CITY OF MORENO VALLEY

INITIAL STUDY FOR THE GATEWAY HEIGHTS PROJECT

GATEWAY HEIGHTS PROJECT
PEN 21-0066

March 2023

Lead Agency
CITY OF MORENO VALLEY
14177 Frederick Street
Moreno Valley, California 92553

Prepared By
PSOMAS
Contact: Sean Noonan, AICP
5 Hutton Centre Drive, Suite 300
Santa Ana, California 92707

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INITIAL STUDY (IS) FOR THE GATEWAY HEIGHTS PROJECT

BACKGROUND INFORMATION AND PROJECT DESCRIPTION:

1. **Project Case Number(s):** PEN21-0066, PEN21-095, PEN21-0096, PEN22-0127

2. **Project Title:** Gateway Heights Project

3. **Public Comment Period:** March 2, 2023 to March 31, 2023

4. **Lead Agency:** City of Moreno Valley
   Community Development
   Luis Lopez, Contract Planner
   14177 Frederick Street
   Moreno Valley, California 92553
   (951) 413-3206
   LuisL@moval.org

5. **Documents Posted At:** http://www.moval.org/cdd/documents/about-projects.html

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   Psomas
   5 Hutton Centre Drive, Suite 300
   Santa Ana, California 92707
   714-481-8035
   Sean.Noonan@Psomas.com

7. **Project Sponsor:**

   Applicant/Developer
   Jason Ackerman
   Ackerman Law PC
   3200 East Guasti Road, Suite100
   Ontario, California 91761
   Phone: 909- 456-1460
   Email: jason.ackerman@ackermanlawpc.com

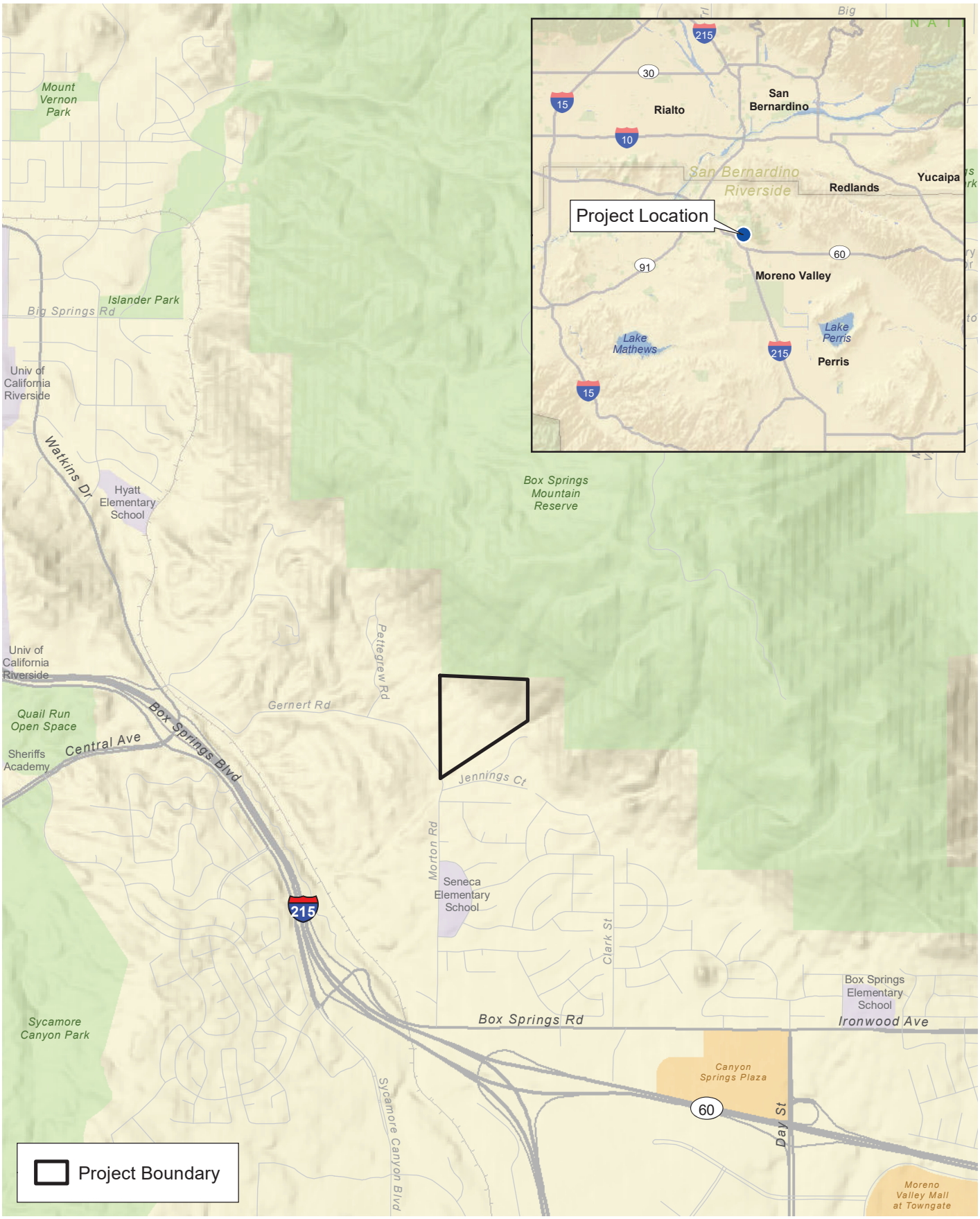
   Property Owner
   Shizao Zheng
   1378 West Zhongshan Road
   Ningbo City, Zhejiang Province, China
   Phone: 626-666-1470

8. **Project Location:** The Project Site is located approximately one mile north of the State Route (SR) 60 and Interstate (I) 215 interchange. The Project Site is approximately 110 feet north of Jennings Court and immediately east of Morton Road in the western portion of the City of Moreno Valley, Riverside County, California, as shown in Figure 1, Vicinity Map. The Project Site is bounded on the northerly and westerly property lines by the Riverside County jurisdictional border. The Project Site is comprised of Tax Assessor Parcel Number (APN) 256-150-001 and is located entirely within the City of Moreno Valley.

   The Project Site is located in Section 34 of Township 2 South, Range 4 West, Riverside East 7.5 minute quadrangle map. The approximate center of the Project Site is at longitude 117°17'39.77″W and latitude 33°57'34.95″N.

9. **General Plan Designation:** Residential 2 (R2) and Hillside Residential (HR)

10. **Specific Plan Name and Designation:** Not applicable for APN 256-150-001.



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Vicinity Map

Figure 1

Gateway Heights Project

N W E S

2,000 1,000 0 2,000 Feet

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11. **Existing Zoning:** Residential 2 (R2) and Hillside Residential (HR)

As defined in the City's Municipal Code, the primary purpose of the R2 district is to provide for suburban lifestyles on residential lots larger than are commonly available in suburban subdivisions, and to allow non-equestrian residential developments in a rural atmosphere. This district is intended as an area for development of large lot, single-family residential development at a maximum allowable density of two dwelling units per net acre.

The primary purpose of the HR district is to balance the preservation of hillside areas with the development of view oriented residential uses. It is the further intent of this district to provide regulations for the limited development of those hillside areas in a manner that would maintain natural open space areas, protect significant landforms and other natural resources, protect views from existing development, retain opportunities for views from development sites, preserve and enhance vistas from public places, minimize the extent and occurrence of erosion and other potential hazards of development in areas of steep topography, and generally protect the public health, safety and welfare. The keeping of animals is permitted, however, the keeping of large animals may be prohibited subject to compatibility with local urbanization and topographic constraints.

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

	Land Use	Zoning
Project Site	Vacant, Hillside	R2 and HR
North	Vacant, Hillside	HR
South	Single-Family Residential	R5
East	Vacant, Hillside	HR
West	Vacant	Gateway Center Specific Plan*

R2: Residential 2; HR: Hillside Residential; R5: Residential 5; MDR: Medium Density Residential

Sources: Moreno Valley 2020a, 2020b, and 2021b; County of Riverside, 2021).

*Parcels to the west of Morton Road are located within unincorporated Riverside County, and the City of Riverside sphere of influence. Land use and zoning pursuant to County records.

13. **Description of the Site and Project:**

Environmental Setting

The Project Site is characterized as undeveloped, vacant lands situated in the southwestern foothills of the Box Springs Mountains. Elevations in the Project Site range from approximately 1,590 feet above mean sea level (amsl) in the southwest corner to 2,080 feet amsl in the northeast corner. A Project Location Map is provided as Figure 2, which shows the Project Site and its general environmental setting. Also, the Project Site is depicted in Figure 3, Site Photographs.

The Project Site is surrounded by vacant, undeveloped land to the north, east, and west with large-lot single-family residential uses to the south and southeast. The Box Springs Mountain Park and Reserve is located north of the Project Site, which is owned by several entities including the County of Riverside, University of California, and Western Riverside County Regional Conservation Authority.

Several erosional features with deep incised banks occur throughout the Project Site and are the result of sheet flow off Box Springs Mountain. There is also evidence of natural springs and one pool along the eastern portion of the Project Site near the base of the Box Springs Mountains.

Sometime between 1942 and 1955, the northeastern portion of the Project Site was developed with residences, which were accessible from a dirt access road. Although the residences were previously removed, the dirt road remains along with eucalyptus trees, which are assumed to have been planted around the residences. Also, several unauthorized dirt off-highway vehicle trails traverse the Project Site.

Aerial Source: Esri, Maxar 2018

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Aerial Location Map

Figure 2

Gateway Heights Project

N
W E
S

300 150 0 300

Feet

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Photo 1: View of the Project Site looking east from Morton Road.

Photo 2: View looking south across the Project Site towards adjacent residential development.

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Site Photographs

Figure 3

Gateway Heights Project

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Dry Utilities

Electricity service is provided by Southern California Edison (SCE) via facilities within Morton Road that run up to and within Jennings Court. However, no existing electricity service is currently available north of the existing residential development.

Natural gas is provided to existing residential development south of the Project Site via an existing pipeline within Morton Road.

An existing 6-inch High Pressure Fuel Line owned by Santa Fe Pacific Pipeline is located on the easterly side of Morton Road.

Also, existing utility poles and overhead lines are located within the Project Site; however, these utilities are not located within an existing easement. These facilities are east of the Project's proposed development area and would not be affected.

Wet Utilities

An existing 12-inch Polyvinyl chloride (PVC) water line and 8-inch sewer line are located within Morton Road that serves the existing residential development south of the Project Site. Stubs for water and sewer are present for future connections to existing utilities, in order to provide water and sewer services for the proposed development on the Project Site.

Storm Drain Facilities

There are no existing storm drains within or adjacent to the Project Site. Stormwater flows from the Project Site along natural drainage courses. The project will require the installation of new storm drain facilities across Morton Road to transfer sheet flows southwesterly of the Project Site.

Project Description

The Project involves the construction of 108 detached townhouse condominium units on southwesterly 16.59 acres of the 32.56-acre Project Site, which is located in the western portion of the City of Moreno Valley, Riverside County, California. The 108 units would be organized using a 4-unit to 10-unit "clusters" on a total of 13 development pads. These clustered units would be arranged with garages facing a common driveway to enhance the aesthetic views of the project from the street and perimeter. Each unit would have an attached two-car garage, and units would range from 1,400 to 1,602 square feet of interior floor area. The 16.59 acres of the Project Site that would be developed would be rezoned to Residential 10 District (R10), which allows a maximum density of 10 dwelling units per net acre. The primary purpose of the R10 district is to provide for a variety of residential products and to encourage innovation in housing types with enhanced amenities such as common open space and recreation areas. This district has the lowest density of all the multiple family residential districts in the City, and is needed in order to allow a townhouse condominium subdivision, as proposed for the Project. The remaining 15.97 acres of the Project Site would be rezoned to Open Space (OS) and dedicated as conservation land. Project improvements are depicted in Figures 4 and 5, the Project's Site Plan and Grading Plan.

The entire Project Site will utilize the PUD (Planned Unit Development) provisions of the Moreno Valley Zoning Code, in order to allow greater innovation in housing development and diversity of housing choices, preserve a significant open space/hillside feature of the Project Site, create significant useable common open space amenities, and allow flexibility in the typical R10 development standards to accommodate the Project amenities. A conditional use permit must be obtained in order to use the PUD regulations.

Open Space

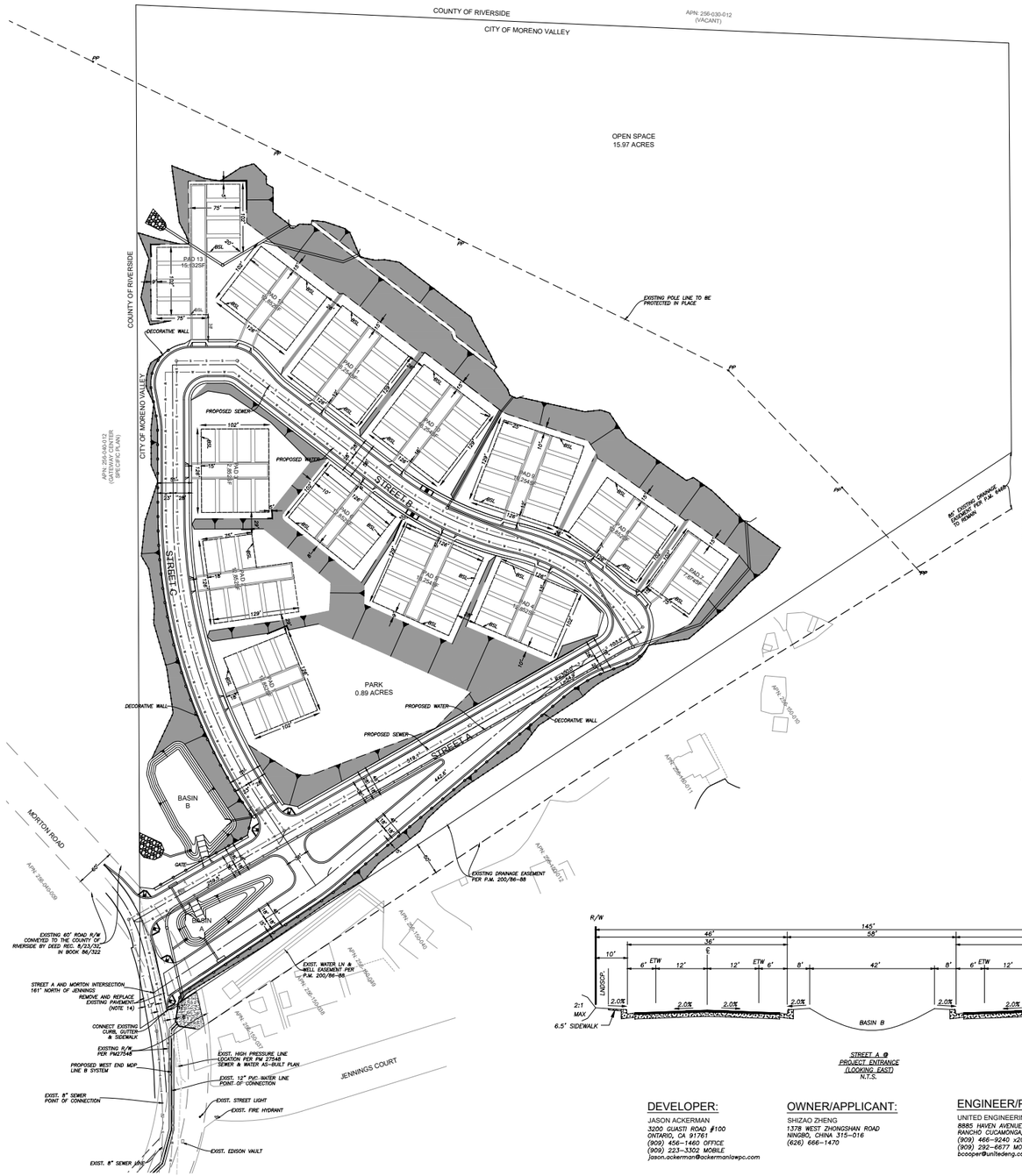
The Project includes a total of 3.1 acres of common open space, including trails and a 0.89 acre community park area at the center of the development. Also, as noted above, 15.97 acres of the Project Site would be rezoned to OS (Open Space) and would be dedicated as conservation land.

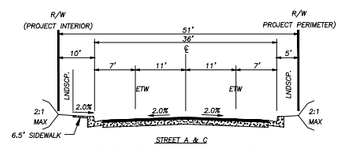
UTILITY PURVEYORS:

WATER	EASTERN MUNICIPAL WATER DISTRICT 2270 TRUMBLE ROAD PERRIS, CA. 92570 (951) 928-3777	ELECTRIC	SOUTHERN CALIFORNIA EDISON 2492 W. SAN BERNARDINO AVE REDLANDS, CA. 92374 (800) 655-4555
SEWER	EASTERN MUNICIPAL WATER DISTRICT 2270 TRUMBLE ROAD PERRIS, CA. 92570 (951) 928-3777	GAS	SOUTHERN CALIFORNIA GAS 4495 HOWARD AVE. RIVERSIDE, CA. 92507 (213) 244-8344
TELEPHONE	SPECTRUM 12625 FREDERICK STREET SUITE F-10 MORENO VALLEY, CA 92553 (866) 874-2389	CABLE	SPECTRUM 12625 FREDERICK STREET SUITE F-10 MORENO VALLEY, CA 92553 (866) 874-2389
SCHOOL	MORENO VALLEY USD 25634 ALESSANDRO BLVD MORENO VALLEY, CA 92553 (951) 571-7500		

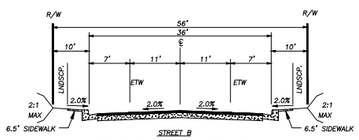
LEGEND

FF	FINISHED FLOOR
FL	FLOW LINE
R/W	RIGHT-OF-WAY
BSL	BUILDING SETBACK LINE
FSL	FIRE SEPERATION LINE
S S	PROPOSED SEWER LINE
W W	PROPOSED WATER LINE
SS	EXISTING SEWER LINE
W	EXISTING WATER LINE
	DEVELOPMENT LIMITS
	PROJECT BOUNDARY
	CENTERLINE
	EXISTING DIRT ROAD
PP	POWER POLE
	OVERHEAD POWER LINE
	FUEL MODIFICATION ZONE
	DECORATIVE WALL

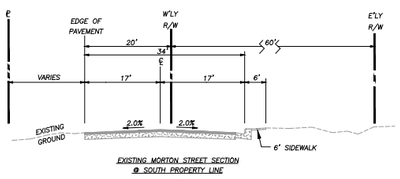




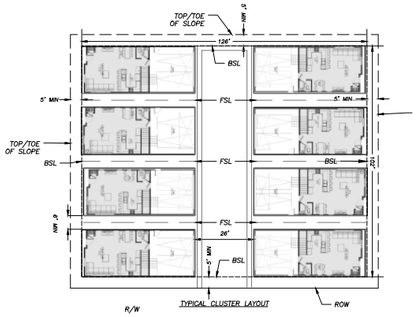
STREET A & C
CITY OF MORENO VALLEY STANDARD MVSI-107A-0 (MODIFIED)
N.T.S.

