Nasturtium gambelii	Gambel's water cress	FE/ST CRPR 1B.1	Habitat includes brackish marsh, freshwater marsh, marsh and swamp, and wetland.	No habitat for this species is present on the Project site. This species is not present.
Navarretia fossalis	Spreading navarretia	FT CRPR 1B.1	Habitat includes alkali playa, chenopod scrub, marsh and swamp, vernal pools, and wetlands.	No habitat for this species is present on the Project site. This species is not present.
Phacelia stellaris	Brand's star phacelia	CRPR 1B.1	Habitat includes coastal dunes and coastal scrub.	No habitat for this species is present on the Project site. This species is not present.

Source: Biological Assessment, 2021 (Appendix B)
1 Listing is as follows: F = Federal; S = State of California; E = Endangered; T = Threatened.
CRPR = California Rare Plant Rank: 1B – rare, threatened, or endangered in California and elsewhere. Extension code: .1 – seriously endangered.

Special-Status Wildlife Species

Sensitive animal species include federal and state listed endangered and threatened species, candidate species for listing by USFWS or CDFW, and/or are species of special concern (SSC) pursuant to CDFW and/or MSHCP.

The Biological Assessment details that 18 special status animal species have the potential to occur within or adjacent to the Project site. Table 5.1-2 lists these special-status wildlife species and identities that none have the potential to occur on the Project site due to lack of habitat.

Table 5.1-2: Special-Status Animal Species Potential to Occur

Species Name	Common Name	Status	Species Habitat	Potential to Occur
Invertebrates				
Bombus crotchii	Crotch bumble bee	--/SCE	Occurs within open grassland and scrub habitats. Species' food genera include *Antirrhinum* sp.,	There is no habitat for this species on the Project site. The species is not present.

Species Name	Common Name	Status	Species Habitat	Potential to Occur
			Phacelia sp., *Clarkia* sp., *Dendromecon* sp., *Eschscholzia* sp., *and Eriogonum* sp.	
Euphydryas editha quino	Quino checkerspot butterfly	FE/--	Found in chaparral and coastal sage scrub.	There is no habitat for this species on the Project site. The species is not present.
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	FE/--	Found only within the Delhi Sands formation in San Bernardino and Riverside Counties. Requires wholly or partly consolidated dunes with sparse vegetation.	There is no habitat for this species on the Project site. The species is not present.
Streptocephalus woottoni	Riverside fairy shrimp	FE	coastal scrub, valley and foothill grassland, vernal pool, and wetland habitat, seasonally astatic pools filled by rain.	There is no habitat for this species on the Project site. The species is not present.
Fish				
Catostomus santaanae	Santa Ana sucker	FT/--	Found within south coastal streams of the Los Angeles Basin. Prefers streams with sand-rubble-boulder bottoms with cool clear water.	There is no habitat for this species on the Project site. The species is not present.
Oncorhynchus mykiss irideus	steelhead - southern California DPS	FE	Freshwater streams from saltwater or brackish water to spawn. Southern steelhead have a greater tolerance to warmer water.	There is no habitat for this species on the Project site. The species is not present.
Reptiles				
Rana muscosa	Southern mountain yellow-legged frog	FE/DE	Requires aquatic habitat	There is no habitat for this species on the Project site. The species is not present.
Birds				
Agelaius tricolor	tricolored blackbird	SCE/SSC	Breeds in dense stands of cattails (*Typha* sp.) or bulrushes (*Schoenoplectus* sp./*Scirpus* sp.) located within large freshwater marshes. Forages in adjacent open habitats, such as agricultural fields, pastures, or grasslands.	There is no habitat for this species on the Project site. The species is not present.
Athene cunicularia	burrowing owl	SSC	Typical habitat is grasslands, open scrublands, agricultural fields, and other areas where there are ground squirrel burrows or other areas in which to burrow.	There is no habitat for this species on the Project site. The species is not present.
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Occurs in coastal sage scrub and very open chaparral.	There is no habitat for this species on the Project site. The species is not present.
Buteo swainsoni	Swainson's hawk	ST	Habitats include great basin grassland, riparian forest, riparian woodland, and valley and foothill grasslands.	There is no habitat for this species on the Project site. The species is not present.

Species Name	Common Name	Status	Species Habitat	Potential to Occur
Coccyzus americanus occidentalis	Western yellow-billed cuckoo	FT/SE	Found in riparian forest habitat of willows, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	There is no habitat for this species on the Project site. The species is not present.
Empidonax traillii extimus	Southwestern willow flycatcher	FE/SE	Found in riparian woodland habitats	There is no habitat for this species on the Project site. The species is not present.
Haliaeetus leucocephalus	Bald eagle	FE/SE FP	Habitat includes lower montane coniferous forest and old-growth tress with open branches, especially ponderosa pine.	There is no habitat for this species on the Project site. The species is not present.
Laterallus jamaicensis coturniculus	California black rail	--/SE FP	Habitat includes brackish marsh, freshwater marsh, marsh and swamp, salt marsh, and wetland	There is no habitat for this species on the Project site. The species is not present.
Polioptila californica californica	Coastal California gnatcatcher	FT/SSC	Habitat includes coastal bluff scrub and coastal scrub	There is no habitat for this species on the Project site. The species is not present.
Vireo bellii pusillus	least Bell's vireo	FE/SE	Inhabits riparian woodland and is most frequent in areas that combine an understory of dense, young willows or mule fat with a canopy of tall willows.	There is no habitat for this species on the Project site. The species is not present.
Mammals				
Dipodomys merriami parvus	San Bernardino kangaroo rat	FE/SSC	Generally associated with alluvial fan sage scrub, but also occurs in sage scrub, chaparral, and grassland in proximity to alluvial fan sage scrub habitats.	There is no habitat for this species on the Project site. The species is not present.
Dipodomys stephensi	Stephens' kangaroo rat	FE/ST	Found in coastal sage scrub with sparse vegetation cover, and in valley and foothill grasslands.	There is no habitat for this species on the Project site. The species is not present.

Source: Biological Assessment, 2021 (Appendix B)

[1] Listing is as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; CE = Candidate Endangered; CT = Candidate Threated; FP = Fully Protected; SSC = State Species of Special Concern.

Jurisdictional Waters and Wetlands

The Project site consists of disturbed and ruderal areas. The Biological Assessment details that the Project site does not contain any streams or drainages or riparian habitat. There are no CDFW, United States Army Corps of Engineers (USACE), or Regional Water Quality Control Board (RWQCB) jurisdictional waters. Further, the Project site does not contain any wetlands or vernal pools.

Wildlife Movement

Wildlife movement corridors can be local or regional in scale; their functions may vary temporally and spatially based on conditions and species present. Wildlife corridors represent areas where wildlife movement is concentrated due to natural or anthropogenic constraints. Local corridors provide access to resources such as food, water, and shelter. Animals use these corridors, which are often hillsides or riparian areas, to move between different habitats. Regional corridors provide these functions and link two or more large habitat areas. They provide avenues for wildlife dispersal, migration, and contact between otherwise distinct populations.

The Project site is not located within a designated wildlife corridor or linkage. The Project area was evaluated for its function as a wildlife corridor that species use to move between wildlife habitat zones. The Project site consists of flat, disturbed land characterized by disturbed/developed and ruderal areas. The Project site is surrounded by urban development such as residential uses, a site under construction for new residential uses, and roadways. No wildlife movement corridors were found to be present on or adjacent to the Project site (Bio 2021).

5.1.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a project could have a significant effect if it were to:

Threshold A: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Threshold B: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Threshold C: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Threshold D: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Threshold E: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Threshold F: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.

5.1.5 METHODOLOGY

The analysis within this EIR section is based on the Biological Assessment completed for the Project site that is, included as Appendix B. The assessment is based on literature review of biological resources occurring within the Project site and surrounding vicinity. The review included: aerial photographs and topographic maps, the California Natural Diversity Data Base (CNDDB), the USFWS Endangered Species Lists, and the California Native Plant Society (CNPS) rare plant lists. The CNDDB and USFWS critical habitat databases were utilized, together with Geographic Information System (GIS) software, to locate the previously recorded locations of sensitive plant and wildlife occurrences and designated critical habitat and determine the distance from the Project site. Additionally, the Western Riverside County MSHCP was reviewed to determine requirements for sensitive species surveys. A Field survey was conducted on December 15, 2020 to document existing conditions within the Project site and surrounding area. All species observed were recorded and are listed in Appendix A of the Biological Assessment, included as Appendix B of the Draft EIR.

5.1.6 ENVIRONMENTAL IMPACTS

As detailed in Section 3.0, *Project Description*, the proposed Project would develop a largely undeveloped Project site for a Planned Residential Development consisting of 96 single family residences, a 61,909 square foot common open space recreation area, an onsite roadway system, and associated setbacks, landscaping, and utility infrastructure.

IMPACT A: WOULD THE PROJECT HAVE A SUBSTANTIAL ADVERSE EFFECT, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATIONS, ON ANY SPECIES IDENTIFIED AS A CANDIDATE, SENSITIVE, OR SPECIAL STATUS SPECIES IN LOCAL OR REGIONAL PLANS, POLICIES, OR REGULATIONS, OR BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE OR U.S. FISH AND WILDLIFE SERVICE?

Special Status Plants

As detailed on Table 5.1-1, there are 19 plant species listed as state and/or federal Threatened, Endangered, or Candidate species; and are required to be reviewed under the Narrow Endemic Plant section of the Western Riverside MSHCP; or are 1B.1 listed plants on the California Native Plant Society (CNPS) Rare Plan Inventory that have the potential to occur within the Project region. Table 5.1-1 details that these special-status plant species do not have the potential to occur on the Project site due to lack of habitat. Therefore, impacts related to special status plants would not occur from the proposed Project.

Special Status Animal Species

As shown on Table 5.1-2, a total of 18 special status animal species have the potential to occur within or adjacent to the Project site. However, habitat for these species does not exist on the site and none of the animal species were observed during the field survey. Because the Project site is within the MSHCP burrowing owl (*Athene cunicularia*) survey area, a habitat assessment was conducted for burrowing owl as part of the Biological Assessment (Appendix B).

Burrowing Owl. Burrowing owl habitat includes coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley and foothill grassland. Burrowing owl is typically found in open and dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Burrowing owl is a subterranean nester and is dependent upon burrowing mammals, most notably the California ground squirrel (*Spermophilus beecheyi*).

The Biological Assessment includes a habitat assessment for burrowing owl that was conducted on the site and a 500-foot buffer area on December 15, 2020. The habitat assessment did not identify any signs of either borrowing owl or ground squirrel on the Project site. The site is heavily disturbed, continuously maintained for weed abatement, and used by off-road vehicles and dumping. The Project site is adjacent to roadways and developed areas. The Biological Assessment determined that due to the lack of habitat, high level of disturbance, and lack of ground squirrel activity, burrowing owl are not present on the Project site. The nearest recorded occurrence of burrowing owl is located approximately 0.4 mile from the site in an area that is now developed with single-family residences.

However, because the Project site is located within the MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the commencement of Project activities (e.g., vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding Project activities. This is included as Mitigation Measure BIO-1. If burrowing owl are found to have colonized the Project site prior to the initiation of construction, the Project applicant would be required by Mitigation Measure **MM BIO-1** to comply with MSHCP protocols for a Burrowing Owl Protection and Relocation Plan. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. Therefore, the potential of Project impacts related to special-status species would be **less than significant with mitigation incorporated.**

IMPACT B: WOULD THE PROJECT HAVE A SUBSTANTIAL ADVERSE EFFECT ON ANY RIPARIAN HABITAT OR OTHER SENSITIVE NATURAL COMMUNITY IDENTIFIED IN LOCAL OR REGIONAL PLANS, POLICIES, REGULATIONS OR BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE OR US FISH AND WILDLIFE SERVICE?

Section 6.1.2 of the MSHCP requires assessment of impacts to riparian habitats, riverine areas, and vernal pools, including focused surveys for sensitive riparian bird and fairy shrimp species when suitable habitat is present. The intent of the assessment requirement is to provide for the protection of resources used by MSHCP-covered species, as well as existing and future downstream conservation areas. Riverine/riparian areas and vernal pools are defined in Section 6.1.2 of the MSHCP as follows: *Riparian/Riverine Areas are lands which contain Habitat dominated by trees, shrubs, persistent emergent, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.*

As described previously, the Project site is comprised of disturbed/developed and ruderal areas that do not include riparian habitats or other sensitive natural communities. The Biological Assessment describes that the Project site is primarily undeveloped and comprised of sandy loams. The onsite soils do not allow for water pooling on the site for any significant length of time after rain events. No vernal pools, swales, or vernal pool mimics such as ditches, borrow pits, cattle troughs, or cement culverts with signs of pooling water were on the site. In addition, the Biological Assessment details that no signs of ponding water were evident on the site. Overall, no signs of riparian habitat or other sensitive natural community is located on the site; and therefore, **no impacts** would occur.

IMPACT C: WOULD THE PROJECT HAVE A SUBSTANTIAL ADVERSE EFFECT ON STATE OR FEDERALLY PROTECTED WETLANDS (INCLUDING, BUT NOT LIMITED TO, MARSH, VERNAL POOL, COASTAL, ETC.) THROUGH DIRECT REMOVAL, FILLING, HYDROLOGICAL INTERRUPTION, OR OTHER MEANS.

As described previously, the Project site is comprised of disturbed/developed and ruderal areas. As detailed by the Biological Assessment, no wetland features (including channels, drainages, streambeds, lakes, ponds, riverine or riparian habitat) are located within or adjacent to the Project site. In addition, there are no potential vernal pools or other ponding areas on the Project site. Soils that may support seasonal ponding are not present. Likewise, the Project site does not support jurisdictional resources, including wetlands, marsh, vernal pool, etc., pursuant to Section 1602 of the California Fish and Game Code as regulated by the California Department of Fish and Wildlife (CDFW) and pursuant to Sections 404/401 of the Clean Water Act as regulated by the U.S. Army Corps of Engineers (USACE) and Santa Ana Regional Water Quality Control Board (RWQCB), respectively. Therefore, **no impacts** to CDFW, USACE, or RWQCB jurisdiction would occur.

IMPACT D: WOULD THE PROJECT INTERFERE SUBSTANTIALLY WITH THE MOVEMENT OF ANY NATIVE RESIDENT OR MIGRATORY FISH OR WILDLIFE SPECIES OR WITH ESTABLISHED NATIVE RESIDENT OR MIGRATORY WILDLIFE CORRIDORS OR IMPEDE THE USE OF NATIVE WILDLIFE NURSERY SITES?

Wildlife Movement

The Biological Assessment describes that the Project site is not located within a designated wildlife corridor or linkage. During the field survey for the Biological Assessment, the Project area was evaluated for its function as a wildlife corridor that species use to move between wildlife habitat zones. The Project site consists of flat, disturbed land characterized by disturbed/developed and ruderal areas. Further, the Project site is surrounded by urban development such as residential uses, a graded construction site for future residential uses, vacant land, and roadways. No wildlife movement corridors were found to be present on or adjacent to the Project site. Thus, impacts related to wildlife movement corridors would not occur with implementation of the Project.

Nesting Birds

The Project site has the potential to support songbird and raptor nests due to the presence of shrubs, ground cover, and trees. Project activities could disturb or destroy active migratory bird nests including eggs and young. Disturbing or destroying active nests is a violation of the MBTA (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Game Code Section 3503. As such, direct impacts to breeding birds (e.g., through nest removal) or indirect impacts (e.g., by noise causing abandonment of the nest) is considered a potentially significant impact. Therefore, Mitigation Measure **MM BIO-2** is included to require a nesting bird survey if vegetation is removed during nesting season, which would reduce potential impacts to a less than significant level. Impacts would be **less than significant with mitigation incorporated.**

IMPACT E: WOULD THE PROJECT CONFLICT WITH ANY LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES, SUCH AS A TREE PRESERVATION POLICY OR ORDINANCE?

The City's General Plan Open Space and Conservation Element includes Policies LU-7.4, OS-5.2, OS-5.4, and OS-5.6 that are related to participation in the MSHCP, protection of native plant communities, and protection and enhancement of wildlife migratory corridors. As detailed within this EIR Section, the proposed Project would be consistent with the MSHCP and implement the required burrowing owl surveys. Also, the site does not include either native plant communities or wildlife migratory corridors. Therefore, the proposed Project would not conflict with the City's General Plan Policies related to biological resources.

All projects within the City of Riverside that includes planting or removal of a street tree within a City right-of-way is required to adhere to the City's Urban Forest Tree Policy Manual. The Manual documents guidelines for the planting, pruning, preservation, and removal of all trees in City rights-of-way. The specifications in the Manual are based on national standards for tree care established by the International Society of Arboriculture, the National Arborists Association, and the American National Standards Institute.

The proposed Project includes installation of trees throughout the common areas of the Project site and along the street rights-of-ways adjacent to the Project site, including along Wood Road, Lurin Avenue, and Krameria Avenue. The installation of these trees would be in compliance with the Tree Policy Manual. The City's Planning Division and Public Works Department, Urban Forestry Division would review the landscaping plans through plan checks and inspection of the landscaping during installation, which would ensure that all required City requirements related to the street trees are incorporated. Therefore, potential impacts related to local policies or ordinances protecting biological resources would be **less than significant.**

IMPACT F: WOULD THE PROJECT CONFLICT WITH THE PROVISIONS OF AN ADOPTED HABITAT CONSERVATION PLAN, NATURAL COMMUNITY CONSERVATION PLAN, OR OTHER APPROVED LOCAL, REGIONAL OR STATE HABITAT CONSERVATION PLAN?

As described previously, the Project site is located within the Lake Mathews/Woodcrest Area Plan of the Western Riverside County MSHCP. The Project site is not located within a Criteria Cell or Cell Group. A discussion of the applicable Western Riverside County MSHCP requirements by MSHCP section is provided below:

Section 6.1.2 Species Associated with Riparian/Riverine Habitat and Vernal Pools. The Project site does not contain habitat that may be considered riparian/riverine areas as defined in Section 6.1.2 of the MSHCP. Due to the lack of suitable riparian habitat on the Project site, focused surveys for riparian/riverine bird species listed in Section 6.1.2 of the MSHCP are not warranted.

Vernal pools are seasonal depressional wetlands that occur under Mediterranean climate conditions of the west coast and in glaciated conditions of northeastern and midwestern states. They are covered by shallow water for variable periods from winter to spring but may be completely dry most of the summer and fall. Vernal pools are usually associated with hard clay layers or bedrock, which helps keep water in the pools. Vernal pools and seasonal depressions usually are dominated by hydrophytic plans, hydric soils, and evidence of hydrology.

The Biological Assessment evaluated the site for the presence of habitat capable of supporting branchiopods. The site was evaluated as described in the USFWS Survey Guidelines for the Listed Large Branchiopods (May 31, 2016). The Project soils consist of sandy loams that do not allow for water pooling for any significant length of time after rain events. The Biological Assessment did not identify any vernal pools, swales, or vernal pool mimics such as ditches, borrow pits, cattle troughs, or cement culverts with signs of pooling water. In addition, the site does not contain areas that show signs of ponding water, hydrophytic vegetation, or soils typical of vernal pools that would be suitable for large branchiopods.

Section 6.1.3 Sensitive Plant Species. The Project site is not located within the Western Riverside County MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA) pursuant to Section 6.1.3 of the MSHCP. Therefore, the NEPSSA requirements are not applicable to the Project.

Section 6.1.4 Urban/Wildlands Interface Guidelines. The Project site is not located within or adjacent to a Western Riverside County MSHCP Conservation Area; therefore, the Urban/Wildlands Interface requirements are not applicable to the Project.

Section 6.3.2 Additional Surveys and Procedures. The Project site is not located within the Western Riverside County MSHCP Additional survey areas for amphibians, mammals, or any special linkage areas. In addition, the Project site is not located within the Western Riverside County MSHCP Criteria Area Plant Species Survey Area (CAPSSA) pursuant to Section 6.3.2 of the Western Riverside County MSHCP.

However, the Project site is located within the Western Riverside County MSHCP additional survey area for burrowing owl. As described previously, a habitat assessment for burrowing owl was conducted on the site that did not identify signs of either burrowing owl or ground squirrels and determined that no suitable habitat for this species present on the site. Because the Project site is located within the Western Riverside County MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the commencement of vegetation clearing, clearing and grubbing, tree removal, site watering to ensure that no owls have colonized the site in the days or weeks preceding Project activities. This requirement has been included as Mitigation Measure **MM BIO-1**. Therefore, impacts would be **less than significant with mitigation incorporated.**

5.1.7 CUMULATIVE IMPACTS

This cumulative impact analysis considers development of the Project in conjunction with other development projects in the geographic area covered by the MSHCP pursuant to buildout of the anticipated land use plans. As the Project consists of development of the site pursuant to the existing General Plan, Specific Plan, and zoning code requirements. The primary effects of the proposed Project are considered with the buildout of long-range plans in the geographic area covered by the MSHCP and would be the cumulative loss of habitat for sensitive species and/or cumulatively considerable impacts to sensitive species throughout the MSHCP area. Although the Project site is disturbed, it is still largely undeveloped and provides open space for foraging, refuge, and potentially nesting habitat for birds.

The MSHCP addresses 146 Covered Species that depend on a broad range of habitats and geographic areas within Western Riverside County and includes threatened and endangered species and regionally- or locally- sensitive species that have specific habitat requirements and conservation and management needs. The MSHCP addresses biological impacts for take of Covered Species within the MSHCP Area. Impacts to Covered Species and establishment and implementation of a regional conservation strategy and other measures included in the MSHCP address federal, state, and local mitigation requirements for these species and their habitats. Specifically, Section 4.4 of the MSHCP states that:

> *The MSHCP was specifically designed to cover a large geographical area so that it would protect numerous endangered species and habitats throughout the region. It is the projected cumulative effect of future development that has required the preparation and implementation of the MSHCP to protect multiple habitats and multiple endangered species.*

The MSHCP goes on to state that:

> *The LDMF [Local Development Mitigation Fee], is to be charged throughout the MSHCP area to all future development to provide a coordinated conservation area and implementation program that will facilitate the preservation of biological diversity, as well as maintain the region's quality of life.*

The reason for the imposition of the mitigation fee over the entire region is that the loss of habitat for endangered species is a regional issue resulting from the cumulative effect of continuing development throughout all the jurisdictions in Western Riverside County. The mitigation fees for implementation of the MSHCP and protection of threatened and endangered species are included in the City's Municipal Code as Section 16.72.040 and 16.40.040 and are collected as part of the City's development permitting process.

As detailed previously, the Project site is within the MSHCP burrowing owl survey area. Pursuant to the MSHCP, a habitat assessment was conducted for burrowing owl that determined that the site does not provide suitable habitat for the species, preconstruction surveys would be completed, and no other biological surveys are required by the MSHCP. Because the MSHCP provides coverage for potential cumulative impacts and the Project would comply with MSHCP, which would be verified through the City's development permitting process, potential cumulative impacts to sensitive biological resources would be less than significant. Furthermore, the Project compliance with the MBTA and Fish and Game Code Section 3503 would reduce potentially cumulatively considerable impacts to nesting bird species to a less than significant level.

5.1.8 CITY STANDARD CONDITIONS OF APPROVAL

None.

5.1.9 MITIGATION MEASURES

MM BIO-1: Burrowing Owl. Prior to commencement of construction activities (i.e., demolition, earthwork, clearing, and grubbing), a 30-day pre-construction survey for burrowing owls shall occur in accordance with the Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan. The results of the single one-day survey shall be submitted to the City Planning Division, for review and acceptance, prior to obtaining a grading permit.

If burrowing owl are not detected during the pre-construction survey, no further mitigation is required. If burrowing owl are detected during the pre-construction survey, a Burrowing Owl Protection and Relocation Plan shall be prepared for and approved by the Regional Conservation Authority (RCA) and the Wildlife Agencies prior to initiating ground disturbance. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey shall again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed and shall be submitted to the City Planning Division, for review and acceptance.

MM BIO-2: Nesting Birds. To the extent possible, vegetation removal shall occur outside of the general bird nesting season, which is February 15 through September 15; and January 1 through August 31 for raptors. If vegetation removal, site clearing, and grubbing) must occur during the general bird nesting season or raptor nesting season, a qualified biologist shall perform a pre-construction survey of potential nesting habitat to confirm the absence of active nests belonging to migratory birds and raptors afforded protection under the Migratory Bird Treaty Act and Fish and Game Code. The pre-construction survey shall be performed no more than three days prior to the commencement of construction activities (i.e., demolition, earthwork, clearing, and grubbing). The results of the pre-construction survey shall be documented by the qualified biologist and shall be submitted to the City Planning Division, for review and acceptance. If construction is inactive for more than seven days, an additional survey shall be conducted.

If the qualified biologist determines that no active migratory bird or raptor nests occur, the activities shall be allowed to proceed without any further requirements. If active nests of birds are found during the surveys, a species-specific no-disturbance buffer zone shall be established by a qualified biologist around active nests until said qualified biologist determines that all young have fledged (i.e., no longer reliant upon the nest). If an active nest occurs on site a biological monitor shall visit the site once a week during ground disturbing activities to ensure all fencing is in place around the active nests and no nesting birds are being impacted.

5.1.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The mitigation measures listed above, and existing regulations would reduce potential impacts associated with biological resources for Impacts A, D, and F to a level that is less than significant. Therefore, no significant unavoidable adverse impacts related to biological resources would occur.

REFERENCES

California Department of Fish and Wildlife. "California Regional Conservation Plans." Accessed: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline

City of Riverside Urban Forest Tree Manuel: Accessed: https://www.riversideca.gov/PDF2/Urban-Forestry-Policy.pdf

City of Riverside General Plan EIR Section 5.4, Biological Resources. Accessed: https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/general-plan/vol2/5-4_Biological_Resources.pdf

Hernandez Environmental Services. "General Biological Assessment and MSHCP Consistency Analysis for Assessors Parcel Numbers 266-130-016, 266-130-023, and 266-130-024." January 2021. Appendix B

5.2 Cultural Resources

5.2.1 INTRODUCTION

This section addresses potential environmental effects to cultural resources related to implementation of the proposed Project. Cultural resources detailed herein include historic and archaeological resources. The analysis in this section is based on the following documents and resources:

- *Historic Resources Assessment*, prepared by JM Research and Consulting, 2021, Appendix C
- *Phase I Cultural Resources Assessment, prepared by Material Culture Consulting, Inc.*, Appendix D
- *Geotechnical Evaluation, prepared by Leighton and Associates, Inc., Appendix E*

In accordance with Public Resources Code Section 15120(d), certain information and communications that disclose the location of archaeological sites and sacred lands are allowed to be exempt from public disclosure.

Cultural Resources Terminology

- **Archaeological resources** include any material remains of human life or activities that are at least 100 years of age, and that are of scientific interest. A unique or significant archaeological resource is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it (1) contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information; (2) has a special and particular quality, such as being the oldest of its type or the best available example of its type; and (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.
- **Cultural resources** are defined as buildings, sites, structures, or objects, each of which may have historic, architectural, archaeological, cultural, or scientific importance, according to the California Environmental Quality Act (CEQA).
- **Historic building** or **site** is one that is noteworthy for its significance in local, state, or national history or culture, its architecture or design, or its works of art, memorabilia, or artifacts.
- **Historic context** refers to the broad patterns of historical development in a community or its region that is represented by cultural resources. A historic context statement is organized by themes such as economic, residential, and commercial development.
- **Historic integrity** is defined as "the ability of a property to convey its significance."
- **Historical resources** are defined as "a resource listed or eligible for listing on the California Register of Historical Resources" (CRHR) (Public Resources Code, Section 5024.1; 14 CCR 15064.5) and defined in CEQA Guidelines Section 15064.5 (detailed in Section 5.2.2.2 State Regulations).

5.2.2 REGULATORY SETTING

5.2.2.1 Federal Regulations

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA) established the National Register of Historic Places (National Register), which is the official register of designated historic places. The National Register is administered by the National Park Service, and includes listings of buildings, structures, sites, objects, and districts that possess historical, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

To be eligible for the National Register, a property must be significant under one or more of the following criteria per 36 Code of Federal Regulations Part 60:

a) Properties that are associated with events that have made a significant contribution to the broad patterns of our history;

b) Properties that are associated with the lives of persons significant in our past;

c) Properties that embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d) Properties that have yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the aforementioned criteria, an eligible property must also possess historic "integrity," which is "the ability of a property to convey its significance." The National Register criteria recognize seven qualities that define integrity: location, design, setting, materials, workmanship, feeling, and association.

Structures, sites, buildings, districts, and objects over 50 years of age can be listed in the National Register as significant historical resources. Properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the National Register.

Properties listed in or eligible for listing in the National Register are also eligible for listing in the California Register, and as such, are considered historical resources for CEQA purposes.

5.2.2.2 State Regulations

California Register of Historical Resources

Eligibility for inclusion in the California Register is determined by applying the following criteria:

1) It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2) It is associated with the lives of persons important in California's past;

3) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic value; or

4) It has yielded or is likely to yield information important in prehistory or history. The Register includes properties which are listed or have been formally determined to be eligible for listing in the National Register, State Historical Landmarks, and eligible Points of Historical Interest (PRC §5024.1).

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time has passed since a resource's period of significance to "obtain a scholarly perspective on the events or individuals associated with the resources." (CCR 4852 [d][2]). The California Register also requires that a resource possess integrity. This is defined as the ability for the resource to convey its significance through seven aspects: location, setting, design, materials, workmanship, feeling, and association.

California Health and Safety Code Section 7050.5

Health and Safety Code Section 7050.5(b) and (c) provides that if human remains are discovered, excavation or disturbance in the vicinity of human remains shall cease until the County Coroner is contacted and has reviewed the remains. If the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours.

CEQA Guidelines Section 15064.5

CEQA Guidelines Section 15064.5(a), states that "historical resources" shall include the following:

(1) A resource listed in, or determined to be eligible by, the State Historical Resources Commission for listing in, the California Register of Historical Resources (Public Resources Code, Section 5024.1).

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

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

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

   (B) Is associated with the lives of persons important in California's past;

   (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

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

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead

agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

Public Resources Code Section 5097.98

Public Resources Code Section 5097.98 provides guidance on the appropriate handling of Native American remains. Once the NAHC receives notification from the Coroner of a discovery of Native American human remains, the NAHC is required to notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code Section 5097.98(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials.

5.2.2.3 Regional & Local Regulations and Policies

City of Riverside General Plan

The City of Riverside General Plan Historic Preservation Element and Land Use Element contain objectives with associated policies to protect the City's historical and archaeological resources that are listed below.

Historic Preservation

Objective HP-1: To use historic preservation principles as an equal component in the planning and development process.

> **Policy HP-1.3:** The City shall protect sites of archaeological and paleontological significance and ensure compliance with all applicable state and federal cultural resources protection and management laws in its planning and project review process.

Objective HP-2: To continue an active program to identify, interpret and designate the City's cultural resources.

Objective HP-3: To promote the City's cultural resources as a means to enhance the City's identity as an important center of Southern California history.

Objective HP-4: To fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting, and development activities.

> **Policy HP-4.3**: The City shall work with the appropriate tribe to identify and address, in a culturally appropriate manner, cultural resources and tribal sacred sites through the development review process.

Objective HP-5: To ensure compatibility between new development and existing cultural resources.

Objective HP-7: To encourage both public and private stewardship of the City's cultural resources.

Land Use

Policy LU-4.6: Ensure protection of prehistoric resources through consultations with the Native American tribe(s) identified by the Native American Heritage Commission pursuant to Government Code § 65352.3 and as required by the California Environmental Quality Act.

