DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Tentative Tract Map No. 37731–Cole Development Project

Prepared for:

City of Riverside Community & Economic Development Department
Planning Division

Prepared by:

LSA Associates, Inc.
1500 Iowa Avenue, Suite 200
Riverside, California 92507

June 2021

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CITY OF RIVERSIDE

COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT **PLANNING DIVISION**

DRAFT MITIGATED NEGATIVE DECLARATION

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1. **Case Numbers:** Tentative Tract No. 37731
2. **Project Title:** **Cole Development Project**
3. **Lead Agency:** City of Riverside
   Community & Economic Development Department
   Planning Division
   3900 Main Street, 3rd Floor
   Riverside, California 92522
4. **Contact Person:** Veronica Hernandez, Senior Planner
   vhernandez@riversideca.gov. (951) 826-3965
5. **Project Location:** Tentative Tract No. 37731-Cole Development Project (herein referred to as the "proposed Project" or "Project") is located south of Lurin Avenue and west of Cole Avenue and north of Mariposa Avenue, in the City of Riverside. The Project would be developed on Assessor's Parcel Numbers 266-140-021, 266-140-022, 266-140-029, 266-140-030, 266-140-049, 266-140-050, a 32.54 acre, undeveloped/vacant site. **Figure 1: Regional Location** and **Figure 2: Project Location** shows the Project site on a regional and local basis, respectively.
6. **Project Applicant/Project Sponsor's Name and Address:**
   Nolan C. Leggio
   Lurin Land, LLC
   10621 Civic Center Drive
   Rancho Cucamonga, California 91730
   NLeggio@DiversifiedPacific.com
7. **General Plan Designation:** Low Density Residential (LDR) and Very Low Density Residential (VLDR)
8. **Zoning:** RR-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone (19.12 acres), R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone (7.23 acres), and RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone (6.19 acres).
9. **Description of Project:**

The proposed Project consists of the following entitlements to facilitate the establishment of an 138-unit Planned Residential Development: (1) Tentative Tract Map (TM 37731) to subdivide 32.54 acres into 138 single-family residential lots, 15 lettered lots for slopes, water quality management plan basins, park/open space, driveways, and drainage areas; (2) Planned Residential Development for the establishment of detached single-family dwelling units, private streets, and common open space; (3) Variance to reduce the setback from the right-of-way (ROW) to perimeter wall to approximately 8 feet along Cole Avenue and minimum of 5 feet along Lurin Avenue; and (4) Design Review of Project plans by the City. **Appendix A: Project Set Plans** is provided as an appendix to this environmental document.

The proposed Project would be developed on six existing parcels: Assessor's Parcel Numbers 266-140-021, 266-140-022, 266-140-029, 266-140-030, 266-140-049, 266-140-050. **Table A: Existing General Plan/Zoning Information** shows the land use and zoning designations of the Project site.

Table A: Existing General Plan/Zoning Information

Assessor's Parcel Number	General Plan Designation	Zoning Designation
266-140-021	Low Density Residential (LDR)	R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone
266-140-022	Low Density Residential (LDR	R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone
266-140-029	Very Low Density Residential (VLDR)	R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone
266-140-030	Low Density Residential (LDR)	R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone
266-140-049	Low Density Residential (LDR)	RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone
266-140-050	Low Density Residential (LDR)	RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone

Source: City of Riverside, Engage Riverside Geodata Website: https://geodata-cityofriverside.opendata.arcgis.com/search?tags=boundaries. Accessed October 28, 2020 and Riverside County Map My County, Website: https://gis.countyofriverside.us/Html5Viewer/?viewer=MMC_Public. Accessed November 11, 2020

Figure 3: Project Site Plan shows the site plan for the proposed Project including the 138 lots where single family residential units would be developed. The minimum lot size would be 4,235 square feet, the maximum lot size would be 15,720 square feet, and the average lot size would be 5,781 square feet. Overall, the proposed Project would be developed at a density of 4.24 dwelling units/acre (total of 138 single family residents), which would be consistent under the density standards of the PRD Permit.[1] The Project site would also contain 15 lettered lots ("A" through "P") that would be occupied by non-residential uses. **Table B: Lettered Lot Details** shows the details on the 15 lots including their size and their use.

Table B: Lettered Lot Details

Lot	Gross Area (square feet)	Use Description
A	5,308	Slope
B	45,160	Slope
C	66,150	WQMP Basin
D	23,378	Park/Open Space
E	865	Slope
F	13,282	Park/Open Space
G	5,177	Driveway
H	4,853	Driveway
J	1,800	Drainage Area
K	15,839	Slope
L	15,615	Slope
M	35,727	Park/Open Space
N	37,711	WQMP Basin
O	20,012	Slope
P	8,487	Slope
Total Lot Area	**240,607 square feet**	
Maximum Lot Size	**64,008 square feet**	
Minimum Lot Size	**866 square feet**	

Source: Lurin Land LLC, Tentative Tract Map No. 37731, August 4, 2020.

[1] The PRD Permit allows for increased density compared to the base zoning designations of the Project site. The Benchmark Density under the PRD Permit for RE and R-1-1/2 Acre zoning designation is 3.0 dwelling units/acre and 4.8 dwelling units/acre for R-1-13000 zoning designation. The Maximum Density with Bonus under the PRD Permit for RE and R-1-1/2 Acre zoning designation is 3.3 dwelling units/acre and is 5.3 dwelling units/acre for R-1-13000 zoning designation.

The lettered lots on the Project site would total 240,607 square feet, which includes 72,387 square feet of park/open space within the Project site. The Project would therefore exceed the 69,000 square feet of open space required by the Zoning Code (138 lots × 500 square feet requirement). The parks/open space on the Project site would have amenities for public use including picnic shelters, BBQ facilities, tot and child play area, pickleball courts, lounge seating with mist/fog, exercise stations, ping-pong tables, and corn hole game features.

Table C: Project Setback Details shows the setback details for the residential development that would occur within the Project site. All setback information for the Project site has been reviewed and compared to the City of Riverside Zoning Code and is consistent to applicable setback requirements for the RE, R-1-1/2 Acre, and R-1-1300 zoning designations under the Proposed Residential Development (PRD) Permit.

Table C: Project Setback Details

Details	RE& R-1-1/2 Acre		R-1 Zones (Except R-1-1/2)
Setbacks from Project Perimeters			
Adjacent to Public Street	Same as base zone. The setback shall be fully landscaped and no fences or walls shall be permitted to encroach into the setback.		
Adjacent to Perimeter Property Lines	25 feet		25 feet
Setbacks within Project Boundaries (May be modified in conjunction with the Planned Residential Development)			
Front Yard Setback	15 feet		10 feet
Side Yard Setback	5 feet		5 feet
Rear Yard Setback	15 feet		10 feet
Single-Family Residential Base Zones Building Setbacks Adjacent to Public Street			
	RE	**R-1-1/2 Acre**	**R-1-1300**
Front	30 feet	30 feet	25 feet
Side	25 feet	20 feet	15 feet
Rear	30 feet	35 feet	30 feet

Source: Lurin Land LLC, Tentative Tract Map No. 37731, September 18, 2020.

Precise construction schedule details are unknown at this time and would be dependent on the residential market; therefore, for the purpose of this Initial Study/Mitigated Negative Declaration (IS/MND), construction is assumed to commence in 2021 with operations occurring as early as 2022. The various phases of construction include demolition, site preparation, grading, building construction, paving, and architectural coating. The site clearing and grading phases would disturb vegetation and surface soils. Preliminary estimates indicate approximately 14,147 cubic yards of soil cut and 252,127 cubic yards of soil fill. The overall soil disturbance would yield approximately 237,980 cubic yards of import.

The Project site will be landscaped with a variety of trees and plants that are consistent with the type of landscaping found in similar planned developments in the City of Riverside. The Project will include a variety of walls and fencing that are typical of residential developments in the City of Riverside. Walls up to six feet in height will be developed on the perimeter of the Project site while interior walls (5 feet 6 inches in height) will be installed as applicable around lots within the site. Tan vinyl lot fencing (5 feet 6 inches in height) will separate each of the 138 lots within the Project site. Tubular fencing (5 feet 6 inches in height) will be installed on the perimeter of the basins within the Project site. The landscape plans and fencing plans are shown in **Appendix A.**

10. **Surrounding Land Uses and Setting:**

The majority of the land surrounding the Project site is either vacant or occupied by single-family residential units on large lots. Parcels to the south of Mariposa Avenue are located in unincorporated Riverside County. An established neighborhood occupied by single-family residential units are located north, northeast of the Project site. **Table D: Project Site and Surrounding Land Use and Zoning** lists the surrounding land uses and zoning.

Table D: Project Site and Surrounding Land Use and Zoning

	Existing Land Use	General Plan Designation	Zoning Designation
Project Site	Vacant land	Low Density Residential (LDR) and Very Low Density Residential (VLDR)	R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, and RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone
North	Orchards, single-family residential units on large lots, single-family residential neighborhood.	Low Density Residential (LDR)	R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone; A110 Orangecrest Specific Plan-Active Land; A1
East	Cole Avenue, single-family residential on large lots.	Low Density Residential (LDR), Very Low Density Residential (VLDR)	R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone
South	Mariposa Avenue, vacant land, single-family residential on large lots	Very Low Density Residential (VLDR) and Riverside County Land Use Designations	R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone; and Riverside County Zoning Designations
West	Vacant land	Low Density Residential (LDR), Very Low Density Residential (VLDR)	R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone

11. **Other public agencies whose approval is required (e.g., permits, financial approval, or participation agreement.):**

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

12. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significant impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

    The City of Riverside sent out notices to the following tribes to initiate consultation on February 20, 2020, pursuant to Assembly Bill 52:

    - 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 Luiseño Indians
    - Rincon Band of Luiseño Indians
    - Gabrielino-Tongva Tribe (San Gabriel Band of Mission Indians)
    - San Manuel Band of Mission Indians
    - Soboba Band of Luiseño Indians

    The following California Native American tribes have requested consultation with the City of Riverside pursuant to Public Resources Code 21080.3.1:

    - Pechanga Band of Luiseño Indians
    - Rincon Band of Luiseño Indians
    - Soboba Band of Luiseño Indians

The results of these consultations will be discussed in Section 18 below.

13. **Other Environmental Reviews Incorporated by Reference in this Review:**

    a. City of Riverside General Plan 2025 (GP 2025)
    b. GP 2025 Final Program EIR (FPEIR)
    c. City of Riverside Housing Element Update 2014–2021
    d. Air Quality and Greenhouse Gas Impact Analysis
    e. Biological Resources Assessment/Habitat Assessment/DBESP Report/Jurisdictional Delineation
    f. Cultural Resources Assessment
    g. Preliminary Geotechnical Investigation and Percolation Testing
    h. Phase 1 Environmental Site Assessment
    i. Preliminary Hydrology Report
    j. Water Quality Management Plan Report
    k. Noise and Vibration Impact Analysis
    l. Traffic Operations Analysis
    m. Vehicle Miles Traveled Memorandum

14. **Acronyms**

AB.....Assembly Bill
ACOE.....United States Army Corps of Engineers
AQMP.....Air Quality Management Plan
Basin .....South Coast Air Basin
BMP.....Best Management Practice
CalEEMod.....California Emissions Estimator Model
CAP.....Climate Action Plan
CBC .....California Building Code
CCR .....California Code of Regulations
CDFW.....California Department of Fish and Wildlife
CEQA.....California Environmental Quality Act
CFR.....Code of Federal Regulations
cfs.....cubic feet per second
CH_4.....methane
CNDDB .....California Natural Diversity Database
CNEL .....Community Noise Equivalent Level
CO.....carbon monoxide
CO_2.....carbon dioxide
CO_2e.....carbon dioxide equivalent
CWA .....(Federal) Clean Water Act
DAMP.....Drainage Area Management Plan
dBA.....A-weighted decibel
DCV .....Design Capture Volume
DMA .....Drainage Management Area
DTSC .....California Department of Toxic Substances Control
EIR.....Environmental Impact Report
EPA.....Environmental Protection Agency
FHWA.....Federal Highway Administration
FMMP.....Farmland Mapping and Monitoring Program
FPEIR.....GP 2025 Final Programmatic Environmental Impact Report
ft.....foot/feet
FTA.....Federal Transit Authority
GHG.....greenhouse gas
GP 2025 .....General Plan 2025

HCOC .....Hydrologic Condition of Concern
HVAC .....Heating, Ventilation, and Air Conditioning
in/sec .....inches per second
IS/MND .....Initial Study/Mitigated Negative Declaration
lbs/day.....pounds per day
L_{eq}.....equivalent continuous sound level
L_{max}.....maximum noise level
LRA .....Local Responsibility Area
LST .....localized significance threshold
MARB ALUC.....March Air Reserve Base Airport Land Use Compatibility Plan
mgd .....million gallons per day
MLD.....Most Likely Descendant
MS4.....Municipal Separate Storm Sewer Systems
MSHCP.....Multiple Species Habitat Conservation Plan
MT .....metric ton
N_2O .....nitrous oxide
NAHC .....Native American Heritage Commission
NOx.....nitrogen oxide
NPDES.....National Pollutant Discharge Elimination System
$PM_{2.5}$.....particulate matter less than 2.5 microns in size
PM_{10} .....particulate matter less than 10 microns in size
PRD.....Planned Residential Development
RAW .....Removal Action Plan
RE .....Residential Estate
RMC.....Riverside Municipal Code
ROW .....right-of-way
RPD.....Riverside Police Department
RPU.....Riverside Public Utilities
RTP .....Regional Transportation Plan
RUSD.....Riverside Unified School District
RWQCB.....Regional Water Quality Control Board
SB.....Senate Bill
SCAG.....Southern California Association of Governments
SCAQMD .....South Coast Air Quality Management District
SCS .....Sustainable Communities Strategy
SEMS .....Superfund Enterprise Management System
SOx .....sulfur oxide
SRA.....State Responsibility Area
SWPPP.....Storm Water Pollution Prevention Plan
TOA .....Traffic Operations Analysis
U.S. .....United States
VdB.....vibration velocity decibels
VOC.....Volatile Organic Compound
WMWD .....Western Municipal Water District
WQMP.....Water Quality Management Plan
WRCRWA .....Western Riverside County Regional Wastewater Authority

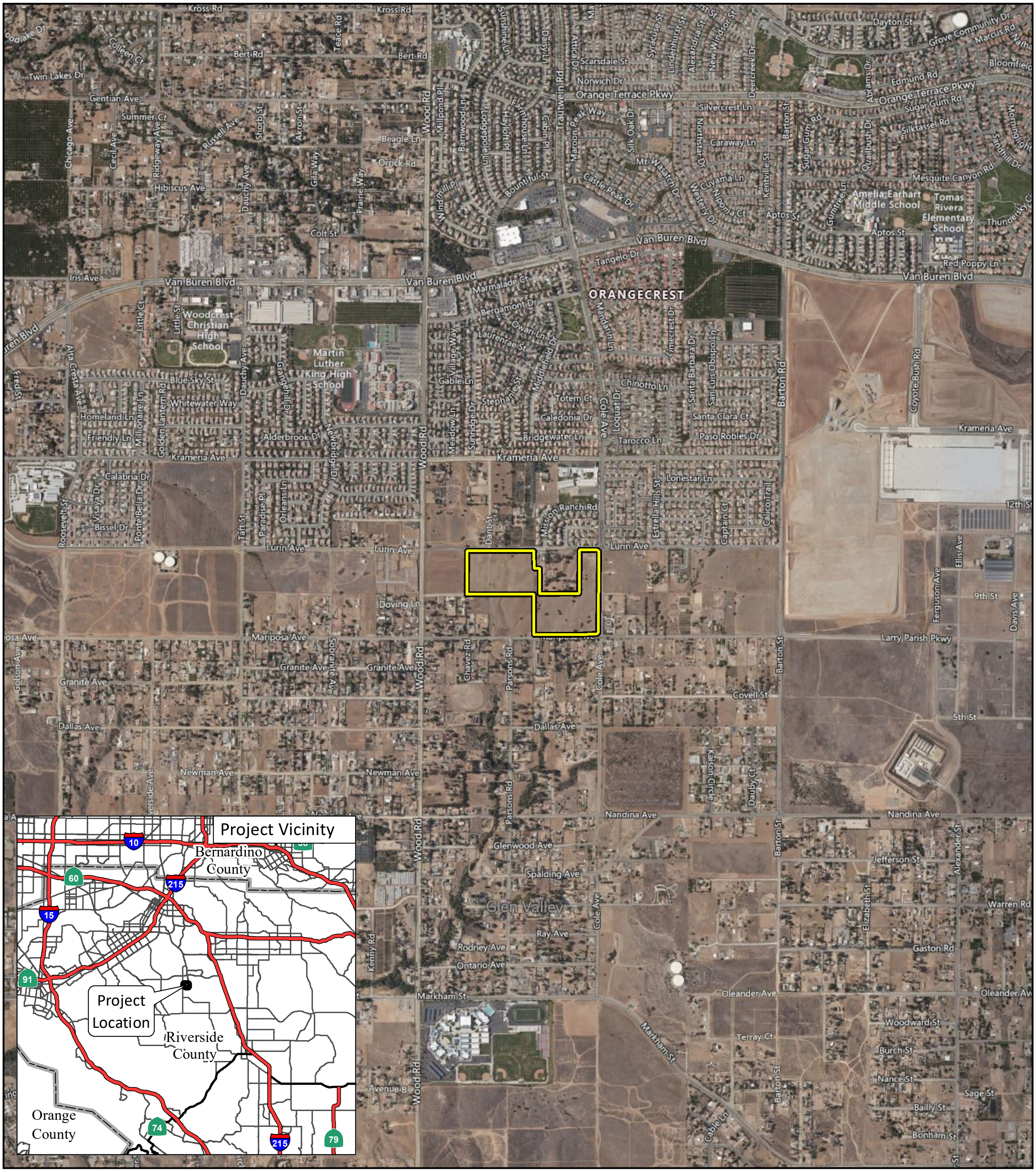

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FIGURE 1

LEGEND

Project Location

0 1000 2000

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TTM37731 Cole Development

Regional Location

SOURCE: Bing Maps (2019)

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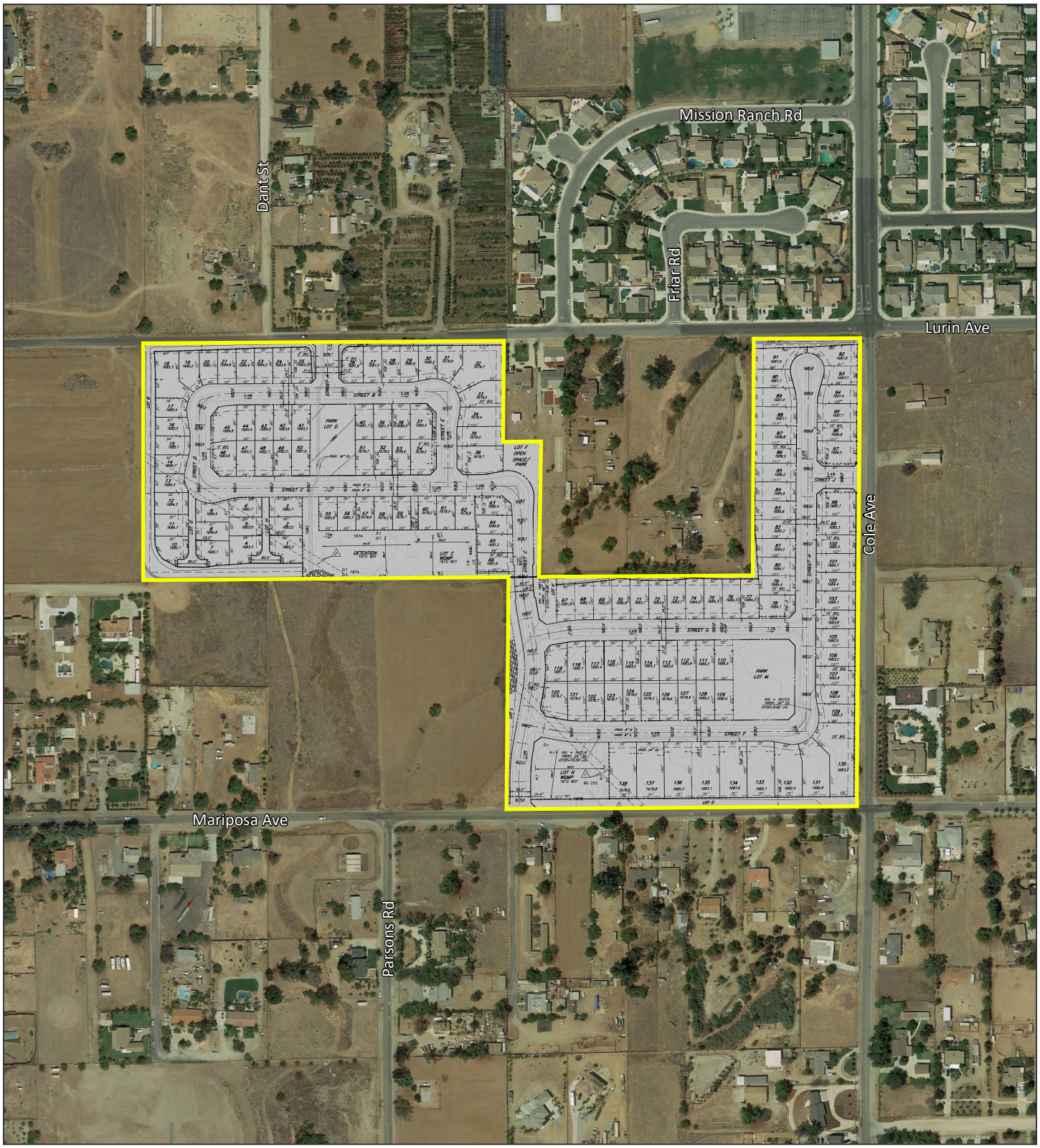

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Project Site

FIGURE 2

0 250 500

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SOURCE: Google Earth (2020),KWC Engineering

TTM37731 Cole Development

Project Location

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NUMBERED LOTS:

LOT NO.	GROSS AREA IN SQ. FT.	WIDTH	DEPTH	PRIVATE OPEN SPACE (SF)	PLAN TYPE	LOT NO.	GROSS AREA IN SQ. FT.	WIDTH	DEPTH	PRIVATE OPEN SPACE (SF)	PLAN TYPE	LOT NO.	GROSS AREA IN SQ. FT.	WIDTH	DEPTH	PRIVATE OPEN SPACE (SF)	PLAN TYPE
1	5968	74	90	738	2	48	4750	50	95	710	1	95	5350	50	107	1214	1
2	4500	50	90	654	1	49	4750	50	95	646	2	96	5350	50	107	895	2
3	4725	52	90	593	4	50	4750	50	95	793	5	97	7305	70	107	1136	4
4	5934	76	89	1312	3	51	4750	50	95	654	1	98	7610	73	107	1003	2
5	4467	50	89	738	5	52	4750	50	95	590	2	99	5349	50	107	1378	5
6	4631	52	89	609	1	53	4750	50	95	636	4	100	5348	50	107	1049	2
7	5435	63	91	1118	5	54	6505	70	95	739	3	101	5348	50	107	1140	4
8	4534	50	91	934	3	55	4750	50	95	657	1	102	5347	50	107	1465	3
9	4919	61	91	919	5	56	4750	50	95	900	3	103	5346	50	107	1306	5
10	5615	62	90	705	1	57	4750	50	95	654	1	104	5346	50	107	1260	3
11	5297	58	91	703	4	58	4750	50	95	742	5	105	5345	50	107	914	1
12	5314	58	91	598	2	59	4750	50	95	900	3	106	5344	50	107	1115	3
13	4235	50	87	547	3	60	4750	50	95	839	5	107	5344	50	107	1036	5
14	4304	50	87	682	3	61	4750	50	95	654	1	108	5285	50	105	901	1
15	4713	50	93	862	5	62	5301	53	95	880	5	109	4935	50	100	791	3
16	4556	50	91	773	3	63	4868	51	95	938	3	110	5350	50	107	1400	3
17	4339	51	90	562	1	64	4956	50	99	1119	1	111	5350	50	107	1621	5
18	9312	67	142	1676	5	65	4882	50	98	850	4	112	5350	50	107	1750	3
19	5538	55	97	1080	4	66	5011	52	100	854	2	113	5350	50	107	1250	2
20	4478	50	91	854	5	67	4915	50	99	987	5	114	5350	50	107	1318	4
21	4606	50	92	991	3	68	4901	50	99	886	4	115	5350	50	107	1304	1
22	4671	50	94	825	1	69	5129	50	103	1029	2	116	5350	50	107	1592	5
23	4732	50	94	1132	3	70	5374	50	106	1774	3	117	5350	50	107	1250	2
24	4772	50	95	926	1	71	5215	50	105	1115	2	118	5301	50	106	1170	1
25	5597	59	96	1257	3	72	5133	50	103	1532	3	119	5846	62	104	1144	4
26	5550	61	97	1356	3	73	5208	50	105	1162	1	120	6598	62	104	1095	3
27	4895	50	98	1050	3	74	5370	50	107	1267	2	121	5303	50	106	799	1
28	4902	50	98	1242	5	75	5308	50	106	1225	4	122	5350	50	107	965	3
29	4861	50	94	1054	1	76	5253	50	105	1383	5	123	5350	50	107	785	2
30	4560	50	92	893	3	77	5227	49	105	1128	2	124	5350	50	107	935	3
31	5866	70	92	1378	5	78	5987	67	99	1062	4	125	5350	50	107	801	4
32	12741	112	102	5909	1	79	4996	50	100	896	2	126	5350	50	107	844	1
33	7362	68	117	2267	2	80	5157	50	103	1325	5	127	5350	50	107	877	4
34	6300	57	121	2003	1	81	5321	50	107	1221	2	128	5350	50	107	839	1
35	6549	52	126	2127	4	82	5506	50	110	1635	1	129	5350	50	107	785	2
36	9144	75	126	3652	5	83	5542	50	111	1785	5	130	15720	82	207	9863	3
37	5472	59	95	795	4	84	5543	50	111	1178	4	131	10791	75	148	5503	2
38	4750	50	95	704	1	85	5542	50	111	1645	5	132	10460	75	148	4738	5
39	4750	50	95	650	2	86	5798	50	117	1705	1	133	11227	75	150	5843	3
40	4750	50	95	743	4	87	5842	50	117	1995	5	134	11247	75	150	5120	4
41	4750	50	95	975	5	88	5842	50	117	1520	4	135	11253	75	150	5328	3
42	4750	50	95	649	4	89	5749	50	114	1490	5	136	11258	75	150	5108	2
43	4750	50	95	1151	3	90	5180	50	105	1135	3	137	11263	75	150	5338	3
44	4751	50	95	1057	5	91	6608	54	144	938	4	138	11268	75	150	5217	4
45	6372	70	95	1366	4	92	6088	57	136	1180		AVERAGE	5781	55	105	1424	
46	6347	70	95	1033	1	93	4596	50	95	777	3	TOTAL LOT AREA=				797,784	
47	4750	50	95	540	4	94	5177	50	107	1046	5	MAX LOT AREA =				15,730	
												MIN LOT AREA =				4,235	

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FIGURE 3

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SOURCE: Community Works Design Group

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TTM37731 Cole Development

Site Plan

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

DETERMINATION

(To be completed by the Lead Agency)

On the basis of this initial evaluation, which reflects the independent judgment of the City of Riverside, it is recommended that:

The City of Riverside finds that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

The City of Riverside finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. ☒

The City of Riverside finds that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ☐

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

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

Signature _____ Date _____

Printed Name & Title _____ For City of Riverside

CITY OF RIVERSIDE

COMMUNITY & ECONOMIC DEVELOPMENTDEPARTMENT **PLANNING DIVISION**

ENVIRONMENTAL INITIAL STUDY

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2) All answers must take account of the whole action involved, including off site as well as on site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other California Environmental Quality Act (CEQA) process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8) The explanation of each issue should identify:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significance.

1. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐

1a. Response: ***(Source: General Plan 2025 Figure CCM-4 – Master Plan of Roadways, General Plan 2025 FPEIR Figure 5.1-1 – Scenic and Special Boulevards and Parkways, Table 5.1-A – Scenic and Special Boulevards, and Table 5.1-B – Scenic Parkways; and, Google Earth)***

Less Than Significant Impact. The City's General Plan 2025 policies aim at balancing development interests with broader community preservation objectives. The General Plan identifies hillsides and ridgelines in the City, as well as the City's natural terrain and vegetation, as scenic vistas. For example, the La Sierra/Norco Hills, Sycamore Canyon Wilderness Park, Box Springs Park, and the peaks of Box Springs Mountain, Mt. Rubidoux, Arlington Mountain, Alessandro Heights and the La Sierra/Norco Hills provide scenic viewpoints of the City and the region. The Project does not constitute hillside development (on slopes greater than 15 percent) where special considerations of the City's natural terrain must be considered for impacts to scenic vistas as the average natural slope of the site equates to 0.53 percent. The site and immediate vicinity are not designated by the City's General Plan for the preservation of scenic views.

The Project site is located in the Orangecrest Specific Plan within a semi-urbanized area in the vicinity of existing residential development. The nearest scenic resource in proximity to the site are major hills and canyons (northwest of Roberts Road) located approximately 2.3 miles to the Project site's northwest. Other features in proximity to the Project area include Lake Matthews approximately 5.7 miles to the southwest and the Temescal Mountains approximately 4.1 miles to the southwest. Distant views of the Santa Ana Mountains to the Project's southwest are also available. However, views from public areas in the vicinity of the Project site include single-family residential uses, large lot single-family residential uses, vacant land, and roads. The Project consists of the development of a single-family residential unit neighborhood, which is consistent with the current pattern of residential development in the Project area (specifically to the northeast of the site).

Views of the distant Temescal Mountains and Santa Ana Mountains exist as one looks southwest from the proposed Project site. However, low and mid-level views of these mountains are obstructed by existing residential structures, vegetation, and existing perimeter walls delineating property boundaries. The other scenic features described above are not visible from the Project site. Travelers on local roadways would experience changes in on-site scenery, but existing views to more distant geographic features would be maintained. Since the Project would be consistent with the residential nature of existing land uses in the area, views available to local residents would be maintained because single-family homes, ornamental landscape, and utility poles already obstruct distant scenic vistas viewable from the Project area. Due to the mass and height of the proposed residential buildings on the site, local or regional scenic vistas would still be visible, and the Project would not have significant adverse impacts on such areas. Through compliance with and implementation of General Plan/Specific Plan Policies and Zoning Code requirements, related to scenic vistas, direct, indirect and cumulative impacts to scenic vistas due to Project implementation are **less than significant impacts**. No mitigation is required.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	☒

1b. Response: ***(Source: General Plan 2025 Figure CCM-4 – Master Plan of Roadways, General Plan 2025 FPEIR Figure 5.1-1 – Scenic and Special Boulevards, Parkways, Table 5.1-A – Scenic and Special Boulevards, Table 5.1-B – Scenic Parkways, the City's Urban Forest Tree Policy Manual, Title 20 – Cultural Resources and, Title 19 – Article V – Chapter 19.100 – Residential Zones - RC Zone; LSA, Cultural Resources Assessment TTM 37731 Cole Development Project, April 2020)***

No Impact. The parcels associated with the Project site are currently vacant. Adjacent land uses include vacant parcels, large lots occupied by residential units, single-family residential neighborhoods, orchards, and local roads.

The *Cultural Resource Assessment* prepared for the Project in April 2020 concluded that no resources were documented on the site during survey reviews and field work. There are no State scenic highways located near the Project site. As designated by the City's General Plan 2025, the proposed Project is not located along or within view of a scenic boulevard, parkway, or

special boulevard. The nearest scenic parkway to the Project site is Van Buren Boulevard approximately 0.76 mile north of the Project site. The Project site cannot be seen from this roadway due to intervening structures, trees, and topography.

No designated scenic resources, State scenic highways, or locally designated scenic roadways are on or adjacent to the Project site. Therefore, the proposed Project would have **no impact** directly, indirectly or cumulatively to scenic resource within a state scenic highway. No mitigation is warranted.

c. 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?	☐	☐	☒	☐

1c. Response: ***(Source: General Plan 2025, General Plan 2025 FPEIR, Zoning Code, Citywide Design and Sign Guidelines, Riverside Municipal Code Section 19.100 and 19.570)***

Less Than Significant Impact. The Project site is located in a semi-urbanized portion of Riverside within the Orangecrest Specific Plan. The site is currently vacant. The proposed Project envisions the development of 138 single-family residential units, internal circulation (neighborhood roads), and 72,387 square feet of park/open space area, similar to the residential development to the northeast of the site. Implementation of the Project would continue the pattern of residential development within the Orangecrest Specific Plan and in accordance with the City's General Plan and Zoning designations of the Project site.

The Project applicant is requesting a Planned Residential Development (PRD) Permit pursuant to Section 19.780.010 of the Municipal Code to allow for flexibility and creativity in design of the single-family residential development planned for the Project site. The PRD Permit allows for increased density compared to the base zoning designations of the Project site. The Benchmark Density under the PRD Permit for RE and R-1-1/2 Acre zoning designation is 3.0 dwelling units/acre and 4.8 dwelling units/acre for R-1-13000 zoning designation. The Maximum Density with Bonus under the PRD Permit for RE and R-1-1/2 Acre zoning designation is 3.3 dwelling units/acre and is 5.3 dwelling units/acre for R-1-13000 zoning designation.. The applicant has blended the density of the various zoning designations on the site to achieve an overall residential development density of 4.24 dwelling units/acre (total of 138 single-family residences), which would be consistent under the density standards of the PRD Permit.

Pursuant to Section 19.100 of the Riverside Municipal Code, the proposed project would meet all development standards, with the exception of an 8-foot project perimeter setback along Cole Avenue and a 5-foot project perimeter setback along Lurin Avenue, where the Zoning Code requires a minimum project perimeter setback of 25 feet. The Project applicant is requesting a variance from the City of Riverside in order to allow the reduced setbacks.

The City of Riverside adopted the *Riverside Citywide Design Guidelines and Sign Guidelines* in 2007. Chapter III, Section A of the document provides residential design guidelines for single-family residential design.

The proposed development includes one-story residences throughout the site in the Craftsman Bungalow, Spanish/Santa Barbara, or Italianate styles. The size and scale of the proposed residences provide from three to five bedrooms, ranging in size from 1,818 to 3,339 square feet of living area and is consistent with existing one- and two-story single-family residential uses fronting the north-side of Lurin Avenue.

Recessed vinyl windows with decorative, fiberglass entry doors located within covered entries, and façade features avoid the appearance of blank, unarticulated walls and allow a varied presentation of the residential units from public areas. Depending on the style of the individual units, façade enhancements may include stucco recesses, recessed faux diamond gable vents, stucco arched soffits, decorative exterior lighting and raised address, plant shelves with tiled paver caps of stucco sill trim, stucco porch surrounds, precast concrete roof finial, decorative fiber cement shutter panes, vertical and horizontal wood siding, decorative exposed wood trim, or similar enhancements. Roof treatments will consist of concrete shingle or concrete S-tiles

with barrel concrete tiles at hips and ridges. In general, walls will be finished with muted light-tone stucco, enhanced with darker tile or wood trim accents. These materials and design features generally match existing or planned residential uses located along Lurin Avenue.

A robust and varied landscaping scheme will be provided along the project frontage, along the project perimeter, in open space areas, and internal lots. The proposed landscape design includes the screening of all electrical transformers and utility fixtures. Air conditioning units will be located within side or rear yards and fully screened from public view. Stamped and colored asphalt will be provided at project entrances and internal street intersections. Perimeter walls (split-face CMU with decorative cap) will complement the variety of residential design. To provide screening, a variety of trees, shrubs, and landscaping will be installed along the new sidewalk and the perimeter wall located along Lurin Avenue.

As part of the City's entitlement process, the Project applicant is required to implement design features to comply with City requirements in providing development of scenic quality. The Project has been designed to be compatible with the *Citywide Design Guidelines* and surrounding area and the Project does not conflict with applicable zoning and other regulations regarding scenic quality. The City's Planning Commission will review the proposed development for consistency with the guidelines prior to entitlement. Therefore, the proposed Project would not degrade the existing visual character of the area. Direct, indirect, and cumulative impacts would be **less than significant** with implementation of the proposed Project and no mitigation is required.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

1d. Response: ***(Source: General Plan 2025, Title 19 – Article VIII – Chapter 19.556 – Lighting, Citywide Design and Sign Guidelines; Riverside County Ordinance No. 655)***

Less Than Significant Impact. The Project site is located in an area with existing outdoor lighting sources. Currently, sources of nighttime light originate from surrounding residential uses, streetlights, and the single-family residential neighborhood northeast of the site. The proposed lighting on the Project site would include lighting typical of single-family residential neighborhoods, including lights from inside and outside homes, entrance lighting, accent lights on common use landscaping features, lighting at parks on the Project site, and streetlights. The proposed lighting would be directed, oriented, and shielded to prevent light from shining onto adjacent properties. Although the lighting proposed by the Project would increase lighting on the Project site, compared to current conditions, the lighting would not result in a substantial light or glare increase compared to surrounding development. Any new lighting proposed or required for the Project would be constructed in accordance with *Section 19.590.070- Light and Glare* and the provisions of *Chapter 19.556 Lighting* of the City's Municipal Code. Additionally, any exterior building materials would be constructed in accordance with *Chapter 19.710 – Design Review* of the City's Municipal Code to ensure that building materials in the development of the Project are not glare producing. Prior to the issuance of a building permit, the applicant would provide the City lighting plans for review and approval. Additionally, the City's Planning Commission will review the proposed development to ensure exterior materials used for the construction of the single-family residential units are compliant with City guidelines prior to entitlement.

In 1988, the County of Riverside adopted Ordinance No. 655 regulating light pollution in areas subject to interference with Mt. Palomar Observatory. Ordinance No 655 established two zones based on radial distance from the Mt. Palomar Observatory: Zone A and Zone B. Zone A is defined as a circular area within a 15-mile radius of the observatory and Zone B is defined as a circular area within a 45-mile radius off the observatory. Figure 5.1-2 of the General Plan 2025 FPEIR indicates that the Project site is located within Zone B of the Mt. Palomar Nighttime Lighting Policy Area. For developments located in these zones, Ordinance 655 requires the use of low-pressure sodium fixtures, limit hours of use, prohibits certain types of lights, and requires hooded fixtures. The Project applicant would comply with the outdoor lighting standards pursuant to Chapter 19.556 of the Riverside Municipal Code which are applicable to Ordinance No. 655 in protecting nighttime zone areas of Mt. Palomar Observatory. As such, implementation of the proposed Project would be designed as to not obstruct Mt. Palomar Observatory views.

The proposed Project would have **less than significant impacts** directly, indirectly, or cumulatively that would adversely affect daytime or nighttime views due to glare and lighting. No mitigation is required.