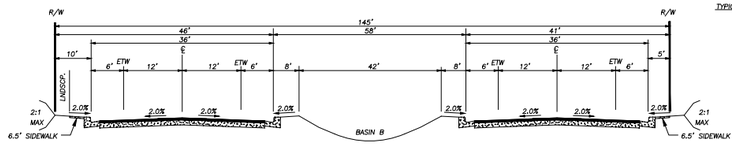


STREET B
CITY OF MORENO VALLEY STANDARD MVSI-107A-0
N.T.S.



EXISTING MORTON STREET SECTION @ SOUTH PROPERTY LINE
N.T.S.





STREET A @ PROJECT ENTRANCE (LOOKING EAST)
N.T.S.

DEVELOPER:
JASON ACKERMAN
3200 GUASTI ROAD #100
ONTARIO, CA 91761
(909) 456-1460 OFFICE
(909) 223-3302 MOBILE
jason.ackerman@ackermanlawpc.com

OWNER/APPLICANT:
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1378 WEST ZHONGSHAN ROAD
NINGBO, CHINA 315-016
(626) 666-1470

ENGINEER/PLAN PREPARER
UNITED ENGINEERING GROUP CA, INC
8885 HAVEN AVENUE, SUITE 195
RANCHO CUCAMONGA, CA 91730
(909) 466-9240 x203 OFFICE
(909) 292-6677 MOBILE
bcooper@unitedeng.com

Source: United Engineering Group, 2022

Site Plan

Gateway Heights Project

Figure 4

N W E S

0 60 120 240 Feet

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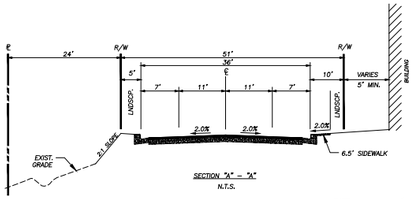
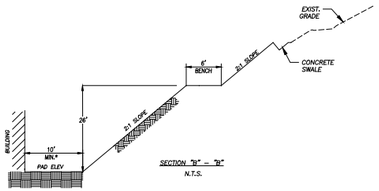
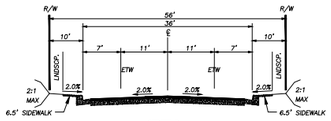


SECTION "A" – "A"
N.T.S.



SECTION "B" – "B"
N.T.S.

* MINIMUM SETBACKS PER CALIFORNIA BUILDING CODE 1808.7:
– TOE OF SLOPE = AT LEAST THE SMALLER OF H/2 OR 15'
– TOP OF SLOPE = AT LEAST THE SMALLER OF H/3 OR 40'



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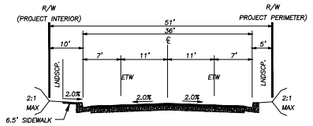
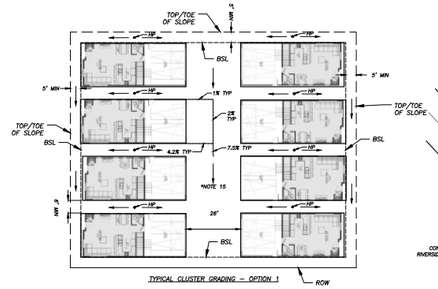
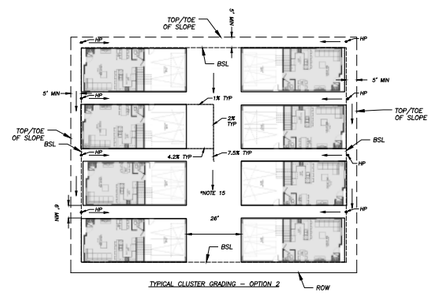
CITY OF MORENO VALLEY STANDARD MVSI–107A–0
N.T.S.



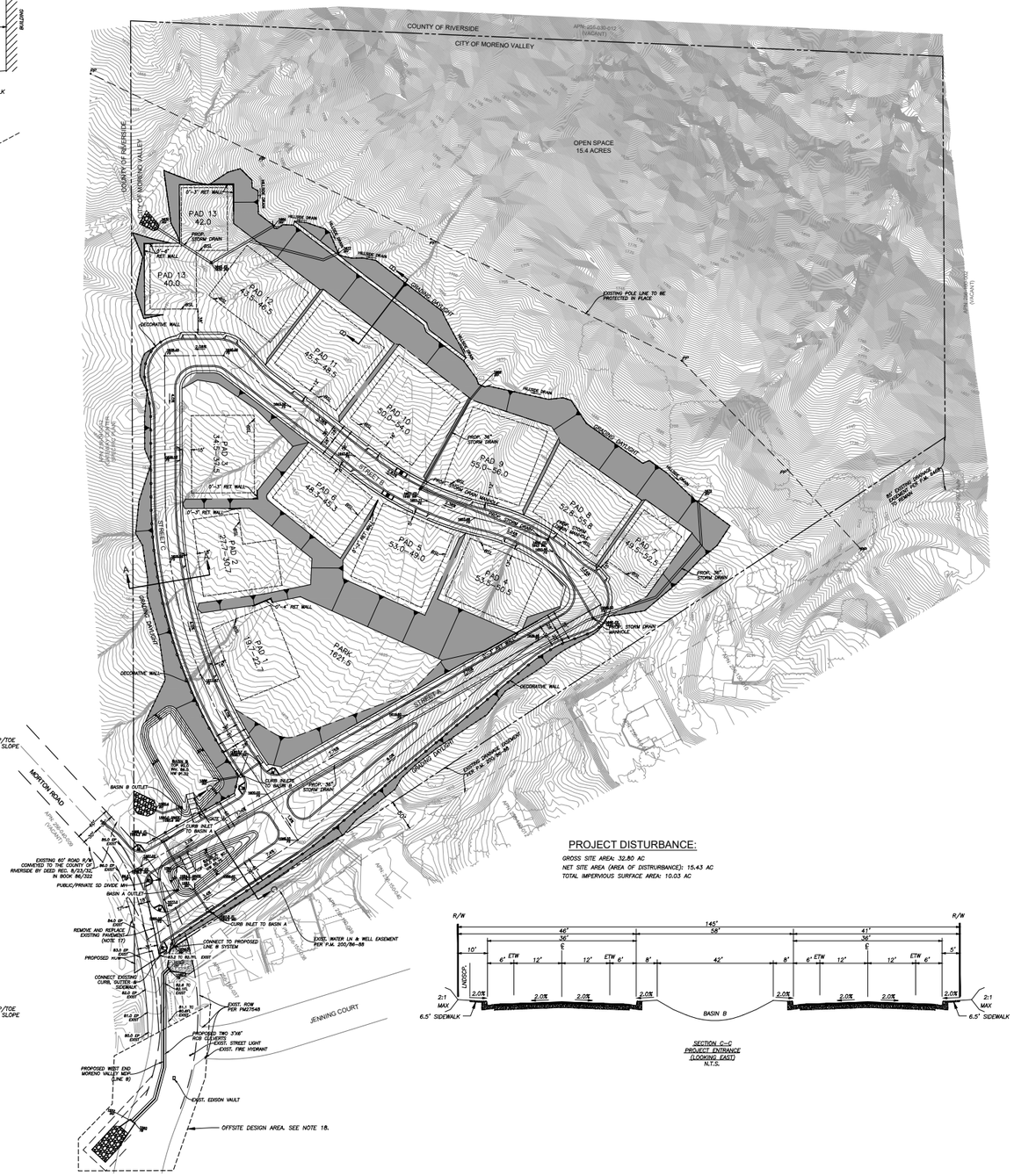
STREET A & C
CITY OF MORENO VALLEY STANDARD MVSI–107A–0
(MODIFIED)
N.T.S.



TYPICAL CLUSTER GRADING – OPTION 1



TYPICAL CLUSTER GRADING – OPTION 2



PROJECT DISTURBANCE:

GROSS SITE AREA: 32.80 AC
NET SITE AREA (AREA OF DISTRUBANCE): 15.43 AC
TOTAL IMPERVIOUS SURFACE AREA: 10.03 AC

SECTION C–C
PROJECT ENTRANCE
(LOOKING EAST)
N.T.S.

Source: United Engineering Group, 2022

Grading Plan

Gateway Heights Project

Figure 5

N W E S

0 60 120 240 Feet

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Access, Circulation, and Parking

The Project's residential units would be accessible from a single access point on Morton Road, to be constructed as a full-access, four-lane roadway with curbs, shoulders, a landscaped center median, and a sidewalk on the east side. Three internal roads, Streets A, B, and C would serve as a two-way loop through the residential development. The Project's main entry roads, Streets A and C, would have 6-foot-wide sidewalks on one interior side of each road, connecting to the internal sidewalk system for the development and connecting to the new Morton Road sidewalks along the property frontage and connecting to the existing sidewalk along Morton Road south of the Project Site. Street B within the development would have sidewalks on both sides of the road. Each dwelling unit would have an attached two-car garage for a total of 216 garage parking spaces. The Project also includes the street widening of Morton Road and improvements of the easterly half of Morton Road, which are partially located within Unincorporated Riverside County, and as shown in Figure 4, generally from north of Jennings Court to the County boundary just north of the Project's proposed driveway.

Lighting and Signage

The Project would include low-level interior lighting associated with the residential units as well as outdoor lighting associated with the park and public streets.

Any new street lighting within the public right-of-way would comply with applicable City regulations and would be subject to City approval in order to maintain appropriate and safe lighting levels on both sidewalks and roadways, while minimizing light and glare on adjacent properties.

Drainage and Stormwater

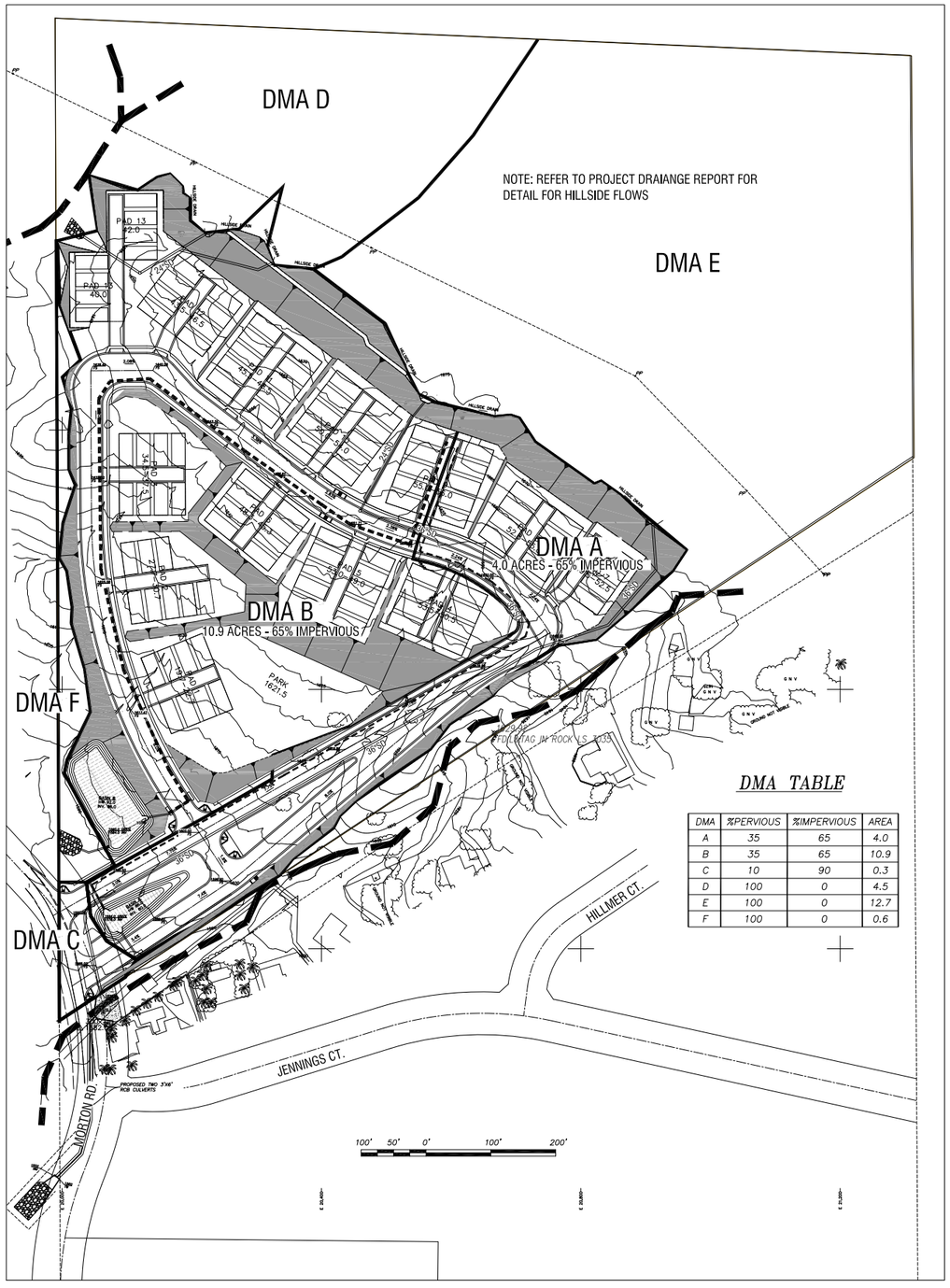
The Project includes the installation of hillside drainage, inlets, and storm drain lines to intercept and convey stormwater either along existing flow paths or to the Project's two combination detention and bioretention basins (e.g., Basins A and B). For the offsite, hillside runoff, the project is proposing three storm drain collection points. Point 502 is along the northern edge, is 7.8 cfs, and will be carried by a 24" pipe through the project, continuing westerly along the existing flow path. The other two, points 403, and 304, are 26.7 cfs, and 90.6 cfs, respectively. 403 will be carried by a proposed 24" pipe and connected to a proposed 36" pipe that carries the flow from point 304. That proposed storm drain system also connects to the historic flow path. At time of final design, additional design including HGL will be required. The project is adjacent to the proposed MDP Line B crossing, which is just south of the projects entrance, but is offsite. The project has been designed to route the hillside flows through the project via a proposed 36" pipe, then outlet to the Line B system. The project proposes to build the Line B Crossing. Two (2) 3' x 6' RCB culverts will be built under Morton Road. From there flows will outlet within an existing channel that carries the regional flows and mimicking the existing conditions just south of the project.

Regarding onsite runoff, the project has incorporated drainage systems and combination bio retention and detention basins that would be of sufficient size to accept, clean, mitigate the increased runoff, and route the runoff from the site. Runoff will be routed to bio-retention basins throughout the project via storm drain inlets. The water quality basins will drain via underdrains into a storm drain system and eventually into the proposed Line B System. Detailed design of the basins, outlet structures, and any filter media would be prepared at final design (UEG 2022a). Project drainage and stormwater improvements are depicted in Figure 6, Preliminary BMP Site Plan from the Preliminary Water Quality Management Plan.

Utility Improvements

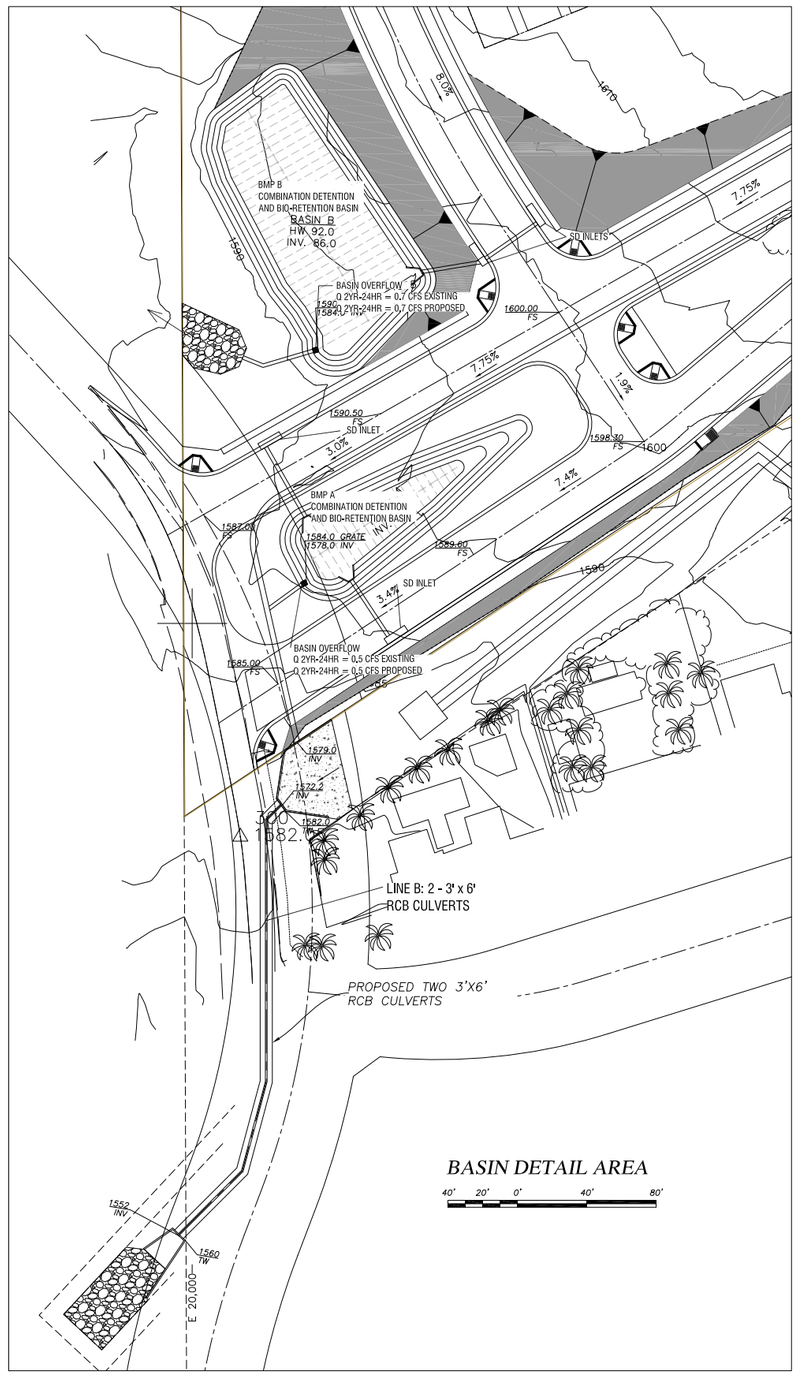
The Project would require the connection to existing utilities, and extension of service within the Project Site. These improvements are depicted in Figure 4, Site Plan and described in more detail below.