Riverside Municipal Code, Title 20

The City's historical preservation program is among the most active in the state. Riverside adopted Title 20 of the Riverside Municipal Code (RMC), otherwise known as the "preservation ordinance," and created the Cultural Heritage Board in 1969. This ordinance forms the primary body of local historical preservation law. The California Office of Historic Preservation designated Riverside as a Certified Local Government; a distinction that ensures the City's preservation program meets all federal and state standards.

RMC Title 20 establishes procedures for preserving, protecting, and designating significant cultural resources should the resource be considered a historical/cultural resource, and outlines the criteria for Cultural Heritage Landmarks (RMC, Title 20, Section 20.50.010[U]), Structures or Resources of Merit (RMC, Title 20, Section 20.50.010[FF]), and Historic Districts (RMC, Title 20, Section 20.50.010[O]). A cultural resource may be eligible for one of the three City designations:

Cultural Heritage Landmark Designation Criteria
"Landmark" means any improvement or natural feature that is an exceptional example of a historical, archaeological, cultural, architectural, community, aesthetic or artistic heritage of the City, retains a high degree of integrity, and meets one or more of the following criteria:

1. Exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history

2. Is identified with persons or events significant in local, state or national history

3. Embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship

4. Represents the work of notable builders, designers, or architects

5. Has a unique location or is a view or vista representing an established and familiar visual feature of a neighborhood community or of the city

6. Embodies a collections of elements of architectural design, detail, materials or craftsmanship that represent a significant structural or architectural achievement or innovation Reflects significant geographical patterns, including those associate with different eras of settlement and growth, particular transportation odes, or distinctive examples of park or community planning Conveys a sense of historical and architectural cohesiveness through its design, setting, materials, workmanship, or association.

Resource or Structure of Merit Criteria
"Resource or Structure or Resource of Merit" means any improvement or natural feature that contributes to the broader understanding of the historical, archaeological, cultural, architectural, community, aesthetic or artistic heritage of the City, retains sufficient integrity, and:

1. Has a unique location or singular physical characteristics or is a view or vista representing an established and familiar visual feature of a neighborhood community or of the City

2. Is an example of a type of building which was once common but is now rare in its neighborhood, community, or area

3. Is connected with a business or use which was once common but is now rare

4. A Cultural Resource that could be eligible under Landmark Criteria no longer exhibiting a high level of integrity, however, retaining sufficient integrity to convey significance under one or more of the Landmark Criteria

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

6. An improvement or resource that no longer exhibits the high degree of integrity sufficient

for Landmark designation, yet still retains sufficient integrity under one or more of the Landmark criteria to convey cultural resource significance as a Structure of Merit

Historic District
A "Historic District" contains either:

1. A concentration, linkage, or continuity of cultural resources, where at least fifty percent of the structures or elements retain significant history integrity (a "geographic Historic District")

2. A thematically-related grouping of cultural resources that contribute to each other and are unified aesthetically by plan or physical development, and which have been designated or determined eligible for designation as a historic district by the Historic Preservation Officer, Board, or City Council, or is listed in the National Register of Historic Places or the California Register of Historical Resources, or is a California Historical Landmark or a California Point of Historical Interest (a "thematic Historic District")

In addition to either number 1 or 2 above, the area must also:

1. Exemplify or reflect special elements of the City's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history

2. Identify with persons or events significant in local, state, or national history

3. Embody distinctive characteristics of a style, type, period, or method of construction, or is

a valuable example of the use of indigenous materials or craftsmanship

4. Represent the work of notable builders, designers, or architects

5. Embody a collection of elements of architectural design, detail, materials, or craftsmanship that represents a significant structural or architectural achievement or innovation

6. Reflect significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning

7. Convey a sense of historic and architectural cohesiveness through its design, setting, materials, workmanship or association

8. Yield or may be likely to yield, information important in history or prehistory

5.2.3 ENVIRONMENTAL SETTING

Historic Resources

The Gold Rush of 1849 and the Homestead Act of 1862 resulted in an influx of settlers within the Southern California Region, and Riverside County was settled by homesteaders and farmers, and became an agricultural area that produced a variety of products, such as citrus, grain, grapes, poultry, and swine. Consistent with this regional pattern, the Project site was used as an agricultural field from at least the early 1900s until the late 1970s. The Historic Resources Assessment describes that the Project site was originally part of a larger agricultural area that was subdivided, and that the site was part of the holdings of the Dant ranching family for about a decade (1936-1947).

The onsite residential structure (located at 16725 Dant Street [APN 266-130-016]) was built in 1927. The single-family house shown in Figure 5.2-1 has a detached garage and is primarily constructed of wood. The Historic Resources Assessment describes that the residential structure is of common design and has been extensively modified by the enclosure of the front porch and inappropriate repair, replacement, or modification of character-defining features, including windows and window openings, main entry, eaves,

and wall cladding. Due to the common design, poor condition, and extensive alteration, the Historic Resources Assessment determined that the structure retains no historic integrity and is not considered a historic resource.

Archaeological Resources

The earliest occupation for the northwestern Riverside County area dates to the early Holocene (11,000 to 8,000 years ago). The earliest sites known in the area are attributed to the San Dieguito culture, which consisted of a hunting culture with flaked stone tool industry. The material culture related to this time included scrapers, hammer stones, large flaked cores, drills, and choppers, which were used to process food and raw materials.

The Project region was historically situated between the Native American territories of the Cahuilla people and the Luiseño people. Migration of Shoshone peoples from the Great Basin into the desert and coastal Southern California regions occurred approximately 1000 to 600 years B.P. Both the Cahuilla and Luiseño occupation of the region was derived from this migration. Additional detail about the Cahuilla and Luiseño is provided in Section 5.5, *Tribal Cultural Resources*.

The records search of the California Historic Resources Inventory System that was conducted for the Project identified 28 previously identified prehistoric resources (all bedrock milling features) within 1-mile radius of the Project site. Nine of these were located within between 0.25 to 0.5 mile from the Project site. None of the previously recorded resources are located within the Project site.

Previous Site Ground Disturbances

A majority of the Project site is highly disturbed from previous agricultural activity, development, and land maintenance activities. Historically, the Project site was used as a citrus grove orchard and a residential use. Piles of cut trees were present in the northernmost portion, remnants of a modern irrigation system, and current disking by machinery is evident by overturned soil was observed during the cultural resources field survey. The Phase I Cultural Resources Assessment review of historic aerial photographs identified the site as previously plowed, used as a citrus grove, and then regularly disked.

Figure 5.2-1: Historic Aged Structure

Northwest view of the existing residential structure

East view of the existing residential structure

5.2.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a project could have a significant effect if it were to:

Threshold A: Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5;

Threshold B: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;

Threshold C: Disturb any human remains, including those interred outside of formal cemeteries

5.2.5 METHODOLOGY

The cultural resources analyses are based on the Historic Resources Assessment (Appendix C) and the Phase 1 Cultural Resources Assessment (Appendix D), and contains information that was compiled through field reconnaissance, record searches, and reference materials. In determining whether an archaeological related impact would result from the proposed Project, the analysis includes record searches of past identified resources, the past disturbance on the site, and the proposed excavation

Archaeological and Historic Records Search

On January 20, 2021, a record search request was submitted to the California Historical Resource Information System (CHRIS) from the Eastern Information Center (EIC), located on the campus of University of California, Riverside. The CHRIS search included areas within 1-mile of the Project site and included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Inventory of Historic Resources. Also, a Sacred Lands File search was requested from the NAHC on January 19, 2021. The NAHC responded on February 3, 2021, stating that there are no known/known sacred lands within 0.5 mile of the Project site.

Historic Field Survey

An intensive-level historic survey was conducted on April 16, 2021 and included field survey and historic and building specific research. The survey resulted in preparation of State of California Department of Parks and Recreation (DPR) historic review forms, provided in the Historic Resources Assessment (Appendix C). Research and review of source material included previous cultural resources studies and reports, Riverside County property records, tract and assessor maps, and historic newspapers and historic aerial photographs.

Archaeological Field Survey

A pedestrian reconnaissance survey was conducted across the Project site on March 4, 2021. The survey consisted of walking in parallel transects spaced at approximately 5- to 10-meter intervals over the Project parcels, while closely inspecting the ground surface. Transect spacing was narrowed when ground visibility was poor. The Project site was examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), or historic-era debris (e.g., metal, glass, ceramics). Existing ground disturbances (e.g., cutbanks, ditches, animal burrows, etc.) were visually inspected.

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5.2.6 ENVIRONMENTAL IMPACTS

IMPACT A: WOULD THE PROJECT WOULD CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A HISTORICAL RESOURCE PURSUANT TO § 15064.5?

According to the *State CEQA Guidelines*, a historical resource is defined as something that meets one or more of the following criteria:

1) Listed in, or determined eligible for listing in, the California Register of Historical Resources;
2) Listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k);
3) Identified as significant in a historical resources survey meeting the requirements of PRC Section 5024.1(g); or
4) Determined to be a historical resource by the project's Lead Agency.

PRC Section 5024.1 directs evaluation of historical resources to determine their eligibility for listing on the CRHR. The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP, enumerated above, and require similar protection to what NHPA Section 106 mandates for historic properties. According to PRC Section 5024.1(c)(1-4), a resource is considered historically significant if it meets at least one of the following criteria:

1) Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;
2) Associated with the lives of persons important to local, California or national history;
3) Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values; or
4) Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The Project site is undeveloped except for a vacant single-family residence that was constructed in 1927 and is located on the southeast corner of the Project site. The proposed Project would demolish the existing residence and the associated improvements for development of the Project. The Historic Resources Assessment (Appendix C) describes that the site and residence was part of the holdings of a ranching family and was originally part of a larger property that was subdivided into smaller parcels. The assessment of the residential structure determined that it is of common design and has been extensively modified by the enclosure of the front porch and inappropriate repair, replacement, or modification of character-defining features, including windows and window openings, main entry, eaves, and wall cladding. The alterations have significantly compromised the structure's integrity and redefined its design, the quality of which lacks architectural distinction, and important associations have not been established, precluding eligibility for local designation under Title 20 of the Riverside Municipal Code. Due to the poor condition, common design, and extensive alteration the structure retains no historic integrity and is not considered a historic resource. Thus, demolition and removal of this structure and associated improvements as part of the Project would not result in impacts to a historic resource.

In addition to the structure itself, the historically related setting of the Project site and its vicinity have been compromised by subdivisions of the larger agricultural area, and historically related agricultural uses do not exist. The Project site is not strongly associated with events that have made a significant contribution to the

broad patterns of our national or state history or with significant persons in our past; does not embody distinctive characteristics of a type, period, or represent the work of a master or possess high artistic value; and has not yielded, or is likely to yield, further information important in history or prehistory. Therefore, the Project site and residential structure are not eligible for listing in the National Register of Historic Places, California Register of Historical Resources, or historic designation at the local level; and is not considered a historic resource under CEQA. Implementation of the proposed Project would result in a **less than significant impact** related to historic resources.

IMPACT B: WOULD THE PROJECT CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF AN ARCHAEOLOGICAL RESOURCE PURSUANT TO § 15064.5?

Less than Significant with Mitigation Incorporated. There are 28 previously identified prehistoric resources (all bedrock milling features) within a 1-mile radius of the Project site; nine of which are within 0.25-mile to 0.5-mile of the Project site. However, no known archaeological resources are located on the site. The site consists of 2 to 4 feet of alluvial soils over bedrock. The alluvial soils have been extensively disturbed by agricultural earthmoving, including plowing, use as a citrus farm, and regular disking, which limits the potential for archaeological resources to exist on the site. The Phase I Cultural Resources Assessment describes that disking by machinery looks to have taken place recently as evident by overturned soil. The modification and disturbance associated with the prior agricultural uses and current disking has eradicated any near-surface record of prehistoric, ethnohistoric, or historic-era behavioral activities that may have otherwise been preserved as archaeological sites, deposits, or features.

However, because previously recorded prehistoric resources have been identified within 0.25-mile of the Project site, it is possible that archaeological resources could be uncovered during earthmoving activities. The Phase 1 Cultural Resources Assessment determined that the site has a low to moderate potential for archaeological resources. As a result, Mitigation Measure **MM CUL-1** has been included to require that a qualified archaeologist monitor initial ground-disturbance activities. The mitigation also requires the monitor to conduct a pre-grading cultural resources sensitivity training for construction personnel and protocols in the event a potential archaeological resource is uncovered. Mitigation Measure **MM CUL-2** states that if inadvertent discoveries of archaeological resources occur, work shall temporarily halt until agreements are executed with consulting tribe. Mitigation Measures **CUL-3** through **CUL-5** outline protocols for tribal monitoring, treatment and disposition of tribal cultural resources, and cultural sensitivity training. With implementation of Mitigation Measure **MM CUL-1** through **MM CUL-5**, potential impacts to archaeological resources would be **less than significant**.

Additional measures that are specifically for tribal cultural resources are provided in Section 5.5, *Tribal Cultural Resources*.

IMPACT C: WOULD THE PROJECT DISTURB ANY HUMAN REMAINS, INCLUDING THOSE INTERRED OUTSIDE OF FORMAL CEMETERIES?

The Project site is vacant and undeveloped, with exception of one small residence at the southeast corner of the site; and the site has no history of previous cemetery uses. As detailed in the previous response, soils have been extensively disturbed by agricultural earthmoving, including plowing, use as a citrus farm, and regular disking. Human remains on the Project site are unlikely, as they typically would have been identified during previous agricultural and disking activities. Thus, impacts are less than significant. However, in the unanticipated event that human remains are found during Project construction activities compliance with California Health and Safety Code Section 7050.5 that is enforced through a City Standard Condition of Approval would ensure that human remains were treated with dignity and as specified by law, which would reduce the impact to a less than significant level.

As specified by California Health and Safety Code Section 7050.5, if human remains are found on the Project site, the County Coroner's office shall be immediately notified and no further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would make a determination as to the Most Likely Descendent. Compliance with the existing California Health and Safety Code regulations, via the City's Standard Condition of Approval would ensure impacts related to potential disturbance of human remains would be **less than significant**.

5.2.7 CUMULATIVE IMPACTS

Historic Resources: The Project's contribution to cumulative impacts to historical resources was analyzed in context with historic resources within the County, as agricultural production of citrus has historically occurred throughout Riverside County. As detailed previously, record searches and field surveys indicate the absence of significant historical sites and resources within the Project site and vicinity, and the Historic Resources Assessment (Appendix C) determined that the existing residential structure on the site is not a historic resource. Therefore, Project implementation would have no potential to contribute towards a significant cumulative impact to historical resources. Thus, cumulatively considerable historic resource related impacts would not occur.

Archaeological Resources: The cumulative study area for archaeological resources includes the southern California region, which contains the same general prehistoric uses and migration trends as the Project site. Cumulative development projects in the region would involve ground disturbances that could reveal buried archaeological resources. However, as detailed previously, the soils within the Project site have been substantially disturbed and the site has a low to moderate potential for archaeological resources and the Project would implement Mitigation Measure **MM CUL-1** through **MM CUL-5** to ensure that impacts would not occur in the case of an inadvertent discovery of a potential resource, including a tribal cultural resource. The mitigation measure ensures that the Project would not contribute to a cumulative loss of archaeological resources; therefore, Project impacts would be less than cumulatively significant.

Disturbance of Human Remains: Mandatory compliance with the provisions of California Health and Safety Code § 7050.5, Public Resources Code § 5097 et seq., and CEQA Guidelines Section 15064.5 that is enforced through the City's standard Condition of Approval would assure that all future development projects treat human remains that may be uncovered during development activities in accordance with prescribed, respectful, and appropriate practices, thereby avoiding significant cumulative impacts.

5.2.8 CITY STANDARD CONDITIONS OF APPROVAL

Discovery of Human Remains. In the event that human remains (or remains that may be human) are discovered at the Project site during grading or earthmoving, the construction contractors, Project Archaeologist, and/or designated Native American Monitor shall immediately stop all activities within 100 feet of the find. The Project proponent shall then inform the Riverside County Coroner and the City of Riverside Community & Economic Development Department immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b) unless more current State law requirements are in effect at the time of the discovery. Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the Native American Heritage Commission shall be contacted within the period specified by law (24

hours). The coroner shall contact the NAHC to determine the most likely descendant(s). The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The Disposition of the remains shall be overseen by the most likely descendant(s) to determine the most appropriate means of treating the human remains and any associated grave artifacts.

The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The County Coroner will notify the Native American Heritage Commission in accordance with California Public Resources Code 5097.98.

According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). The disposition of the remains shall be determined in consultation between the Project proponent and the MLD. In the event that the Project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

5.2.9 MITIGATION MEASURES

MM CUL-1: Archaeological Monitoring. At least 30 days prior to application for a grading permit and before any grading, excavation, and/or ground disturbing activities take place, the developer/applicant shall retain a Secretary of Interior Standards qualified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.

The Project archaeologist, in consultation with consulting tribes, the Developer, and the City, shall develop and implement an Archaeological Monitoring Plan to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the Project site. Details in the plan shall include:

a. Project grading and development scheduling;
b. The development of a rotating or simultaneous schedule in coordination with the developer/applicant and the Project archaeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation, and ground-disturbing activities on the site, including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists;
c. The protocols and stipulations that the Applicant, tribes, and project archaeologist/paleontologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits, or nonrenewable paleontological resources that shall be subject to a cultural resources evaluation;
d. In conjunction with the Archeological Monitor(s), the Native American Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources;
e. Treatment and final disposition of any cultural and paleontological resources, sacred sites, and human remains if discovered on the project site; and
f. The requirements (including scheduling and timing) of a preconstruction Cultural Sensitivity Training .

MM CUL-2: Native American Coordination. Prior to grading permit issuance, if there are any changes to Project site design and/or proposed grades, the Applicant and the City shall contact consulting tribes to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the City, developer/applicant, and consulting tribes to discuss any proposed changes and review any new impacts and/or potential avoidance/preservation of any identified cultural resources on the Project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place any cultural

and paleontological resources that are identified on the Project site if the site design and/or proposed grades should be revised. In the event of inadvertent discoveries of archaeological resources, work shall temporarily halt until agreements are executed with consulting tribe, to provide tribal monitoring for ground disturbing activities.

MM CUL-3: Native American Monitor: Prior to issuance of grading permit, the developer/permit applicant shall engage each of the consulting tribe(s) regarding Native American Monitoring. The developer/permit applicant shall provide evidence to the City that they have reached an agreement with each of the consulting tribe(s) regarding the following:

a. The treatment of known cultural resources;

b. The treatment and final disposition of any tribal cultural resources, sacred sites, human remains or archaeological and cultural resources inadvertently discovered on the Project site;

c. Project grading, ground disturbance (including but not limited to excavation, trenching, cleaning, grubbing, tree removals, grading and trenching) and development scheduling; and

d. The designation, responsibilities, and participation of professional Tribal Monitor(s) during grading, excavation and ground disturbing activities.

If the developer/permit applicant and the consulting tribe(s) are unable to reach an agreement regarding compensation, the mitigation measure shall be considered satisfied if the developer/permit applicant provides sufficient documented evidence that they have made a reasonable good faith effort to reach an agreement, as determined by the City with the consulting tribes with regards to items a-d, as listed above).

MM CUL-4: Treatment and Disposition of Cultural Resources. In the event that Native American cultural resources are inadvertently discovered during the course of grading for this Project, the following procedures will be carried out for treatment and disposition of the discoveries:

1. **Consulting Tribes Notified:** within 24 hours of discovery, the consulting tribe(s) shall be notified via email and phone. The developer shall provide the city evidence of notification to consulting tribes. Consulting tribe(s) will be allowed access to the discovery, in order to assist with the significance evaluation.

2. **Temporary Curation and Storage:** During the course of construction, all discovered resources shall be temporarily curated in a secure location on site or at the offices of the Project archaeologist. The removal of any artifacts from the Project site shall require the approval of the consulting Tribes and all resources subject to such removal must be thoroughly inventoried with a tribal monitor from each consulting tribe to oversee the process; and

3. **Treatment and Final Disposition:** The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The Applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same:

    a. Preservation-in-place of the cultural resources, if feasible as determined through coordination between the project archeologist, developer/applicant, and consulting tribal monitor(s). Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources in perpetuity;

    b. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial

area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed, with an exception that sacred items, burial good and Native American human remains are excluded. No cataloguing, analysis, or other studies may occur on human remains and grave goods. Any reburial process shall be culturally appropriate. List of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV report shall be prepared by the project archeologist and shall be filled with the City under a confidential cover and not subject to a Public Records Request. The Tribe(s) should be able to access these areas in the future through enforceable agreement;

c. If reburial is not feasible, a curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation; and

d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the Project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Riverside, Eastern Information Center, and consulting tribes.

MM CUL-5: Cultural Sensitivity Training. The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. Only construction personnel who have received this training can conduct construction and disturbance activities in sensitive areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.

5.2.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of **MM CUL-1** through **MM CUL-5** impacts related to cultural resources would be less than significant.

REFERENCES

Geotechnical Evaluation, prepared by Leighton and Associates, Inc. (GEO 2021) (Appendix F)

Historic Resources Assessment, prepared by JM Research and Consulting, 2021 (Appendix C)

National Park Service (NPS). 2018, June 11. Archaeology Program. The Archaeological Resources Protection Act of 1979. https://www.nps.gov/archeology/tools/laws/arpa.htm.

NETRonline. Historic Aerials. https://www.historicaerials.com/viewer

Phase I Cultural Resources Assessment, prepared by Material Culture Consulting, Inc. (MCC 2021) (Appendix D)

5.3 Noise

5.3.1 INTRODUCTION

This EIR section evaluates the potential noise and vibration impacts that would result from implementation of the proposed Project. It discusses the existing noise environment within and around the Project site, as well as the regulatory framework for regulation of noise. This section analyzes the effect of the proposed Project on the existing ambient noise environment during demolition, construction, and operational activities; and evaluates the Project's noise effects for consistency with relevant local agency noise policies and regulations. The analysis also evaluates the potential of vibration related effects from the Project. This section includes data from the Noise Impact Analysis (NOI 2021), included as Appendix F.

Noise and Vibration Terminology

Various noise descriptors are utilized in this EIR analysis, and are summarized as follows:

dB: Decibel, the standard unit of measurement for sound pressure level.

dBA: A-weighted decibel, an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

Leq: The equivalent sound level, which is used to describe noise over a specified period of time, typically 1 hour, in terms of a single numerical value. The Leq of a time-varying signal and that of a steady signal are the same if they deliver the same acoustic energy over a given time. The Leq may also be referred to as the average sound level.

Lmax: The instantaneous maximum noise level experienced during a given period of time.

Lmin: The instantaneous minimum noise level experienced during a given period of time.

Lx: The sound level that is equaled or exceeded "x" percent of a specified time period. The "x" thus represents the percentage of time a noise level is exceeded. For instance, L50 and L90 represents the noise levels that are exceeded 50 percent and 90 percent of the time, respectively.

Ldn: Also termed the "day-night" average noise level (DNL), Ldn is a measure of the average of A-weighted sound levels occurring during a 24-hour period, accounting for the greater sensitivity of most people to nighttime noise by weighting noise levels at night (penalizing" nighttime noises). Noise between 10:00 p.m. and 7:00 a.m. is weighted by adding 10 dBA to take into account the greater annoyance of nighttime noises.

CNEL: The Community Noise Equivalent Level, which, similar to the Ldn, is the average A-weighted noise level during a 24-hour day that is obtained after an addition of 5 dBA to measured noise levels between the hours of 7:00 p.m. to 10:00 p.m. and after an addition of 10 dBA to noise levels between the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

The "ambient noise level" is the background noise level associated with a given environment at a specified time and is usually a composite of sound from many sources from many directions.

Effects of Noise

Noise is generally loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity that is a nuisance or disruptive. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance)
- Interference effects (e.g., communication, sleep, and learning interference)
- Physiological effects (e.g., startle response)
- Physical effects (e.g., hearing loss)

Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. Interference effects refer to interruption of daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening and arousal to a lesser state of sleep. With regard to the subjective effects, the responses of individuals to similar noise events are diverse and are influenced by many factors, including the type of noise, the perceived importance of the noise, the appropriateness of the noise to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity.

In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be by those hearing it. With regard to increases in A-weighted noise levels, the following relationships generally occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived.
- Outside of the laboratory, a 3-dBA change in noise levels is considered to be a barely perceivable difference.
- A change in noise levels of 5 dBA is considered to be a readily perceivable difference.
- A change in noise levels of 10 dBA is subjectively heard as doubling of the perceived loudness.

Noise Attenuation

Stationary point sources of noise, including mobile sources such as idling vehicles, attenuate (lessen) at a rate of 6 dBA per doubling of distance from the source over hard surfaces to 7.5 dBA per doubling of distance from the source over hard surfaces, depending on the topography of the area and environmental conditions (e.g., atmospheric conditions, noise barriers [either vegetative or manufactured]). Thus, a noise measured at 90 dBA 50 feet from the source would attenuate to about 84 dBA at 100 feet, 78 dBA at 200 feet, 72 dBA at 400 feet, and so forth. Widely distributed noise, such as a large industrial facility spread over many acres or a street with moving vehicles, would typically attenuate at a lower rate, approximately 4 to 6 dBA per doubling of distance from the source.

Hard sites are those with a reflective surface between the source and the receiver, such as asphalt or concrete surfaces or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the changes in noise levels with distance (drop-off rate) is simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. In addition to geometric spreading, an excess ground attenuation value of 1.5 dBA (per doubling distance) is normally assumed for soft sites. Line sources (such as traffic noise from vehicles) attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement.

Fundamentals of Vibration

Vibration is energy transmitted in waves through the ground or man-made structures. These energy waves generally dissipate with distance from the vibration source. There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. VdB serves to reduce the range of numbers used to describe human response to vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment.

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

5.3.2 REGULATORY SETTING

5.3.2.1 Federal Regulations

Federal Transit Administration Transit Noise and Vibration

Neither the City General Plan nor Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers. Therefore, a numerical construction threshold based on *Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts. According to the FTA, local noise ordinances are typically not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity, and sometimes specify limits in terms of maximum levels, but are generally not practical for assessing the impact of a construction project. Project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dBA Leq as a reasonable threshold for noise sensitive residential land use.

5.3.2.2 State Regulations

Title 24, California Building Code

State regulations related to noise include requirements for the construction of new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings that are intended to limit the extent of noise transmitted into habitable spaces. These requirements are collectively known as the California Noise Insulation Standards and are found in California Code of Regulations, Title 24 (known as the Building

Standards Administrative Code), Part 2 (known as the California Building Code), Appendix Chapters 12 and 12A. For limiting noise transmitted between adjacent dwelling units, the noise insulation standards specify the extent to which walls, doors, and floor ceiling assemblies must block or absorb sound. For limiting noise from exterior sources, the noise insulation standards set forth an interior standard of DNL 45 dBA in any habitable room and, where such units are proposed in areas subject to noise levels greater than DNL 60 dBA require an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard. If the interior noise level depends upon windows being closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

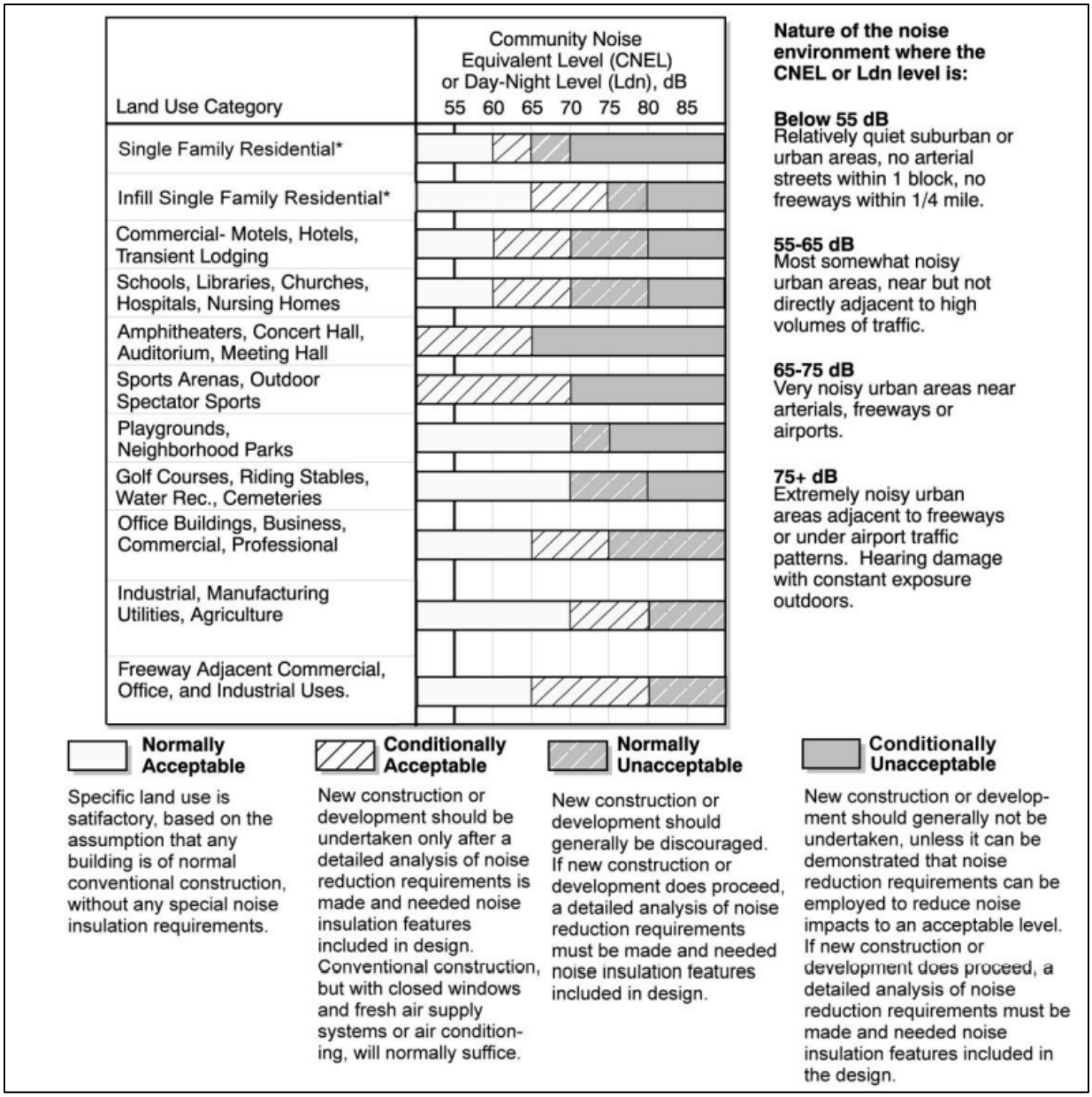
The mandatory measures for non-residential buildings states that new construction shall provide an interior noise level that does not exceed an hourly equivalent level of 50 dBA Leq in occupied areas during any hour of operation. Title 24 standards are included in the City's Municipal Code in Title 7, *Noise Control*, and are enforced through the building permit application process in the City.

5.3.2.3 Regional & Local Regulations and Policies

City of Riverside General Plan Noise Element

The City of Riverside General Plan Noise Element includes a Noise Land Use Compatibility Matrix (included as Table 5.3-1) that establishes standards for outdoor noise levels that are normally acceptable, conditionally acceptable, normally unacceptable, and conditionally unacceptable for a variety of land uses. For example, noise levels of up to 60 dBA CNEL are "normally acceptable" and levels up to 65 dBA CNEL are "conditionally acceptable" for single-family uses, noise levels of up to 60 dBA CNEL are "normally acceptable."