2. AGRICULTURE AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information complied by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

2a. Response: ***(Source: General Plan and Supporting Documents EIR – Figure 5.2-1, California Department of Conservation Farmland Mapping and Monitoring Program Riverside County FTP Website, 2016 data, accessed October 29, 2020; California Department of Conservation Farmland Mapping and Monitoring Program, Farmland of Local Importance (2016) Definitions, Website: https://www.conservation.ca.gov/dlrp/fmmp/Documents/ Farmland_of_Local_Importance_2016.pdf. Accessed October 29, 2020.)***

No Impact. A review of Figure 5.2-1 of the City of Riverside General Plan and Supporting Documents EIR indicated that the Project site is not designated as or adjacent to land designated as Important Farmland (Prime Farmland, Unique Farmland, or Farmland of Statewide Importance). The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) data for Riverside County was accessed to verify that the site was not designated as Important Farmland. According to the FMMP data, the Project site is designated as "Other Land (X)" (approximately 16.04 acres) and "Farmland of Local Importance (L)" (approximately 16.50 acres). According to Section 5.2 of the City of Riverside General Plan and Supporting Documents EIR, farmland of local importance is defined as lands of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee. The County of Riverside defines farmland of local importance as the following:

> *"Soils that would be classified as Prime and Statewide but lack available irrigation water. Lands planted to dryland crops of barley, oats, and wheat. Lands producing major crops for Riverside County but that are not listed as Unique crops. These crops are identified as returning one million or more dollars on the 1980 Riverside County Agriculture Crop Report. Crops identified are permanent pasture (irrigated), summer squash, okra, eggplant, radishes, and watermelons. Dairylands, including corrals, pasture, milking facilities, hay and manure storage areas if accompanied with permanent pasture or hayland of 10 acres or more. Lands identified by City or County Ordinance as Agricultural Zones or Contracts, which includes Riverside "Proposition R" lands. Lands planted to jojoba which are under cultivation and are of producing age."*

The portion of the Project site designated as Farmland of Local Importance has not been actively farmed since 2006. Based on historic aerial photographs and historic research of the site, agricultural cultivation occurred during the 1940s and 1972 into the early 2000s. Since 2006, the Project site has been vacant and has been overtaken by natural vegetation.

Both the City of Riverside and the Orangecrest Specific Plan have identified the Project site for future residential development based on the type of residential zoning designated for the site. As such, the City of Riverside has incorporated the Project site into its General Plan and buildout of the City and the site will not be occupied by agricultural resources in the future. As such, the loss of 16.5 acres of Farmland of Local Importance designated land would be consistent with the future development plans for the City of Riverside on the Project site.

Implementation of the proposed Project would not result in the conversion of Prime Farmland, Unique Farmland, nor Farmland of Statewide Importance to a non-agricultural use. As such, impacts would be **less than significant** from a CEQA perspective no mitigation is required.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

2b. Response: ***(Source: General Plan 2025 FPEIR – Figure 5.2-2 Williamson Act Preserves and Figure 5.2-4 – Proposed Zones Permitting Agricultural Uses, and Title 19)***

No Impact. According to Figure 5.2-2 of the City of Riverside General Plan 2025 FPEIR, the Project site is not under a Williamson Act Contract. The Project site is zoned R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, and RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone and is not zoned for agricultural use. The Project applicant is not requesting a zone change or General Plan amendment and the land use designations of the Project site will be retained.

Implementation of the proposed Project would not conflict with existing zoning for agricultural use, or a Williamson Act Contract. As such, **no impact** would occur and no mitigation measures are warranted.

c. 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))?	☐	☐	☐	☒

2c. Response: ***(Source: GIS Map – Forest Data)***

No Impact. 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, timberland, or timberland zoned Timberland Production; as such, implementation of the Project would not conflict with such zoning designations. Therefore, **no impacts** would occur from this Project directly, indirectly or cumulatively. No mitigation is required.

d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

2d. Response: ***(Source: GIS Map – Forest Data)***

No Impact. 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 fully developed and is not occupied by forestland; as such, implementation of the Project would not result in the loss of forest land or conversion of forest land to non-forest use. **No impacts** would occur from this Project directly, indirectly, or cumulatively. No mitigation is required.

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

2e. Response: ***(Source: General Plan and Supporting Documents EIR – Figure 5.2-1, California Department of Conservation Farmland Mapping and Monitoring Program Riverside County FTP Website; General Plan 2025 FPEIR Title 19 – Article V – Chapter 19.100 – Residential Zones – RC Zone and RA Zone and GIS Map – Forest Data)***

No Impact. The California Department of Conservation FMMP data for Riverside County was accessed to verify that the site was not designated as Important Farmland. According to the FMMP data, the Project site is designated as "Other Land (X)" (approximately 16.04 acres) and "Farmland of Local Importance (L)" (approximately 16.50 acres). The Project site has a current land use designation of Low Density Residential and zoning designations of R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest)

Overlay Zone, and RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone. The Project site has not been under agricultural production since 2006 and the City of Riverside recognizes this area will be developed with residential uses as part of its eventual buildout. There is no forest land on site. Parcels surrounding the Project site are not designated as agricultural or forest land use; as such, implementation of the proposed Project would not result in conversion of nearby Farmland to non-agricultural use or conversion of forest land to non-forest use. It should be noted that parcels 266-130-011 266-130-029, north of the Project site and north of Lurin Avenue, are occupied by potted orchard vegetation; however, the Project not result in development occurring on these or any off-site parcels. Therefore, the proposed Project would have **no impact** directly, indirectly, or cumulatively related to conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. No mitigation is required.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

3a. Response: ***(Source: South Coast Air Quality Management District's 2007 Air Quality Management Plan; Air Quality and Greenhouse Gas Analysis TTM37731 Cole Development, May 2020, Appendix B)***

Less Than Significant Impact. The Project site is located in the South Coast Air Basin (Basin) and is under the jurisdiction of the SCAQMD. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SCAQMD and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the Air Quality Management (AQMP), which has a 20-year horizon for the Basin. The current regional air quality plan is the Final 2016 AQMP adopted by the SCAQMD on March 10, 2017. The Final 2016 AQMP proposes policies and measures currently contemplated by responsible agencies to achieve federal standards for healthful air quality in the Basin and those portions of the Salton Sea Air Basin that are under SCAQMD jurisdiction. This Final Plan also addresses several federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. This Final Plan builds upon the approaches taken in the 2012 AQMP for the Basin for the attainment of the federal ozone air quality standard.[2] The Basin is currently a federal and State nonattainment area for particulate matter less than 10 microns in size (PM_{10}), particulate matter less than 2.5 microns in size ($PM_{2.5}$), and ozone.

The Final 2016 AQMP proposes attainment demonstration of the federal $PM_{2.5}$ standards through a more focused control of sulfur oxide (SOx), directly emitted $PM_{2.5}$, nitrogen oxide (NOx), and volatile organic compounds (VOC). Consistency with the AQMP for the Basin means that a project would be consistent with the goals, objectives, and assumptions in the respective plan to achieve the federal and State air quality standards. For a project to be consistent with the AQMP adopted by the SCAQMD, the pollutants emitted from the project should not exceed the SCAQMD daily threshold or cause a significant impact on air quality, or the project must already have been included in the AQMP projections. However, if feasible mitigation measures are implemented and shown to reduce the impact level from significant to less than significant, a project may be deemed consistent with the AQMP. The AQMP uses the assumptions and projections of local planning agencies to determine control strategies for regional compliance status. Since the AQMP is based on the local General Plan, projects that are deemed consistent with the General Plan are found to be consistent with the AQMP.

The proposed Project consists of the following entitlements to facilitate the establishment of an 138-unit Planned Residential Development: (1) Tentative Tract Map (TM 37731) to subdivide 32.54 acres into 138 single-family residential lots, 15 lettered lots for slopes, water quality management plan basins, park/open space, driveways, and drainage areas; (2) Planned Residential Development for the establishment of detached single-family dwelling units, private streets, and common open space; (3) Variance to reduce the setback from the right-of-way (ROW) to perimeter wall to approximately 8 feet along Cole Avenue and minimum of 5 feet along Lurin Avenue; and (4) Design Review of Project plans by the City. The Project site is zoned with the following designation: R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, and RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone. The Project would not require a General Plan Amendment or a Zoning Designation Amendment.

The City's General Plan is consistent with the SCAG Regional Comprehensive Plan Guidelines and the SCAQMD AQMP. The proposed Project includes 138 single-family residential units, parks, and internal neighborhood roads on approximately 32.54 acres. Based on the household size of 2.8625 persons per residential unit used in the California Emissions Estimator Model (CalEEMod) v2016.3.2, the proposed Project could increase the City's population by approximately 396 persons.

[2] *Final 2013 Air Quality Management Plan,* South Coast Air Quality Management District, February 2014.

Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD *CEQA Air Quality Handbook*, consistency for project development proposals that differ from the land use designation assumed within the Basin's 2016 AQMP is affirmed when a project: (1) it does not increase the frequency or severity of an air quality standards violation or cause a new violation; and (2) is consistent with the growth assumptions in the AQMP. Since the proposed Project would not require a General Plan Land Use Amendment or Zone Change, the screening pursuant to Chapter 12 of the 1993 SCAQMD *CEQA Air Quality Handbook* is not required.

SCAG foresees that population would increase in the City and region over the next 25 years, and the anticipated population growth rate in the City (2.4 percent) is roughly similar to that of Riverside County (2.0 percent) and the SCAG region (2.5 percent) for the same period. Because the Project site has been designated for residential uses by the City, the proposed increase in population by approximately 396 persons has been anticipated and planned for in the City's General Plan. Furthermore, as discussed below in Checklist Question 3b, the project-specific short-term construction and long-term pollutant emissions would be less than the emission thresholds established in the SCAQMD's *CEQA Air Quality Handbook*. Therefore, the Project would not result in an increase in the frequency or severity of any air quality standards violation and would not cause a new air quality standard violation. Through adherence to standard SCAQMD regional rules required for all development activity with the Basin that assist in reducing air pollutant emissions, the proposed Project would not conflict with or obstruct implementation of the AQMP. Impacts would be **less than significant** and no mitigation is required.

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐

3b. Response: ***(Source: General Plan 2025 FPEIR Table 5.3-B SCAQMD CEQA Regional Significance Thresholds, South Coast Air Quality Management District's 2007 Air Quality Management Plan, URBEMIS 2007 Model or CalEEMod 2017 Model, Air Quality and Greenhouse Gas Analysis TTM37731 Cole Development, May 2020, Appendix B)***

Less Than Significant Impact. The information in this section is based on the Air Quality impact analysis that was conducted in the *Air Quality and Greenhouse Gas Analysis Technical Report* prepared for the Project by LSA (May 2020).

Construction Analysis

Construction activities produce combustion emissions from various sources (e.g., demolition, site preparation, grading, utility engines, tenant improvements, and motor vehicles transporting the construction crew). Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change. The use of construction equipment on the Project site would result in localized exhaust emissions.

The construction calculations prepared for the Project assumed that dust control measures (watering a minimum of three times daily) would be employed to reduce emissions of fugitive dust during site grading. Further, all construction would need to comply with SCAQMD Rule 403 regarding emission of fugitive dust. The most recent version of CalEEMod (Version 2016.3.2) was used to calculate the construction emissions. **Table E: Estimated Construction Emissions** shows the estimated construction emissions and the determination if generation of such emissions exceeds SCAQMD thresholds. No exceedances of any criteria pollutants are expected during construction; therefore, project-related short-term construction air quality impacts would be **less than significant** and no mitigation is required.

No exceedances of any criteria pollutants are expected during construction; therefore, project-related short-term construction air quality impacts would be **less than significant** and no mitigation is required.

Table E: Estimated Construction Emissions

Construction Phase	Total Regional Pollutant Emissions (lbs/day)							
	VOC	NO_x	CO	SOx	Fugitive PM_{10}	Exhaust PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$
Site Preparation	4.17	42.48	22.25	0.04	7.25	2.20	3.93	2.02
Grading	4.55	50.26	32.78	0.06	3.61	2.18	1.46	2.00
Building Construction	2.42	20.92	19.27	0.04	0.65	1.13	0.18	1.06
Paving	1.09	10.23	15.07	0.02	0.17	0.51	0.04	0.47
Architectural Coating	28.49	1.33	2.13	0.00	0.11	0.07	0.03	0.07
Peak Daily	**28.49**	**50.26**	**32.78**	**0.06**	**9.45**		**5.59**	
SCAQMD Thresholds	**75.00**	**100.00**	**550.00**	**150.00**	**150.00**		**55.00**	
Significant Emissions?	**No**	**No**	**No**	**No**	**No**		**No**	

Source: LSA, *Air Quality and Greenhouse Gas Analysis Technical Report,* Table I, pg. 41, May 2020.

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

Fugitive Dust: Fugitive dust emissions are generally associated with land clearing and exposure of soils to the air and wind, as well as cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions at the time of construction. The proposed Project will be required to comply with SCAQMD Rule 403 to control fugitive dust. Impacts would be **less than significant** and no mitigation is required.

Architectural Coatings: Architectural coatings contain VOCs that are part of the ozone precursors. Based on the uses associated with the proposed Project, it is estimated that application of the architectural coatings for the proposed peak construction day would result in a peak of 28.9 pounds per day (lbs/day) of VOCs. Therefore, VOC emission from this task would not exceed SCAQMD VOC established thresholds of 75 lbs/day. Impacts would be **less than significant** and no mitigation is required.

Naturally Occurring Asbestos: The proposed Project is located in Riverside County, which is among the California counties found to have serpentine and ultramafic rock in their soils. However, according to the California Geologic Survey mapping of the Project site, no such rock has been identified in the Project vicinity. As such, the potential risk for natural occurring asbestos during Project construction is **less than significant**.

Operational Analysis

Long-term air pollutant emissions impacts are those associated with stationary sources and mobile sources involving project-related changes. The proposed Project would result in net increases in both stationary-and-mobile source emissions. The stationary-source emissions would come from many sources, including the use of consumer products, landscaping equipment, general energy, and solid waste.

The proposed Project would generate approximately 1,303 trips per day. The Project's average daily trips were entered in the CalEEMod. The results are shown in **Table F: Regional Operational Emissions**, which demonstrates that none of the criteria pollutants would exceed SCAQMD emission thresholds. Therefore, project-related long-term air quality impacts would be **less than significant** and no mitigation is required.

Table F: Regional Operational Emissions

Source	Pollutant Emissions, lbs/day					
	VOC	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Area	5.92	2.08	12.24	0.01	0.22	0.22
Energy	0.12	1.07	0.45	< 0.01	0.09	0.09
Mobile	2.56	13.19	34.40	0.12	10.03	2.75
Total Project Emissions	**8.60**	**16.33**	**47.10**	**0.14**	**10.34**	**3.06**
SCAQMD Thresholds	**55.00**	**55.00**	**550.00**	**150.00**	**150.00**	**55.00**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: LSA, *Air Quality and Greenhouse Gas Analysis Technical Report,* Table K, pg. 44, May 2020.

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

Localized Impacts: CalEEMod was used to calculate localized nitrogen dioxide, carbon monoxide (CO), PM_{10}, and $PM_{2.5}$ pollutant concentrations for Project operational activities. **Table G: Operational Localized Impacts Analysis** shows that the operational emissions rates would not exceed the localized significance thresholds (LSTs) for residents in the Project area. Localized impacts analysis only includes on-site sources; however, the CalEEMod outputs do not separate on-site and off-site emissions for mobile sources. Motor vehicle emissions are estimated based on the average trip length for residential land uses. The average trip length used in the CalEEMod does not break down the portion of the motor vehicle emissions generated on site. For a worst-case scenario vehicle emission assessment of the mobile source, the emissions shown in **Table G** include all on-site Project-related area sources and 5 percent of the Project-related new mobile sources, which is an estimate of the amount of Project-related new vehicle traffic that would occur on site. During operation, the proposed Project would not exceed NOx, CO, PM_{10}, or $PM_{2.5}$ thresholds. Therefore, the proposed operational activity would not result in a locally significant air quality impact. Impacts would be **less than significant.**

Table G: Operational Localized Impacts Analysis

Emissions Sources	NOx (lbs/day)	CO (lbs/day)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
Maximum On-site Emissions	2.7	14	0.72	0.36
LST – 5-acre site	270	1,577	4.0	2.0
Significant Emissions?	**No**	**No**	**No**	**No**

Source: LSA, *Air Quality and Greenhouse Gas Analysis Technical Report,* Table L, pg. 45, May 2020.

Note: Source Receptor Area – Metropolitan Riverside County, 5 acres, receptors at less than 25 meters (82.02 feet).

CO = carbon monoxide
LST = localized significance threshold
NOx = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size

Long-Term Microscale (Co Hot Spot) Analysis: Vehicular trips associated with the proposed Project would contribute to congestion at intersections and along roadway segments in the Project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed Project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, this, of traffic flow conditions. Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels. Since the SCAQMD modeled intersections do not exceed the CO standards, intersections within the proposed Project study area with less volumes of traffic and under less extreme conditions would not exceed the CO standards. Buildout of the proposed Project would not produce the volume of traffic, as described above, required to generate a CO hot spot. Therefore, implementation of the proposed Project would not be expected to result in CO hot spots, and impacts would be **less than significant**.

The Project would contribute to criteria pollutants to the area during Project construction. A number of individual projects in the area may be under construction simultaneously with the proposed Project. Depending on construction schedules and actual

implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction could result in substantial short-term increases in air pollutants. However, each project would be required to comply with the SCAQMD's standard construction measures. The proposed Project's short-term construction CO, nitrogen dioxide, PM_{10} and $PM_{2.5}$ emissions would not exceed the LSTs. Therefore, construction of the proposed Project would have a **less than significant impact** with regard to regional and localized emissions and impacts would not be cumulatively considerable. Therefore, cumulative air quality emissions impacts are **less than significant**. No mitigation is required.

c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

3c. Response: (*Source: General Plan 2025 FPEIR Table 5.3-B SCAQMD CEQA Regional Significance Thresholds, South Coast Air Quality Management District's 2016 Air Quality Management Plan, CalEEMod, EMFAC 2017 Air Quality and Greenhouse Gas Analysis TTM37731 Cole Development, May 2020, Appendix B)*

Less Than Significant Impact. The closest sensitive receptor (i.e., residential home) to the Project site is a single-family residential unit, located approximately 30 feet to the east of the Project boundary at 19331 Lurin Avenue.

Table H: Construction Localized Impacts Analysis identifies the emissions thresholds for local pollutants based on the nearest sensitive receptors. This area is consistent with the anticipated intensity of construction and based on the number of pieces of construction equipment to be used. The emissions of each of the pollutants analyzed would be less than the LST shown in **Table H** and would therefore be **less than significant**. No mitigation is required.

Table H: Construction Localized Impacts Analysis

	Pollutant Emissions				
Emissions Sources	**CO 1-hour (ppm)**	**CO 8-hour (ppm)**	**NOx 1-hour (ppm)**	**PM_{10} 24-hour ($\mu g/m^3$)**	**$PM_{2.5}$ 24-hour ($\mu g/m^3$)**
On-Site Construction Emissions[1]	0.07	0.05	0.05	0.80	0.80
Background Concentration	2.40	2.00	0.07	—	—
SCAQMD Localized Significance Threshold	20.00	9.00	0.18	10.40	10.40
Significant Emissions?	**No**	**No**	**No**	**No**	**—**

Source: LSA, *Air Quality and Greenhouse Gas Analysis Technical Report,* Table J, pg. 43, May 2020.

Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All other are expressed in ppm.

[1] CalEEMod clearly delineates the on-site and off-site construction emissions; thus, this includes all on-site construction emissions without having to include a percentage of the mobile source emissions as is done for the operational LST.

CO = carbon monoxide
lbs/day = pounds per day
NOx = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ppm = parts per million

Table H shows that daily construction emissions would not exceed the daily thresholds and the air quality standards of the VOC, NOx, CO, SOx, PM_{10}, and $PM_{2.5}$ pollutant emission thresholds established by the SCAQMD. No additional mitigation is required for the construction equipment.

In conformance with the General Plan 2025 FPEIR Mitigation Measure AIR 1 and Mitigation Measure AIR 7, CalEEMod analyzed short-term construction and long-term operational related impacts of the Project and determined that the proposed Project would not exceed SCAQMD thresholds for short-term construction and long-term operational impacts. Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations and a **less than significant impact** would occur directly, indirectly, or cumulatively for this project. No mitigation is required.

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

3d. Response: ***(Source: General Plan 2025 FPEIR Table 5.3-B SCAQMD CEQA Regional Significance Thresholds, South Coast Air Quality Management District's 2016 Air Quality Management Plan, CalEEMod, EMFAC 2017 Model; Air Quality and Greenhouse Gas Analysis TTM37731 Cole Development, May 2020, Appendix B)***

Less Than Significant Impact. Construction equipment exhaust, the application of architectural coatings, and the installation of asphalt surfaces may create odors in the Project vicinity during its construction. These construction activities are of a temporary duration and would not occur after completion of construction. The Project would be required to comply with SCAQMD Rule 1113 standards for paint applications and Rule 1108 standards regarding application of asphalt as a matter of regulatory policy.

Land uses generally associated with long-term (i.e., operational) objectionable odors include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, dairies, and/or various heavy industrial uses. The proposed Project does not propose any such uses or activities that would result in a potentially significant operational-source odor impact. Potential sources of project-generated operational odors include disposal of miscellaneous domestic refuse. Consistent with City requirements, all project-generated refuse would be stored in covered containers and removed at regular intervals in accordance with solid waste regulations, thereby precluding substantial generation of odors that could result from temporary holding of refuse on site. Additionally, the proposed Project would be required to comply with SCAQMD Rule 402, which regulates nuisance odors.

Through compliance with SCAQMD Rule 1108, 1113, and 402, the Project would not involve any substantial short-term or long-term sources of odors. Direct, indirect, or cumulative Project impacts are considered **less than significant** and no mitigation is required.

4. BIOLOGICAL RESOURCES

Would the project:

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?	☐	☒	☐	☐

4a. Response: ***(Source: TERACOR Resource Management Inc., Step I Habitat Assessment, Step II, Part a Focused Burrow Survey and Step II, Part B Focused Burrowing Owl Survey for Tentative Tract No. 37731 a 138 Lot Subdivision of 3.58 Gross Acres (32.54 Net Acres), July 24, 2020; TERACOR Resource Management Inc.; Determination of Biologically Equivalent or Superior Preservation for Tentative Tract No. 37731, revised per Wildlife Agency Comments, January 13, 2021; TERACOR Resource Management Inc., Preliminary Jurisdictional Delineation and Determination of California Department of Fish and Wildlife and California Regional Water Quality Control Board-Santa Ana Region, and U.S. Army Corps of Engineers Jurisdiction for Tentative Tract No. 37731, revised per Wildlife Agency Comments, January 23, 2021; TERACOR Resource Management, Inc., General Biological Assessment and Multiple Species Habitat Conservation Plan Consistency Analysis for Tentative Tract No. 37731, revised per Wildlife Agency Comments, January 13, 2021 Appendix C)***

Less Than Significant with Mitigation Incorporated. The *Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis and General Biological Assessment* was prepared by TERACOR Resource Management, Inc., January 15, 2020, to ensure the proposed Project was consistent with the Western Riverside County MSHCP and to analyze potential impacts to biological resources.

The Project site is located within the boundaries of the MSHCP. All projects within the MSHCP area are required to analyze their consistency with the MSHCP, including conducting analyses of species organisms on designated parcels across the Plan Area, such as criteria area/narrow endemic plant species, or animals like burrowing owl. These analyses usually include preparation of specific habitat assessments for target organisms. If a given property is found to be suitable for specified species to occur, then focused surveys are often required for the specific species. The Riverside County Regional Conservation Authority (RCA) MSHCP Information Map outlines, on a parcel-by-parcel basis, those properties which require habitat assessment and focused surveys. The only species requiring specific analysis for the Project site is the burrowing owl. When development or a property is proposed, the City of Riverside is also required to consult the Regional Conservation Authority's MSHCP Information Map to determine the following:

- If a property is located within a MSHCP-designated Cell Group or Criteria Cell (which the Project site is not); and,
- If it is in either a Cell or Cell Group then there would be a Conservation Description which outlines how conservation should be organized in that particular area (not applicable to the Project site).

Focused general field investigations were conducted on site in mid-2016, late 2017, early 2018, and May 2019. Both general habitat-based assessment and focused surveys for burrowing owl was conducted on site on July 22, July 31, August 7, August 14, August 22, and December 8, 2019. During the course of the 2019 surveys, biologists detected a number of bird species which utilize habits on-site either year-round or seasonally. These bird species include red-tailed hawk, Cooper's hawk, lesser goldfinch (*Spinus psaltria*), California scrub-jay (*Aphelocoma californica*), house finch (*Haemorhous mexicanus*), American kestrel (*Falco sparverius*), and common raven (*Corvus corax*). In addition to bird species there were also the following species that likely occur within the Project site based on signs discovered during the field surveys: dusky-footed woodrat (*Neotoma fuscipes*) and bat species such as western yellow bat (*Lasiurus xanthinus*) and western mastiff bat (*Eumops perotis californicus*). Additionally, there are a couple of species of white-footed mice (*Peromyscus* sp.) that could still occur on site relictually, California kingsnake (*Lampropeltis californiae*), southern Pacific rattlesnake, red racer (*Masticophis flagellum piceus*), western toad (*Anaxyrus boreas*), and Pacific tree frog (*Pseudacris regilla*). There are a number of non-native trees

that have also become established on the site, primarily California pepper (*Schinus mole*), eucalyptus, palo verde and tamarisk trees. The Project site was formerly occupied by grove of citrus trees, as was much of this area of Riverside in decades past.

The Project site is located on a vacant site within a semi-urbanized area of the City of Riverside. A search of the MSHCP database and other appropriate databases identified potential for candidate, sensitive, or special-status species, or suitable habitat for such species to occur on site. Federal Species of Concern, California Species of Special Concern, and California Species Animal or Plants on lists 1-4 of the California Native Plant Society Inventory may also have the potential to be located on the Project site. Table 3 - MSHCP Covered Species of the *General Biological Assessment and Multiple Species Habitat Conservation Plan* lists MSHCP Covered Species that have been designated as present, not present, or potentially occurring (low, moderate, high potential) on the Project site. **Table I: MSHCP Covered Species** shows the plant and animal species with a present or low/moderate/high potential of occurring onsite and their regulatory status.

Table I: MSHCP-Covered Species

Species	Regulatory Status	Status of the Species on the Project Site/Life History/Habitat Description
Invertebrates		
Crotch bumble bee (*Bombus crotchii*)	SSA	**Low.** This species ranges from coastal California east to the Sierra-Cascade Crest and south into Mexico. Food plant genera include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia*, and *Eriogonum*. These plant species which are necessary support resources for the bumble bee, are not found on site.
Reptiles		
coastal whiptail (*Aspidoscelis tigris stejnegeri*) Formerly known as the coastal western whiptail (*Cnemidophorus tigris multiscutatus*)	SSC	**Moderate.** This MSHCP-covered subspecies is not likely to occur on site. This species inhabits deserts and semiarid habitats, usually where plants are sparse and there are open areas for running, conditions not present as the site is densely vegetated. It ranges from deserts to montane pine forests where it prefers warmer, drier areas. Coastal whiptail is also found in woodland and streamside growth and avoids dense grassland and thick growth of shrubs. It uses firm, sandy or rocky soil. This whiptail was not detected on site.
southern rubber boa (*Charina umbratica*) Formerly known as *(Charina bottae umbratica)*	ST	**Low.** This MSHCP-covered species is unlikely to occur on site. The southern rubber boa frequents grassland, broken chaparral, woodland, and forest, in and beneath rotting logs, under rocks, and under bark of fallen and standing dead trees. Habitat on site is particularly suitable because of the removal of natural microhabitat elements (leaf and organic matter, logs, etc.).
red diamond rattlesnake (*Crotalus ruber*) Formerly (*Crotalus ruber ruber*)	SSC	**Low.** This MSHCP-covered species might still occur in the area, but the species docility and relatively gentle nature suggest it would not do well near residential neighborhoods. This species frequents chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains in Riverside County. It occurs in rocky areas and dense vegetation and suitable habitat is not present on site.
Amphibians		
western spadefoot (*Spea hammondii*) Formerly known as *(Scaphiopus hammondii*)	SSC	**Low and Unlikely to be Present.** This MSHCP-covered species occurs in western Riverside County. This species is generally found in washes, lowlands stream courses, man-made ponds, floodplains, and vernal pools. Occurs in wide range of habitats but grassland with seasonal pools considered optimal. The California Natural Diversity Database (CNDDB) notes several detections, including the Motte Rimrock Reserve as well as detections south of Santa Rosa Mine Road. The habitat on the subject property is not suitable due to lack of standing water on site or nearby.

Birds		
Cooper's hawk (*Accipiter cooperii*)	SWL (Nesting)	**Present.** Observed foraging on site, but the property is not in a conservation cell and not designated for conservation. It was seen in the riparian cell at the northwest corner of the property. Cooper's hawk is a crow-sized raptor and typically breeds throughout the state. It is tolerant of human activity and population numbers appear to be on the rise. It nests in open forests, groves, or trees along rivers, or low scrub of otherwise treeless areas. This species has been detected foraging on site.
sharp-shinned hawk (*Accipiter striatus*)	SWL (Nesting)	**Low (Not Nesting – Winter Resident).** This MSHCP-covered species could occur on site, but the property is not in a conservation cell and not designated for conservation. This species is a common winter visitor to southern California. It prefers forested or woodland riparian habitats, but will also occur in urban areas.
Grasshopper sparrow (*Ammodramus savannarum*)	SSC (Nesting) Second Priority	**Low (Nesting).** This MSHCP-covered species is not likely to utilize the subject property. The species prefers grasslands with sparse shrub cover. It occurs mainly on hillsides and mesas in coastal districts, but has bred up to 1500 meters in the San Jacinto Mountains. Marginally suitable habitat is present on site, but this sparrow is uncommonly observed. It was not detected on the subject property.
ferruginous hawk (*Buteo regalis*)	SWL (Wintering)	**Low.** This MSHCP-covered species could occur on site, but the property is not in a conservation cell and not designated for conservation. This raptor frequents open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. It eats mostly lagomorphs (rabbits), ground squirrels, and mice. The ferruginous hawk breeds in the northern Midwest in the U.S. and southern Canada, and is only known to occur in California during the winter. Suitable foraging habitat was present in the area prior to widespread development, and ferruginous hawk has not been detected on site.
Swainson's hawk (*Buteo swainsoni*)	ST (Nesting)	**Low (Low Migratory Occurrence Potential).** This MSHCP covered species could occur on site, but the property is not in a conservation cell and not designated for conservation. This raptor is a summer migrant to North America, and spends the winter in South America, making it the longest migrant of any North American raptor. Habitat preferences for this species include broken woodlands, savannah, higher deserts with scattered groves of trees, and ranch lands with scattered trees. Prey items for this species range from small mammals to insects with small birds and reptiles taken occasionally. The subject property is located outside of this species' known breeding range; therefore, this species does not nest on site. Swainson's hawk generally migrates in flocks along established flyways, and is not expected to be seen on the project site.
northern harrier (*Circus cyaneus*)	SSC (Nesting) Third Priority	**Low.** This MSHCP-covered species could forage on site, but the property is not in a conservation cell and not designated for conservation. The subject property is located within this species' current breeding range. The northern harrier has a worldwide distribution and a wide range during migration. This species prefers expansive open, treeless areas. Marginally suitable nesting habitat is present. This species was not detected on site.

white-tailed kite (*Elanus leucurus*)	SFP (Nesting)	**Low.** This species has not been seen on site, and the single cell of willow is too small for raptor nesting. It may forage on site from time to time. The property is not in a conservation cell and not designated for conservation, therefore, potential presence is not problematic. This species is fairly common in open fields, and is a yearlong resident in coastal and valley lowlands throughout California. It occurs in low elevation grassland, agricultural, wetland, or oak-woodland habitats. Riparian areas adjacent to open areas can be used by this species for nesting, but no nesting or foraging was observed.
merlin (*Falco columbarius*)	SWL (Wintering)	**Low.** It seems unlikely that this MSHCP-covered species would utilize the site, and the property is not in a conservation cell and not designated for conservation even if it did occur. This species winters mainly in the western half and southern portion of California below 1500 meters. It is seldom found in heavily wooded areas or open deserts. It occurs in coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, and various ecotones (edge habitats). Although somewhat suitable wintering habitat is present, this species was not detected on site.
prairie falcon (*Falco mexicanus*)	SWL (Nesting)	**Low.** This MSHCP-covered species could forage on site, but the property is not in a conservation cell and not designated for conservation. This species occurs throughout California, and breeds in the northern, central and southeastern portions of the state. This species inhabits primarily open habitats such as grasslands, savannahs, and open shrub habitats. Although suitable foraging habitat is present, this species was not detected.
Lincoln's sparrow - breeding (*Melospiza lincolnii*)	This species has no formal federal or State governmental listing status.	**Low.** The Lincoln's sparrow has a sparse and widespread distribution throughout the MSHCP Plan Area within a wide variety of habitats. This species occurs within the lowland and foothills of the Plan Area as a transient in the spring and fall and may overwinter within the area. This sparrow prefers dense, low underbrush often in disturbed edges with grasses and weeds mixed with shrubs. It occurs in a variety of habitats including willow-sedge swamp, scrub-meadow, and flat land aspen. Breeding in southern California occurs in wet montane meadows of corn lily, sedges and low willows. At lower elevations, this organism prefers mesic willow shrubs and can be found in mixed deciduous groves such as aspen and cottonwoods, mixed shrub-willows, bogs as well as a variety of other riparian habitats. No Lincoln sparrows were observed or heard.
Downy woodpecker (*Picoides pubescens*)	This species has no formal federal or State governmental listing status.	**Low.** This MSHCP-covered species could occur on site, but the property is not in a conservation cell and not designated for conservation. The downy woodpecker is sparsely distributed throughout the MSHCP Plan Area. This species utilizes riparian scrub, forest and woodland, and oak woodland and forest. Suitable support habitat is not present, and this woodpecker was not detected on the subject property.
yellow warbler (*Setophaga petechia*) Formerly known as (*Dendroica petechial Brewsteri*)	SSC (Nesting) Second Priority	**Low.** This MSHCP-covered species occurs in riparian scrub and woodlands, which are present but limited to less than one-half acre on site. This species breeds in southern California in the dense understory of riparian thickets. Yellow warbler populations have been severely impacted by brown-headed cowbird parasitism. This species has not been detected on site.

tree swallow (*Tachycineta bicolor*)	This species has no formal federal or State governmental listing status.	**Low.** This MSHCP-covered species was not detected on site, and the property is not in a conservation cell and not designated for conservation. The tree swallow is widely but sparsely distributed throughout the MSHCP Plan Area. Habitat characteristics include open water for foraging and riparian scrub and water-associated woodland and forest for nesting. This species could forage on site but would not expect to nest.
Costa's hummingbird (*Calypte costae*)	SSA (Nesting)	**Low.** The subject property is located within the year-round range of this hummingbird species. Costa's hummingbird primarily occurs in the desert and semi-desert; but also occurs in arid brushy foothills and chaparral, and in adjacent mountains, open meadows and gardens during migration and winter. This species has a low probability of occurrence on site due to the paucity of flowering plants.
Lawrence's goldfinch (*Spinus lawrencei*)	SSA (Nesting)	**Low (Moderate Migratory Occurrence Potential).** This species occurs in the vicinity of the subject property during the nesting season. Suitable habitat is comprised of open woodlands, chaparral and weedy fields. Although marginally suitable nesting habitat is present, this species has a low probability of nesting on the subject property due to the limited extent of suitable habitat present. Additionally, this species has not been detected on site. This notwithstanding, Lawrence's Goldfinch has a moderate potential of utilizing the subject property as a migratory stopover.
Mammals		
Coyote (*Canis latrans*)	This species has no formal federal or State government listing status.	**Present.** This MSHCP-covered species has been detected onsite, but coyote is common and widespread throughout the Plan Area. It occurs in all areas of the Plan Area except the most highly urbanized commercial and industrial areas. This species is highly tolerant of human activity and coexists well with humans unless trapped, hunted or otherwise harassed (e.g., disturbance of breeding dens). It would not den on site.
northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)	SSC	**Low.** This MSHCP-covered species could occur on site, but the degraded nature and plant density of the grassland on site due to non-native grass and herb invasion may preclude it from being on the property. The northwestern San Diego pocket mouse occurs in sandy, herbaceous areas, usually associated with rocks or coarse gravel in coastal scrub, chaparral, grasslands, and in sagebrush. The CNDDB reports several nearby detections at the San Jacinto Wildlife Refuge, along the Ramona Expressway near the San Jacinto River, and just east of Lake Perris. Marginally suitable habitat is present on site.
Dulzura kangaroo Rat (*Dipodomys simulans*)	SSA	**Moderate.** This MSHCP-covered species could occur on site, but the property is not in a conservation cell and not designated for conservation. The Dulzura kangaroo rat occurs throughout western Riverside County in coastal sage scrub (including upland sage scrub and alluvial fan sage scrub), sage scrub/grassland ecotones, chaparral, and desert scrubs up to 2,600 feet in elevation. This species is considered fairly common in suitable habitat. Somewhat suitable habitat is present on site.