Water. Water is provided to the Project Site by the Eastern Municipal Water District. The Project includes trenching and installation of a water line to connect at two locations along the existing 12-inch PVC water line located within Morton Road near the intersection with Jennings Court and Penunuri Place, which serves the existing residential development south of the Project Site. EWMD would deliver water to the Project boundary where a master meter would be placed. All onsite distribution would be via a private water system,



DMA TABLE

DMA	%PERVIOUS	%IMPERVIOUS	AREA
A	35	65	4.0
B	35	65	10.9
C	10	90	0.3
D	100	0	4.5
E	100	0	12.7
F	100	0	0.6



BASIN DETAIL AREA

40' 20' 0' 40' 80'

LEGEND:

- CONTRIBUTORY AREA & DISTURBANCE AREA
- FLOW DIRECTION
- ONSITE FLOWPATH
- 102 / XXXX — NODE/CONCENTRATION POINT / FLOWLINE ELEVATION
- L=XXX' Lc=XXX' A=XXac — DRAINAGE AREA & DETAILS
- 6" UNDERDRAINS
- 6" CLEANOUTS

NOTES:

1. ALTHOUGH MULTIPLE POINTS OF RUNOFF ARE PRESENT IN THE EXISTING CONDITION, DRAINAGE DIVERSION IS PROPOSED TO CONSOLIDATE OUTLETS ALONG THE WESTERN EDGE. ALL WASHES ALONG THE WESTERN EDGE JOIN IN A SINGLE STREAM DOWNSTREAM.
2. BASINS AS SHOWN AND WITH CONTROL STRUCTURES WILL BE DETAILED AT FINAL DESIGN TO ENSURE OUTLETS TO WEST AND SOUTH ARE MITIGATED TO DESIGN FLOWS.
3. 5' CONTOURS SHOWN FOR EASY VIEWING, HOWEVER 1' CONTOURS WERE OBTAINED AND USED FOR DESIGN.
4. REFER TO APPENDIX 6 FOR DESIGN DETAILS.
5. "ESM" OR ENGINEERED SOIL MIX TO BE DESIGNED AND CALCULATIONS CONFIRMED AT FWQMP.
6. WATER QUALITY BASINS TO BE IRRIGATED AND LANDSCAPED PER RIVERSIDE COUNTY REQUIREMENTS.
7. OVERFLOW SET AT WATER QUALITY ELEVATION MAY BE USED TO DISCHARGE FLOOD STORAGE VOLUME ABOVE WATER QUALITY VOLUME AT TIME OF FINAL DESIGN.

Source: United Engineering Group, 2022

Preliminary BMP Exhibit

Gateway Heights Project

Figure 6

PSOMAS

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connecting via laterals along the interior public streets to the various home clusters, and maintained by the Homeowners Association.

Sewer. Sewer collection and treatment for the Project Site is provided by the Eastern Municipal Water District. The Project would construct a sewer line to connect to the existing 8-inch sewer line which is located within Morton Road near the intersection with Jennings Court, which serves the existing residential development south of the Project Site.

Gas. Gas service is provided to the Project Site by Southern California Gas Company. An existing gas line is located within Morton Road, which the Project would connect to for gas service. Similar to wet utilities, gas service would be connected via a trench and new gas pipe.

Electricity. Electricity for the Project would be supplied by Southern California Edison (SCE). The Project would connect to existing electrical infrastructure within the Morton Road right-of-way.

Cable and Internet. Cable and internet is provided to the Project Site by Spectrum which has existing facilities in Morton Road south of the Project Site. The Project would connect to these facilities via a trench within Morton Road south of the Project Site.

Fuel Modification Zones

The Project includes the establishment and ongoing maintenance of 100-foot-wide fuel modification zones for most units. For two buildings where the 100-foot-wide fuel modification zones may not be feasible, alternative on-site "hardening" techniques are proposed. Specifically, wherever less than 100 feet of FMZ (on and off site combined) is achievable, a 6 foot tall, masonry wall will be constructed at the property line in lieu of the additional FMZ. The Project would comply with the requirements of Section 8.36.050 of the Moreno Valley Municipal Code and other applicable requirements, which require the preparation, approval, and ongoing implementation of a fuel modification plan for the Project. Review and approval of preliminary and final fuel modification plans by the Fire Code Official will occur prior to the issuance of grading permits and recordation of subdivision maps. A Fire Hazard Analysis and Approach memorandum was prepared for the Project in October 2022 by Dudek, which documents the fire protection planning that has occurred for the Project to date and is included as Appendix L. Specifically, Attachment 2 of Appendix L includes the Proposed Project Fuel Modification Plan, which shows the limits of proposed fuel modification activities.

Anticipated Construction Schedule

Site preparation and grading of the entire Project Site would occur in one phase, which would be followed by construction of residential clusters beginning every 24 to 30 months, or consistent with the sales absorption of the prior units. As noted above, the Project includes a total of thirteen residential clusters. Construction is anticipated to commence in 2022, pending Project approval. For the purposes of the Traffic Impact Analysis (Appendix K), it was assumed that the Project would be fully constructed by 2023. The following construction durations are anticipated.

- Site preparation – 2 weeks
- Grading/excavation – 12 months
- Building construction – 12 months for each cluster
- Paving – 2 weeks for each cluster

Project grading would involve a cut volume of 90,148 cubic yards (cy) and fill volume of 56,011 cy, and require the export of approximately 34,137 cy of soil from the Project Site, as shown in Figure 5, Grading Plan. No import is needed.

Offsite Improvements

As noted above, the extension of sewer, water, gas, and telecommunication facilities would be required within the Morton Road right of-way from the intersection of Morton Road and Jennings Court to the location where the proposed Project's access road intersects with Morton Road.

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

Note: Conducting consultation early in the California Environmental Quality Act (CEQA) process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

Consultation under Assembly Bill 52 (AB 52) and Senate Bill 18 (SB 18) began on January 20, 2022 with letters being sent to the following tribes:

- Agua Caliente Band of Cahuilla Indians;
- Cahuilla Band of Indians;
- Torres-Martinez Desert Cahuilla Indians;
- Los Coyotes Band of Cahuilla Mission Indians;
- Morongo Band of Mission Indians;
- Pechanga Band of Luiseño Indians;
- Rincon Band of Luiseño Indians;
- San Manuel Band of Mission Indians;
- Santa Rosa Band of Mission Indians; and
- Soboba Band of Luiseño Indians.

The 90-day response period ended on April 19, 2022. Of the ten tribes contacted, two tribes requested to consult during the consultation process which included: Pechanga Band of Luiseño Indians and Rincon Band of Luiseño Indians. Additionally, the City received a request from Agua Caliente Band of Cahuilla Indians for Project documents but no formal request to consult.

15. **Required Discretionary Approvals from the City of Moreno Valley:**

- A General Plan Amendment to amend the City of Moreno Valley General Plan Land Use Map to change the land use designation for the Project Site from "Residential 2 (R2)" and "Hillside Residential (HR)" to "Residential 10 (R10)" and "Open Space (OS)" designations.
- A Change of Zone to amend the City of Moreno Valley Zoning Map to change the zoning designation for the Project Site from "Residential 2 (R2) District" and "Hillside Residential (HR)" to "Residential 10 (R10)" and "Open Space (OS) zones.
- A Tentative Tract Map (TTM 38459) to subdivide the Project Site in accordance with the Project Site Plan (Figure 4).
- A conditional use permit in order to use the PUD regulations.

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

- California Department of Fish and Wildlife (CDFW)
- County of Riverside;
- US Army Corps of Engineers (USACE);

- Santa Ana Regional Water Quality Control Board (RWQCB); and
- Western Riverside County Regional Conservation Authority (RCA).

17. **Acronyms:**

$\mu g/m^3$	micrograms per cubic meter
AAM	Annual Arithmetic Mean
AAQS	Ambient Air Quality Standards
AICUZ	Air Installation Compatible Use Zone
ALUC	Airport Land Use Commission
amsl	above mean sea level
APN	Tax Assessor Parcel Number
AQMP	Air Quality Management Plan
Basin Plan	Water Quality Control Plan for the Santa Ana River Basin
BMPs	Best Management Practices
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH_4	methane
CIWMP	Countywide Integrated Waste Management Plan
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	Carbon dioxide equivalent
CO	carbon monoxide
CRPR	California Rare Plant Rank
CWA	Clean Water Act
cy	cubic yards
dB	decibel
dBA	A-weighted decibel scale
DBESP	Determination of Biologically Equivalent or Superior Preservation
diesel PM	diesel particulate matter
DIF	Development Impact Fee
DOC	Department of Conservation
DTSC	Department of Toxic Substances Control
EDR	EDR Radius Map
EIC	Eastern Information Center
EIR	Environmental Impact Report
EMFAC	EMissions FACtor
EMWD	Eastern Municipal Water District

FHSZ	Fire Hazard Severity Zone
FTA	Federal Transit Administration
FUDS	Formerly Used Defense Site
GHG	greenhouse gases
GPCD	Gallons per Capita per Day
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GWP	global warming potential
HFCs	hydrofluorocarbons
HR	Hillside Residential
I	Interchange
in/sec	inches per second
IS/MND	Initial Study/Mitigated Negative Declaration
kBTU	kilo-British thermal units
km	kilometer
kWh	kilowatt hour; yr: year
lbs/day	pounds per day
L_{eq}	equivalent noise level
$L_{eq(3)}$	equivalent noise level 3-hour average
LOS	level of service
LRA	Local Responsibility Area
LST	localized significance threshold
MBTA	Migratory Bird Treaty Act
Mills	Henry J. Mills
mg/m^3	milligrams per cubic meter
MSHCP	Multiple Species Habitat Conservation Plan
MT/yr CO_2e	metric tons per year of carbon dioxide equivalents
MVPD	Moreno Valley Police Department
MVU	Moreno Valley Utility
NAHC	Native American Heritage Commission
NO_2	nitrogen dioxide
N_2O	nitrous oxide
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
OS	Open Space
PFCs	perfluorocarbons
PM10	respirable particulate matter with a diameter of 10 microns or less
PM2.5	fine particulate matter with a diameter of 2.5 microns or less
ppm	parts per million
ppv	peak particle velocity
PUD	Planned Unit Development
PVC	Polyvinyl chloride
R10	Residential 10
R2	Residential 2
RCA	Regional Conservation Authority
RHNA	Regional Housing Needs Assessment
rms	root mean square

RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
RWRF	regional water reclamation facility
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SF_6	sulfur hexafluoride
Skinner	Robert A. Skinner
SO_2	sulfur dioxide
SoCAB	South Coast Air Basin
SOx	sulfur oxides
SR	State Route
SRA	State Responsibility Area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TAZ	Transportation Analysis Zone
TIA	traffic impact analysis
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
UWMP	Urban Water Management Plan
VMT	vehicle miles traveled
VOC	volatile organic compound
WRCOG	Western Riverside Council of Governments

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

DETERMINATION (To be completed by the Lead Agency):

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find 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.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant" 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.

☐ I find 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 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.

Luis Lopez
Signature

2/9/23
Date

Luis Lopez
Printed Name

City of Moreno Valley
Lead Agency

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 would 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 is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.

4) “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 Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or another 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 Analyses 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 which 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) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) 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.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Except as provided in Public Resources Code §21099 – Modernization of Transportation Analysis for Transit-Oriented Infill Projects – **Would the project:**				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐

Response:

Less Than Significant Impact. A scenic vista is generally defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. A substantial adverse effect to a scenic vista is one that degrades the view from a designated viewing location. Most of the City of Moreno Valley is located on a relatively flat valley floor surrounded by rugged hills and mountains. The topography of the City is defined by the Box Springs Mountains and the Reche Canyon area to the north, the "Badlands" to the east, and the Mount Russell area to the south, which are identified by the City as scenic vistas (Moreno Valley 2021b).

The Project Site is located within the Box Springs Mountains, which are identified by the City as a major scenic resource as well as a scenic vista (Moreno Valley 2021c). Specifically, the City has identified the Box Springs Mountains as containing numerous rock outcroppings and boulders that add visual character to these landforms (Moreno Valley 2021b).

The Project's design minimizes aesthetic impacts by developing the lower elevations of the Project Site which contain less topography and hillside terrain, and preserving the upper (steep hillside topography) elevations. As noted in the Project Description, a total of 15.97 acres of the Project Site would be rezoned to Open Space (OS) and dedicated as conservation land. These areas to be set aside for preservation are the most visible portions of the Project Site from Morton Road near the Project entrance, and also contain the majority of sizeable rocks and boulders that the City has identified as desirable components of the area's visual character. Although the Project would convert a portion of the Project Site to residential uses, the area proposed for development would be located in the western portion of the Project Site in the lower elevation area, and the Project would preserve the natural foothills located in the eastern portion of the Project Site. Additionally, the proposed residential units would be two stories in height and would not exceed 30-feet in height due to the sloping terrain and would be similar in appearance and massing to existing residential uses located to the southeast. Therefore, although the Project would partially obstruct views from local public viewpoints, impacts would be minimized through Project design and siting. Additionally, views from local roadways including Morton Road, as well as from SR-60 and I-215 are temporary due to the transitory nature of drivers. The Project would not substantially damage any scenic resources. The Project would result in less than significant impacts and 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?	☐	☐	☐	☒

Response:

No Impact. The Project is not located along or near a State scenic highway. There are no State Scenic Highways in Moreno Valley as defined by the California Department of Transportation (Caltrans 2021). However, Gilman Springs Road, Moreno Beach Drive, and State Route 60 (SR–60) are designated as local scenic roads in the City's General Plan (Moreno Valley 2021b). Also, the Reche Canyon/Badlands Area Plan of Riverside County's General Plan contains several County-Designated or County-Eligible scenic roadways including San Timoteo Canyon Road, Redlands Boulevard, Gilman Springs Road, and SR-60 (County of Riverside 2011).

The Project would not be visible from any of these roadways, with the exception of SR-60, which offers minor, intermittent views of the Project Site, which would be marginally altered by the Project. As discussed

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

above under threshold I(b), the Project has avoided upper elevations of the Project Site that are most visible from Morton Road and other local public roads and viewpoints. Instead, the Project includes development of structures within the lower western portions of the Project Site. The new structures would be consistent in height and appearance (e.g., building materials) for viewers from adjacent public viewpoints, and would appear as an extension of existing suburban development that occurs to the south of the Project Site. Given there are no state scenic highways in the vicinity, no impact would result and no mitigation is required.

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

Response:

Less Than Significant Impact. The Project Site is located in an urbanized area as defined in Section 15191 of the State CEQA Guidelines , so this response focuses on whether the Project would substantially degrade the existing visual character or quality of public views of the Project Site and its surroundings. The primary publicly accessible vantage points of the Project Site and its surroundings are from Morton Road, which is immediately west of the Project Site. Views of the Project Site from Morton Road are shown in Figure 3, Site Photographs. Visible features in the foreground from this viewpoint include the lower elevation portion of the Project Site, represented as a flat, previously-disturbed property with dirt trails. This foreground area comprises the primary development area associated with the Project. The Project Site's higher elevations as well as a portion of the Box Springs Mountains, including rock outcroppings and native vegetation, are visible in the background. This area visible in the background comprises the portion of the site to be set aside for preservation and off-site areas to the northeast. Also, as discussed above SR-60 offers minor, intermittent views of the Project Site, which would be marginally altered by the Project. The Project's addition of residential structures and new roads on the hillside would result in a minor visual encroachment on public views of the hillside. The Project has been designed to be visually compatible with adjacent residential development, including features such as similar building heights, massing, and colors and materials including tile roofs. Also, as noted above, the Project's design minimizes aesthetic impacts by developing the lower elevations of the Project Site and preserving the higher elevations in the northeastern 15.97 acres of the Project Site, which are most visible from surrounding vantage points. The Project would have less than significant impacts relative to this threshold and no mitigation is required.

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

Response:

Less Than Significant Impact. The Project would include low-level interior lighting associated with the residential units as well as outdoor lighting associated with the park and public streets. All lighting fixtures shall be appropriate in scale, intensity, and height for the Project. Consistent with City requirements (e.g., Section 9.16.280), exterior lighting would be hooded and arranged to reflect away from adjoining properties and streets. Regulatory requirement **RR AES-1** requires the development of a lighting plan for the Project, which would ensure that lighting impacts would be less than significant.

Glare is caused by light reflections from pavement, vehicles, and building materials (e.g., reflective glass and polished surfaces). During daylight hours, the amount of glare depends on intensity and direction of sunlight. Glare can create hazards to motorists and nuisances for pedestrians and other viewers. The

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Project would be constructed using exterior materials and finishes that are common for residential structures and are not highly-reflective. Furthermore, as discussed above, Project light fixtures would be directed downward and shielded or recessed in such a manner so that light trespass is minimized and light from the Project is not perceptible at or beyond the property line. The Project does not include any uses that would have the potential to create noticeable glare from sunlight, vehicle lights, or outdoor lighting which have the potential to pose a hazard to motorists traveling in the Project vicinity or that would affect surrounding uses. Therefore, less than significant impacts would occur, and no mitigation is required.

Mitigation Program:

Regulatory Requirement:

RR AES-1 The Developer shall prepare a Lighting Plan that provides the type and location of proposed exterior lighting and signage, subject to the review and approval of the City's Development Services Department. All new lighting shall be shielded and down-cast, such that the light is not cast onto adjacent properties or visible from above.

II.	**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 Dept. 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 compiled 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 forest carbon measurement methodology provided in 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?	☐	☐	☐	☒

Response:

No Impact. The Project Site does not contain land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance according to the California Department of Conservation, California Important Farmland Finder, which identifies the Project Site as "Other Lands" (DOC 2021). Therefore, the Project would have no impact.

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

Response:

No Impact. The Project Site is not zoned for agricultural use (Moreno Valley 2020b). Furthermore, no land within the City is currently under a Williamson Act contract (Moreno Valley 2019). Therefore, the Project would have no impact upon agricultural zoning or agricultural conservation, and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒

Response:

No Impact. Generally, in southern California, including Riverside County and the City of Moreno Valley, climate and topography limit the types and locations of forest lands and their potential for commercial or industrial timber utilization. Accordingly, there is no existing or currently proposed zoning of forest land, timberland, or Timberland Production Zones within the City. Also, figures released by the State of California indicate that no "California forest land" ownership, either public or private, is mapped for Riverside County including the City. Finally, the Project Site does not contained forest land as defined in Public Resources Code Section 12220(g) since it does not support 10-percent native tree cover. Therefore, the Project would not conflict with the existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production and the Project would have no impact, directly, indirectly, or cumulatively to forest land (Moreno Valley 2019).

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

Response:

No Impact. There is no commercial forestry or timber production industry within the City other than Christmas tree farms or nursery stock production (that is, cultivated, rather than wild-harvested). Therefore, the Project would not result in the loss of forest land or the conversion of forest land to non-forest use and the Project would have no impact, directly, indirectly, or cumulatively to the loss of forest land or conversion of forest land to a non-forest use (Moreno Valley 2019). Therefore, no impact would result related to this threshold and no mitigation is required.