Table 5.3-1: City of Riverside General Plan Noise Compatibility Guidelines



The City of Riverside General Plan Noise Element also has objectives and policies related to excessive noise levels. The following existing objectives and policies in the Noise Element are relevant to the proposed Project.

Objective N-1: Minimize noise levels from point sources throughout the community and, wherever possible, mitigate the effects of noise to provide a safe and healthful environment.

> **Policy N-1.1:** Continue to enforce noise abatement and control measures particularly within residential neighborhoods.

Policy N-1.2: Require the inclusion of noise-reducing design features in development consistent with standards in Figure N–10 (Noise/Land Use Compatibility Criteria), Title 24 California Code of Regulations and Title 7 of the Municipal Code.

Policy N-1.3: Enforce the City of Riverside Noise Control Code to ensure that stationary noise and noise emanating from construction activities, private developments/residences and special events are minimized.

Policy N-1.4: Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading areas, ingress/egress points and refuse collection areas.

Policy N-1.5: Avoid locating noise-sensitive land uses in existing and anticipated noise-impacted areas.

Policy N-1.8: Continue to consider noise concerns in evaluating all proposed development decisions and roadway projects.

Policy N-3.1: Avoid placing noise-sensitive land uses (e.g., residential uses, hospitals, assisted living facilities, group homes, schools, day care centers, etc.) within the high noise impact areas (over 65 dB CNEL) for March Air Reserve Base/March Inland Port in accordance with the Riverside County 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan.

Objective N-4: Minimize ground transportation-related noise impacts.

Policy N-4.1: Ensure that noise impacts generated by vehicular sources are minimized through the use of noise reduction features (e.g., earthen berms, landscaped walls, lowered streets, improved technology).

City of Riverside Municipal Code

Municipal Code Section 7.25.010, Exterior Sound Level Limits:

A. Unless a variance has been granted as provided in this title, it shall be unlawful for any person to cause or allow the creation of any noise which exceeds the following:

   1. The exterior noise standard of the applicable land use category, up to five decibels, for a cumulative period of more than 30 minutes in any hour (L_{50}); or
   2. The exterior noise standard of the applicable land use category, plus five decibels, for a cumulative period of more than 15 minutes in any hour (L_{25}); or
   3. The exterior noise standard of the applicable land use category, plus ten decibels, for a cumulative period of more than five minutes in any hour (L_8); or
   4. The exterior noise standard of the applicable land use category, plus 15 decibels, for the cumulative period of more than one minute in any hour (L_2); or
   5. The exterior noise standard for the applicable land use category, plus 20 decibels or the maximum measured ambient noise level, for any period of time (L_{max}).

B. If the measured ambient noise level exceeds that permissible within any of the first four noise limit categories, the allowable noise exposure standard shall be increased in five decibel increments in each category as appropriate to encompass the ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under

said category shall be increased to reflect the maximum ambient noise level.

C. If possible, the ambient noise level shall be measured at the same location along the property line with the alleged offending noise source inoperative. If for any reason the alleged offending noise source cannot be shut down, then the ambient noise must be estimated by performing a measurement in the same general area of the source but at a sufficient distance that the offending noise is inaudible. If the measurement location is on the boundary between two different districts, the noise shall be the arithmetic mean of the two districts.

D. Where the intruding noise source is an air-conditioning unit or refrigeration system which was installed prior to the effective date of this title, the exterior noise level when measured at the property line shall not exceed 60 dBA for units installed before 1-1-80 and 55 dBA for units installed after 1-1-80.

Table 5.3-2: City of Riverside Municipal Code Exterior Noise Standards

Land Use Category	Time Period	Noise Level
Residential	Night (10:00 p.m. - 7:00 a.m.)	45 dBA
	Day (7:00 a.m. - 10:00 p.m.)	55 dBA
Office/Commercial	Any time	65 dBA
Industrial	Any time	70 dBA
Community Support	Any time	60 dBA
Public Recreation Facility	Any time	65 dBA
Nonurban	Any time	70 dBA

Source: Municipal Code Section 7.25.010

Municipal Code Section 7.30.015, Interior Noise Level Limits:

A. No person shall operate or cause to be operated, any source of sound indoors which causes the noise level, when measured inside another dwelling unit, school or hospital, to exceed:

1. The interior noise standard for the applicable land category area, up to five decibels, for a cumulative period of more than five minutes in any hour;
2. The interior noise standard for the applicable land use category, plus five decibels, for a cumulative period of more than one minute in any hour;
3. The interior noise standard for the applicable land use category, plus ten decibels or the maximum measured ambient noise level, for any period of time.

B. If the measured interior ambient noise level exceeds that permissible within the first two noise limit categories in this section, the allowable noise exposure standard shall be increased in five decibel increments in each category as appropriate to reflect the interior ambient noise level. In the event the interior ambient noise level exceeds the third noise limit category, the maximum allowable interior noise level under said category shall be increased to reflect the maximum interior ambient noise level.

C. The interior noise standard for various land use districts shall apply, unless otherwise specifically indicated, within structures located in designated zones with windows opened or closed as is typical of the season.

Table 5.3-3: City of Riverside Municipal Code Interior Noise Standards

Land Use	Time Period	Noise Level
Residential	Night (10:00 p.m. - 7:00 a.m.)	35 dBA
	Day (7:00 a.m. - 10:00 p.m.)	45 dBA
School	7:00 a.m. – 10:00 p.m. (while school is in session)	45 dBA
Hospital	Any time	45 dBA

Source: Municipal Code Section 7.30.015

Municipal Code Section 7.35.020 Exemptions: Construction. Noise sources associated with construction, repair, remodeling, or grading of any real property; provided a permit has been obtained from the City as required; and provided said activities do not take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or at any time on Sunday or a federal holiday.

Neither the City General Plan nor Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers. Therefore, a numerical construction threshold based on Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual is used for analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA Leq averaged over an 8-hour period as a reasonable threshold for noise sensitive residential land uses.

Where the City did not have applicable construction standards, the following supplemental construction noise standards were applied.

- ***Federal Transit Administration***: The construction noise threshold from *Transit Noise and Vibration Impact Assessment* (2018), identifies a significant construction noise impact if construction noise exceeds 80 dBA Leq over an eight-hour period during the daytime at the nearby sensitive receivers (e.g. residential, etc.).
- ***Caltrans Transportation and Construction Vibration Guidance Manual***: The City does not have numeric vibration standards that are applicable to the proposed Project. Hence, the California Department of Transportation's (Caltrans) Transportation and Construction Vibration Guidance Manual guidelines are used as a screening tool for assessing the potential for adverse vibration effects related to structural damage and human perception.

Caltrans identifies a building damage vibration level threshold for older residential structures of 0.3 in/sec PPV; and a distinctly perceptible human annoyance vibration level threshold of 0.04 in/sec PPV at nearby sensitive receiver locations.

5.3.3 ENVIRONMENTAL SETTING

Existing Noise Levels

To determine the existing noise level environment, short-term noise measurements were taken at four locations in the Project study area on April 27, 2021. The location of the noise measurements are shown in Figure 5.3-1. As listed on Table 5.3-4, the existing ambient noise levels on the site range from approximately 46.6 to 69.3 Leq dBA. The existing ambient noise at the Project site is generally characterized by traffic noise along Lurin Avenue, Wood Road, and Krameria Avenue and Earth moving equipment that was in use south of Lurin Avenue.

Table 5.3-4: Noise Measurement Summary (dBA)

Site Location	Time Started	Leq	Lmax	Lmin	L(2)	L(8)	L(25)	L(50)
NM 1	12:06 p.m.	58.7	72.9	40.1	68.8	64.4	55.1	49.8
NM 2	12:40 p.m.	69.3	80.8	45.2	77.2	74.8	70.3	62.0
NM 3	1:17 p.m.	46.6	55.1	39.2	51.3	49.9	47.8	45.7
NM 4	1:43 p.m.	62.6	77.5	49.5	70.2	67.0	62.4	58.9

Source: Noise Impact Analysis, Appendix F

The nearest airport is March Air Reserve Base/Inland Port Airport (March ARB/IPA), which is located approximately 3.5 miles northeast of the Project site. The Project site is located outside of the 60 dBA noise contour; therefore, MARCH ARB is not considered as a source that contributes to the existing ambient noise levels on the Project site.

The existing ambient noise from vehicular traffic was modeled using the Federal Highway Administration (FHWA) Traffic Noise Prediction Model (FHWA-RD-77-108). As shown on Table 5.3-5, the existing traffic noise in the Project vicinity is as high as 73.9 dBA at a distance of 50 feet from the centerline from Van Buren Boulevard. However, the existing traffic noise level along Krameria Avenue, which borders the Project site to the north, is approximately 62.1 dBA.

Table 5.3-5: Existing Traffic Noise Levels

Road Segments	Existing Average Daily Traffic	dB CNEL
Van Buren Boulevard		
w/o Wood Street	42,054	73.9
e/o Wood Street	40,117	73.7
at Trautwein-Cole Avenue	41,461	73.9
Cole Avenue		
s/o Van Buren Blvd	6,934	66.1
Krameria Avenue		
w/o Cole Avenue	2,752	62.1
e/o Cole Avenue	1,870	60.4

Source: Noise Impact Analysis, Appendix F

Existing Vibration Levels

Aside from periodic construction work that may occur in the vicinity of the Project site, other sources of groundborne vibration include heavy-duty vehicular travel (e.g., refuse trucks and delivery trucks) on the roadways that are adjacent to the Project site. Trucks traveling at a distance of 50 feet typically generate groundborne vibration velocity levels of around 63 VdB (approximately 0.006 in/sec PPV), and these levels could reach 72 VdB (approximately 0.016 in/sec PPV) when trucks pass over bumps in the road.

Existing Sensitive Receptors

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, single and multiple-family residential, including transient lodging, motels and hotel uses make up the majority of these areas. The closest receptors to the Project site include: the single-family residential uses located adjacent to the east and west of the site, the single-family residential uses located approximately 90 feet north of the site, north of Krameria Avenue; approximately 40 feet east of the site, east of Dant Street; and approximately 60 feet to the west, west of Wood Road (see Figure 5.3-2).

Noise Measurement Locations

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Sensitive Receptor Locations

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5.3.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a project could have a significant effect if it were to:

Threshold A	Generation of a substantial temporary or permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
Threshold B	Generate excessive groundborne vibration or groundborne noise levels;
Threshold C	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

The Initial Study established that the Project would result in no impact related to Threshold NOI-3; no further assessment of this impact is required in this EIR.

5.3.5 METHODOLOGY

The analysis within this EIR section is based on the Noise Impact Analysis (NOI 2021), included as Appendix F. The assessment is based on noise modeling conducted for the Project. Noise monitoring was performed on April 27, 2021 using American National Standards Institute (ANSI Section SI4 1979, Type 1) Larson Davis model Sound Track LxT2 sound level meter. The noise monitoring locations were selected in order to obtain noise measurements of the current noise sources impacting the vicinity of the Project site and to provide a baseline for any potential noise impacts that may be created by development of the proposed Project. Project impacts were then evaluated based on the thresholds established for construction and operational noise impacts. Additionally, construction and operation groundborne vibration was estimated for the Project and evaluated based on applicable vibration impact thresholds.

Construction Noise

To identify the temporary construction noise contribution to the existing ambient noise environment, the construction noise levels anticipated from usage of construction equipment needed to implement the proposed Project was calculated utilizing methodology from the FTA Transit Noise and Vibration Impact Assessment Manual (2018) together with construction parameters including: distance to each sensitive receiver, equipment usage, percent usage factor, and baseline parameters for the Project site. The construction noise levels are compared against the thresholds listed below to assess the level of significance associated with temporary construction noise level impacts.

The Project could result in a noise related impact if construction activities:

- Occur between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or at any time on Sunday or a federal holiday (City of Riverside Municipal Code Section 7.35.020(G)); or
- Create noise levels which exceed 80 dBA Leq averaged over an 8-hour period at the nearby sensitive receiver locations (Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment (2018) criteria).

Operational Noise

The primary source of noise associated with the operation of the proposed Project would be from vehicular trips. The expected roadway noise level increases from vehicular traffic were calculated using the Federal Highway Administration (FHWA) traffic noise prediction model and the average daily traffic volumes that would be generated by the proposed Project.

As detailed in Section 5.4, *Transportation,* the proposed Project is anticipated to generate approximately 906 daily trips, 72 a.m. peak hour trips and 95 p.m. peak hour trips. The increase in noise levels generated by the vehicular trips have been quantitatively estimated and compared to the applicable noise thresholds of significance listed below.

Secondary sources of noise would include new stationary sources (such as heating, ventilation, and air conditioning units) associated with the new residences on the Project site. The increase in noise levels generated by these activities have been quantitatively estimated and compared to the applicable noise standards listed below.

The Project would result in a noise related impact if Project related operational (stationary source) noise levels:

- Exceed the exterior 55 dBA Leq daytime or 45 dBA Leq nighttime noise level standards at nearby sensitive residential receiver locations (City of Riverside Municipal Code, Section 7.25.010).

The Project would result in a noise related impact if the existing ambient noise levels at the nearby noise-sensitive receivers increase by 5 dBA because an increase of at least 5 dBA is required before any noticeable change in community response. This threshold was identified in the City's General Plan EIR.

Vibration

Aside from noise levels, groundborne vibration would also be generated during construction of the Project by various construction-related activities and equipment; and could be generated by truck traffic traveling to and from the Project site. The potential ground-borne vibration levels resulting from construction activities occurring from the proposed Project were estimated by data published by the FTA. Thus, the groundborne vibration levels generated by these sources have also been quantitatively estimated and compared to the applicable thresholds of significance listed below.

There are no City or state vibration standards applicable to the proposed Project. As such, available guidelines from the Federal Transit Administration (FTA) are utilized to assess impacts due to ground-borne vibration. The FTA has adopted vibration standards that are used to evaluate potential building damage impacts related to construction activities. As shown in Table 5.3-6, the threshold at which there is a risk to "architectural" damage to residential structures (non-engineered timber and masonry buildings) is a PPV of 0.2.

Table 5.3-6: FTA Vibration Damage Potential Thresholds

Building Category	PPV (in/sec)
I. Reinforced-concrete, steel or timber (no plaster)	0.50
II. Engineered concrete and masonry (no plaster)	0.30
III. Non-engineered timber and masonry buildings	0.20
IV. Buildings extremely susceptible to vibration damage	0.12

Source: Noise Impact Analysis, Appendix F.

The FTA has also adopted standards associated with human annoyance for groundborne vibration. As shown on Table 5.3-7, the FTA has identified that 75 VdB is the threshold for annoyance from groundborne vibration at sensitive receptors.

Table 5.3-7: FTA Vibration Annoyance Thresholds

Vibration Velocity Level	Human Perception
65 VdB	Approximate threshold of perception for many people.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

Source: Noise Impact Analysis, Appendix F.

Therefore, impacts would be significant if construction activities result in groundborne vibration of 0.2 PPV or higher at residential structures or 75 VdB.

5.3.6 ENVIRONMENTAL IMPACTS

IMPACT A: WOULD THE PROJECT GENERATE A SUBSTANTIAL TEMPORARY OR PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE, OR APPLICABLE STANDARDS OF OTHER AGENCIES?

Construction

Noise generated by construction activities would include a combination of trucks, power tools, concrete mixers, and portable generators that generate high noise levels. As shown on Table 5.3-8, construction equipment used for the Project generates noise up to 89.6 dBA at a distance of 50 feet from the noise source.

Table 5.3-8: Construction Reference Noise Levels

Equipment Description	Acoustical use Factor (%)	Spec. Lmax @ 50ft (dBA, slow)	Actual Measured Lmax @ 50ft (dBA, slow)
Compressor (air)	40	80	78
Concrete Mixer Truck	40	85	79
Concrete Saw	20	90	89.6
Crane	16	85	81
Dozer	40	85	82
Excavator	40	85	81
Forklift	50	n/a	61
Front End Loader	40	80	79
Generator	50	82	81
Grader	40	85	-N/A-
Paver	50	85	77
Pickup Truck	50	85	77
Paving Equipment	20	90	-N/A-
Roller	20	85	80
Scraper	40	85	84
Tractor/Loader/Backhoe	25	80	-N/A-
Welder/Torch	40	73	74

Source: Noise Impact Analysis, Appendix F.

However, construction noise levels will vary significantly based upon the size and topographical features of the active construction zone, duration of the workday, and types of equipment employed. Also, typical operating cycles for construction equipment involves one or two minutes of full power operation followed by three to four minutes at lower power settings and turned off when not in use. Thus, construction equipment noise would not be continuous.

Noise from construction would also be limited by Municipal Code Section 7.35.020(G), which prohibits construction activities between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or at any time on Sunday or a federal holiday. The proposed Project's construction activities would occur pursuant to these regulations. Thus, the proposed Project would be in compliance with the City's construction related noise standards.

The increase in ambient noise at nearby sensitive receptors from the Project construction activities to determine if a substantial increase in noise would occur. Because construction would occur throughout the Project site, the distances to the sensitive noise receptors were based on the acoustical center of the proposed construction activity. Construction noise levels were calculated for each phase. To be conservative, the noise generated by each piece of equipment was added together within each phase. However, it is unlikely (and unrealistic) that all of the equipment will be used at the same time.

As detailed on Table 5.3-9, the noisiest construction phase is anticipated to occur during grading, where the highest modeled construction noise levels could reach up to 74.3 dBA Leq at the façade of the closest residential receptors located northwest of the site (in the vicinity of STNM2), which would not exceed the 80 dBA threshold. Other receptors located further from the center of construction activity would experience lower noise levels. Therefore, construction noise impacts would be **less than significant.**

Table 5.3-9: Construction Noise Levels at Receptor Locations

Construction Phase	Receptor Location	Existing Ambient Noise Levels (dBA Leq)	Construction Noise Levels at Receptor Location (dBA Leq)
Demolition	Northwest (STNM2)	69.3	73.6
	Northeast (STNM3)	46.6	68.6
	East (STNM 4)	62.6	65.9
	West (STNM2)	69.3	65.0
	North (STNM1)	58.7	61.2
Site Preparation	Northwest (STNM2)	69.3	72.4
	Northeast (STNM3)	46.6	67.4
	East (STNM 4)	62.6	64.7
	West (STNM2)	69.3	63.9
	North (STNM1)	58.7	58.5
Grading	Northwest (STNM2)	69.3	74.3
	Northeast (STNM3)	46.6	69.3
	East (STNM 4)	62.6	66.6
	West (STNM2)	69.3	65.8

Construction Phase	Receptor Location	Existing Ambient Noise Levels (dBA Leq)	Construction Noise Levels at Receptor Location (dBA Leq)
	North (STNM1)	58.7	60.6
Building Construction	Northwest (STNM2)	69.3	68.9
	Northeast (STNM3)	46.6	64.0
	East (STNM 4)	62.6	61.2
	West (STNM2)	69.3	60.4
	North (STNM1)	58.7	56.7
Paving	Northwest (STNM2)	69.3	70.3
	Northeast (STNM3)	46.6	65.4
	East (STNM 4)	62.6	62.6
	West (STNM2)	69.3	61.8
	North (STNM1)	58.7	58.8
Architectural Coating	Northwest (STNM2)	69.3	61.0
	Northeast (STNM3)	46.6	56.0
	East (STNM 4)	62.6	53.3
	West (STNM2)	69.3	52.4
	North (STNM1)	58.7	47.1

Source: Noise Impact Analysis, Appendix F.

Operation

On-Site Stationary Source Noise

Operational noise would occur from stationary equipment such as heating, ventilation, and air conditioning (HVAC) units that would be installed for the new residences. The typical noise from air conditioning units is intermittent and approximately 66.5 dBA L_{eq} at 5 feet. The Project design includes perimeter walls and building setbacks. Noise levels from the HVAC units would be reduced by approximately 5 dBA (61.5 dBA L_{eq}) due to the proposed 6-foot-high perimeter wall, and further reduced to 49.5 dBA as a result of the 20-foot building setback from the public right-of-way to the HVAC units. The 20-foot minimum building setback from the Project perimeter is the Planned Residential Development standard for the R-1 Zone that the Project would adhere to, and HVAC units are assumed to be adjacent to the residential structures. Therefore, noise levels generated from on-site HVAC units would not exceed the City's exterior daytime (7:00 a.m. to 10:00 p.m.) ambient noise standard of 55 dBA and the intermittent noise increase would not exceed the City's nighttime (10:00 p.m. to 7:00 a.m.) 30-minute noise standard of up to 50 dBA (45 dBA plus 5 decibels). In addition, the location of mechanical equipment and related noise would be reviewed as part of the building plan submittal to ensure compliance with the City's municipal code requirements. Therefore, noise impacts related to HVAC and other mechanical equipment that could be used by the proposed residences would be **less than significant.**

Traffic Noise

The proposed Project is estimated to generate a total of 906 daily trips. Of these trips, 72 would occur in the a.m. peak hour and 95 would occur in the p.m. peak hour. The increase in traffic resulting from implementation of the Project would result in a limited increase the ambient noise levels in proximity to the Project area. The significance of the Project's traffic noise impacts is determined by comparing existing ambient noise levels with Project-related noise levels. As utilized in the City's General Plan EIR, if Project-related traffic would increase the CNEL at a sensitive receptor by 5 dBA, a significant impact could occur.

The noise traffic noise levels that would be generated by the Project were calculated using the FHWA's Highway Traffic Noise Prediction Model (FHWA-RD-77-108). As shown in Table 5.3-10, the proposed Project would increase noise levels at sensitive receptor sites by a maximum of 0.3 dBA Leq. This increase would not exceed the 5 dBA threshold; thus, impacts related to traffic noise increases would be **less than significant.**

Table 5.3-10: Project Increase in Traffic Noise Levels

	Existing		Existing Plus Project			
Road Segments	**ADT**	**dB CNEL**	**ADT**	**Total**	**Project Increase**	**Exceed Threshold?**
Van Buren Boulevard						
w/o Wood St	42,054	73.9	42,493	74.0	0.1	No
e/o Wood St	40,117	73.7	40,293	73.8	0.1	No
at Trautwein-Cole Ave	41,461	73.9	41,637	73.9	0.0	No
Cole Avenue						
s/o Van Buren Blvd	6,934	66.1	7,241	66.3	0.2	No
Krameria Avenue						
w/o Cole Ave	2,752	62.1	2,928	62.4	0.3	No
e/o Cole Ave	1,870	60.4	1,914	60.5	0.1	No

Source: Noise Impact Analysis, Appendix F.

IMPACT B: WOULD THE PROJECT GENERATE EXCESSIVE GROUND-BORNE VIBRATION OR GROUNDBORNE NOISE LEVELS?

Construction

Construction activities would include demolition, excavation, and grading activities, which have the potential to generate low levels of groundborne vibration. People working in close proximity to the construction could be exposed to the generation of excessive groundborne vibration or groundborne noise levels related to construction activities. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Site ground vibrations from construction activities very rarely reach the levels that can damage structures, but they can be perceived in the audible range and be felt in buildings very close to a construction site.

The nearest existing structures to the Project boundary are the residential structures located adjacent to the northern portion of the Project site, approximately 5 feet from the Project site boundary. To be conservative, this distance represents the closest a piece of equipment could come to the building façade of the sensitive receptors as the equipment passes by the Project boundary. Other vibration sensitive land uses are located further from the Project site and would experience lower impacts.

Architectural Damage. Vibration generated by construction activity generally has the potential to damage structures. This damage could be structural damage, such as cracking of floor slabs, foundations, columns, beams, or wells, or cosmetic architectural damage, such as cracked plaster, stucco, or tile.

Construction of the proposed Project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The highest degree of groundborne vibration that would be generated during construction would be from operation of a vibratory roller and a large bulldozer. At a distance of 5 feet vibratory roller operations are estimated to be approximately 2.348 inch-per-second PPV and large bulldozer operations are estimated to be 0.995 inch-per-second

PPV, which exceeds the FTA significance thresholds (i.e., 0.2 inch-per-second PPV for potential structural damage to non-engineered timber and masonry buildings).

However, at a distance of 120 feet, the vibration level from a vibratory roller is 0.02 in/sec PPV, and at a distance of 68 feet, the vibration level from a large bulldozer is 0.02 in/sec PPV, which meets the criteria to reduce potential structural damage to a less than significant level (vibration calculations provided in Appendix F). Therefore, to avoid the potential for any structural damage to the adjacent buildings during construction, Mitigation Measure **MM NOI-1** has been included to restrict use of a vibratory roller within 120 feet of the existing offsite buildings and restrict use of a large bulldozer within 68 feet of the existing offsite buildings. The site will be visibly marked to show equipment buffer distances. Construction plans and specifications will state equipment buffer requirements, which the City will review and confirm during plan check. With the implementation of Mitigation Measure NOI-1, construction impacts from groundborne vibration would be reduced to a level of **less than significant with mitigation incorporated.**

Vibration Annoyance. At a distance of 5 feet, use of a vibratory roller would generate vibration of approximately 114.97 VdB and use of a bulldozer would be expected to generate 107.97 VdB, which would exceed the 75 VdB threshold for human annoyance. However, at a distance of 110 feet, use of a vibratory roller would generate 74.7 VdB and at a distance of 63 feet use of a bulldozer would generate 74.96 VdB (vibration calculations provided in Appendix F). At these distances, annoyance-based impacts from groundborne vibration would be less than significant. As described previously, Mitigation Measure NOI-1 has been included to restrict use of a vibratory roller within 120 feet of the existing offsite buildings and restrict use of a large bulldozer within 68 feet of the existing offsite buildings. At the distances required by Mitigation Measure **MM NOI-1**, impacts related to human annoyance would be less than the 75 VdB threshold, and **less than significant with mitigation incorporated.**

Operation

Operation of the proposed residential uses would include heavy trucks for residents moving in and out of the residences, product deliveries, and garbage trucks for solid waste disposal. Truck vibration levels are dependent on vehicle characteristics, load, speed, and pavement conditions. However, typical vibration levels for the heavy truck activity at normal traffic speeds would be approximately 0.006 in/sec PPV (63 VdB), based on the FTA Transit Noise Impact and Vibration Assessment. Truck movements on site would be travelling at very low speed, so it is expected that truck vibration at nearby sensitive receivers would be less than the vibration threshold of 0.20 in/sec PPV for non-engineered timber and masonry buildings and 75 VdB for human annoyance, and therefore, would be **less than significant with mitigation incorporated.**

5.3.7 CUMULATIVE IMPACTS

Cumulative noise assessment considers development of the proposed Project in combination with ambient growth and other development projects within the vicinity of the Project site. As noise and vibration are localized phenomena, and drastically reduce in magnitude as distance from the source increases, only projects and ambient growth in the nearby area could combine with the proposed Project to result in cumulative noise impacts. As shown in Figure 5-1, *Cumulative Projects*, the closest cumulative projects are located across Lurin Avenue from the Project site. Cumulative projects 6, 7, and 10 consist of residential developments that are currently under construction and may be within hearing distance of the Project site; however, these projects are in different stages of development, and concurrent construction of the same activities are not anticipated to occur.

In addition, Municipal Code Section 7.35.020 prohibits construction activities between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or at any

time on Sunday or a federal holiday. Thus, no cumulative construction noise or vibration would occur during the evening hours. Also, with Mitigation Measure NOI-1, the Project would not exceed applicable standards or significance thresholds and cumulative noise and vibration impacts would be less than significant.

Cumulative mobile source noise impacts would occur primarily as a result of increased traffic on local roadways due to the proposed Project and related projects within the study area. Therefore, cumulative traffic-generated noise impacts have been assessed based on the contribution of the proposed Project in the traffic volumes on the roadways in the Project vicinity. The noise levels associated with these traffic volumes with the proposed Project were identified previously in Table 5.3-10. As shown, the proposed Project would increase local noise levels by a maximum of 0.2 dBA CNEL. As the increase is much lower than 5 dBA threshold, cumulative impacts associated with traffic noise would be less than significant.

5.3.8 CITY STANDARD CONDITIONS OF APPROVAL

None.

5.3.9 MITIGATION MEASURES

MM NOI-1: Construction Vibration: Construction plans and specifications for the Project shall specify that bulldozers (greater than 80,000 pounds) shall not be used within 68 feet of offsite residential structures and vibratory rollers shall not be used within 120 feet of offsite residential structures. The City will ensure plans and specifications include requirements during plan check. Construction activity that must occur within 120 feet of the offsite residential structures would need to be performed with small rubber-tired or alternative equipment that does not exceed the vibration threshold of 0.2 in/sec PPV at offsite residences. The site shall be staked (or other visible demarcation) to mark the limits for bulldozing and vibratory rolling activities while equipment is in use.

5.3.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The mitigation measure and existing regulatory programs described previously would reduce potential impacts associated with noise to a level that is less than significant. Therefore, no significant unavoidable adverse impacts related to noise or vibration would occur.

REFERENCES

City of Riverside General Plan Noise Element. Accessed: https://riversideca.gov/cedd/planning/city-plans/general-plan-0

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Federal Transit Administration Transit Noise and Vibration Impact Assessment, May 2006. Accessed: https://docs.vcrma.org/images/pdf/planning/ceqa/FTA_Noise_and_Vibration_Manual.pdf

Noise Impact Analysis. Prepared by EPD Associates, Inc. Appendix F.

United States Department of Housing and Urban Development (HUD), The Noise Guidebook, February 2009. Accessed at: https://www.hudexchange.info/resource/313/hud-noise-guidebook/

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5.4 Transportation

5.4.1 INTRODUCTION

This section describes the existing transportation and circulation conditions, criteria for the level of service, vehicle miles traveled (VMT) and impacts from implementation of the proposed Project. This analysis is based on information contained in the Vehicle Miles Traveled Analysis (VMT 2022), which is included as Appendix G.

Traffic Analysis Terminology

Level of Service (LOS): is a measure of the quality of operational conditions within a traffic stream and is generally expressed in terms of such measures as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience. Levels range from A to F, with LOS A representing excellent (free-flow) conditions and LOS F representing extreme congestion.

Peak Hour: The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 a.m. and 9:00 a.m. The p.m. peak hour is defined as the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m.

Vehicle Miles Traveled: VMT measures the amount of vehicle travel from a project site or within a geographic region over a given period of time, typically a 24-hour period. It is calculated as the vehicle trip generation times the trip length for each vehicle trip and equates to the sum of the number of miles traveled by each vehicle.

5.4.2 REGULATORY SETTING

5.4.2.1 State Regulations

Congestion Management Program

In 1990, the California Legislature enacted the Congestion Management Program (CMP) to implement Proposition 111, a state-wide transportation funding proposal that required local governments to implement mitigation measures to offset the impacts from new development on the regional transportation system. The CMP addresses the impact of local growth on the regional transportation system; the goal is to examine the interactions among land use, transportation, and air quality and to make decisions at the regional and local level in consideration of these interactions.

When LOS requirements are not maintained on portions of the CMP highway and roadway system, a deficiency plan is required that analyzes the cause of the deficiency and the implementation costs of various alternatives such as roadway modifications, programs, or actions to measurably improve performance. Highways must maintain at least LOS E, which is essentially one grade better than gridlock and is defined by a level of service where traffic flow fluctuates in terms of speed and flow rates, operating speeds average 35 miles per hour, and delays are significant. For arterial streets, LOS E occurs where long queues of vehicles are waiting upstream of an intersection and it may take several signal cycles for a vehicle to clear the intersection. A jurisdiction failing to comply with the CMP may have its allocation of the state gas tax withheld.