Stephens' kangaroo rat (*Dipodomys stephensi*)	FE, ST	**Moderate.** This MSHCP-covered species could occur on site, but the property is not in a conservation cell and not designated for conservation. The Stephens' kangaroo rat occurs primarily in annual and perennial grasslands, but also occurs in open coastal sage scrub. Preferred habitat species include buckwheat (*Eriogonum* sp.), chamise (*Adenostoma fasciculatum*), brome and filaree (*Erodium* sp.). Suitable habitat is present on site, and burrows typical of kangaroo rats are present. Multiple CNDDB occurrences suggest broad distribution across the Lake Matthews Estelle Mountain area and eastward toward Perris, Mead Valley and Moreno Valley. The nearest CNDDB location is 1.2 miles south of the Trautwein Road/Van Buren Boulevard intersection (1988).
San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)	SSC Addition to List	**Low.** This MSHCP-covered species occurs in intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges in southern California coastal sage scrub habitats and agricultural lands. The black-tailed jackrabbit is common throughout the state; however, habitat loss and fragmentation in southern California has caused declines. This notwithstanding, all subspecies in California are legally hunted and seasons are open year-round with no limit of take. San Diego black-tailed jackrabbit was not observed on the subject property.
bobcat (*Lynx rufus*)	This species has no formal federal or State governmental listing status	**Low.** This MSHCP-covered species could occur on site, but the general area in which the site is located has become quite isolated from larger habitat zones, rendering access to the site problematic. The bobcat is widespread throughout the Plan Area. This species requires large expanses of relatively undisturbed brushy and rocky habitats near springs or other perennial water sources. Suitable foraging habitat is present on site, although the bobcat was not detected on the subject property.
long-tailed weasel (*Mustela frenata*)	This species has no formal federal or State governmental listing status	**Low.** This MSHCP-covered species could occur on site but is an unlikely visitor due to habitat fragmentation in the area. The long-tailed weasel occurs throughout the Plan Area in virtually all types of habitat, including agricultural and disturbed areas. It may occur wherever there is sufficient prey. Suitable habitat is present onsite, but this species was not detected on the subject property.
San Diego desert woodrat (*Neotoma lepida intermedia*)	SSC Addition to List	**Moderate.** This MSHCP-covered species may occur on site, but one Neotoma nest observed likely belongs to the dusky footed woodrat in the riparian cell. This subspecies is rather widely distributed throughout southern California in sage scrub, chaparral and desert regions. It prefers rocky areas, nesting in cracks and crevices. The San Diego desert woodrat is not believed to occur on site.
Los Angeles pocket mouse (*Perognathus longimembris brevinasus*)	SSC Highest Priority	**Low.** This MSHCP-covered species can occur in western Riverside County; however, focused surveys are not required for the subject property. Pocket mice are the smallest members of the family Heteromyidae. Los Angeles pocket mouse occurs on open ground with fine, sandy soils in low elevation grasslands and open canopy sage scrub. Relevant CNDDB records include the Box Springs. This subspecies may not dig extensive burrows, and prefers hiding under weeds and dead leaves instead. Marginally suitable habitat is present on site, although trapping was not conducted for this subspecies on the subject property.

brush rabbit (*Sylvilagus bachmani*)	This species has no formal federal or State governmental listing status.	**Low.** This MSHCP-covered species was not observed on site, although Audubon's cottontail was fairly common. The brush rabbit occurs throughout the Plan Area. Suitable habitat includes chaparral, coastal sage scrub, riparian and woodland habitats, coniferous forest, and agricultural areas (grove/orchard and field crops). This species occurs at all elevations up to 6,000 feet. Suitable habitat is present on site, although the brush rabbit was not detected on the subject property.
hoary bat (*Lasiurus cinereus*)	SSA	**Low.** This species prefers deciduous and coniferous forests, and often roosts in those types of trees. Moths are the preferred food item; however, other species of flying insects and occasionally small bat species will be consumed. This species has a low potential of occurring and potentially roosting on the subject property. Marginally suitable habitat for this species is present on site.
western small-footed myotis (*Myotis ciliolabrum*)	SSA	**Low.** The western small-footed myotis roosts singly or in small communal groups in rock crevices, mines, caves, under exfoliating bark, or in buildings. This species consumes a wide variety of flying insects including moths and beetles. Suitable habitat includes desert, short-grass prairies, riparian areas, and coniferous forests. Marginally suitable roost sites, such as rock crevices and area barns or old structures, are situated near the subject property. Habitats on the subject property are marginal; therefore, this species has a low possibility of occurrence on site.
Yuma myotis (*Myotis yumanensis*)	SSA	**Low.** The Yuma myotis roosts in large groups in vertical cracks in cliff faces, buildings, and under bridges. This species' distribution is often closely tied to bodies of water. Suitable habitat includes humid forest to desert. This species has a low potential of foraging over the subject property. Area urbanization and lack of specific host resources suggest it would not occur on site.

Source: TERACOR Resource Management, Inc. *General Biological Assessment and MSHCP Consistency Analysis for Tentative Tract No.* 37731, Table 3 – MSHCP Covered Species, pages 21 to 55, January 15, 2020
Notes: SSC = State Species of Special Concern; SWL = State Watch List Species; SSA = State Special Animal; FE = Federally Listed as Endangered; ST = State listed as Threatened.

Project-associated impacts within the MSHCP are typically offset and mitigated via a number of processes. When projects are within Criteria Cells various combinations of fee-payment, land dedication/purchase, and other mechanisms as applicable can be utilized to offset impacts to sensitive species and habitats of all types, but the Project site is not within a Criteria Cell or Cell Group. Some project areas are required to survey for specific biological resources, such as burrowing owls or fairy shrimp. Focused survey were conducted in 2019 for burrowing owl, with negative results and no owls were detected. The proposed Project is not within a Criteria Cell; therefore, there are no land dedications required. Although no burrowing owls were detected on the Project site, the focused burrowing owl survey and habitat assessment recommended conducting a pre-construction survey within 30 days prior to ground disturbance activities (and in accordance with MSHCP requirements) as suitable habitat was located on site (refer to **Mitigation Measure BIO-3** below).

The Project site is located within the California Floristic Province Southwestern California region. Two distinct plant communities/landscape types are recognized and considered dominant on site; a mixed willow scrub alliance and annual grassland/mixed herbs alliance. **Table J: Vegetation Communities** shows the type of vegetative communities that currently exist on the Project site.

Project implementation would result in the removal of 22.6 acres of natural and semi-natural habitat. Of that 22.6 acres, 22.09 acres consist of upland habitats comprised of annual brome grasslands, fiddleneck wildflower field and ornamental trees as shown in **Table J.** Removal of these vegetative communities may potentially impact sensitive plant and animal species which

are State, federally and MSHCP protected. Implementation of **Mitigation Measures BIO-1** through **BIO-5** would reduce impacts to a **less than significant** level under CEQA.

Table J: Vegetation Communities

Vegetation Community	Size of Community on the Project Site (acres)
Annual Grassland/Wildflower Field	33.05
Mixed Red Willow/Arroyo Willow/Black Willow	0.2
Ornamental Alliance	0.37
Total	**35.8**

Source: TERACOR Resource Management, Inc. *General Biological Assessment and MSHCP Consistency Analysis for Tentative Tract No.* 37731, Table 2 – Vegetation Communities, page 15 January 15, 2020.

Mitigation Measures

BIO-1: Prior to the issuance of grading permits, the applicant shall make the appropriate mitigation fee payment into the MSHCP Stephens' kangaroo rat fee payment program for conservation of Stephens' kangaroo rat-occupied habitats in order to offset the loss of potentially suitable Stephens' kangaroo rat habitat on site through project implementation.

BIO-2: Prior to on-site vegetation clearance, the Project applicant shall retain a qualified biologist to conduct a pre-construction nesting bird survey in accordance with the following:

- The survey shall be conducted no more than three days prior to the initiation of clearance/construction work;
- If pre-construction surveys indicate that bird nests are not present or are inactive, or if potential habitat is unoccupied, no further mitigation is required.
- 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).
- Close coordination among the developer of the site, the City of Riverside, the Project engineer, and the consulting qualified biologist is recommended to consider vegetation clearance outside of the normal bird nesting season (usually February 15 through September 15) to avoid impacts to nesting birds, which would potentially violate the Migratory Bird Treaty Act. It should be noted that bird nesting season is increasingly less-definitive for some year-round resident species such as hummingbirds and raptors. Further, ground-dwelling birds such burrowing owls, can be affected nearly any time of the year if present. It is therefore advisable to conduct a pre-construction bird survey no matter the time of year.
- Removal of vegetation necessitates installation of appropriate Storm Water Pollution Prevention Plan (SWPPP) measures, particularly if grading is not undertaken immediately, therefore careful timing of the project schedule and implementation measures is necessary to avoid water quality impacts.

BIO-3: The Project applicant shall retain a qualified biologist to conduct a 30-day pre-construction survey for burrowing owl. The results of the single one-day survey shall be submitted to the City 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, the Project applicant and a qualified consulting biologist will be required to prepare and submit for approval a burrowing owl-relocation program.

BIO-4: In accordance with MSHCP provisions limiting the use of exotic and invasive plant species, the Project's landscape plan shall exclude invasive species such as, but not limited to crimson fountain grass (*Pennisetum setaceum*), Pampas grass (*Cortaderia selloana*), giant reed (*Arundo donax*), tree of heaven (*Ailanthus altissima*), eucalyptus, and other ornamental landscape elements on the list of exotic invasive plants utilized by the Riverside Conservation Authority which have to potential to spread into adjoining, downstream, or nearby areas.

BIO-5: The Project applicant shall demonstrate to the City of Riverside that applicable federal and State resource agency permits have been obtained, or that authorization from the agency is not required. These agencies include: U.S.

Army Corps of Engineers, California Department of Fish and Wildlife, and the Santa Ana Regional Water Quality Control Board.

With implementation of **Mitigation Measures BIO-1** through **BIO-5**, the proposed Project would not 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 (CDFW) or United States Fish and Wildlife Service (USFWS). Impacts would be **less than significant with mitigation incorporated.**

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

4b. Response: ***(Source: TERACOR Resource Management Inc., Step I Habitat Assessment, Step II, Part a Focused Burrow Survey and Step II, Part B Focused Burrowing Owl Survey for Tentative Tract No. 37731 a 138 Lot Subdivision of 3.58 Gross Acres (32.54 Net Acres), July 24, 2020; TERACOR Resource Management Inc., Determination of Biologically Equivalent or Superior Preservation for Tentative Tract No. 37731, revised January 23, 2021; TERACOR Resource Management Inc., Preliminary Jurisdictional Delineation and Determination of California Department of Fish and Wildlife and California Regional Water Quality Control Board-Santa Ana Region, and U.S. Army Corps of Engineers Jurisdiction for Tentative Tract No. 37731, revised January 13, 2021; TERACOR Resource Management, Inc., General Biological Assessment and MSHCP Consistency Analysis for Tentative Tract No. 37731, revised January 13, 2021, Appendix C).***

Less Than Significant Impact. Section 6.1.2 of the MSHCP requires assessment of impacts to riparian habitats, riverine areas, and vernal pools (discussed under Threshold 4c), 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.*

The Project site was determined to have a total of **0.28 acre of Riparian/Riverine** habitat within six distinct on-site features (Features 1 through 5 and Feature 5A). Each of the features containing the Riparian Riverine habitat is described below:

- **Feature 1:** Feature 1 receives urban runoff from the residential area on the north side of Lurin Avenue. Based on review of historic aerial photographs from 1962 to present, the riparian scrub cell did not exist in 1962 and was created more recently. By the 1980s, there was a tree grove at that location. Development to the north shunted nuisance flows into the property and willows emerged. A roadside ditch along Lurin Avenue was retrenched that conveyed stormflow in a westerly direction toward an adjacent property after our initial 2016 evaluation along Lurin Avenue. The area is now **0.03 acre**, but the entire area is human created, induced, and modified within a historically upland environment. Discussion with the Wildlife Agencies has revealed that Feature 1 should be considered Riverine; therefore, it has been included in the Riparian/Riverine tabulations.
- **Feature 2:** Feature 2 is located along the westerly property line of the larger southern parcel on site. This feature actually is a continuation of Feature 1; however, Feature 1 winds through an adjoining rural residential property before entering the site. The feature displays no actual bed and bank, but there is a broad, winding swale through this portion of the site. The upstream portion of Feature 2 comprises only grassy and herbaceous vegetation. We recorded brome, tumbleweed, bindweed (*Convolvulus arvensis*), common sunflower (*Helianthus annuus*), and common plantain (*Plantago major*) this upstream portion. The feature transitions to a small cell of several individual arroyo willows (*Salix lasiolepis*) spaced apart from one another and exists the property at the west property line. Feature 2 totals **0.10 acre**. It has a permanent water source in the form of an underground culvert, which discharges urban runoff into upstream (and off-site) at Lurin Avenue. Though induced from human actions in an upland environment, it nonetheless has developed as a result of a permanent discharge of water from new homes to the north. This "naturalized" condition indicates that Feature 2 should be classified as Riparian/Riverine.

- **Feature 3:** Feature 3 is a narrow swale on the Project site with no clear origin or terminus on site. The alignment of Feature 3 can be detected in historic aerial photography dating back to 1962; however, Feature 3 is shallow and supports only non-native grasses with the exception of one or two scrubby senescent willow shrubs. Feature 3 has no defined riverine characteristics and does not flow off site. Because of these factors and the resulting conclusion that the feature does not in any discernable manner support or contribute to the conservation of the 146 species covered under the MSHCP, the feature is not occupied by Riparian/Riverine habitat.
- **Feature 4:** Feature 4 is a roadside ditch with no riparian vegetation. It contains weedy, water-tolerant species such as curly dock (*Rumex crispis*), common sunflower, knotweed (*Polygonum areanstrum*), and dandelion (*Sonchus* sp.). Feature 4 is a **0.08-acre** human-constructed roadside ditch; however, discussion with the Wildlife Agencies indicated that Feature 4 should be considered Riparian/Riverine. Therefore, Feature 4 has been included in the Riparian/ Riverine tabulations.
- **Feature 5:** The westerly-most cell comprises several small trees; it receives storm water and nuisance water discharges from a 12-inch CMP drain under Lurin Avenue. Other non-native trees have emerged recently in this area as well, including non-native Palo Verde trees and a single palm tree. This small willow cell and Palo Verde/palm trees developed as other nearby properties across Lurin Avenue redirected water toward it in the 1980s and 1990s. The willow cell at this location is **0.03 acre** in extent and, because of the consistent urban runoff flow into it that has become the "naturalized" condition, it should be considered Riparian/Riverine. Sheetflow drainage continues to the south in a broad swale that is not a riverine feature.
- **Feature 5A:** On January 13, 2021, the Wildlife Agencies identified that Feature 5 would likely connect to downstream drainages; therefore, Feature 5A was added to the mapping. Feature 5A now extends south of Feature 5, for a total length of 608 feet. The projected width of any hydrological connection was projected to be 3 feet wide (**0.04 acre**). This has been designated Feature 5A and included in riverine tabulations.

The Project applicant in coordination with the City and Wildlife Agencies reviewed potential ways to avoid loss of the 0.28 acre of the Riparian/Riverine Habitat. The following describes the avoidance discussions that were analyzed:

- **Feature 1** (**0.03 acre**) lies within the designated Lurin Avenue right-of-way. **Feature 4** (**0.08 acre**) lies within the designated right-of-way of Mariposa Avenue. **Feature 5** (**0.03 acre**) lies within the designated right-of-way of Lurin Avenue. Avoidance of these three features would create a permanent, unsafe condition in the community where roadways need to be constructed within a narrowed footprint, and sidewalks could not be constructed along either Lurin Avenue or Mariposa Avenue. Additionally, area intersection improvements also could not be constructed to meet City requirements because **Features 1** and **4** begin at the current edge of Cole Avenue and avoidance would preclude proper intersection improvements at both locations. Drainage improvements have not been designed in Lot P, but may include an earthen ditch similar to the existing ditch. If that occurs, post-construction water quality would remain in a realigned **Feature 1**.
- **Feature 2** lies at the juncture between the central portion of Tract No. 37731 and its northwest section. This proposed roadway connection is considered important for future circulation purposes. In order to avoid **Feature 2**, Street C would have to be severed between the north and south portions of the tract. A replacement vehicular access point would be needed along Lurin Avenue somewhere between Lots 18 and 32, as well as another access point along Cole or Mariposa Avenues. Tract design changes would likely result in the loss of up to four residential lots. **Feature 2** is a broad swale but it has a larger watershed that produces a 100-year storm event flow of 119 cubic feet per second (cfs). To avoid the floodplain of **Feature 2**, several more lots would likely need to be eliminated, such as Lots 67, 68, 118, 119, and 120 (five additional lots lost). Water quality functions of **Feature 2**, which is almost always dry, most likely occur primarily on the adjoining property to the north in a ditch with cattail vegetation, which is usually inundated. The loss of **Feature 2**, while not unavoidable with the loss of nine lots, would appear to be warranted due to its very small size (**0.10 acre**) and limited functions and values as a Riparian/Riverine feature.
- **Feature 3** lies in the east-central area of the tract. It is very faint and it was determined not to be Riverine/Riparian Habitat due to its isolation and lack of functions and values of the MSHCP. The Wildlife Agencies agreed with this determination.
- **Feature 4** is a roadside ditch along the southerly boundary of the tract. It is artificial and the Wildlife Agencies determined it is Riparian/Riverine Habitat. Diversion into an existing subsurface drain under Mariposa Avenue is

planned as a consequence of street widening, which must occur for the Project to be constructed, resulting in a loss of **0.08 acre** of Riparian/Riverine Habitat.

- **Features 5** and **5A** are considered Riparian/Riverine. Lurin Avenue must be widened to meet current City transportation safety standards; therefore, **Feature 5 (0.03 acre)** loss is unavoidable. The central location of **Feature 5A (0.04 acre)** and the paucity of functional values in **Feature 5A** suggest avoidance is not a feasible alternative.

As described above, the avoidance measures would not reduce the loss of the **0.28 acre** of Riparian/Riverine due to Project implementation. As such, **Mitigation Measure BIO-6** would be implemented to reduce the impact associated with the loss of **0.28 acre** of Riparian/Riverine Habitat.

Mitigation Measure

BIO-6: Prior to the issuance of grading permits, the removal of Features 1, 2, 3, 4, 5, and 5A, which comprise 0.28 acre of Riparian/Riverine area on the Project site, shall be mitigated at a 1:1 mitigation to impact basis with purchase of rehabilitation credit and also purchase of re-establishment credit at the same mitigation ratio (1:1). Purchase of these rehabilitation credits and reestablishment credit shall be required if such credits are available for purchase and are acceptable to all associated agencies including U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and the Santa Ana Regional Water Quality Control Board, if applicable. If these credits are not available or acceptable to the aforementioned agencies, then alternative mitigation shall be identified and approved by each agency.

With implementation of **Mitigation Measure BIO-6,** the proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Impacts would be **less than significant with mitigation incorporated**.

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?	☐	☒	☐	☐

4c. Response: ***(Source: TERACOR Resource Management Inc., Step I Habitat Assessment, Step II, Part a Focused Burrow Survey and Step II, Part B Focused Burrowing Owl Survey for Tentative Tract No. 37731 a 138 Lot Subdivision of 3.58 Gross Acres (32.54 Net Acres), July 24, 2020; TERACOR Resource Management Inc., Determination of Biologically Equivalent or Superior Preservation for Tentative Tract No. 37731, July 24, 2020; TERACOR Resource Management Inc., Preliminary Jurisdictional Delineation and Determination of California Department of Fish and Wildlife and California Regional Water Quality Control Board-Santa Ana Region, and U.S. Army Corps of Engineers Jurisdiction for Tentative Tract No. 37731, July 24, 2020; TERACOR Resource Management, Inc., General Biological Assessment and MSHCP Consistency Analysis for Tentative Tract No. 37731, January 15, 2020, Appendix C).***

Less Than Significant with Mitigation Incorporated. 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:

Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and

hydrologic records. For Riverside, vernal pool and Santa Rosa fairy shrimp, mapping of stock ponds, ephemeral pools and other features shall also be undertaken as determined appropriate by a qualified biologist.

A *Preliminary Jurisdictional Delineation and Determination Report* was prepared for the proposed Project. The field survey on the site found 5 drainage features that had the potential to be State or federally protected. The description of these features is as follows:

- **Feature 1:** Review of historic aerials from 1962 to present indicate the roadside ditch and adjacent willow scrub thicket which comprise Feature 1 is of recent artificial origin. In 1962, there were no hydrologic features in this area. In the 1970s or 1980s a tree grove was established where Feature 1 is now. In the early 2000s, the grove was removed. By 2005/2006, no feature was apparent, but urban development was underway on the north side of Lurin Avenue. By 2014, two 24-inch storm drains discharged urban runoff onto the project site from underneath Cole Avenue. Presumably, a ditch was excavated along Lurin Avenue to convey flows, but the ditch became dysfunctional or blocked and filled in with sediment. Stormflows spread onto the site and created a willow scrub cell. Since the initial investigations in 2016, a public entity (probably a utility company) retrenched the roadside ditch along Lurin Avenue on site to convey the runoff, rather than just allowing uncontrolled discharge out toward the west in the former agricultural field. The willow thicket was trimmed back substantially when the channel was retrenched, presumably to avoid the utility lines along Lurin Avenue. Since 2016, most of the willow growth has died; however, a few still remain. The cell remains scrubby, senescent, and underdeveloped. This cell, including both the ditch and the willow thicket, has declined substantially in extent and vigor since the ditch was retrenched. The ditch is now 0.03 acre. It appears that the willow cell will not long be jurisdictional at the federal (U.S. Army Corps of Engineers [ACOE]) level and because the source of water for the thicket was collected following retrenching a roadside ditch. The cell is in decline and is likely to not persist in the near future. The CDFW confirmed the **0.03 acre** area would be considered jurisdictional by CDFW.
- Feature 2: Feature 2 is located along the westerly property line of the larger southern parcel on site. Feature 2 is actually a continuation of Feature 1; however, Feature 1 joins with another swale (see Exhibit 6 – May 1974 Aerial) and winds through an adjoining rural residential property before entering the site. One sample point in Feature 2 was investigated to determine wetland presence/absence within this drainage. Wetland determinations taken were recorded on Arid West Region Wetland Determination Data Forms. It was marginally positive for the three wetland parameters; however, Feature 2 is small and isolated and does not connect downstream to other "waters." Feature 2 displays no actual bed and bank, it consists of a broad, winding swale through the middle section of the Project site. The upstream portion of Feature 2 comprises only grassy and herbaceous weedy vegetation. The swale, including the four willow scrub trees located within it, is 0.10 acre in extent. The actual hydrological "pathway," however, is quite narrow and was calculated at 0.03 acre, not including the willow overstory. Should the ACOE assert jurisdiction, it would be over 0.03 acre of the drainage. The Regional Water Quality Control Board (RWQCB) acreage is also 0.03 acre. Brome, tumbleweed (*Amararnthus* sp.), bindweed (*Convolvulus arvensis*), common sunflower (*Helianthus annuus*), and common plantain (*Plantago major*) were recorded in this upstream portion. The feature transitions to a discontinuous stand of small arroyo willow trees spaced apart from one another. The CDFW has confirmed that Feature 2 contains **0.10 acre** of jurisdictional streambed including the willow overstory.
- **Feature 3:** Feature 3 is an isolated, grassy swale, which was detected in aerial photography but was very faint during field surveys. The photography suggests moist and denser grass, not water. There is no developed riparian vegetation in Feature 3 with the exception of one or two small senescent shrubs. Feature 3 is 0.02 acre and does not constitute "waters" of the U.S., and its jurisdictional standing with RWQCB and CDFW also seems improbable since it has no detectable stream functions and does not have functions or values normally considered necessary for RWQCB and CDFW to assert jurisdiction. CDFW confirmed this determination on February 8, 2021.
- **Feature 4:** Feature 4 is a 0.08-acre roadside ditch with only ruderal, weedy vegetation. It contains some water-tolerant species such as curly dock (*Rumex crispis*), common sunflower, knotweed (*Polygonum areanstrum*), and dandelion (*Sonchus oleraceus*). Roadside ditches do not constitute "waters" of the U.S., and its jurisdictional status with the RWQCB is not yet determined. The CDFW, on February 8, 2021, indicated that Feature 4 would be considered jurisdictional.

- **Feature 5:** The westerly-most willow cell comprises five willows and one ash tree; it receives storm water and nuisance water discharges from a 12-inch corrugated metal pipe (CMP) drain under Lurin Avenue. Other non-native trees have emerged recently in this area as well, including Palo Verde trees and a single palm tree. The west cell and Palo Verde trees developed as other nearby properties across Lurin Avenue redirected water toward it in the 1980s and 1990s. The willow cell at this location is approximately 0.03 acre in extent, but surface water collects during storm events along Lurin Avenue and then flows southward through a very broad grassy swale. The dominant grass in this seasonally moist feature is Bermuda grass (*Cynodon* sp.) and species like common knotweed. Hydrology to Feature 5 is ephemeral and probably enhanced along the road to some degree by irrigation runoff from the plant nursery across Lurin Avenue. It has not been determined if the RWQCB will assert jurisdiction over any portion of Feature 5. A total of three sampling points in Feature 5 were investigated to determine wetland presence/absence. One point adjacent to the 12 inch CMP discharge pipe under Lurin Avenue was marginally positive for wetland soils; other test pits were not.
- **Feature 5A:** The CDFW had suggested that a narrow band of surface flow was likely to stretch down from Feature 5 to the south property line. The CDFW confirmed this determination on February 8, 2021, and 0.04 acre of this feature was added.

No vernal pools were located on the Project site during field investigations. The sandy loam soils on site are not conducive to ponding and there was no evidence across the property that any location on the site ponded. Soils on site are shallow and underlain by granitic basement rock which, when subsurface water comes into contact with it, conducts water laterally and downward via hydraulic pressure and gravitational forces. As no vernal pools were located on site, vernal pool-associated species were also absent from the site.

Based on field surveys conducted on the Project site, it has preliminarily been determined that the ACOE has no jurisdiction on the Project site. Features 1, 3, and 5 are not jurisdictional due to isolation while Features 1 and 4 are artificial roadside ditches and therefore would not be considered jurisdictional by ACOE since 2008. Furthermore, the 2020 Navigable Waters Protection Rule generally precludes ephemeral "waters: from ACOE regulatory purview. The ACOE will either confirm the results of the *Preliminary Jurisdictional Delineation and Determination Report*, or will inform the Project applicant that authorization under a Nationwide Permit will be required. Since this is preliminary and the ACOE has not officially determined the absence of jurisdictional waters on site. **Mitigation Measure BIO-9** as described below will be implemented.

Field surveys have preliminary determined that up to 0.17 acre of RWQCB-jurisdictional surfaces would be permanently affected through implementation of the proposed Project. Due to this preliminary impact, either a Clean Water Act Section 401 Water Quality Certification and/or a Report of Waste Discharge is required prior commencement of Project construction. The type of authorization depends on whether the ACOE asserts jurisdiction over the Project site. If the ACOE determines that "waters" of the U.S. are present on the Project site, then a 401 Water Quality Certification would be required to be issued which would allow the ACOE to then authorize impacts to "waters" via a Nationwide Permit. If the ACOE confirms that jurisdictional "waters" are not present, then the RWQCB will have the option of not asserting jurisdiction at all, or of asserting jurisdiction over one or more of the five features, and then issuing a Report of Waste Discharge. The 2020 *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* could affect how the RWQCB views this particular site in terms of whether "wetlands" are present, or seek additional information about the presumed extent of wetlands under the State's new wetland definition. It is understood that the RWQCB has not fully implemented procedures to identify and regulate wetlands as now defined by that agency. Confirmation that the Project is compliant with all current requirements of the RWQCB will need to be provided prior to Project implementation.

Finally, field surveys also determined that up to 0.28 acre of CDFW-jurisdictional "streambeds" are present on the Project site and would be directly impacted through Project implementation. Due to these impacts, a CDFW California Fish and Game Code Section 1600 Lake or Streambed Alteration Agreement is required to be processed and approved by CDFW prior to the commencement of construction activities.

As implementation of the proposed Project would permanently impact RWQCB and CDFW protected wetlands, the following mitigation measures would be implemented.

Mitigation Measures

BIO-7: **Restoration of Off-site Habitat in an Approved In-Lieu Fee Program or Mitigation Bank.** Implementation of the proposed Project would result in the loss of 0.17 acre of RWQCB jurisdictional waters on site. The Project applicant shall implement, at a 1:1 ratio, the purchase of 0.17 acre of rehabilitation credits for wetland "waters" at the Riverpark Mitigation Bank. Evidence of compliance with RWQCB requirements shall be submitted to the City of Riverside and the mitigation purchase shall occur prior to the issuance of grading permits for the proposed Project. This mitigation measure is intended to reduce impacts of RWQCB jurisdictional waters on the proposed Project site.

BIO-8: **Restoration of Off-site Habitat in an Approved In-Lieu Fee Program or Mitigation Bank.** Implementation of the proposed Project would result in the loss of 0.28 acre of CDFW jurisdictional waters onsite. The Project applicant shall implement, at a 1:1 ratio, the purchase of 0.28 acre of rehabilitation credits for wetland "waters" at the Riverpark Mitigation Bank. Evidence of compliance with CDFW requirements shall be submitted to the City of Riverside and the mitigation purchase shall occur prior to the issuance of grading permits for the proposed Project. This mitigation measure is intended to reduce impacts of CDFW jurisdictional waters on the proposed Project site.

BIO-9: The Project applicant, prior to final tract map approval, shall provide the *Preliminary Jurisdictional Delineation and Determination* analysis to the U.S. Army Corps of Engineers (ACOE) for their review to determine if any federal jurisdictional waters exist on site. If federal jurisdictional waters are determined to occur on the Project site, the Project applicant shall implement mitigation measures required in the ACOE review of the proposed Project. Final tract maps for the proposed Project shall not be approved by the City of Riverside until a determination of federal jurisdictional waters occurs on the Project site.

BIO-10: **Construction/Post-Construction Best Management Practices.** Construction/Post-Construction Best Management Practices (BMPs) detailed in the Final Water Quality Management Plan (WQMP) shall be implemented. Such BMPs shall be implemented to maintain the quality of water runoff emanating from the Project site during construction and post-construction activities.

Implementation of **Mitigation Measures BIO-7** through **BIO-10** would reduce direct, indirect, and cumulative impacts to State or federally-protected wetlands to a level that is **less than significant**.

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?	☐	☒	☐	☐

4d. Response: ***(Source: MSHCP, General Plan 2025 –Figure OS-7 – MSHCP Cores and Linkage; TERACOR Resource Management Inc., Step I Habitat Assessment, Step II, Part a Focused Burrow Survey and Step II, Part B Focused Burrowing Owl Survey for Tentative Tract No. 37731 a 138 Lot Subdivision of 3.58 Gross Acres (32.54 Net Acres), July 24, 2020; TERACOR Resource Management Inc., Determination of Biologically Equivalent or Superior Preservation for Tentative Tract No. 37731, July 24, 2020; TERACOR Resource Management Inc., Preliminary Jurisdictional Delineation and Determination of California Department of Fish and Wildlife and California Regional Water Quality Control Board-Santa Ana Region, and U.S. Army Corps of Engineers Jurisdiction for Tentative Tract No. 37731, July 24, 2020; TERACOR Resource Management, Inc., General Biological Assessment and MSHCP Consistency Analysis for Tentative Tract No. 37731, December 10, 2019, Appendix C)***

Less Than Significant Impact with Mitigation. Habitat fragmentation occurs when a single, contiguous habitat area is divided into two or more areas, or where an action isolates the two or more new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or to/from one habitat type to another. Habitat fragmentation may occur when a portion of one or more habitats is converted to another habitat, as when scrub habitats are converted into annual grassland habitat because of frequent burning. Wildlife movement includes seasonal migration along corridors, as well as daily movements for foraging. Examples of migration corridors may include areas of unobstructed

movement for deer, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and between roosting and feeding areas for birds.

The Project site is located in and the Orangecrest Specific Plan area, in an area undergoing expanding urbanization due to increase population and development pressures in the City and County of Riverside. As such, the Project site is not located in an area to serve as a movement or migratory corridor, and the MSHCP did not specify any critical habitat connectivity, constrained or otherwise, in the immediate area of the Project site. The nearest intended connective habitat areas to the proposed Project is the Sycamore Canyon Wildness Park habitat area, 3.3 miles to the northeast of the Project site. Recent grading to the east and development to the north and south of the Project site precludes overland connectivity between the Project area and conserved lands to its northeast. The *General Biological Assessment and MSHCP Consistency Analysis* prepared for the Project concluded that no evidence was found to support the possibility that the Project site functions as a corridor or movement pathway for any MSHCP-covered animals.

The Project site is occupied with ornamental trees that have the potential to provide areas for nesting birds. However, raptor nesting onsite is not expected due to the relatively small size of the ornamental trees onsite. During the bird breeding season (typically February 1 through August 31), large trees on or adjacent to the Project site may be used by hawks, ravens, or other large birds for nesting. Trees, shrubs, and other vegetation on site may provide nest sites for smaller birds, and burrowing owls may nest in ground squirrel burrows or some similar feature (however, response 4a above indicates that burrowing owl were not observed on the Project site during field visits). Nesting bird species, with potential to occur are protected by California Fish and Game Code Sections 3503, 3503.5, and 3800, and by the Migratory Bird Treaty Act (16 United States Code 703-711). These laws regulate the take, possession, or destruction of the nest or eggs of any migratory bird or bird of prey. However, the USFWS has recently determined that the Migratory Bird Treaty Act should apply only to "… affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs" and would not be applied to incidental take of migratory birds pursuant to otherwise lawful activities. To avoid potential effects to fully protected raptors, special-status bird species, and other nesting birds protected by the California Fish and Game Code, and for compliance with MSHCP Incidental Take Permit Condition 5, State regulations require a nesting bird pre-construction survey to be conducted by a qualified biologist three days prior to ground-disturbing activities. Should nesting birds be found, an exclusionary buffer would be established by the qualified biologist. The buffer may be up to 500 feet in diameter depending on the species of nesting bird found. This buffer would be clearly marked in the field by construction personnel under guidance of the qualified biologist and construction or clearing would not be conducted within this zone until the qualified biologist determines that the young have fledged or the nest is no longer active. Nesting bird habitat within the biological study area would be resurveyed during bird breeding season if there is a lapse in construction activities longer than seven days. The nesting bird pre-construction survey will be implemented through **Mitigation Measure BIO-3** as described above.

Implementation of **Mitigation Measure BIO-3** would ensure that nesting birds in the Project area are not disturbed during construction activities. Direct, indirect, or cumulative Project impacts would be **less than significant with mitigation**.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐

4e. Response: ***(Source: MSHCP, Title 16 Section 16.72.040 – Establishing the Western Riverside County MSHCP Mitigation Fee, Title 16 Section 16.40.040 – Establishing a Threatened and Endangered Species Fees, City of Riverside Urban Forest Tree Policy Manual; MSHCP, General Plan 2025 –Figure OS-7 – MSHCP Cores and Linkage; TERACOR Resource Management Inc., Step I Habitat Assessment, Step II, Part a Focused Burrow Survey and Step II, Part B Focused Burrowing Owl Survey for Tentative Tract No. 37731 a 138 Lot Subdivision of 3.58 Gross Acres (32.54 Net Acres), July 24, 2020; TERACOR Resource Management Inc., Determination of Biologically Equivalent or Superior Preservation for Tentative Tract No. 37731, July 24, 2020; TERACOR Resource Management Inc., Preliminary Jurisdictional Delineation and Determination of California Department of Fish and Wildlife and California Regional Water Quality Control Board-Santa Ana Region, and U.S. Army Corps of Engineers Jurisdiction for Tentative Tract No. 37731, July 24, 2020; TERACOR Resource Management, Inc., General Biological Assessment and MSHCP Consistency Analysis for Tentative Tract No. 37731, January 15, 2020, Appendix C)***

Less Than Significant Impact. Implementation of the Project is subject to all applicable federal, State, and local policies and regulations related to the protection of biological resources and tree preservation. Additionally, the Project is required to comply with Riverside Municipal Code 16.72.040 establishing the MSHCP mitigation fee and Section 16.40.040 establishing the Threatened and Endangered Species Fees. Construction of the proposed Project would require the removal of ornamental trees on site; however, the Project would not be subject to the Riverside Urban Tree Policy Manual pertaining to tree removal as none of the ornamental trees are located in City owned right-of-way. The Project includes a Landscape Plan (see **Appendix A**), which would be subject to City Design Review and Approval. Implementation of the proposed Project would have a **less than significant impact** directly, indirectly, or cumulatively related to local policies or ordinances protecting biological resources. No mitigation is required.

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?	☐	☒	☐	☐

4f. Response: ***(Source: MSHCP, General Plan 2025 – Figure OS-6 – Stephen's Kangaroo Rat Core Reserve and Other Habitat Conservation Plans (HCP), Stephens' Kangaroo Rat Habitat Conservation Plan, Lake Mathews Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan, and El Sobrante Landfill Habitat Conservation Plan; MSHCP, General Plan 2025 –Figure OS-7 – MSHCP Cores and Linkage; TERACOR Resource Management Inc., Step I Habitat Assessment, Step II, Part a Focused Burrow Survey and Step II, Part B Focused Burrowing Owl Survey for Tentative Tract No. 37731 a 138 Lot Subdivision of 3.58 Gross Acres (32.54 Net Acres), July 24, 2020; TERACOR Resource Management Inc., Determination of Biologically Equivalent or Superior Preservation for Tentative Tract No. 37731, July 24, 2020; TERACOR Resource Management Inc., Preliminary Jurisdictional Delineation and Determination of California Department of Fish and Wildlife and California Regional Water Quality Control Board-Santa Ana Region, and U.S. Army Corps of Engineers Jurisdiction for Tentative Tract No. 37731, July 24, 2020; TERACOR Resource Management, Inc., General Biological Assessment and MSHCP Consistency Analysis for Tentative Tract No. 37731, January 15, 2020, Appendix C)***

Less Than Significant Impact with Mitigation Incorporated. The Project site is located within a semi-urbanized portion of Riverside and is located within the MSHCP; therefore, the Project is subject to applicable provisions of the MSHCP as specified in Checklist Responses 4a, 4b, 4c, and 4d above. The MSHCP provides for the assembly of a Conservation Area consisting of Core Areas and Linkages for the conservation of covered species. The Conservation Area is to be assembled from portions of the MSHCP Criteria Area, which consist of quarter-section (i.e., approximately 160-acre) Criteria Cells, each with specific criteria for the species conservation within that cell. The Project site is not within the MSHCP Criteria Area, therefore, no cell or criteria analysis is required. Although, no burrowing owls were detected on the Project site, the focused burrowing owl survey and habitat assessment recommended conducting a pre-construction survey within 30 days prior to ground disturbance activities (and in accordance with MSHCP requirements) as suitable habitat was located on site (refer to **Mitigation Measure BIO-3**). The proposed Project would affect MSHCP-covered plant and animal species as described above under Thresholds 4a, 4b, 4c, and 4d; however, such impacts are what the MSHCP anticipated and offsets the impact through fee payments.

Project implementation would result in the permanent removal of 22.6 acres of natural and semi-natural habitat as shown above in **Table J.** Of that 22.6 acres, 22.09 acres consist of upland habitats comprised of annual brome grasslands, fiddleneck wildflower field and ornamental trees. In order to reduce impacts to biological resources protected by the MSHCP, **Mitigation Measures BIO-1** through **BIO-5** would be implemented which would reduce impacts to a level that is **less than significant with mitigation incorporated**.

5. CULTURAL RESOURCES

Would the project:

a. Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5 of the *CEQA Guidelines*?	☐	☒	☐	☐

5a. Response: ***(Source: GP 2025 FPEIR Table 5.5-A Historical Districts and Neighborhood Conservation Areas and Appendix D, Title 20 of the Riverside Municipal Code; Cultural Resources Assessment TTM37731 Cole Development Project, April 2020, Appendix D)***

Less Than Significant Impact with Mitigation Incorporated. A *Cultural Resources Assessment*, April 2020, was prepared for the proposed Project to provide the City of Riverside the necessary information and analysis to determine, as mandated by CEQA, whether the proposed Project would cause substantial adverse changes to any historical resources that may exist in or around the Project site. A field survey conducted on the site in July 2019 revealed that the site has been subject to disturbance from weed abatement disking and visibility was poor with most of the ground surface obscured by vegetation. Recent (mid-1970s) wind machine foundation slabs were located on the site, along with sparse modern refuse and building debris on the periphery of the Project site. No cultural resources were identified during the field survey conducted on the Project site.