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

Response:

No Impact. As discussed above related to thresholds II (a) and (b), the Project is not zoned for or currently used for agricultural purposes. As discussed related to thresholds II (d) and (e), there is no commercial forestry or timber production industry within the City. Therefore, the Project would not result in the loss of forest land or the conversion of forest land to non-forest use, and the Project would have no impact directly, indirectly, or cumulatively (Moreno Valley 2019). No impact would result related to this threshold and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. 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?	☐	☐	☐	☒

Environmental Setting

The Project Site is located within the South Coast Air Basin (SoCAB) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SoCAB is a 6,600-square-mile area bound by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east; and the San Diego County line to the south. The SoCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties.

Both the U.S. Environmental Protection Agency (USEPA) and the State of California have established health-based Ambient Air Quality Standards (AAQS) for air pollutants, which are known as “criteria pollutants”. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. The federal criteria pollutants are ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter with a diameter of 10 microns or less (PM10), fine particulate matter with a diameter of 2.5 microns or less (PM2.5), and lead.

The State of California Air Resources Board (CARB) has established standards for the federal criteria pollutants that are generally more restrictive than the national AAQS, and additional standards for atmospheric sulfates, vinyl chloride, hydrogen sulfide, and visibility. National and state AAQS are shown in Table 1.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

TABLE 1
CALIFORNIA AND FEDERAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary[a]	Secondary[b]
O_3	1 Hour	0.09 ppm (180 µg/m^3)	—	—
	8 Hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Same as Primary
PM10	24 Hour	50 µg/m^3	150 µg/m^3	Same as Primary
	AAM	20 µg/m^3	—	Same as Primary
PM2.5	24 Hour	–	35 µg/m^3	Same as Primary
	AAM	12 µg/m^3	12.0 µg/m^3	15.0 µg/m^3
CO	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	—
	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	—
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)	—	—
NO_2	AAM	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary
	1 Hour	0.18 ppm (339 µg/m^3)	0.100 ppm (188 µg/m^3)	—
SO_2	24 Hour	0.04 ppm (105 µg/m^3)	—	—
	3 Hour	—	—	0.5 ppm (1,300 µg/m^3)
	1 Hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	—
Lead	30-day Avg.	1.5 µg/m^3	—	—
	Calendar Quarter	—	1.5 µg/m^3	Same as Primary
	Rolling 3-month Avg.	—	0.15 µg/m^3	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	**No Federal Standards**	
Sulfates	24 Hour	25 µg/m^3		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)		

O_3: ozone; ppm: parts per million; µg/m^3: micrograms per cubic meter; PM10: respirable particulate matter 10 microns or less in diameter; AAM: Annual Arithmetic Mean; –: No Standard; PM2.5: fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; mg/m^3: milligrams per cubic meter; NO_2: nitrogen dioxide; SO_2: sulfur dioxide; km: kilometer.

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

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

Note: More detailed information in the data presented in this table can be found at the CARB website (www.arb.ca.gov).

Source: CARB 2016

Regional air quality is defined by whether the area has attained or not attained State and federal air quality standards, as determined by air quality data from various monitoring stations. Areas that are considered in “nonattainment” are required to prepare plans and implement measures that will bring the region into “attainment”. When an area has been reclassified from nonattainment to attainment for a federal standard, the status is identified as “maintenance”, and there must be a plan and measures established that will keep the region in attainment for the following ten years. Table 2 summarizes the attainment status of the SoCAB for the criteria pollutants.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

TABLE 2
CRITERIA POLLUTANT DESIGNATIONS
IN THE SOUTH COAST AIR BASIN

Pollutant	State	Federal
O_3 (1-hour)	Nonattainment	Nonattainment
O_3 (8-hour)		Extreme Nonattainment
PM10	Nonattainment	Attainment/Maintenance
PM2.5	Nonattainment	Moderate Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Nonattainment/Attainment[a]
Visibility-Reducing Particles	Unclassified[b]	No Standards
Sulfates	Attainment	
Hydrogen Sulfide	Unclassified	

O_3: ozone; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; CO: carbon monoxide; NO_2: nitrogen dioxide; SO_2: sulfur dioxide; CARB: California Air Resources Board; SoCAB: South Coast Air Basin

[a] Los Angeles County is classified as nonattainment for lead; the remainder of the SoCAB is in attainment of State and federal standards.

[b] "Unclassified" designation indicates that the air quality data for the area are incomplete and do not support a designation of attainment or nonattainment.

Source: CARB 2018, USEPA 2020.

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness or that may pose a present or potential hazard to human health. TACs may be emitted from a variety of common sources, including motor vehicles, gasoline stations, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs are different than the "criteria" pollutants previously discussed in that AAQS have not been established for them. TACs occurring at extremely low levels may still affect health, and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts on human health are described by having carcinogenic risk and being chronic (i.e., of long duration) or acute (i.e., severe but of short duration). Diesel particulate matter (diesel PM) is a TAC and is responsible for the majority of California's known cancer risk from outdoor air pollutants.

The effects from air pollution can be significant, both in the short-term during smog alerts, but also from long-term exposure to pollutants. While the majority of the populace can overcome short-term air quality health concerns, selected segments of the population are more vulnerable to its effects. Specifically, young children, the elderly, and persons with existing health problems are most susceptible to respirator complications.

Air quality data for the Project Site is represented by the Perris Valley monitoring station. Pollutants measured at this monitoring station include O_3, and PM10. The monitoring data presented in Table 3, Air Quality Levels Measured at the Perris Valley Monitoring Stations, include maximum pollutant levels and exceedances of federal and State air quality standards for the years 2017–2019.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

TABLE 3
AIR QUALITY LEVELS MEASURED AT THE PERRIS VALLEY MONITORING STATION

Pollutant	California Standard	National Standard	Year	Max. Level[a]	Days State Standard Exceeded	Days National Standard Exceeded
O_3 (1 hour)	0.09 ppm	None	2017	0.12	33	N/A
			2018	0.117	31	N/A
			2019	0.118	26	N/A
O_3 (8 hour)	0.070 ppm	0.070 ppm	2017	0.105	80	80
			2018	0.103	67	67
			2019	0.095	64	64
PM10 (24 hour)	50 µg/m^3	150 µg/m^3	2017	75	11 (19%)	0
			2018	64	3 (5%)	0
			2019	97	4 (7%)	0
PM2.5 (24 Hour)	None	35 µg/m^3	2017	–	NA	–
			2018	–	NA	–
			2019	–	NA	–
NO_2 (1 hour)	0.18 ppm	0.100 ppm	2017	–	–	–
			2018	–	–	–
			2019	–	–	–

–: O_3: ozone; ppm: parts per million; PM10: respirable particulate matter with a diameter of 10 microns or less; µg/m^3: micrograms per cubic meter; –: Data Not Reported or insufficient data available to determine the value; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; N/A indicates that there is no applicable standard.

[a] Estimated days based on measurement every six days.

Source: CARB 2021, SCAQMD 2021

The SCAQMD defines a “sensitive receptor” as a land use or facility such as residences, schools, childcare centers, athletic facilities, playgrounds, retirement homes, and convalescent homes (SCAQMD 1993). The sensitive receptors nearest to the Project Site are single-family residences adjacent to the Project’s southern boundary.

Significance Criteria

Appendix G of the State CEQA Guidelines states that the significance criteria established by the applicable air quality management district may be relied upon to make significance determinations. The SCAQMD has established significance thresholds to assess the regional and localized impacts of Project-related air pollutant emissions; Table 4 presents the current significance thresholds.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

TABLE 4
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
AIR QUALITY SIGNIFICANCE THRESHOLDS

Mass Daily Thresholds[a]		
Pollutant	**Construction**	**Operation**
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
TACs, Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO_2e for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants[b, c]		
NO_2 1-hour average annual arithmetic mean	SCAQMD is in attainment; Project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (State) 0.03 ppm (State) and 0.0534 ppm (federal)	
PM10 24-hour average annual average	 10.4 µg/m^3 (construction)[c] & 2.5 µg/m^3 (operation) 1.0 µg/m^3	
PM2.5 24-hour average	 10.4 µg/m^3 (construction)[c] & 2.5 µg/m^3 (operation)	
SO_2 1-hour average 24-hour average	 0.25 ppm (State) & 0.075 ppm (federal – 99th percentile) 0.04 ppm (State)	
Sulfate 24-hour average	 25 µg/m^3 (State)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; Project is significant if it causes or contributes to an exceedance of the following attainment standards: 20.0 ppm (State) and 35 ppm (federal) 9.0 ppm (State/federal)	
Lead 30-day average Rolling 3-month average	 1.5 µg/m^3 (State) 0.15 µg/m^3 (federal)	

NOx: nitrogen oxides, lbs/day: pounds per day, VOC: volatile organic compound, PM10: respirable particulate matter with a diameter of 10 microns or less, PM2.5: fine particulate matter with a diameter of 2.5 microns or less, SOx: sulfur oxides, CO: carbon monoxide, TACs: toxic air contaminants, GHG: greenhouse gases, MT/yr CO_2e: metric tons per year of carbon dioxide equivalents, NO_2: nitrogen dioxide, ppm: parts per million, µg/m^3: micrograms per cubic meter; SCAQMD: South Coast Air Quality Management District

[a] Source: South Coast AQMD CEQA Handbook (SCAQMD 1993)
[b] Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated
[c] Ambient air quality threshold is based on SCAQMD Rule 403

Source: SCAQMD 2019

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒

Response:

No Impact. Air quality in Riverside County is regulated by the SCAQMD, which is the agency principally responsible for comprehensive air pollution control in the SoCAB. The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary. The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of Air Quality Management Plans (AQMPs).

On March 3, 2017, the SCAQMD adopted the 2016 AQMP, which is a regional and multi-agency effort (SCAQMD, CARB, Southern California Association of Governments [SCAG], and USEPA). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); emission inventory methodologies for various source categories; and SCAG's growth forecasts (SCAG 2016). The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. The two principal criteria for conformance to an AQMP are:

1. Whether the project would result in an increase in the frequency or severity of existing air quality violations; cause or contribute to new violations; or delay timely attainment of air quality standards and
2. Whether the project would exceed the assumptions in the AQMP.

With respect to the first criterion, the analyses in under threshold III(b) below demonstrates that the Project would not (1) generate short-term or long-term emissions of volatile organic compounds (VOCs), nitrogen oxides (NOx), which are O_3 precursors, or PM2.5 that could potentially cause an increase in the frequency or severity of existing air quality violations; (2) cause or contribute to new violations; or (3) delay timely attainment of air quality standards.

With respect to the second criterion, the Project would result in an increase of approximately 319 persons. The addition of 319 residents within the City would not increase or modify SCAG's population, housing, or employment projections (SCAG 2016). The Project would accommodate the projected growth in population accounted for in the 2016 AQMP emissions forecast and would provide additional wastewater storage capacity. Therefore, the Project would be consistent with the region's AQMP. No impacts would occur, 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?	☐	☐	☒	☐

Response:

Less Than Significant Impact.

<u>Construction Emissions – Regional</u>

Criteria pollutant emissions would occur during construction from operation of construction equipment; excavation and earth-moving activities, which would generate fugitive dust; import of soil; import of construction materials; VOC emissions from paving and painting; and operation of vehicles driven to and from the site by construction workers. Emissions would vary from day to day, depending on the level of

activity; the specific type of construction activity occurring; and, for fugitive dust, prevailing weather conditions.

A construction-period mass emissions inventory was compiled based on an estimate of construction equipment as well as scheduling and Project phasing assumptions. More specifically, the mass emissions analysis takes into account the following:

- Combustion emissions from operating onsite stationary and mobile construction equipment;
- Fugitive dust emissions from site preparation and soils remediation/grading phases;
- VOC emissions from asphalt paving and architectural coatings; and
- Mobile-source combustion emissions and fugitive dust from worker commute and truck travel.

The California Emissions Estimator Model (CalEEMod) version 2020.4.0 computer program is designed to model construction and operational emissions for land development projects and allows for the input of project- and County-specific information. CalEEMod has separate databases for specific counties and air districts, and the Riverside County database was used for the Project.

The mass emissions thresholds (see Table 4) are based on the rate of emissions (i.e., pounds of pollutants emitted per day). Therefore, the quantity, duration, and the intensity of construction activity are important in ensuring the analysis of the maximum daily emissions scenarios. The Project activities (e.g., grading, building) are identified by start date and duration. Each activity has associated off-road equipment (e.g., loaders, backhoes) and on-road vehicles (e.g., haul trucks, concrete trucks, worker commute vehicles). The CalEEMod input for construction emissions was based on the Project's construction assumptions and default data included in CalEEMod.

Site preparation and grading of the entire Project Site would occur in one phase, which would be followed by construction of residential clusters beginning every 24 to 30 months, or consistent with the sales absorption of the prior units. Construction is anticipated to commence in 2022, pending Project approval. For the purposes of the Traffic Impact Assessment, it was assumed that the Project would be fully constructed by 2023. The following construction durations are anticipated.

- Site preparation – 2 weeks
- Grading/excavation – 12 months
- Building construction – 12 months for each cluster
- Paving – 2 weeks for each cluster

Based on information provided by the developer and supplemented with default computer model values developed by the SCAQMD, it is anticipated that the construction of the Project would involve the following equipment for each construction phase.

- Site preparation – 1 dozer, 1 water truck
- Grading – 1 dozer, 2 scrapers, 1 dump truck, 1 water truck
- Building construction – 1 crane, 3 forklifts, 1 generator set, 3 tractors/loaders/backhoes, 1 welder
- Paving – 1 paver, 1 curb machine, 1 dump truck, 1 cement truck, 1 roller
- Architectural coatings – air compressors

Project grading would involve a cut volume of 90,148 cubic yards (cy) and fill volume of 56,011 cy, and require the export of approximately 34,137 cy of soil from the Project Site, as shown in Figure 5, Grading

Plan. More detailed information related to construction related equipment utilization, construction worker and haul truck information can be found in Appendix A of this document.

Dust control by watering was assumed within the CalEEMod modeling, consistent with the requirements of SCAQMD Rule 403. Rule 403, Fugitive Dust, requires that fugitive dust be controlled with the best available control measures (BACM) so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. SCAQMD Rule 403 requires the application of BACM which includes prewatering and stabilization of soils during clearing and grading activities, stabilization of backfill material, and stabilization of the disturbed site once site preparation and grading activities are complete. Unpaved roads/parking lots/staging areas must be stabilized and vehicles must be limited to travel on established unpaved roads and designated parking lots/staging areas. Export of materials requires that soils are stabilized during loading, transport, and unloading through the use of a watering, sufficient freeboard distance or the use of a cover. Additional requirements may be triggered under high wind conditions (winds in excess of 25 mph). Additional requirements are detailed in Rule 403. It is noted that construction contractors must also comply with SCAQMD Rules 401, Visible Emissions and 402, Nuisance; no quantitative reductions of particulate emissions are assumed for Rules 401 and 402.

Maximum daily emissions for the Project's peak workday are shown in Table 5, Estimated Maximum Daily Construction Emissions. As shown, all criteria pollutant emissions would be less than their respective thresholds. Thus, impacts to regional construction emissions from the Project would be less than significant.

TABLE 5
ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS
(LBS/DAY)

Year	VOC	NOx	CO	SOx	PM10	PM2.5
2022	3	40	19	<1	6	3
2023	34	15	17	<1	1	1
Maximum	**34**	**40**	**19**	**<1**	**6**	**3**
SCAQMD Daily Thresholds *(Table 4)*	***75***	***100***	***550***	***150***	***150***	***55***
Exceeds SCAQMD Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compound(s); NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: inhalable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SCAQMD: South Coast Air Quality Management District.

Source: SCAQMD 2019 (Thresholds). CalEEMod data in Appendix A.

Construction Emissions – Local/Ambient Air Quality

The localized effects from the onsite portion of daily emissions were evaluated at receptor locations potentially impacted by the Project according to the SCAQMD's localized significance threshold (LST) method, which utilizes onsite emissions rate look up tables and Project-specific modeling, where appropriate. LSTs are applicable to the following criteria pollutants: NO_2, CO, PM10, and PM2.5. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest receptor. For the LST CO and NO_2 exposure analysis, receptors who could be exposed for one hour or more are considered. For PM10 and PM2.5 exposure analysis, receptors who could be exposed for 24 hours are considered. The mass rate look-up tables were developed for each source receptor area and can be used to determine if a project may generate significant adverse localized air quality impacts. The City of Moreno Valley is in source-receptor area 24, Perris Valley. The SCAQMD provides LST mass rate look-up tables for projects that are less than or equal to five acres of area disturbed. For projects that exceed five acres, such as the Project, the five-acre LST look-up values can be used as a screening tool

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

to determine which pollutants require detailed analysis. If a project exceeds the LST look-up values, then the SCAQMD recommends that project-specific localized air quality modeling be performed.

When quantifying mass emissions for localized analysis, only emissions that occur on site are considered. Emissions for PM10 and PM2.5 includes dust suppression associated with SCAQMD Rule 403. Consistent with the SCAQMD's LST method guidelines, emissions related to offsite delivery/haul truck activity and employee trips are not considered in the evaluation of localized impacts. The LST analysis for the Project is shown in Table 6. As shown in Table 6, localized emissions would be less than their respective SCAQMD LSTs for all four pollutants. Thus, impacts would be less than significant, and no mitigation is required.

TABLE 6
LOCALIZED CONSTRUCTION POLLUTANT EMISSIONS
(LBS/DAY)

	NOx	CO	PM10	PM2.5
Grading Emissions	27	16	5	2
SCAQMD LSTs for Site Preparation*	**187**	**999**	**8**	**5**
Exceeds SCAQMD Thresholds?	**No**	**No**	**No**	**No**

lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SCAQMD: South Coast Air Quality Management District; LST: Localized Significance Threshold.

* Thresholds for Source Receptor Area 24, Perris Valley, 2.5-acre daily site disturbance, 25-meter receptor distance.

Source: SCAQMD 2009.

Long-Term Operational Emissions

Operational emissions comprised of area, energy, and mobile source emissions were estimated using CalEEMod. Area source emissions include consumer products, routine painting, and landscaping equipment and are based on CalEEMod assumptions for the specific land uses and population. Energy emissions include the use of natural gas for hot water heating.

Mobile source emissions for the Project are based on estimated Project-related trip generation forecasts, as contained in the Project trip generation memorandum (Translutions Inc. 2021). The Project would generate an estimated 1,020 daily vehicle trips. Estimated maximum daily operational emissions for the Project are shown in Table 7.

TABLE 7
ESTIMATED MAXIMUM DAILY OPERATIONAL EMISSIONS

	Emissions (lbs/day)					
Source	**VOC**	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Area sources	28	2	37	<1	4	4
Energy source	<1	1	<1	<1	<1	<1
Mobile sources	2	2	25	<1	7	2
Total Operational Emissions*	**30**	**4**	**63**	**<1**	**11**	**6**
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; SO2: sulfur dioxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.