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into State law. The California legislature found that with the adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the state had signaled its commitment to encourage land use and transportation planning decisions and

investments that reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of greenhouse gas (GHG) emissions, as required by the California Global Warming Solutions Act of 2006 (AB 32).

SB 743 started a process that could fundamentally change transportation impact analysis as part of CEQA compliance. These changes will include the elimination of auto delay, LOS, and similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts in many parts of California (if not statewide). As part of the new CEQA Guidelines, the new criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099[b][1]). The Governor's Office of Planning and Research revised the CEQA guidelines for implementation of SB 743. Based on these changes, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment" (Public Resources Code Section 21099[b][2]).

SB 743 does not prevent a city or county from continuing to analyze delay or LOS outside of CEQA review for other transportation planning or analysis purposes; but these metrics may no longer be used as an indicator of environmental impact under CEQA. In July 2020, the city provided updated TIA Guidelines to comply with the new CEQA Guidelines.

5.4.2.2 Regional & Local Regulations and Policies

SCAG 2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the designated metropolitan planning organization for six Southern California counties (Ventura, Los Angeles, San Bernardino, Riverside, Orange, and Imperial). As the designated metropolitan planning organization, SCAG is mandated by the federal and state governments to prepare plans for regional transportation and air quality conformity. The most recent plan adopted by SCAG is the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also known as Connect SoCal, which was adopted in September 2020. The RTP/SCS integrates transportation planning with economic development and sustainability planning and aims to comply with state GHG emissions reduction goals, such as SB 375. With respect to transportation infrastructure, SCAG anticipates, in the RTP/SCS, that the six-county region will have to accommodate 22.5 million residents by 2045 while also meeting the GHG emissions reduction targets set by the California Air Resources Board. SCAG is empowered by state law to assess regional housing needs and provide a specific allocation of housing needs for all economic segments of the community for each of the region's counties and cities. In addition, SCAG has taken on the role of planning for regional growth management.

Western Riverside County Transportation Uniform Mitigation Fee

In 2002, the cities of Riverside, Corona, Moreno Valley, and Riverside County, agreed to participate in the Western Riverside County Transportation Uniform Mitigation Fee (TUMF) Program. The TUMF is an obligation that must be met on all new development in Western Riverside County. For some developments, the developer is exempt from paying TUMF, but where the local agency has determined that TUMF is due, a developer will need to pay their TUMF fees. These fees vary based on the land use type of the proposed development and its size; factors that influence how traffic will be increased due to development. The TUMF fee goes toward providing improvements to improve local traffic. The City of Riverside also has a Development Impact Fee (DIF) program that funds a variety of public transportation facilities, namely, traffic and railroad signals and transportation for dwelling and mobile homes.

City of Riverside General Plan

Circulation and Community Mobility Element

The Circulation and Community Mobility Element of the General Plan serves as the City's primary guide for transportation planning. The following policies in the General Plan Circulation and Community Mobility Element are relevant to the proposed Project:

Policy CCM-2.2: Balance the need for free traffic flow with economic realities and environmental and aesthetic considerations, such that streets are designed to handle normal traffic flows with tolerances to allow for potential short-term delays at peak flow hours.

Policy CCM-2.3: Maintain LOS D or better on Arterial Streets wherever possible. At key locations, such as City Arterials that are used by regional freeway bypass traffic and at heavily traveled freeway interchanges, allow LOS E at peak hours as the acceptable standard on a case-by-case basis.

Policy CCM-2.4: Minimize the occurrence of streets operating at LOS "F" by building out the planned street network and by integrating land use and transportation in accordance with the General Plan principles.

Objective CCM-6: Cooperate in the implementation of regional and inter-jurisdictional transportation plans and improvements to the regional transportation system.

Policy CCM-6.1: Encourage the reduction of vehicle miles, reduce the total number of daily peak hour vehicular trips, increase the vehicle occupancy rate and provide better utilization of the circulation system through the development and implementation of TDM programs contained in the SCAQMD and County of Riverside TDM Guidelines.

Objective CCM-8: Protect neighborhoods and reduce the risk posed to young children and other residents by vehicular traffic on local roadways.

Policy CCM-8.1: Continue to regularly meet with local school districts to identify safe routes to all schools, enabling better school access by cyclists and pedestrians. Support the establishment of safe drop-off and pick-up zones around schools during the morning and afternoon peak hours.

5.4.3 ENVIRONMENTAL SETTING

Roadways

The General Plan designates Wood Road and Krameria Avenue as 88-foot-wide arterial roadways, and Lurin Avenue and Dant Street are designated as local roadways. The Project site is undeveloped (with exception of one vacant residential structure) and many parcels around the Project site are undeveloped, partially developed, or under development. The City's nearest intersection with a 24-hour volume count available is Wood Road and Van Buren. On October 7, 2020, the intersection had a 24-hour traffic count of 39,887 trips.

Existing Transit Service

The Riverside Transit Agency (RTA) currently provides bus services in the city and western Riverside County. In addition to bus route services, RTA also provides CommuterLink and Dial-A-Ride services. CommuterLink routes travel to major transit centers and Metrolink stations in Riverside, San Diego and San Bernardino counties. Dial-A-Ride is a curb-to-curb transportation services for seniors and persons with disabilities. Dial-A-Ride vehicles travel to areas within three-quarters of a mile of an RTA local fixed bus route.

RTA Bus Route 22 is located along Wood Road, with stops adjacent to the Project site. Route 22 provides services to the Perris Station Transit Center, which is a Metrolink stop to the southeast of the site and downtown Riverside, which is to the northwest of the site. Route 22 provides service 7 days per week, between 5:46 a.m. and 8:18 p.m. Also, RTA Bus Route 27 runs along Van Buren Boulevard, approximately 0.75 miles north of the Project site.

Existing Bicycle and Pedestrian Facilities

There are no existing bicycle lanes or pedestrian facilities adjacent to the Project site. However, sidewalks are located throughout the newly developed single-family tracts that are located to the north of the site across Krameria Avenue and to the west of the site across Wood Road.

5.4.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a project could have a significant effect if it were to:

Threshold A:	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
Threshold B:	Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b);
Threshold C:	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
Threshold D:	Result in inadequate emergency access.

City Level of Service Standards. The City of Riverside Traffic Impact Analysis (TIA) Preparation Guide (July 2020) provides the City's level of service (LOS) standards and acceptable delay increases for use in preparing traffic analysis. The standards identify that LOS D is the maximum acceptable LOS for intersections and roadways of Collector or higher classification. However, LOS E is allowed during peak hours at arterials that are used by regional freeway bypass traffic and at heavily traveled freeway interchanges.

The City's TIA Preparation Guide also describe that residential projects that would generate less than 100 peak hour trips, and single-family residential tract projects of less than 100 lots that are consistent with the General Plan land use designation would not result in a significant impact, and do not require an LOS analysis. The TIA Preparation Guide further describes that single-family residential tracts of less than 100 lots typically do not affect LOS significantly once distributed to the local roadway network, and therefore, are considered to result in a less than significant impact related to the City's LOS standards.

City VMT Screening Thresholds. The City's TIA Preparation Guide includes VMT screening criteria to identify projects that would have a less than significant impact on VMT and would therefore not require further VMT analysis. The screening criteria includes the following:

- Step 1: Transit Priority Area (TPA) Screening. Projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary.
- Step 2: Low VMT Area Screening. Residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary.
- Step 3: Project Type Screening. Local serving projects such as K-12 schools, local parks, daycare centers and retail projects less than 50,000 square feet may be presumed to have a less than significant impact absent substantial evidence to the contrary. This screening criteria also includes projects which generate fewer than 110 daily vehicle trips, which equates to 11 single-family residences.
- Step 4: Mixed-Use Projects. To identify if the proposed project requires a VMT analysis, the City of Riverside may evaluate each component of a mixed-use project independently and apply the significance threshold for each project type included (e.g. residential and retail).
- Step 5: Redevelopment Projects. Where a project replaces existing VMT generating land uses, if

the replacement leads to a net overall decrease in VMT, the project would lead to less than significant transportation impact. If the project leads to a net overall increase in VMT, then the City VNT thresholds apply.

Projects not screened through the steps above are required complete VMT analysis and forecasting through the Riverside County Transportation Analysis Model (RIVTAM) to determine if they have a significant VMT impact pursuant to the following impact thresholds.

City VMT Impact Thresholds. The City's TIA Preparation Guide states that a project would result in a significant project-generated VMT impact if the following conditions are satisfied:

1. For residential projects: the baseline or cumulative project-generated VMT per capita exceeds 15% below the current jurisdictional baseline VMT per capita; or
2. For office and industrial projects: the baseline or cumulative project-generated VMT per employee exceeds 15% below the current jurisdictional baseline VMT per employee; or
3. For new retail & other land use projects, utilizing a threshold consistent with the net total VMT of the jurisdiction.

5.4.5 METHODOLOGY

Level of Service

The City's TIA Preparation Guide LOS screening criteria, detailed previously in the thresholds of significance discussion, was applied to the Project to identify if the Project would be inconsistent or result in an exceedance of the TIA Preparation Guide or General Plan policy related criteria.

Vehicle Miles Traveled

The City's TIA Preparation Guide describes that the threshold for residential projects is 15 percent below the City's current baseline VMT per capita. Therefore, the project VMT per capita under both the baseline and cumulative conditions have been compared with the corresponding VMT per capita for the City to determine whether the project would have a significant VMT impact.

Model data from previous RIVTAM model runs was used to estimate both jurisdictional and project VMT. The project modeling is based on the traffic analysis zone (TAZ) where the project is located to determine the project generated VMT/capita. RIVTAM socioeconomic database provides both baseline (2012) and cumulative (2040) scenarios to calculate project VMT.

5.4.6 ENVIRONMENTAL IMPACTS

IMPACT A: WOULD THE PROJECT CONFLICT WITH A PROGRAM, PLAN, ORDINANCE, OR POLICY ADDRESSING THE CIRCULATION SYSTEM, INCLUDING TRANSIT, ROADWAY, BICYCLE, AND PEDESTRIAN FACILITIES?

As described previously, SB 743 requires that VMT thresholds be utilized for traffic analysis. State CEQA Guidelines Section 15064.3 states that a project's effect on automobile delay shall not constitute a significant environmental impact. However, the City's General Plan and traffic study guidelines require analysis based on LOS, which the City uses to confirm development projects' consistency with the General Plan, and to determine if any transportation improvement obligations are required of development projects. The LOS analysis and number of vehicular trips described within this EIR, is provided for public disclosure regarding vehicular trips in the developing area of the City.

Construction

Construction of the proposed Project is anticipated to occur over an 18-month period. Construction-related trips generated on a daily basis throughout various construction activities would be derived from construction workers and delivery of materials. It is anticipated Project construction would generate haul trips distributed throughout the day. During construction, there would also be passenger car construction trips associated with crew arrivals and departures. The weekday a.m. peak period is 7:00 a.m. to 9:00 a.m., and the weekday p.m. peak period is 4:00 p.m. to 6:00 p.m. It is anticipated the majority of construction crews would arrive and depart outside the peak hours, while delivery trucks would arrive and depart throughout the day. As shown on Table 5.4-1, the building construction phase of construction would generate the most vehicular trips per day from approximately 175 workers and 50 vendors per day, which would result in a total of 450 daily trips.

Table 5.4-1: Daily Construction Vehicle Trips

Construction Activity	Workers Per Day	Vendors Per Day	Hauling Trips Per Day
Demolition	8	0	4
Site Preparation	18	0	0
Grading	20	0	0
Building Construction	175	50	0
Paving	15	0	0
Architectural Coating	35	0	0

Source: Air Quality, Energy, and Greenhouse Gas Impact Analysis (Initial Study Appendix A)

This equates to 50 percent of the daily trips that would be generated by operation of the Project (as shown in Table 5.4-2). As described below, operation of the Project would not result in an inconsistency with the City's traffic criteria. Therefore, 50 percent of the daily trips would also not result in an inconsistency with the City's traffic criteria. Additionally, as described above, vendor delivery trucks would arrive and depart throughout the day and a majority of construction crews would arrive and depart outside the peak hours. Furthermore, the construction traffic would be temporary and intermittent depending on the phase of construction.

All construction equipment, including construction worker vehicles, would be staged on the Project site for the duration of the construction period. In addition, as part of the grading plan and building plan review processes, the City permits would require appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures (as applicable). Through compliance with Riverside Municipal Code Section 7.35.010, construction impacts related to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system would be less than significant.

Operation

As described previously, SB 743 does not prevent a city or county from continuing to analyze delay or LOS; but delay/LOS metrics may no longer constitute the basis for CEQA impacts. In addition, Section 21099 (b) (4) of the PRC states that SB 743 does not preclude the application of local general plan policies, zoning codes, conditions of approval, thresholds, or any other planning requirements pursuant to the police power or any other authority." Thus, the City requires projects to identify potential impacts to the LOS standards designated in its general plan, and requires LOS improvements for congestion relief as CEQA mitigation measures, as needed. The LOS analysis and number of vehicular trips described within this EIR, is provided for public disclosure regarding vehicular trips in the developing area of the City. As detailed previously, per the City's TIA Preparation Guide, projects that generate less than 100 peak hour trips, and single-family residential tract projects of less than 100 lots, that are consistent with the existing General Plan would not result in an LOS related General Plan policy inconsistency.

The proposed Project would develop 96 single-family residences, which is fewer than 100 units. Also, the proposed Project would not exceed the City's 100 peak hour trip screening criteria. Vehicle trips for the Project were generated by using the trip rates from the Institute of Transportation Engineers (ITE) Trip Generation (10th Edition, 2017). As shown in Table 5.4-2, the Project is anticipated to generate 72 a.m. peak hour and 95 p.m. peak hour trips. Thus, the proposed Project would not exceed the City's LOS related screening criteria.

Table 5.4-2: Proposed Project Trip Generation

			AM Peak Hour			PM Peak Hour		
Land Use	**Unit**	**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates Single-Family Detached Housing	DU	9.44	0.185	0.555	0.740	0.624	0.366	0.990
Project Trip Generation	96 DUs	906	18	53	72	60	35	95

DU = Dwelling Unit
[1] Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 210 - Single Family Detached Housing.

The proposed Project is also consistent with the General Plan designations of the site. The Project site has a General Plan land use designation of LDR – Low Density Residential, which allows up to 6.0 dwelling units per acre with a Planned Residential Development (PRD) permit, and MDR – Medium Density Residential, which allows up to 8.0 dwelling units per acre, with a PRD permit. The Project includes a PRD permit to develop 96 single-family residences on the 18.925-acre site, which would result in 5.07 single-family dwelling units per gross acre and would be within the allowable density of the existing General Plan land use designations for the Project site. Thus, based on the City's traffic impact criteria for general plan land use consistency, no inconsistency would not occur.

Transit, Bicycle, and Pedestrian Facilities. As described previously, the RTA currently provides bus services in the city and western Riverside County. Bus Route 22 is located along Wood Road, with stops adjacent to the Project site. Route 22 provides services between the Perris Station Transit Center, which is a Metrolink stop to the southeast of the site and downtown Riverside, which is to the northwest of the site. Route 22 provides service 7 days per week, between 5:46 a.m. and 8:18 p.m. The existing bus services would allow Project site residents to convenient access to transit and may reduce VMT. The proposed Project would not alter or conflict with existing bus stops and schedules, and impacts related to RTA transit services would not occur.

There are no existing bicycle lanes or pedestrian facilities adjacent to the Project site. However, sidewalks are located throughout the newly developed single-family tracts that are located to the north of the site across Krameria Avenue and to the west of the site across Wood Road.

The Project includes 5-foot-wide concrete sidewalks and pedestrian street crossings throughout the Project site to provide for safe pedestrian circulation. In addition, a 35-foot setback would be located along Wood Road that would include a 10-foot-wide multi-purpose trail that would provide for pedestrian and bicycle circulation. The Project would provide new sidewalks along Wood Road, Lurin Avenue, and Krameria Avenue that would provide pedestrian transportation opportunities for new and existing residents of the area. The Project would provide additional facilities and would not conflict with any existing facilities. Therefore, impacts to transit, bicycle, and pedestrian facilities would be **less than significant**.

IMPACT B: WOULD THE PROJECT CONFLICT OR BE INCONSISTENT WITH CEQA GUIDELINES SECTION 15064.3, SUBDIVISION (B)?

The Senate Bill 743 was signed by the Governor in 2013 and directed the Governor's Office of Planning and Research (OPR) to identify alternative metrics for evaluating transportation impacts under CEQA. Per SB 743 changes to the CEQA Guidelines included a section (15064.3) that specifies that VMT is the most appropriate measure of transportation impacts. A separate Technical Advisory issued by OPR provides additional technical details on calculating VMT and assessing transportation impacts for various types of projects. The revised CEQA guidelines took effect July 1, 2020, and the City's TIA Preparation Guide that includes VMT screening thresholds was adopted thereafter.

The City's VMT screening thresholds were applied to the proposed Project to determine if a VMT analysis is required. The screening thresholds and their applicability to the Project site are as follows:

- **Transit Priority Area Screening:** The Project is not located in a Transit Priority Area, therefore this screening criteria does not apply.
- **Low VMT Area Screening:** Per the online WRCOG VMT Screening Tool, the Project is located in a traffic analysis zone (TAZ) with a VMT per capita of 16.88. The City jurisdictional average is 10.77. To meet the City's threshold of project generated VMT/capita that is 15 percent below the current jurisdictional average, the Project VMT/capita would need to be reduced by 46 percent. The Project is required to prepare a VMT analysis using this criteria.
- **Project Type Screening:** This applies to local serving projects, projects that generate fewer than 110 daily vehicle trips. The Project does not meet this screening criteria and a VMT analysis would be required.
- **Mixed-Use Projects:** The Project is a single use and therefore does not meet this criteria and a VMT analysis would be required.
- **Redevelopment Projects:** The Project site is vacant and therefore the Project would not replace any land use currently generating VMT. Therefore, this criteria would not apply to the Project and a VMT analysis would be required.

As detailed above, the Project does not meet any of the screening criteria and therefore a VMT evaluation was prepared. According to the City's TIA Guidelines, projects not screened out of further analysis should complete the VMT analysis using the RIVTAM traffic model to determine if the project would generate VMT per capita exceeding 15 percent below the City's current average VMT per capita. The project would be input into the traffic analysis zone (TAZ) where the project is located or a new zone would be created for the project. The model would then be run to determine the project generated VMT per capita and the projects effect on VMT within the City limits. Based on the City's VMT analysis guidelines for residential development projects, the City's current baseline VMT per capita include baseline (2012) and cumulative (2040) conditions.

A VMT analysis using the above methodology was recently prepared for the Cole Single-Family Development Project (TTM37731), located at the southwest corner of Cole Avenue and Lurin Avenue; within the same TAZ as the proposed Project (TAZ 3574). Because the Cole Development Project is a single-family residential project within the same TAZ as the proposed Project, the VMT per capita is the same. As shown in Table 5.4-3, in the baseline condition, the Project VMT per capita (of 19.0) is more than double the threshold (of 9.18) and in the cumulative condition, the Project VMT per capita (of 17.0) is approximately 89 percent higher than the threshold (of 9.01). Therefore, the Project would result in a significant impact in both the baseline and cumulative conditions.

Table 5.4-3: Baseline (2012) and Cumulative (2040) VMT per Capita

Scenario	City of Riverside VMT/capita	Threshold (15% Below Baseline)	Project VMT/capita
Baseline	10.8	9.18	19.0
Cumulative	10.6	9.01	17.0

Source: Vehicle Miles Traveled (VMT) Analysis, Appendix G.

In order to mitigate the significant VMT impact to a less than significant level, the Project would need to implement strategies to reduce the Project VMT/capita from 19.0 VMT/capita to 9.18 VMT/capita (a reduction of 52 percent). However, to mitigate VMT behavioral changes would be required to reduce the number of trips. The City's TIA Guidelines identify three methods to mitigate VMT measures that are listed in Table 5.4-4 along with their applicability to the Project.

Table 5.4-4: Project Applicability of City Methods to Reduce VMT

Method	Project Applicability
Modify the project's built environment characteristics to reduce VMT generated by the project.	The Project design reduces VMT generated by the Project. The proposed onsite street system would include 5-foot-wide concrete sidewalks and pedestrian street crossings. The location of the proposed open space recreation area and the surrounding street system prohibits straight cut-through traffic and is designed to be traffic calming, as both left-turn and right-turns are required to drive through the site. The Project also includes a 34-foot 9-inch setback along Wood Road that would include a 10-foot-wide multi-purpose trail. There are existing bus stops adjacent to the Project site that are served by an existing RTA route that would provide transit opportunities to site residents. Thus, the proposed single-family residential Project does modify the built environment to reduce VMT.
Implement Transportation Demand Management (TDM) measures to reduce VMT generated by the project.	The City's TIA Guidelines identify a WRCOG study that identifies TDM measures for the region that include both modifications to the built environment and measures from *Quantifying Greenhouse Gas Mitigation Measures*[1]. The strategies are grouped into 4 categories: Land Use/Location, Neighborhood Site Enhancements, Transit System, and Commute Trip Reduction and were evaluated in Table 5.4-5 to determine the feasibility of implementing for the proposed Project to reduce VMT impacts.
Participate in a VMT fee program and/or VMT mitigation exchange/banking program (if they exist) to reduce VMT from the project or other land uses to achieve acceptable levels.	At this time a VMT fee program and/or VMT mitigation exchange/banking program does not exist within the City. If such a program were established prior to Project approval, then the Project would be required to participate in a VMT fee or mitigation exchange/banking program.

Potentially feasible TDM and built mitigation for the Project has been reviewed. Measures considered include Project funding of off-site bicycle lanes, off-site transit amenity improvements, transit/bus pass subsidies, and other TDM measures suitable for residential development such as carpool matching and school pool. Because these mitigations are contextual and behavioral in nature, their success depends on resulting changes in human behavior. For example, although existing bus stops for RTA Bus Route 22 are located next to the Project site along Wood Road that provides services to the Perris Station Transit Center, providing a

[1] Quantifying Greenhouse Gas Mitigation Measures, California Air Pollution Control Officers Association (CAPCOA), August 2010.

transit/bus pass program for the single-family residential project does not necessarily guarantee a behavioral change within the project's population that would substantially reduce VMT.

The VMT Analysis (Appendix G) also evaluated installation of off-site bicycle lanes. As detailed in Section 3.0, *Project Description*, the Project also includes a 35-foot setback along Wood Road that would include a 10-foot-wide multi-purpose trail that could be used for both walking and bicycling. The VMT Analysis determined that the addition of off-site bicycle lanes would result in a minimal reduction to VMT.

The CAPCOA report, *Quantifying Greenhouse Gas Mitigation Measures,*[2] as referred to by the City's TIA Guidelines, identifies TDM measures that may be effective at the project level. Those measures have been applied to the proposed Project in Table 5.4-5 to identify the feasibility of reducing Project generated impacts. However, a feasible mix of strategies that would reduce the Project VMT/capita from 19.0 VMT/capita to 9.18 VMT/capita (a reduction of 52 percent) was not identified.

Table 5.4-5: Project Applicability of CAPCOA TDM Measures to Reduce VMT

Measure	Project Applicability
Increase Diversity of Land Uses (LUT-3). Having different types of land uses near one another can decrease VMT since trips between land use types are shorter and may be accommodated by non-auto modes of transportation. For example, when residential areas are in the same neighborhood as retail and office buildings, a resident does not need to travel outside of the neighborhood to meet his/her trip needs.	The Project proposes the construction of 96 single-family dwelling units and onsite park and recreation areas. In order for this measure to apply, at least 3 of the following land uses should be located on-site or if not on-site then off-site within 0.25-mile of the Project: residential development, retail development, office development, park, or open space. As the proposed Project does not include a mix of land uses on-site. The Project is consistent with the residential General Plan land use and zoning designations. In addition, the Project site is not located within 0.25 mile of three other land uses. Although school facilities are within 0.25 mile, parks, retail, and office uses are located farther from the site. Restaurant, service, and retail uses are located approximately 0.5 mile from the site, which is farther than 0.25 mile. Therefore, this TDM measure does not apply and would not provide a VMT reduction.
Provide Pedestrian Network Improvements (SDT-1). Providing on-site pedestrian access network to link areas of the Project site to the off-site pedestrian network encourages people to walk instead of drive. This mode shift results in people driving less for short/nearby trips (typically less than 0.25 mile and no greater than 0.5 mile) and thus a reduction in VMT.	The Project would install on-site sidewalks and crosswalks that would provide pedestrian connectivity and encourage walking. The Project also includes a 35-foot setback along Wood Road that would include a 10-foot-wide multi-purpose trail. Per WRCOG guidance, the increase in pedestrian connectivity to commercial and residential uses in the area has the potential to decrease VMT by 0.5 to 5.7 percent. However, due to the lack of commercial land uses in the immediate vicinity of the project, the maximum reduction of 5.7 percent is unlikely to be achieved.

[2] Quantifying Greenhouse Gas Mitigation Measures, California Air Pollution Control Officers Association (CAPCOA), August 2010.

Measure	Project Applicability
Provide Traffic Calming Measures (SDT-2). Providing traffic calming measures encourages people to walk or bike instead of using a vehicle. Traffic calming features may include: marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, and others.	This measure would encourage walking and bicycling instead of using a vehicle through the implementation of pedestrian and bicycle safety and traffic calming measures. Traffic calming would reduce motor vehicle speeds through features such as marked crosswalks, raised intersections, median islands, tight corner radii, roundabouts and similar improvements. This measure is also in the 2021 CAPCOA guidance as Measure T-35. Although the 2010 guidance notes a potential decrease in VMT of up to 1 percent, the 2021 guidance includes traffic calming as a supporting, non-quantified measure.
Implement Car-Sharing Program (TRT-9). Implementing a car-sharing program would allow individuals to have on-demand access to a shared fleet of vehicles on an as-needed basis. User costs are typically determined through mileage or hourly rates, with deposits and/or annual membership fees.	A car sharing program would allow residents to have on-demand access to a shared fleet of vehicles on an as-needed basis. Costs are typically paid by the user via an annual membership or on a per-use basis. Car sharing programs are more effective when implemented on an area-wide basis and are not as applicable to smaller single-family developments. The maximum reduction in VMT that could be achieved by a car sharing program in the WRCOG region is 1.6 percent. This measure is included in the 2021 Guidance (Measure T-21-A), however according to the 2021 update the maximum reduction in VMT is reduced to 0.15 percent.
Increase Transit Service Frequency and Speed (TST-4). This measure serves to reduce transit-passenger travel time through more reduced headways and increased speed and reliability. This makes transit service more attractive and may result in a mode shift from auto to transit which reduces VMT.	This measure is achieved through the addition of additional busses along an existing bus route, the addition of additional routes, or by adding rapid/express bus service that would provide service to activity areas with fewer local stops. This measure is included in the 2021 guidance as Measure T-26. Implementation of this measure would be by the local transit authority with funding from local developments. This measure is not as applicable to a single development, but would be achieved through multiple funding sources, including development fees. According to the 2021 guidance a maximum VMT reduction of 11.3 percent can be achieved by TST-4. However, the maximum achievable VMT reduction in the WRCOG area from this measure is 6.3 percent.
Encourage Telecommuting and Alternative Work Schedule (TRT-6). Encouraging telecommuting and alternative work schedules reduces the number of commute trips and therefore VMT traveled by employees. Alternative work schedules could take	This measure is implemented by employers as part of a commute trip reduction program. This measure is not applicable to a residential project; and is therefore not evaluated further as means of providing a reduction in Project VMT.

Measure	Project Applicability
the form of staggered starting times, flexible schedules, or compressed work weeks.	
Provide Ride-Sharing Programs (TRT-3). This strategy focuses on encouraging carpooling and vanpooling of employees.	A ride-sharing program would increase vehicle occupancy by matching commuters with others who live and work within close proximity to one another. This strategy is generally implemented by employers through a Transportation Management Association or on a region-wide basis through a regional ride-share matching program. Ride-sharing programs are generally not implemented within a single-family development. The maximum achievable VMT reduction from ride-sharing programs in the WRCOG region is 8.3 percent. This measure is also included in the 2021 guidance as Measure T-8. According to the latest guidance, the maximum VMT reduction from Ride-sharing programs is 8 percent.
Implement Subsidized or Discounted Transit Program (TRT-4). This strategy provides subsidized/discounted daily or monthly public transit passes. These passes can be partially or wholly subsidized by the development.	This measure is not included in the WRCOG report and is not identified as a measure that would achieve meaningful reduction within the WRCOG region. The measure is included in the 2021 guidance as T-9, which indicates that up to 5.5% reduction in VMT can be achieved. At the City's request, EPD evaluated a transit pass subsidy for mitigation of project VMT. Riverside Transit Route 22 runs along Wood Road with a stop at the corner of Wood Road and Lurin Avenue. Riverside Transit routes 22 and 27 run along Van Buren Boulevard, approximately 0.75 miles north of the project site. Because the site is served by transit, a subsidized or discounted transit program could be effective in reducing project VMT.
Implement Commute Trip Reduction Marketing (2010 Guidance TRT-7, 2021 Guidance T-7). This strategy implements marketing strategies to reduce commute trips. Information sharing and marketing are key components to commute trip reduction strategies.	This measure would implement a marketing strategy intended to reduce commute trips through promotion of an employer's commute trip reduction program (CTR). CTR marketing would educate employees (or residents) about their travel choices beyond driving such as carpooling, transit, walking and bicycling. A CTR Marketing program is generally implemented by an employer and could result in a reduction in VMT of 4 percent. There is no guidance for calculating the benefit when implemented by a residential project, therefore this measure would be considered a supportive measure to other resident-based programs, such as the subsidized/discounted transit program.
Implement a School Pool Program (2010 Guidance TRT-10, 2021 Guidance T-41). A School Pool program would entail creating a ridesharing	This measure is not included in the WRCOG guidance but was included at the request of the City. Implementation of a school pool by an

Measure	Project Applicability
program for school children and is generally implemented on a District-wide basis.	individual development project would not be effective due to the limited number of potential school students utilizing the program. According to the 2021 CAPCOA guidance, school pool program would help match parents to transport students to private schools or to schools where students cannot walk or bike but do not meet the requirements for bussing. It should be noted that Mark Twain Elementary School and Martin Luther King High School are both located approximately ¼ mile from the project and are therefore within walking distance. While implementation of a School Pool Program has the potential to reduce VMT for residential projects, the 2021 CAPCOA guidance indicates School Pool programs as a supporting measure and does not provide a method for calculating the reduction in VMT for School Pool programs.

Source: Appendix G.

As detailed in Table 5.4-6, if the Project were to implement every VMT reduction strategy and achieve the maximum VMT reduction, then the VMT could be reduced by 24.9 percent. This calculation includes the maximum reductions for each sector, even if the calculated reduction is higher and reflects the limited effectiveness that some measures have in suburban areas. To mitigate the significant VMT impact, a reduction of 52 percent would be required. Because it is not possible to reduce the project's VMT by more than 24.9 percent, the VMT impact would remain significant and unavoidable.