A records search was conducted in July 2019 which revealed 39 cultural resource studies previously conducted within one mile of the proposed Project, two of which included a portion of the Project site, but neither of which documented any cultural resources. Although no resources have been recorded within the Project area, 41 have been documented within one mile, including 33 archaeological (prehistoric bedrock milling slicks and prehistoric bedrock milling stations) and 8 built environment resources (historic residences, a ranch complex, and former military barracks). The nearest resource is a historic period residence (33-007826) approximately 600 feet to the north of the Project site; and the nearest prehistoric resource is a bedrock milling feature (33-13836-CA-RIV-7563) approximately 1,500 feet to the west of the Project site. Four of the 41 documented resources within a mile of the Project site are listed in the Riverside County Historic Properties Directory.

Although no cultural resources have been previously documented within the Project site and survey results were negative, due to the poor surface visibility and the presence of more than 33 prehistoric resources within a mile, the Project site retains potential for surface and subsurface resources. As such, **Mitigation Measures CUL-1** and **CUL-2** shall be implemented to reduce any impacts to historical resources that may be uncovered onsite during Project construction activities.

Mitigation Measures

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 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. Treatment and final disposition of any cultural and paleontological resources, sacred sites, and human remains if discovered on the project site; and

e. The scheduling and timing of the Cultural Sensitivity Training noted in Mitigation Measure CUL-5.

CUL-2: 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 the cultural resources on the project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place as many cultural and paleontological resources as possible that are located 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.

Implementation of the proposed Project would result in a **less than significant impact with mitigation incorporated** directly, indirectly, or cumulatively to a historical resource pursuant to §15064.5 of the *CEQA Guidelines*.

b. Cause a substantial adverse change in the significance of an archeological resource pursuant to § 15064.5 of the *CEQA Guidelines*?	☐	☒	☐	☐

5b. Response: ***(Source: GP 2025 FPEIR Figure 5.5-1 - Archaeological Sensitivity and Figure 5.5-2 – Prehistoric Cultural Resources Sensitivity, Appendix D – Cultural Resources Study; Cultural Resources Assessment TTM37731 Cole Development Project, April 2020, Appendix D)***

Less Than Significant Impact with Mitigation Incorporated. A records search was conducted in July 2019 which revealed 39 cultural resource studies previously conducted within one mile of the proposed Project, two of which included a portion of the Project site, but neither of which documented any cultural resources. Although no resources have been recorded within the Project area, 41 have been documented within one mile, including 33 archaeological (prehistoric bedrock milling slicks and prehistoric bedrock milling stations) and 8 built environment resources (historic residences, a ranch complex, and former military barracks). The nearest resource is a historic period residence (33-007826) approximately 600 feet to the north of the Project site; and the nearest prehistoric resource is a bedrock milling feature (33-13836-CA-RIV-7563) approximately 1,500 feet to the west of the Project site. Four of the 41 documented resources within a mile of the Project site are listed in the Riverside County Historic Properties Directory.

The proposed Project would be required to comply with all applicable regulations protecting archaeological resources and would be conditioned to cease excavation or construction activities if archaeological resources are identified during execution of the Project. Implementation of **Mitigation Measures CUL-1** and **CUL-2** would ensure that the proposed Project will comply with applicable regulations protecting undiscovered archaeological resources on the site. Therefore, impacts related to previously undiscovered archaeological resources would be **less than significant with mitigation incorporated** directly, indirectly, and cumulatively. No mitigation is required.

c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

5c. Response: ***(Source: GP 2025 FPEIR Figure 5.5-1 - Archaeological Sensitivity and Figure 5.5-2 – Prehistoric Cultural Resources Sensitivity; Cultural Resources Study; Cultural Resources Assessment TTM37731 Cole Development Project, April 2020, Appendix D)***

Less Than Significant with Mitigation Incorporated. An on-site archaeological field survey was conducted in July 2019. No known human remains were present on the proposed Project site and there were no facts or evidence to support the idea that Native Americans or people of European descent are buried on the subject site. Conditions on site remain substantially

unchanged. In the unlikely event that human remains are encountered during proposed Project grading, the proper authorities would be notified, and standard procedures for the respectful handling of human remains during earthmoving activities would be followed in accordance with State law.

Consistent with the requirement of California Code of Regulations (CCR) Section 15064.5(e), if human remains are encountered, work within 25 feet of the discovery shall be redirected and the Riverside County Coroner notified immediately State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be Native American, the Count Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the property owner, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Consistent with CCR Section 15064.5(d), if the remains are determined to be Native American and an MLD is notified, the City shall consult with the MLD as identified by the NAHC to develop an agreement for treatment and disposition of the remains. Implementation of **Mitigation Measures CUL-3** through **CUL-5** would ensure enforcement of requirements if human remains are discovered on the site during Project construction activities.

Mitigation Measures

CUL-3: If human remains are discovered/uncovered/encountered during Project construction activities, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner shall be notified by the City of Riverside of the find immediately. If the remains are determined to be Native American, the County Coroner shall notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD will have the opportunity to offer recommendations for the disposition of the remains.

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:

- 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.
- 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.
- 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:
  - 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.
  - 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.

- If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the Western Science Center or Museum of Riverside by default.

- 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.

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.

Compliance with these provisions and implementation of **Mitigation Measures CUL-2** through **CUL-5** would ensure that any potential impacts to unknown buried human remains would be **less than significant with mitigation incorporated** by ensuring appropriate examination, treatment, and protection of human remains as required by State law.

6. ENERGY

Would the project:

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐

6a. Response: ***(Source: California Code of Regulations Title 24, Part 6 and Part 24, SCAQMD, Project Plan Set; SCE 2017 Power Content Label; SCE Energy Data-Reports and Compliance https://www.sce.com/regulatory/energy-data---reports-and-compliances)***

Less Than Significant Impact. Riverside Public Utilities (RPU) Electric Service, as shown in Figure 5.16-7 of the City of Riverside 2025 General Plan FEIR, would provide electric service to the Project site. The RPU was established in 1895 and includes 90 miles of transmission lines and 1,200 miles of distribution lines within an 80 square mile service area. In the 2016/2017 fiscal year for RPU, the average annual electricity usage per residential customer equated to 7,519 kilowatt-hour.

The proposed Project would include site preparation and development of a Planned Residential Development consisting of 138 single-family residential units, 72,387 square feet of park/open space use in three lots, and lots for water quality management plan basins and drainage areas. The increase in residential units on the site would generate a minimal increase in energy demand from the RPU. To conserve energy usage, the proposed Project would comply with Building Energy Efficient Standards included in Title 24 of the CCR, which requires new residential development to incorporate energy efficiency standards into the proposed Project design. The Project would be required to comply with 2019 Title 24 standards because its building construction phase would commence after January 1, 2020. The Project would include the following energy conservation standards during construction and into its design per the California Green Building Standards Code (Title 24, Part 11 and Part 6 of the California Code of Regulations):

- Mandatory reduction in indoor water use through compliance with specified slow rates for plumbing fixtures and fittings;
- Mandatory reduction in outdoor water use through compliance with a local water-efficient landscaping ordinance or the California Department of Water Resources' Model;
- Water Efficient Landscape Ordinance;
- 65 percent of construction and demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency;
- Inclusion of electric vehicle charging stations within garages of the single-family residential units;
- Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards; and
- Installation of solar panels on single-family residential units.

During construction, the construction contractor would apply the requirements of the SCAQMD to ensure energy-efficient equipment and vehicles are used for the duration of construction. Implementation of these standards into the design features of the Project and during construction would minimize wasteful, inefficient, or unnecessary consumption of energy resources. Implementation of the proposed Project would have a **less than significant impact** directly, indirectly, or cumulatively on energy resources. No mitigation is warranted.

b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

6b. Response: ***(Source: California Code of Regulations Title 24, Part 6 and Part 24, SCAQMD, Project Plan Set; City of Riverside Economic Prosperity Action Plan and Climate Action Plan January 2016)***

Less Than Significant Impact. The proposed Project would be designed to comply with the California Green Building Standards Code; Title 24, Part 6 of the California Code of Regulations; California Building Code and Energy Code standards, as applicable to the type of use being developed on site. After January 1, 2020, residential development applications in

California would be required to include solar panels for on-site renewable energy generation, as part of the statewide effort in becoming more energy efficient and generating cleaner energy options. The proposed Project would also comply with measures that are presented in the Riverside *Economic Prosperity Action Plan and Climate Action Plan January 2016* by implementing different design elements that increase energy efficiency. The measures and how the Project will comply are presented below:

- **Measure E-2: Shade Trees.** The applicant of the proposed Project has prepared a Landscape Plan for the site which includes shade trees in various locations where residential units would be located.
- **Measure SR-3: Utility Programs.** The proposed Project would be designed to support the City's utility programs to promote energy efficiency and the use of renewable energy.
- **Measure T-2: Bicycle Parking.** The applicant, as shown on the Site Design Plans, would develop bicycle parking areas in the common park areas of the site. Additionally, single-family residential units would be design with garages where residents could store their bicycles.
- **Measure T-6: Density.** The density of the proposed Project is compliant with the zoning designations on the site. A PRD would be requested for the establishment of detached single-family residential units, private streets, and common open space. A Variance would also be requested by the applicant to reduce the setback from the ROW to perimeter wall to approximately 8 feet along Cole Avenue and minimum of 5 feet along Lurin Avenue.
- **Measure T-14: Neighborhood Electric Vehicle Programs.** The Project in itself would not offer a neighborhood electric vehicle program but would provide electric vehicle charging stations for residents in their garages to promote the use of electric vehicles and promote the City of Riverside in establishing neighborhood electric vehicle programs.
- **Measure W-1: Water Conservation and Efficiency.** The proposed Project would comply with the California Green Building Standards Code through implementation of fixture flow rates, standards for plumbing fixtures and fittings, and automatic irrigation systems utilizing weather and/or soil moisture-based irrigation controllers.

Based on the Project design features incorporated into the Project, the proposed Project would not conflict with or obstruct a state or local plan related to renewable energy or energy efficiency. Direct, indirect, or cumulative Project impacts would be **less than significant** and no mitigation measures are required.

7. GEOLOGY AND SOILS

Would the project:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐

7i. Response: ***(Source: General Plan 2025 Figure PS-1 – Regional Fault Zones & General Plan 2025 FPEIR Appendix E – Geotechnical Report; Preliminary Geotechnical Investigation and Percolation Testing, TTM 37731, TTM 37732, and TTM 37733, Cole Avenue, Barton Street, and Obsidian Drive, May 28, 2019 Appendix E)***

Less Than Significant Impact. The *Preliminary Geotechnical Investigation and Percolation Testing* (**Appendix E)** technical report prepared for the proposed Project contributes to the analysis in this section. The Project site does not lie within an "Earthquake Fault Zone" as defined by the State of California in the Alquist-Priolo Earthquake Fault Zoning Act. The mapped fault closest to the Project site is the San Jacinto Fault, approximately 13 miles to the northeast of the Project site. Therefore, the potential for ground rupture due to an earthquake beneath the site is considered low.

CCR Title 24, Part 2, the California Building Code (CBC), establishes minimum standards for building design in the State, and it is consistent with or more stringent than Uniform Building Code requirements. Local codes are permitted to be more restrictive than Title 24, but are required to be no less restrictive. The CBC is designed and implemented to improve building safety, sustainability, and consistency, and to integrate new technology and construction methods to construction projects throughout California. The CBC is published every three years and intervening Code Adoption Cycles produce Supplement pages 18 months into each three-year period. All proposed amendments to California's building standards are subject to a lengthy and transparent public participation process throughout each code adoption cycle.

Chapter 16 of the CBC regards General Design Requirements, includes regulations governing seismically resistant construction (Chapter 16, Division IV) and construction to protect people and property from hazards associated with excavation cave-ins and falling debris or construction materials. Chapter 18 and Chapter 33 regard site demolition, excavations, foundations, retaining walls, and grading, including requirements for seismically resistant design, foundation investigations, stable cut and fill slopes, and drainage and erosion control. The procedures and limitations for the design of structures are based on site characteristics, occupancy type, configuration, structural system height, and seismic zoning. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in California Occupational Safety and Health Administration regulations (CCR Title 8).

State law requires the design and construction of new structures to comply with current CBC requirements, which address general geologic, seismic (including ground shaking), and soil constraints for new buildings. Additionally, General Plan Policy PS-1.1 requires the City to ensure all new development in the City abides by the most recently adopted City and State seismic and geotechnical requirements.

Pursuant to State law, and in accordance with City of Riverside General Plan Policy PS-1.1, the proposed Project would be designed to resist seismic impacts in accordance with current CBC requirements and Title 16 (Buildings and Construction) of the Riverside Municipal Code (RMC). Prior to issuance of any entitlements, the City would review and approve plans to confirm that the siting, design, and construction of all single-family residential units (and associated structures) are in accordance with the regulations established in the CBC, City Building Code, and/or professional engineering standards appropriate for the seismic zone in which such construction may occur. Additionally, all grading plans would be subject to City review in accordance with RMC, Section 17.16.010. As required by RMC, Section 17/16.010, the recommendations cited in the Project-specific soils and geotechnical reports must be incorporated into the design of the site-specific grading plans, therefore, it is reasonable to conclude the appropriate Project-specific geotechnical recommendations would be reviewed and approved as part of the grading permit. Compliance with CBC regulations and implementation of recommended measures in

Sections 8.1 through 8.14 of the Project-specific geotechnical study would ensure that Project impacts would be **less than significant** directly, indirectly, or cumulatively. No mitigation measures are required.

ii. Strong seismic ground shaking?	☐	☐	☒	☐

7ii. Response: ***(Source: General Plan 2025 FPEIR Appendix E – Geotechnical Report; Preliminary Geotechnical Investigation and Percolation Testing, TTM 37731, TTM 37732, and TTM 37733, Cole Avenue, Barton Street, and Obsidian Drive, May 28, 2019, Appendix E)***

Less Than Significant Impact. The Project site is located in a seismically active area that has historically been affected by generally moderate to occasionally high levels of ground motion. The site lies within 50 miles of several active faults (San Jacinto Fault, the closest, approximately 13 miles from the Project site); therefore, during the life of the Project, the property would most likely experience similar moderate to occasionally high ground shaking from these fault zones, as well as some background shaking from other seismically active areas of the Southern California region. The peak ground acceleration is anticipated to be 0.500 g, which equates to potentially severe ground shaking. No known active faults are known to cross through the site.

Design and construction in accordance with the current CBC requirements is anticipated to adequately address potential ground shaking effects on the newly developed 138 single-family residential units on the site. Pursuant to State law and in accordance with General Plan Policy PS-1.1, the 41 single-family residential units of the proposed Project would be designed to resist seismic impacts in accordance with current CBC requirements and Title 16 (Buildings and Construction) of the RMC. Prior to issuance of any permit(s), the City would review and approve plans to confirm that the siting, design and construction of all structures and facilities are in accordance with the regulations established in the CBC, City Building Code, and/or professional engineering standards appropriate for the seismic zone in which such construction may occur. Additionally, grading plans would be subject to City review and approval in accordance with RMC, Section 17.16.010.

Because the proposed Project would comply with CBC regulations that protect habitable structures from seismic hazards and would implement recommended measures in Sections 8.1 through 8.14 of the Project-specific geotechnical study, direct, indirect, or cumulative impacts associated with strong seismic ground shaking would have **a less than significant impact.** No mitigation measures are required.

iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐

7iii. Response: ***(Source: Preliminary Geotechnical Investigation and Percolation Testing, TTM 37731, TTM 37732, and TTM 37733, Cole Avenue, Barton Street, and Obsidian Drive, May 28, 2019 Appendix E; General Plan 2025 FPEIR Figure 5.6-3 Generalized Liquefaction Zones)***

Less Than Significant Impact. According to *Figure 5.6-3 Generalized Liquefaction Zone* of the General Plan 2025 FPEIR, the Project site is not located in an area known for liquefaction. As part of the Project-specific geotechnical report (**Appendix E**), five borings were drilled to a maximum depth of approximately 18 feet below ground surface. Groundwater was not found in one boring (Boring B-2a) at a depth of 12 feet 11 inches. Colluvium and Val Verde Tonalite Bedrock was encountered on the Project site; both of which are not conducive soil/geological features for liquefaction to occur. Based on results of the Project-specific geotechnical study, neither liquefaction nor seismic "dry-sand" settlement is a design issue with the proposed Project. Although the Project site would not be susceptible to liquefaction or settlement, the development would still be designed to meet CBC requirements, as described below.

Pursuant to State law and in accordance with General Plan Policy PS-1.1, the proposed Project would be designed to resist seismic impacts (including seismic-related ground failure and liquefaction) in accordance with current CBC requirements and Title 16 (Buildings and Construction) of the RMC. Prior to issuance of any permit(s), the City would review and approve plans to confirm that the siting, design and construction of all single-family residential units are in accordance with the regulations established in the CBC, City Building Code, and/or professional engineering standards appropriate for the seismic zone in which such construction may occur. Additionally, all grading plans would be subject to City staff review for regulatory compliance in accordance with RMC, Section 17.16.010. Proper engineering design and construction in conformance with the current CBC standards and Project-specific recommendations in Sections 8.1 through 8.14 of the Project-specific geotechnical

study would ensure that seismic-related ground failure, including liquefaction, would be reduced to **less than significant** levels directly, indirectly, and cumulatively. No mitigation measures are required.

iv. Landslides?	☐	☐	☒	☐

7iv. Response: ***(Source: Preliminary Geotechnical Investigation and Percolation Testing, TTM 37731, TTM 37732, and TTM 37733, Cole Avenue, Barton Street, and Obsidian Drive, May 28, 2019 Appendix E; General Plan 2025 FPEIR Figure 5.6-1 Areas Underlain by Steep Slopes)***

Less Than Significant Impact. The Geology and Soils section of the City's General Plan 2025 FPEIR identifies "areas of high susceptibility to seismically induced landslides and rock falls correspond to steep slopes in excess of 30 percent." Figure 5.6-1 of the General Plan 2025 FPEIR indicates that the Project site is located on land identified as having a 0 to 10 percent slope. The Project site has an average natural slope that equates to 0.53 percent. The Project-specific geotechnical report determined that landslides are not a design impact consideration at the Project site as the site is relatively topographically flat and lacks significant onside or adjacent slopes.

The Project-specific geotechnical report indicates that proposed grading on the Project site would create fill, cut, and fill-over-cut slopes of up to 10 feet in height. In general, permanent graded cut slopes, fill slopes, and fill-over-cut slopes inclined no steeper than a 2:1 slope with vertical heights of 10 feet or less would possess Factors of Safety of 1.5 or greater and 1.1 or greater under pseudo-static loading. The Project site be designed to meet CBC requirements, as described below.

Pursuant to State law and in accordance with General Plan Policy PS-1.1, the proposed Project would be designed to resist seismic impacts (including seismic-related ground failure and liquefaction) in accordance with current CBC requirements and Title 16 (Buildings and Construction) of the RMC. Prior to issuance of any permit(s), the City would review and approve plans to confirm that the siting, design and construction of all single-family residential units are in accordance with the regulations established in the CBC, City Building Code, and/or professional engineering standards appropriate for the seismic zone in which such construction may occur. Additionally, all grading plans would be subject to City staff review for regulatory compliance in accordance with RMC, Section 17.16.010. Proper engineering design and construction in conformance with the current CBC standards and Project-specific recommendations in Sections 8.1 through 8.14 of the Project-specific geotechnical study would ensure that seismic-related ground failure, including landslides, would be reduced to **less than significant** levels directly, indirectly, and cumulatively. No mitigation measures are required.

b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

7b. Response: ***(Source: General Plan 2025 FPEIR Figure 5.6-1 – Areas Underlain by Steep Slope, Figure 5.6-4 – Soils, Table 5.6-B – Soil Types, Title 18 – Subdivision Code, Title 17 – Grading Code, and SWPPP; Preliminary Geotechnical Investigation and Percolation Testing, TTM 37731, TTM 37732, and TTM 37733, Cole Avenue, Barton Street, and Obsidian Drive, May 28, 2019, Appendix E; USDA Web Soil Survey Website https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx)***

Less Than Significant Impact. The Project site is occupied by the following soils: Fallbrook fine sandy loam, 2 to 8 percent slopes, eroded (FfC2); Monserate sandy loam, 0 to 5 percent slopes (MmB); and Fallbrook sandy loam, shallow, 5 to 8 percent slopes, eroded (FbC2). Colluvium (Qcol) was encountered across the Project site ranging between 1.5 to 6 feet in depth. These deposits generally consist of silty sand and silt. The materials associated with Colluvium are characterized as loose to very dense or soft to very stiff, and dry to moist. Val Verde Tonalite Bedrock (Kvt) was encountered underlying the Colluvium across the Project site. The granitic bedrock encountered is generally characterized as a weathered, moderately strong material that is medium to coarse grained. The granitic bedrock was found on the site at a depth between 4 to 7.5 feet.

Erosion and loss of topsoil could occur as a result of the Project. State and federal requirements call for the preparation and implementation of a SWPPP establishing erosion and sediment controls for construction activities. The Project must also comply with the National Pollutant Discharge Elimination System (NPDES) regulations. In addition, with the erosion control standards for which all development activity must comply (Title 18), the Grading Code (Title 17) also requires the implementation of measures designed to minimize soil erosion. Development of the project site would include incorporation of the recommended design measures of the geotechnical study in Sections 8.1 through 8.14. Compliance with State and

federal requirements as well as with Titles 18 and 17 would ensure that soil erosion or loss of topsoil impacts would be **less than significant** directly, indirectly, or cumulatively. No mitigation measures are required.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐

7c. Response: ***(Source: General Plan 2025 Figure PS-1 – Regional Fault Zones, Figure PS-2 – Liquefaction Zones, General Plan 2025 FPEIR Figure PS-3 – Soils with High Shrink-Swell Potential, Figure 5.6-1 – Areas Underlain by Steep Slope, Figure 5.6-4 – Soils, Table 5.6-B – Soil Types, and Appendix E – Geotechnical Report; Preliminary Geotechnical Investigation and Percolation Testing, TTM 37731, TTM 37732, and TTM 37733, Cole Avenue, Barton Street, and Obsidian Drive, May 28, 2019 Appendix E)***

Less Than Significant Impact. The Project site is located within the Peninsular Ranges geomorphic province, which forms a broad, northwest-southeast trending mountain belt that extends from Baja California to the Lost Angeles/San Bernardino basins, and terminates against the Transverse Ranges. The Peninsular Ranges are primarily composed of Mesozoic granites and volcanic rocks. The Project site resides on granitic rocks, with a thin cover of colluvial deposits. Compliance with the City's existing codes and the policies contained in the General Plan 2025 help to ensure that impacts related to geologic conditions are reduced to **less than significant** levels directly, indirectly, and cumulatively.

Landslides: The Project-specific geotechnical report indicates that proposed grading on the Project site would create fill, cut, and fill-over-cut slopes of up to 10 feet in height. In general, permanent graded cut slopes, fill slopes, and fill-over-cut slopes inclined no steeper than a 2:1 slope with vertical heights of 10 feet or less would possess Factors of Safety of 1.5 or greater and 1.1 or greater under pseudo-static loading. The Project site be designed to meet CBC requirements to reduce impacts associated with landslide events. Impacts would be **less than significant**. (See response 7(a)(iv).)

Lateral Spreading: Adherence to the City's Grading and Subdivision Codes as well as the California Building Code in the design of this Project would prevent lateral spreading. The design features that are preventing lateral spreading are retaining walls and the proposed residential units would be wood-framed structures with concrete slabs on grade yielding light foundation loads. Impacts would be **less than significant.**

Subsidence: The geotechnical study prepared for this Project indicates that the volumetric changes in earth quantities would occur when the site is excavated and on-site soil materials are replaced with compacted fill. Based on the properties of the soil, subsidence could occur but, with adherence to the recommendations found in the geotechnical study, the impact would be reduced to **less than significant** levels.

Liquefaction: As part of the Project-specific geotechnical report (**Appendix E**), five borings were drilled to a maximum depth of approximately 18 feet below ground surface. Groundwater was not found in one boring (Boring B-2a) at a depth of 12 feet, 11 inches. Colluvium and Val Verde Tonalite Bedrock was encountered on the Project site, neither of which is a conducive soil/geological feature for liquefaction to occur. Based on results of the Project-specific geotechnical study, neither liquefaction nor seismic "dry-sand" settlement is a design issue with the proposed Project. Although the Project site would not be susceptible to liquefaction or settlement, the development would still be designed to meet CBC requirements. Impacts would be **less than** significant. (See response 7(a)(iii).)

Collapse: Adherence to the City's grading and building requirements would ensure that the Project site is adequately prepared to prevent the collapse of the graded pads and/or slopes. Impacts would be **less than significant.**

Pursuant to State law and in accordance with General Plan Policy PS-1.1, the proposed Project would be designed to resist impacts related to unstable geologic units or soils in accordance with current CBC requirements and Title 16 (Buildings and Construction) of the RMC. Prior to issuance of any entitlements, the City would review and approve plans to confirm that the siting, design and construction of single-family residential units are in accordance with the regulations established in the CBC, City Building Code, and/or professional engineering standards appropriate for the soil types on which such construction may occur. As stated in the Project-specific geotechnical report, additional geotechnical evaluation is required once grading plans,

development plans, foundation plans, and structural loads become available. Upon further geotechnical evaluation, additional recommendations may be proposed by the geotechnical engineer, the implementation of which would be required pursuant to 2016 CBC regulations, RMC Title 16 (Buildings and Construction) and Title 17 (Grading), and General Plan Policy PS-1.1. Additionally, all grading plans would be subject to City staff review for regulatory compliance in accordance with RMC, Section 17.16.010. Because the proposed Project must comply with current CBC regulations that protect habitable structures from unstable geologic units or soils, direct, indirect, and cumulative impacts associated with unstable geologic units or soils would be **less than significant**. No mitigation measures are required.

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

7d. Response: ***(Source: General Plan 2025 FPEIR Figure 5.6-4 – Soils, Figure 5.6-4 – Soils, Table 5.6-B – Soil Types, Figure 5.6-5 – Soils with High Shrink-Swell Potential, Appendix E – Geotechnical Report, and California Building Code as adopted by the City of Riverside and set out in Title 16 of the Riverside Municipal Code; ; Preliminary Geotechnical Investigation and Percolation Testing, TTM 37731, TTM 37732, and TTM 37733, Cole Avenue, Barton Street, and Obsidian Drive, May 28, 2019 Appendix E)***

Less Than Significant Impact. Expansive soils, defined under CBC, expand when wet, and shrink when dry. The amount or type of clay present in soil determines its shrink-swell potential. As evaluated by the project-specific geotechnical study, on-site soils generally consist of clayey sand, silty sand, silt and clay, and laboratory testing on the soil indicated these soils are non-expansive.

Pursuant to State law and in accordance with General Plan Policy PS-1.1, the proposed Project would be designed to resist impacts related to expansive soils in accordance with current CBC requirements and Title 16 (Buildings and Construction) of the RMC. Prior to issuance of any entitlements, the City would review and approve plans to confirm that the siting, design and construction of single-family residential units are in accordance with the regulations established in the CBC, City Building Code, and/or professional engineering standards appropriate for the soil types on which such construction may occur. As stated in the Project-specific geotechnical report, additional geotechnical evaluation is required once grading plans, development plans, foundation plans, and structural loads become available. Upon further geotechnical evaluation, additional recommendations may be proposed by the geotechnical engineer, the implementation of which would be required pursuant to 2016 CBC regulations, RMC Title 16 (Buildings and Construction) and Title 17 (Grading), and General Plan Policy PS-1.1. Additionally, all grading plans would be subject to City staff review for regulatory compliance in accordance with RMC, Section 17.16.010. Because the proposed Project must comply with current CBC regulations that protect habitable structures from expansive soils, direct, indirect, and cumulative impacts associated with unstable geologic units or soils would be **less than significant**. No mitigation measures are required.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

7e. Response: ***(Source: Project Set Plans)***

No Impact. The proposed Project would develop an internal wastewater infrastructure system that would connect directly to existing wastewater infrastructure in adjacent roads. The proposed Project does not include the installation of septic tanks or alternative wastewater disposal systems in its design, as existing off-site sewer connections are available. **No impact** directly, indirectly, or cumulatively would occur with implementation of the proposed Project. No mitigation is required.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

7f. Response: ***(Source: General Plan 2025 Policy HP-1.3; Project Plan Set)***

Less Than Significant. The project-specific geotechnical report that was prepared for the project indicated that the site is underlain by undocumented fill (afu), Colluvium (Qcol), overlying Val Verde Tonalite Bedrock (Kvt) granitic bedrock.

According to the General Plan 2025, as of 2004, the area south of Mockingbird Canyon Reservoir, 4.8 miles southeast of the Project site, is the only portion of the City considered as a place of paleontological importance. Accordingly, the Project site is categorized as having a *low potential* to yield paleontological resources.

This category includes sedimentary rock units that: (1) are potentially fossiliferous but have not yielded significant fossils in the past; (2) have not yet yielded fossils but possess a potential to contain fossil remains; or (3) contain common and/or widespread invertebrate fossils if the taxonomy, phylogeny, and ecology of the species contained in the rock are well understood. Sedimentary rocks expected to contain vertebrate fossils are not placed in this category because vertebrates are generally rare and found in more localized strata. Rock units designated as low potential generally do not require monitoring and mitigation during grading and excavation. However, as excavation for construction gets underway, it is possible that new and unanticipated paleontological resources might be encountered. If the resource is determined to be significant, monitoring and mitigation are required during grading and excavation from that time on.

Due to the prior grading activities on site and surface disturbance required to develop the previous single-family residential unit, the likelihood of encountering subsurface paleontological resources during excavation for the proposed Project is low. In accordance with State law, the proposed Project would be required to comply with Section 5097.5 of the California Public Resources Code and California Administrative Code, Title 14, Section 4307, which state that no person shall remove, injure, deface or destroy any object of paleontological, archaeological, or historical interest or value. Penal Code Section 622.5 establishes as a misdemeanor the willful injury, disfiguration, defacement, or destruction of any object or thing of paleontological interest or value, whether situated on private or public lands. Finally, Section 17.28.010(H)(3) of the RMC enables the City to require the project applicant to make reasonable effort to preserve or mitigate impacts to any affected significant or unique paleontological resource. Pursuant to Section 17.28.010(H)(3) of the RMC, the City's Community & Economic Development Department may inspect construction activities onsite for compliance with project conditions of approval, including protection of paleontological resources.

Since the proposed Project footprint is within a previously cleared site at one time used for agricultural activities, there is no indication that paleontological resources occur therein. The proposed Project would be required to comply with all applicable regulations protecting paleontological resources and would be conditioned to cease excavation or construction activities if paleontological resources are identified during execution of the Project. Therefore, impacts related to previously undiscovered paleontological resources would be **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

8. GREENHOUSE GAS EMISSIONS

Would the project:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

8a. Response: ***(Source: Air Quality and Greenhouse Gas Analysis TTM37731 Cole Development, May 2020 (Appendix B); SCAQMD Greenhouse Gases CEQA Significance Thresholds Working Group Meeting No. 15. September 28, 2010, City of Riverside Restorative Growthprint – Climate Action Plan RRG, 2015)***

Less Than Significant Impact. *State CEQA Guidelines* Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

Currently, there is no statewide greenhouse gas (GHG) emissions threshold used to determine potential GHG emissions impacts of a project. The SCAQMD uses the following tiered approach for evaluating GHG emissions for development projects where the SCAQMD is not the lead agency.

Tier 1 Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

Tier 2 Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

Tier 3 Consider whether the proposed project generates GHG emissions in excess of screening thresholds for individual land uses. A 10,000 metric ton of carbon dioxide equivalent per year (MT CO_2e/year) threshold for industrial uses would be recommended for use by all lead agencies. Under Option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO_2e/year), commercial projects (1,400 MT CO_2e/year), and mixed-use projects (3,000 MT CO_2e/year). Under Option 2, a single numerical screening threshold of 3,000 MT CO_2e/year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Tier 4 Establishes a decision tree approach that includes compliance options for projects that have incorporated design features into the project and/or implement GHG mitigation measures.

- Efficiency Target (2020 Targets).
  - 4.8 MT CO_2e per service population (the number of jobs and the number of residents provided by a project) for project level threshold (land use emissions only).
  - 6.6 MT CO_2e per service population for plan level thresholds (all sectors).
- Efficiency Target (2035 Targets).
  - 3.0 MT CO_2e per service population for project level threshold.
  - 4.1 MT CO_2e per service population for plan level threshold.

If a project fails to meet any of these emissions reduction targets and efficiency targets, the project would move to Tier 5.

Tier 5 Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

In 2014, the City of Riverside was one of 12 cities that collaborated with the Western Riverside Council of Governments on a Subregional Climate Action Plan (CAP) that includes 36 measures to guide the City's GHG reduction efforts through 2020. Through the Western Riverside Council of Governments Subregional Climate Action Plan process, the City has a Climate

Action Plan (CAP) that identifies emissions target of 2,224,908 MT CO_2e, which is 26.4 percent below the City's 2007 baseline and 15 percent below 2010 emissions. To further develop local GHG reduction measures for the Riverside Restorative Growthprint Economic Prosperity Action Plan and CAP, the City conducted a detailed assessment of local strategies and actions related to the measures identified in the Subregional CAP and expanded the discussion and analysis with respect to implementation (particularly post-2020), costs and funding, performance metrics, and local co-benefits. Importantly, the discussions identify local economic and entrepreneurship opportunities that can be integrated with local, regional, and global greenhouse gas reductions (e.g., the development of green enterprise zones). The Project is consistent with the Riverside Restorative Growthprint Economic Prosperity Action Plan and CAP and Assembly Bill (AB) 32. Nonetheless, for informational purposes, the project's construction- and operational-related GHG emissions have been identified below. The Tier 3, Option 1 approach for residential projects (3,000 metric tons of CO_2e) is utilized in order to determine the significance for the proposed Project's GHG emissions. Overall, the following activities associated with the proposed Project could directly or indirectly contribute to the generation of GHG emissions.

Construction Activities: During construction of the Project, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-fuel based fuels creates GHGs (e.g., carbon dioxide (CO_2), methane [CH_4] and nitrous oxide [N_2O]). Furthermore, CH_4 is emitted during the fueling of heavy equipment.

Gas, Electricity, and Water Use: Natural gas use results in the emission of two GHGs: CH_4 (the major component of natural gas) and CO_2 (from combustion of natural gas). Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. California's water conveyance system is energy-intensive. Preliminary estimates indicate that the total energy used to pump and treat this water exceeds 6.5 percent of the total electricity used in the State per year. Title 24 standards have been documented to reduce energy usage (e.g., for lighting, heating, cooling, ventilation, and water heating) and associated GHG emissions.

Solid Waste Disposal: Solid waste generated by the Project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH_4 from the anaerobic decomposition of organic materials. CH_4 is 25 times more potent a GHG than CO_2. However, landfill CH_4 can also be a source of energy. In addition, many materials in landfills do not decompose fully and the carbon that remains is sequestered in the landfill and not released into the atmosphere.

Motor Vehicle Use: Transportation associated with the proposed Project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips.

Short-Term (Construction) Emissions. The Project construction emissions were calculated using CalEEMod, which calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecast based on the proposed construction schedule and applying the mobile source derived from the SCAQMD-recommended CalEEMod. The calculations of the emissions generated during the Project construction activities reflects the types and quantities of construction equipment that would be used to grade and excavate the Project site, construct the residential units and related improvements, and plant new landscaping within the Project site. **Table K: Construction Greenhouse Gas Emissions** lists the CO_2 emissions for each of the planned construction phases.

The emissions detailed in **Table K** would be generated from the proposed Project constructed in compliance with the latest California Department of Resources Recycling and Recovery Sustainable (Green) Building Program regulations. Specifically, at least 50 percent of all construction materials (including, but not limited to, soil, mulch, vegetation, concrete, lumber, metal, and cardboard) shall be recycled/reused and "green building materials" (e.g., those materials that are rapidly renewable or resource-efficient, and recycled and manufactured in an environmentally friendly way) shall be used for at least 10 percent of the Project.

Table K: Construction Greenhouse Gas Emissions

Construction Phase	Peak Annual Emissions (MT per year)				Total Emissions per Calendar Year (MT/CO_2e)
	CO_2	CH_4	N_2O	CO_2e	
Site Preparation	52.81	0.02	0	53.22	**1,506.81**
Grading	211.72	0.07	0	213.38	
Building Construction	1,166.07	0.22	0	1,171.55	
Paving	58.73	0.02	0	59.18	
Architectural Coatings	9.46	<0.01	0	9.47	
Total Construction Emissions Amortized over 30 years					**50.23**

Source: LSA, *Air Quality and Greenhouse Gas Analysis Technical Report,* Table M, pg. 49, May 2020.

CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT/CO_2e = metric tons of carbon dioxide equivalent
MT = metric tons
N_2O = nitrous oxide

Long-Term (Operational) Emissions. Long-term operation of the proposed Project would generate GHG emissions from area and mobile sources and indirect emissions from stationary sources associated with energy consumption. Mobile-source emissions of greenhouse gases would include Project-generated vehicle trips associated with on-site uses. Area-source emissions would be associated with activities (e.g., landscaping and maintenance of proposed land uses, natural gas for heating, and other sources). Increases in stationary-source emissions would also occur at off-site utility providers as a result of demand for electricity, natural gas, and water by the proposed Project. Construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The GHG emission estimates presented in **Table L: Operational Greenhouse Gas Emissions** detail the emissions associated with the level of development envisioned by the proposed Project.

Table L: Operational Greenhouse Gas Emissions

Source	Pollutant Emissions (MT/yr)					
	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	CO_2e
Construction Emissions Amortized over 30 Years	0	49.96	49.96	0.01	0	50.23
Operational Emissions						
Area	0	30.49	30.49	< 0.01	< 0.01	30.72
Energy	0	586.00	586.00	0.02	< 0.01	588.06
Mobile	0	1,902.69	1,902.69	0.09	0	1,905.02
Waste	32.87	0	32.87	1.94	0	81.44
Water	2.28	61.56	63.84	0.23	< 0.01	71.52
Total Project Emissions	**35.73**	**2,765.50**	**2,801.33**	**2.36**	**0**	**2,726.99**
SCAQMD Tier 3 Threshold						**3,000**
Significant?						**No**

Source: LSA, *Air Quality and Greenhouse Gas Analysis Technical Report,* Table N, pg. 50, May 2020.