* Some totals may not add due to rounding.

Note: CalEEMod model data sheets are included in Appendix A.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Cumulative Impacts

The Riverside County portion of the SoCAB is a nonattainment area for O_3, PM10, and PM2.5. The Project would generate these pollutants during construction, and short-term cumulative impacts related to air quality could occur if Project construction and nearby construction activities were to occur simultaneously. In particular, with respect to local impacts, cumulative construction particulate (i.e., fugitive dust) impacts are considered when projects are located within a few hundred yards of each other. As described in the analysis above, construction emissions would be below the SCAQMD regional and localized significance thresholds. Therefore, short-term construction emissions of nonattainment pollutants would not be cumulatively considerable and Project impacts would be less than significant.

SCAQMD's policy with respect to cumulative impacts associated with criteria pollutants and their precursors is that impacts that would be directly less than significant would also be cumulatively less than significant (SCAQMD 2003). As shown in Tables 5 through 7 and discussed above, the Project's construction and operational emissions would not exceed SCAQMD thresholds. Therefore, consistent with SCAQMD policy, the cumulative construction and operational impacts of the Project would also be less than significant, and no mitigation is required.

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

Response:

Less Than Significant Impact. Exposure of sensitive receptors is addressed for the following situations: CO hotspots; criteria pollutants from onsite construction; and TACs from onsite construction.

Carbon Monoxide Hotspot

A CO hotspot is an area of localized CO pollution caused by severe vehicle congestion on major roadways, typically near intersections. If a project increases average delay at signalized intersections operating at level of service (LOS) E or F or causes an intersection that would operate at LOS D or better without the project to operate at LOS E or F with the project, a quantitative screening is required. As discussed in Section XVII. Transportation, implementation of the Project would result the intersection of Sycamore Canyon Boulevard and Fair Isle Drive currently operating at LOS D to operate at LOS E. As a result of Senate Bill 743 (SB 743), a Project's impacts on vehicular Level of Service (LOS) are no longer considered an environmental impact. Therefore, the Project's effects on vehicular LOS are disclosed separately in the Project's Traffic Impact Analysis, provided as Appendix K. Recommended LOS-related conditions of approval are provided therein to ensure consistency with City LOS standards that are contained in the Circulation Element. Roadway improvements that are consistent with the Circulation Element of the General Plan would ensure that the LOS would not result in congested conditions that would have the potential for a CO hotspot. In addition, with the advent of catalytic converters and improved vehicle fuel efficiency standards, both the State of California and federal ambient air quality standards for carbon monoxide have not been exceeded for decades. As such, the Project would neither cause new severe congestion nor significantly worsen existing congestion. There would be no potential for a CO hotspot or exposure of sensitive receptors to substantial, Project-generated local CO emissions.

Criteria Pollutants from Onsite Construction

Exposure of persons to NO_2, CO, PM10, and PM2.5 emissions is discussed in the LST analysis under the response to threshold question III(b) above. As discussed, there would be a less than significant impact and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Toxic Air Contaminant (Diesel PM) Emissions from Onsite Construction

Construction activities would result in short-term, Project-generated emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment used for site preparation (e.g., demolition, excavation, and grading); paving; and building construction. CARB identified diesel PM as a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer time period. According to the Office of Environmental Health Hazard Assessment, health risk assessments—which determine the exposure of sensitive receptors to TAC emissions—should be based on a 30- to 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with a project.

For the Project, there would be little off-road, heavy-duty diesel equipment in operation, and the construction period would be short when compared to a 30- to 70-year exposure period. When considering these facts combined with the highly dispersive properties of diesel PM and additional reductions in particulate emissions from newer construction equipment, as required by USEPA and CARB regulations, it can be concluded that TAC emissions during construction of the Project would not expose sensitive receptors to substantial emissions of TACs. There would be a less than significant impact and no mitigation is required.

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

Response:

Less than Significant Impact. The Project would not result in other emissions that would affect a substantial number of people. Objectionable odors are generally associated with agricultural activities; landfills and transfer stations; the generation or treatment of sewage; the use or generation of chemicals; food processing; or other activities that generate unpleasant odors (SCAQMD 1993).

During construction, the Project would operate equipment that may generate odors resulting from onsite construction equipment's diesel exhaust emissions or paving operations. However, these odors would be temporary and would dissipate rapidly from the source with an increase in distance.

Potential operational odors could be created by cooking activities associated with residential uses. These odors would be similar to existing residential uses surrounding the Project Site and throughout the City and odors would be confined to the immediate vicinity of the proposed dwelling units. The Project would also be regulated from nuisance odors and other objectionable emissions by SCAQMD Rule 402. Rule 402, Nuisance, prohibits discharge from any source of air contaminants or other material which would cause injury, detriment, nuisance, or annoyance to people or the public. Compliance with Rule 402, which the Project must do, would ensure that no significant odor impacts would result. Therefore, other emissions would be considered less than significant, and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. 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 Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

Response:

Less than Significant with Mitigation. An impact analysis for sensitive biological resources potentially on the Project Site was prepared by Dudek in 2022 (Dudek 2022c, provided as Appendix B). Focused plant and burrowing owl (*Athene cunicularia*) surveys were conducted by Psomas in 2021 and the results of those surveys are detailed in the July 2021 survey reports (Appendix B). Also, an MSHCP Consistency Analysis and Determination of Biologically Equivalent or Superior Preservation Report was prepared by Dudek in October 2022 (Dudek 2022b).

Special-Status Plants

The focused plant survey determined one special status plant species, paniculate tarplant (*Deinandra paniculata*), is present on the Project Site. This species is not covered by the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). As a species with a California Rare Plant Rank (CRPR) of 4.2, it is considered to be of limited distribution and on a "watch list". Multiple occurrences of this species are present within the Project region. Species with a CRPR of 4.2 are not generally considered constraints on development and impacts to this species would be less than significant. No mitigation would be required.

One additional special status plant species, Parry's spineflower (*Chorizanthe parryi* var. *parryi*), has potential to occur in the Project Site. Because sufficient growing conditions for Parry's spineflower could not be confirmed for the 2021 survey year, species absence from the Project Site cannot be absolutely determined. Impacts to this species are fully covered under the MSHCP; therefore, compliance with the MSHCP offsets potential direct and indirect impact to this species and impacts would be less than significant. No mitigation is required.

Special-Status Wildlife

One federally listed threatened species (coastal California gnatcatcher [*Polioptila californica californica*]) was detected within the Project Site; however, this species is a fully covered species under the MSHCP. Therefore, compliance with the MSHCP offsets the Project's direct and indirect impacts to this species with respect to the federal Endangered Species Act and the species' status as a California Species of Special Concern. Loss of an active nest of this species due to construction activities, however, would be considered a significant impact under CFW code and the federal Migratory Bird Treaty Act (MBTA). Impacts would be reduced to less than significant levels by implementing **MM BIO-1,** which requires a pre-construction nesting bird survey be conducted if ground-disturbing and/or vegetation clearance activities are scheduled to occur during the avian nesting season (typically February 15 through August 31).

One federally listed endangered wildlife species (San Bernardino kangaroo rat [*Dipodomys merriami parvus*]) has a low potential to occur within the Project Site and one federally listed endangered and state-listed threatened wildlife species (Stephen's kangaroo rat [*Dipodomys stephensi*]) has a moderate potential to occur within the Project Site. San Bernardino kangaroo and Stephen's kangaroo rat are fully covered under the MSCHP; therefore, compliance with the MSHCP offsets potential direct and indirect impacts to these species. Furthermore, the Project is also within the Stephen's Kangaroo Rat Habitat Conservation Plan Area, which provides take authorization for Stephen's kangaroo rat within its boundaries.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

One California Fully Protected wildlife species (white-tailed kite) has a low potential to nest and moderate potential to forage within the Project Site. This species is fully covered under the MSCHP; therefore, compliance with the MSHCP offsets potential loss of foraging and nesting habitat of this species. Loss of an active nest of this species due to construction activities, however, would be considered a significant impact under CDFW code and the federal MBTA. Impacts would be reduced to less than significant levels by implementing **MM BIO-1**, which requires a pre-construction nesting bird survey to be conducted by a qualified biologist.

In addition, two non-listed special status species (San Diego banded gecko [*Coleonyx variegatus abbotti*] and loggerheaded shrike [*Lanius ludovicianus*]) have moderate potential to occur within the Project Site. Two other non-listed special status species (red diamond rattlesnake [*Crotalus ruber*] and coast horned lizard [*Phrynosoma blainvillii*]) have a high potential to occur within the Project Site. All of these species are fully covered under the MSCHP; therefore, compliance with the MSHCP offsets potential direct and indirect impacts to these species. Loss of an active nest of loggerhead shrike due to construction activities, however, would be considered a significant impact under CDFW code and the federal MBTA. Impacts would be reduced to less than significant levels by implementing pre-construction nesting bird requirements specified in **MM BIO-1**.

Burrowing Owl

The Project Site and vicinity contains habitat suitable for burrowing owl, a non-listed special status species. A focused burrowing owl survey was conducted in 2021 and burrowing owl were determined to be absent. If burrowing owl should colonize the Project Site or 500-foot vicinity prior to initiation of construction activities, impacts to burrowing owl could be significant. Implementation of **MM BIO-2**, which requires a pre-construction survey for burrowing owl be conducted, would reduce any potential impact to less than significant levels.

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

Response:

No Impact. There are no special-status vegetation communities as defined by the CDFW within the Project Site; therefore, the Project would not result in direct or indirect impacts to special-status vegetation communities.

Drainage features subject to the jurisdiction of CDFW, RWQCB, USACE are present on the Project Site and some would be directly impacted by the Project. These features are also considered riverine features under the MSHCP. None of the features, however, support riparian or wetland vegetation and impacts are assessed under CEQA Checklist Question: Biological Resources C, below.

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?	☐	☒	☐	☐

Response:

Less than Significant with Mitigation. A jurisdictional delineation was conducted for the Project Site in 2022 by Dudek (Dudek 2022b, provided as Appendix B). Based on current Project design, approximately

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

0.08 acres of waters jurisdictional to the RWQCB and CDFW, and 0.05 acres of waters jurisdictional to the USACE would be permanently impacted by the Project. The Project would also result in direct impacts to approximately 0.05 acres of riverine features pursuant to the MSHCP. Fuel modification zones would avoid riverine areas. Impacts to drainage features that are jurisdictional to the USACE, RWQCB, CDFW, and under the MSHCP would be considered significant without mitigation. **MM BIO-3** requires that the Developer obtain regulatory permits. Note that a Determination of Biologically Equivalent or Superior Preservation (DBESP) has already been approved by the RCA for the project. **MM BIO-4** specifies minimum compensatory mitigation requirements for impacts to jurisdictional waters. Implementation of **MM BIO-3** and **MM BIO-4** would reduce these impacts to a less than significant level.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with an established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐

Response:

Less than Significant with Mitigation.

Nesting Birds

Project construction could result in direct and indirect impacts to nesting birds, including the loss of nests, eggs, and fledglings if ground-disturbing activities occur during the nesting season (generally February 15 through August 31). Construction activities during this time may result in reduced reproductive success and may violate the federal Migratory Bird Treaty Act and California Fish and Game Code. If construction (including any ground-disturbing activities) occurs during the nesting season, a nesting bird survey must be conducted by a qualified biologist prior to grading activities. If nesting birds are observed within or adjacent to the construction activities, avoidance of active bird nests shall occur as determined by the qualified biologist to ensure compliance with these regulations. Implementation of **MM BIO-1** would reduce impacts to less than significant levels.

Wildlife Corridors and Nursery Sites

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as stepping stones for wildlife dispersal. The Project Site and the surrounding environment to the north, east, and west contain open scrub habitat associated with Box Springs Mountain that likely functions as open habitat, but does not function as a corridor for wildlife. Additionally, the area is not identified as a wildlife movement corridor by the MSHCP. The Project Site does not function as a wildlife corridor and does not support any wildlife nursery sites. As a result, implementation of the Project would not result in impacts to these resources.

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

Response:

Less than Significant Impact. The Heritage Trees Ordinance, which is codified as Section 9.17.030 (G) of the City of Moreno Valley Municipal Code, states that no tree taller than 15 feet or with a diameter of greater than 15 inches may be removed within City Limits. The mature trees located in the Eucalyptus alliance shown on Figure 6 of Appendix B are greater than 15 feet tall. Removing any of these trees would

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

conflict with the City ordinance. These trees are located beyond the edge of the Project's grading footprint; however, individual eucalyptus trees may be impacted due to the Project's fuel modification requirements, which necessitate thinning and removal of certain plant species. Section 9/17/030(G) allows removal of heritage trees to protect against hazardous conditions to property, such as would be needed to comply with fuel modification zone requirements. However, Implementation of **RR BIO-1** would ensure all Heritage Trees requiring removal as a result of this project would be sufficiently mitigated by replacement trees, and staff review. Accordingly, impacts would be less than significant.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐

Response:

Less than Significant with Mitigation. The Project Site occurs within the boundaries of two regional Habitat Conservation Plans: the MSHCP and the Stephens' Kangaroo Rat Habitat Conservation Plan.

MSHCP

The Project is under the jurisdiction of the City of Moreno Valley and the Project Site is within the MSHCP Plan Area. Compliance with the MSHCP is mandatory and any conflict with the MSHCP would be likely be a significant impact.

The Project Site is not located within an MSHCP Conservation Area or within a designated Criteria Cell. To prevent conflicts with the applicable sections of the MSHCP, the Developer must do the following: pay the applicable MSHCP Development Mitigation Fee (**MM BIO-5**); implement resource avoidance measures associated with burrowing owl and riparian/riverine resources (**MM BIO-2** and **MM BIO-4**); and comply with MSHCP Urban/Wildlife Interface Guidelines (**MM BIO-6** and **RR AES-1**).

The Project is located adjacent to a proposed conservation area and has connectivity to areas described for conservation; therefore, the MSHCP Urban/Wildlife Interface Guidelines are applicable. Each of the Urban/Wildlife Interface Guidelines are further discussed below.

- Drainage/Toxics: The Project includes the construction of two water quality basins. With the development of a Stormwater Pollution Prevention Plan (**MM BIO-6**), the Project would be consistent with these requirements of the MSHCP.
- Lighting/Noise: The Project is located immediately north of existing residential development and adjacent to Morton Road. The Project would incorporate a setback consisting of open space within the northern portion of the Project Site. Furthermore, a lighting plan would be prepared noting that all new lighting would be shielded and down-cast, such that the light is not cast onto adjacent areas (**RR AES-1**). Therefore, night lighting and noise would not impact existing or future MSHCP Conservation Areas and the Project would be consistent with these requirements of the MSHCP.
- Barriers: The Project does not include fencing or other barriers that would impede wildlife. Furthermore, the Project Site does not function as a corridor for wildlife. Additionally, the area is not identified as a wildlife movement corridor by the MSHCP; therefore, the Project would be consistent with these requirements of the MSHCP.
- Grading/Land Development: No manufactured slopes would extend within existing or planned Conservation Areas as part of development of the Project. Therefore, the Project would be consistent with these requirements of the MSHCP.
- Invasives: Invasive species provided in MSHCP Table 6-2 are not to be used in development or restoration plan activities for projects adjacent to conservation areas. As described in **MM BIO-6**,

the Project shall not use invasive species as defined in the MSHCP Table 6-2 within its landscape plan. With implementation of this measure, the Project would be consistent with this requirement of the MSHCP.

- Fuel Modification: Weed abatement and fuel modification zones do not encroach into existing or planned Conservation Areas; therefore, the Project would be consistent with these requirements of the MSHCP.

With the project design features and mitigation measures, including the development of two combination detention and bioretention basins (e.g., Basins A and B), and implementation of **MM BIO-6** and **RR AES-1**, the Project is consistent with Section 6.1.4 of the MSHCP regarding Urban / Wildlands interface.

The Project Site supports riverine resources as defined by Section 6.1.2 of the MSHCP. The Project would result in the permanent loss of approximately 0.05 acres of MSHCP riverine resources. A DBESP has been prepared for the project identifying avoidance, minimization, and mitigation measures for impacts to riverine resources. The DBESP was reviewed and approved by the RCA in 2022 and is attached in Appendix B. With implementation of **MM BIO-4** which specifies minimum compensatory mitigation requirements, the Project is consistent with Section 6.1.2 of the MSHCP regarding protection of species associated with riparian/riverine areas and vernal pools.

The Project Site occurs within an area identified by the MSHCP as requiring burrowing owl surveys. With implementation of **MM BIO-2**, which requires a pre-construction burrowing owl survey, the Project would be consistent with the MSHCP burrowing owl requirements and Criteria Area Species Survey Area discussed in Section 6.3.2 of the MSHCP.

As a result of implementation of **MM BIO-2, MM BIO-4, MM BIO-5, MM BIO-6, MM BIO-7, and RR AES-1,** potential conflicts with the MSHCP, as explained above, would be avoided and no impacts are anticipated.

Stephens' Kangaroo Rat Habitat Conservation Plan

The Project Site is within the Stephens' Kangaroo Rat Habitat Conservation Plan boundary. With payment of the Stephens' Kangaroo Rat Habitat Conservation Plan Development Mitigation Fee (**MM BIO-7**), the Project would be consistent with the Stephens' Kangaroo Rat Habitat Conservation Plan and less than significant impacts would result from the Project.

Mitigation Program:

Regulatory Requirements:

RR AES-1 The Developer shall prepare a Lighting Plan that provides the type and location of proposed exterior lighting and signage, subject to the review and approval of the City's Development Services Department. All new lighting shall be shielded and down-cast, such that the light is not cast onto adjacent properties or visible from above.

RR BIO-1 The Developer shall obtain a tree removal permit from the City, if fuel modification, grading, or other improvements require removal of any heritage trees. The Developer would incorporate mitigation trees, replacing removed heritage trees, resulting from a tree removal permit into the Project's final landscape plan.

Mitigation Measures:

MM BIO-1: To maintain compliance with the Migratory Bird Treaty Act and California Fish and Game Code, if ground-disturbing and/or vegetation clearance activities are scheduled to occur during the avian nesting season (typically February 15 through August 31), a pre-construction nesting bird survey shall be conducted by a qualified biologist within the

Project Site and a 500-foot buffer around the Project Site. Surveys shall be conducted within 3 days prior to initiation of activity and shall be conducted between dawn and noon.

If an active nest is detected during the nesting bird survey, avoidance buffers shall be implemented as determined by a qualified biologist. The buffer shall be of a distance to ensure avoidance of adverse effects to the nesting bird by accounting for topography, ambient conditions, species, nest location, and activity type. All nests shall be monitored as determined by the qualified biologist until nestlings have fledged and dispersed or it is otherwise confirmed that the nest has been unsuccessful or abandoned.