Table 5.4-6: Potential VMT Reduction Strategies

VMT Reduction Strategy	Maximum Achievable VMT Reduction	Feasible for Project
Land Use/Location Strategies (Maximum Reduction 5%)[1]		
- Increase Diversity of Land Uses	0% Supportive Measure	No
Neighborhood Site Enhancements (Maximum Reduction 5%)[1]		
- Provide Pedestrian Network Improvements	5.7%	Yes
- Provide Traffic Calming Measures	0% Supportive Measure	Yes
Implement Car-Sharing Program	1.6%	No
Calculated VMT Reduction from Neighborhood Site Enhancements[1]		
- Transit System (Maximum Reduction 10%)[1]		
Increase Transit Service Frequency/Speed		
- Commute Trip Reduction (Maximum Reduction 15%)[1]		
- Encourage Telecommuting and Alternative Work Schedules	4.5%	No
- Provide Ride-Sharing Programs	8.3%	No
- Implement Subsidized or Discounted Transit Program	3.6%	Yes
- Implement Commute Trip Reduction Marketing	0% - Supportive Measure	Yes

- Implement a School Pool Program	0% - Supportive Measure	No
Calculated VMT Reduction from Commute Trip Reduction[1]	**15.6%**	
Total VMT Reduction from All Subsectors (Assumes Maximum Reduction where Calculated Reduction is Greater)[2]	**24.9%**	

Source: Appendix G.

[1] Maximum Reduction per Sector from CAPCOA.

[2] Per CAPCOA total VMT reduction for multiple strategies within same subsector is calculated using the equation: 1-(1-A)*(1-B)*(1-C)... where A, B, C are equal to individual mitigation strategy reduction percentages. This equation is applied to measures within a sector as well as the totals across all sectors. When applied to the project, the calculation would be 1 - (1 - 0.05)*(1 – 0.063)*(1 – 0.156) = 0.2487, or 24.9%.

Not all strategies included in Table 5.4-6 would be applicable to the Project. However, the following VMT reduction strategies would be applicable to the Project:

- Provide Pedestrian Network Improvements,
- Provide Traffic Calming Measures,
- Implement Subsidized or Discounted Transit Program, and
- Implement Commute Trip Reduction Marketing.

Each of these strategies and anticipated VMT reductions are discussed further below.

Provide Pedestrian Network Improvements: As a Project Design Feature, the project would construct sidewalks along all internal streets as well as along the project's frontages on Wood Road, Krameria Avenue, and Lurin Avenue. The effectiveness of this measure was calculated using the methodology in the 2021 CAPCOA guidance, which is based on the increase in sidewalks within the project area. The project would construct an additional 5,780 linear feet of sidewalk along Wood Road, Lurin Avenue, Krameria Avenue and within the Project. The increase in pedestrian connectivity to existing and planned commercial and residential uses in the area was calculated to have the potential to decrease in VMT by 4.6 percent, according to the CAPCOA calculation. This strategy is considered a project design feature and has not been included as mitigation.

Provide Traffic Calming Measures: As a Project Design Feature, the location of the park and surrounding proposed street system has been designed to prohibit straight cut-through traffic and is designed to be traffic calming, as both left and right-turns are required to drive through the Project site. Although traffic calming would not result in a reduction in VMT, it is supportive to the pedestrian network improvements and would provide a more comfortable walking environment within the project site as well as connections to the off-site pedestrian network. This strategy is considered a project design feature and has not been included as mitigation.

Mitigation Measure MM TR-1: Implement Subsidized or Discounted Transit Program. To encourage use of transit and reduce the VMT per capita of the Project, the Project will implement a subsidized transit pass program. The Project applicant shall establish an account in the amount of $50,000, to be administered by the Homeowners Association (HOA) to provide free or reduced cost transit passes to Project residents for a period of at least 10 years from project occupancy. Implementation of the subsidized transit pass program by the HOA shall be included in the Project Covenants, Conditions and Restrictions (CC&R's), and the fund shall be established prior to occupancy of the first unit of the Project. The program shall provide up to $95 for a Riverside Transit Agency monthly pass or up to $100 for a Metrolink monthly pass to qualified residents who request transit reimbursement from the HOA. Residents who participate in the subsidized transit pass program would also be eligible to receive reimbursement for use of a ride sharing service (i.e., Uber or Lyft) for an emergency ride home.

The HOA shall provide an annual report of the transit pass program that includes the number of reimbursement requests, the amount disbursed to residents, and the remaining amount in the transit pass account. If the program experiences low participation, the City shall have the discretion to direct the HOA to redirect the funds for implementation of another measure intended to reduce VMT by Project residents. Such measures could include, but are not limited to, offsite or onsite pedestrian, bicycle or transit improvements, funding toward a bikeshare station on or near the site, implementation of further traffic calming measures, or other feasible and implementable TDM measures.

The subsidized transit pass program would be administered by the Project Homeowners Association (HOA) and would rely on a fund, established by the Project applicant, to purchase transit passes for Project residents. The amount required by the fund was determined using the Project's projected population, the regional transit mode share and the cost of Riverside Transit Agency (RTA) and Metrolink monthly passes. The project is anticipated to generate a demand for 4.18 passes per month, or approximately 50 passes per year. The fund value is estimated using an average cost of transit pass of $100 (Current transit pass costs include $95 for RTA Commuter Link+Local or $100 for Metrolink). Over a 10-year period, the cost of transit passes would be $50,000.

The calculation methodology for VMT reduction was referenced from the California Air Resources Board Quantification Methodology with input on trip lengths from Riverside Transit Authority (RTA). Based on a project VMT per capita of 19.0 (see Table 5.4-2), the calculated maximum VMT reduction assuming all transit trips would be on Commuterlink trips would be 3.6 percent. This strategy has been included as mitigation T-1.

Mitigation Measure MM TR-2: Implement Commute Trip Reduction Marketing. As noted previously, a Commute Trip Reduction Marketing program is generally implemented by an employer and is intended to reduce commute trips through promotion of an employer's commute trip reduction program (CTR). A residential project could, however, provide a CTR marketing program via information provided by the HOA and would educate residents about their travel choices beyond driving such as carpooling, transit, walking and bicycling. The Project HOA shall provide up to date travel information in a publicly accessible location, such as a website or on-site bulletin board. The CTR Marketing program shall provide information on the Subsidized Transit Pass program as well as other travel options such as transit routes and schedules, bikeway maps, and location of nearby bike and carshare stations. The information shall be reviewed and updated as needed and no less than every six months. This strategy has been included as mitigation T-2.

As shown by Table 5.4-6, there would be four feasible VMT reduction strategies for consideration as part of the Project. As shown in Table 5.4-7, implementation of these four measures could result in a decrease in VMT of 8.1 percent. Additional feasible mitigation measures are not available for residential projects at this time, therefore, the project's impact on VMT would remain significant and unavoidable. There is no feasible mitigation that would reduce the VMT/capita from 19.0 to below 9.18, a reduction of 52 percent.

Table 5.4-7: Calculated VMT Reduction with Project Mitigation

Mitigation Measure (Number corresponds to the 2021 CAPCOA Handbook)	Formula	Comments	Calculated Reduction in VMT (%)
Neighborhood Design			
T-18 Provide Pedestrian Network Improvement	A = ((C/B)-1)*D, Where B = Existing sidewalk length in study area, C = Sidewalk length in study area with measure, and D = Elasticity of household VMT with respect to the ratio of sidewalks-to-streets (-0.05 constant)	Approximately 6,235 linear feet of existing sidewalks in RivTAM TAZ 3574. Project would construct approximately 5,780 LF of sidewalk within project and along Wood Road, Lurin Avenue and Krameria Avenue.	4.6%
Trip Reduction Programs (maximum reduction of 45% commute VMT)			
T-7 Implement Commute Trip Reduction Marketing	A = B * C * D, Where B = Percent of employees/residents eligible for program, C = Percent reduction in employee commute trips, D = Adjustment from Vehicle trips to VMT	Based on the formula, an employer Commute Trip Reduction (CTR) Marketing program could result in a 4% reduction in VMT. However, because no methodology exists to evaluate a CTR Marketing Program for a residential project, this measure is considered supportive to other measurable mitigation measures.	0.0%
T-9 Implement Subsidized or Discounted Transit Program	Formula provided in report text.		3.6%
		Total VMT Reduction from Individual Trip Reduction Programs (T-7 & T-9)[1]	**3.6%**
		Total VMT Reduction from Neighborhood Designs[1]	**4.6%**
		Total VMT Reduction from All Subsectors[1]	**8.1%**

[1] Per CAPCOA total VMT reduction for multiple strategies within same subsector is calculated using the equation: 1-(1-A)*(1-B)*(1-C)... where A, B, C are equal to individual mitigation strategy reduction percentages.

It should be noted that given the City's VMT screening thresholds and the size of the proposed Project (over 10,000 square feet or 11 single-family residences), it is infeasible to develop and operate the Project site, consistent with the General Plan land use and zoning designations with fewer VMT related impacts. As a result, impacts related to VMT would be **significant and unavoidable.**

IMPACT C: WOULD THE PROJECT SUBSTANTIALLY INCREASE HAZARDS DUE TO A GEOMETRIC DESIGN FEATURE (E.G., SHARPT CURVES OR DANGEROUS INTERSECTIONS) OR INCOMPATIBLE USES (E.G., FARM EQUIPMENT)?

The Project includes development of single-family residences and open space recreation areas. The Project includes residential type uses and does not include any incompatible uses, such as farm equipment. The proposed Project would be accessed from one driveway on Krameria Avenue and Lurin Avenue that provide direct access to the onsite roadways.

The Project would also not increase any hazards related to a geometric design feature. As shown on the conceptual site plan (Figure 3-5), the proposed onsite street system prohibits straight cut-through traffic and is designed to be traffic calming, as both left-turns and right-turns are required to drive through the site. All of the proposed improvements would be required to be installed in conformance with City design standards. The City's construction permitting process includes review of Project site plans to ensure that no potentially hazardous transportation design features would be introduced by the Project. The internal circulation of the site would be consistent with similar developments in the City and would allow parking (driveway and on-street) and access for residents. Building setbacks would be consistent with the development standards of the

PRD Permit and base zoning designations and would not block line of sight views for vehicles exiting the site onto Lurin Avenue and Krameria Avenue. Implementation of the proposed Project would not substantially increase hazards due to a geometric design feature or incompatible use. As a result, impacts related to vehicular circulation design features would be **less than significant**.

IMPACT D: WOULD THE PROJECT RESULT IN INADEQUATE EMERGENCY ACCESS?

Construction. The proposed construction activities, including equipment and supply staging and storage, would occur within and adjacent to the Project area and would not restrict access of emergency vehicles to the Project site or adjacent areas. The roadway improvements and installation of sidewalks and utilities could require the temporary closure of travel lanes, but full roadway closure and traffic detours are not expected to be necessary. In addition, construction activities would be required to implement measures to facilitate the passage of persons and vehicles through/around any required temporary road restrictions and ensure the safety of passage in accordance with Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9), which would be ensured through the City's permitting process. Thus, implementation of the Project through the City's permitting process would ensure existing regulations are adhered to and would reduce potential construction related emergency access impacts to a **less than significant** level.

Operation. Operation of the proposed Project would also not result in an inadequate emergency access. Direct access to the Project site would be provided from Krameria Avenue and Lurin Avenue, which are adjacent to the Project site. The Project is required to design and construct internal access roads of sufficient size to accommodate emergency vehicles and provide fire suppression facilities (e.g., hydrants, fire sprinklers and fire-resistant construction materials) in conformance with the City Municipal Code and Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9). Compliance with appropriate code specifications would be verified by the City's Building and Safety Department during the construction and occupancy permitting process. Thus, potential impacts related to inadequate emergency access during Project operation would be **less than significant**.

5.4.7 CUMULATIVE IMPACTS

The cumulative traffic study area for the proposed Project includes the TAZ where the Project is located because the RIVTAM modeling that determines impacts is based on the TAZ. As described previously, the proposed Project is consistent with the existing General Plan, and thus, would be consistent with the cumulative volume of anticipated traffic on the area roadways. In addition, the proposed Project also would not exceed the City's 100 peak hour trip or 100 single-family residence tract screening criteria. Thus, cumulative LOS related General Plan policy consistency impacts would be less than significant.

Cumulative impacts related to VMT are evaluated as part of the RIVTAM. As described previously, RIVTAM socioeconomic database provides cumulative (2040) scenarios to calculate Project VMT. As shown in in Table 5.4-3, in the cumulative (2040) condition, the Project VMT per capita is approximately 89 percent higher than the threshold. Therefore, the Project would result in a cumulatively considerable significant impact. As detailed previously, VMT reducing measures, such as sidewalks and multipurpose trails are included in the Project; however, no feasible mitigation exists to reduce the cumulative (2040) VMT below the threshold. Therefore, cumulative VMT impacts would be **significant and unavoidable**.

5.4.8 CITY STANDARD CONDITIONS OF APPROVAL

The Project would include the following Project Design Features to ensure implementation and further reduction of Project VMT.

- **Provide Pedestrian Network Improvements**: The project would construct an additional 5,780 linear feet of sidewalk along Wood Road, Lurin Avenue, Krameria Avenue and within the Project.

- **Provide Traffic Calming Measures**: The location of the park and surrounding proposed street system will be designed to prohibit straight cut-through traffic and provide traffic calming by requiring both left and right-turns to drive through the Project site.

5.4.9 MITIGATION MEASURES

MM T-1 **Implement Subsidized or Discounted Transit Program:** The Project will implement a subsidized transit pass program. The Project applicant shall establish an account in the amount of $50,000, to be administered by the Homeowners Association (HOA) to provide free or reduced cost transit passes to Project residents for a period of at least 10 years from project occupancy. Implementation of the subsidized transit pass program by the HOA shall be included in the Project Covenants, Conditions and Restrictions (CC&R's), and the fund shall be established prior to occupancy of the first unit of the Project. The program shall provide up to $95 for a Riverside Transit Agency monthly pass or up to $100 for a Metrolink monthly pass to qualified residents who request transit reimbursement from the HOA. Residents who participate in the subsidized transit pass program would also be eligible to receive reimbursement for use of a ride sharing service (i.e., Uber or Lyft) for an emergency ride home.

The HOA shall provide an annual report of the transit pass program that includes the number of reimbursement requests, the amount disbursed to residents, and the remaining amount in the transit pass account. If the program experiences low participation, the City shall have the discretion to direct the HOA to redirect the funds for implementation of another measure intended to reduce VMT by Project residents. Such measures could include, but are not limited to, offsite or onsite pedestrian, bicycle or transit improvements, funding toward a bikeshare station on or near the site, implementation of further traffic calming measures, or other feasible and implementable TDM measures. The subsidized transit pass program will be administered by the Project Homeowners Association (HOA) and would rely on a fund, established by the Project applicant, to purchase transit passes for Project residents.

MM T-2 **Implement Commute Trip Reduction Marketing:** The Project will implement a CTR marketing program via information provided by the HOA and will educate residents about their travel choices beyond driving such as carpooling, transit, walking and bicycling. The Project HOA shall provide up to date travel information in a publicly accessible location, such as a website or on-site bulletin board. The CTR Marketing program shall provide information on the Subsidized Transit Pass program as well as other travel options such as transit routes and schedules, bikeway maps, and location of nearby bike and carshare stations. The information shall be reviewed and updated as needed and no less than every six months.

5.4.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

As described above, no feasible mitigation measures are available. Table 5.4-6 details that feasible VMT reduction strategies include:

- Provide Pedestrian Network Improvements,
- Provide Traffic Calming Measures,
- Implement Subsidized or Discounted Transit Program, and
- Implement Commute Trip Reduction Marketing.

Implementation of these four strategies as part of the Project would have the potential to reduce VMT by a maximum of 8.1 percent. A reduction of 52 percent is required to reduce the Project's VMT impacts to a less than significant level. There is no feasible mitigation that would reduce the VMT/Capita from 19.0 to below

the threshold of 9.18. Therefore**, significant and unavoidable** adverse impacts related to VMT pursuant to Impact TR-2 would occur.

REFERENCES

California Air Pollution Control Officers Association Quantifying Greenhouse Gas Mitigation Measures, August, 2010. Accessed: http://www.capcoa.org/wp-content/uploads/downloads/2010/09/CAPCOA-Quantification-Report-9-14-Final.pdf

City of Riverside General Plan Circultion and Mobility Element. Accessed: https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/general-plan/12_Circulation_&_Community%20Mobility_Element_with%20maps.pdf

City of Riverside Traffic Impact Analysis Guidelines For Vehicle Miles Traveled and Level of Service Assessment. July 2020. Accessed: https://riversideca.gov/traffic/pdf/TIA%20Guidelines%20-%20July%202020.pdf

Wood and Lurin Residential Project Vehicle Miles Traveled (VMT) Analysis (VMT 2022), prepared by EPD Solutions, Inc., 2022.

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5.5 Tribal Cultural Resources

5.5.1 INTRODUCTION

This section addresses potential impacts to tribal cultural resources associated with implementation of the proposed Project. Information within this section is based upon data from the Phase I Cultural Resources Assessment that was prepared by Material Culture Consulting, Inc. (MCC 2021) (Appendix D), the Geotechnical Evaluation, prepared by Leighton and Associates, inc. (GEO 2021) (Appendix E), and project-specific coordination and consultation with California Native American tribes that are traditionally and culturally affiliated with the Project region.

5.5.2 REGULATORY SETTING

5.5.2.1 Federal Regulations

Native American Graves Protection and Repatriation Act

The Federal Native American Graves Protection and Repatriation Act was passed in 1990 (NAGPRA) (25 U.S.C. 3001 et seq.,) and requires federal agencies and institutions that receive federal funding to return Native American cultural items to their respective peoples. In addition, is establishes a program of federal grants to assist in the repatriation process and authorizes the Secretary of the Interior to assess civil penalties on museums that fail to comply. This act ensures that Native American human remains and cultural items be treated with respect and dignity.

5.5.2.2 State Regulations

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (CalNAGPRA) was passed in in 2001. The CalNAGPRA was passed with the intent to cover gaps in the federal NAGPRA specific to the State of California. In 2020, AB 275 was passed and signed to strengthen CalNAGPRA for non-federally recognized California Native American tribes and elevate the status of tribal traditional knowledge in determining cultural affiliation and identifying cultural items, among other changes to the law. CalNAGPRA runs concurrently with federal NAGPRA.

California Assembly Bill 52

Assembly Bill 52 (AB 52) established a requirement under CEQA to consider "tribal cultural values, as well as scientific and archaeological values when determining impacts and mitigation." Public Resources Code (PRC) Section 21074(a) defines "tribal cultural resources" (TCRs) as "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" that are either "[i]ncluded or determined to be eligible for inclusion in the California Register of Historical Resources" or "in a local register of historical resources." Additionally, defined cultural landscapes, historical resources, and archaeological resources may be considered tribal cultural resources. PRC Section 21074(b), (c). The lead agency may also in its discretion treat a resource as a TCR if it is supported with substantial evidence.

Projects for which a notice of preparation for a Draft EIR was filed on or after July 1, 2015 are required to have lead agencies offer California Native American tribes traditionally and culturally affiliated with the project area consultation on CEQA documents prior to submitting an EIR in order to protect TCRs. PRC Section

21080.3.1(b) defines "consultation" as "the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement." Consultation must "be conducted in a way that is mutually respectful of each party's sovereignty [and] recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance." The consultation process is outlined as follows:

1. California Native American tribes traditionally and culturally affiliated with the project area submit written requests to participate in consultations.
2. Lead agencies are required to provide formal notice to the California Native American tribes that requested to participate within 14 days of the lead agency's determination that an application package is complete or decision to undertake a project.
3. California Native American tribes have 30 days from receipt of notification to request consultation on a project.
4. Lead agencies initiate consultations within 30 days of receiving a California Native American tribe's request for consultation on a project.
5. Consultations are complete when the lead agencies and California Native tribes participating have agreed on measures to mitigate or avoid a significant impact on a TCR, or after a reasonable effort in good faith has been made and a party concludes that a mutual agreement cannot be reached (PRC Sections 21082.3(a), (b)(1)-(2); 21080.3.1(b)(1)).

AB 52 requires that the CEQA document disclose significant impacts on TCRs and discuss feasible alternatives or mitigation to avoid or lessen an impact.

California Health and Safety Code, Section 7050.5

This code requires that if human remains are discovered on a project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and recognizes or has reason to believe the human remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

California Public Resources Code, Sections 5097.9 to 5097.991

PRC Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites and identify the powers and duties of the NAHC. These sections also require notification to descendants of discoveries of Native American human remains and provide for treatment and disposition of human remains and associated grave goods.

City of Riverside General Plan

The General Plan Historic Preservation Element and Land Use Element includes the following policies to reduce potential impacts to cultural resources:

Historic Preservation
Objective HP-4: To fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting and development activities.

Policy HP-1.1: The City shall promote the preservation of cultural resources to ensure that citizens of Riverside have the opportunity to understand and appreciate the City's unique heritage.

Policy HP-1.2: The City shall assume its direct responsibility for historic preservation by protecting and maintaining its publicly owned cultural resources. Such resources may include, but are not limited to, buildings, monuments, landscapes, and right-of-way improvements, such as retaining walls, granite curbs, entry monuments, light standards, street trees, and the scoring, dimensions, and patterns of sidewalks, driveways, curbs and gutters.

Policy HP-1.3: The City shall protect sites of archaeological and paleontological significance and ensure compliance with all applicable State and Federal cultural resources protection and management laws in its planning and project review process.

Policy HP-4.3: The City shall work with the appropriate tribe to identify and address, in a culturally appropriate manner, cultural resources and tribal sacred sites through the development review process.

Land Use
Policy LU-4.6: Ensure protection of prehistoric resources through consultations with the Native American tribe(s) identified by the Native American Heritage Commission pursuant to Government Code § 65352.3 and as required by the California Environmental Quality Act.

5.5.3 ENVIRONMENTAL SETTING

Native American Tribes

The region that the Project is within has historically been situated between the Native American territories of the Cahuilla people and the Luiseño people. Migration of Shoshone peoples from the Great Basin into the desert and coastal Southern California regions occurred approximately 1000 to 600 years B.P. Both the Cahuilla and Luiseño ethnographic groups derived from this migration.

Cahuilla
The Cahuilla territory was bounded by the San Bernardino Mountains to the north, the Orocopia Mountains to the east, the Santa Ana River/the San Jacinto Plain and the eastern portion of Palomar Mountains to the west, and Borrego Springs and the Chocolate Mountains to the south (Bean 1978). The Project site falls within the western region of the tribe's traditional territory, denoted by the San Gorgonio Pass. The Cahuilla existed within the most geographically diverse region, having exploited more than 500 native and non-native plants (Bean and Saubel 1972). The Cahuilla spoke a language that belongs to the Cupan group of the Takic subfamily of the Uto-Aztecan language family, a language family that includes the Shoshonean groups of the Great Basin (Bean and Shipek 1978).

The prehistoric Cahuilla occupation is characterized by structures within permanent villages that ranged from small brush shelters to dome-shaped or rectangular dwellings. Villages were situated near water sources, in the canyons near springs, or on alluvial fans at man-made walk-in wells (Bean 1972). There appears to be slight difference in subsistence tools between the Desert, Pass, or Mountain Cahuilla groups. The Desert Cahuilla used deep, wooden mortars with a long pestle whereas San Gorgonio Pass Cahuilla utilized shallower mortars with basketry rims (Kroeber 1908: 40, 43). Cahuilla granaries were usually raised on pole platforms two to four feet high, which resembled birds' nests, and were used to store mesquite (Kroeber 1908: 42).

In comparison with other Southern California tribes, the Cahuilla appear to have had a lower population density and a less rigid social structure. The Cahuilla are patrilineal, with closely related patrilineages that share an assumed common ancestor which is important socially and ceremonially (Hudlow 2007). The office of lineage leader, also known as a nét, directed subsistence activities, settled conflicts, represented the clan regionally and was responsible for correct performances of ceremonies, with the official role of the chief passed from father to eldest son (Bean 1978; Hudlow 2007).

Initial contact with European explorers with the Cahuilla most likely occurred during the expedition of Juan Bautista de Anza in 1777 (Napton and Greathouse 1982). The presence of the San Gabriel Mission in the early 1800s led to more contact via baptisms (Napton and Greathouse 1982). It also led to the Native Americans moving away from traditional habitation sites to separate themselves from the influence of the Mission (Brumgardt 1977). The Cahuilla traditions may have been relatively stable until mission secularization in 1834, due to the policy of the Catholic Mission fathers, or padres, to maintain imported European traditional style settlement and economic patterns (Bean and Shipek 1978). After 1877, when the United States government established Indian reservations in the region and religious missionaries began conversion of the Native American populations in the region, traditional cultural practices were prohibited. Presently, the Cahuilla reside in nine separate reservations in Southern California, located in Imperial, Riverside and San Diego counties (Bean 1978).

Luiseño

The Spanish name Luiseño was used to identify Native Americans who were associated with the Mission San Luis Rey, with the Luiseño most likely had no known native term for their own nationality (Bean and Shipek 1978). Extensive research has been accumulated that gives detailed accounts of the Luiseño (DuBois 1908, Sparkman 1908, Kroeber 1976, White 1963, and Bean and Shipek 1978). At the time of these ethnographies, the Luiseño maintained a sophisticated political organization structure, and their lands extended from western San Jacinto to the Pacific Ocean along several major waterways, including Temecula, Santa Margarita, and San Luis Rey Rivers (Bean and Shipek 1978). Neighboring tribes included the Cahuilla to the east, the Serrano to the north, and the Gabrielino to the west. Each of these groups are part of the same Uto-Aztecan linguistic group and are Takic-speakers. The boundaries for territories fluctuate as new information evolves in ethnographic research, so there is a likelihood that there was quite a bit of overlap between groups over time as well.

The Luiseño organized themselves according to family groups or lineages, rather than forming exogamous moieties. Each lineage occupied land that they held in common, and they lived socially and politically separately from others (Bean and Shipek 1978). They typically resided in villages near reliable water sources and maintained special purpose camps close to the main villages. In the springtime, families would replenish food supplies by gathering local fruit, seeds, bulbs and roots. In the fall, families would move into the upland areas to gather acorns, prickly pear, toyon berries, and yucca. The Luiseño territory contained several species of oak that produced edible acorns. Acorns were stored and processed as needed by breaking the shell, grinding the meat into a powder, and leaching the tannic acid from the nut by using water. A porridge was made from the leached nuts and cooked with water using hot stones in baskets. The Luiseño used a wide variety of tools, including manos and metates, bone and shell fish hooks, stone and shell ornaments, bone awls, wooden throwing sticks, hammer stones, handstones, pestles, mortars, and drills, which are evident in late Prehistoric archaeological sites. Presently, there are six federally recognized Luiseño tribes with associated reservations within Southern California.

Known Local Resources

The records search of the California Historic Resources Inventory System that was conducted for the Project listed 28 previously identified bedrock milling features within 1-mile radius of the Project site. Nine of these were located within between 0.25 to 0.5 mile from the Project site. None of the previously recorded resources are located within the Project site.

Project Site Soils and Ground Disturbances

The Phase I Cultural Resources Assessment includes a review of historical aerial photographs and maps that show that the Project site was heavily disturbed through use as an agricultural field, including citrus groves, during from the early 1900s through the early 1990s, and mowing or disking as rows are present. Current disking by machinery was evident and overturned soil was observed during the cultural resources field survey

conducted on the site. In addition, a residence was developed at the southeastern portion of the Project site, which still exists.

The Geotechnical Evaluation that was prepared for the Project describes that the site is underlain by 2 to 4 feet of alluvial soils that overlie granitic bedrock. Thus, potential tribal cultural resources would be limited to 2 to 4 feet below the surface.

5.5.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a project could have a significant effect if it were to 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:

Threshold 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); or

Threshold 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, that considers the significance of the resource to a California Native American tribe.

5.5.5 METHODOLOGY

Records Searches

On January 20, 2021, a record search request was submitted to the California Historical Resource Information System (CHRIS) from the Eastern Information Center (EIC), located on the campus of University of California, Riverside. The CHRIS search included areas within 1-mile of the Project site and included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Inventory of Historic Resources.

A Sacred Lands File search was requested from the NAHC on January 19, 2021. The NAHC responded on February 3, 2021, stating that there are no known/known sacred lands within 0.5 mile of the Project area, and requested that 21 Native American individuals be contacted for further information regarding the general area vicinity. Pursuant to the NAHC request, on February 9, 2021, letters were sent to the 21 Native American tribes that may have knowledge regarding tribal cultural resources in the Project vicinity. The following five responses were received.

- On February 22, 2021, an email was received from the Quechan Tribe of the Fort Yuma Reservation stating that the Tribe has no comments on this Project and defers to the more local Tribes and support their decisions on the Project.
- On February 26, 2021, an email was received from the Rincon Band of Luiseno Indians expressing concerns that that the Project may impact tangible Tribal Cultural Resource and recommended conducting an archaeological/cultural resources study with an archeological record search and complete intensive survey of the property. Additionally, the tribe requested that a professional Tribal monitor to accompany the archaeologist during the survey. The Rincon Band further requests

to consult directly with the lead agency regarding Project impacts to cultural resources. The tribe was informed via email on March 2, 2021, and via phone call on March 3, 2021, that a pedestrian survey would be conducted on March 4, 2021, and no response was received.

- On March 10, 2021, an email was received from the Cahuilla Band of Indians that stated the Project is within Traditional Use Lands and the tribe requests a monitor present during all ground disturbance activities.
- On March 12, 2021, the Aqua Caliente Band of Cahuilla Indians sent an email stating that the Project is located within Traditional Use Area and requested a cultural resources inventory of the site by a qualified archaeologist prior to any development activities in this area, a copy of the records search with associated survey reports and site records from the information center and copies of any cultural resource documentation (report and site records) generated in connection with this Project.
- On March 12, 2021, the Augustine Band of Cahuilla Mission Indians sent an email with an attachment stating that the tribe is unaware of specific cultural resources that may be affected by the proposed Project; however, in the event that any cultural resources are discovered during the development of the Project to contact the Augustine Band of Cahuilla Mission Indians immediately for further evaluation.

AB 52 Compliance

In compliance with AB 52, on June 3, 2021, the City sent letters to the following Native American tribes that may have knowledge regarding tribal cultural resources in the Project vicinity.

- Agua Caliente Band of Cahuilla Indians
- Cahuilla Band of Indians
- Gabrieleño Band of Mission Indians – Kizh Nation
- Morongo Band of Mission Indians
- Pechanga Band of Luiseno Indians
- Rincon Band of Luiseno Indians (2 contacts)
- San Gabriel Band of Mission Indians
- San Manuel Band of Mission Indians
- Soboba Band of Luiseno Indians

Responses were received from the following three tribes: Pechanga Band of Luiseño Mission Indians, the San Manuel Band of Mission Indians, and the Rincon Band of Luiseño Indians. The San Manuel Band of Mission Indians responded on June 7, 2021; and did not express concerns about the Project. The Pechanga Band of Luiseño Mission Indians responded on June 16, 2021, and the Rincon Band of Luiseño Indians responded on June 22, 2021, both of which requested consultation.

City consultation with the Rincon Band of Luiseño Indians occurred on June 29, 2021. The Tribe requested tribal and archaeological monitoring due to resources found in the general area outside the Project site. The City consultation with the Pechanga Band of Luiseño Mission Indians occurred on July 22, 2021. During this consultation, the Tribe described the potential of the Project vicinity to contain tribal cultural resources and requested mitigation be implemented to reduce the potential for impacts. On June 1, 2022, the City responded by providing the revised Cultural Resources Assessment, proposed tentative tract map showing an onsite location for potential reburial, and a memo outlining the mitigation measures, and requested a

response by June 15, 2022. The City sent follow up emails on June 14, 2022, June 28, 2022, and July 7, 2022 to the requesting a response by July 14, 2022 to the Pechanga Band of Luiseño Mission Indians. No response was received. Thus, the City determined that a good faith effort had been made and closed the AB 52 consultation in accordance with PRC Section 21082.3 on July 14, 2022.