Bio-CO_2 = biologically generated CO_2
CO_2 = carbon dioxide
MT/yr = metric tons per year
NBio-CO_2 = non-biologically generated CO_2
CH_4 = methane
CO_2e = carbon dioxide equivalent
N_2O = nitrous oxide
SCAQMD = South Coast Air Quality Management District

The remaining CO_2e emissions are primarily associated with building heating systems and increased regional power plant electricity generation due to the proposed Project's electrical demands. At present, there is a federal ban on chlorofluorocarbons; therefore, it is assumed the Project would not generate emissions of chlorofluorocarbons. The Project may emit a small amount of hydrofluorocarbons from leakage and service of refrigeration and air-conditioning equipment and from disposal at the end of the life of the equipment. However, the details regarding refrigerants to be used at the Project site are unknown at this time. Perfluorocarbons and sulfur hexafluoride are typically used in industrial applications, which would

not occur on the Project site. Therefore, the Project is not anticipated to contribute significant emissions of these additional GHGs.

Because climate change impacts are cumulative in nature, no typical single project can result in emission of such a magnitude that it, in and of itself, would be significant on a project basis. The Project's GHG emissions of 2,726.99 MT CO_2e are less than the SCAQMD-recommended interim Option 1 threshold of 3,000 MT CO_2e for all land use types.

The emissions detailed in **Table L** would be generated from the proposed Project operated in compliance with the latest California Building Code's Title 24 energy standards. Specifically, the Project design would incorporate increased insulation such that heat transfer and thermal bridging is minimized, as well as ENERGY STAR® or better rated windows, space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment. All on-site lighting would be energy efficient, and daylight would be utilized as an integral component of residential development lighting systems. On-site landscaping would be drought tolerant and incorporate water-efficient irrigation systems and devices such as soil moisture-based irrigation controls. Additionally, buildings would be designed to be water efficient and incorporate water-efficient fixtures and appliances, including low-flow faucets and toilets. Furthermore, Project design would restrict watering methods to prohibit systems that apply water to non-vegetated surfaces and to control runoff. To facilitate and encourage recycling to reduce landfill-associated emissions, among others, residents would have bins for both recycling and solid waste generation.

Furthermore, this analysis considers GHG emission significance by determining the Project's consistency with the policies and goals in the Riverside Restorative Growthprint Economic Prosperity Action Plan and Climate Action Plan, Assembly Bill 32, and Executive Order S-3-05. As discussed in Checklist Response 7b, below, the Project would be consistent with the strategies and goals from the Riverside Restorative Growthprint Economic Prosperity Action Plan and Climate Action Plan and would not conflict with Assembly Bill 32, which establishes a goal of reducing GHG emissions to 1990 levels by the year 2020, or Executive Order S-3-05, which establishes a goal of reducing GHG emissions 80 percent below 1990 levels by 2050. In order to ensure that the proposed Project complies with and would not conflict with or impede the implementation of reduction goals identified by the City or State, the proposed Project would comply with the latest California Building Code's Title 24 energy standards regarding the energy efficiency of buildings, appliances, and lighting, which would reduce the Project's electricity demand by enhancing the design and construction of proposed buildings through the use of features that encourage sustainable construction practices having a positive environmental impact and encouraging sustainable construction practices.

As detailed in detailed in **Tables K** and **L**, the Project's greenhouse gas emissions (2,726.99 metric tons of CO_2e) would not exceed the SCAQMD-recommended Tier 3, Option 1 threshold of 3,000 MT CO_2e. Accordingly, the proposed Project would not conflict with or impede implementation of the reduction goals identified in AB 32, EO S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor. Therefore, the proposed Project would not generate GHG emissions, directly, indirectly, or cumulatively that would have a significant impact on the environment. Impacts would be **less than significant** and no mitigation is required.

b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

8b. Response: ***(Source: Air Quality and Greenhouse Gas Analysis TTM37731 Cole Development, May 2020 (Appendix B))***

Less Than Significant Impact. In 2014, the City was one of 12 that collaborated with the Western Riverside Council of Governments on a Subregional Climate Action Plan that includes 36 measures to guide the City's greenhouse gas reduction efforts through 2020. Through the Western Riverside Council of Governments Subregional Climate Action Plan process, the City has committed to a 2020 emissions target of 2,224,908 MT CO_2e, which is 26.4 percent below the City's 2007 baseline and 15 percent below 2010 emissions. This represents a reduction of 779,304 MT CO_2e from the City's 2020 business-as-usual forecast. The City is aiming for a 2035 emissions target of 1,542,274 MT CO_2e, which is 49 percent below the 2007 baseline and represents a reduction of 2,120,931 MT CO_2e from the 2035 business-as-usual forecast. The City adopted its Riverside Restorative Growthprint Economic Prosperity Action Plan and Climate Action Plan in January 2016.

The Riverside Restorative Growthprint Economic Prosperity Action Plan and Climate Action Plan expands upon the efforts of the Western Riverside Council of Governments Subregional Climate Action Plan, employing local measures to help the City achieve deep greenhouse gas reductions through the year 2035. To further develop local GHG reduction measures for the Riverside Restorative Growthprint Economic Prosperity Action Plan and Climate Action Plan, the City conducted a detailed assessment of local strategies and actions related to the measures identified in the Subregional CAP and expanded the discussion and analysis with respect to implementation (particularly post-2020), costs and funding, performance metrics, and local co-benefits. Importantly, the discussions identify local economic and entrepreneurship opportunities that can be integrated with local, regional, and global greenhouse gas reductions (e.g., the development of green enterprise zones).

Table M: Riverside Restorative Growthprint Action Plan Emission Reduction Strategies Consistency lists the applicable strategies and goals from the Riverside Growthprint Climate Action Plan and identifies how the proposed Project achieves compliance.

Table M: Riverside Restorative Growthprint Climate Action Plan Emission Reduction Strategies Consistency

Measure/Regulation	Project Consistency
State and Regional Regulations	
Energy	
California Building Energy Efficiency Standards (Title 24, Part 6). Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).	**Consistent.** The proposed project will comply with the requirements of the 2019 California Building Energy Efficiency Standards (Title 24, Part 6) including the introduction of photovoltaic panels on each home into the prescriptive package, improvements for better duct sealing to limit air leakage, new insulation standards, low-flow water faucets, energy efficient water heating, and high-efficiency lighting.
Water	
Water Use Efficiency. Reduce per capita water use by 20 percent by 2020. Senate Bill (SB) X7-7 is part of a California legislative package passed in 2009 that requires urban retail water suppliers to reduce per-capita water use by 10 percent from a baseline level by 2015, and to reduce per capita water use by 20 percent by 2020. Green accountability performance Goal 16 directly aligns with SB X7-7. In Southern California, energy costs and GHG emissions associated with the transport, treatment, and delivery of water from outlying regions are high. Therefore, the region has extra incentive to reduce water consumption. While this is considered a state measure, it is up to the local water retailers, jurisdictions, and water users to meet these targets.	**Consistent.** The proposed Project would comply with the requirements of Title 19 – Article VIII – Chapter 19.570 – Water Efficient Landscaping and Irrigation, including measures to increase water use efficiency. Water-efficient irrigation systems and devices and drought-tolerant landscaping would be installed on the Project site.
Solid Waste	
Construction and Demolition Waste Diversion. Meet mandatory requirement to divert 50 percent of C&D waste from landfills by 2020 and exceed requirement by diverting 90 percent of C&D waste from landfills by 2035.	**Consistent.** In compliance with CalGreen requirements, at least 65 percent of all nonhazardous construction waste generated by the proposed Project would be recycled and/or salvaged (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard). Furthermore, 100 percent of excavated soil shall be reused or recycled.
Transportation	
Pavley and Low Carbon Fuel Standard. ARB identified this measure as a Discrete Early Action Measure. This measure would reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020.	**Consistent.** The Project does not involve the manufacture, sale, or purchase of vehicles. However, construction vehicles that operate within and access the Project site will comply with Pavley and Low Carbon Fuel Standard.
Riverside Restorative Growthprint Climate Action Plan Measures	
Energy Measures	
E-1: Traffic and Streetlights. Replace traffic and streetlights with high-efficiency bulbs.	**Not Applicable.** This objective is aimed at government agencies, not private developers. Nonetheless, the Project

	would comply with applicable energy efficiency requirements related to lighting detailed in the Green Building Standards Code (Title 24, California Code of Regulations).
E-2: Shade Trees Strategically. Plant trees at new residential developments to reduce the urban heat island effect.	**Consistent.** The Project would include trees and vegetation throughout the Project site in various locations.
E-3: Local Utility Programs. Electricity Financing and incentives for business and homeowners to make energy efficient, renewable energy, and water conservation improvements.	**Not Applicable.** This objective is aimed at government agencies, not private developers. Nonetheless, the Project would comply with applicable energy efficiency requirements detailed in the CalGreen (Title 24, CCR).
E-4: Renewable Energy Production on Public Property. Large scale renewable energy installation on publicly owned property and in public rights of way.	**Not Applicable.** This objective is aimed at government agencies, not private developers.
E-5: UC Riverside Carbon Neutrality. Collaborate with UC Riverside to achieve a carbon neutral campus.	**Not Applicable.** This objective is aimed at government agencies, not private developers.
E-6: RPU Technology Grants. RPU grant programs to foster research, development and demonstration of innovative solutions to energy problems.	**Not Applicable.** This objective is aimed at government agencies, not private developers.
Transportation Measures	
T-1: Bicycle Infrastructure Improvements. Expand on-street and off-street bicycle infrastructure, including bicycle lanes and bicycle trails.	**Consistent.** The Project would comply with RMC Chapter 10.64.240. Bicycle accessibility would be possible through share bike lane in roads on Lurin Avenue, Mariposa Avenue, and Cole Avenue. The City allows bicycles to travel on roads via shared lanes, in areas without designated bicycle lanes.
T-2: Bicycle Parking. Provide additional options for bicycle parking.	**Consistent.** The Project would comply with RMC Chapter 10.64. Neighborhood parks will provide bicycle posts, or in some cases, a bicycle corral, to afford the least obstruction to pedestrian traffic.
T-3: End of Trip Facilities. Encourage use of non-motorized transportation modes by providing appropriate facilities and amenities for commuters.	**Not Applicable.** This objective is aimed at large employment centers or commercial land uses.
T-4: Promotional Transportation Demand Management. Encourage Transportation Demand Management strategies.	**Not Applicable.** This objective is aimed at large employment centers with 100 or more employees. This Project would not staff any on-site employees.
T-5: Traffic Signal Coordination. Incorporate technology to synchronize and coordinate traffic signals along local arterials.	**Not Applicable.** This objective is aimed at government agencies, not private developers.
T-6: Density. Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities.	**Consistent. T**he Project would provide a residential density of 4.24 dwelling units per acre and would increase the supply of housing units in Riverside by 138 dwelling units, adding approximately 396 residents to the City population. By providing housing units within 5 miles of metropolitan Riverside, the Project would improve the jobs–housing balance and help reduce vehicle miles traveled by local residents.
T-7: Mixed-Use Development. Provide for a variety of development types and uses.	**Not Applicable.** The project is a single-family residential development.
T-8: Pedestrian-Only Areas. Encourage walking by providing pedestrian-only community areas.	**Consistent.** The neighborhood provides a pedestrian network along streets. Sidewalks are required on all arterial and collector streets. Inclusion of plans for pedestrian access and circulation for this Project would be submitted for review and approval as a condition of the City's Design Review Process. The Project would also be required to comply with RMC Chapter 19.580.080 G regarding pedestrian access and circulation.

T-9: Limit Parking Requirements for New Development. Reduce requirements for vehicle parking in new development projects.	**Not Applicable.** The proposed Project would meet the minimum parking spaces for residences.
T-10: High Frequency Transit Service. Implement bus rapid transit service in the subregion to provide alternative transportation options.	**Not Applicable.** This objective is aimed at government agencies, not private developers. However, the proposed Project would be located a half-mile from the Pierce Street bus stop, which would encourage employees and residents to use transit.
T-11: Voluntary Transportation Demand Management. Encourage employers to create TDM programs for their employees	**Not Applicable.** This objective is aimed at large employment centers with 100 or more employees. The Project would not have employees and would not be considered a large employment center.
T-12: Accelerated Bike Plan. Accelerate the implementation of all or specified components of a jurisdiction's adopted bike plan.	**Not Applicable.** This objective is aimed at government agencies, not private developers. However, the proposed Project would not obstruct the implementation of the adopted bike plan.
T-13: Fixed Guideway Transit. By 2020, complete feasibility study and by 2025 introduce a fixed route transit service in the jurisdiction.	**Not Applicable.** This objective is aimed at government agencies, not private developers.
T-14: Neighborhood Electric Vehicle Programs. Implement development requirements to accommodate Neighborhood Electric Vehicles and supporting infrastructure.	**Consistent.** The Project would provide electrical infrastructure for electric vehicle charging station in compliance with the 2019 Green Building Energy Efficiency Standard.
T-15: Subsidized Transit. Increase access to transit by providing free or reduced passes	**Not Applicable.** This objective is aimed at large employment centers with 100 or more employees and is not applicable to the Project.
T-16: Bike Share Program. Create nodes offering bike sharing at key locations throughout the City.	**Not Applicable.** This objective is aimed at government agencies, not private developers.
T-17: Car Share Program. Offer Riverside residents the opportunity to use car sharing to satisfy short-term mobility needs.	**Consistent.** The Project would provide parking areas for residents and would not inhibit the opportunity to use car sharing.
T-18: SB 743 - Alternative to level of service. Use SB 743 to incentivize development in the downtown and other areas served by transit.	**Not Applicable.** This objective is aimed at government agencies, not private developers. Furthermore, the Project is not located in a transit priority area.
T-19: Alternative Fuel & Vehicle Technology and Infrastructure. Promote the use of alternative fueled vehicles such as those powered by electric, natural gas, biodiesel, and fuel cells by Riverside residents and workers.	**Consistent.** The proposed Project would be required to be consistent with applicable EV charging station requirements detailed in CalGreen (Title 24, CCR). As such, the Project would be equipped with the EV changing infrastructure to support charging stations within each dwelling unit.
T-20: Eco-Corridor/Green Enterprise Zone. Create a geographically defined area(s) featuring best practices in sustainable urban design and green building focused on supporting both clean-tech and green businesses.	**Not Applicable.** This objective is aimed at government agencies, not private developers.
Water Measure	
W-1: Water Conservation and Efficiency. Reduce per capita water use by 20 percent by 2020.	**Consistent.** The proposed Project would be required to be consistent with applicable water efficiency requirements detailed in the Green Building Standards Code (Title 24, California Code of Regulations). As such, the Project would be equipped with low-flow plumbing fixtures that reduce water use.
Solid Waste Measures	
SW-1: Yard Waste Collection. Provide green waste collection bins community-wide.	**Consistent.** The Project would comply with applicable solid waste requirements.
SW-2: Food Scrap and Compostable Paper Diversion. Divert food and paper waste from landfills by implementing commercial and residential collection program.	**Consistent.** The Project would be required to participate in applicable waste diversion programs. The Project would also be subject to all applicable State and City requirements for

	solid waste reduction.
Food, Agriculture, and Urban Forest Measures	
A-1: Local Food and Agriculture. Promote local food and agricultural programs.	**Not Applicable.** This objective is aimed at government agencies, not private developers.
A-2: Urban Forest. Augment City's Urban and Community Forest Program to include an Urban Forest Management Plan.	**Consistent.** The Project would be required to comply with the Orangecrest Specific Plan Landscape Requirements, the City Landscape Design Guidelines, and Chapter 13.06 of the RMC.

Source: LSA, *Air Quality and Greenhouse Gas Analysis Technical Report, Table O, pgs. 52 to 54, May 2020.*

The SCAQMD supports State, federal, and international policies to reduce levels of ozone depleting gases through its Global Warming Policy and rules and has established an interim GHG threshold. The Project would comply with the City's General Plan policies and CBC provisions designed to reduce GHG emissions. In addition, the Project would comply with all SCAQMD applicable rules and regulations during construction and, as demonstrated in the Climate Change Analysis, would not interfere with the State's goals of reducing GHG emission to 1990 levels by the year 2020 as stated in AB 32 and an 80 percent reduction in GHG emissions below 1990 levels by 2050 as stated in Executive Order S-3-05. Based upon the prepared modeling for this Project and the discussion above, the Project would not conflict with any applicable plan, policy, or regulation related to the reduction in the emissions of GHG and thus a **less than significant impact** would occur directly, indirectly, and cumulatively in this regard. No mitigation is required.

9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

9a. Response: ***(Source: General Plan 2025 Public Safety Element, GP 2025 FPEIR, California Health and Safety Code, Title 49 of the Code of Federal Regulations, California Building Code, Riverside Fire Department Emergency Operations Plan, 2002 and Riverside Operational Area – Multi-Jurisdictional Local Hazard Mitigation Plan, 2004 Part 1, Office of Emergency Management's Strategic Plan)***

Less Than Significant Impact. Construction of the Project has the potential to create a hazard to the public or environment through the routine transportation, use, and disposal of construction-related hazardous materials such as fuels, oils, solvents, and other materials. These materials are typical materials delivered to construction sites. However, due to the limited quantities of these materials to be used by the proposed Project, they are not considered hazardous to the public at large. In accordance with the City's Hazardous Materials Policy, the transport, use, and storage of hazardous materials during the construction and operation of the Project would be conducted pursuant to all applicable local, State, and federal laws, and in cooperation with the County's Department of Environmental Health. Title 49 of the Code of Federal Regulations (CFR) implemented by Title 13 of the CCR describes strict regulations for the safe transportation of hazardous materials. Compliance with all applicable local, State, and federal laws related to the transportation, use, and storage of hazardous materials would reduce the likelihood and severity of accidents during transit, use, and storage.

Once operational, the 138 single-family residential units on the Project site may store small quantities of hazards materials on their private properties. The parks on the site would more than likely be occupied by maintenance buildings which may contain small quantities of hazardous materials, such as pesticides and herbicides, for park landscaping maintenance. However, due to the limited quantities of these materials to be used once the Project is operational, they are not considered hazardous to the public at large.

Compliance with all applicable local, State, and federal laws, including but not limited to Title 49 of the CFR implemented by Title 13 of the CCR, would ensure a **less than significant impact** directly, indirectly, and cumulatively from the routine transport, use, or disposal of hazardous materials. No mitigation is required.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐

9b. Response: ***(Source: General Plan 2025 Public Safety Element, GP 2025 FPEIR Tables 5.7 A – D, California Health and Safety Code, Title 49 of the Code of Federal Regulations, California Building Code, City of Riverside's Emergency Operations Plan, 2002 and Riverside Operational Area – Multi-Jurisdictional Local Hazard Mitigation Plan, 2004 Part 1, Office of Emergency Management's Strategic Plan)***

Less Than Significant With Mitigation Incorporated. The Project site is vacant except for various existing improvements, spoil sites, and potential subsurface structures associated with previous onsite farming improvements. Based on the earliest available site photographs and aerials the site has been undeveloped since 1948. Sometime between 1948 and 1966, an improvement was made on the northeastern corner of the Project site, adjacent to the intersection of Lurin Avenue and Cole Avenue; however, it is unknown what this improvement was due to the low resolution of the photograph. Sometime between 1966 and 1978, the eastern half of the site was improved with an agricultural farm. Sometime between 2002 and 2005, the portions of the site being utilized for agricultural production was demolished; and since 2006, the site has not undergone any further improvements. As the Project site has been historically used for agricultural use, the probability of onsite soil containing pesticides and heavy metals, cannot be precluded. If such hazardous materials are within the on-site soil, construction activities would have the potential to release pesticides and heavy metals in the air, potentially impacting adjacent and nearby sensitive receptors (i.e., the single-family residential units to the north, south, southwest and southeast). In order to ensure that

agricultural use related hazardous materials are not present in the on-site soil, **Mitigation Measure HAZ-1** would be implemented to reduce impacts.

As no structures are located onsite, Asbestos-Containing Material and Lead-Based Paint would not be encountered on the Project site.

Online research of government environmental regulatory databases where available, as well as a general cursory internet search of the Project site, for information indicative of a Recognized Environmental Condition (REC). The results indicated no REC was identified on the site pursuant to all of the databases that were researched. A summary of the findings of the regulatory database review with regard to sites identified as located within the American Society for Testing Materials specified search distance surrounding the Project site is provided below:

- **CORTESE List** – None.
- **Federal National Priority List:** No National Priority List listings were identified within a one-mile radius of the Project site.
- **Federal Delisted National Priority List (DNPL):** No DNPL listings were identified within a 0.5-mile radius of the Project site.
- **Federal Superfund Enterprise Management System (SEMS) (formerly Comprehensive Environmental Response Compensation and Liability Information System):** No SEMS listings were identified within a 0.5-mile radius of the Project site.
- **Federal SEMS-ARCHIVE (formerly CERC-NFRAP):** No SEMS-ARCHIVE listings were identified within a 0.5-mile radius of the Project site.
- **Federal Resource Conservation and Recovery Act Corrective Action Sites (Resource Conservation and Recovery Act -CORRACTS):** No CORRACTS listings were identified within a one-mile radius of the Project site.
- **Federal Resource Conservation and Recovery Act -Treatment, Storage, and Disposal Facilities (TSDF):** No Treatment, Storage and Disposal (TSD) listings were identified within a 0.5-mile radius of the Project site.
- **State/Tribal Hazardous Waste Sites:** No State Hazardous Waste Sites listings were identified within a one-mile radius of the Project site on the EnviroStor database.
- **State/Tribal Landfill/Solid Waste Disposal Sites:** No listings were identified within a 0.5- mile radius of the Project site.
- **State/Tribal Leaking Storage Tanks:** No leaking underground storage tank listings were identified within a 0.5-mile radius of the Project site.
- No SLIC listings were identified within a 0.5-mile radius of the Project site.
- **State/Tribal Voluntary Cleanup Sites:** No listing was identified within a 0.5-mile radius of the Project site.
- **State/Tribal Brownfields:** No brownfields listings were identified within a 0.5-mile radius of the Project site.

The EnviroStor Website was also researched to determine if the Project site or adjacent areas (within a 1-mile radius of the Project site) contain hazardous materials sites. The EnviroStor Website indicated one site, Elementary School No. 32 (Krameria Avenue/Cole Avenue) where school clean-up sites were investigated. However, this site is now inactive and the cleanup status was withdrawn as of July 14, 2004. The Project site does not show up on any of the governmental regulatory database lists.

The Project may involve the use of hazardous materials but would comply with all applicable federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste. These regulations include, but are not limited to, Title 49 of the CFR implemented by Title 13 of the CCR for the safe transportation of hazardous

materials, SCAQMD Rule 1403 for Asbestos-Containing Material, Code of Federal Regulations Chapter 29, Section 1926.62 and Title 8, and CCR Section 1532.1 for lead based paint (LBP). As condition of Project approval, the above-recommended actions would be implemented as part of the Project to reduce potential hazardous material releases. Compliance with all applicable federal, State, and local laws related to the transportation, use, and storage of hazardous materials, as well as implementation of **Mitigation Measures HAZ-1** and **HAZ-2**, would reduce the likelihood and severity of accidents through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Mitigation Measures

HAZ-1 Prior to issuance of a grading permit, a soil survey conducted by a licensed professional (retained by the applicant and approved by the City) to determine levels of pesticides and or heavy metals shall be conducted on the site. If pesticide or heavy metal levels are not found on the Project site (or are found below the Environmental Protection Agency [EPA] threshold limits for human exposure), then no additional mitigation is required. However, if pesticide or heavy metal levels exceeding the EPA threshold limits for human exposure are found on site, then **Mitigation Measure HAZ-2** would be required.

HAZ-2 If the soil survey determines that pesticide or heavy metal levels are found on the Project site that exceed the EPA threshold limits for human exposure, a report of the findings and a Removal Action Plan (RAW) shall be prepared by a qualified licensed professional (retained by the applicant and approved by the City) and submitted to the California Department of Toxic Substances (DTSC) or other appropriate agency for review and approval. The report shall outline the procedures for removing contaminated soils from the Project site down to the level of contamination and for off-site disposal by a licensed contractor at a facility that accepts such contaminated soil. Soil shall not be reused on the Project site and new soil shall be imported from off site and used on the site during Project construction. This measure shall be implemented to the satisfaction of the DTSC and the City of Riverside Community Development Director or designee, and/or Building and Safety Division or designee.

Implementation of **Mitigation Measures HAZ-1** and **HAZ-2** would reduce direct, indirect, and cumulative impacts to **less than significant with mitigation incorporated**.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐

9c. Response: ***(Source: General Plan 2025 Public Safety and Education Elements, GP 2025 FPEIR Table 5.7-D - CalARP RMP Facilities in the Project Area, Figure 5.13-2 – Riverside Unified School District Boundaries, Table 5.13-D Riverside Unified School District Schools, Figure 5.13-3 Alvord Unified School District Boundaries, Table 5.13-E Alvord Unified School District Schools, Figure 5.13-4 – Other School District Boundaries, California Health and Safety Code, Title 49 of the Code of Federal Regulations, California Building Code)***

Less Than Significant Impact. Mark Twain Elementary School, located at 19411 Krameria Avenue, approximately 0.13 mile north of the Project site. This school is the nearest school to the proposed Project; as such, it is within 0.25 mile of the Project site.

Although hazardous materials and/or waste generated from the construction of the proposed Project may pose a health risk to nearby existing or proposed schools, the construction contractor and any other construction companies retained for the Project that handle hazardous materials are required to comply with the provisions of the City's Fire Code and any additional regulations as required in the California Health and Safety Code Article 1 Chapter 6.95 for the Business Emergency Plan. Once operational, the residential units within the Project site would more than likely store minimal amounts of hazardous materials (e.g., bleaches, oil, and fuel). Residents would be required to comply with the City's Fire Code and, if a hazardous waste release occurs, would contact the fire department to secure such releases. If a hazardous release occurs, the amount of release is expected to be nominal, and would not affect Mark Twain Elementary School. Compliance with existing federal and State regulations impacts associated with the exposure of schools to hazardous materials caused by this Project would result in a **less than significant impact** directly, indirectly, and cumulatively. No mitigation is required.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒

9d. Response: ***(Source: General Plan 2025 Figure PS-5 – Hazardous Waste Sites, GP 2025 FPEIR Tables 5.7-A – Comprehensive Environmental Response Compensation and Liability Information System Facility Information, Figure 5.7-B – Regulated Facilities in TRI Information and 5.7-C; Department of Toxic Substances Control EnviroStor Database Listed Sites https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Riverside)***

No Impact. A search of the Department of Toxic Substances Control EnviroStor database (on November 2, 2020) and the California Environmental Protection Agency "Cortese List" complied pursuant to Government Code Section 65962.5 indicated there are no sites of concern regarding hazardous materials on the Project site or in the immediate vicinity of the Project site. In addition, the General Plan 2025 FPEIR (Figure 5.7-1) does not list any hazardous waste sites on or adjacent to the Project site. Therefore, the Project would have **no impact** related to creating any significant hazard to the public or environment due to being located on a recognized hazardous materials site, directly, indirectly, or cumulatively. No mitigation is required.

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

9e. Response: ***(Source: General Plan 2025 Figure PS-6 – Airport Safety Zones and Influence Areas, Riverside County Airport Land Use Compatibility Plan (RCALUCP) and March Air Reserve Base/March Inland Port Comprehensive Land Use Plan (1999), Air Installation Compatible Use Zone Study for March Air Reserve Base (August 2005); Final Air installations Compatible Use Zones Study March Air Reserve Base Riverside, California, Figure 4-3, 2018)***

No Impact. The nearest airport to the Project site is the March Air Reserve Base, located approximately 3.61 miles east of the site. Riverside Municipal Airport is located approximately 8.4 miles northwest of the Project site. The proposed Project is located within Zone D and Zone E of the March Air Reserve Base Airport Land Use Compatibility Plan (MARB ALUC). Neither Zone D nor Zone E places any restrictions on the development of residential units. The proposed Project is also located outside of the noise contours as described in the MARB ALUC. The Outer Horizontal Surface is an imaginary surface located 500 feet above the established airfield elevation and extends outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet. The Project would include structures that are no taller than 35 feet and therefore would not extend into the Outer Horizontal Surface area of March Air Reserve Base. According to Figure 4-3 of the *Final Air Installations Compatible Use Zones Study March Air Reserve Base Riverside*, the Project site is not located in the noise contours of March Air Reserve Base. As such, implementation of the proposed Project would not result in on-site residents or employees on site being affected by a safety hazard or excessive noise from an airport. **Less than significant impacts** would occur directly, indirectly, or cumulatively with implementation of the. No mitigation is required.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

9f. Response: ***(Source: GP 2025 FPEIR Chapter 7.5.7 – Hazards and Hazardous Materials, City of Riverside's Emergency Operations Plan, 2002 and Riverside Operational Area – Multi-Jurisdictional Local Hazard Mitigation Plan, 2004 Part 1, and Office of Emergency Management's Strategic Plan)***

Less Than Significant Impact. The proposed Project would be constructed and operated in accordance with the City's Emergency Operations Plan to ensure a coordinated and effective planned response by the City Police and Fire Departments to extraordinary emergency situations and disasters. The proposed Project will comply with the 2019 California Fire Code Section 503-Fire Apparatus Access Roads. Sections 503.1.1 Buildings and Facilities; 503.2.1 Dimensions of the 2019 California Fire Code Section will all be followed in development of the proposed Project.

The Project site is currently vacant. The site is currently accessible via a dirt access way off Lurin Avenue and Cole Avenue. The preliminary site plan of the proposed Project shows that the site would be accessed via three entryways, one on Lurin Avenue, one on Cole Avenue and one on Mariposa Avenue. Implementation of the proposed Project would not require construction activities on the off-site roadway system and therefore would not impair the City's adopted emergency response plan or emergency evacuation plan. Design of the proposed Project would include an internal circulation system developed to City of Riverside requirements and Riverside Fire Department requirements for street width and access. If residents need to evacuate the area, they can exit the Project site on Lurin Avenue, Cole Avenue, or Mariposa Avenue, connect with Van Buren Boulevard, where Interstate 215 can be accessed to exit the region.

The design of the Project would comply with the Riverside Municipal Code Sections 19.100 and 19.780 related to the development standards for a single-family residential units and Planned Residential Development. Prior to the issuance of the final building permit, the City would review site plans for the proposed Project to ensure that design features would not substantially impair emergency response or emergency evacuation plans of the City. Direct, indirect, and cumulative Project impacts would be **less than significant** and no mitigation is required.

g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

9g. Response: ***(Source: General Plan 2025 Figure PS-7 – Fire Hazard Areas, GIS Map Layer Very High Fire Severity Zone 2010, City of Riverside's Emergency Operations Plan, 2002, Riverside Operational Area – Multi-Jurisdictional Local Hazard Mitigation Plan, 2004 Part 1/Part 2 and Office of Emergency Management's Strategic Plan)***

Less Than Significant Impact. The Project site is located in a semi-urbanized portion of Riverside and is not located within a Local Responsibility Area (LRA) Very High or High Fire Hazard Severity Zone nor is it located within a State Responsibility Area (SRA) Very High or High Fire Hazard Severity Zone, as defined by Cal Fire and the Fire Hazard Severity Zone Map programs. The Project site is approximately 0.65 mile from the closest SRA High Fire Hazard Severity Zone and 3.0 miles from the closest SRA Very High Fire Hazard Severity Zone. The closest LRA Very High Fire Hazard Severity Zone is approximately 1.36 miles northwest of the Project site. The proposed Project would be developed with an internal circulation system consisting of neighborhood streets that would connect to Lurin Avenue, Cole Avenue, and Mariposa Avenue. The internal neighborhood streets and access points to the Project site would be developed to meet the minimum roadway widths of Title 18 (Subdivision Code) and the City's Fire Code Section 503 (California Fire Code 2007). The Fire Code and City of Riverside would also confirm locations of fire hydrants within the Project site to adequately serve the 138 single-family residential units. With implementation of General Plan 2025 policies, compliance with existing codes and standards, and through Fire Department review and approval, impacts from wildland fires due to Project implementation are **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

10. HYDROLOGY AND WATER QUALITY

Would the project:

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐

10a. Response: ***(Source: GP 2025 FPEIR Table 5.8-A – Beneficial Uses Receiving Water; KWC Engineers, Preliminary Hydrology Report TTM 37731, January 2020, Appendix F; KWC Engineers, Project Specific Water Quality Management Plan, Tentative Tract Map 37731, 1/9/20, Appendix F)***

Less Than Significant Impact. The Project is located on 32.54 acres and is bounded by Lurin Avenue on the north, Cole Avenue on the east, Mariposa Avenue on the south, and vacant land on the west, within the San Ana River Watershed. The Project site is vacant and is completely pervious under existing conditions. Once developed, the proposed Project would increase the impervious surface of the site by 500,911 square feet. The site clearing and grading phases would disturb vegetation and surface soils, potentially resulting in erosion and sedimentation. If left exposed and with no vegetative cover, the site's bare soil would be subject to wind and water erosion. Since the project involves more than one acre of ground disturbance, it is subject to NPDES requirements and must implement a SWPPP. Implementation of site-specific Best Management Practices (BMPs) as established by the SWPPP would ensure all impacts related to erosion and sedimentation from ground disturbance are **less than significant.** No mitigation is required.

The Federal Clean Water Act (CWA) establishes a framework for regulating municipal and industrial (including construction) storm water discharges under the NPDES permit. Section 402(p) of the CWA requires NPDES permits for storm water discharges from Municipal Separate Storm Sewer Systems (MS4), as well as other designated storm water discharges that are considered significant contributors of pollutants. The Santa Ana Regional Water Quality Control Board developed the NPDES Permit and Waste Discharge Requirements (Order No. R8-2010-0033 or MS4 Permit) for the Riverside County Flood Control District and other local agencies. The City is a co-Permittee under this permit.

The City is located within the Riverside County Drainage Area Management Plan (DAMP), which describes a wide range of continuing and enhanced BMPs and control techniques, which are being implemented during the term of the MS4 permit. As the City is an MS4 co-Permittee and because the DAMP addresses the requirements of the to meet MS4 permit conditions, the City is required to enforce and comply with the storm water discharge requirements detailed in the DAMP.

The Project site is characterized by generally increasing in elevation from the south and southwest to the north and northeast. Several ravines are present, which will convey natural drainage across the Project site. The runoff from off-site tributary areas to the site mainly discharges from west, north and east side of the Project site. The existing off-site tributary area from the west side of the Project site is 30.24 acres discharging approximately 52.3 cubic feet per second (cfs) (100-year storm event) at node 308. The existing off-site tributary area from the north and cross from Lurin Avenue side of the Project site mainly has been divided into three main tributary areas. The westerly side is 18.49 acres discharging approximately 25.4 cfs (100-year storm event) at node 313. The middle portion is approximately 28.7 acres, discharging approximately 45.5 cfs (100-year storm event) at node 318 and the easterly portion is 77.58 acres, discharging approximately 120.1 cfs (100 year storm event) at node 120 west side of the intersection of Cole and Lurin Avenue. The existing off-site tributary area from the east side of the Project site is 2.72 acres discharging approximately 5.7 cfs (100-year storm event) at node 115 and 8.85 acres, discharging approximately 16.1 cfs. (100-year storm event) at node 202. There are no existing major drainage improvements on site. The runoff discharge from this site in the existing condition are in three different locations and are situated at the south of the Project site at node 124, 204, and 320.

A preliminary project-specific Water Quality Management Plan (WQMP) has been prepared for the Project per City of Riverside Water Quality Ordinance (Municipal Code Section 14.12.315) requirements. The WQMP identifies two Drainage Management Area (DMA). DMA 1A would drain approximately 816,750 square feet of area into Bioretention Basin 1A that will be developed on site. DMA 2A would drain approximately 601,128 square feet of area into Infiltration Basin 2A that will be developed on site.

All runoff is conveyed to Reach 1 of Temescal Creek, flowing downstream to Reach 3 of the Santa Ana River, and ultimately into the Pacific Ocean. Reach 1 of Temescal Creek has no Section 303(d) impairments and Reach 3 of the Santa Ana River list pathogens (Bacterial Indicators) as EPA-approved Section 303(D) listed impairments to water quality and are the pollutants of concern of the proposed Project.

To address potential water contaminants, the Project is required to comply with applicable federal, State, and local water quality regulations, including the design and maintenance of DMA 1A and DMA 2A detailed in the Project-specific WQMP and described above. The proposed sump basins, to where on-site runoff is designed to flow through DMA 1A and DMA 2A, would infiltrate the maximum volume of runoff. Based on calculations from the project-specific WQMP, DMA 1A would collectively manage runoff from 816,750 square feet of the Project site and would require a minimum Design Capture Volume (DCV) of 18,498 cubic feet of runoff. Accordingly, DMA 1A would be treated via bioretention basin with a DCV of 18,764 cubic feet (storage and volume retention). DMA 2A would collectively manage runoff from 601,128 square feet of the Project site and would require a minimum DCV of 12,632 cubic feet of runoff. Accordingly, DMA 2A would be treated via an infiltration basin with a DCV of 38,536 cubic feet (storage and volume retention).

The DCV of the proposed BMP basins treating DMA 1A and DMA 2A would satisfy the estimated detention volume needed post-development for the Project per the preliminary hydrology calculations. According to the preliminary WQMP, the full DCV would be met with the proposed BMP basins that would treat DMA 1A and DMA 2A.

The WQMP would be reviewed and approved as a routine action during the processing of the Project by the City; therefore, it is reasonable that the required measures and features detailed in the WQMP to safeguard water quality would be incorporated into the proposed Project. Given compliance with all applicable federal, State, and local laws regulating surface water quality, the proposed Project as designed is anticipated to result in a **less than significant** impact directly, indirectly, and cumulatively to any water quality standards or waste discharge. No mitigation is required.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐

10b. Response: ***(Source: Western Municipal Water District, 2015 Urban Water Management Plan Update, Table 7-3: Retail Supply and Demand Comparison for a Normal Year; Table 7-4: Wholesale Supply and Demand Comparison for a Normal Year; Table 7-5: Retail Supply and Demand in a Single-Dry Year; Table 7-6: Wholesale Supply and Demand in a Single-Dry Year; Table 7-7 Retail Supply and Demand Comparison in Multiple-Dry Years; Table 7-8: Wholesale Supply and Demand Comparison in Multiple-Dry Years, pgs. 7-5 through 7-7; KWC Engineers, Preliminary Hydrology Report TTM 37731, January 2020, Appendix F; KWC Engineers, Project Specific Water Quality Management Plan, Tentative Tract Map 37731, 1/9/20, Appendix F)***

Less Than Significant Impact. The Western Municipal Water District (WMWD) provides water to the Project site. Groundwater is a major source of water supply for WMWD and its retail agencies, comprising 13 percent of purchased water and 85 percent of locally produced water, representing 21 percent of WMWD's total supply in 2015. Most groundwater sources available to Western are adjudicated or subject to groundwater management plans. There are four primary groundwater basins that supply WMWD, including: Riverside-Arlington Basin (and Arlington subbasin), the Temecula-Murrieta Basin, the San Bernardino Basin Area, and the Chino Basin.