MM BIO-2: The Developer shall have a qualified biologist conduct a pre-construction survey for burrowing owl in accordance with the March 2006 Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area. This survey shall occur within 30 days prior to ground-disturbance activities. A minimum of one survey site visit within the described time frame prior to disturbance is required to confirm presence or absence of owls on the site. If burrowing owl are present within the survey area, take of active nests shall be avoided as determined by a qualified biologist.

MM BIO-3: For all features identified as jurisdictional that cannot be avoided, the Developer shall obtain permits from the respective agencies prior to the initiation of construction activities. These permits include a Clean Water Act (CWA) Section 404 permit from the USACE, a CWA Section 401 water quality certification from the Regional Water Quality Control Board, and a CDFW Section 1602 Notification of Lake or Streambed Alteration.

The Developer shall implement and comply with all measures required by the jurisdictional permits. Mitigation for the loss of jurisdictional resources shall be negotiated with the resource agencies (US Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife) during the regulatory permitting process.

MM BIO-4: The Developer shall compensate for impacts to jurisdictional waters and riparian/riverine areas by providing a 1:1 ratio of offsite land within the Santa Ana Watershed or an adjacent watershed to be acquired for the purpose of In-Perpetuity Preservation, or through the purchase of mitigation credits at an established off-site Mitigation Bank or In-lieu Fee Program. Mitigation proposed on land acquired for the purpose of in-perpetuity mitigation that is not part of an agency-approved mitigation bank or in-lieu fee program shall include the preservation, creation, restoration, and/or enhancement of similar habitat within the Santa Ana Watershed or an adjacent watershed pursuant to a Habitat Mitigation and Monitoring Plan (HMMP) to be approved by the Lead and Responsible agencies. The HMMP shall be prepared prior to any impacts and it shall provide details as to the implementation of mitigation, maintenance, future monitoring, and management. The goal of the mitigation shall be to preserve, create, restore, and/or enhance similar habitat with equal or greater function and value than the affected habitat.

MM BIO-5: The Developer shall pay the applicable MSHCP Development Mitigation Fee prior to initiation of grading activities.

MM BIO-6: The following avoidance and minimization measures shall be implemented during Project construction activities:

- Construction limits along the northern and eastern boundaries of the Project shall be clearly marked so that adjacent native vegetation is avoided.
- Staging and storage areas for spoils, equipment, materials, fuels, lubricants, and solvents shall be located within the designated impact area or adjacent developed areas.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

- A Stormwater Pollution Prevention Plan shall be developed and implemented.
- Invasives: Invasive species identified in Table 6-2 of the MSHCP shall not be used in development landscape plans or restoration plan activities.

MM BIO-7: The Developer shall pay the applicable Stephens' Kangaroo Rat Habitat Conservation Plan Development Mitigation Fee prior to initiating any grading activities.

V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒

Response:

No Impact. A Phase I cultural resources survey was completed by CRM Tech in 2007 for the Project Site (Appendix C), which included a records search, historical research, a systematic field survey and consultation with Native American representatives. As a result of the survey, two archaeological sites, 33-015937 (CA-RIV-8274/H) and 33-015938 (CA-RIV-8275), and a prehistoric isolate, 33-015967, were identified and recorded within the Project Site.

In order to evaluate their qualifications as "historical resources," as defined by CEQA, archaeological testing was recommended on the two sites. The isolate, which consisted of a hand-held grinding stone that appears to have been used as a mano and a pestle, was not considered a potential "historical resource" due to its lack of contextual integrity and its limited ability to contribute information to the study of prehistory (CRM Tech 2018).

Site 33-015937 (CA-RIV-8274/H) consists of both prehistoric and historic-period components, including bedrock milling features, building foundations, a well, a cistern, and a refuse deposit. CA-RIV-8275 consists of two bedrock milling features (CRM Tech 2018).

Sites 33-015937 and 33-015938 were subsequently evaluated in 2007 with a testing program, which included surface collection of artifacts and the excavation of shovel test pits, standard archaeological units, and mechanical trenches. Also, focused historical research was completed on Site 33-015937. No subsurface cultural remains were discovered during excavation, and the historical research did not identify any significant persons or events associated with the sites, nor any other historical quality of distinction. Therefore, the two sites were determined not to meet CEQA definition of "historical resources" (Chambers Group 2007).

In 2018, an *Update to Previous Cultural Resources Studies* was prepared by CRM Tech for the Project Site (Appendix C). This updated evaluation included a standard one-mile-radius records search, which was conducted November 14, 2018, at the Eastern Information Center (EIC). The results of the records search indicate that in addition to the survey and testing reports summarized above, another cultural resources survey also took place within the project boundaries in 2007. That survey was focused on the site of a wooden power pole that was slated to be replaced, and no cultural resources were identified in the vicinity. No other studies have occurred in the Project area since 2007 and Sites 33-015937 and 33-015938 and Isolate 33-015967 remain the only cultural resources recorded in the immediate vicinity. As stated above, all three of these known cultural resources were previously determined not to constitute "historic resources" under CEQA provisions and were not further evaluated in the 2018 updated cultural resource study.

Also in 2018, additional historical background research was conducted with the purpose of supplementing and updating the findings of the 2007 studies with information from sources that have become available since then, such as aerial photographs taken between 1966 and 2018, accessible at the Nationwide Environmental Title Research Online website and through the Google Earth software. As mentioned in the 2007 survey report, an apparent homestead was once located in the northeast portion of the Project area,

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

at the location of Site 33-015937. The aerial photographs confirmed the presence of at least one residence and several ancillary structures at that location during the 1960s–1970s. By 1994, all of the buildings and structures had been removed, and some grading or clearing had occurred in the Project area for unknown purposes.

Finally the 2018 updated cultural resource study included a field inspection that focused primarily on the locations of the three previously recorded cultural resources, and the rest of the Project Site was inspected along the southern and western perimeters for an overview of the current conditions of the property. The field inspection revealed that features of Sites 33-015937 and 33-015938, such as the bedrock milling features and the structural remains, were still present in a similar condition as in 2007, but the ground stone artifact at Isolate 33-015967 could not be located. No other potential cultural resources were encountered within or adjacent to the Project boundaries during the field inspection.

Based on these findings, no historical resources eligible for the California Register of Historic Resources or a local register are present within or adjacent to the Project Site. Therefore, the Project would not result in any direct or indirect impacts to historic resources pursuant to CEQA, and no mitigation is required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐

Response:

Less Than Significant with Mitigation. As described in more detail above and in the cultural reports (Appendix C), given the presence of archaeological resources in the vicinity of the Project, there is the possibility that undiscovered intact cultural resources, including archaeological resources may be present below the surface in native sediments. This would represent a significant impact. However, implementation of **MM CUL-1**, which requires that any suspected cultural (archaeological) resources inadvertently unearthed during grading be evaluated by a qualified archaeologist to determine their significance and make recommendations for the appropriate course of action, would reduce this impact to a level considered less than significant. Also, **MM CUL-2** has been incorporated, which requires archaeological monitoring for all ground disturbance activities that occur within 30 meters (100 feet) of Sites 33-015937 and 33-015938. With implementation of these measures, impacts to archaeological resources would be reduced to a less than significant level.

c) Disturb any human remains, including those interred outside of formally dedicated cemeteries?	☐	☐	☒	☐

Response:

Less than Significant Impact. There is no indication that human remains are present within the Project Site, including those interred outside formal cemeteries. The records searches conducted as part of the Project's Cultural Report indicates no evidence of human remains on or near the Project Site (CRM Tech 2018). In the unlikely event of an unanticipated encounter with human remains in Project Site, the *California Health and Safety Code* and the *California Public Resources Code* require that any activity in the area of a potential find be halted and the County Coroner be notified, as described in **RR CUL-1**. Compliance with **RR CUL-1** would ensure that impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Mitigation Program:

Regulatory Requirement:

RR CUL-1: In the event of the discovery of human remains, the developer shall contact the County coroner immediately. If human remains of Native American origin are discovered during ground-disturbing activities, the developer shall comply with the State laws relating to the disposition of Native American burials that fall within the jurisdiction of the Native American Heritage Commission (NAHC; PRC §5097). According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that excavation is stopped near discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the California Native American Heritage Commission shall be notified, and appropriate measures provided by State law shall be implemented to determine the most likely living descendant(s). Disposition of the remains shall be overseen by the most likely living descendants to determine the most appropriate means of treating the human remains and any associated grave artifacts.

Mitigation Measure

MM CUL-1: Prior to the issuance of a demolition permit, the Developer shall submit the name and qualifications of a qualified archaeologist to the City of Moreno Valley Community Development Department for review and approval. Once approved, the qualified archaeologist shall be retained by the Developer. In the event that suspected cultural (archaeological) resources or tribal cultural resources are inadvertently unearthed during excavation activities, the contractor shall immediately cease all earth-disturbing activities within a 100-foot radius of the area of discovery. The Project contractor or Developer shall contact the qualified archaeologist to request an evaluation of the significance of the find and determine an appropriate course of action. If avoidance of the resource(s) is not feasible, salvage operation requirements pursuant to Section 15064.5 of the State California Environmental Quality Act Guidelines shall be followed in consultation with the City. After the find has been appropriately avoided or mitigated, work in the area may resume.

MM CUL-2: Archaeological monitoring will be conducted by a qualified archaeologist for all ground disturbance activities that occur within 30 meters (100 feet) of Sites 33-015937 and 33-015938, which are identified in greater detail within the Project's cultural reports (Appendix C). If any suspected cultural (archaeological) resources are detected, the procedures identified in **MM CUL-1** will be implemented.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. 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?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The State of California has adopted efficiency design standards within the Title 24 Building Standards and California Green Building Standards Code (CALGreen) requirements (**RR ENE-1**). Title 24 of the California Code of Regulations (CCR, specifically, Part 6) is California's Energy Efficiency Standards for Residential and Non-residential Buildings. Title 24 was established by the California Energy Commission (CEC) in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and to provide energy efficiency standards for residential and non-residential buildings. The 2019 California Green Building Standards Code (24 CCR, Part 11), also known as the CALGreen Code, contains mandatory requirements for new residential and nonresidential buildings throughout California (**RR ENE-2**). The development of the CALGreen Code is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the Code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impacts during and after construction. The regulation of energy efficiency for residential and non-residential structures is established by the CEC and its California Energy Code.

SCE and the Southern California Gas are utility companies that would provide electrical and natural gas services to the Project Site. Compliance with energy efficiency and conservation policies and regulations is discussed in this section.

The City of Moreno Valley has adopted Moreno Valley 2040 Plan which serves as the City's General Plan pursuant to State law. Section 7.6 Energy Resources of the Moreno Valley 2040 Plan contains attainable conservation goals and policy actions that would assist in energy conservation within the community. This Section discusses how electricity production is generated from burning fossil fuels and that transportation is currently reliant on the consumption of gasoline and diesel fuels. The advent of electric vehicles is also increasingly displacing the need to consume gasoline and diesel for transportation. The State of California leads the country in the adoption of electric vehicles (Moreno Valley 2021d).

The City of Moreno Valley further adopted a Climate Action Plan in June, 2021 that established a comprehensive Green House Gas reductions strategy for the City. Some of the regulatory policies applicable to new residential developments (operational and construction-related measures) are included herein for explanation, and which will be added as conditions of approval to the Project, to further mitigate the wasteful use of energy resources. They include the following which have been added as Regulatory Requirements below (**RR ENE -3**) :

1. Require new multi-family residential development to reduce the need for external trips by providing useful services/facilities on-site such as electric vehicle infrastructure. (Policy TR-9)
2. incentives such as streamlined permitting or bonus density for new multi-family buildings and reroofing projects to install "cool" roofs consistent with the current California Green Building Code (CALGreen) standards for commercial and industrial buildings. (Policy R-1)
3. Require new construction and major remodels to install interior real-time energy smart meters in line with current utility provider (e.g., MVU, SCE) efforts. (Policy R-2)

4. Reduce emissions from heavy-duty construction equipment by limiting idling based on South Coast Air Quality Management District (SCAQMD) requirements and utilizing cleaner fuels, equipment, and vehicles.
    a. Require provision of clear signage reminding construction workers to limit idling
    b. Require project applicants to limit GHG emissions through one or more of the following measures:
        i. substitute electrified or hybrid equipment for diesel/gas powered equipment
        ii. Use alternative fueled equipment on site
        iii. Avoid use of on-site generators. (Policy OR-2)

Construction Impacts

Project construction would require the use of construction equipment for demolition, grading, and building activities. All off-road construction equipment is assumed to use diesel fuel. Construction also includes the vehicles of construction workers and vendors traveling to and from the Project Site.

Off-road construction equipment use was calculated from the equipment data (mix, hours per day, horsepower, load factor, and days per phase) provided in the CalEEMod construction output files included in Appendix A. The total horsepower hours for the Project was then multiplied by fuel usage estimates per hours of construction activities included in the Off-Road Model.

Fuel consumption from construction worker, vendor, and delivery/haul trucks was calculated using the trip rates and distances provided in the CalEEMod construction output files. Total vehicle miles traveled (VMT) was then calculated for each type of construction-related trip and divided by the corresponding miles per gallon factor using CARB's EMissions FACtor (EMFAC) 2017 model. EMFAC provides the total annual VMT and fuel consumed for each vehicle type. Construction vendor and delivery/haul trucks were assumed to be heavy-duty diesel trucks.

As shown in Table 8, Energy Use During Construction, a total of 15,871 gallons of gasoline and 23,135 gallons of diesel fuel is estimated to be consumed during Project construction.

TABLE 8
ENERGY USE DURING CONSTRUCTION

Source	Gasoline (gallons)	Diesel (gallons)
Off-road Construction Equipment	10,413	10,457
Worker commute	4,373	19
Vendors	1,070	17
On-road haul	15	12,642
Totals	**15,871**	**23,135**
Sources: based on data from CalEEMod, OffRoad, and EMFAC2017. Energy data can be found in Appendix D.		

Fuel energy consumed during construction would be temporary in nature and would not represent a significant demand on energy resources. The Project would also implement best management practices such as requiring equipment to be properly maintained and minimize idling (as further stipulated under **RR ENE-3**). Furthermore, there are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the State. Energy used in the construction of the Project would enable the development of buildings

that meet the latest energy efficiency standards as detailed in California's Title 24 building standards (**RR ENE-1**). Therefore, the proposed construction activities would not result in inefficient, wasteful, or unnecessary fuel consumption and a less than significant impact would occur.

Operational Impacts

The Project would promote building energy efficiency through compliance with energy efficiency standards (Title 24 and CALGreen [**RR ENE-2**]) and Climate Action Plan policies (**RR ENE-3**). The development of the Project is required to comply with the latest building energy efficiency standards adopted by the State of California. The estimated energy consumption attributable to the Project as calculated by CalEEMod is shown in Table 9 below.

TABLE 9
ENERGY USE DURING OPERATIONS

Land Use	Gasoline/yr (gallons)	Diesel/yr (gallons)	Natural Gas (kBTU/yr)	Electricity (kWh/yr)
Project Land Uses	120,409	1,533	2,447,660	609,342
kBTU: kilo-British thermal units; kWh: kilowatt hour; yr: year Sources: Energy data can be found in Appendix D.				

Adherence to the 2019 Building Energy Efficiency Standards would result in a reduction of energy use as compared to previous energy standards (CEC 2018). Therefore, the new buildings would be more energy efficient than existing buildings proximate to the Project Site and would be among the most energy efficient buildings in the City. In terms of whether the operations phase would result in a wasteful, inefficient, or unnecessary consumption of energy resources, during Project operation, the Project would add new energy efficient units to the housing inventory within Riverside County, in keeping with new regulatory requirements that stipulate reduced energy usage. Therefore, the Project would not result in an inefficient, wasteful, or unnecessary consumption of energy. There would be a less than significant impact, and no mitigation is required.

Mitigation Program

Regulatory Requirements:

RR ENE-1 The Project must be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods.

RR ENE-2 The Project is subject to the California Green Building Standards Code (CALGreen) (CCR, Title 24, Part 11). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods.

RR ENE-3 The Project shall comply with applicable policies of the Moreno Valley Climate Action Plan by complying with meeting the following policies:

1. Require new multi-family residential development to reduce the need for external trips by providing useful services/facilities on-site such as electric vehicle infrastructure. (Policy TR-9)
2. incentives such as streamlined permitting or bonus density for new multi-family buildings and reroofing projects to install "cool" roofs consistent with the current

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

California Green Building Code (CALGreen) standards for commercial and industrial buildings. (Policy R-1)

3. Require new construction and major remodels to install interior real-time energy smart meters in line with current utility provider (e.g. MVU, SCE) efforts. (Policy R-2)
4. Reduce emissions from heavy-duty construction equipment by limiting idling based on South Coast Air Quality Management District (SCAQMD) requirements and utilizing cleaner fuels, equipment, and vehicles.
   a. Require provision of clear signage reminding construction workers to limit idling
   b. Require project applicants to limit GHG emissions through one or more of the following measures:
   i. substitute electrified or hybrid equipment for diesel/gas powered equipment
   ii. Use alternative fueled equipment on site
   iii. Avoid use of on-site generators. (Policy OR-2)

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Response:

No Impact. The Project would be required to comply with the State of California's Title 24 Energy Efficiency Standards and Title 24 Green Building Standards (**RR ENE-1** and **RR ENE-2,** respectively) which are both adopted by a local ordinance in the City, and the Project would comply with the City's Climate Action Plan **(RR ENE-3).** As discussed previously, the latest building standards would incorporate the CEC's building energy efficiency standards, which would reduce energy consumption through the incorporation energy efficiency requirements. This would result in efficient use of electricity, natural gas, and water as compared to older buildings developed under less stringent Title 24 requirements.

Because the Project would comply with the latest energy efficiency standard, the Project would be consistent with energy conservation goals established within the Moreno Valley 2040 Plan and the City's Climate Action Plan (Moreno Valley 2021c, 2021d). As such, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and no impact would occur.

Mitigation Program

Regulatory Requirements:

RR ENE-1 The Project must be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods.

RR ENE-2 The Project is subject to the California Green Building Standards Code (CALGreen) (CCR, Title 24, Part 11). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. 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 https://www.conservation.ca.gov/cgs/Documents/SP_042.pdf	☐	☐	☐	☒

Response:

No Impact. The Project Site is not located within an Alquist-Priolo Earthquake Fault Zone. According to the Geotechnical Report (Appendix E), the possibility of damage to structures or site improvements because of ground rupture is considered negligible because active faults are not known to cross the site (LGC Geo-Environmental, Inc 2018a, DOC 2021). Therefore, no impact would result and no mitigation is required.

ii) Strong seismic ground shaking?	☐	☒	☐	☐

Response:

Less than Significant with Mitigation. The Project Site, as with the entire Southern California region, is subject to secondary effects from earthquakes. The nearest known faults in the vicinity of the Project Site include the San Jacinto-San Bernardino (5.2 miles away) and San Jacinto-San Jacinto Valley (5.6 miles away) fault zones.