Field Survey

An archaeological survey was conducted of the Project site on March 4, 2021. The survey consisted of walking in parallel transects spaced at approximately 5- to 10-meter intervals, while closely inspecting the ground surface. All undeveloped ground surface areas within the ground disturbance portion of the Project site were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), or historic-era debris (e.g., metal, glass, ceramics). Existing ground disturbances (e.g,. cutbanks, ditches, animal burrows, etc.) were visually inspected. Representative photographs were taken and are included in Appendix D).

5.5.6 ENVIRONMENTAL IMPACTS

IMPACT A: WOULD THE PROJECT CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE THAT IS LISTED OR ELIGIBLE FOR LISTING IN THE CALIFORNIA REGISTER OF HISTORICAL RESOURCES, OR IN A LOCAL REGISTER OF HISTORICAL RESOURCES AS DEFINED IN PUBLIC RESOURCES CODE SECTION 5020.1(K)?

The Phase I Cultural Resources Assessment identified 28 bedrock milling features within 1-mile of the Project site. Nine of the bedrock milling features are located within 0.25-mile to 0.5-mile of the Project site.

The Phase I Cultural Resources Assessment includes a review of historical aerial photographs and maps that show that the Project site was heavily disturbed through use as an agricultural field, including citrus groves, during from the early 1900s through the early 1990s, when mowing or disking as rows are present. In addition, a residence is located at the southeastern portion of the Project site. Consistent with these past uses, the field survey identified piles of cut trees in the northernmost portion of the site and remnants of a modern irrigation system, along with multiple dirt roads. The Phase I Cultural Resources Assessment determined that the modification and disturbance associated with the prior agricultural uses within the Project area has eradicated any near-surface record of tribal cultural resources. However, it is possible that tribal cultural resources underneath near-surface soils could be uncovered and impacted during earthmoving activities. As described in Section 3.0, *Project Description*, the proposed Project would excavate onsite soils as part of Project construction.

The Phase 1 Cultural Resources Assessment determined that the site has a low to moderate potential for archaeological resources. Also, as described previously, two Native American tribes (the Rincon Band of Luiseño Indians and the Pechanga Band of Luiseño Mission Indians) identified the potential of resources being located within the Project region and requested tribal and archaeological monitoring occur during project excavation. The Phase I Cultural Resources Assessment and the tribal consultations did not identify any tribal cultural resources on the site. However, due to the number of previously identified bedrock milling features within 1-mile of the site it is possible that tribal cultural resources exist on the site. Thus, to avoid a potential adverse effect to tribal cultural resources, Mitigation Measure **MM CUL-1** has been included to require that a qualified archaeologist monitor initial ground-disturbance activities. In addition, Mitigation Measures **MM CUL-2** through **MM CUL-5** require Native American coordination of Project plans, treatments of any uncovered resources, and a pre-grading cultural resources sensitivity training for construction personnel implementation of protocols in the event a potential tribal cultural resource is uncovered. Therefore, potential

impacts related to tribal cultural resource that are listed or eligible for listing in the California Register of Historical Resources, or other register of historical resources would be **less than significant with mitigation.**

IMPACT B: WOULD THE PROJECT CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF 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 THE PUBLIC RESOURCES CODE SECTION 5024.1, THAT CONSIDERS THE SIGNIFCANCE OF THE RESOURCES TO A CALIFORNIA NATIVE AMERICAN TRIBE?

As described in the previous response, the Project site has been heavily disturbed to substantial depths. Although no evidence exists that tribal cultural resources are present in the Project site, it is possible that tribal cultural resources exist underneath near-surface soils and could be uncovered and impacted during earthmoving activities. Thus, the Phase 1 Cultural Resources Assessment determined that the site has a low to moderate potential for archaeological resources. In addition, the Rincon Band of Luiseño Indians and the Pechanga Band of Luiseño Mission Indians stated that there is potential of resources being located within the Project region and requested tribal and archaeological monitoring occur during Project excavation.

Therefore, to avoid a potential adverse effect to tribal cultural resources, Mitigation Measure **MM CUL-1** has been included to require that a qualified archaeologist monitor initial ground-disturbance activities. In addition, Mitigation Measures **MM CUL-2** through **MM CUL-5** require Native American coordination of Project plans, treatments of any uncovered resources, and a pre-grading cultural resources sensitivity training for construction personnel implementation of protocols in the event a potential tribal cultural resource is uncovered.

Also, California Health and Safety Code, Section 7050.5 requires that if human remains are discovered in the Project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation. If the coroner determines that the remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Therefore, with implementation of the prescribed mitigation and the existing regulations, impacts to TCRs would be **less than significant with mitigation.**

5.5.7 CUMULATIVE IMPACTS

The cumulative study area for tribal cultural resources includes the southern California region, which contains the same general tribal historic setting, as detailed previously in Section 5.5.3, *Environmental Setting*. Other projects in the vicinity of the Project would involve ground disturbances that could reveal or impact buried TCRs.

Cumulative impacts to TCRs would be reduced by compliance with applicable regulations and consultations required by AB 52. As described above, the Project site and vicinity is not known to contain TCRs; however, Mitigation Measures **MM CUL-1** through **MM CUL-5** would be implemented to ensure that impacts would not occur in the case of an inadvertent discovery of a potential TCR. These mitigation measures would provide that the Project would not contribute to a cumulative loss of TCRs. Therefore, cumulatively considerable impacts would be less than significant.

5.5.8 CITY STANDARD CONDITIONS OF APPROVAL

Condition of Approval: Discovery of Human Remains. In the event that human remains (or remains that may be human) are discovered at the Project site during grading or earthmoving, the construction contractors, Project Archaeologist, and/or designated Native American Monitor shall immediately stop all activities within 100 feet of the find. The Project proponent shall then inform the Riverside County Coroner and the City of Riverside Community & Economic Development Department immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b) unless more current State law requirements are in effect at the time of the discovery. Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). The coroner shall contact the NAHC to determine the most likely descendant(s). The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The Disposition of the remains shall be overseen by the most likely descendant(s) to determine the most appropriate means of treating the human remains and any associated grave artifacts.

The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The County Coroner will notify the Native American Heritage Commission in accordance with California Public Resources Code 5097.98.

According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). The disposition of the remains shall be determined in consultation between the Project proponent and the MLD. In the event that the Project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

5.5.9 MITIGATION MEASURES

MM CUL-1: Archaeological Monitoring. (See Section 5.2, Cultural Resources for text).

MM CUL-2: Native American Coordination. (See Section 5.2, Cultural Resources for text).

MM CUL-3: Native American Monitor: (See Section 5.2, Cultural Resources for text).

MM CUL-4: Treatment and Disposition of Cultural Resources. (See Section 5.2, Cultural Resources for text).

MM CUL-5: Cultural Sensitivity Training. (See Section 5.2, Cultural Resources for text).

5.5.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The mitigation measure and existing regulatory programs described previously would reduce potential impacts associated with TCRs to a level that is less than significant. Therefore, no significant unavoidable adverse impacts related to TCRs would occur.

REFERENCES

Geotechnical Evaluation, prepared by Leighton and Associates, inc. (GEO 2021) (Appendix E).

Phase I Cultural Resources, prepared by Material Culture Consulting, Inc. (MCC 2021) (Appendix D).

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5.6 Mandatory Findings of Significance and Other CEQA Topics

5.6.1 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires an EIR to describe "any significant impacts, including those which can be mitigated but not reduced to a level of insignificance." Potential significant environmental effects of the proposed Project and mitigation measures are discussed in detail in Chapter 5 of this EIR.

Transportation

As detailed, in Section 5.4, *Transportation*, in the baseline condition, the Project VMT per capita would be more than double the threshold; and in the cumulative condition, the Project VMT per capita would be approximately 89 percent higher than the threshold. Feasible measures that are proposed as part of the Project would have a limited reduction in the Project's VMT to a maximum of 8.1 percent. A reduction of 52 percent is required to reduce the Project's VMT impacts to a less than significant level. There is no feasible mitigation that would reduce the VMT/Capita to below the City's threshold. Furthermore, the City of Riverside currently does not have a mitigation bank where payments can be made for funding of improvement projects to reduce cumulative VMT impacts. Therefore, impacts related to VMT would be significant and unavoidable in both the baseline and cumulative condition.

It should be noted that given the City's VMT screening thresholds and the size of the proposed Project (over 10,000 square feet or 11 single-family residences), it is infeasible to develop and operate the Project site, consistent with the General Plan land use and zoning designations with fewer VMT related impacts.

5.6.2 GROWTH INDUCEMENT

This section analyzes the growth inducement potential of the proposed Project and the associated secondary effects of growth the Project might permit. As required by CEQA Guidelines Section 15126.2(d), an EIR must:

> "Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a recycled water plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

Thus, based on CEQA, a project could have a direct effect on population growth, for example, if it would involve construction of substantial new housing. A project could also have indirect growth-inducement potential if it would:

- Establish substantial new permanent employment opportunities (e.g., commercial, industrial, governmental, or other employment-generating enterprises) or otherwise stimulate economic activity such that is would result in the need for additional housing, businesses, and services to support increased economic activities;

- Remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or would add substantial capacity that could accommodate additional unplanned growth;
- Remove obstacles to growth through changes in existing regulations pertaining to land development;
- Result in the need to expand one or more public service facilities to maintain desired levels of service; or
- Involve some other action that could encourage and facilitate other activities that could significantly affect the environment.

As CEQA Guidelines Section 15126.2(d) states that growth-inducing effects are not to be construed as necessarily beneficial, detrimental or of little significance to the environment; the following information is provided as additional information on ways in which the proposed Project could contribute to significant changes in the environment beyond the direct consequences of developing the land use concepts examined in the preceding sections of this EIR.

Establish substantial new permanent employment opportunities or otherwise stimulate economic activity such that is would result in the need for additional housing, businesses, and services to support increased economic activities

The proposed Project would develop the Project site to provide single-family residential units and would not establish new permanent employment opportunities. In addition, as detailed in Section 14, *Population and Housing* of the Initial Study (Appendix A), the proposed Project would result in an overall density of 5.07 du/acre, which is consistent and within the General Plan land use densities for the Project site. Therefore, the residential development that would occur by the proposed Project is consistent with planned growth. Thus, the Project would not result in unplanned population that could result in stimulating the economy, and the economic effects of the proposed Project would not result in the need for additional development that could result in a substantial impact on the environment.

Remove Obstacles to Growth, e.g., Through the Construction Or Extension of Major Infrastructure Facilities that do not Presently Exist in the Project Area or Would Add Substantial Capacity that Could Accommodate Additional Unplanned Growth.

The elimination of a physical obstacle to growth is considered to be a growth inducing impact. A physical obstacle to growth typically involves the lack of public service infrastructure. The proposed Project would induce growth if it would provide public services or infrastructure with excess capacity to serve lands that would otherwise not be developable or to expand the development potential of redevelopment areas.

The proposed Project would develop onsite infrastructure to serve the proposed single-family residences. New 8-inch water and sewer lines would be located within each of the residential streets and serve each of the proposed residences. The new onsite water lines would connect to the existing 12-inch water line in Wood Road and the existing 8-inch and 24-inch lines Krameria Avenue. The new onsite sewer lines would connect to the existing 8-inch sewer line in Lurin Avenue. The Project would not extend or expand the capacity of the offsite system and would not provide for additional off-site capacity.

In addition, the Project would install an onsite stormwater drainage system that would convey runoff to catch basins that would convey flows to proposed two bioretention basins that would treat and infiltrate runoff. The remaining limited runoff would discharge runoff to the existing storm drain line within Wood Road. As detailed in Section 10, *Hydrology and Water Quality*, of the Initial Study (Appendix A) the onsite drainage

system has been designed to accommodate runoff from the Project site, and the Project would not result in the need for new or expanded offsite stormwater drainage infrastructure. Thus, no additional offsite drainage capacity would occur from implementation of the Project.

The Project would also connect to existing electric power, natural gas, and telecommunication facilities that exist in the adjacent rights-of-way. Therefore, the Project would not result in expansion of electric power, natural gas, or telecommunication facilities, and no additional capacity of these utilities would occur. Overall, the proposed Project would install new infrastructure on the site that would connect to the existing off-site systems. The new onsite infrastructure would not provide additional capacity beyond what is needed to serve the proposed Project. Therefore, infrastructure improvements would not result in significant growth inducing impacts.

Remove Obstacles to Growth Through Changes in Existing Regulations Pertaining to Land Development

A project could directly induce growth if it would remove barriers to population growth such as change to a jurisdictions general plan and zoning code, which allows new development to occur in underutilized areas. The proposed Project is consistent with the existing General Plan land use designations for the site. The Project site has a General Plan land use designation of LDR – Low Density Residential, which allows up to 6.0 dwelling units per acre with a Planned Residential Development (PRD) permit, and MDR – Medium Density Residential, which allows up to 8.0 dwelling units per acre, with a PRD permit. The proposed Project is requesting a PRD permit to develop 96 single-family residences on the 18.92-acre site, which would result in 5.07 single-family dwelling units per gross acre, which would be consistent with the existing General Plan land use designations for the Project site, and regulations related to land development would not be changed by implementation of the proposed Project, and impacts would not occur.

A portion of the Project site is within Woodcrest Agricultural Preserve No. 7. Therefore, the Project would require Agricultural Preserve Diminishment (AP) to diminish Woodcrest Agricultural Preserve No. 7 prior to development of the site with residential land uses. Upon diminishment of the agricultural preserve, the site would become R-1-13000 and R-1-8500 zoning, as provided within the Orangecrest Specific Plan.

In addition, the General Plan Land Use Table LU-3 assumes an average household size of 3. Based on the General Plan assumption, the 96 proposed single-family residences would result in a population of 288 residents. The California Department of Finance estimates that in January 2020, the City of Riverside had a population of 328,155 and 101,414 housing units. The proposed Project would result in a 0.09 percent increase in both residents and housing units in the city, which is not substantial growth.

Result in the Need to Expand One or More Public Service Facilities to Maintain Desired Levels of Service

The proposed Project is expected to incrementally increase the demand for fire protection and emergency response, police protection, and school services. However, as described in Initial Study Section 15, *Public Services*, the proposed Project would not require development of additional facilities or expansion of existing facilities to maintain existing levels of service. Based on service ratios and buildout projections, the proposed Project would not create a demand for services beyond the capacity of existing facilities. Therefore, an indirect growth inducing impact as a result of expanded or new public facilities that could support other development in addition to the proposed Project would not occur. The proposed Project would not have significant growth inducing consequences that would require the need to expand public services to maintain desired levels of service.

Involve Some Other Action that Could Encourage and Facilitate Other Activities that Could Significantly Affect the Environment

The proposed Project does not involve any other action or activity that could significantly affect the environment. The Project would be implemented in compliance with the existing General Plan, Orangecrest Specific Plan, and municipal code. The proposed Project does not propose changes to any of the City's building safety standards (i.e., building, grading, plumbing, mechanical, electrical, or fire codes). The Project would comply with all applicable City plans, policies, and ordinances. In addition, Project features and mitigation measures have been identified within this EIR to ensure that the Project minimizes environmental impacts. Thus, the Project would not involve any precedent-setting action that could encourage and facilitate other activities that significantly affect the environment.

Environmental Impacts of Induced Growth

All physical environmental effects from construction of development of the proposed Project has been analyzed in this EIR and the Initial Study that is included as Appendix A. For example, activities such as excavation, grading, and construction as required for the proposed residential development were analyzed in the Initial Study, and mitigation would be implemented to ensure that impacts related to construction and operation would be less than significant. Therefore, the proposed Project has been analyzed and would be adequately mitigated either through implementation of existing regulations and/or mitigation measures contained within Chapter 5 of this EIR.

5.6.3 SIGNIFICANT IRREVERSIBLE EFFECTS

State CEQA Guidelines require the EIR to consider whether "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely…. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified." (CEQA Guidelines Section 15126.2(d)). "Nonrenewable resource" refers to the physical features of the natural environment, such as land, waterways, mineral resources, etc. These irreversible environmental changes may include current or future uses of non-renewable resources, and secondary or growth-inducing impacts that commit future generations to similar uses.

Generally, a project would result in significant irreversible environmental changes if:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The proposed irretrievable commitments of nonrenewable resources is not justified (e.g., the project involves the wasteful use of energy).

The proposed Project would result in or contribute to the following irreversible environmental changes:

- Lands in the Project site would be committed to single-family residential uses once the proposed buildings are constructed. Secondary effects associated with this irreversible commitment of land resources include:
    - Changes in views associated with construction of the new buildings and associated development (see Initial Study Section 1, *Aesthetics*).
    - Increased traffic on area roadways (see Section 5.1 *Transportation*).

  - Emissions of air pollutants associated with Project construction and operation (see Initial Study Section 3, *Air Quality*).
  - Consumption of non-renewable energy associated with construction and operation of the proposed Project due to the use of automobiles, lighting, heating, and cooling systems, appliances (see Initial Study Section 6, *Energy*).
  - Increased ambient noise associated with an increase in activities and traffic from the Project (see Initial Study Section 13, *Noise*).

- Construction of the proposed Project as described in Section 3.0, *Project Description*, would require the use of energy produced from non-renewable resources and construction materials.

In regard to energy usage from the proposed Project, as demonstrated in the analyses contained in the Initial Study Section 6, *Energy*, the proposed Project would not involve wasteful or unjustifiable use of non-renewable resources, and conservation efforts would be enforced during construction and operation of proposed development through the City's permitting process. The proposed development would incorporate energy-generating and conserving project design features, including those required by the California Building Code, California Energy Code Title 24, which specify green building standards for new developments.

REFERENCES

City of Riverside General Plan. Accessible: https://riversideca.gov/cedd/planning/city-plans/general-plan-0

State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State, 2020. Accessible: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5

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6.0 Alternatives

This section addresses alternatives to the proposed Project and describes the rationale for including them in the EIR. The section also discusses the environmental impacts associated with each alternative and compares the relative impacts of each alternative to those of the proposed Project. In addition, this section describes the extent to which each alternative meets the Project objectives.

6.1 INTRODUCTION

The identification and analysis of alternatives to a project is a fundamental part of the environmental review process pursuant to CEQA. Public Resources Code (PRC) Section 21002.1(a) establishes the need to address alternatives in an EIR by stating that in addition to determining a project's significant environmental impacts and indicating potential means of mitigating or avoiding those impacts, "the purpose of an environmental impact report is . . . to identify alternatives to the project."

Pursuant to *CEQA Guidelines* Section 15126.6(a), an EIR must describe a reasonable range of alternatives to the proposed Project or to the Project's location that would feasibly avoid or lessen its significant environmental impacts while attaining most of the proposed Project's objectives. *CEQA Guidelines* Section 15126.6(b) emphasizes that the selection of project alternatives be based primarily on the ability to reduce impacts relative to the proposed project. In addition, *CEQA Guidelines* Section 15126.6(e)(2) requires the identification and evaluation of an "Environmentally Superior Alternative."

Pursuant to *CEQA Guidelines* Section 15126.6(d), discussion of each alternative presented in this EIR Section is intended "to allow meaningful evaluation, analysis, and comparison with the proposed project." As permitted by CEQA, the significant effects of each alternative are discussed in less detail than those of the proposed Project, but in enough detail to provide perspective and allow for a reasoned choice among alternatives to the proposed Project.

In addition, the "range of alternatives" to be evaluated is governed by the "rule of reason" and feasibility, which requires the EIR to set forth only those alternatives that are feasible and necessary to permit an informed and reasoned choice by the lead agency and to foster meaningful public participation (*CEQA Guidelines* Section 15126.6(f)). CEQA generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors and other considerations (*CEQA Guidelines* Sections 15091(a)(3), 15364).

Based on the CEQA requirements described above, the alternatives addressed in this EIR were selected in consideration of one or more of the following factors:

- The extent to which the alternative could avoid or substantially lessen any of the identified significant environmental effects of the proposed Project;
- The extent to which the alternative could accomplish the objectives of the proposed Project;
- The potential feasibility of the alternative;
- The appropriateness of the alternative in contributing to a "reasonable range" of alternatives that would allow an informed comparison of relative advantages and disadvantages of the proposed Project and potential alternatives to it; and

- The requirement of the *CEQA Guidelines* to consider a "no project" alternative; and to identify an "environmentally superior" alternative in addition to the no project alternative (*CEQA Guidelines* Section 15126.6(e)).

Neither the CEQA statute, the *CEQA Guidelines*, nor recent court cases specify a specific number of alternatives to be evaluated in an EIR. Rather, "the range of alternatives required in an EIR is governed by the rule of reason that sets forth only those alternatives necessary to permit a reasoned choice" (*CEQA Guidelines* 15126(f)).

6.2 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

CEQA requires the alternatives selected for comparison in an EIR to avoid or substantially lessen one or more significant effects of the project being evaluated. In order to identify alternatives that would avoid or substantially lessen any of the identified significant environmental effects of implementation of the proposed Project, the significant impacts must be considered, although it is recognized that alternatives aimed at reducing the significant and unavoidable impacts would also avoid or reduce impacts that were found to be less than significant or reduced to below a level of significance with implementation of mitigation measures. The analysis in Chapter 5 of this EIR determined that impacts related to the following would remain significant and unavoidable.

Transportation

As detailed, in Section 5.4, *Transportation*, in the baseline condition, the Project VMT per capita would be more than double the threshold; and in the cumulative condition, the Project VMT per capita would be approximately 89 percent higher than the threshold. Feasible measures that are proposed as part of the Project would have a limited reduction in the Project's VMT to a maximum of 8.1 percent. A VMT reduction of 52 percent would be required to reduce the Project's VMT impacts to a less than significant level. While VMT could be reduced with Project Design Features and Mitigation Measure MM TR-1 and MM TR-2, there is no feasible mitigation that would reduce the VMT/Capita to below the City's significance threshold. Furthermore, the City of Riverside currently does not have a mitigation bank where payments can be made for funding of improvement projects to reduce cumulative VMT impacts. Therefore, impacts related to VMT would be significant and unavoidable in both the baseline and cumulative condition.

It should be noted that given the City's VMT screening thresholds and the size of the proposed Project (over 10,000 square feet or 11 single-family residences), it is infeasible to develop and operate the Project site, consistent with the General Plan land use and zoning designations with less than significant VMT related impacts.

6.3 PROJECT OBJECTIVES

The following objectives have been identified in order to aid decision makers in their review of the proposed Project and its associated environmental impacts.

- Provide high quality residential development that is consistent with the General Plan, Orangecrest Specific Plan, and zoning code.
- Implement the residential provisions of the Specific Orangecrest Specific Plan Overlay intended to take effect upon diminishment of Woodcrest Agricultural Preserve No. 7 on the site.
- Establish a well-planned community that provides visual and functional compatibility with adjacent residential neighborhoods.

- Create a walkable and bikeable environment near existing bus routes.
- Provide housing to assist the City in meeting its Regional Housing Need Allocation (RHNA) as identified by Southern California Association of Governments (SCAG) and assist in reducing the housing shortage in southern California.
- Provide housing in areas that have family services, such as schools.

6.4 ALTERNATIVES CONSIDERED BUT REJECTED

Pursuant to *CEQA Guidelines* Section 15126.6(c), an EIR must briefly describe the rationale for selection and rejection of alternatives. The lead agency may make an initial determination as to which alternatives are potentially feasible and, therefore, merit in-depth consideration, and which are infeasible and need not be considered further. Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, need not be considered (*CEQA Guidelines* Section 15126.6(f), (f)(3)). This section identifies alternatives considered by the lead agency but rejected as infeasible and provides a brief explanation of the reasons for their exclusion. Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid any significant environmental effects.

- **Eleven Residences Alternative:** An alternate that would develop the site with 11 single-family residences was eliminated from further consideration. As described in Section 5.1, *Transportation*, development projects that generate fewer than 110 daily vehicle trips, which equates to 11 single-family residences, would have a less than significant impact on VMT. Therefore, an 11 single-family residential project would eliminate the significant and unavoidable transportation impact that would result from the proposed Project. The Project site has a General Plan land use designations of MDR-Medium Density Residential, which allows up to 6.2 units per acre, or 8 units per acre with a Planned Residential Development (PRD); and LDR-Low Density Residential that allows up to 4.1 units per acre or 6 units per acre with a PRD. Neither the MDR nor the LDR land use designations have a density minimum. However, the General Plan Land Use Element (Table LU-3) provides that the typical dwelling unit per acre for MDR designated areas is 5.5 units per acre and the typical dwelling unit per acre for LDR designated areas is 3 units per acre. While the Project site does not have an applicable minimum density requirement, the intent of the General Plan was for the site to be built out according to the typical density seen for the LDR and MDR land use designations identified in Table LU-3, otherwise, if lower density land use designations would have been assigned to facilitate lower density development. Therefore, the 11 single-family residences alternative would not meet the intention of the City's General Plan Land Use Element.

  Development of the 18.92-acre project site with 11 single-family residences would result in 1.72 dwelling units per acre, which is far below the General Plan land use designation densities for the Project site. Thus, this alternative would not be consistent with the existing General Plan designations for the site, and it would not be consistent with the Orangecrest Specific Plan designations for the site that provide for development consistent with of R-1-13000 and R-1-8500 residential zones. Further, the City's General Plan Draft Housing Element includes Program HE-5-2-Zoning Code Amendments, which calls for incentivizing building the maximum number of homes allowed for a given site to further the City's housing policies and increase the City's housing stock. Therefore, the Eleven Residences Alternative would not be consistent with the City's intent for the Project site and was rejected from further consideration.

6.5 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Two alternatives to the proposed Project have been identified for further analysis as representing a reasonable range of alternatives that attain most of the objectives of the Project, may avoid or substantially lessen the significant effects of the proposed Project, and are feasible from a development perspective. These alternatives have been developed based on the criteria identified in Section 6.1, and are described below:

Alternative 1: No Project/No Build. Pursuant to Section 15126.6(e)(2) of the CEQA Guidelines, the EIR is required to "discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time the environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services." In addition, Section 15126.6(e)(3)(B) of the CEQA Guidelines states that, "the no project alternative means 'no build' wherein the existing environmental setting is maintained." Therefore, under this alternative, no development would occur on the Project site, and it would remain in its existing condition with one vacant aged residential building.

Alternative 2: No Project/Existing Zoning,
As discussed above, based on Section 15126.6(e)(2) of the CEQA Guidelines, the EIR is required to discuss the existing conditions at the time the notice of preparation is published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved. Section 15126.6(e)(3)(B) of the CEQA Guidelines states that, "the no project alternative means 'no build' wherein the existing environmental setting is maintained." This includes development consistent with existing land use and zoning designations. The site has a zoning designation of R-1-13000-SP - Single Family Residential and Specific Plan (Orangecrest) Overlay Zones and in the OSP-RA-SP – Residential Agricultural and Specific Plan (Orangecrest) Overlay Zones. Overlay Planning Area 107-B (northern portion of the site) provides for development consistent with R-1-8500 - Single Family Residential Zone upon diminishment of Woodcrest Agricultural Preserve No. 7. Overlay Planning Area 107-C (southern portion of the site) provides for approximately 10.4 acres of development consistent with R-1-13000 - Single Family Residential Zone upon diminishment of Woodcrest Agricultural Preserve No. 7 to the west and approximately 4.8 acres of development consistent with R-1-13000 - Single Family Residential Zone (no agricultural preserve) to the east (Figure 3-4, *Existing Zoning Designation and Specific Plan Planning Areas*).

Therefore, under this alternative, Woodcrest Agricultural Preserve No. 7 would not be diminished on the 10.3-acre southwestern portion of the site (Overlay Planning Area 107-C) and would be developed with commercial farming uses. Additionally, Woodcrest Agricultural Preserve No. 7 would not be diminished on the 3.7-acre northern portion of the site and would be developed with commercial farming uses. The 4.8-acre southeastern portion of the site would be developed with 16 single-family residences. The number of units on the 4.8-acre portion of the site is based on the zoning code and Orangecrest Specific Plan base allowable dwelling units per gross area (not including PRD allowable increases) per Municipal Code Section 19.100.040, Residential development standards, Table 19.100.040.A, *Residential Development Standards: Single-family Residential Zones*, which provides a maximum density of 3.4 units per acre for areas zoned R-1-13000.

Alternative 3: Reduced Project Alternative. Under this alternative, a reduction in the number of residential units would be built. The reduced number of units is based on the zoning code and Orangecrest Specific Plan base allowable dwelling units per gross area (not including PRD allowable increases) per Municipal Code Section 19.100.040, Residential development standards, Table 19.100.040.A, *Residential Development*

Standards: Single-family Residential Zones, which provides a maximum density of 5.1 units per acre for areas zoned R-1-8500 and a maximum density of 3.4 units per acre for areas zoned R-1-13000. Development of housing up to the maximum allowable dwelling unit per acre is encouraged by the City's Draft 2021-2029 Housing Element (see Program HE-5-2, zoning Code Amendments).

Thus, under this alternative the 3.7-acre northern portion of the site with the allowable R-1-8500 zoning (with implementation of the Orangecrest Specific Plan and diminishment of the Woodcrest Agricultural Preserve No. 7) would be developed with 19 single-family residences; and the southern 15.1-acre portion of the site that is zoned R-1-13000 would be developed with 51 single-family residences (with implementation of the Orangecrest Specific Plan and diminishment of the Woodcrest Agricultural Preserve No. 7). A total of 70 single-family residences would be developed by the Reduced Project Alternative, which is 26 fewer residences (a 27% reduction) than would be developed by the proposed Project. This alternative would provide development consistent with the General Plan and Orangecrest Specific Plan.

6.6 ALTERNATIVE 1: NO PROJECT/NO BUILD

Under this alternative, the proposed Project would not be approved, and no development would occur. The existing vacant aged residential building would remain. In accordance with the CEQA Guidelines, the No Project/No Build Alternative for a development project on an identifiable property consists of the circumstance under which the project does not proceed. Section 15126.6(e)(3)(B) of the CEQA Guidelines states that, "In certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained." In addition, the no project includes what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. In addition, Section 15126.6(e)(3)(B) of the CEQA Guidelines states that, "the no project alternative means 'no build' wherein the existing environmental setting is maintained." Therefore, under this alternative, no development would occur on the Project site, and it would remain in its existing condition with one vacant aged residential building.

The No Project/No Build Alternative assumes that the proposed 96 single-family residential units would not be constructed. Alternative 1 considers no development/disturbance on the Project site beyond the existing condition. As such, the entire 18.92-acre site would remain vacant and undeveloped, except for the vacant single-family residence and associated shed structure, in the southeastern portion of the site. Under this alternative, no improvements would be made to the Project site and none of the Project infrastructure improvements such as internal roadways, utility connections, and construction and grading within the Project site, as well as sidewalks and pedestrian street crossings, would be made. This alternative is intended to meet the requirements of CEQA Guidelines Section 15126.6(e) for evaluation of a no project alternative.

6.6.1 ENVIRONMENTAL IMPACTS

Biological Resources

Section 5.1, *Biological Resources*, describes that due to the lack of habitat, high level of disturbance, and lack of ground squirrel activity, burrowing owls are not present on or adjacent to the Project site. However, because the Project site is located within the MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the commencement of Project activities (e.g., vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls are on the site and impacts do not occur. This is included as Mitigation Measure BIO-1. Because no construction activity would occur by the No Project/No Build Alternative, preconstruction surveys (Mitigation Measure BIO-1) would not be required and no impacts to biological resources would occur.