The WMWD's 2015 Urban Water Management Plan estimated a daily per capita water demand of 352 gallons. Implementation of the proposed Project would result in a maximum population of 396 residents (2.8625 persons/household × 138 units), with an estimated water usage of 139,392 gallons per day (0.43 acre-feet/day) or 50,878,080 gallons per year (156.1 acre-feet/year). This represents 0.22 percent of anticipated WMWD's retail water supplies in 2020 (69,718 acre feet assuming worst-case multiple dry years), a 0.17 percent of anticipated WMWD's retail water supplies in 2040 (90,400 acre feet assuming worst-case multiple dry years), a 0.1 percent of anticipated WMWD's wholesale water supplies in 2020 (152,491 acre feet assuming worst-case multiple dry years), and a 0.08 percent of anticipated WMWD's wholesale water supplies in 2040 (184,095 acre feet assuming worst-case multiple dry years). Sufficient water supplies are available to serve existing and projected future water demand under normal, dry

and multiple-dry conditions. Therefore, the proposed Project was found to have a **less than significant impact** directly, indirectly, or cumulatively to groundwater supplies. No mitigation is required.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on-or-off-site?	☐	☐	☒	☐

10i. Response: ***(Source: KWC Engineers, Preliminary Hydrology Report TTM 37731, January 2020, Appendix F; KWC Engineers, Project Specific Water Quality Management Plan, Tentative Tract Map 37731, 1/9/20, Appendix F)***

Less Than Significant Impact. The Project site is vacant. The Project site is characterized by a gradual general increase in elevation from the south and southwest to the north and northeast. Several ravines are present which will convey natural drainage across the Project site. General sheet flow conditions would be maintained, and the Project site would be designed with infiltration BMP basins and permeable areas within DMA 1A and DMA 2A to ensure runoff from regular rain events are retained on site. The proposed Project would not significantly alter drainage patterns on the site.

The proposed DMA 1A and DMA 2A were analyzed to determine if its conveyance of storm water runoff would create a Hydrologic Condition of Concern (HCOC). A HCOC occurs when post-development runoff conditions exceed pre-development runoff conditions, and discharge from the Project site has a flow rate greater than 110 percent of the pre-development two-year peak flow. Generally, projects are exempt from HCOC analysis if (1) they disturb less than one acre; (2) the volume and time of concentration of storm water runoff under post-development conditions are within five percent of pre-development conditions for a two-year return frequency 24-hour storm; or (3) all downstream conveyance channels to an adequate sump (e.g., Santa Ana River) engineered and regularly maintained to ensure design flow capacity, no sensitive stream habitat areas would be adversely affected, or they are not identified on the Co-Permittees Hydromodification Sensitivity Maps. Based on analysis presented in the preliminary WQMP, the Project does create a Hydrologic Condition of Concern and does not qualify for HCOC Exemption 1, 2, or 3. Low Impact Development BMPs would be implemented pursuant to the *Preliminary Water Quality Management* prepared for the Project.

The proposed sump basins, to where on-site runoff is designed to flow through DMA 1A and DMA 2A, would infiltrate the maximum volume of runoff. Based on calculations from the project-specific WQMP, DMA 1A would collectively manage runoff from 816,750 square feet of the Project site and would require a minimum DCV of 18,498 cubic feet of runoff. Accordingly, DMA 1A would be treated via bioretention basin with a DCV of 18,764 cubic feet (storage and volume retention). DMA 2A would collectively manage runoff from 601,128 square feet of the Project site and would require a minimum DCV of 12,632 cubic feet of runoff. Accordingly, DMA 2A would be treated via an infiltration basin with a DCV of 38,536 cubic feet (storage and volume retention).The DCV of the proposed BMP basins treating DMA 1A and DMA 2A would satisfy the estimated detention volume needed post-development for the Project per the preliminary hydrology calculations.

The WQMP would be reviewed and approved as a routine action during the processing of the Project by the City; therefore, it is reasonable that the required measures and features detailed in the WQMP to safeguard the existing drainage pattern of the site and area would be incorporated into the proposed Project. The project would not have any substantial effects on a stream or river, as none are located on or in close proximity to the Project site. Through compliance with all applicable federal, State, and local laws and regulations, the proposed Project would not alter the existing drainage pattern of an on-site stream. Impacts from substantial erosion or siltation on or off site as a result of altering existing drainage patterns would be **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or-off-site?	☐	☐	☒	☐

10ii. Response: ***(Source: KWC Engineers, Preliminary Hydrology Report TTM 37731, January 2020, Appendix F; KWC Engineers, Project Specific Water Quality Management Plan, Tentative Tract Map 37731, 1/9/20, Appendix F)***

Less Than Significant Impact. The *Preliminary Hydrology Report* prepared for the proposed Project breaks the Project site into three drainage areas. Drainage Area One of the Project, during a 100 year storm event would have a peak flow of 5.40 cfs more than the existing peak flow; Drainage Area Two would have a peak flow of 4.96 cfs less than the existing peak flow; and, Drainage Area Three would have a peak flow of 7.83 more than the existing peak flow during a 100 year storm event. The onsite storm drain system will be privately owned and maintained by the Homeowners Association. Preliminary onsite drainage facilities will be sized to accommodate the anticipated 100-year runoff. Detailed sizing calculations will be provided in the design review and final engineering process for the proposed Project. Mainline pipe sizes will be designed based on the 100-year storm event. Pipes will consist of reinforced concrete pipe or high-density polyethylene while maintaining the hydraulic grade line below the proposed finished surface, with a roughness coefficient of 0.013 per City standards. Hydraulic calculations will be performed in the Final Engineering phase. Catch basins and storm drain laterals will be placed at locations to keep the 10-year flood flow below the top of curb and the 100-year flood flow below the right of way. Catch basins will also be placed in various locations within the Project site to collect the runoff and convey the storm flows in underground piping to the appropriate discharge points.

Based on calculations from the project-specific WQMP, DMA 1A would collectively manage runoff from 816,750 square feet of the Project site and would require a minimum DCV of 18,498 cubic feet of runoff. Accordingly, DMA 1A would be treated via bioretention basin with a DCV of 18,764 cubic feet (storage and volume retention). DMA 2A would collectively manage runoff from 601,128 square feet of the Project site and would require a minimum DCV of 12,632 cubic feet of runoff. Accordingly, DMA 2A would be treated via an infiltration basin with a DCV of 38,536 cubic feet (storage and volume retention).The DCV of the proposed BMP basins treating DMA 1A and DMA 2A would satisfy the estimated detention volume needed post-development for the Project per the preliminary hydrology calculations.

Through compliance with all applicable federal, State, and local laws and regulations, the proposed Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site. Impacts from flooding on or off site as a result of increasing the rate or amount of surface runoff would be **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐

10iii. Response: ***(Source: KWC Engineers, Preliminary Hydrology Report TTM 37731, January 2020, Appendix F; KWC Engineers, Project Specific Water Quality Management Plan, Tentative Tract Map 37731, 1/9/20, Appendix F)***

Less Than Significant Impact. The CWA delegates authority to the States to issue NPDES permits for discharges of storm water from construction, industrial, and municipal entities to Waters of the United States. The purpose of the California MS4 permit meets the California State Water Resources Control Board's requirements to mitigate for the negative impact of increases in storm water runoff caused by new development and redevelopment. The Project storm water discharge rates cannot exceed the pre-development runoff condition for 2-year 24-hour storm total or the 85th percentile 24-hour storm runoff event to be in compliance with the MS4 post-construction and site design requirements.

The proposed Project would include the development of a water quality management plan basins totaling 103,861 square feet and a drainage area totaling 1,800 square feet. These features would help prevent increases in the rate or volume of storm water runoff leaving the site. The Project is over one acre in size and is required to have coverage under the State's General Permit for Construction Activities (SWPPP). As stated in the permit, during and after construction, BMPs would be implemented to reduce/eliminate adverse water quality impacts resulting from development. All impacts related to runoff during site preparation, demolition, and grading would be addressed by the SWPPP. The site has been designed to maximize the landscape areas, thereby minimizing the impervious area to the maximum extent practicable. All runoff from the built

Project site would disperse into infiltration basins or adjacent landscape planted areas prior to discharging into off-site storm water drainage infrastructure. DMA 1A would collectively manage runoff from 816,750 square feet of the Project site and would require a minimum DCV of 18,498 cubic feet of runoff. Accordingly, DMA 1A would be treated via bioretention basin with a DCV of 18,764 cubic feet (storage and volume retention). DMA 2A would collectively manage runoff from 601,128 square feet of the Project site and would require a minimum DCV of 12,632 cubic feet of runoff. Accordingly, DMA 2A would be treated via an infiltration basin with a DCV of 38,536 cubic feet (storage and volume retention).The DCV of the proposed BMP basins treating DMA 1A and DMA 2A would satisfy the estimated detention volume needed post-development for the Project per the preliminary hydrology calculations.

Any sources of storm water pollution would be addressed through adherence to NPDES permit requirements. Compliance with all applicable federal, State, and local laws and regulations would ensure impacts from generation of runoff water exceeding the capacity of existing or planned storm water drainage systems or contributing substantial additional sources of polluted runoff would be **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

iv. Impede or redirect flood flows?	☐	☐	☒	☐

10iv. Response: ***(Source: Federal Emergency Management Administration FEMA Flood Map Service Center Website https://msc.fema.gov/portal/home. Map 06065C0740G and Map 06065C1405G)***

Less Than Significant Impact. The Flood Insurance Rate Map (FIRM) for the area was reviewed on the Federal Emergency Management Website for the Project site. The Project site is partially located within an Area of Minimal Flood Hazard Zone X (FIRM Map 06065C1405G) and Zone D (FIRM Map 06065C0740G). Given the existing topography of the Project site, the potential for flooding within the Project site is not likely to occur. Implementation of the proposed Project would not impede or redirect flood flows. Direct, indirect, and cumulative impacts would be **less than significant** and no mitigation is required.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐

10d. Response: ***(Source: GP 2025 FPEIR Chapter 7.5.8 – Hydrology and Water Quality; KWC Engineers, Preliminary Hydrology Report TTM 37731, January 2020, Appendix F; KWC Engineers, Project Specific Water Quality Management Plan, Tentative Tract Map 37731, 1/9/20, Appendix F)***

Less Than Significant Impact. The Project site is located inland and no large bodies of water are located within the site's vicinity; therefore, the potential of tsunamis or seiches affecting the subject site is low. Further, the proposed Project site and its surroundings have generally flat topography and are 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 nine arroyos that traverse the City and its sphere of influence. The Project site is partially located within an Area of Minimal Flood Hazard Zone X (FIRM Map 06065C1405G) and Zone D (FIRM Map 06065C0740G). Given the existing topography of the Project site, the potential for flooding within the Project site is not likely to occur. Given the proposed Project's location and since there are no features nearby that would pose a threat from seiche, tsunami, or flooding, impacts are considered **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

10e. Response: ***(Source: GP 2025 FPEIR Chapter 7.5.8 – Hydrology and Water Quality; KWC Engineers, Preliminary Hydrology Report TTM 37731, January 2020, Appendix F; KWC Engineers, Project Specific Water Quality Management Plan, Tentative Tract Map 37731, 1/9/20, Appendix F)***

Less Than Significant Impact. The proposed Project is located within a semi-urbanized portion of the City of Riverside within the Orangecrest Specific Plan. Since the proposed Project involves more than one acre of ground disturbance, it is subject to NPDES requirements and must implement an SWPPP. Compliance with NPDES and implementation of an SWPPP would ensure the proposed Project does not conflict or obstruct applicable City water quality control plans. The WQMP would be reviewed and approved as a routine action during the processing of the Project by the City; therefore, it is reasonable that the required measures

and features detailed in the WQMP to safeguard the existing drainage pattern of the site and area would be incorporated into the proposed Project.

The WMWD's 2015 Urban Water Management Plan estimated a daily per capita water demand of 352 gallons. Implementation of the proposed Project would result in a maximum population of 396 residents (2.8625 persons/household × 138 units), with an estimated water usage of 139,392 gallons per day (0.43 acre-feet/day) or 50,878,080 gallons per year (156.1 acre-feet/year). This represents 0.22 percent of anticipated WMWD's retail water supplies in 2020 (69,718 acre feet assuming worst-case multiple dry years), a 0.17 percent of anticipated WMWD's retail water supplies in 2040 (90,400 acre feet assuming worst-case multiple dry years), a 0.1 percent of anticipated WMWD's wholesale water supplies in 2020 (152,491 acre feet assuming worst-case multiple dry years), and a 0.08 percent of anticipated WMWD's wholesale water supplies in 2040 (184,095 acre-feet assuming worst-case multiple dry years). Sufficient water supplies are available to serve existing and projected future water demand under normal, dry and multiple-dry conditions. As the Project site would not require a zoning designation or land use designation amendment, it can be assumed that the existing land use and zoning designations of the site (buildout density of the site) have been considered in the WMWD 2015 Urban Water Management Plan. Therefore, implementation of the proposed Project would not conflict with or obstruct implementation of the current groundwater management plan for the City of Riverside. Impacts would be **less than significant** directly, indirectly, and cumulatively. No mitigation measures are required.

11. LAND USE AND PLANNING

Would the project:

a. Physically divide an established community?	☐	☐	☐	☒

11a. Response: ***(Source: General Plan 2025 Land Use and Urban Design Element, Project site plan, City of Riverside GIS/CADME map layers)***

No Impact. The Project site is located within the City of Riverside in the Orangecrest Specific Plan. Large lot single-family residential units and a single-family residential neighborhood are located north of the site; large lot single-family residential units are located east and south of the site; and, vacant parcels of land are located to the west of the Project site. The proposed Project consists of the following entitlements to facilitate the establishment of an 138-unit Planned Residential Development: (1) Tentative Tract Map (TM 37731) to subdivide 32.54 acres into 138 single-family residential lots, 15 lettered lots for slopes, water quality management plan basins, park/open space, driveways, and drainage areas; (2) Planned Residential Development for the establishment of detached single-family dwelling units, private streets, and common open space; (3) Variance to reduce the setback from the ROW to perimeter wall to approximately 8 feet along Cole Avenue and minimum of 5 feet along Lurin Avenue; and (4) Design Review of Project plans by the City. The proposed Project would develop a currently vacant (underutilized) site with a new residential neighborhood which would allow for the continuation of the established community to the north, east and south of the site. The Project would include an internal circulation system consisting of neighborhood streets that would connect to Lurin Avenue, Cole Avenue, and Mariposa Avenue. The Project has been reviewed for consistency with the Zoning Code and to ensure that the requested perimeter setback variance would be consistent and conducive to similar surrounding development. The Project would not include features such as roads (except for internal roads connecting to existing Lurin Avenue, Cole Avenue, and Mariposa Avenue), highways, a transit system, or a non-consistent use that would constitute a physical divide in the established community. **No impact** directly, indirectly, or cumulatively to an established community would occur with implementation of the proposed Project. No mitigation is required.

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?	☐	☐	☒	☐

11b. Response: ***(Source: General Plan 2025, General Plan 2025 Figure LU-10 – Land Use Policy Map, Table LU-5 – Zoning/General Plan Consistency Matrix, Figure LU-7 – Redevelopment Areas, Title 19 – Zoning Code, Title 18 – Subdivision Code, Title 7 – Noise Code, Title 17 – Grading Code, Title 20 – Cultural Resources Code, Title 16 – Buildings and Construction and Citywide Design and Sign Guidelines)***

Less Than Significant Impact. The proposed Project consists of the following entitlements to facilitate the establishment of a 138- unit Planned Residential Development: (1) Tentative Tract Map (TM 37731) to subdivide 32.54 acres into 138 single-family residential lots, 15 lettered lots for slopes, water quality management plan basins, park/open space, driveways, and drainage areas; (2) Planned Residential Development for the establishment of detached single-family dwelling units, private streets, and common open space; (3) Variance to reduce the setback from the ROW to perimeter wall to approximately 8 feet along Cole Avenue and minimum of 5 feet along Lurin Avenue; and (4) Design Review of Project plans by the City. The existing Riverside General Plan Land Use Designation on the site is either Low Density Residential (LDR) or Very Low Density Residential (VLDR) and the existing zoning of the site is: R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, and RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone.

The proposed Project would develop 138 single-family residential units on 138 lots ranging in size from 4,235 square feet to 15,720 square feet. The Project applicant is requesting a Planned Residential Development due to the developmental constraints of the Project site and a Variance. **Table C** (in the Project Description of this document) shows the setback information from the base zone and PRD designations of R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, and RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone that will be implemented on the Project site. With

approval of requested Variance by the City of Riverside, the proposed Project would be consistent with base zone and PDR setback information.

Overall, the site plan indicates that the total density of the site would equate to 4.24 dwelling units/acre which would be consistent with the General Plan Low Density Residential Land Use Designation of 3 to 6 dwelling units/acre. Pursuant to Section 19.780.060 of the Municipal Code, the benchmark density for the R-1-1300-SP Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone, and -1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone is 4.8 dwelling units/acre, 3.0 dwelling units/acre and 3.0 dwelling units/ace, respectively. The Maximum Density with Bonus density for the R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone is 5.3 dwelling units/acre and 3.3 dwelling units/ace for RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone and the R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone. The applicant has blended the density of the various zoning designations on the site to achieve an overall residential development density of 4.24 dwelling units/acre (total of 138 single-family residences), which would be consistent under the density standards of the PRD Permit. Based on the overall density of the site pursuant to the site plans, the proposed Project would be consistent with the density requirements under Section 19.780.060 of the City of Riverside Municipal Code.

Based on the zoning designations of the Project site, the Project applicant would be required to develop 69,000 square feet of park/open space area. Lots D, F and M of the Project, as shown on the site plan, would be developed with a 72,387 square feet of park/open space use. As such, the proposed Project would meet the park development standards imposed by the City of Riverside.

The elevation plans of the residential units associated with the proposed Project show that structures will be no taller than 28 feet. This is below the height restriction of 35 feet pursuant to the zoning code design regulations for single-family residential units. During final plan check, the City of Riverside would review the heights of the single-family residential units to ensure that they do not exceed the zoning height (R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, and RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone) requirements. If the single-family residential units do exceed height limits, the City would require the applicant to apply for a variance or redesign the heights of the residential units.

As shown in City of Riverside 2025 General Plan *Land Use and Urban Design Element*, the Project site is located in the Orangecrest Specific Plan. The following provides a short consistency analysis to show that the proposed Project would be consistent with the Specific Plan's applicable objectives/policies.

Objective LU-75: Manage continued growth of the Orangecrest neighborhood in a manner consistent with the Orangecrest Specific Plan, providing needed infrastructure as land develops.

> **Consistent**: The proposed Project would develop a vacant (underutilized) site within the Orangecrest Specific Plan. The Project would include development of 138 single-family residential units, an internal circulation system, and 72,387 square feet of park/open space use. Such design would be consistent with the types of residential neighborhood development that occur within the Specific Plan area. This IS/MND has analyzed the potential impact the Project would have on infrastructure/public services with a determination that utility infrastructure and public services could adequately serve the residents of the proposed Project without additional staffing, infrastructure, or building development. For these reasons, development of the proposed Project would be consistent with this objective.

Policy LU-75.1: Avoid creating any hindrance to safe operations at the March Air Reserve Base/Inland Port using the Riverside County Airport Land Use Compatibility Plan when reviewing projects within the airport influence area for consistency.

> **Consistent:** Review of the Riverside County Airport Land Use Compatibility Plan indicates that the proposed Project is within Zones D and E of the airport influence area of March Air Reserve Base/Inland Port; however, the site is not located in the noise contour of the airport. The Project site is located in the Outer Horizontal Surface area of March Air Reserve Base. The Outer Horizontal Surface is an imaginary surface located 500 feet above the established airfield elevation and

extends outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet. The proposed Project would develop residential units that are no taller than 35 feet in height above ground level (based on the R-1-1300-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, R-1-1/2 Acre-SP – Single-Family Residential and Specific Plan (Orangecrest) Overlay Zone, and RE-SP – Residential Estate and Specific Plan (Orangecrest) Overlay Zone designation standards); as such, the proposed Project would not intrude into FAR Part 77 airspace of the March Air Reserve Base/Inland Port. Furthermore, the Project would not be designed with bright lights facing skywards or reflective material that could interfere with March Air Reserve Base/Inland Port operations. For these reasons, the proposed Project would be consistent with this policy.

Policy LU-75.2: Identify and proactively undertake logical annexation opportunities to improve the consistency and coherence of the neighborhood.

Consistent: The Project site was located in the Riverside Planning Area Southern Sphere of influence and was annexed into the City in 2008. The site was annexed into the City with the plan to develop the underutilized vacant site with a residential Project that was consistent with other residential neighborhoods in close proximity. Once developed, the 138 single-family residential units would be similar to the residential units northeast of the site allowing for continued coherence of the Orangecrest Specific Plan area. For these reasons, the proposed Project would be consistent with this policy.

It should be noted that **Policies LU-75.3, LU-75.4,** and **LU-75.5** are not included in this consistency analysis, as they would not be applicable to the proposed Project.

Overall, the Project uses would be consistent with uses permitted under the General Plan land use, Orangecrest Specific Plan, and zoning designation. As discussed, the project complies with all development standards for Planned Residential Developments, with the exception of the requested variance, and would also be compatible with surrounding uses. As such, the proposed Project would result in a **less than significant impact.** No mitigation is required.

12. MINERAL RESOURCES

Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒

12a. Response: ***(Source: General Plan 2025 FPEIR – Figure 5.10-1 Mineral Resources)***

No Impact. According to General Plan 2025 FPEIR Figure 5.10-1, the Project site is not designated as a Mineral Resource Zone -2 (MRZ-2) or Mineral Resource Zone-3 (MRZ-3). The Project site is designated as a Mineral Resources Zone -4 (MRZ-4). The MRZ-4 designation indicates there is insufficient data to assign any other MRZ designation. The majority of the Project site is undeveloped; however, there is one abandoned outbuilding located on the Project site. Due to the location of the Project site (in a semi-urban area of Riverside and in an MRZ-4), unknown mineral deposits would more than likely not be discovered or disturbed during proposed Project construction activities. As such, implementation of the proposed Project would have a **less than significant impact** on statewide and regional mineral deposits directly, indirectly, or cumulatively. No mitigation is required.

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

12b. Response: ***(Source: General Plan 2025 FPEIR – Figure 5.10-1 Mineral Resources)***

No Impact. Review of the General Plan 2025 FPEIR Figure 5.10-1 indicates there are no mineral resource recovery sites delineated within the City of Riverside. Additionally, as described above in Response 12a, the Project site is not located within MRZ-2 or MRZ-3 areas and implementation of the proposed Project would not result in mineral resource losses. As such, implementation of the proposed Project would have **no impact** on locally-important mineral resources recovery sites directly, indirectly, or cumulatively. No mitigation is required.

13. NOISE

Would the project:

a. Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐

13a. Response: ***(Source: General Plan 2025 Figure N-5 – 2025 Roadway Noise, Section 5.11 – Noise of the General Plan and Supporting Documents Environmental Impact Report; Project Site Plans; Noise and Vibration Impact Analysis Tentative Tract Map No 37731 – Cole Development Project, August 2020, Appendix G)***

Less Than Significant Impact. The construction and operational noise analysis under this response has been provided by the *Noise and Vibration Impact Analysis Technical Report* prepared for the Project in August 2020 (**Appendix G**) by LSA. Construction and operational noise standards for the City of Riverside are provided by the City of Riverside Noise Element of the General Plan 2025 and the City Municipal Code.

Noise Element of the General Plan 2025: In its land use decisions, the City may consider its noise/land use compatibility guidelines which describes categories of compatibility and not specific noise standards.

These guidelines generally identify conditions where development of a particular use may be "Normally Acceptable," "Conditionally Acceptable," "Normally Unacceptable," or "Conditionally Unacceptable." The development of infill single residential uses is Normally Acceptable in areas with noise levels of 65 dBA (A-weighted decibel) Community Noise Equivalent Level (CNEL) or less, and Conditionally Acceptable in areas with a noise levels between 65 and 75 dBA CNEL. For Conditionally Acceptable single-family residential uses, new development should only be undertaken after an analysis of noise reduction requirements and identification of noise reduction/insulation features. The City's General Plan Noise Element requires interior noise levels for new residential development to comply with standards set forth in Title 24 of the State Health and Safety Code, which identifies an interior noise standard of 45 dBA CNEL for residences.

Municipal Code: The purpose of the City's Municipal Code Noise Ordinance is to control unnecessary, excessive, and/or annoying noises in the City by prohibiting such noise generated by the sources specified in Title 7: Noise Control of the City's Municipal Code. Based on Sections 7.25.010 and 7.30.015 of the City's Municipal Code (and as shown in Table G of the *Noise and Vibration Impact Analysis* in **Appendix G**), the maximum exterior noise level for residential uses is 55 dBA maximum noise level (L_{max}) (no louder than 75 dBA L_{max} during any period) during daytime (7:00 a.m. to 10:00 p.m.) hours and 45 dBA L_{max} (no louder than 65 dBA L_{max} during any period) during nighttime (10:00 p.m. to 7:00 a.m.) hours, or the maximum measured ambient noise level for any period of time.

Similarly, the maximum interior noise level for residential uses is 45 dBA L_{max} (no louder than 55 dBA L_{max} during any period) during daytime hours and 35 dBA L_{max} (no louder than 45 dBA L_{max} during any period) during nighttime hours, or the maximum measured ambient noise level for any period of time. Section 7.35.020.G, Exemptions, of the City's Municipal Code Noise Ordinance states that "Noise source 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" are exempt from the noise level limits of the Municipal Code.

Existing Conditions: The Project site is located at the northwest corner of Cole Avenue and Mariposa Avenue, on the south side of Lurin Avenue. Land uses in the vicinity of the Project area include residences, vacant land, and a commercial use. Single-family residences are located south of Lurin Avenue between Cole Avenue and Dant Street and north, east, south, and southwest of the Project site. The closest single-family residential unit is located south of Lurin Avenue between Cole Avenue and Dant Street at 19331 Lurin Avenue, which is approximately 30 feet east of the Project construction boundary. Vacant land is located to the northwest, west, and southwest of the Project and a commercial use is located north of the site.

The primary existing noise sources in the Project area is generated by traffic on Cole Avenue, Mariposa Avenue, and Lurin Road, dog barking, and other typical residential noises. In order to determine the existing ambient noise level in the Project

area, two long-term (24-hour) and two short-term (20-minute) noise level measurements were conducted and recorded on February 5th to February 6th, 2020. Noise levels from the long-term monitoring ranged between 59.4 to 68.1 dBA CNEL and the calculated CNEL noise level using the long-term measurement results at short-term monitoring locations ranged between 48.6 to 59.6 dBA CNEL.

Existing traffic noise levels were modeled using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) to evaluate traffic-related noise conditions along roadway segments in the project vicinity. **Table N: Existing Traffic Noise Levels** shows the existing traffic noise levels on roadways in the Project vicinity. As shown in **Table N**, the noise level at 50 feet from the centerline of the outermost lanes of the listed roadway segments range from 50.1 dBA CNEL to 62.3 dBA CNEL.

Table N: Existing Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Lurin Avenue west of Project Driveway 1	690	< 50	< 50	< 50	51.0
Lurin Avenue between Project Driveway 1 and Cole Avenue	720	< 50	< 50	< 50	51.2
Lurin Avenue east of Cole Avenue	1,230	< 50	< 50	< 50	53.5
Mariposa Avenue west of Project Driveway 2	3,510	< 50	< 50	< 50	62.3
Mariposa Avenue between Project Driveway 2 and Cole Avenue	3,505	< 50	< 50	< 50	62.3
Mariposa Avenue east of Cole Avenue	2,405	< 50	< 50	< 50	60.8
Cole Avenue North of Lurin Avenue	3,560	< 50	< 50	< 50	58.8
Cole Avenue between Lurin Avenue and Project Driveway 3	3,015	< 50	< 50	< 50	57.4
Cole Avenue between Project Driveway 3 and Mariposa Avenue	2,945	< 50	< 50	< 50	57.3
Cole Avenue south of Mariposa Avenue	1,680	< 50	< 50	< 50	57.9

Source: Noise and Vibration Impact Analysis TTM 37731 Cole Development Project, LSA (August 2020)
Note: Traffic noise within 50 feet of the roadway centerline should be evaluated with site-specific information.

ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = foot/feet

Short-Term Construction Noise: Two types of short-term noise impacts could occur during construction on the Project site. First, construction crew commutes and the transport of construction equipment and materials to the site for the proposed Project would incrementally increase noise levels on roads leading to the site. Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance (passing trucks at 50 feet would generate up to a maximum of 84 dBA), the effect on longer-term (hourly or daily) ambient noise levels would be small because the hourly/daily construction-related vehicle trips are few when compared to existing hourly/daily traffic volume on Lurin Avenue, Cole Avenue, and Mariposa Avenue. The building construction phase would generate the most trips out of all of the construction phases, at 83 trips per hour and 118 trips per day. Roadways that would be used to access the Project site are Lurin Avenue, Cole Avenue and Mariposa Avenue. Also, it is assumed that approximately half of the construction-related traffic would access the Project site from Lurin Avenue and that the other half would access the site from Mariposa Avenue. **Table N** details daily traffic volumes on Lurin Avenue, Cole Avenue, and Mariposa Avenue. Construction-related traffic would increase noise by up to 1.1 dBA on Cole Avenue, 2 dBA on Lurin Avenue, and 0.7 dBA on Mariposa Avenue. A noise level increase of less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, no short-term construction-related noise impacts associated with worker commute and equipment transport to the Project site would occur. No noise reduction measures are required.

The second type of short-term noise impact is related to noise generated during site preparation, grading, building construction, paving, and architectural coating on the project site. Construction is undertaken in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. Project construction is expected to require the use of graders, bulldozers, and water trucks/pickup trucks. Noise associated with the use of each type of construction equipment for the site preparation phase is estimated to be between 55 dBA L_{max} and 85 dBA L_{max} at a distance of 50 feet from the active construction area. Assuming that each piece of construction equipment operates at some distance from the other equipment, the worst-case combined noise level during this phase of construction would be 88 dBA L_{max} at a distance of 50 feet from the active construction area. Based on a usage factor of 40 percent, the worst-case combined noise level during this phase of construction would be 84 dBA equivalent continuous sound level (L_{eq}) at a distance of 50 feet from the active construction area.

The closest residential property line at 19331 Lurin Avenue (south of Lurin Avenue between Cole Avenue and Dant Street) is located approximately 30 feet from the Project construction boundary and may be subject to short-term construction noise reaching 92 dBA L_{max} (88 dBA L_{eq}) or higher generated by construction activities in the Project area. Ambient noise levels at the Project site range between 42.2 to 67.6 dBA L_{eq} based on the long-term noise level measurements. Although the noise generated by Project construction activities would be higher than the ambient noise levels and would result in a temporary increase in the ambient noise levels, construction noise would stop once Project construction is completed. The proposed Project would be required to comply with the construction hours allowed under the City's Municipal Code Noise Ordinance and standard construction measures listed below:

- During all Project site excavation and grading, the Project contractors shall equip all construction equipment, fixed or mobile, with properly and maintained mufflers consistent with manufacturers' standards.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and most noise-sensitive receptors nearest the Project site during all Project construction.
- The construction contractor shall place all stationary construction equipment so that the emitted noise is directed away from the sensitive receptors nearest the Project site. Sensitive receptors nearest to the Project site include residences south of Lurin Avenue between Cole Avenue and Dant Street and north, east, south, and southwest of the site.

With the implementation of the standard construction measures listed above, Project construction noise would not exceed City noise standards for nearby sensitive receptors. Impacts would be **less than significant** and no mitigation measures be required.

Long-Term Off-Site Traffic Noise: The FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to evaluate roadway traffic-related noise conditions along roadway segments in the vicinity of the proposed Project under the following scenarios:

- Existing Year (2020) Traffic Noise Levels Without and With the Project;
- Project Completion (2021) Traffic Noise Levels Without and With the Project
- Cumulative (2021) Traffic Noise Levels Without and With the Project

Noise level increases below 3 dBA would not be perceptible to the human ear in an outdoor environment. Furthermore, an increase or decrease in noise level of at least 5 dBA is required before any noticeable change in community response would be expected.[3] Therefore, the City's ambient noise threshold is a clearly perceptible increase of 5 dBA in for ambient noise increases to be considered significant.[4] Tables P, Q and R in the *Noise and Vibration Impact Analysis* report show that the project-related traffic noise increase would be no greater than 2.0 dBA under all of the scenarios. As such, Project-related traffic noise increases on off-site sensitive receptors would be **less than significant**. No mitigation measures are required.

[3] *Section 5.11 – Noise of the General Plan and Supporting Documents Environmental Impact Report.* Page 5.11-26. Albert A. Webb Associates. Certified November 2007.

[4] *Ibid.*

Long-Term Off-Site Stationary Noise: Adjacent off-site land uses could potentially be exposed to stationary-source noise impacts from the proposed on-site heating, ventilation, and air conditioning (HVAC) equipment.

The proposed Project includes on-site ground-floor HVAC units for each residential unit that could potentially operate 24 hours per day. The HVAC equipment would generate noise levels of 66.5 dBA L_{eq} at 5 feet based on previous measurements conducted by LSA for similar project types. **Table O: HVAC Noise Levels** shows the noise levels generated by HVAC equipment at the property line of the closest off-site land use along with distance attenuation and shielding. As shown in **Table O**, 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.) and nighttime (10:00 p.m. to 7:00 a.m.) 30-minute (L_{50}) noise standards of 55 dBA and 45 dBA, respectively, for residential uses except for the residential units north and south of the Project site. Also, noise levels generated from on-site HVAC units would not exceed the City's exterior 30-minute (L_{50}) noise standard of 65 dBA at any time for commercial uses.

Table O: HVAC Noise Levels

Land Use	Direction	Reference Noise Level at 5 feet (dBA)	Distance from Source to Off-site Property Line (feet)	Distance Attenuation (dBA)	Exterior Noise Level (dBA L_{eq})	Interior Noise Level (a L_{eq})
Residential/ Commercial	North	66.5	60	21.6	39.9	15.9
Residential	East	66.5	125	28.0	33.5	9.5
Residential	South	66.5	100	26.0	33.5	11.5

Source: Noise and Vibration Impact Analysis TTM 37731 Cole Development Project, LSA (August 2020)
[1] Average distance to the property line of off-site land uses.
Protective Noise Levels (EPA 1978).
dBA = A-weighted decibel
EPA = United States Environmental Protection Agency
ft = foot/feet
HVAC = heating, ventilation, and air conditioning
L_{eq} = equivalent continuous sound level

As shown in **Table O**, with shielding from the 6 foot perimeter wall, interior noise levels generated from on-site HVAC units would not exceed the City's interior daytime and nighttime 5-minute (L_8) noise standards of 45 dBA and 35 dBA, respectively, for residential units. Impacts would be **less than significant** and no mitigation measures are required.

Land Use Compatibility Assessment: The land use compatibility of the Project site was assessed based on the Noise/Land Use Compatibility Criteria in the City of Riverside General Plan Noise Element. Table G of the General Plan Noise Element shows that single-family residential uses are considered "Normally Acceptable" in areas with noise levels of 60 dBA CNEL or less and "Conditionally Acceptable" in areas with a noise levels between 60 and 65 dBA CNEL.

Table P: Exterior Traffic Noise Levels at the Closest Residences shows the exterior traffic noise levels at the nearest residential property line from the adjacent roadway. As shown in **Table P**, traffic noise levels at the property line of onsite first-row residences range between 49.3 dBA CNEL and 56.8 dBA CNEL, which are "normally acceptable" based on the threshold limits of the City.

Based on the United States EPA Protective Noise Levels (1978), standard construction for Southern California (warm climate) residential buildings would provide 12 dBA or more with windows and doors open (the national average is 15 dBA) and 24 dBA or more with windows and doors closed (the national average is 25 dBA). As shown in **Table Q: Interior Traffic Noise Levels at the Closest Residences,** with windows and doors open, first-row residences along Mariposa Avenue and Cole Avenue between Lurin Avenue and Project Driveway 3 would exceed the interior noise standard of 45 dBA CNEL, while first row residences along Cole Avenue between Project Driveway 3 and Mariposa Avenue and Lurin Avenue would not exceed the interior noise standard of 45 dBA CNEL. With windows and doors closed, all first-row residences (along Mariposa Avenue and Cole between Lurin Avenue and Project Driveway 3 and Cole Avenue between Project Driveway 3 and Mariposa Avenue

and Lurin Avenue) would not exceed the noise standard of 45 dBA CNEL. Mechanical ventilation such as air conditioning would be required for the first-row of residences along Mariposa Avenue and Cole Avenue between Lurin Avenue and Project Driveway 3 so that windows and doors can remain closed for a prolonged period of time. As the Project would provide air conditioning as a standard feature, windows and doors can remain closed for a prolonged period of time. Therefore, no on-site traffic noise impacts would occur and no noise mitigation measures are required.

Table P: Exterior Traffic Noise Levels at the Closest Residences

First-Row Residences	Distance from Roadway Centerline to Property Line (feet)	Exterior Noise Level at the Property Line (dBA CNEL)
Cole Avenue between Lurin Avenue and Project Driveway 3	60	53.7
Cole Avenue between Project Driveway 3 and Mariposa Avenue	60	53.0
Lurin Avenue between Project Driveway 1 and Cole Avenue	40	49.3
Mariposa Avenue between Project Driveway 2 and Cole Avenue	65	56.8

Source: Noise and Vibration Impact Analysis TTM 37731 Cole Development Project, LSA (August 2020)
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels

Table Q: Interior Traffic Noise Levels at the Closest Residences

First-Row Residences	Distance from Roadway Centerline to Building Setback Line (feet)	Exterior Noise Level at the Building (dBA CNEL)[1]	Interior Noise Level with Windows/Doors Open (dBA CNEL)[2]	Interior Noise Levels with Windows/Doors Closed (dBA CNEL)[3]
Cole Avenue between Lurin Avenue and Project Driveway 3	75	57.2	**45.2**[4]	33.2
Cole Avenue between Project Driveway 3 and Mariposa Avenue	80	56.1	44.1	32.1
Lurin Avenue between Project Driveway 1 and Cole Avenue	50	52.8	40.8	28.8
Mariposa Avenue between Project Driveway 2 and Cole Avenue	75	60.9	**48.9**	36.9

Source: Noise and Vibration Impact Analysis TTM 37731 Cole Development Project, LSA (August 2020)
[1] The exterior noise levels was calculated using the same reference noise level and reference distance shown in Table R, and the proposed 6 foot high perimeter wall would provide a minimum noise reduction of 5 dBA.
[2] The interior noise level with windows and doors closed was calculated based on an exterior-to-interior noise reduction of 12 dBA based on the EPA Protective Noise Levels (EPA 1978).
[3] The interior noise level with windows and doors closed was calculated based on an exterior-to-interior noise reduction of 24 dBA based on the EPA Protective Noise Levels (EPA 1978).
[4] The number in bold represents a noise level that exceeds the City of Riverside's interior noise standard of 45 dBA CNEL.
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
EPA = United States Environmental Protection Agency

In summary, the proposed Project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established by the City of Riverside General Plan or City of Riverside Zoning. Impacts would be **less than significant** and no mitigation is required.

b. Result in generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

13b. Response: ***(Source: Project Site Plans; Noise and Vibration Impact Analysis TTM 37731 Cole Development Project, May 2020, Appendix G; Federal Transit Authority's Transit Noise and Vibration Impact Assessment Manual)***

Less Than Significant Impact. Vibration refers to groundborne noise and perceptible motion which is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernable, but without the effects associated with the shaking of a building there is less adverse reaction. The vibration standards included in the Federal Transit Authority's (FTA) *Transit Noise and Vibration Impact Assessment Manual* were used to evaluate operational and construction vibration levels related to Project implementation.