Implementation of the Project would not change the intensity of ground shaking that would occur on the Project Site during a seismic event, but it would increase exposure to additional people. The proposed buildings would be designed in accordance with the most recent California Building Code (CBC) (CBSC 2019). The CBC contains minimum standards regulating the design and construction of excavations, foundations, retaining walls, and other building elements to control the effects of seismic ground shaking and adverse soil conditions. The CBC also includes provisions for earthquake safety based on factors such as occupancy type, the types of soil and rock on-site, and the strength of ground motion that may occur at the Project Site. Project implementation would also occur consistent with the recommendations outlined in the Geotechnical Report prepared for the Project (Appendix E), including over-excavation. Based on the Geotechnical Report, the Project is geotechnically feasible provided that the recommendations in the Geotechnical Report are reviewed in the context of the final Project design and are incorporated during the Project's construction phase. Seismic design parameters have been included in the Geotechnical Report based on the seismic zone, soil profile, and proximity of known faults to the Project Site, which provide the minimum design procedures to avoid significant cosmetic damage structures (LGC Geo-Environmental, Inc 2018a, 2018b). Compliance with the applicable regulations, and proper grading, design, and building construction methods specified in the Geotechnical Report, as required in **MM GEO-1**, would ensure that impacts that may result from strong seismic ground shaking at the Project Site would be less than significant.

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

Response:

Less Than Significant Impact. The potential for liquefaction was found to be negligible in the Project's Geotechnical Report because of shallow depths to very dense older alluvial fan deposits and hard bedrock,

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

which are not conducive to liquefaction (LGC Geo-Environmental, Inc 2018a). Furthermore, the Project would over excavate down to competent base materials, which would minimize potential for liquefaction. The Project would result in less than significant impacts related to this threshold, and no mitigation is required.

iv) Landslides?	☐	☒	☐	☐

Response:

Less Than Significant With Mitigation. Earthquake-induced land sliding often occurs in areas where previous landslides have moved and in areas where the topographic, geologic, geotechnical, and subsurface groundwater conditions are conducive to permanent ground displacements. According to the Geotechnical Report, there was no geologic literature that indicated the presence of landslides on or directly adjacent to the Project Site (LGC Geo-Environmental, Inc 2018a). However, the Project includes cuts into a slope, which have the potential to result in landslides if not designed and implemented pursuant to geotechnical recommendations. Therefore, the Slope Stability Report prepared for the Project identifies design, construction, and monitoring measures to be implemented, which would ensure that the Project's slopes would be stable once constructed (Dynamic Geotechnical Solutions 2021). Compliance with the recommendations of the Slope Stability Report, as required in **MM GEO-1**, would ensure that impacts that may result from landslides would be less than significant.

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

Response:

Less Than Significant Impact. The Project would grade and develop the site with new impervious surfaces and new pervious landscaped areas. Project construction would expose soils on the site and would require the hauling of soil off-site, which could result in soil erosion and the loss of topsoil if not implemented consistent with regulatory requirements. The largest source of erosion and topsoil loss is uncontrolled drainage during construction. As discussed in more detail in Section IX, Hydrology and Water Quality, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into "waters of the U.S.". Construction activities shall be conducted in compliance with the statewide NPDES General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2012-0006-DWQ, NPDES No. CAS000002), adopted by the State Water Resources Control Board (SWRCB) on July 17, 2012. In compliance with the NPDES permit, erosion potential during construction of the Project would be managed with Best Management Practices (BMPs) implemented on the Project Site as part of a Storm Water Pollution Prevention Plan (SWPPP) during construction activities in accordance with NPDES requirements. Implementation of the BMPs would ensure that construction-related erosion impacts would be less than significant.

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

Response:

Less Than Significant With Mitigation. The Project's Geotechnical Report found that the Project was geotechnically feasible, with implementation of grading and foundation recommendations. As noted above, the Project is not in a location susceptible to landslides. Potential impacts related to lateral spreading would

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

be avoided through adherence to preliminary foundation design recommendations in the Geotechnical Report. The top level of the soil on the Project Site, where construction will take place, consists of undocumented artificial fill, topsoil, alluvium and weathered portions of the older alluvial fan deposits and bedrock are susceptible to subsidence, liquefaction, and collapse. As required by the Geotechnical Report, the Project would include the over excavation during the Project's grading down to underlying competent older alluvial fan deposits or bedrock. Over excavation would range from approximately 2- to 10-feet in depth depending on the location within the Project Site. With implementation of the foundation design and grading recommendations contained in the Geotechnical Report, as specified in **MM GEO-1**, less than significant impacts would result from the Project (LGC Geo-Environmental, Inc 2018a).

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?	☐	☒	☐	☐

Response:

Less Than Significant With Mitigation. Expansive soils are materials that, when subject to a constant load, are prone to expand when exposed to water. The hazard associated with expansive soils is that they can overstress and cause damage to the foundation of buildings set on top of them. Results of the testing conducted as part of the Geotechnical Report indicates that onsite soil materials exhibit very low expansion potentials in accordance with the CBC. Therefore, with implementation of the construction and foundation recommendations in the Geotechnical Report, as specified in **MM GEO-1**, less than significant impacts would result from the Project, related to this threshold.

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?	☐	☐	☐	☒

Response:

No Impact. The Project Site and related development would be connected to existing infrastructure in the vicinity (municipal sewer system) for wastewater disposal, currently served by Easter Municipal Water District. The Project does not require the development of either septic tanks or alternative wastewater systems. No related impacts would result, and no mitigation is required.

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

Response:

Less than Significant with Mitigation. The Project Site lies on the Perris Block, which is part of an unfaulted, eroded mass of Cretaceous granitic rock of the Southern California Batholith. This formation of granite rock is composed of primarily quartz diorite with areas of biotite-hornblende Tonalite. Overlying this bedrock is the Old Alluvial Deposits of the Late Pliocene- Early Pleistocene. This layer of alluvial deposits holds moderate to high potential for paleontological resources. Overlying this alluvial deposit is the Late Pleistocene-recent Holocene Young Alluvial Valley Deposits which typically has a low potential for any paleontological resources; however, it should be noted over 100,000 fossil specimens from 105 plant and animal species from the Early Pleistocene Very Old Alluvial Fan Deposits were documented nearby at Diamond Valley Lake in the 1990s. Therefore, there is always the possibility faunal and floral assemblages may inadvertently be discovered during ground disturbance within the Young Alluvial Valley Deposits.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

However, it should be noted the City's General Plan EIR Figure 5.10-3 – Paleontological Resource Sensitive Areas identifies the Project Site as having Low Potential for paleontological resources. Furthermore, according to the Geotechnical Report prepared for the Project, areas of the Project Site that would be excavated include Artificial Fill (2.0feet [ft] to 5.5 ft thick), Topsoil (0.5ft to 2.0ft thick), and alluvium of the Young Alluvial Valley Deposits (2.0ft to 10.0ft thick) followed by the Older Alluvial Fan Deposits (20.ft to 12.0ft thick) and the Bonzal Tonalite Bedrock (0.5ft to 12.0ft thick) below, which are located within areas of the Project Site. These deposits would be excavated as a result of the Project. Therefore, ground disturbance within the Young Alluvial Valley Deposits and the Old Alluvial Fan Deposits should be considered moderate to high sensitivity for intact paleontological resources. Impacts to paleontological resources, if encountered, would be significant without mitigation. Accordingly, incorporation of **MM GEO-2** which requires that a qualified paleontologist be retained to observe grading activities in the Older Alluvial Fan and Alluvium deposits on the Project Site and to salvage and catalogue fossils as necessary, would ensure that impacts to fossil resources are reduced to below a level of significance.

Mitigation Program

Mitigation Measures:

MM GEO-1 Prior to approval of final plans and specifications for the Project, the City shall review the Project plans to confirm that all recommendations in the Geotechnical Report (prepared by LGC Geo-Environmental, Inc in 2018), the Slope Stability Report (prepared by Dynamic Geotechnical Solutions in 2021), and any future geotechnical reports have been fully and appropriately incorporated into all grading and construction drawings.

MM GEO-2: Prior to the issuance of a grading permit, the Developer shall submit the name and qualifications of a qualified paleontologist to the City of Moreno Valley Community Development Department for review and approval. Once approved, the qualified paleontologist shall be retained by the Developer on an on-call basis to observe grading activities in the Young Alluvial Valley Deposits and Old Alluvial Fan Deposits on the Project Site and to salvage and catalogue fossils as necessary. At the Project's Pre-Grade Meeting, the paleontologist shall discuss the sensitivity of the sediment being graded and shall establish procedures for monitoring. Protocols must be developed and explained for temporarily halting or redirecting work to permit sampling, identification, and evaluation of any fossils discovered. If the fossils are deemed significant, the paleontologist shall determine appropriate actions, in cooperation with the City of Moreno Valley, to recover and treat the fossils and to prepare them to the point of identification. A final Paleontological Resources Monitoring Report shall include a catalogue and analysis of the fossils found; a summary of their significance; and the repository that would curate the fossils in perpetuity.

VIII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

Response:

Environmental Setting

Climate change refers to any significant change in climate, such as the average temperature, precipitation, or wind patterns over a period of time. Climate change may result from natural factors, natural processes, and human activities that change the composition of the atmosphere and alter the surface and features of the land. Significant changes in global climate patterns have been associated with global warming, which is an average increase in the temperature of the atmosphere near the Earth's surface; this is attributed to

an accumulation of greenhouse gas (GHG) emissions in the atmosphere. GHGs trap heat in the atmosphere, which in turn increases the Earth's surface temperature. Some GHGs occur naturally and are emitted into the atmosphere through natural processes, while others are created and emitted solely through human activities. The emission of GHGs through fossil fuel combustion, in conjunction with other human activities, are associated with global warming.

GHGs, as defined under California's Assembly Bill (AB) 32, include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). General discussions on climate change often include water vapor, O_3, and aerosols in the GHG category. Water vapor and atmospheric O_3 are not gases that are formed directly in the construction or operation of development projects, nor can they be controlled in these projects. Aerosols are not gases. While these elements have a role in climate change, they are not considered by regulatory bodies, such as CARB, or climate change groups, such as The Climate Registry, as gases to be reported or analyzed for control. Therefore, no further discussion of water vapor, O_3, or aerosols is provided herein.

GHGs vary widely in the power of their climatic effects; therefore, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both its potency and lifespan in the atmosphere as compared to CO_2. For example, since CH_4 and N_2O are approximately 25 and 298 times more powerful than CO_2, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO_2 has a GWP of 1). Carbon dioxide equivalent (CO_2e) is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the emission rate of that gas to produce the CO_2e emissions.

Regulatory Setting

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05, which proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce snowpack in the Sierra Nevada Mountains; could further exacerbate California's air quality problems; and could potentially cause a rise in sea levels. In an effort to avoid or reduce the impacts of climate change, Executive Order S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010; to year 1990 levels by 2020; and to 80 percent below 1990 levels by 2050.

AB 32, the California Global Warming Solutions Act of 2006 (California Health and Safety Code §38501), recognizes that California is the source of substantial amounts of GHG emissions. The statute states that:

> Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems; a reduction in the quality and supply of water to the state from the Sierra snowpack; a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences; damage to marine ecosystems and the natural environment; and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

In order to avert these consequences, AB 32 establishes a State goal of reducing GHG emissions to 1990 levels by the year 2020, which is a reduction of approximately 16 percent from forecasted emission levels, with further reductions to follow. In an effort to help achieve this reduction, on November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, raising California's renewable energy goals to 33 percent by 2020.

California Executive Order B-30-15 (April 29, 2015) set an "interim" statewide emission target to reduce GHG emissions to 40 percent below 1990 levels by 2030 and directed State agencies with jurisdiction over GHG emissions to implement measures pursuant to statutory authority to achieve this 2030 target and the 2050 target of 80 percent below 1990 levels.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

On September 8, 2016, the Governor signed Senate Bill (SB) 32 to codify the GHG reduction goals of EO B-30-15, requiring the State to reduce GHG emissions by 40 percent below 1990 levels by 2030 (Health and Safety Code Section 38566). This goal is expected to keep the State on track to meeting the goal set by EO S-3-05 of reducing GHG emissions by 80 percent below 1990 levels by 2050. SB 32's findings state that CARB will "achieve the state's more stringent greenhouse gas emission reductions in a manner that benefits the state's most disadvantaged communities and is transparent and accountable to the public and the Legislature."

Title 24, Part 6, Energy Efficiency Standards (incorporated as **RR ENE-1**). The Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The current applicable standards are the 2019 Standards, effective January 1, 2020. The California Energy Commissions states that nonresidential buildings built with the 2019 standards will use about 30 percent less energy due to energy efficiency measures versus those built under the 2016 standards due mainly to lighting upgrades. The new code will reduce greenhouse gas emissions by 700,000 metric tons over three years (CEC 2018). The requirements of the energy efficiency standards result in the reduction of natural gas and electricity consumption. Since natural gas use produces criteria pollutant emissions, a reduction in natural gas consumption results in a related reduction in air quality emissions.

Title 24, Part 11, Green Building Standards (incorporated as **RR ENE-2**). The 2019 California Green Building Standards Code (CCR, Title 24, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools, and hospitals) throughout California and became effective on January 1, 2020. The code is Part 11 of the California Building Standards Code in Title 24 of the California Code of Regulations and is also known as the CALGreen Code. The development of the CALGreen Code is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction. The CALGreen Code contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more.

The City of Moreno Valley adopted its Climate Action Plan (CAP) on June 15, 2021 (Moreno Valley 2021d). The CAP is intended to help reduce GHG emissions, prepare the community for the impacts of climate change, improve the quality of life, and enhance economic vitality in Moreno Valley. Moreno Valley strives to be a more sustainable and resilient city in the face of climate change impacts such as air pollution, extreme heat, and drought. The CAP provides a framework for creating or updating policies, programs, practices, and incentives for Moreno Valley residents and businesses to reduce the City's GHG footprint and ensure the community and physical assets are better protected from the impacts of climate change (Moreno Valley 2021b).

Significance Criteria

The City of Moreno Valley has not formally adopted a quantitative GHG emissions significance criterion to date. Beginning in April 2008, the SCAQMD convened a Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold of 10,000 metric tons of CO_2 equivalent per year ($MTCO_2e$/yr) for projects where the SCAQMD is the lead agency (SCAQMD 2008). In September 2010, presented a revised tiered approach to determining GHG significance for residential and commercial projects (SCAQMD 2010). These proposals have not yet been considered by the SCAQMD Board.

At Tier 1, GHG emissions impacts would be less than significant if the project qualifies under a categorical or statutory CEQA exemption. At Tier 2, for projects that do not meet the Tier 1 criteria, the GHG emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

impact would be less than significant if the project is consistent with a previously adopted GHG reduction plan that meets specific requirements.[1] At Tier 3, the Working Group proposes extending the 10,000 $MTCO_2e$/yr screening threshold currently applicable to industrial projects where the SCAQMD is the lead agency, described above, to other lead agency industrial projects. The Working Group also proposes the following Tier 3 screening values: either (1) a single 3,000 $MTCO_2e$/yr threshold for all land use types or (2) separate thresholds of 3,500 $MTCO_2e$/yr for residential projects, 1,400 $MTCO_2e$/yr for commercial projects, and 3,000 $MTCO_2e$/yr for mixed-use projects. The screening thresholds are based on estimates that the threshold would capture 90 percent of the GHG emissions from residential and commercial projects. Therefore, a project with emissions less than the applicable screening value would be considered to have less than significant GHG emissions. Projects with emissions greater than the Tier 3 screening values would be analyzed at Tier 4 by one of the three methods. Projects with GHG emissions not meeting the Tier 4 targets would be required to provide mitigation in the form of real, quantifiable, and verifiable offsets to achieve the target thresholds. The offsets may be achieved through project design features, other onsite methods, or by offsite actions, such as energy efficiency upgrade of existing buildings.

In summary, to date, the SCAQMD Board has adopted an interim CEQA significance threshold for GHGs for industrial projects where the SCAQMD is the lead agency and continues to consider screening levels under CEQA for residential, commercial, and mixed-use projects. This proposed screening and mitigation proposal from SCAQMD remains a work in progress; the Working Group has not convened since fall 2010. The proposal has not been considered or approved for use by the SCAQMD Board. However, the interim draft significance thresholds are used for determination of potential GHG impacts because they represent the latest basis for GHG CEQA thresholds from the SCAQMD.

Less than Significant Impact.

Construction Impacts

Construction activities associated with remediation and construction activities would result in emissions of GHGs. GHG emissions occurring during the construction phase are generated by vehicle engine exhaust from construction equipment, on-road hauling trucks, vendor trips, and worker commuting trips. Construction GHG emissions were calculated concurrently with air quality criteria pollutant emissions by using CalEEMod. The results are output in $MTCO_2e$ for each year of construction.

GHG emissions generated from construction activities are finite and occur for a relatively short-term period of time. Unlike the numerous opportunities available to reduce a project's long-term GHG emissions through design features, operational restrictions, use of green-building materials, and other methods, GHG emissions-reduction measures for construction equipment are relatively limited. Therefore, SCAQMD staff members recommended that construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures would address construction GHG emissions as part of the operational GHG reduction strategies (SCAQMD 2008).

As shown in Table 10, Estimated Annual Greenhouse Gas Emissions from Construction, the 30-year amortized construction emissions would be 19 $MTCO_2e$/yr.

[1] The plan must (a) quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area; (b) establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable; (c) identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area; (d) specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level; (e) establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels; and (f) be adopted in a public process following environmental review (State CEQA Guidelines Section 15183.5).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

TABLE 10
ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS
FROM CONSTRUCTION

Year	Emissions ($MTCO_2e$)
2022	437
2023	143
Total	**580**
Amortized Annual Emissions*	**19**

$MTCO_2e$: metric tons of carbon dioxide equivalent
* Combined total amortized over 30 years
Totals may not add up due to rounding
Source: CalEEMod data in Appendix A.

Operational/Total Impacts

Operational GHG emissions attributed to the Project include natural gas use; purchased electricity; the electricity embodied in water consumption; the energy associated with solid waste disposal; and mobile sources. Operational GHG emissions were calculated concurrently with air quality criteria pollutant emissions by using CalEEMod, which incorporates mitigation measures based on the California Air Pollution Control Officers Association publication Quantifying Greenhouse Gas Mitigation Measures (CAPCOA 2010).

As shown in Table 11, Estimated Annual Operational and Amortized Greenhouse Gas Emissions, the annual GHG emissions would be 1,336 $MTCO_2e$/yr. Project related GHG emissions would be less than the SCAQMD's interim draft significance threshold of 3,000 $MTCO_2e$/yr and consequently would result in less than significant GHG impacts.