Also, Section 5.1, *Biological Resources*, describes that Project construction could result in impacts to nesting birds if vegetation is removed during nesting season. Therefore, the Project requires mitigation to reduce the potential impacts to nesting birds if removal of vegetation is to occur during nesting season. The No Project/No Build Alternative would not involve removal of vegetation. Hence, this alternative would not have the potential to impact nesting birds and mitigation would not be required. Thus, potential impacts to biological resources under the No Project/No Build Alternative would be less than the proposed Project.

Cultural Resources

The proposed Project involves construction that could result in inadvertent impacts to unknown buried archaeological resources. Therefore, the Project requires mitigation to reduce potential impacts to resources that could be unearthed during construction. However, the No Project/No Build Alternative would not involve ground disturbance; no excavation or grading would occur. Hence, this alternative would not have the potential to impact unknown buried archaeological resources and mitigation measures would not be required. Thus, potential impacts to cultural resources under the No Project/No Build Alternative would be less than the proposed Project.

Noise

The proposed Project would result a short-term increase in noise from construction and a minimal increase in long-term noise from operation. The short-term construction noise impacts would be less than significant; and operation of the Project would also result in less than significant impacts. However, construction related vibration has the potential to result in impacts. Therefore, mitigation has been included to require appropriate setback distances to ensure that short-term vibration related impacts to offsite residential buildings and receptors during construction would be less than significant.

The No Project/No Build Alternative would continue the vacant and undeveloped uses of the Project site. No construction or operational activities would occur, and no noise or vibration would be generated by this alternative. As a result, the No Project/No Build Alternative would not increase ambient noise and would avoid potential impacts related construction vibration. Mitigation would not be required. Thus, impacts related to noise and vibration under the No Project/No Build Alternative would be less than the proposed Project.

Transportation

As described in Section 5.4, *Transportation*, it is estimated that the proposed Project would result in a VMT per capita that is more than double the threshold in the baseline condition and 89 percent higher than the threshold in the cumulative condition. While Project Design Features and Mitigation Measures MM TR-1 and TR-2 reduce impacts, there is no feasible mitigation which would reduce the VMT/capita from 19.0 to below 9.18, a reduction of 52 percent. As a result, impacts related to VMT would be significant and unavoidable. As described previously, given the City's VMT screening thresholds (i.e., projects that generate fewer than 110 daily vehicle trips, which equates to 11 single-family residences) and the size of the proposed Project (more than 11 single-family residences), it is infeasible to develop and operate the Project site, consistent with the General Plan land use and zoning designations with fewer VMT related impacts.

The No Project/No Build Alternative would not develop new residences on the site. Therefore, impacts related to VMT would not occur from implementation of this alternative, and impacts would be avoided.

Tribal Cultural Resources

The proposed Project involves construction that could result in inadvertent impacts to unknown buried tribal cultural resources. Therefore, the Project requires mitigation to reduce the potential impacts to these resources that could occur during construction. However, the No Project/No Build Alternative would not involve ground

disturbance; no excavation or grading would occur. Hence, this alternative would not have the potential to impact unknown buried tribal cultural resources and mitigation measures would not be required. Thus, potential impacts to tribal cultural resources under the No Project/No Build Alternative would be less than the proposed Project.

6.6.2 CONCLUSION

Ability to Reduce Impacts

The No Project/No Build Alternative would not construct or operate the proposed residences and the site would remain vacant with one aged residential structure. As a result, the No Project/No Build Alternative would not have the potential to impact biological resources, cultural resources, or tribal resources. Also, this alternative would not generate noise, vibration, or VMT. Thus, significant VMT impacts that would occur by the proposed Project would not occur by the No Project/No Build Alternative, and mitigation that would be required by the proposed Project would not be required by this alternative. Therefore, implementation of the No Project/No Build Alternative would eliminate the significant and unavoidable VMT impact and eliminate the need for mitigation. Impacts under the No Project/No Build Alternative would be less than that of the proposed Project..

Ability to Achieve Project Objectives

As shown in Table 6-3, the No Project/ No Build Alternative would not meet any of the Project objectives. The site would not be developed consistent with the General Plan, Orangecrest Specific Plan, and zoning code, would not implement the Orangecrest Specific Plan Overlay provisions for the site, would not establish a community that would provide visual and functional compatibility with adjacent residential neighborhoods, would not create a walkable and bikeable environment near existing bus routes, and would not provide housing assist in meeting the City's Regional Housing Need Allocation (RHNA) or provide housing in areas that have family services, such as schools. Overall, this alternative would not meet any of the objectives of the proposed Project.

6.7 ALTERNATIVE 2: NO PROJECT/EXISTING ZONING

Under this alternative, a reduction in the number of residential units would be built. The reduced number of units is based on the zoning code base allowable dwelling units per gross area (not including PRD allowable increases) per Municipal Code Section 19.100.040, Residential development standards, Table 19.100.040.A, *Residential Development Standards: Single-family Residential Zones*, which provides a maximum density of 3.4 units per acre for areas zoned R-1-13000.

Thus, under this alternative the Woodcrest Agricultural Preserve No. 7 would not be diminished on the 14.1-acre portion of the site (within Overlay Planning Area 107-B and C) and would be developed with commercial farming uses. The remaining 4.8-acre southeastern portion of the site would be developed with 16 single-family residences. The number of units on the 4.8-acre portion of the site is based on the zoning code and Orangecrest Specific Plan base allowable dwelling units per gross area (not including PRD allowable increases) per Municipal Code Section 19.100.040, Residential development standards, Table 19.100.040.A, *Residential Development Standards: Single-family Residential Zones*, which provides a maximum density of 3.4 units per acre for areas zoned R-1-13000.3. A total of 16 single-family residences would be developed by the No Project/Existing Zoning Alternative, which is 80 fewer residences (a 83% reduction) than would be developed by the proposed Project. This alternative would provide development consistent with the General Plan and Orangecrest Specific Plan.

6.7.1 ENVIRONMENTAL IMPACTS

Biological Resources

The No Project/Existing Zoning Alternative would require site preparation, grading, and removal of vegetation consistent with the proposed Project. Section 5.1, *Biological Resources*, describes that because the Project site is located within the MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the commencement of Project activities (e.g., vegetation clearing, clearing and grubbing, tree removal, site watering) (included as Mitigation Measure BIO-1). Because site disturbance and vegetation removal would also occur by the Reduced Project Alternative, preconstruction surveys per mitigation would also be required.

Consistent with the Project, construction of this alternative could result in impacts to nesting birds if vegetation is removed during nesting season. Therefore, this alternative requires mitigation to reduce the potential impacts to nesting birds if removal of vegetation is to occur during nesting season, which is the same measure that is required for the proposed Project. Thus, potential impacts to biological resources under the No Project/Existing Zoning Alternative would be less than significant with mitigation incorporated, which is the same as the proposed Project.

Cultural and Resources

The No Project/Existing Zoning Alternative would require site preparation, grading, drainage/utilities/subgrade, which would disturb site soils to a similar extent as the proposed Project; and therefore, this alternative has a similar potential to impact archaeological resources during construction activities. Thus, consistent with the Project, the No Project/Existing Zoning Alternative would require implementation of mitigation to reduce potential impacts related to unknown buried resources on the northern portion of the site. Thus, impacts under both the No Project/Existing Zoning Alternative and the proposed Project would be similar, and similarly reduced to a less than significant level with incorporation of mitigation.

Noise

The No Project/Existing Zoning Alternative would decrease the number of residential units by 83 percent compared to the proposed Project. This would result in overall reduced construction related noise and vibration. Construction activities would be at slightly further distances to existing sensitive receptors on the northern portion of the site, and construction vibration impacts would be reduced. Therefore, construction related noise would be similarly less than significant; however, construction vibration mitigation (in the form of buffers) would no longer be required to ensure that construction related vibration would be less than significant.

Noise from commercial farming operations would result on the northern and southern portion of the site. Operation of the No Project/Existing Zoning Alternative would result in fewer stationary source noise emitters as fewer HVAC units would exist and reduced traffic noise because fewer vehicular trips would occur, compared to the proposed Project. As the proposed Project would result in less than significant operational noise impacts, the No Project/Existing Zoning Alternative would result in a reduced less than significant impact, in comparison to the proposed Project.

Transportation

As described previously, the proposed Project would result in an increase of 906 daily vehicular trips, including 71 a.m. peak hour trips and 95 p.m. peak hour trips. This increase in vehicle trips would not exceed the City's 100 peak hour trip screening criteria for preparation of a level of service (LOS) analysis. City's Traffic Impact Analysis Preparation Guide also describe that residential projects that would generate less than 100 peak hour trips, and single-family residential tract projects of less than 100 lots that are consistent

with the General Plan land use designation would not result in a significant impact, and do not require an LOS analysis.

The No Project/Existing Zoning Alternative would decrease the number of residential units by 83 percent compared to the proposed Project. While there would be some traffic generated from the operation of the commercial farming uses, this alternative would result in fewer residents on the site and thus, fewer vehicular trips. As shown on Table 6-1, the No Project/Existing Zoning Alternative would generate 179 fewer daily vehicular trips than the proposed Project. Consistent with the proposed Project, the increase in vehicle trips from the No Project/Existing Zoning Alternative would not exceed the City's 100 peak hour screening trip criteria.

Table 6-1: Comparison of Project and No Project/Existing Zoning Alternative Trip Generation

				AM Peak Hour			PM Peak Hour		
Land Use	**Units**		**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates									
Single-Family Detached Housing[1]		DU	9.440	0.185	0.555	0.740	0.624	0.366	0.990
Project Trip Generation									
Single-Family Homes	96	DU	906	18	53	71	60	35	95
No Project/Existing Znong Trip Generation									
Single-Family Homes	16	DU	151	3	9	12	10	6	16
Commercial Farming*	14.1	AC	28	n/a	n/a	n/a	n/a	n/a	n/a
Differnce			-179						

DU = Dwelling Unit

[1] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 10th Edition,* 2017. Land Use Code 210 - Single-Family Detached Housing.

* Trip rates assume 2 employees per acre (14.1 acres x 2 trips = 28.2 daily trips)

Although, the No Project/Existing Zoning Alternative would reduce the overall vehicular trips from the Project site because fewer residents would reside on the site, the VMT per capita would remain the same. Any single-family residential project within the same TAZ as the proposed Project would have the same VMT per capita as the proposed Project. Thus, consistent with the proposed Project, under the No Project/Existing Zoning Alternative, the VMT per capita would be more than double the threshold in the baseline condition and 89 percent higher than the threshold in the cumulative condition. Therefore, the No Project/Existing Zoning Alternative would result in a significant and unavoidable VMT impact in both the baseline and cumulative conditions to same extent as the Project.

Tribal Cultural Resources

The No Project/Existing Zoning Alternative would require site preparation, grading, drainage/utilities/subgrade, which would disturb site soils to a lesser extent on the southern portion of the site associated with farming operations and to the same extent as the proposed Project on the northern portion associated with residential construction. Therefore, this alternative would require implementation of Mitigation Measures MM CUL-1 through CUL-5 to reduce potential impacts related to unknown buried tribal cultural resources. Thus, impacts under both the No Project/Existing Zoning Alternative and the proposed Project would be similar, and reduced to a less than significant level with incorporation of mitigation.

6.7.2 CONCLUSION

Ability to Reduce Impacts

The No Project/Existing Zoning Alternative would result in 80 fewer residential units, which would result in 179 fewer daily vehicular trips than the proposed Project. However, significant and unavoidable impacts related to VMT would continue to occur from implementation of this alternative. Any single-family residential project consistent with General Plan, Orangecrest Specific Plan, and zoning designations within the same TAZ as the proposed Project would have the same VMT per capita as the proposed Project. Overall, although the number of residences and volume of vehicular trips would be less by the No Project/Existing Zoning Alternative in comparison to the proposed Project, the No Project/Existing Zoning Alternative would result in the same VMT per capita. Therefore, VMT impacts would be significant and unavoidable. Additionally, construction vibration impacts would be reduced under the No Project/Existing Zoning Alternative since residential development would not be proposed within the northern portion of the site nearby existing sensitive residential receptors, and Mitigation Measure NOI-1 would no longer be required.

In addition, the No Project/Existing Zoning Alternative would disturb site soils, remove vegetation, and generate operational noise from commercial farming operations. Thus, implementation of the same mitigation measures, except for Mitigation Measure NOI-1, that are required for the proposed Project are required for the No Project/Existing Zoning Alternative to reduce potential impacts to a less than significant level. Therefore, the No Project/Existing Zoning Alternative would not eliminate the significant and unavoidable impact of the proposed Project or eliminate the need for mitigation.

Ability to Achieve Project Objectives

As shown in Table 6-3, the No Project/Existing Zoning Alternative would meet the Project objectives, but not to the same extent as the proposed Project. The site would provide fewer housing units to meet the City's RHNA allocation and fewer residences in an area that has residential services, such as schools. Overall, this alternative would meet the objectives of the proposed Project, but not to the same extent as the proposed Project.

6.8 ALTERNATIVE 3: REDUCED PROJECT ALTERNATIVE

Under this alternative, a reduction in the number of residential units would be built. The reduced number of units is based on the zoning code base allowable dwelling units per gross area (not including PRD allowable increases) per Municipal Code Section 19.100.040, Residential development standards, Table 19.100.040.A, *Residential Development Standards: Single-family Residential Zones*, which provides a maximum density of 5.1 units per acre for areas zoned R-1-8500 and a maximum density of 3.4 units per acre for areas zoned R-1-13000. Thus, under this alternative the 3.7-acre northern portion of the site with the allowable R-1-8500 zoning (after cancellation of the Woodcrest Agricultural Preserve No. 7) would be developed with 19 single-family residences; and the southern 15.1-acre portion of the site that is zoned R-1-13000 would be developed with 51 single-family residences (after cancellation of the Woodcrest Agricultural Preserve No. 7). A total of 70 single-family residences would be developed by the Reduced Project Alternative, which is 26 fewer residences (a 27% reduction) than would be developed by the proposed Project. This alternative would provide development consistent with the General Plan and Orangecrest Specific Plan.

6.8.1 ENVIRONMENTAL IMPACTS

Biological Resources

The Reduced Project Alternative would require site preparation, grading, and removal of vegetation consistent with the proposed Project. Section 5.1, *Biological Resources*, describes that because the Project site is located within the MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the commencement of Project activities (e.g., vegetation clearing, clearing and grubbing, tree removal,

site watering) (included as Mitigation Measure BIO-1). Because site disturbance and vegetation removal would also occur by the Reduced Project Alternative, preconstruction surveys per mitigation would also be required.

Consistent with the Project, construction of this alternative could result in impacts to nesting birds if vegetation is removed during nesting season. Therefore, this alternative requires mitigation to reduce the potential impacts to nesting birds if removal of vegetation is to occur during nesting season, which is the same measure that is required for the proposed Project. Thus, potential impacts to biological resources under the Reduced Project Alternative would be less than significant with mitigation incorporated, which is the same as the proposed Project.

Cultural and Resources

The Reduced Project Alternative would require site preparation, grading, drainage/utilities/subgrade, which would disturb site soils to a similar extent as the proposed Project; and therefore, this alternative has a similar potential to impact archaeological resources during construction activities. Thus, consistent with the Project, the Reduced Project Alternative would require implementation of mitigation to reduce potential impacts related to unknown buried resources. Thus, impacts under both the Reduced Project Alternative and the proposed Project would be similar, and similarly reduced to a less than significant level with incorporation of mitigation.

Noise

The Reduced Project Alternative would decrease the number of residential units by 27 percent compared to the proposed Project. This would result in overall reduced construction related noise and vibration. However, construction activities would be at similar distances to existing sensitive receptors, and effects to these receptors would be similar to those that would occur by the proposed Project. Therefore, construction related noise would be similarly less than significant, and mitigation (in the form of buffers) would be required to ensure that construction related vibration would be less than significant.

Operation of the Reduced Project Alternative would result in fewer stationary source noise emitters as fewer HVAC units would exist and reduced traffic noise because fewer vehicular trips would occur, compared to the proposed Project. As the proposed Project would result in less than significant operational noise impacts, the Reduced Project Alternative would result in a reduced less than significant impact, in comparison to the proposed Project.

Transportation

As described previously, the proposed Project would result in an increase of 906 daily vehicular trips, including 71 a.m. peak hour trips and 95 p.m. peak hour trips. This increase in vehicle trips would not exceed the City's 100 peak hour trip screening criteria for preparation of a level of service (LOS) analysis. City's Traffic Impact Analysis Preparation Guide also describe that residential projects that would generate less than 100 peak hour trips, and single-family residential tract projects of less than 100 lots that are consistent with the General Plan land use designation would not result in a significant impact, and do not require an LOS analysis.

The Reduced Project Alternative would decrease the number of residential units by 27 percent compared to the proposed Project. This would result in fewer residents on the site and fewer vehicular trips. As shown on Table 6-2, the Reduced Project Alternative would generate 245 fewer daily vehicular trips than the proposed Project, resulting in 20 fewer a.m. peak hour trips and 26 fewer p.m. peak hour trips. Consistent with the proposed Project, the increase in vehicle trips from the Reduced Project Alternative would not exceed the City's 100 peak hour screening trip criteria.

Table 6-2: Comparison of Project and Reduced Project Alternative Trip Generation

			AM Peak Hour			PM Peak Hour		
Land Use	**Unit**	**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates Single-Family Detached Housing	DU	9.44	0.185	0.555	0.740	0.624	0.366	0.990
Project Trip Generation	96 DUs	906	18	53	72	60	35	95
Reduced Project Alternative	70 DUs	661	13	39	52	44	26	69
Difference		**-245**	**-5**	**-14**	**-20**	**-16**	**-9**	**-26**

DU = Dwelling Unit
[1] Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 210 - Single Family Detached Housing.

Although, the Reduced Project Alternative would reduce the overall vehicular trips from the Project site because fewer residents would reside on the site, the VMT per capita would remain the same. Any single-family residential project within the same TAZ as the proposed Project would have the same VMT per capita as the proposed Project. Thus, consistent with the proposed Project, under the Reduced Project Alternative, the VMT per capita would be more than double the threshold in the baseline condition and 89 percent higher than the threshold in the cumulative condition. Therefore, the Reduced Project Alternative would result in a significant and unavoidable VMT impact in both the baseline and cumulative conditions to same extent as the Project.

Tribal Cultural Resources

The Reduced Project Alternative would require site preparation, grading, drainage/utilities/subgrade, which would disturb site soils to the same extent as the proposed Project; and therefore, this alternative would require implementation of Mitigation Measures MM TCR-1, MM TCR-2 and MM TCR-3, as well as CUL-1 and CUL-2 to reduce potential impacts related to unknown buried tribal cultural resources. Thus, impacts under both the Reduced Project Alternative and the proposed Project would be similar, and reduced to a less than significant level with incorporation of mitigation.

6.8.2 CONCLUSION

Ability to Reduce Impacts

The Reduced Project Alternative would result in 26 fewer residential units, which would result in 245 fewer daily vehicular trips than the proposed Project. However, significant and unavoidable impacts related to VMT would continue to occur from implementation of this alternative. Any single-family residential project consistent with General Plan, Orangecrest Specific Plan, and zoning designations within the same TAZ as the proposed Project would have the same VMT per capita as the proposed Project. Overall, although the number of residences and volume of vehicular trips would be less by the Reduced Project Alternative in comparison to the proposed Project, the Reduced Project Alternative would result in the same VMT per capita. Therefore, VMT impacts would be significant and unavoidable.

In addition, the Reduced Project Alternative would disturb site soils, remove vegetation, and generate temporary construction vibration. Thus, implementation of the same mitigation measure that are required for the proposed Project are required for the Reduced Project Alternative to reduce potential impacts to a less than significant level. Therefore, the Reduced Project Alternative would not eliminate the significant and unavoidable impact of the proposed Project or eliminate the need for mitigation.

Ability to Achieve Project Objectives

As shown in Table 6-3, the Reduced Project Alternative would meet the Project objectives, but not to the same extent as the proposed Project. The site would provide fewer housing units to meet the City's RHNA allocation and fewer residences in an area that has residential services, such as schools. Overall, this alternative would meet the objectives of the proposed Project, but not to the same extent as the proposed Project.

6.9 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the "environmentally superior alternative" when significant environmental impacts result from a proposed Project. The Environmentally Superior Alternative for the proposed Project would be the No Project/No Build Alternative. The No Project/No Build alternative would avoid the significant and unavoidable impacts of the Project and would not be required to implement the mitigation measures related to biological resources, cultural resources, vibration, and tribal cultural resources that are identified in Chapter 5.0 of this EIR. However, this alternative would not implement the City's General Plan or the Orangecrest Specific Plan and would not provide additional housing within the City to meet the City's RHNA allocation or assist in reducing the housing shortage in southern California.

Additionally, CEQA Guidelines Section 15126.6(3)(1) states:

> *The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. (Emphasis added).*

Therefore, pursuant to CEQA, because the No Project/No Build Alternative has been identified as the Environmentally Superior Alternative, the Environmentally Superior Alternative among the other alternatives would be the Reduced Project Alternative because it would allow for development of the site and would meet some of the Project objectives compared to the No Project/No Build Alternative..

While the No Project/Existing Zoning Alternative and Reduced Project Alternative would reduce the overall vehicular trips and vehicle miles traveled from the Project site because fewer residents would reside on the site, the VMT per capita would remain the same. Any single-family residential project within the same TAZ as the proposed Project would have the same VMT per capita as the proposed Project; and would have the same limited feasibility to implement mitigation that would substantially reduce VMT. Therefore, VMT impacts would be significant and unavoidable. In addition, consistent with the proposed Project, the No Project/Existing Zoning Alternative, and the Reduced Project Alternative would remove vegetation and disturb site soils; however, since residential development would not be proposed within the northern portion of the site, Mitigation Measure NOI-1, which requires buffers from existing residential development to the north to minimize construction vibration impacts, would no longer be required and impacts would be reduced to less than significant. All other mitigation measures would be required to reduce impacts related to biological resources, cultural resources, and tribal cultural resources to a less than significant level.

The No Project/Existing Zoning Alternative and Reduced Project Alternative would meet the Project objectives, but not to the same extent as the proposed Project. The site would provide fewer housing units to meet the City's RHNA allocation, and fewer residences in an area that has family services, such as schools.

CEQA does not require the Lead Agency (the City of Riverside) to choose the environmentally superior alternative. Instead, CEQA requires the City to consider environmentally superior alternatives, weigh those considerations against the environmental impacts of the proposed Project, and make findings that the benefits of those considerations outweigh the harm. Table 6-3 provides, in summary format, a comparison between the level of impacts for each alternative and the proposed Project. In addition, Table 6-3 provides a comparison of the ability of each of the alternatives to meet the objectives of the proposed Project.

Table 6-3: Impact Comparison of the Proposed Project and Alternatives

Topic Area	**Proposed Project**	**Alternative 1: No Project/No Build**	**Alternative 2: No Project/Existing Zoning**	**Alternative 3: Reduced Project**
Biological Resources	Less than significant with mitigation	Less, no impacts, no mitigation required	Same as proposed Project; less than significant with mitigation	Same as proposed Project; less than significant with mitigation
Cultural Resources	Less than significant with mitigation	Less, no impacts, no mitigation required	Same as proposed Project but on a smaller portion of the site; less than significant with mitigation	Same as proposed Project; less than significant with mitigation
Noise	Less than significant with mitigation	Less, no impacts, no mitigation required	Less, no impacts, no mitigation required	Less, but also less than significant with mitigation
Transportation	Significant and unavoidable	Less, no impacts, no mitigation required	Same as proposed Project; significant and unavoidable	Same as proposed Project; significant and unavoidable
Tribal Cultural Resources	Less than significant with mitigation	Less, no impacts, no mitigation required	Same as proposed Project but on a smaller portion of the site; less than significant with mitigation	Same as proposed Project; less than significant with mitigation
Reduce Impacts of the Project?		Yes	Yes	Yes
Areas of Reduced Impacts Compared to the Project		*5*	2, but requires same mitigation (except for NOI-1) and would result in the same significant and unavoidable impact	1, but requires the same mitigation and would result in the same significant and unavoidable impact

Table 6-4: Comparison of the Proposed Project and Alternatives Ability to Meet Project Objectives

Project Objective	Proposed Project	Alternative 1: No Project/No Build	Alternative 2: No Project/Existing Zoning	Alternative 3: Reduced Project
Provide high quality residential development that is consistent with the General Plan, Orangecrest Specific Plan, and Zoning Code.	Yes	No	Yes, but not to the same extent as the proposed Project.	Yes, but not to the same extent as the proposed Project.
Implement the residential provisions of the Specific Orangecrest Specific Plan Overlay intended to take effect upon diminishment of Woodcrest Agricultural Preserve No. 7 on the site.	Yes	No	Yes, but not to the same extent as the proposed Project.	Yes, but not to the same extent as the proposed Project.
Establish a well-planned community that provides visual and functional compatibility with adjacent residential neighborhoods.	Yes	No	Yes, but not to the same extent as the proposed Project.	Yes, but not to the same extent as the proposed Project.
Create a walkable and bikeable environment near existing bus routes.	Yes	No	Yes	Yes
Provide housing to assist the City in meeting its Regional Housing Need Allocation (RHNA) as identified by Southern California Association of Governments (SCAG) and assist in reducing the housing shortage in southern California.	Yes	No	Yes, but not to the same extent as the proposed Project.	Yes, but not to the same extent as the proposed Project.
Provide housing in areas that have family services, such as schools.	Yes	No	Yes, but not to the same extent as the proposed Project.	Yes, but not to the same extent as the proposed Project.

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7. Effects Found Not Significant

CEQA Guidelines Section 15126.2(a) states that "[a]n EIR shall identify and focus on the significant effects on the environment". Topics that have been determined not to be significant and therefore are not discussed in detail in the EIR were identified based upon the responses to the NOP and a review of the Project by the City of Riverside. The City determined through the Initial Study and NOP process that impacts related to the following topics are not potentially significant and are not required to be analyzed in this EIR:

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems
- Wildfire

CEQA Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons that various possible effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. As allowed by CEQA Guidelines Section 15128, statements related to the above listed topic areas are provided in the Initial Study, which is Included as Appendix A.

7.1 Aesthetics

Threshold 7.1a: Have a substantial adverse effect on a scenic vista?

None of the roadways in the Project vicinity are designated scenic boulevards or parkways by the General Plan. Development of the proposed two-story residences on the Project site would not hinder any scenic vistas or panoramic views. The proposed two-story residences would be set back a minimum of 40-feet from public roadways (15-foot building setback plus 25-foot landscaped buffers). Thus, the existing long-distance views of hills from the public roadway corridors, would not be diminished. In addition, the Project site and vicinity are not designated by the City's General Plan for the preservation or uniqueness of scenic views. Therefore, impacts related to scenic vistas would be less than significant impact.

Threshold 7.1b: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

There are no scenic highways within the City that could potentially be impacted. In addition, the proposed Project is not located along or within view of a scenic boulevard, parkway or special boulevard as designated by the City's General Plan 2025. Therefore, the Project would not have any effect on any scenic resources within a scenic roadway.

Threshold 7.1c: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site the site and its surroundings? (Public views are those that are experienced from a publicly-accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The Project site is generally undeveloped with the exception of one residential structure and is located within a partially urbanized area. The site is adjacent to roadways to the north, south, east, and west and the existing character of the Project site and surrounding area is neither unique nor of special aesthetic value or quality. The northern portion of the site has a General Plan land use designation of MDR-Medium Density

Residential that allows up to 6.2 units per acre or 8 units per acre with a Planned Residential Development (PRD); and the southern portion of the site has a General Plan land use designation of LDR-Low Density Residential that allows up to 4.1 units per acre or 6 units per acre with a PRD. The Project site is also within the Orangecrest Specific Plan Planning Areas 107-C and 107-B. The proposed Project would result in an overall density of 5.07 du/acre, which is consistent and compatible with the surrounding residential densities. Thus, the Project would not conflict with applicable General Plan buildout densities that govern scenic quality.

The R-1-8500 - Single-family Residential zone has an allowable density of 6.3 dwelling units per gross acre with a PRD, and the R-1-13000 - Single-family Residential zone has an allowable density of 4.8 dwelling units per gross acre with a PRD. Both zones allow two-story residences up to 35-feet in height.

The Project would develop 24 residential units within the 3.783-acre northern portion of the site identified as Planning Area 107-B in the Orangecrest Specific Plan, which would result in 6.3 units per acre and would be consistent with the allowable density. The Project would also develop 72 residential units within the southern 15.136-acre portion of the site, identified as Planning Area 107-C in the Orangecrest Specific Plan, which would result in 4.7 units per acre and would be within the allowable density. In addition, the proposed Project would be consistent with the other development standards outlined in Sections 19.780.040 and 19.780.060 of the City's Municipal Code including the City's Design Guidelines, which would be verified through the City's development review and permitting process. Thus, the Project would not conflict with applicable zoning and other regulations governing scenic quality.

As the Project would develop the site with single-family housing, which is consistent with the land uses adjacent to the site, the Project would be visually compatible with the surrounding single-family uses. Hence, the proposed Project would not degrade the visual character of the Project site and surrounding area. Therefore, impacts would be less than significant.

Threshold 7.1d: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Project site is at the outer edge of the Mount Palomar Lighting Area and there are no existing sources of lighting or glare emanating from the Project site and the majority of the exterior of the proposed residential structures would consist of stucco, cement tile, brick, wood, and concrete, which are not reflective surfaces. Additionally, the installation of outdoor lighting would be required to meet the requirements of the City's Municipal Code Chapter 19.556, which would reduce the potential to generate glare from new lighting fixtures. Therefore, impacts related to increased sources of light would be less than significant.

7.2 Agriculture and Forest Resources

Threshold 7.2a: 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?

The Project site is not designated as Prime, Unique, or Farmland of Statewide Importance. Approximately 8.9 acres of the site is identified by the California Department of Conservation Farmland Mapping and Monitoring Program as Farmland of Local Importance. The remainder of the Project site is identified by the California Department of Conservation Farmland Mapping and Monitoring Program as Other Land, which includes land not included in any other mapping category. Thus, the proposed Project would result in no impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.

Threshold 7.2b: Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The site is zoned R-1-13000-SP – Single Family Residential and Specific Plan (Orangecrest) Overlay Zones and OSP-RA-SP – Residential Agricultural and Specific Plan (Orangecrest) Overlay Zones. The Overlay Planning Area 107-B that includes the northern portion of the site provides for development consistent with R-1-8500 Single Family Residential Zone upon diminishment of the Woodcrest Agricultural Preserve No. 7 and Overlay Planning Area 107-C (southern portion of the site) provides for development consistent with R-1-13,000 Single Family Residential Zone upon diminishment of the Woodcrest Agricultural Preserve No. 7 within the southwestern portion of the site. Therefore, conflicts related to agricultural zoning would result in a less than significant impact. In addition, the Project site is not located within an area that is affected by a Williamson Act contract. Thus, the proposed Project would result in less than significant impacts related to conflict with a Williamson Act contract.

Threshold 7.2c: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

The City of Riverside has no forest land that can support 10-percent native tree cover nor does it have any timberland. The Project site is not zoned for forest land or timberland uses. Thus, the proposed Project would result in no impacts related to conflict with an existing forest land or timberland zoning.

Threshold 7.2d: Result in the loss of forest land or conversion of forest land to non-forest use?

The City of Riverside has no forest land that can support 10-percent native tree cover nor does it have any timberland. The Project site does not include forest land. Thus, the proposed Project would result in no impacts related to the loss of forest land or conversion of forest land to non-forest use.

Threshold 7.2e: Result in the loss of forest land or conversion of forest land to non-forest use?