Occupation of the proposed single-family residential units on the site is not expected to generate vibration. In addition, vibration generated from project-related traffic on the adjacent roadways would be unusual for on-road vehicles because the rubber tires and suspension systems of vehicles provide vibration isolation. Therefore, vibration generated from project-related traffic on the adjacent roadways, and Project operation in general, would be **less than significant.** No mitigation is required.

Table R: Construction Vibration Damage Criteria lists the potential vibration building damage criteria associated with construction activities, as suggested by the *Transit Noise and Vibration Assessment Model* prepared by the FTA. The guidelines in **Table R** show that a vibration level of up to 102 VdB is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster) and would not result in any construction vibration damage. For non-engineered-timber and masonry buildings, the construction building vibration damage criterion is 94 VdB.

Table R: Construction Vibration Damage Criteria

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

Source: Noise and Vibration Impact Analysis TTM 37731 Cole Development Project, LSA (May 2020)

[1] RMS VdB 1 µin/sec.

µin/sec. = micro-inches per second
FTA = United States Federal Transit Administration
in/sec = inches per second
L_v = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

During construction, outdoor site preparation for the proposed Project is expected to require the use of a large bulldozer and loaded trucks, which would generate ground-borne vibration of up to 87 VdB and 86 VdB when measured at 25 feet,

respectively. **Table S: Summary of Construction Vibration Levels** shows the projected vibration levels from various construction equipment expected to be used on the Project site to the closest sensitive receptors in the Project vicinity.

Table S: Summary of Construction Vibration Levels

Land Use	Direction	Equipment Activity	Reference Vibration Level (PPV) at 25 ft	Reference Vibration Level (PPV) at 25 ft	Distance (ft)	Maximum Vibration Level (VdB)	Maximum Vibration Level (PPV)
Residential (19331 Lurin Avenue)	North	Large Bulldozers	87	0.089	10	99	0.352
		Loaded Trucks	86	0.076	10	98	0.300
Residential (19504 Mariposa Avenue)	East	Large Bulldozers	87	0.089	70	74	0.019
		Loaded Trucks	86	0.076	70	73	0.016
Residential (19345 Mariposa Avenue)	South	Large Bulldozers	87	0.089	75	73	0.017
		Loaded Trucks	86	0.076	75	72	0.015

Source: Noise and Vibration Impact Analysis TTM 37731 Cole Development Project, LSA (May 2020)

Note: The FTA-recommended building damage threshold is 94 VdB (0.2 PPV [in/sec]) for building structures constructed of non-engineered timber and masonry

ft = foot/feet; FTA = United States Federal Transit Administration; in/sec = inches per second; PPV = peak particle velocity; VdB = vibration velocity decibels

The closest structure to the Project construction boundary is the residence 30 feet to the east located at 19331 Lurin Avenue, which would be exposed to vibration levels of up to 99 VdB (0.352 PPV [in/sec]). This vibration level would result in community annoyance because vibration levels would exceed the FTA community annoyance threshold of 78 VdB for residential uses during daytime hours. However, the vibration generated would be temporary and sporadic in nature during construction activities and therefore would not be considered a permanent impact to nearby sensitive receptors. The 99 VdB vibration level has the potential to result in building damage because the building was observed to be constructed of non-engineered timber and masonry and because the vibration level would exceed the FTA vibration damage threshold of 94 VdB (0.2 PPV [in/sec]). **Mitigation Measure NOI-1** would be implemented to reduce vibration impacts from construction equipment at the residential unit located at 19331 Lurin Avenue. Other building structures surrounding the Project site would experience vibration levels of up to 74 VdB (0.019 PPV [in/sec]) or lower. This vibration level would not result in community annoyance because vibration levels would not exceed the FTA community annoyance threshold of 78 VdB for residential uses during daytime hours. In addition, this vibration level would not have the potential to result in building damage because other buildings were observed to be constructed of non-engineered timber and masonry and because the vibration level would not exceed the FTA vibration damage threshold of 94 VdB (0.2 PPV [in/sec]).

Mitigation Measure

NOI-1: The use of large bulldozers and loaded trucks shall be prohibited within 15 feet of existing structures or the construction contractor shall use light construction equipment (e.g., small rubber-tire bulldozers or pickup trucks) within 15 feet of the residential building at 19331 Lurin Avenue.

With implementation of **Mitigation Measure MM NOI-1** the vibration level at the nearest sensitive receptor would not exceed the FTA vibration damage threshold of 94 VdB (0.2 PPV [in/sec]) for buildings constructed of non-engineered timber and masonry. Impacts would be **less than significant with mitigation implemented.**

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?	☐	☐	☐	☒

13c. Response: ***(Source: General Plan 2025 FPEIR Figure 5.11-10 March ARB Noise Contours; Google Earth Noise and Vibration Impact Analysis TTM 37731 Cole Development Project, May 2020, Appendix G)***

No Impact. The nearest airport to the Project site is the March Air Reserve Base, located approximately 3.61 miles east of the site. Riverside Municipal Airport is located approximately 8.4 miles northwest of the Project site. The Project site is located in Zones D and E of the March Air Reserve Base Airport Land Use Compatibility Plan. It is also within the Outer Horizontal Surface area of March Air Reserve Base. The Project site is not located in the noise contours of March Air Reserve Base and the Project site is far enough away to not be impacted by this airport's noise contours. Implementation of the proposed Project would not expose on-site construction workers, workers, or residents to excessive noise levels from nearby airport operations. **No impact** directly, indirectly, or cumulatively would occur with Project implementation and no mitigation is required.

14. POPULATION AND HOUSING

Would the project:

a. 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)?	☐	☐	☒	☐

14a. Response: ***(Source: General Plan 2025 Table LU-3 – Land Use Designations, FPEIR Table 5.12-A – SCAG Population and Households Forecast, Table 5.12-B – General Plan Population and Employment Projections–2025, Table 5.12-C – 2025 General Plan and SCAG Comparisons, Table 5.12-D - General Plan Housing Projections 2025, Capital Improvement Program and SCAG's RCP and RTP)***

Less Than Significant Impact. The Project proposes the construction of 138 single-family residential units on a vacant 32.54-acre parcel. The Project is in a semi-urbanized area and would not induce substantial population growth, as the addition of 138 single-family residential units represents approximately 0.11 percent of the projected 118,600 housing units anticipated by 2040 in the SCAG RTP/SCS housing projections for 2040. Based on the 2.8625 person per household estimated in Riverside in 2019 the proposed Project could increase the City's population by approximately 396 people. The 2015 and 2040 population of the City, Riverside County, and the region are detailed in **Table T: SCAG Population Projections**.

Table T: SCAG Population Projections

	2015		2040	
	Population	**Employment**	**Population**	**Employment**
City of Riverside	310,700	120,000	386,600	200,500
Riverside County	2,316,438	742,000	3,167,584	1,174,500
SCAG	18,779,123	8,006,030	18,779123	9,871,441

Source: Tables 8 and 11, Demographic and Growth Forecast, 2016-2040 RTP-SCS, Southern California Association of Governments, December 2015.

SCAG's 2016 RTP/SCS establishes population, housing, and growth trends for the City, Riverside County, and SCAG region. According to the 2016 RTP/SCS, the forecast population for the County of Riverside Sub-region in 2040 is approximately 3,167,584 persons. In 2015, the County of Riverside was reported to have a population of approximately 2,316,438 persons. Therefore, the forecast population for the County of Riverside would grow by approximately 851,146 persons between 2015 and 2040. Based on an anticipated increase of 396 persons, Project residents would account for 0.05 percent of the population growth forecast by SCAG in the County of Riverside between 2015 and 2040.

The SCAG foresees that population would increase in the City and region over the next 25 years, and the anticipated rate of population growth in the City (2.4 percent) is roughly similar to that of Riverside County (2.0 percent) and the SCAG region increase in population by approximately 396 persons has been anticipated and planned for in the City's General Plan. Additionally, the Project does not include any significant infrastructure improvements or the extension of roads that could indirectly induce growth in the City. Therefore, this Project would have a **less than significant impact** on population growth directly, indirectly, and cumulatively. No mitigation is required.

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

14b. Response: ***(Source: General Plan 2025, General Plan 2025 Housing Element Update 2014 – 2021; California Department of Finance)***

Less Than Significant Impact. The Project site is currently vacant. Once the Project site is developed, a total of 138 single-family residential units would be built on site. The site would be developed at an overall density of 3.86 dwelling units/acre and would include minimum lot sizes of 4,235 square feet and a maximum lot size of 15,720 square feet. The development on

the Project site, based on the current person per household estimate in the City, would provide housing for approximately 396 residents.

Implementation of the Project would not displace existing people or housing, necessitating the construction of replacement housing elsewhere as the Project in itself would add needed housing to the City's inventory. **No impact** on housing either directly, indirectly, or cumulatively would occur with Project implementation. No mitigation is required.

15. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a. Fire protection?	☐	☐	☒	☐

15a. Response: ***(Source: FPEIR Table 5.13-B – Fire Station Locations, Table 5.13-C – Riverside Fire Department Statistics and Ordinance 5948 § 1)***

Less Than Significant Impact. The City of Riverside Fire Department provides fire protection service to the subject site. Fire Station 11, located at 19595 Orange Terrace Parkway, approximately 1.46 miles north of the site, and would be the closest fire station serving the proposed Project. The City's Fire Department policy states that stations would be located and staffed in such that an effective response force of 4 units with 12 personnel minimum shall be available to all areas of the City within a maximum of 10 minutes (total response time).

Implementation of the proposed Project would add 396 residents to the City of Riverside; however, this increase in residents is accounted for in the General Plan 2025 Land Use Plan and the development density of the site would be consistent with City Zoning Development Standards. The operation of the City's Fire Department would continue to provide adequate service as the City develops to its buildout potential.

Implementation of the proposed Project would generate an incremental increase in the demand for fire protection services; however, the increase in population would be limited by density development standards per the City's Zoning Code and would not demand an increase in fire service such that new or expanded facilities would be needed.

The proposed Project would implement General Plan 2025 policies pertaining to fire protection, comply with existing codes and standards (California Fire Code and Riverside Municipal Code Section 16.32.10) and comply with Chapter 16.52.010 of the City's Municipal Code pertaining to the payment for development fees to be utilized for the purchase of land for and the construction of fire stations and the acquisition of equipment and furnishings to equip fire stations. The Project's final development plan would also be reviewed and approved by the City's Fire Prevention Bureau. With these standard measures implemented, the proposed Project would generate a **less than significant impact** on Riverside's fire protection services. No mitigation is required.

b. Police protection?	☐	☐	☒	☐

15b. Response: ***(Source: General Plan 2025 Public Safety Element pgs. 34-39; Project Set Plan; City of Riverside, Riverside Police Department, Operations, Website: https://www.riversideca.gov/rpd/about-contact/operations/field-operations/about, accessed January 22, 2021)***

Less Than Significant Impact. The Riverside Police Department (RPD) provides law enforcement services to the City of Riverside and the Project site. The Magnolia Neighborhood Policing Center, at 10540-B Magnolia Avenue, approximately 10.1 miles northwest of the Project site, is the base of operations for Central and West Neighborhood Policing Center Field Operations, Central and Special Investigations, Special Operations, Central and Special Investigations, Special Operations, Policing, Training, and the Record Bureau. The RPD employs 130 sworn officers, 24 Sergeants, 6 Lieutenant Watch Commanders, 1 Executive Lieutenant, 1 Traffic Lieutenant, and civilian support staff. As part of the Riverside Renaissance Initiative, a new Public Safety Administrative building, 911 Dispatch and Data Center and Neighborhood Police Center are proposed in the future.

Implementation of the Project would add 396 residents to the existing population of the City. Residential development, such as that proposed by the Project, typically generates calls for law enforcement service due to residential break-ins, vehicle burglaries and break-ins, and general disturbances. The design of the proposed Project would include a 6-foot tall perimeter

wall, exterior building lighting, and street lighting, all considered features of Crime Prevention through Environmental Design technique, to reduce on-site crime and thus reduce law enforcement calls of service to the Project site.

An incremental increase in law enforcement calls to the Project site could occur; however, such calls would be consistent to the types of calls RPD responds to at similar residential developments within the City. Additionally, the proposed Project's anticipated population contribution to the City of Riverside was consistent with and analyzed in the 2025 General Plan; as such, potential impacts of the population growth from the proposed Project have already been considered in potential impacts to the Riverside Police Department. Implementation of the Project would not degrade the RPD's performance to the point that a new facility or expansion of an existing facility would be needed. With implementation of General Plan 2025 policies, compliance with existing codes and standards, and through Police Department practices, there would be **a less than significant impact** on the demand for additional law enforcement facilities of services either directly, indirectly, or cumulatively. No mitigation is required.

c. Schools?	☐	☐	☒	☐

15c. Response: ***(Source: California Department of Education, https://www.cde.ca.gov/ds/sd/cb/dataquest.asp; General Plan 2025 Final EIR, Section 5.13 Public Services pgs. 5.13-8 to 5.13-14)***

Less Than Significant Impact. The proposed Project is located within the Riverside Unified School District (RUSD), which had a 2019–2020 total enrollment of 41,617 students. The following schools within the RUSD would provide education services to students of the proposed Project:

- Mark Twain Elementary School is located at 19411 Krameria Avenue, approximately 0.12 mile north of the Project site. This school had a 2019–2020 enrollment of 1,068 students.
- Frank Augustus Miller Middle School is located at 17925 Krameria Avenue, approximately 1.26 miles west of the Project site. This school had a 2019–2020 enrollment of 1,035 students.
- Martin Luther King High School is located at 9301 Wood Road, approximately 0.50 mile northwest of the Project site. This school had a 2019–2020 enrollment of 3,058 students.

According to the Final EIR of the General Plan 2025, RUSD contains many schools that are near or over capacity and are located in areas where vacant land to expand is not available. The school district is in need of new elementary and high school sites to meet the needs of the projected student population within its district as the City of Riverside reaches full buildout. Table 5.13-G in the Final EIR of the General Plan 2025, indicates that the maximum with PRD development buildout of land within the RUSD boundary would generate 136,716 students. Based on the student generation factor of RUSD, the proposed Project is estimated to generate 97 students (0.70 × 138 residential units) who would attend schools within RUSD. The total students generated includes 52 elementary school students (0.38 × 138 residential units), 16 middle school students (0.11 × 138 residential units), and 29 high school students (0.21 × 138 residential units). It should be noted, the generation of students for the Project site has been anticipated in the Riverside General Plan 2025 based on the site's existing land use and zoning designations.

The Project applicant would be required to pay RUSD impact fees for new residential construction and, pursuant to Government Code Section 65995, such impact fee payment would offset potentially significant impacts to school facilities due to Project implementation. Project impacts would be **less than significant** and no mitigation is required.

d. Parks?	☐	☐	☒	☐

15d. Response: ***(Source: General Plan 2025 Figure PR-1 – Parks, Open Spaces and Trails, Table PR-4 – Park and Recreation Facilities, Parks Master Plan 2003, GP 2025 FPEIR Table 5.14-A – Park and Recreation Facility Types; Project Site Plan)***

Less Than Significant Impact. Bergamont Park, located at 19275 Bergamont Drive, is the closest park to the Project site (0.59 mile to the north of the site). This park is approximately 5.32 acres in size and includes the following amenities: basketball half courts, playground, picnic tables, and exercise course.

The General Plan EIR indicates that the City currently has a parkland to population ratio standard of 3 acres per 1,000 population. The proposed Project will develop 138 residential units and, if fully occupied, would house 396 residents. The City of Riverside, through the zoning code, requires residential development projects to include park areas equating to 500 square feet per planned residential unit. As such, the proposed Project would require the development of 69,000 square feet of park/open space within its boundary.

The proposed Project, consistent with Zoning development standards, would include the development of park/open space with a variety of amenities in three lots within the Project site (Lots D, F, and M). The park/open space within the Project site would equate to approximately 72,387 square feet of land and would include picnic shelters, BBQ facilities, tot and child play areas, pickleball courts, lounge seating with mist/fog, exercise stations, ping-pong tables, and corn hole game facilities. As such, the proposed Project would exceed the park requirement standards as set forth by the City of Riverside Zoning development standards.

The population generated by proposed Project has the potential to incrementally increase the use of off-site nearby parks; however, such use would be nominal due to the fact that the project would provide parkland as part of its design. Additionally, the proposed Project's anticipated population contribution to the City of Riverside was consistent with and analyzed in the 2025 General Plan; as such, potential impacts of the population growth from the proposed Project have already been considered in potential impacts to parks within the City. Implementation of the proposed Project would not require the construction of new or expansion of existing public facilities. Furthermore, the Project applicant would be required to pay parkland development impact fees for regional parks, local parks, and aquatics facilities to ensure that enough parkland is provided to residents in the City of Riverside. The proposed Project would not generate the need to develop new parks or expand existing parks within the City. Project impacts would be **less than significant** and no mitigation is required.

e. Other public facilities?	☐	☐	☒	☐

15e. Response: ***(Source: General Plan 2025 Figure LU-8 – Community Facilities, FPEIR Figure 5.13-5 - Library Facilities, Figure 5.13-6 - Community Centers, Table 5.3-F – Riverside Community Centers, Table 5.13-H – Riverside Public Library Service Standards)***

Less Than Significant Impact. The City of Riverside provides library services to its residents through a Main Library located at 3581 Mission Inn Avenue and six branch libraries (Arlington Neighborhood Library, Casa Blanca Family Learning Center, Marcy Branch, La Sierra Neighborhood Library, Orange Terrace Library, and Eastside Library and Cybrary) located throughout the City. The City of Riverside Public Library System provides over 600,000 books and other library materials to residents in the City. The Woodcrest Community Library, located at 16625 Krameria Avenue (approximately 2.8 miles west of the Project site), is the closest library that would serve residents occupying the Project site.

Community centers, senior centers, and service centers are other public facilities provided by the City to provide various services to residents. The centers offer a wide range of services that include computer training, English as a second language classes, fitness and wellness programs, early childhood programs, aquatics, social recreation programs, specialty classes, sports programs, field trips, and a variety of cultural and holiday activities. Ysmael Villegas Center, located at 7260 Marguerita Avenue, is the closest community center that would serve Project residents; the Cesar Chavez Center, located at 2060 University Avenue, is the closest service center that would serve Project residents; and Janet Goeske Senior Center, located at 5257 Sierra Avenue, is the closest senior center that would serve project residents.

The population increase generated by the proposed Project would result in an incremental increase in the use of public libraries and other public facilities. Additionally, the proposed Project's anticipated population contribution to the City of Riverside was consistent with and analyzed in the 2025 General Plan; as such, potential impacts of the population growth from the proposed Project have already been considered in potential impacts to the other public facilities within the City. Implementation of the proposed Project would not require the construction of new or expansion of existing public facilities. Project impacts would be **less than significant** and no mitigation is required.

16. RECREATION

Would the project:

a. 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?	☐	☐	☒	☐

16a. Response: ***(Source: General Plan 2025 Figure PR-1 – Parks, Open Spaces and Trails, Table PR-4 – Park and Recreation Facilities, Figure CCM-6 – Master plan of Trails and Bikeways, Parks Master Plan 2003, FPEIR Table 5.14-A – Park and Recreation Facility Types, and Table 5.14-C – Park and Recreation Facilities Funded in the Riverside Renaissance Initiative, Table 5.14-D – Inventory of Existing Community Centers, Riverside Municipal Code Chapter 16.60 - Local Park Development Fees, Bicycle Master Plan May 2007)***

Less Than Significant Impact. Bergamont Park, located at 19275 Bergamont Drive, is the closest park to the Project site (0.59 mile north of the site). This park is approximately 5.32 acres in size and includes the following amenities: basketball half courts, playground, picnic tables, and exercise course. As detailed in Figure 5.14-2 Trails Map of the General Plan 2025 FPEIR, the closest trail to the Project site is designated as a City of Riverside Trail along Wood Road. As population increases in the City of Riverside, the need for park and other recreational facilities rises due to the additional strain on upkeep and maintenance that is required from the City.

The proposed Project would include the development of 72,387 square feet of park/open space on site within Lots D, F, and M. The park/open space facilities would include amenities such as, picnic shelters, BBQ facilities, tot and child play areas, pickleball courts, lounge seating with mist/fog, exercise stations, ping-pong tables, and corn hole game facilities. The amount of park/open space provided would exceed the 69,000 square feet of common usable open space/recreational facilities space required by Section 19.780.060 of the Riverside Municipal Code. The Project features would help in reducing increased uses and deterioration of existing City recreational amenities as residents would be more apt to use the on-site facilities. In addition, as a condition of approval, the Project applicant would be required to pay parkland development impacts fees for regional parks, local parks, and aquatics facilities, which would help in maintaining recreation amenities within the City.

As the Project will include on-site recreational amenities and pay parkland development impact fees as a condition of approval, implementation of the proposed Project would not increase the use or deterioration of the City's recreational amenities. Direct, indirect, or cumulative impacts would be **less than significant** and no mitigation is required.

b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

16b. Response: ***(Source: Project Site Plan, General Plan 2025 Figure PR-1 – Parks, Open Spaces and Trails, Table PR-4 – Park and Recreation Facilities, Figure CCM-6 – Master plan of Trails and Bikeways, Parks Master Plan 2003, FPEIR Table 5.14-A – Park and Recreation Facility Types, and Table 5.14-C – Park and Recreation Facilities Funded in the Riverside Renaissance Initiative, Table 5.14-D – Inventory of Existing Community Centers, Riverside Municipal Code Chapter 16.60 - Local Park Development Fees, Bicycle Master Plan May 2007)***

Less Than Significant Impact. The proposed Project would include the development of 72,387 square feet of park/open space on site within Lots D, F, and M. The park/open space facilities would include amenities such as, picnic shelters, BBQ facilities, tot and child play areas, pickleball courts, lounge seating with mist/fog, exercise stations, ping-pong tables, and corn hole game facilities. The amount of park space provided would exceed the 69,000 square feet of common usable open space/recreational facilities space required by Section 19.780.060 of the Riverside Municipal Code. The park space of the proposed Project would be developed in accordance with the City's General Plan 2025, Park and Recreation Master Plan, and all other applicable local, State, and/or federal regulatory requirements. As the Project includes recreational amenities within the onsite parks that would be used by the Project residents, the use of off-site City-owned recreational facilities would be minimal compared to existing conditions, and would not necessitate expansion solely due to Project implementation. Direct, indirect, and cumulative project impacts would be **less than significant** and no mitigation is required.

17. TRANSPORTATION

Would the project:

a. Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☒	☐

17a. Response: ***(Source: LSA, Traffic Operations Analysis (TOA) TTM37731 Cole Development, March 2021, Appendix H; City of Riverside Traffic Impact Analysis Preparation Guide April 2019)***

Less Than Significant Impact. The information in this section is based on the analysis presented in the *Traffic Operations Analysis (TOA)* approved by the City of Riverside in March 2021. The study area for the proposed Project consists of the following intersections: (1) Lurin Avenue/Project Driveway 1; (2) Mariposa Avenue/Project Driveway 2; (3) Lurin Avenue/Cole Avenue; (4) Cole Avenue/Project Driveway 3; and, (5) Cole Avenue/Mariposa Avenue. All of the intersections within the study area are in the City of Riverside. The City of Riverside General Plan Circulation and Community Mobility Element analyses traffic impacts via level of service (LOS) for intersections and sections within the City of Riverside. As such, this section of the IS/MND focuses on LOS analysis for the study intersections under the following scenarios: Existing Levels of Service, Existing with Project Levels of Service, Project Completion (2021) without Project Levels of Service, Project Completion (2021) with Project Levels of Service, Cumulative (2021) without Project Levels of Service, and, Cumulative (2021) with Project Levels of Service.

The following provides a brief description of the major roadways within the study area:

- **Cole Avenue:** Within the study area, Cole Avenue is a two-lane undivided road designated 88 feet Arterial in the City's General Plan. The posted speed limit is 30 miles per hour and there are no existing sidewalks or bike lanes along Cole Avenue along the Project frontage.
- **Lurin Avenue:** Lurin Avenue is not classified in the City's General Plan. Within the study area, Lurin Avenue is a two-lane undivided road. The posted speed limit is 30 miles per hour. There are no existing sidewalks or bike lanes along Luyrin Avenue along the Project frontage with the exception of the northern side of Lurin Avenue west of Cole Avenue for approximately 1,000 feet of sidewalk.
- **Mariposa Avenue:** Within the study area, Mariposa Avenue is a two-lane undivided road designated as a 66 foot wide Collector in the City's General Plan. The posted speed limit is 45 miles per hour and there are no existing sidewalks or bike lanes along Mariposa Avenue along the Project frontage.

The proposed Project is estimated to generate 102 trips in the a.m. peak hour, 137 trips in the p.m. peak hour, and 1,303 daily trips.

Intersection LOS Existing Conditions Summary

All of the study intersections under Existing Conditions without the Project and Existing Conditions with the Project would operate at a satisfactory LOS as shown below in **Table U: Existing Intersection Levels of Service.**

Intersection LOS Opening Year (2021) Conditions Summary

All of the study intersections under Opening Year (2021) without Project and Opening Year (2021) with Project conditions would operate at a satisfactory LOS as shown below in **Table V: Opening Year (2021) Intersection Levels of Service.**

Intersection LOS Cumulative (2021) Conditions Summary

All of the study intersections under Cumulative Year (2021) without Project and Cumulative Year (2021) with Project conditions would operate at a satisfactory LOS as shown below in **Table W: Cumulative Year (2021) Intersection Levels of Service.**

Overall, the proposed Project would not degrade the LOS of the study intersections when implemented.

Under the proposed Project, improvements will only occur on the site. No improvements to the local transit system or bicycle and pedestrian facilities off of the Project site will occur. The internal circulation system on the Project site will be developed to be consistent with City of Riverside and Riverside Fire Department roadway width requirements as part of the conditions of approval of the Project. Sidewalks will be installed along the internal street system to promote pedestrian movement. As bicycle lanes will not be developed on the internal roads of the Project site, bicyclists will be able to share the road with vehicles.

Overall, implementation of the Project would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant and no mitigation is required.

Table U: Existing Intersection Levels of Service

Intersection	LOS Standard	Without Project		With Project		Significant Impact?
		A.M. Peak Hour LOS	P.M. Peak Hour LOS	A.M. Peak Hour LOS	P.M. Peak Hour LOS	
1. Project Driveway 1/Lurin Avenue	D	DNE	DNE	B	A	No
2. Project Driveway 2/ Mariposa Avenue	D	A	A	B	B	No
3. Cole Avenue/Lurin Avenue	D	A	A	B	A	No
4. Cole Avenue/Project Driveway 3	D	DNE	DNE	B	B	No
5. Cole Avenue/Mariposa Avenue	D	B	A	B	A	No

Source: LSA, Traffic Operations Analysis (TOA) TTM 37731 Cole Development Project, Table 7-A, , March 2021.
Note: DNE = Does Not Exist; LOS = Level of Service

Table V: Opening Year (2021) Intersection Levels of Service

Intersection	LOS Standard	Without Project		With Project		Significant Impact?
		A.M. Peak Hour LOS	P.M. Peak Hour LOS	A.M. Peak Hour LOS	P.M. Peak Hour LOS	
1. Project Driveway 1/Lurin Avenue	D	DNE	DNE	B	A	No
2. Project Driveway 2/ Mariposa Avenue	D	B	A	B	B	No
3. Cole Avenue/Lurin Avenue	D	A	A	B	A	No
4. Cole Avenue/Project Driveway 3	D	DNE	DNE	B	B	No
5. Cole Avenue/Mariposa Avenue	D	B	A	B	A	No

Source: LSA, Traffic Operations Analysis (TOA) TTM 37731 Cole Development Project, Table 7-B, March 2021.
Note: DNE = Does Not Exist; LOS = Level of Service

Table W: Opening Year (2021) Intersection Levels of Service

Intersection	LOS Standard	Without Project		With Project		Significant Impact?
		A.M. Peak Hour LOS	P.M. Peak Hour LOS	A.M. Peak Hour LOS	P.M. Peak Hour LOS	
1. Project Driveway 1/Lurin Avenue	D	DNE	DNE	B	A	No
2. Project Driveway 2/ Mariposa Avenue	D	A	A	B	B	No
3. Cole Avenue/Lurin Avenue	D	B	A	B	B	No
4. Cole Avenue/Project Driveway 3	D	DNE	DNE	B	B	No
5. Cole Avenue/Mariposa Avenue	D	B	A	B	A	No

Source: LSA, Traffic Operations Analysis (TOA) TTM 37731 Cole Development Project, Table 7-C, March 2021.
Note: DNE = Does Not Exist; LOS = Level of Service

b. Would the project conflict or be inconsistent with C*EQA Guidelines* Section 15064.3, subdivision (b)?	☐	☒	☐	☐

17b. Response: (*Source: LSA, TTM37731 Cole Development Project Vehicle Miles Traveled Analysis, March 12, 2021 Appendix I)*

Less than Significant Impact with Mitigation Incorporated. On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) guidelines for use. Among the changes to the guidelines was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts were required to be evaluated based on a project's generation of vehicle miles traveled (VMT). The City of Riverside adopted new VMT analysis guidelines in July 2020; therefore, all projects where environmental documentation was commenced after July 2020 needed to be analyzed and compliant with the City's *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment*. The City's VMT analysis guidelines requires the proposed Project's VMT per capita to be compared with the jurisdictional VMT per capita to determine VMT impacts.

Based on the City's VMT analysis guidelines for residential development projects, the threshold for determining VMT impacts is 15 percent below the City's current baseline VMT per capita under baseline (2012) and cumulative (2040) conditions. **Table X: Baseline (2012) and Cumulative (2040) Jurisdictional and Project VMT per Capita Comparison** shows the Project's VMT under baseline (2012) and cumulative (2040) conditions compared to the VMT of the City of Riverside under the same conditions.

Table X: Baseline (2012) and Cumulative (2040) Jurisdictional and Project VMT per Capita Comparison

Analysis Scenario	City of Riverside (miles)	Project (miles)	Percentage Difference
Baseline (2012)	10.8	19.0	+ 76%
Cumulative (2040)	10.6	17.0	+ 60%

Source: LSA, *TTM37731 Cole Development Project Vehicle Miles Traveled Analysis*, March 12, 2021.

As shown above in **Table X**, the Project's VMT per capita exceeds the City's VMT per capita during baseline (2012) and cumulative (2040) conditions by 76 percent and 60 percent, respectively. As such, based on the City's VMT analysis guidelines, the proposed Project would have a significant VMT impact under both baseline and cumulative conditions.

However, in coordination with the City of Riverside staff, mitigation measure strategies were explored to reduce the Project's impact pertaining to VMT.

When a lead agency, under CEQA, identifies a significant impact, the agency must identify feasible mitigation measures in order to avoid or substantially reduce such an impact. VMT impacts require mitigation of regional impacts through more behavioral changes. Enforcement of mitigation measures are subject to the mitigation monitoring requirements of CEQA, as well as the regular police powers of the lead agency (in this case the City of Riverside). These measures can also be incorporated as part of plans, policies, regulations, or project design features. In general, transportation demand management (TDM) actions, active transportation amenities, and other measures to reduce the number of trips creating an impact are possible VMT mitigation strategies.

The City's baseline and future VMT per capita was compared to the Riverside County Transportation Analysis Mode (RIVTAM) and it was determined that the City's cumulative VMT per capita would be lower compared to the baseline VMT per capita. Lower VMT per capita for the City in the forecast scenario is possible due to multiple factors such as improvements in land use densities, mix of land uses, and non-drive alone mode shares. The City's investment in active transportation projects is one of the contributors towards the decrease in the City's drive alone mode share and thus, decrease in the VMT per capita metric. Since the proposed Project is consistent with the City's General Plan, the Project's fair share contribution towards these active transportation improvements can be considered as an appropriate VMT mitigation measure.

At present, the City of Riverside does not have a mitigation bank where all the General Plan improvements are researched and documented; however, City staff has a list of bicycle and pedestrian improvement projects that are anticipated to be completed in the future pursuant to the City of Riverside Active Transportation Master Plan. The total cost of these improvements were calculated and the Project's fair share contribution towards these improvements were determined. Based on the total VMT Growth in the City under baseline (2012) and cumulative (2040) conditions totaling 2,998,673 miles compared to the proposed Project's VMT of 5,913 miles, a Project Fair Share of 0.20 percent was calculated for the proposed Project. Implementation of **Mitigation Measure TRA-1** would require the Project applicant to pay their fair share toward the City's bicycle and pedestrian projects and mitigation bank study to reduce Project impacts associated with VMT generation.

Mitigation Measure

TRA-1: The Project Applicant shall pay a Project Fair-Share fee of 0.20 percent of the $61,583,924.03 total cost toward the City's bicycle and pedestrian projects and mitigation bank study. The Project Fair-Share Cost equates to $121,435.63 and shall be paid to the City of Riverside by the Project Applicant. The mitigation amount is a maximum and shall be confirmed by the City of Riverside prior to payment. The Project will pay the required fair-share contribution by the date of issuance of the first grading permit or within one year of entitlement, whichever comes first**.**

Implementation of **Mitigation Measure TRA-1** would ensure that any potential impacts to Project related VMT generation would be **less than significant with mitigation incorporated**.

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒

17d. Response: ***(Source: Project Plan Set, City of Riverside Zoning Code, General Plan 2025)***

No Impact. The design of the proposed Project does not include any geometric design features or incompatible uses that could substantially increase hazards. The proposed Project would develop a neighborhood consisting of 138 single-family residential units on varying sized lots, an internal circulation system (neighborhood roads), three common use park/open space areas, one lots occupied by a water quality management basins, seven lots occupied by slopes, two lots for driveways, and one lot for a drainage area. The design of the Project, through review of the Project Plan Set, does not include abnormal development that would increase hazards related to traffic. 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 the amended zoning designation and would not block line of sight

views for vehicles exiting the site onto Lurin Avenue, Cole Avenue, and Mariposa Avenue. Implementation of the proposed Project would not substantially increase hazards due to a geometric design feature or incompatible use. Direct, indirect, or cumulative impacts would be **less than significant** with implementation of the Project and no mitigation is required.

d. Result in inadequate emergency access?	☐	☐	☒	☐

17e. Response: ***(Source: Project Plan Set – Project Site Plan; 2019 California Fire Code Sections 503.1.1, 503.2.1, 506.1, and 503.6; General Plan 2025; City of Riverside Fire Department)***

Less Than Significant Impact. The proposed Project would comply with the 2020 California Fire Code Section 503-Fire Apparatus Access Roads. Sections 503.1.1 Buildings and Facilities; and 503.2.1 Dimensions of the 2019 California Fire Code Section would all be followed in development of the proposed Project. During construction, the Project site would remain accessible for emergency vehicles through the onsite dirt roads that connect to Lurin Avenue and Cole Avenue. The Project Site Plan indicates that access to the Project site, once operational, would be provided via newly constructed onsite roads connecting to Lurin Avenue, Cole Avenue, and Mariposa Avenue. The internal circulation system would be designed to a width to accommodate emergency vehicles pursuant to the 2020 California Fire Code requirements and City of Riverside. Prior to Project approval, the Riverside City Fire Department would review the Final Site Plan to ensure adequate emergency access to the site is provided. If additional access/circulation features are required, the Project would need to incorporate these as conditions of approval.

Based on the design of the Project as shown on the Project Site Plan, compliance with the applicable 2020 California Fire Code, and review and approval by the Riverside Fire Department, the proposed Project would provide adequate emergency access. Direct, indirect, and cumulative Project impacts would be **less than significant** and no mitigation is required.

18. TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☒	☐	☐

18a. Response: ***(Source: AB 52 Consultation)***

Less Than Significant With Mitigation Incorporated. Chapter 532, Statutes of 2014 (i.e., AB 42), requires Lead Agencies evaluate project's potential to impact "tribal cultural resources." Such resources include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources." AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a "tribal cultural resource."

Per AB 52 (specifically PRC 21080.3.1), Native American consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects. Pursuant to provisions of AB 52, the City contacted the following Native American Tribes:

- 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 Luiseño Indians
- Rincon Band of Luiseño Indians
- Gabrielino-Tongva Tribe (San Gabriel Band of Mission Indians)
- San Manuel Band of Mission Indians
- Soboba Band of Luiseño Indians

The following California Native American tribes have requested consultation with the City of Riverside pursuant to Public Resources Code 21080.3.1:

- Pechanga Band of Luiseño Indians
- Rincon Band of Luiseño Indians
- Soboba Band of Luiseño Indians
- Agua Caliente Band of Cahuilla Indians

The Pechanga Band of Luiseño Indians requested consultation with the City of Riverside on March 19, 2020, and a consultation via teleconferenced occurred in April 2020. During the teleconference, representatives from the Pechanga Band of Luiseño Indians requested Project document from the City and conditions of approval/mitigation measures, which the City provided on April 22, 2020. The City subsequently reached out to Pechanga Band of Luiseño Indians on June 17, October 6, and October 19, 2020. The City of Riverside provided the Pechanga Band of Luiseño Indians with the City's conditions of approval/ mitigation measures on October 19 and reached out on November 24 and December 22, 2020. The City of Riverside did not receive written comments or a response and/or input on the City's conditions of approval/mitigation measures. The City closed consultation with the Pechanga Band of Luiseño Indians on January 20, 2021.

The Rincon Band of Luiseño Indians requested consultation on March 3, 2020, and provided formal comment on April 15, 2020. The Rincon Band of Luiseño Indians recommended archaeological and tribal monitoring for all ground-disturbing activities, a monitoring report, and protocols for discovery of cultural material and human remains, which will be implemented

through **Mitigation Measures CUL-1** through **CUL-5.** Formal consultation with the Rincon Band of Luiseño Indians was closed by the City on January 20, 2021.

The Soboba Band of Luiseño Indians requested formal consultation with the City on April 8, 2020. The City of Riverside provided the Soboba Band of Luiseño Indians Project documents and conditions of approval/mitigation and closed consultation with the City on October 14, 2020.

The Agua Caliente Band of Cahuilla Indians requested formal consultation with the City of March 17, 2020. The Agua Caliente Band of Cahuilla Indians requested cultural resources inventory of the site, identification of the lead agency for the Project, and copies of any cultural resource documentation generated in connection with the proposed Project. The City provided this information to the Agua Caliente Band of Cahuilla Indians and the tribe indicated that the Project was within its Traditional Use Area. In a letter to the City dated June 10, 2020, the Agua Caliente Band of Cahuilla Indians requested that an approved Agua Caliente American Cultural Resource Monitor being present on site during ground-disturbing activities. The City of Riverside closed consultation with the Agua Caliente Band of Cahuilla Indians on June 10, 2020.

Mitigation Measures

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 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. Treatment and final disposition of any cultural and paleontological resources, sacred sites, and human remains if discovered on the project site; and

e. The scheduling and timing of the Cultural Sensitivity Training noted in Mitigation Measure CUL-5.

CUL-2: 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 the cultural resources on the project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place as many cultural and paleontological resources as possible that are located 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.

CUL-3: If human remains are discovered/uncovered/encountered during Project construction activities, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner

shall be notified by the City of Riverside of the find immediately. If the remains are determined to be Native American, the County Coroner shall notify the NAHC, which will determine and notify an MLD. With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD will have the opportunity to offer recommendations for the disposition of the remains.

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:

- 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.
- 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.
- 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:
  - 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.
  - 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.
  - If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the Western Science Center or Museum of Riverside by default.
- 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.

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.

With implementation of **Mitigation Measures CUL-1** through **CUL-5** impacts to tribal cultural resources 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) would be reduced to a **less than significant** level.

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

18b. Response: ***(Source: AB 52 Consultation)***

Less Than Significant With Mitigation Incorporated. CEQA defines a "historical resource" as a resource that meets one or more of the following criteria: (1) is listed in, or determined eligible for listing in, the California Register of Historical Resources (California Register); (2) is listed in a local register of historical resources as defined in PRC §5020.1(k); (3) is identified as significant in a historical resource survey meeting the requirements of PRC §5024.1(g); or (4) is determined to be a historical resource by a project's Lead Agency (PRC §21084.1 and State CEQA Guidelines §15064.5[a]).

A resources may be listed as a historical resource in the California Register if it meets any of the following National Register of Historic Places criteria as defined in PRC §5024.1(C):

A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
B. Is associated with the lives of persons important in our past.
C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possess high artistic values.
D. Has yielded, or may be likely to yield, information important in prehistory or history.

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

As detailed in response to Checklist Question 5b, a project-specific cultural resources assessment was conducted for the project site and included archaeological and historical records search, communication with Native American tribal representatives, and an intensive pedestrian survey of the project site. A records search was conducted in July 2019, which revealed 39 cultural resource studies previously conducted within one mile of the proposed Project, two of which included a portion of the Project site, but neither of which documented any cultural resources. Although no resources have been recorded within the Project area, 41 have been documented within one mile, including 33 archaeological (prehistoric bedrock milling slicks and prehistoric bedrock milling stations) and 8 built environment resources (historic residences, a ranch complex, and former military barracks). The nearest resource is a historic period residence (33-007826), approximately 600 feet to the north of the Project site, and the nearest prehistoric resource is a bedrock milling feature (33-13836-CA-RIV-7563), approximately 1,500 feet to the west of the Project site. Four of the 41 documented resources within a mile of the Project site are listed in the Riverside County Historic Properties Directory.

Although no cultural resources have been previously documented within the Project site and survey results were negative, due to the poor surface visibility and the presence of more than 33 prehistoric resources within a mile, the Project site retains potential for surface and subsurface historical Native American resources. With the implementation of **Mitigation Measures CUL-1** through **CUL-5**, impacts to tribal cultural resources determined significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1 with Native American input would be reduced to **less than significant** levels.

19. UTILITIES AND SYSTEM SERVICES

Would the project:

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐

19a. Response: ***(Source: General Plan 2025 Table PF-1 – RPU Projected Domestic Water Supply (AC-FT/YR), Table PF-2 – RPU Projected Water Demand, Table PF-3 – Western Municipal Water District Projected Domestic Water Supply (AC-FT/YR), RPU, FPEIR Table 5.16-G – General Plan Projected Water Demand for RPU Including Water Reliability for 2025, Table 5.16-I - Current and Projected Water Use WMWD, Table 5.16-J - General Plan Projected Water Demand for WMWD Including Water Reliability 2025, Table 5.16-K - Estimated Future Wastewater Generation for the City of Riverside's Sewer Service Area & Table 5.16-L - Estimated Future Wastewater Generation for the Planning Area Served by WMWD, Figure 5.16-4 – Water Facilities and Figure 5.16-6 – Sewer Infrastructure and Wastewater Integrated Master Plan and Certified EIR; KWC Engineers, Project Specific Water Quality Management Plan Tentative Tract Map 37731, 1/9/20, Appendix F)***

Less Than Significant Impact. The Project Site Plans prepared by the applicant indicates that the Western Municipal Water District provides water and sewer service in the vicinity of the site. Electricity and natural gas is provided by Southern California Edison and SoCal Gas, respectively.

Water: Water mains exist in Lurin Avenue, Cole Avenue, and Mariposa Avenue. The proposed Project would connect to these existing water mains in order to provide both potable water to the Project residents and for Project landscaping. Water distribution lines would be installed and loop through the Project site in order to provide water supply to each of the single-family residential units. Water for landscape irrigation would be separately metered. The necessary on-site water distribution line installation is included as a design feature of the Project and would not result in any physical environmental effects beyond what is analyzed in this environmental document. Off-site improvements to water lines located in the surrounding streets would not be required as the piping is correctly sized to continue to provide adequate water delivery to the Project site. As a condition of approval, the Project applicant would require a will-serve letter from Western Municipal Water District verifying that the Project would be adequately served by the district, prior to final map approval. Implementation of the proposed Project would not require or result in the relocation or construction of new water infrastructure that would cause significant environmental effects. Impacts would be **less than significant** and no mitigation is required.

Wastewater: Cole Avenue and Mariposa Avenue both have existing wastewater lines; whereas Lurin Avenue is not improved with a wastewater line. The proposed Project would include an internal wastewater distribution system connecting the on-site uses to the existing infrastructure in Cole Avenue and Mariposa Avenue. From here, wastewater would be conveyed to either the Western Riverside County Regional Wastewater Authority wastewater treatment facility (WRCRWA) or March Air Reserve Base wastewater treatment facility. The two wastewater treatment plants have a combined capacity of 8.75 million gallons per day (mgd) with the WRCRWA treatment plant designed to have a capacity for 8 mgd. The WRCRWA recently expanded its design capacity up to 14 mgd; as such, both plants currently have a daily intake capacity of 14.75 mgd.

According to the Riverside 2014 Capital Improvement Program and Rate Development Study, the adjusted daily flow of wastewater per equivalent dwelling unit in the City is 206 gallons per day. The proposed Project would include the development of 138 single-family residential units and therefore is estimated to generated 28,428 gallons of wastewater per day that would be conveyed and treated at the WRCRWA or March Air Reserve Base. Based on the existing daily treatment capacity and inflow of both plants, the Project would be adequately served pertaining to wastewater disposal and conveyance. As part of the Project design, an internal wastewater distribution system would be developed on site; however, such installation would not result in any physical environmental effects beyond those that are analyzed in this environmental document. As part of the Project's conditions of approval, the applicant would be required to provide sewer-loading calculations to the City to ensure the existing piping is correctly sized to continue to provide adequate service to the Project site. Any required improvements to the existing piping would occur within City right-of-way or on properties that have already been developed,

so no additional physical impacts to the environment are expected. Impacts would be **less than significant** and no mitigation measures are required.

Storm Water: The Project site is currently served by existing storm water drain lines in Lurin Avenue. The Project is required to comply with applicable federal, State, and local water quality regulations, including the design and maintenance of DMA 1A and DMA 2A detailed in the Project-specific WQMP. The proposed sump basins, to where on-site runoff is designed to flow through DMA 1A and DMA 2A, would infiltrate the maximum volume of runoff. Based on calculations from the project-specific WQMP, DMA 1A would collectively manage runoff from 816,750 square feet of the Project site and would require a minimum DCV of 18,498 cubic feet of runoff. Accordingly, DMA 1A would be treated via bioretention basin with a DCV of 18,764 cubic feet (storage and volume retention). DMA 2A would collectively manage runoff from 601,128 square feet of the Project site and would require a minimum DCV of 12,632 cubic feet of runoff. Accordingly, DMA 2A would be treated via an infiltration basin with a DCV of 38,536 cubic feet (storage and volume retention). Off-site storm water drainage facilities would not need to be upgraded with implementation of the proposed Project as existing off-site infrastructure has enough capacity to accommodate development on the Project site. Implementation of the proposed Project would not require or result in the relocation or construction of new off-site wastewater infrastructure that would cause significant environmental effects. Impacts will be **less than significant** and no mitigation is required.

Electrical/Gas Utilities: The proposed Project would tie into existing electrical and natural gas infrastructure that exists in roads adjacent to the site. Such connections may require trenching on the adjacent roads; however, construction to connect to existing electrical and natural gas infrastructure would be temporary. Implementation of the proposed Project would not require the relocation or construction of new electrical/natural gas infrastructure off site that would cause significant environmental effects. The Project site is occupied by a few utility poles, all of which will be relocated with the input of the various utility providers. Impacts would be **less than significant** and no mitigation is required.

Telecommunications: The proposed Project would tie into existing telecommunication infrastructure that exists in roads adjacent to the site. Such connections may require trenching on the adjacent roads; however, construction to connect to existing telecommunication infrastructure would be temporary. Implementation of the proposed Project would not require the relocation or construction of new telecommunication infrastructure off site that would cause significant environmental effects. Impacts will be **less than significant** and no mitigation is required.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐

19b. Response: ***(Source: Western Municipal Water District, 2015 Urban Water Management Plan Update, Table 7-3: Retail Supply and Demand Comparison for a Normal Year; Table 7-4: Wholesale Supply and Demand Comparison for a Normal Year; Table 7-5: Retail Supply and Demand in a Single-Dry Year; Table 7-6: Wholesale Supply and Demand in a Single-Dry Year; Table 7-7 Retail Supply and Demand Comparison in Multiple-Dry Years; Table 7-8: Wholesale Supply and Demand Comparison in Multiple-Dry Years, pgs. 7-5 through 7-7)***

Less Than Significant Impact. Although the proposed Project is located within the City of Riverside, the WMWD provides water to the Project site. The WMWD would have sufficient water supplies available to adequately serve the Project during normal, dry, and multiple dry year scenarios. The proposed Project would connect to existing water infrastructure to provide the necessary construction and operational water needs of site occupants. The connection point for water lines would be from infrastructure within the Lurin Avenue, Cole Avenue, and Mariposa Avenue right-of-way. The WMWD 2015 Urban Water Management Plan Update estimates water supply and demand during normal, dry, and multiple-dry years as shown in **Table Y: WMWD Projected Water Supply/Demand (acre-feet/year)**.

Table Y: Riverside Projected Water Supply/Demand (acre-feet/year)

Years	Normal Year		Dry Year		Multiple-Dry Year	
	Supply	Demand	Supply	Demand	Supply	Demand
Retail						
2020	69,718	30,814	69,718	30,814	69,718	30,814
2025	76,264	33,714	76,264	33,714	76,264	33,714
2030	79,672	36,415	79,672	36,415	79,672	36,415
2035	92,030	39,170	92,030	39,170	92,030	39,170
2040	90,400	41,704	90,400	41,704	90,400	41,704
Wholesale						
2020	152,491	110,787	152,491	110,787	152,491	110,787
2025	159,389	114,039	159,389	114,039	159,389	114,039
2030	169,372	123,515	169,372	123,515	169,372	123,515
2035	178,155	122,895	178,155	122,895	178,155	122,895
2040	184,095	132,999	184,095	132,999	184,095	132,999

Source: Western Municipal Water District, *2015 Urban Water Management Plan Update*, Table 7-3: Retail Supply and Demand Comparison for a Normal Year; Table 7-4: Wholesale Supply and Demand Comparison for a Normal Year; Table 7-5: Retail Supply and Demand in a Single-Dry Year; Table 7-6: Wholesale Supply and Demand in a Single-Dry Year; Table 7-7 Retail Supply and Demand Comparison in Multiple-Dry Years; Table 7-8: Wholesale Supply and Demand Comparison in Multiple-Dry Years, pgs. 7-5 through 7-7.

The WMWD's 2015 Urban Water Management Plan estimated a daily per capita water demand of 352 gallons.[5] Implementation of the proposed Project would result in a maximum population of 396 residents (2.8625 persons/household × 138 units), with an estimated water usage of 139,392 gallons per day (0.43 acre-feet/day) or 50,878,080 gallons per year (156.1 acre-feet/year). This represents 0.22 percent of anticipated WMWD's retail water supplies in 2020 (69,718 acre feet assuming worst-case multiple dry years), a 0.17 percent of anticipated WMWD's retail water supplies in 2040 (90,400 acre feet assuming worst-case multiple dry years), a 0.1 percent of anticipated WMWD's wholesale water supplies in 2020 (152,491 acre feet assuming worst-case multiple dry years), and a 0.08 percent of anticipated WMWD's wholesale water supplies in 2040 (184,095 acre feet assuming worst-case multiple dry years). As shown in **Table Y**, sufficient water supplies are available to serve existing and projected future water demand under normal, dry and multiple-dry conditions.

Therefore, the proposed Project was found to have a **less than significant impact** on water supplies either directly, indirectly, or cumulatively during normal, dry, and multiple-dry years. No mitigation is required.

c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐

19c. Response: ***(Source: FPEIR Figure 5.16-5 - Sewer Service Areas, Figure 5.16-6 -Sewer Infrastructure, Table 5.16-L - Estimated Future Wastewater Generation for the Planning Area Served by WMWD, and Wastewater Integrated Master Plan and Certified EIR)***

Less Than Significant Impact. Table 5.16-L of the City of Riverside General Plan FPEIR shows that the future flow per capita of wastewater (2025) would be 96.6 gallons per day. Table 5.16-L indicates that the WMWD Planning Area's population would be 35,841 residents with maximum buildout and Planned Residential Development. The Project's population estimate

[5] Western Municipal Water District, *2015 Urban Water Management Plan Update,* Section 5.1 Update of Targets from 2010 Urban Water Management Plan Update, Table 5-1 Revised SBX7-7 Water Use Targets, page 5-2, June 2016.

has been included in this population buildout in the area served by WMWD. As of 2014, the WRCRWA had a daily intake capacity of 14 mgd. In its General Plan analysis, the City evaluated utility demands based on three levels of development ranging from typical growth to the most extreme growth (Typical, Maximum, and Maximum with PRD). According to the General Plan 2025 FPEIR, the WMWD WRCRWA would adequately serve the City under a Typical Growth Scenario, Maximum Growth Scenario, and Maximum w/PRD Scenario through 2025.

With an estimated increase in the City's population of approximately 396 persons, the proposed Project would generate approximately 38,253.6 gallons of wastewater per day or 13,962,564 gallons of wastewater per year. Given the plant's maximum treatment capacity of 14 million gallons per day and a planned expansion of the facility to increase capacity to 32 million gallons per day, the Project would only incrementally increase the demand for wastewater treatment by approximately 0.12 percent (38,253.6/32,000,000).

The proposed Project would connect to the existing municipal water and sewer system via on-site water and sewer lines to be constructed to interconnect to existing lines. The proposed population increase as a result of the proposed Project would not be considered substantial. As a result, the proposed Project would not induce a population increase above that which has been planned for by the City, and the proposed Project would remain consistent with the Typical Growth Scenario of the General Plan 2025 where future wastewater treatment capacity was determined to be adequate (see Table 5.16-L of the Riverside General Plan 2025 FPEIR).

The Project would not exceed RWQCB wastewater treatment requirements. The Project is consistent with the General Plan 2025 Typical Growth Scenario where future wastewater generation was determined to be adequate (see Table 5.16-L of the General Plan 2025 Final PEIR). Further, the current Wastewater Treatment Master Plan anticipates and provides for this type of project. For these reasons, Project impacts would be **less than significant** directly, indirectly, or cumulatively. No mitigation is required.

d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐

19d. Response: ***(Source: FPEIR Table 5.16-A – Existing Landfills and Table 5.16-M – Estimated Future Solid Waste Generation from the Planning Area)***

Less Than Significant Impact. Solid waste generated during construction and operation of the proposed Project would be disposed of at the Badlands Landfill, located at 31125 Ironwood Avenue in Moreno Valley. The Badlands Landfill operates Monday through Saturday from 6:00 a.m. to 4:30 p.m. and accepts the following types of waste: agricultural, asbestos, ash, construction/demolition, contaminated soil, dead animals, green materials, industrial waste, inert waste, liquid waste, metals, mixed municipal, sludge (bio solids), tires, and wood waste. Riverside County, in April 2019, circulated a Notice of Intent to adopt an IS/MND for the Badlands Landfill Integrated Project; a project to revise the landfill's Solid Waste Facility Permit to expand operations and capacity. The revised permit would increase the permitted disturbance area of the landfill from 278 acres to 811 acres, which includes expanding the disposal footprint from 150 acres to 396 acres, thereby providing an additional 50 years of needed landfill capacity. The permit would increase the maximum permitted daily tonnage by 500 tons per day, from 4,500 tons per day to 5,000 tons per day. The maximum design capacity of the landfill will increase from 34.4 million cubic yards to 86 million tons (cubic yards not stated), resulting in a new closure date of 2073.[6]

In its General Plan analysis, the City evaluated solid waste generation and disposal based on three levels of development ranging from typical growth to the most extreme growth (Typical, Maximum, and Maximum with PRD). According to the General Plan 2025 FPEIR, the estimated solid waste generation in 2025 under the Maximum with PRD Scenario would be 2,579 tons/day. According to Table 5.16-M of the General Plan 2025 FPEIR, single-family residential units have a solid waste generation factor of 10 pounds per day per dwelling units. Based on this solid waste generation rate, the proposed Project,

[6] CEQAnet Web Portal, EA No. 2017-03: Badlands Landfill Integrated Project Notice of Completion, https://ceqanet.opr.ca.gov/2019049142/2 (accessed July 9, 2019).

once operational is estimated to generate a maximum of 1,380 pounds (lbs.) per day (0.69 ton per day),[7] which is well below the maximum permitted daily tonnage accepted by the Badlands Landfill.

Per the California Green Building Code, a minimum of 50 percent of debris would be diverted to a material recycling facility thus reducing the input of solid waste to Badlands Landfill emanating from the proposed Project. Direct, indirect, and cumulative impacts to landfill capacity will be **less than significant** with implementation of the proposed. No mitigation is required.

e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

19e. Response: ***(Source: California Integrated Waste Management Board 2002 Landfill Facility Compliance Study)***

No Impact. The California Integrated Waste Management Act under the Public Resource Code requires that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. The City is currently achieving a 60 percent diversion rate, well above State requirements. In addition, the California Green Building Code requires all developments to divert 50 percent of non-hazardous construction and demolition debris for all projects and 100 percent of excavated soil and land clearing debris for all non-residential projects beginning January 1, 2011. 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, **no impact** related to solid waste statutes would occur directly, indirectly, or cumulatively with Project implementation. No mitigation is required.

[7] Solid Waste Estimate 10 lbs/day per dwelling unit for single-family residential units × 40 dwelling units = 400 lbs/day or 0.2 tons/day.

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

20a. Response: ***(Source: General Plan 2025; Project Set Plans; Riverside Municipal Code Section 9.20.130 and Section 19.100; CAL FIRE Fire Hazard Severity Zone Map Program)***

Less Than Significant Impact. . The Project site is located in a semi-urbanized portion of Riverside and is not located within a Local Responsibility Area (LRA) Very High or High Fire Hazard Severity Zone nor is it located within a State Responsibility Area (SRA) Very High or High Fire Hazard Severity Zone, as defined by CAL FIRE and the Fire Hazard Severity Zone Map programs. The Project site is approximately 0.65 mile from the closest SRA High Fire Hazard Severity Zone and 3.0 miles from the closest SRA Very High Fire Hazard Severity Zone. The closest LRA Very High Fire Hazard Severity Zone is approximately 1.36 miles northwest of the Project site.

The Project site is currently vacant and is currently accessed by existing dirt roads off Lurin Avenue and Cole Avenue. Implementation of the proposed Project would not require construction activities on the off-site roadway system and therefore would not impair the City's adopted emergency response plan or emergency evacuation plan. Design of the Project would include the development an internal circulation system (residential streets) that would connect to Lurin Avenue, Cole Avenue, and Mariposa Avenue.

The design of the Project will comply with the Section 19.780.060 of the Riverside Municipal Code related to the development standards for a PRD use. Prior to the issuance of the final building permits, the City would review site plans for the proposed Project to ensure that design features would not substantially impair emergency response or emergency evacuation plans of the City. Direct, indirect and cumulative project impacts would be **less than significant** and no mitigation is required.

b. 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?	☐	☐	☒	☐

20b. Response: ***(Source: CAL FIRE Fire Hazard Severity Zone Map Program)***

Less Than Significant Impact. The proposed Project site is located in a semi-urbanized portion of Riverside and is not within an LRA or SRA Very High Fire Hazard Severity Zone, as defined by CAL FIRE and the Fire Hazard Severity Zone Map program. The proposed Project site is topographically flat and, based on weather conditions, can be exposed to offshore (Santa Ana Winds) or onshore winds, similar to other portions of Riverside. If wildfires occur nearby, there is potential for smoke to drift into the City and increase pollutant concentrations for the residents at the proposed Project site as well as residents in the City. Such conditions would most likely be temporary as fires that produce the smoke is controlled and extinguished. Due to the location of the proposed Project site in a semi-urbanized area, the exposure of Project occupants to uncontrolled spread of a wildfire relatively low. The City of Riverside has systems in place to protect residents in the event that wildfires are burning outside of the City limits and spreading toward the City.

Implementation of the proposed Project would not exacerbate wildfire risks, exposing Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Direct, indirect, and cumulative Project impacts would be **less than significant** with implementation of the proposed Project. No mitigation is required.

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

20c. Response: ***(Riverside Municipal Code Section 19.100; Project Set Plans)***

No Impact. The proposed Project includes the development of 138 single-family residential units, three park/open space areas, and an internal circulation system (residential streets), on approximately 32.54 acres of land. The Project would be served by existing infrastructure (roads, natural gas, sewage, electrical and water utilities) and would directly connect to existing utilities already serving the site. The proposed Project would not include the development of infrastructure (roads, fuel breaks, emergency water sources, etc.) that may exacerbate fire risk or cause temporary or ongoing impacts to the environment.

Prior to the issuance of the final building permit, the City would review site plans for the proposed Project to ensure that design features would not exacerbate fire risk. The proposed Project is not anticipated to install or require the maintenance of infrastructure that would exacerbate fire risk; as such, **no impact**, directly, indirectly, or cumulatively would occur. No mitigation is required.

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

20d. Response: ***(Source: General Plan 2025, Federal Emergency Management Administration Flood Map Service Center, https://msc.fema.gov/portal/search#searchresultsanchor; California Department of Water Resources Division of Safety of Dams California Dam Break Inundation Maps https://fmds.water.ca.gov/maps/damim/)***

No Impact. The proposed Project is located on a site that is topographically flat (average natural slope of the site is 0.53 percent) and is surrounded by land that is topographically flat. A residential neighborhood is located north and northwest of the Project site, and large lot single family residential uses are located east and south of the site. Areas to the west of the site are vacant. The closest elevated terrain in the Temescal Mountains (approximately 3.5 miles southwest of the site); as a result, future residents and the structures on the proposed Project site would most likely not be exposed to significant risks from downslope flooding, landslides or drainage changes due to wildland fires. The proposed Project site is partially located in Federal Emergency Management Agency Zone D Area of Undetermined Flood Hazard and Area Of Minimal Flood Hazard Zone X. The closest Flood Hazard area is Cajalco Creek, which is approximately 3.5 miles southwest of the site.

The Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. **No impact** would occur and no mitigation is required.

21. MANDATORY FINDINGS OF SIGNIFICANCE				
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or an endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐

21a. Response

Less Than Significant With Mitigation Incorporated. The proposed Project's impacts to biological and cultural resources were analyzed in this Initial Study and all direct and cumulative impacts were determined to have no impact, a less than significant impact, or rendered a less than significant impact with implementation of mitigation. Therefore, impacts to biological and cultural resources would be **less than significant with mitigation incorporated** and no additional mitigation is required.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐

21b. Response

Less Than Significant With Mitigation Incorporated. The expected growth associated with the proposed Project has been previously analyzed under the 2025 General Plan EIR. The 2025 General Plan EIR took into consideration the cumulative impact of buildout of the City (which included development of the Project site under its current land use designation and zoning designation) and determined that cumulative impacts with buildout of the City would be less than significant. The proposed Project, throughout this Initial Study/Mitigated Negative Declaration, has considered all impacts in a project-level analysis. Where impacts were determined to occur, the proposed Project would implement mitigation measures, which would reduce impacts on a project-level basis, and would ensure the proposed Project does not cumulatively contribute to impacts discussed under the 2025 General Plan EIR. All cumulative impacts related to the resource topics in this environmental document were determined to be **less than significant** or rendered **less than significant with mitigation incorporated**.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

21c. Response

Less Than Significant With Mitigation Incorporated. Impacts related to aesthetics, air quality, geology and soils, GHGs, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, traffic, utilities and services, and wildfires that could potentially affect human beings directly or indirectly were analyzed in this Initial Study. All direct and cumulative impacts were **less than significant** or rendered **less than significant with mitigation incorporated**.

CITY OF RIVERSIDE

COMMUNITY & ECONOMIC DEVELOPMENTDEPARTMENT PLANNING DIVISION

MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program has been prepared for use in implementing mitigation for the:

Tentative Tract Map No. 37731 – Cole Development Project

The program has been prepared in compliance with State law and the Initial Study prepared for the project by the City of Riverside.

CEQA requires adoption of a reporting or monitoring program for those measures placed on a project to mitigate or avoid adverse effects on the environment (Public Resource Code Section 21081.6). The law states that the reporting or monitoring program would be designed to ensure compliance during project implementation.

The monitoring program contains the following elements:

1) The mitigation measures are recorded with the action and procedure necessary to ensure compliance. In some instances, one action may be used to verify implementation of several mitigation measures.
2) A procedure for compliance and verification has been outlined for each action necessary. This procedure designates who would take action, what action would be taken and when, and to whom and when compliance would be reported.
3) The program has been designed to be flexible. As monitoring progresses, changes to compliance procedures may be necessary based upon recommendations by those responsible for the program. As changes are made, new monitoring compliance procedures and records would be developed and incorporated into the program.

This Mitigation Monitoring and Reporting Program includes mitigation identified in the Initial Study.

Tentative Tract Map No. 37731-Cole Development Project
Initial Study/Mitigated Negative Declaration: Mitigation Monitoring Reporting Program

Mitigation Measures		Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
Biological Resources							
BIO-1	Prior to the commencement of grading activities, the applicant shall make the appropriate mitigation fee payment into the MSHCP Stephens' kangaroo rat fee payment program for conservation of Stephens' kangaroo rat-occupied habitats in order to offset the loss of potentially suitable Stephens' kangaroo rat habitat on site through project implementation.	Prior to Grading	Confirmation of Payment of Mitigation Fees	City of Riverside			
BIO-2	Prior to on-site vegetation clearance, the Project applicant shall retain a qualified biologist to conduct a pre-construction nesting bird survey in accordance with the following: • The survey shall be conducted no more than three days prior to the initiation of clearance/construction work; • If pre-construction surveys indicate that bird nests are not present or are inactive, or if potential habitat is unoccupied, no further mitigation is required. • 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). • Close coordination among the developer of the site, the City of Riverside, the Project engineer, and the consulting qualified biologist is recommended to consider vegetation clearance outside of the normal bird nesting season (usually February 15 through September 15) to avoid impacts to nesting birds, which would potentially violate the Migratory Bird Treaty Act. It should be noted that bird nesting season is increasingly less-definitive for some year-round resident species such as hummingbirds and raptors. Further, ground-dwelling birds such burrowing owls, can be affected nearly any time of the year if present. It is therefore advisable to conduct a pre-construction bird survey no matter the time of year. • Removal of vegetation necessitates installation of appropriate Storm Water Pollution Prevention Plan (SWPPP) measures, particularly if grading is not undertaken immediately; therefore, careful timing of the	Prior to on-site vegetation clearance.	Survey submittal to City	City of Riverside			

Tentative Tract Map No. 37731-Cole Development Project
Initial Study/Mitigated Negative Declaration: Mitigation Monitoring Reporting Program

Mitigation Measures		Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
	project schedule and implementation measures is necessary to avoid water quality impacts.						
BIO-3	The Project applicant shall retain a qualified biologist to conduct a 30-day pre-construction survey for burrowing owl. The results of the single one-day survey shall be submitted to the City 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, the Project applicant and a qualified consulting biologist will be required to prepare and submit for approval a burrowing owl-relocation program.	Prior to construction commencement.	Submittal and Approval of Survey	City of Riverside			
BIO-4	In accordance with MSHCP provisions limiting the use of exotic and invasive plant species, the Project's landscape plan shall exclude invasive species such as, but not limited to crimson fountain grass (*Pennisetum setaceum*), pampas grass (*Cortaderia selloana*), giant reed (*Arundo donax*), tree of heaven (*Ailanthus altissima*), eucalyptus, and other ornamental landscape elements on the list of exotic invasive plants utilized by the Riverside Conservation Authority which have to potential to spread into adjoining, downstream, or nearby areas.	Prior to approval of Landscaping Plan.	Approval of Landscaping Plan.	City of Riverside			
BIO-5	The Project applicant shall demonstrate to the City of Riverside that applicable federal and State resource agency permits have been obtained, or that authorization from the agency is not required. These agencies include: U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and the Santa Ana Regional Water Quality Control Board.	Prior to Construction Commencement	City Review	City of Riverside			
BIO-6	Implementation of the proposed Project would result in the loss of 0.07 acre of RWQCB jurisdictional waters onsite. The Project applicant shall implement, on a 2:1 ration, the purchase of 0.14 acre of rehabilitation credits for wetland "waters" at the Riverpark Mitigation Bank. Evidence of compliance with RWQCB requirements shall be submitted to the City of Riverside and the mitigation purchase shall occur prior to the issuance of grading permits for the proposed Project. This mitigation measure is intended to reduce impacts of RWQCB jurisdictional waters on the proposed Project site.	Prior to Issuance of Grading Permits	Proof of Credit Purchase	City of Riverside			

Tentative Tract Map No. 37731-Cole Development Project
Initial Study/Mitigated Negative Declaration: Mitigation Monitoring Reporting Program

Mitigation Measures		Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
BIO-7	Implementation of the proposed Project would result in the loss of 0.17 acre of RWQCB jurisdictional waters on site. The Project applicant shall implement, at a 1:1 ratio, the purchase of 0.17 acre of rehabilitation credits for wetland "waters" at the Riverpark Mitigation Bank. Evidence of compliance with RWQCB requirements shall be submitted to the City of Riverside and the mitigation purchase shall occur prior to the issuance of grading permits for the proposed Project. This mitigation measure is intended to reduce impacts of RWQCB jurisdictional waters on the proposed Project site.	Prior to Issuance of Grading Permits	Proof of Credit Purchase	City of Riverside			
BIO-8	Implementation of the proposed Project would result in the loss of 0.28 acre of CDFW jurisdictional waters onsite. The Project applicant shall implement, at a 1:1 ratio, the purchase of 0.28 acre of rehabilitation credits for wetland "waters" at the Riverpark Mitigation Bank. Evidence of compliance with CDFW requirements shall be submitted to the City of Riverside and the mitigation purchase shall occur prior to the issuance of grading permits for the proposed Project. This mitigation measure is intended to reduce impacts of CDFW jurisdictional waters on the proposed Project site.	Prior to Issuance of Grading Permits	Proof of Credit Purchase	City of Riverside			
BIO-9	The Project applicant, prior to final tract map approval, shall provide the *Preliminary Jurisdictional Delineation and Determination* analysis to the U.S. Army Corps of Engineers (ACOE) for their review to determine if any federal jurisdictional waters exist onsite. If federal jurisdictional waters are determined to occur on the Project site, the Project applicant shall implement mitigation measures required in the ACOE review of the proposed Project. Final tract maps for the proposed Project shall not be approved by the City of Riverside until a determination of federal jurisdictional waters occurs on the Project site.	Prior to final tract map approval.	Determination of Federal Jurisdictional Waters	City of Riverside			
BIO-10	Construction/Post-Construction Best Management Practices. Construction/Post-Construction Best Management Practices (BMPs) detailed in the Final Water Quality Management Plan (WQMP) shall be implemented. Such BMPs shall be implemented to maintain the quality of water runoff emanating from the Project site during construction and post-construction activities.	Prior to Issuance of Grading Permits	Proof of Credit Purchase	City of Riverside			

Tentative Tract Map No. 37731-Cole Development Project
Initial Study/Mitigated Negative Declaration: Mitigation Monitoring Reporting Program

Mitigation Measures		Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
Cultural Resources							
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 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, on nonrenewable paleontological resources that shall be subject to a cultural resources evaluation; d. Treatment and final disposition of any cultural and paleontological resources, sacred sites, and human remains if discovered on the project site; and e. The scheduling and timing of the Cultural Sensitivity Training noted in Mitigation Measure CUL-5.	Thirty day prior to grading and during grading activity.	Monitoring by Archaeologist and reporting.	City of Riverside			
CUL-2	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	Prior to Issuance of Grading Permit	Further Consultation with Native	City of Riverside			

Mitigation Measures		Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
	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 the cultural resources on the project site. The City and the developer/ applicant shall make all attempts to avoid and/or preserve in place as many cultural and paleontological resources as possible that are located 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.		American Tribe				
CUL-3	If human remains are discovered/uncovered/encountered during Project construction activities, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner shall be notified by the City of Riverside of the find immediately. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD will have the opportunity to offer recommendations for the disposition of the remains.	During Project Construction.	Inspection by MLD.	NAHC and City of Riverside			
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: • 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.	During Project Construction Activities	Phase IV Monitoring Report Submitted to and Approved by City	City of Riverside			

Mitigation Measures	Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
• 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. • 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: o 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. o 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. o If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the Western Science Center or Museum of Riverside by default. • 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						

Mitigation Measures		Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
	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.						
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.	Prior to Commencement of Project construction activities.	Sign-in Sheet submitted to the City.	City of Riverside			
Hazards and Hazardous Materials							
HAZ-1	Prior to issuance of a grading permit, a soil survey conducted by a licensed professional (retained by the applicant and approved by the City) to determine levels of pesticides and or heavy metals shall be conducted on the site. If pesticide or heavy metal levels are not found on the Project site (or are found below the Environmental Protection Agency (EPA) threshold limits for human exposure), then no additional mitigation is required. However, if pesticide or heavy metal levels exceeding the EPA threshold limits for human exposure are found on site, then Mitigation Measure HAZ-2 would be required.	Prior to Issuance of Grading Permit.	Soil Survey Submittal to City	City of Riverside			

Tentative Tract Map No. 37731-Cole Development Project
Initial Study/Mitigated Negative Declaration: Mitigation Monitoring Reporting Program

Mitigation Measures		Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
HAZ-2	If the soil survey determines that pesticide or heavy metal levels are found on the Project site that exceed the EPA threshold limits for human exposure, a report of the findings and a Removal Action Plan (RAW) shall be prepared by a qualified licensed professional (retained by the applicant and approved by the City) and submitted to the California Department of Toxic Substances (DTSC) or other appropriate agency for review and approval. The report shall outline the procedures for removing contaminated soils from the Project site down to the level of contamination and for off-site disposal by a licensed contractor at a facility that accepts such contaminated soil. Soil shall not be reused on the Project site and new soil shall be imported from off site and used on the site during Project construction. This measure shall be implemented to the satisfaction of the DTSC and the City of Riverside Community Development Director or designee, and/or Building and Safety Division or designee.	Prior to Issuance of Grading Permit.	Removal of Contaminated Soil Off site.	City of Riverside			
Noise and Vibration							
NOI-1	The use of large bulldozers and loaded trucks shall be prohibited within 15 feet of existing structures or the construction contractor shall use light construction equipment (e.g., small rubber-tire bulldozers or pickup trucks) within 15 feet of the residential building at 19331 Lurin Avenue.	During Project construction.	Monitoring by City during Activities.	City of Riverside			
Transportation							
TRA-1	The Project Applicant shall pay a Project Fair-Share fee of 0.20 percent of the $61,583,924.03 total cost toward the City's bicycle and pedestrian projects and mitigation bank study. The Project Fair-Share Cost equates to $121,435.63 and shall be paid to the City of Riverside by the Project Applicant. The mitigation amount is a maximum and shall be confirmed by the City of Riverside prior to payment. The Project will pay the required fair-share contribution by the date of issuance of the first grading permit or within one year of entitlement, whichever comes first.	Prior to Issuance of First Building Permit by City	Payment of Fair Share Fee to City	City of Riverside			
Tribal Cultural Resources							
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	Thirty day prior to grading and during grading activity.	Monitoring by Archaeologist and reporting.	City of Riverside			

Mitigation Measures		Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
	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 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, on nonrenewable paleontological resources that shall be subject to a cultural resources evaluation; d. Treatment and final disposition of any cultural and paleontological resources, sacred sites, and human remains if discovered on the project site; and e. The scheduling and timing of the Cultural Sensitivity Training noted in Mitigation Measure-CUL-5.						
CUL-2	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 the cultural	Prior to Issuance of Grading Permit	Further Consultation with Native American Tribe	City of Riverside			

Mitigation Measures		Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
	resources on the project site. The City and the developer/ applicant shall make all attempts to avoid and/or preserve in place as many cultural and paleontological resources as possible that are located 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.						
CUL-3	If human remains are discovered/uncovered/encountered during Project construction activities, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner shall be notified by the City of Riverside of the find immediately. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD will have the opportunity to offer recommendations for the disposition of the remains.	During Project Construction.	Inspection by MLD.	NAHC and City of Riverside			
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: • 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. • 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	During Project Construction Activities	Phase IV Monitoring Report Submitted to and Approved by City	City of Riverside			

Mitigation Measures	Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
project site will need to be thoroughly inventoried with tribal monitor oversight of the process. • 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: o 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. o 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. o If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the Western Science Center or Museum of Riverside by default. • 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						

Mitigation Measures		Monitoring Timing/ Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
	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.						
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.	Prior to Commencement of Project construction activities.	Sign-in Sheet submitted to the City.	City of Riverside			

Appendix A:
Project Set Plans

Appendix B:
Air Quality and Greenhouse Gas Impact Analysis

Appendix C:

General Biological Assessment and MSHCP Consistency Analysis/Step I Habitat Assessment, Step II Part A Focused Burrow Survey and Step II, Part B Focused Burrowing Owl Survey/Determination of Biologically Equivalent or Superior Preservation/Preliminary Jurisdictional Delineation

Appendix D:
Cultural Resource Assessment

Appendix E:
Preliminary Geotechnical Investigation and Percolation Testing

Appendix F:
Preliminary Hydrology Report and Water Quality Management Plan Report

Appendix G:
Noise and Vibration Impact Analysis

Appendix H:
Traffic Operations Analysis

Appendix I:
VMT Memorandum