The Project site is not used for agricultural activity and does not consist of farmland. Approximately 8.9 acres of the site is identified by the California Department of Conservation Farmland Mapping and Monitoring Program as Farmland of Local Importance, which is identified as land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. However, the site is vacant and has not been used for agriculture since at least 1994 thus the site is not land of importance to the local agricultural economy. In addition, the City of Riverside has no forest land that can support 10-percent native tree cover. Thus, impacts related to the conversion of farmland to non-agricultural use would be less than significant and there would be no impacts related to forest land.

7.3 Air Quality

Threshold 7.3a: Conflict with or obstruct implementation of the applicable air quality plan?

The analysis methodologies from the Southern California Air Quality Management District's (SCAQMD) CEQA Air Quality Handbook were used in evaluating Project impacts. As mentioned previously, the development density of the proposed Project would be 5.07 single-family dwelling units per gross acre consistent with the assumptions in the Air Quality Management Plan and would not conflict with Southern California Air Quality Management District's (SCAQMD) attainment plans. In addition, emissions generated by construction and operation of the proposed Project would not exceed thresholds and it would not conflict with the goal of bringing the Basin into attainment for all criteria pollutants and, as such, is consistent with the applicable Air Quality Management Plan (AQMP). Therefore, because the proposed Project does not exceed any of the thresholds it would not conflict with SCAQMD's attainment goals. As a result, impacts related to conflict with the applicable air quality plan from the proposed Project would be less than significant.

Threshold 7.3b: 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?

The analysis methodologies from the SCAQMD CEQA Air Quality Handbook were used in evaluating Project impacts. The maximum construction and operational emissions generated on a peak construction or operational day by the Project would not exceed SCAQMD regional thresholds. Operation of the proposed Project would not generate any substantial localized pollutant concentrations. During construction, emissions from diesel equipment, use of volatile organic compounds from architectural coatings, and paving activities may generate some nuisance odors. However, these odors would be temporary and would dissipate as odors disperse, and therefore, would not affect a substantial number of people. Therefore, impacts were found to be less than significant.

Threshold 7.3c: Expose sensitive receptors to substantial pollutant concentrations?

The Air Quality, Energy, and Greenhouse Gas Impact Analysis determined that the proposed Project would disturb a maximum of 3.5 acres per day, and that the closest receptors include residential along the northeast and northwest portion of the Project site, about 50 feet and 5 feet respectively. With implementation of SCAQMD Rule 403 to minimize fugitive dust generation during construction activities, the daily construction emissions from the proposed Project would not exceed any thresholds. Operation of the proposed residences would not generate any substantial localized pollutant concentrations. The proposed single-family residential Project does not include stationary sources or attracts mobile sources that may spend long periods of time queuing and idling at the project site (e.g., warehouse buildings) and therefore, would result in a less than significant impact.

Threshold 7.3d: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The development of the proposed Project would not involve the types of activities odors such as those listed in the SCAQMD CEQA Air Quality Handbook, that would emit objectionable odors, affecting a substantial number of people. In addition, odors generated by land uses are required to be in compliance with SCAQMD Rule 402. Implementation of the proposed residential uses and adherence to Rule 402 would reduce operational odors to a less than significant impact. During construction, emissions from diesel equipment, use of volatile organic compounds from architectural coatings, and paving activities may generate some nuisance odors. However, these odors would be temporary and would dissipate as odors disperse, and therefore, would not affect a substantial number of people. Therefore, impacts relating to both operational and construction activity odors would be less than significant.

7.4 Energy

Threshold 7.4a: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Energy consumption required for the proposed construction and operation of the Project are not anticipated to include any unusual characteristics that would make the construction fuel and energy consumption associated with construction of the Project less efficient compared with other similar construction sites throughout the state. In addition, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with local, state and federal regulations limiting engine idling times and requiring recycling of construction debris would further reduce the amount of transportation fuel demand during the Project's construction. Therefore, Project construction and operation would result in a less than significant impact.

Threshold 7.4b: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The proposed Project would be required to meet the Title 24 energy efficiency standards in effect during permitting of the Project. The City's administration of the requirements includes review of design components and energy conservation measures during the permitting process, which ensures that all requirements are met. As such, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would not occur.

7.5 Geology and Soils

Threshold 7.5a: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

The Project site is not located within a designated Alquist-Priolo Earthquake Fault Zone. As described by the Geotechnical Evaluation for the proposed Project, there are no known active faults in the vicinity of the site (Leighton 2021). Thus, the proposed Project would not expose people or structures to potential substantial adverse effects from rupture of a known earthquake fault that is delineated on an Alquist-Priolo Earthquake Fault Zoning Map, therefore, no impacts would not occur.

ii. Strong seismic ground shaking?

The site is located within a seismically active region of southern California. However, structures built in the City are required to be built in compliance with the California Building Code (CBC [California Code of Regulations, Title 24, Part 2]) that contains provisions for earthquake safety based on factors including occupancy type, the types of soils onsite, and the probable strength of ground motion. Because the proposed Project would be constructed in compliance with the CBC, the proposed Project would result in a less than significant impact related to strong seismic ground shaking.

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

The Project site is not located in an area that has been identified as having a potential for liquefaction on the General Plan 2025 Liquefaction Zones Map – Figure PS-2. In addition, the Project is required to be built in compliance with the CBC, which includes provisions to reduce the potential effects of liquefaction, such as proper buildings and footings. With implementation of the required CBC seismic safety measures, including those related to liquefaction, the proposed Project would result in a less than significant impact related to liquefaction.

iv. Landslides?

The Project site and its surroundings have generally flat topography and are not located in an area prone to landslides per Figure 5.6-1 of the General Plan 2025 Program Final EIR. Due to the lack of nearby rock out crop and the gentle natural slope of adjacent hillside areas, the Geotechnical Evaluation determined that debris flow and rock fall hazards are considered very low. Therefore, the Project would result in no impacts.

Threshold 7.5b: Result in substantial soil erosion or the loss of topsoil?

Construction of the Project has the potential to contribute to soil erosion and the loss of topsoil. Grading and excavation activities that would be required for the proposed Project would expose and loosen topsoil, which could be eroded by wind or water. The City's Municipal Code Titles 17 (Grading) and 18

(Subdivisions), Storm Water/Urban Runoff implement the requirements of the California RWQCB Order No. R8-2010-0033, NPDES Permit No. CAS618033 for the portion of the Santa Ana River watershed located within Riverside County, which includes the City. The Project would be required to install Best Management Practices (BMPs) in compliance with the RWQCB permit, which establishes minimum stormwater management requirements and controls to avoid and minimize potential soil erosion. With compliance of the City's Municipal Code, RWQCB requirements, and the BMPs in the SWPPP that is required to be prepared to implement the project, potential impacts related to substantial soil erosion and loss of topsoil would be less than significant.

Threshold 7.5c: 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?

The Geotechnical Evaluation that was prepared for the site determined that slope instability and landslides hazards on the site are very low (Leighton 2021). As a result, impacts related to landslides would not occur from implementation of the proposed Project. In addition, the potential for surface manifestations of liquefaction and damage because of liquefaction is very low with removal and re-compaction of the near surface soils to a 90 percent compaction in compliance with the CBC (Leighton 2021). For these same reasons, the potential impacts for lateral spreading and subsidence would be less than significant.

In addition, with removal and re-compaction of the upper 2-4 feet of alluvial soils in compliance with the CBC, the potential for dynamic settlement or collapse of soils due an earthquake event to affect structures at this site is very low (Leighton 2021). Overall, impacts would be less than significant with implementation of CBC requirements that are verified during City permit processing.

Threshold 7.5d: 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?

According to the Geotechnical Evaluation completed for the Project, testing indicated that near surface soils generally possess a very low to low expansion potential. Additionally, the General Plan 2025 Final Environmental Impact Report indicated that the Project site is not located in an area with high shrink swell potential. Therefore, impacts related to expansive soils would be less than significant.

Threshold 7.5e: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The proposed Project would install an onsite sewer system that would connect to the existing sewers in the surrounding roadways and would not use septic tanks or alternative wastewater disposal systems. As a result, there would be no impacts related to septic tanks or alternative wastewater disposal systems from implementation of the proposed Project.

Threshold 7.5f: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The Project site has Low Potential to contain significant paleontological resources. The Phase I Paleontological Resource Assessment describes that the site is overlain by sediments that have been extensively disturbed by agricultural earthmoving and are unlikely to contain any in-situ fossils. In addition, the Phase I Paleontological Resource Assessment stated that no significant fossils have been found within Project site or in similar sediment mapped units as the geologic unit is not suitable to preserve fossils. The Project would be implemented in consistency with state and City policies including the City Municipal Code Section 17.28.010(h)(3) which requires the project applicant to make reasonable effort to preserve or mitigate impacts to any affected

significant or unique paleontological resource. The Project would therefore result in less than significant impacts on paleontological resources.

7.6 Greenhouse Gas Emissions

Threshold 7.6a: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

To determine whether the Project has a significant impact related to greenhouse gas, the City of Riverside uses the conservative SCAQMD Tier 3 threshold of 3,000 MTCO2e per year for all land use types. The proposed Project's total net annual GHG emissions would be approximately 1,549 MTCO2e per year. As shown in Table GHG-3 of the Initial Study (Appendix A), the Project would be consistent with applicable plans, policies, and regulations for the purpose of reducing the emissions of greenhouse gases. Therefore, impacts were found to be less than significant.

Threshold 7.6b: Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

The City has adopted the California Building Code (Title 24) and would comply with the regulations through installation of solar panels, high-efficacy lighting, plumbing, and appliances and would install landscaping designed to minimize irrigation and runoff. The city would also be consistent with the scoping measures in applicable plans and policies including the City of Riverside Restorative Growthprint-Climate Action Plan (RRG CAP), the California Air Resources Board (CARB) Scoping Plan. Therefore, the proposed Project would not conflict with existing plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gases.

7.7 Hazards and Hazardous Materials

Threshold 7.7a: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Phase I and Phase II Environmental Assessments testing indicated that chemicals of concern within the Project site were either not detected or detected a concentration generally acceptable for future residential development. Construction of the proposed residential Project would involve the use, storage, and disposal of small amounts of hazardous materials on the Project site. These hazardous materials would be limited and used and disposed of in compliance with federal, state, and local regulations. Operation of the proposed Project may involve the use of common types of hazardous materials generally classified as household hazardous waste which would not result in a significant hazard to residents or workers in the vicinity of the Project. Therefore, construction and operation of the proposed Project would not result in a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous waste during operation of the proposed Project, and impacts would be less than significant

Threshold 7.7b: 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?

Construction activities would be required to adhere to all applicable regulations regarding hazardous materials storage and handling, as well as to implement construction BMPs to prevent a hazardous materials release and to promptly contain and clean up any spills, which would minimize the potential for harmful exposures. In addition, the Project must comply with the Southern California Hazardous Waste Management Authority for disposal of any hazardous materials at either appropriate waste facilities or service providers. With compliance to existing laws and regulations, the Project's construction and operation related impacts

to the public or the environment from accident conditions involving the release of hazardous materials into the environment would be less than significant.

Threshold 7.7c: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The closest school to the Project site is the Mark Twain Elementary, which is located at 19411 Krameria Avenue, approximately 0.25 mile from the Project site. The Project would generate small amounts of hazardous materials from construction and operation. However, these hazardous materials would be limited and used and disposed of in compliance with federal, state, and local regulations, which would reduce the potential of accidental release into the environment near the school. The emissions that would be generated from construction and operation of the Project would not cause or contribute to an exceedance of the federal or state air quality standards (see Appendix A). Thus, the Project would not emit hazardous or handle acutely hazardous materials, substances, or waste near the school, and impacts would be less than significant.

Threshold 7.7d: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

A search of selected government databases was conducted during preparation of the Phase I and the environmental database report system did not identify the Project site on any list of hazardous material sites (Leighton 2021). In addition, the Phase I conducted a search to identify if there are any hazardous material uses in the Project vicinity that could adversely affect the Project site. Information from the search was reviewed for potential environmental concerns; however, none of the offsite listings were identified as a potential impact. Therefore, the proposed Project would not be located on a list of hazardous material sites or create a significant hazard to the public or the environment, and no impacts would occur.

Threshold 7.7e: 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?

The proposed Project is located within Zone E of the March Air Reserve Base/March Inland Port Land Use Compatibility Plan. Zone "E" is beyond the 55 dBA CNEL noise contour and the proposed Project would not expose people residing or working in the Project area to excessive airport related noise levels. Also, as shown on General Plan Airport Safety Zones Figure and Map RI-1, Compatibility Map Riverside Municipal Airport of the Airport Land Use Compatibility Plan, the Project site is not located within a flight corridor or approach/departure corridor. Therefore, the Project would result in a less than significant impact related to both noise and safety hazards for people residing or working in the Project area.

Threshold 7.7f: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed Project would comply with existing safety regulations, such as the California Building Code and Fire Code to ensure that it would not conflict with implementation of an emergency evacuation. Operation of the proposed Project would also not result in a physical interference with an emergency response evacuation and would accommodate emergency vehicles and provide fire suppression facilities in conformance with the City Municipal Code. In addition, the development plans would be consistent with the requirements in the International Fire Code and Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9). As such, the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

Threshold 7.7g: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The Project site is located within a developed area, not adjacent to wildlands, and is not located within an identified wildland fire hazard area, as identified by the General Plan Figure 5.7-3, Fire Hazard Areas. The proposed Project would be implemented in compliance with the City Fire Code requirements, as included in the City's Municipal Code Chapter 16.32. Therefore, the proposed Project would not expose people or structures to a significant risk of loss, injury, or death from wildfires, and no impact would occur.

7.8 Hydrology and Water Quality

Threshold 7.8a: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Water quality impacts during construction of the Project would be prevented through implementation of a grading and erosion control plan that is required by the Construction Activities General Permit (State Water Resources Board Order No. 2009-009-DWQ, NPDES No. 99-08-DWQ). Additionally, with implementation of the operational BMPs that would be required by the City pursuant to the NPDES permit, which would be verified during the permitting process for the proposed Project, potential pollutants would be reduced to the maximum extent feasible, and development of the proposed Project would not violate any water quality standards or waste discharge requirements, including but not limited to increasing pollutant discharges to receiving waters, and impacts would be less than significant.

Threshold 7.8b: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The 2020 UWMP details that the Western Municipal Water District would be able to meet all its water demands in both normal and multiple-dry year conditions through 2045 without increasing use of groundwater. The Project would utilize the planned sources of water within the anticipated water demand and supply projections and would not substantially deplete groundwater supplies. The Project also includes installation of landscape areas that would be pervious and two bioretention basins that would treat and infiltrate runoff. Due to the existing low infiltration rate of the existing site and the provision of infiltration onsite the proposed Project would not substantially interfere with groundwater recharge. Therefore, impacts related to water demand upon groundwater supplies and impediment of sustainable groundwater management would be less than significant.

Threshold 7.8c: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on-or-off-site?

Construction of the proposed Project requires City approval of a grading and erosion control plan per the Construction Activities General Permit (State Water Resources Board Order No. 2009-009-DWQ, NPDES No. 99-08-DWQ), which requires preparation of a SWPPP by a Qualified SWPPP Developer. The grading and erosion control plan and SWPPP are required for plan check and approval by the City's Public Works Department, prior to provision of permits for the Project, and would include construction BMPs to reduce erosion or siltation. Adherence to the existing requirements and implementation of the required BMPs per the permitting process would ensure that erosion and siltation associated with construction activities would be minimized, and impacts would be less than significant.

Although an increase of impervious surfaces would occur by implementation of the Project, the existing onsite soils have a low infiltration rate and the site drainage would be designed to closely mimic the existing drainage conditions. Runoff from the impervious surfaces that would be created by the Project would be conveyed into bioretention basins that would retain, treat, and remove sediment before discharging stormwater into the existing offsite drainage system. Overall, the proposed Project would not alter an existing drainage pattern that could result in substantial erosion or siltation, and impacts would be less than significant.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or-off-site?

The Project site does not receive run-off, and according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for the Project site (06065C0740G), the Project site is located within "Zone D," which is an area of undetermined flood hazard. Therefore, there is a low potential for onsite flooding to occur during construction activities. Additionally, each of the bioretention facilities would exceed the required design capture volume, which would accommodate the stormwater from the Project site. As a result, implementation of the proposed Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, and impacts would be less than significant.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Implementation of Project construction requires approval of a grading and erosion control plan per the City's existing requirements and the NPDES requires preparation of a SWPPP by a Qualified SWPPP Developer, which both include construction BMPs to minimize the potential for construction related sources of pollution or increases in stormwater flows that could result in flooding. The Project would develop an onsite stormwater drainage system that would convey drainage to bioretention basins to treat and infiltrate flows. Compliance with existing requirements and implementation of the operational source BMPs and bioretention basin BMPs, would ensure potential pollutants would be reduced, and implementation of the proposed Project would not provide substantial additional sources of polluted runoff; thus, impacts would be less than significant.

iv. Impede or redirect flood flows

The Project site is not located within a 100-year flood hazard area. Thus, the proposed Project would not place structures within a flood hazard area that would impede or redirect flood flows, and no impacts would occur.

Threshold 7.8d: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

As described previously, the Project site is not located within a 100-year flood hazard area. Tsunamis are large waves that occur in coastal areas; therefore, since the City is not located in a coastal area, no impacts due to tsunamis would occur. Additionally, the Project site and its surroundings have generally flat topography and is within an urbanized area not within proximity to Lake Mathews, Lake Evans, the Santa Ana River, Lake Hills, Norco Hills, Box Springs Mountain Area or any of the 9 arroyos which transverse the City and its sphere of influence. Therefore, no impact potential for seiche or mudflow exists.

Threshold 7.8e: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Potential water quality impacts during construction of the Project would be prevented through implementation of a grading and erosion control plan that is required by the Construction Activities General Permit, which requires preparation of a SWPPP by a Qualified SWPPP Developer. The SWPPP is required for plan check and approval by the City's Public Works Department, prior to provision of permits for the Project. Adherence to the existing requirements and implementation of the appropriate BMPs per the permitting process would ensure that construction activities would not conflict with or obstruct implementation of a water quality control or groundwater management plan, and impacts would be less than significant. Also, operational related conflicts would be avoided by incorporation of LID site design, source control, and treatment control BMPs into the Project in accordance with State Water Resources Board Order No. 2012-0006-DWQ, NPDES No. CAS000002. Compliance with the NPDES permit would be verified during the permitting process for the Project, and would ensure that the Project would not conflict with or obstruct implementation of a water quality control or groundwater management plan, and impacts would be less than significant.

7.9 Land Use and Planning

Threshold 7.9.a: Physically divide an established community?

The Project site is undeveloped, with exception of one vacant residence, and is within a developed or developing residential area. The proposed single-family residential project is consistent with the existing single-family residential land uses surrounding the Project site. In addition, the Project would not change roadways or areas outside of the Project site. Therefore, implementation of the proposed Project would not physically divide an established community, and no impacts would occur.

Threshold 7.9.b: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

In terms of the existing General Plan Designations, the northern portion of the site has a General Plan land use designation of MDR-Medium Density Residential and the southern portion of the site has a General Plan land use designation of LDR-Low Density Residential. The Project site is also within the Orangecrest Specific Plan Planning Areas 107-B and 107-C. The surrounding areas are designated as either Low Density Residential or Medium Density Residential, which both allows for single-family residences. The proposed Project would result in an overall density of 5.07 du/acre, which is consistent and compatible with the land use designation of the site and the surrounding residential densities.

The Project would develop 24 residential units within the 3.8-acre northern portion of the site that would allow development consistent with R-1-8500 zoning (upon diminishment of the Woodcrest Agricultural Preserve No. 7), which would result in 6.3 units per acre and would be consistent with the allowable density of the zone. The Project would also develop 72 residential units within the southern 15.1-acre portion of the site that would allow development consistent with R-1-13000 zoning (upon diminishment of the Woodcrest Agricultural Preserve No. 7), which would result in 4.7 units per acre and would be within the allowable density of the zone. As such, the proposed Project would result in a less than significant impact related to applicable land use plan, policy, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

7.10 Mineral Resources

Threshold 7.10a: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The General Plan EIR lists the Project site as within MRZ-4, which is defined as areas where there is insufficient data to assign any mineral resource designation. No existing or abandoned quarries or mines exist in the area surrounding the Project site, and the Project site and surrounding have no history of mining or containing mineral resources. The proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, therefore no impacts would occur.

Threshold 7.10b: Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Review of the General Plan 2025 FPEIR Figure 5.10-1 indicates there are no mineral resource recovery sites delineated within the City or Riverside. Therefore, the implementation of the proposed Project would result in no impact.

7.11 Population and Housing

Threshold 7.11a: 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)?

The General Plan Land Use Table LU-3 assumes an average household size of 3. Based on the General Plan assumption, the 96 proposed single-family residences would result in a population of 288 residents. The California Department of Finance estimates that in January 2020, the City of Riverside had a population of 328,155 and 101,414 housing units. The proposed Project would result in a 0.09 percent increase in both residents and housing units in the City, which is not substantial growth. According to the GP 2025 Final Program Environmental Impact Report (EIR), the City has a projected population of 383,077 at the ultimate buildout of the City, which equates to a population increase of 54,922. The Project's population increase of 288 residents would be 0.5 percent of the General Plan planned growth. In addition, the Southern California Association of Governments (SCAG) population projections show a City population of 395,800 in the year 2045, which would be an increase of 67,645 residents over the 2020 population and the Project's 288 residents would be 0.4 percent of the increase. The SCAG projections also estimate that 115,100 households will exist in the City in 2045, which is an increase of 13,686 dwelling units over those in 2020. The 96 residences developed by the Project would consist of 0.7 percent of the increase in residential units. Regarding the potential for indirect growth, the Project would be served by the existing public roadways that surround the Project site; and would connect into the existing utility and infrastructure system. As such, the residential development that would occur by the proposed Project is consistent with planned growth. Therefore, the proposed Project would result in less than significant impacts related to both direct and indirect inducement of growth.

Threshold 7.11b: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The Project site is undeveloped with exception of one vacant residential structure. The Project would not displace existing people or housing, necessitating the construction of replacement housing elsewhere. The Project would develop 96 residences, which would increase housing on the site and would not necessitate the replacement of housing elsewhere. Therefore, the Project would result in no impact.

7.12 Public Services

Threshold 7.12a: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire protection?

Due to the limited increase in residents (approximately 288) that would occur from the proposed 96 single-family residences on the Project site, the Project would result in an incremental increase in demand for fire protection and emergency medical services; however, the increase in population is limited, and would not increase demands such that provision of a new or physically altered fire station would be required that could cause environmental impacts. Additionally, the Project is not in an area considered VHFSZ. Therefore, impacts would be less than significant.

ii. Police protection?

As described in the City's General Plan EIR, staffing is based on growth and evaluated on a project-by-project basis. The proposed Project would result in an onsite population that would create the need for police services. Although an incremental increase in calls for law enforcement services could result from implementation of the Project, the need for law enforcement services from the proposed Project would not be significant when compared to the current service levels of the Riverside Police Department and the small residential nature of the proposed Project. The additional 288 residents that are anticipated to be generated from full occupancy of the proposed Project would not require the construction or expansion of police stations. Overall, the proposed Project would not result in the need for, new or physically altered police protection facilities, therefore impacts are less than significant.

iii. Schools?

The Project site is located within the Riverside Unified School District, which has 50 schools. It is anticipated that approximately 50 total students would be generated from build out of the proposed Project. The Riverside Unified School District levies school fees of $4.79 per square foot of new residential construction. Pursuant to Government Code Section 65995 et seq., payment of these fees would offset any potentially significant impacts to school facilities, and impacts would be less than significant.

iv. Parks?

Based on the number of residents, the Project would create a demand for 0.86-acre (or 37,462 square feet) of parkland. to ensure the future provision of parkland in the City, the Project would be required to pay parkland development impact fees for regional parks, local parks, and aquatics facilities pursuant to Municipal Code Sections 16.44, 16.60, and 16.76. Overall, impacts related to parks would be less than significant.

v. Other public facilities?

The proposed Project may result in an incremental increase in the use of libraries and other public facilities. However, with a projected total of approximately 288 people occupying the residences, Project development is not expected to substantially increase the demand of these services such that construction of new or expanded facilities would be required. Thus, impacts would be less than significant.

7.13 Recreation

Threshold 7.13a: 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?

The proposed Project includes development of 61,909 square feet of private park and recreational space on-site. The proposed Project would provide housing for approximately 288 residents, which would create a slight increase in demand on the existing recreation facilities; however, impacts from the proposed Project are anticipated to be minimal due to the provision of park and recreational space on-site and the limited number of residents that would be generated by the Project. Therefore, the Project would not 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. Thus, impacts would be less than significant.

Threshold 7.13b: 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?

As described previously, the proposed Project includes 61,909 square feet of park and recreational amenities. The impacts of development of the proposed recreational amenities are considered part of the impacts of the proposed Project as a whole and are analyzed throughout the various sections of the Initial Study and this EIR. For example, activities such as excavation, grading, and construction as required for the recreational components of this Project would result in impacts that are analyzed in the Air Quality, Greenhouse Gas Emissions, Noise, and Transportation sections. In addition, operation of the Project would only result in the demand for parks and recreational facilities as articulated in the previous response, which would not require the construction or expansion of other recreational facilities in the City. Therefore, impacts were found to be less than significant.

7.14 Utilities and Service Systems

Threshold 7.14a: Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

The Western Municipal Water District provides water and sewer infrastructure and services in the Project vicinity. The proposed Project would install onsite 8-inch water and sewer lines that would be located within each of the residential streets and serve each of the proposed residences. The new onsite water lines would connect to the existing 12-inch water line in Wood Road and the existing 8-inch and 24-inch lines Krameria Avenue. The new onsite sewer lines would connect to the existing 8-inch sewer line in Lurin Avenue. Additionally, The Project would install an onsite stormwater drainage system that would convey runoff to catch basins that would convey flows to proposed two bioretention basins that would treat and infiltrate runoff. The remaining limited runoff would discharge runoff to the existing storm drain line within Wood Road. The Project would also connect to existing electric power, natural gas, and telecommunication facilities that exist in the adjacent rights-of-way. Therefore, the Project would not result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities that could cause environmental effects. Thus, impacts were found to be less than significant.

Threshold 7.14b: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

The domestic and irrigation water for the proposed Project would be supplied to the Project by the Western Municipal Water District. The proposed Project would result in an overall density of 5.07 du/acre, which is

consistent and within the General Plan land use densities for the Project site; and is therefore within the Urban Water Management Plan (UWMP) water demand assumptions. In addition, the 2020 UWMP details that water supplies are projected to exceed the projected demand under normal, single dry, and multiple-dry year conditions through the year 2045. Thus, sufficient water supplies are available to serve the Project and impacts related to water supplies would be less than significant.

Threshold 7.14c: 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?

The proposed Project would install onsite 8-inch water and sewer lines that would be located within each of the residential streets and serve each of the proposed residences. The proposed single-family residential units would generate an average of 206 gallons per day (gpd). Therefore, the proposed 96-residence Project would result in an average daily flow of 19,776 gpd. Wastewater from the Project site would be conveyed to the Western Riverside County Regional Wastewater Authority (WRCWRA) Treatment Plant, which has a tertiary treatment capacity of 14 million gallons per day (mgd) and handled 7.76 mgd in 2020. Existing wastewater facilities would be able to accommodate the proposed Project. Therefore, impacts related to wastewater treatment capacity would be less than significant.

Threshold 7.14d: 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?

It is anticipated that solid waste landfill disposal from operation of the Project would be approximately 1,680 pounds (0.84 tons) per week. The Badland Sanitary Landfill has a minimum additional capacity of 1,104 tons per day and the El Sobrante Sanitary Landfill has a minimum additional capacity of 3,488 tons per day. The Project would not result in the need for new or expanded offsite solid waste facilities. Therefore, impacts related to landfill capacity would be less than significant.

Threshold 7.14e: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The proposed Project would comply with all regulations related to solid waste. All solid waste-generating activities within the City are subject to the requirements set forth in AB 341 that requires all development to divert 75 percent of solid waste pursuant to state regulations. Implementation of the proposed Project would be consistent with all state regulations. The proposed Project must comply with the City's waste disposal requirements as well as the California Green Building Code and, as such, would not conflict with any federal, State, or local regulations related to solid waste. Therefore, there would be no impacts related to solid waste statues.

7.15 Wildfire

Threshold 7.15a: Substantially impair an adopted emergency response plan or emergency evacuation plan?

The Project site is not located near or adjacent to a fire hazard zone and is adjacent to roadways and residential areas. The Project site would be accessed from both Krameria Avenue and Lurin Avenue through the onsite streets to each residence. Permitting of these roadways would provide adequate and safe circulation to, from, and through the Project site and would provide two routes for emergency responders to access the Project site. Therefore, no impacts related to wildfires and impairment of an emergency response or evacuation plan would not occur from the proposed Project.

Threshold 7.15b: Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The Project site is not adjacent to any wildland areas, and as determined by the City's General Plan CAL FIRE Hazard Severity Zone map, the Project site is not within a fire hazard zone. In addition, the Project site is flat and within a flat area. The site is adjacent to a roadway, a concrete flood control channel, commercial and residential development. There are no factors on or adjacent to the Project site that would exacerbate wildfire risks. Therefore, there would be no impacts.

Threshold 7.15c: 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?

The Project does not include any infrastructure that would exacerbate fire risks. In addition, the Project would provide internal streets and fire suppression facilities (e.g., hydrants and sprinklers) that conform to the California Fire Code requirements, included as Municipal Code Chapter 16.32.20, as verified through the City's permitting process. Therefore, there would be no impacts related to infrastructure that could exacerbate fire risks with implementation of the proposed Project.

Threshold 7.15d: 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?

As described previously, the Project site is not within a wildfire hazard zone. In addition, the Project site is flat and surrounded by flat areas. There are no slope or hillsides that would become unstable. In addition, the Project would install onsite drainage that would be conveyed to onsite bioretention basins and then an existing storm drain, which is consistent with the existing condition. Therefore, there would be no impacts related to flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes with implementation of the proposed Project.

8.0 EIR Preparers

8.1 EIR Preparers

E|P|D Solutions, Inc.
Jeremy Krout, AICP
Konnie Dobreva, JD
Renee Escario
Meghan Macias, TE
Danielle Thayer
Alex Garber
Brooke Blandino
Abby Pal

Lead Agency, City of Riverside
Judy Egüez, Senior Planner
Candice Assadzadeh, Senior Planner
Scott Watson, Historic Preservation Officer
Philip Nitollama, City Traffic Engineer
Vital Patel, Assistant Engineer, Public Works Department, Traffic Engineering
Julie Felipe, Utility Senior Resource Analyst
Anthony Beaumon, Senior Deputy City Attorney
Layla Sarwari, Deputy City Attorney II

8.2 Technical Study Preparers

Hernandez Environmental Services, General Biological Assessment and Western Riverside County MSHCP Consistency Analysis
Shawn Hernandez, Biologist
Hallie Hernandez, Associate Biologist
Elizabeth Gonzalez, Associate Biologist

JM Research and Consulting, Historic Resources Assessment
Jennifer Mermilliod, M.A.

Material Culture Consulting, Inc., Phase I Cultural Resources Assessment
Tria Belcourt, M.A., Registered Professional Archaeologist
Erika McMullin, B.A.

Leighton and Associates, Inc., Geotechnical Evaluation
Simon I. Saiid, Principal Engineer, GE 2641
Robert F. Riha, Sr. VP / Sr. Principal Geologist, CEG 1921

Noise Impact Analysis, EPD Solutions, Inc.
Katie Wilson

Vehicle Miles Traveled (VMT) Analysis
Meghan Macias, TE

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