TABLE 11
ESTIMATED ANNUAL OPERATIONAL AND
AMORTIZED GREENHOUSE GAS EMISSIONS

Source	Emissions $MTCO_2e$/yr
Area sources	28
Energy sources	218
Mobile sources	1,010
Solid waste	25
Water	35
Amortized construction emissions (Table 10)	19
Project Total	1,336

$MTCO_2e$/yr: metric tons of carbon dioxide per year.
Totals may not add up due to rounding
Note: Detailed calculations in Appendix A.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	☐	☐	☐	☒

Response:

No Impact. As discussed above, the principal State plan and policy adopted for the purpose of reducing GHG emissions is AB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020. SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations. SB 375 requires Metropolitan Planning Organizations to adopt a Sustainable Communities Strategy (SCS) or alternative planning strategy that will address land use allocation in that Metropolitan Planning Organization's RTP. The principles of SB 375 are incorporated in SCAG's adopted 2020 RTP/SCS.

The Project is a housing development project and would increase population within the City and increase VMT. As discussed previously, the Project would also not result in substantial amounts of GHG emissions from either the construction or operations phase and would result in emissions which are below the SCAQMD's interim draft significance thresholds.

Section 4.3 of the City's CAP discusses residential uses and mentions "The General Plan 2040 seeks to provide a range of new housing suited to people of all ages and income levels throughout Moreno Valley, with an emphasis on increasing the diversity of housing types in the community and promoting construction of multi-family and mixed-use residential development in infill areas near employment and shopping and well-served by transit and public facilities." The Project is consistent with the General Plan 2040's goal of providing multi-family residential uses representing a unique housing product type within the City, that is an alternative to single family detached homes on fee lots. The facilities on the Project Site would be built in compliance with the 2019 California Building Code and the 2019 CALGreen Code, or latest codes, which adopted for the purpose of reducing GHG emissions.

As shown in Table 11, the Project would result in emissions which are below the SCAQMD's draft interim significance threshold for GHG emissions. In addition, the Project would also incorporate the latest energy efficiency requirements detailed in the State of California's Title 24 green building standards (**RR ENE-2**). The Project would install electric vehicle infrastructure as required by the Title 24 building standards, and the City's CAP (as stipulated in **RR ENE-3**). Therefore, the Project would not conflict with the goals established within the abovementioned plans, policies, or regulations adopted for the purpose of reducing GHG emissions. There would be no impact, and no mitigation measures are required.

Mitigation Program

Regulatory Requirements:

RR ENE-1 The Project must be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods.

RR ENE-2 The Project is subject to the California Green Building Standards Code (CALGreen) (CCR, Title 24, Part 11). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

RR ENE-3 The Project shall comply with applicable policies of the Moreno Valley Climate Action Plan by complying with meeting the following policies:

1. Require new multi-family residential development to reduce the need for external trips by providing useful services/facilities on-site such as electric vehicle infrastructure. ***(Policy TR-9)***
2. incentives such as streamlined permitting or bonus density for new multi-family buildings and reroofing projects to install "cool" roofs consistent with the current California Green Building Code (CALGreen) standards for commercial and industrial buildings***. (Policy R-1)***
3. Require new construction and major remodels to install interior real-time energy smart meters in line with current utility provider (e.g. MVU, SCE) efforts***. (Policy R-2)***
4. Reduce emissions from heavy-duty construction equipment by limiting idling based on South Coast Air Quality Management District (SCAQMD) requirements and utilizing cleaner fuels, equipment, and vehicles.
    a. Require provision of clear signage reminding construction workers to limit idling
    b. Require project applicants to limit GHG emissions through one or more of the following measures:
    i. substitute electrified or hybrid equipment for diesel/gas powered equipment
    ii. Use alternative fueled equipment on site
    iii. Avoid use of on-site generators. ***(Policy OR-2)***

IX. 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?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The Project would not involve the routine use, transport, handling, or storage of hazardous materials on-site. The proposed land uses are limited to residential, and no industrial or manufacturing land uses would be developed which routinely utilize hazardous materials. The Project would result in the on-site handling of materials that are common in similar residential developments, such as commercial cleansers, solvents and other janitorial or industrial-use materials; paints; and landscape fertilizers/pesticides. While many such common materials are technically labeled "hazardous", the presence of such materials is common in a suburban environment and their transport and use is considered a less than significant impact. The Project would not generate hazardous emissions, nor would it involve hazardous materials that would create a substantive hazard to the public or environment.

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?	☐	☐	☒	☐

Response:

Less Than Significant Impact. Project construction activities routinely involve the use and handling of limited volumes of commonly used hazardous materials, such as petroleum (fuel), paints, adhesives, and solvents. During construction, there is a limited risk of spills and/or accidental release of hazardous

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

materials that are used for the operation and maintenance of construction equipment. The on-site temporary handling, storage, and usage of these materials would be subject to applicable local, State, and/or federal regulations.

Based on the Department of Toxic Substances Control (DTSC) Envirostor web mapper, there is one hazardous waste site nearby, the March Air Force Base Rifle Range. The Rifle Range formerly included land east of the Project Site, and this property is now classified as a Formerly Used Defense Site (FUDS), and requires evaluation by the USACE for further action (DTSC 2021). The FUDS program was established to protect human health and the environment by investigating and, if required, cleaning up potential contamination or munitions that may remain on FUDS properties from past Department of Defense activities. At one time, the Rifle Range was approximately 648 acres, most of which was leased. According to documentation prepared by the USACE, the Rifle Range site has since been entirely redeveloped as residential and commercial uses (USACE 1994). Therefore, the Rifle Range site would pose no risk to the Project Site. Less than significant impacts would result related to this threshold, and no mitigation is required.

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

Response:

Less Than Significant Impact. Seneca Elementary School (11615 Wordsworth Road) is located approximately 0.24 mile south of the Project Site. However, as discussed above under Threshold IX(a), the Project would not develop land uses that involve the use, storage, or transport of hazardous materials that represent a significant hazard to the public or the environment. During Project operations the Project would result in the routine on-site handling of materials that are common in similar developments, such as commercial cleansers, solvents and other janitorial or industrial-use materials; paints; and landscape fertilizers/pesticides. As noted above, hazardous materials utilized during Project construction would be stored, transported, and used according to applicable regulations and ordinances. Therefore, the Project would result in less than significant impacts related to this threshold, and 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, will it create a significant hazard to the public or the environment?	☐	☐	☐	☒

Response:

No Impact. Section 65962.5 requires the development of a hazardous waste and substances site list, also known as the Cortese List, which provides the location of known hazardous materials release sites. According to the EDR Radius Map prepared in 2021 and included as Appendix G (EDR 2021), as well as a search of the DTSC, which consists of a search of selected government databases for potential environmental concerns in the vicinity of the Project Site (e.g., “listed sites”), no Cortese List properties occur within the Project Site. Therefore, no impact would result from implementation of the Project, and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The Project Site is located approximately 3.95 miles north of March Air Reserve Base. As such, the Project is within Airport Compatibility Zone E of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan. Within this zone, residential density and non-residential intensity are not restricted. There are no other private airstrips in the vicinity of the Project. Based on a review by the ALUC Director, the Project was found to be consistent with the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, with implementation of standard conditions included in the letter to avoid and minimize potential impacts to aircraft related to lighting, glare, and bird strikes (ALUC 2020). These avoidance measures have been incorporated as part of the Project and include **PDF HAZ-1** through **PDF HAZ-4**, and regulatory requirement **RR AES-1**. Therefore, the Project would result in less than significant impacts and no mitigation is required.

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

Response:

Less Than Significant With Mitigation. The City's Local Hazard Mitigation Plan (May 2017) is designed to identify hazards, estimate the probability of future occurrences, and set goals to mitigate potential risks to reduce or eliminate long-term natural or man-made hazard risks to human life and property for the City of Moreno Valley and its residents. The Project would not conflict with any of the mitigation strategies listed within Chapter 20 of the Local Hazard Mitigation Plan (May 2017). Also, the City has an Emergency Operations Plan (March 2009), which provides the City with guidance on the response to extraordinary emergency situations associated with natural, man-made and technological disasters. The Project would not conflict with or impair implementation of this plan. Finally, the Moreno Valley Utility (MVU) has adopted a Wildfire Mitigation Plan (February 2021), which describes the safety-related measures that MVU follows to reduce its risk of causing wildfires. The Project is approximately 0.72-mile from the nearest evacuation route, Box Springs Road, identified in the Western Riverside County Vulnerability Assessment by Resilient IE, a collaboration between Western Riverside Council of Governments (WRCOG) and the San Bernardino County Transportation Authority, with funding from Caltrans (Resilient IE 2020). The Project would result in additional traffic on local roadways during construction and once the Project is constructed; however, this additional traffic would not substantially degrade level of service in a manner that would impair implementation or otherwise interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, less than significant impacts would result related to this threshold, 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?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The Project Site, as well as much of the northern and eastern portions of the City of Moreno Valley, is subject to wildland fires. The Project Site is located within and adjacent to a Fire Hazard Severity Zone (FHSZ). The Project would be constructed in compliance with the Fire Code,

California Building Code, and the objectives, policies, and programs of the City's General Plan (2021b). Also, the Project includes the establishment and ongoing maintenance of fuel modification zones along the northern and eastern boundaries of the Project Site, as shown in the Fire Hazard Analysis and Approach memorandum (Appendix L) that was prepared for the Project. Given the above considerations, the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Impacts would be less than significant and no mitigation is required.

Mitigation Program:

Project Design Features

PDF HAZ-1: The Project's proposed basins would be designed and maintained to provide for a maximum 48-hour detention period following the design storm, and to remain totally dry between rainfalls.

PDF HAZ-2: Vegetation in and around the basins that would provide food or cover for birds would be incompatible with airport operations and shall not be utilized in Project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature. Landscaping in and around the basins shall not include trees or shrubs that produce seeds, fruits, or berries. Landscaping in the basins, if not rip rap, would be in accordance with the guidance provided in ALUC "Landscaping Near Airports" brochure, and the "Airports, Wildlife, and Stormwater Management" brochure available at RCALUC.org which lists acceptable plants from the Riverside County Landscaping Guide or other alternative landscaping as may be recommended by a qualified wildlife hazard biologist.

PDF HAZ-3: A notice shall be permanently affixed to the fencing surrounding the basins with the language similar to the following: "There is an airport nearby. This stormwater basin is designed to hold stormwater for only 48 hours and to not attract birds. Proper maintenance is necessary to avoid bird strikes." This sign would also include the name, telephone number, or other contact information of the person or entity responsible for monitoring and maintain the basins.

PDF HAZ-4: Prior to close of escrow on the Project's future proposed homesites, the "Notice of Airport in Vicinity" that was attached to the ALUC's 2020 Airport Land Use Commission (ALUC) Development Review – Director's Determination letter shall be provided to all prospective purchasers and occupants of the Project.

Regulatory Requirement:

RR AES-1 The Developer shall prepare a Lighting Plan that provides the type and location of proposed exterior lighting and signage, subject to the review and approval of the City's Development Services Department. All new lighting shall be shielded and down-cast, such that the light is not cast onto adjacent properties or visible from above.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐

Response:

Less Than Significant Impact. This section discusses the Project's potential construction- and operational-related water quality impacts.

Construction-Related Water Quality Impacts

The Project could result in short-term construction impacts to surface water quality from demolition, grading, and other construction-related activities. Storm water runoff from the Project Site during construction could contain soils and sediments from these activities. Also, spills or leaks from heavy equipment and machinery, construction staging areas, and/or building sites can also enter runoff and typically include petroleum products such as fuel, oil and grease, and heavy metals.

The SWRCB has issued the Statewide NPDES General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2012-0006-DWQ, NPDES No. CAS000002, adopted by the SWRCB on July 17, 2012). Under this Construction General Permit, individual NPDES permits or Construction General Permit coverage must be obtained for discharges of storm water from construction sites with a disturbed area of one or more acres. Since the development area within the Project Site is 16.59-acres, coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity is required. To obtain coverage, the Developer must retain the services of a certified Qualified SWPPP Developer to prepare a SWPPP for the Project. The Developer, or the contractor if specifically delegated, would electronically submit permit registration documents prior to beginning construction activities in the Storm Water Multi-Application Report Tracking System, which would consist of a Notice of Initiation, Risk Assessment, Post-Construction Calculations, a site map, the SWPPP, a signed certification statement, and the first annual fee. Project construction would also adhere to the South Coast Air Quality Management District's Rule 402 (Nuisance) and Rule 403 (Fugitive Dust) to avoid and minimize dust from leaving the site.

Construction activities are not anticipated to encounter groundwater, as levels are anticipated to be more than 73 feet below ground surface at the Project Site (LGC Geo-Environmental, Inc 2018a), which is well below the depth of proposed excavation.

Adherence to applicable regulatory requirements would ensure that Project short-term impacts to surface water quality during construction would be less than significant, and no mitigation is required.

Operational Water Quality Impacts

The Project is located in the Santa Ana River Basin. Specifically, the Project Site drains to Box Springs Canyon, which drains to Tequesquite Arroyo, then to Santa Ana River Reach 3, and then to Prado Flood Control Basin. The SWRCB maintains the 303(d) List of Impaired Water Bodies, which identifies water bodies where water quality indicators exceed acceptable thresholds. The Project Sites does not directly drain to 303(d)-listed impaired water body; however, the Santa Ana River Reach 3 has 303(d) listed impairments for indicator bacteria, copper, and lead, and the Prado Flood Control Basin has impairments for pH (acidity and alkalinity) (UEG 2022a). The Santa Ana RWQCB develops and implements total maximum daily loads to address water quality impairments and help achieve water quality standards. Water quality is also governed through NPDES stormwater discharge permits issued to municipalities, construction sites, and industrial facilities to control non-point-source pollutants in stormwater discharges to surface waters.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

According to the Project Specific Water Quality Management Plan, provided as Appendix I, general pollutants that may result from Project operations, which are also known as project priority pollutants of concern, include bacterial indicators, nutrients, pesticides, sediments, trash and debris, and oil and grease (UEG 2022a). As detailed in the Project Description and shown on Figure 6, two combination detention and bioretention basins (e.g., Basins A and B) have been incorporated into the Project design based on the recommendations of the Project Specific Water Quality Management Plan to minimize impacts related to stormwater quality and increased stormwater volumes generated from Project implementation. Detention basins are impoundments or excavated basins for the short-term detention of stormwater runoff. Bioretention basins are landscaped depressions or shallow basins that are used to slow and treat on-site stormwater runoff. Under developed conditions, stormwater would be directed to the basins and would then percolate through the basins where it would be treated by a number of physical, chemical, and biological processes. The Project's basins would slow and clean the water before allowing it to flow downslope into existing off-site earthen drainage channels. Basin overflows have been designed to connect downstream to two natural drainage courses, similar to pre-Project conditions. Therefore, construction and operation of these basins would adequately treat stormwater runoff and a less than significant impact would occur; no mitigation would be required.

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

Response:

Less Than Significant Impact. The Project would not involve direct or indirect withdrawals of groundwater. Domestic water service would be provided by Eastern Municipal Water District (EMWD); EMWD has managed groundwater quantity and quality in the western portion of the San Jacinto Groundwater Basin via the West San Jacinto Groundwater Management Plan since 1995. Also, EMWD prepares annual reports documenting the implementation of the plan and activities in groundwater management zones (EMWD 2021). In addition to the existing groundwater management program, EMWD was required to complete a Groundwater Sustainability Plan (GSP) by January 2022, which they did in September 2021. Under the State Groundwater Management Act, each high and medium priority basin, as identified by the California Department of Water Resources, is required to have a Groundwater Sustainability Agency (GSA) that will be responsible for groundwater management and development of a GSP. The EMWD Board of Directors is the GSA for the West San Jacinto Groundwater Basin, which underlies the Project Site, and is responsible for development and implementation of a GSP. The Project would not conflict with or impair implementation of the Groundwater Sustainability Plan for the San Jacinto Groundwater Basin (EMWD 2021b). Therefore, the Project would not substantially decrease groundwater supplies.

Additionally, the Project would not interfere substantially with groundwater recharge as the Project Site has limited to no infiltration potential (UEG 2022a). Furthermore, the drainage feature in the southern portion of the Project Site as well as 15.97 acres of the 32.56-acre Project Site would not be developed and would remain pervious. Therefore, although the Project would result in the addition of approximately 436,885 square feet of impervious surfaces there would be minimal change in groundwater recharge, less than significant impacts would result, and no mitigation is required (UEG 2022a).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 will:				
i) Result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐

Response:

Less Than Significant Impact. As described above in response to threshold X(a), the Project has the potential to result in erosion and siltation during construction. Development and implementation of a SWPPP for the Project would ensure potential effects related to erosion and siltation are reduced to less than significant levels during construction. Also, as discussed above under threshold X(a), two combination detention and bioretention basins (e.g., Basins A and B) and associated drainage infrastructure, including rip rap, have been incorporated in the Project's design, which would reduce potential for erosion and siltation during Project operations. Given these considerations, less than significant impacts would result from the Project and no mitigation is required.

ii) Substantially increase the rate or amount of surface runoff in a manner which will result in flooding on- or offsite?	☐	☐	☒	☐
iii) Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The Project would result in the addition of approximately 436,885 square feet of impervious surfaces, which would result in a total of 65 percent impervious surface coverage (UEG 2022a). Although there is limited infiltration ability within the Project Site in existing conditions due to soil types and other conditions, the addition of impervious surface has the potential to permanently increase the runoff potential from the Project. Therefore, as described above in response to threshold X(a), the Project has incorporated stormwater drainage systems, as well as two combination detention and bioretention basins (e.g., Basins A and B), which would convey, retain, and treat stormwater prior to it being conveyed off-site along natural drainage courses. Basin overflows have been designed to connect downstream to two natural drainage courses, similar to pre-Project conditions. Therefore, less than significant impacts would result related to these thresholds, and no mitigation is required.

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

Response:

Less Than Significant Impact. The Flood Insurance Rate Maps (Panel 06065C0733G) for this subject property shows that the site falls within Zone X. Zone X denotes areas determined to be "Areas of Undetermined Flood Hazard" (UEG 2022b). However, the Project Site is located at a high elevation relative to natural nearby drainage courses that are typically associated with flooding. Minor ephemeral drainages, which flow only in direct response to precipitation and for short periods of time, traverse the Project Site in existing conditions. The Project would provide drainage improvements to receive, convey, detain, and treat stormwater within the Project Site, as well as curbs and gutters on proposed streets that would protect the site from offsite flows. Onsite runoff would be conveyed to two combination detention and bioretention basins (e.g., Basins A and B) using an onsite storm drain system of inlets, pipes, channels, and curb cuts. Basin overflows have been designed to connect downstream to two natural drainage courses, similar to

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

pre-Project conditions. Therefore, the Project would provide adequate drainage and conveyance within the site and impacts to flood flows would be less than significant; no mitigation is required.

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

Response:

Less Than Significant Impact. As noted above in response to threshold X(c)(iv), the Project Site's flood potential has not been determined by prior studies; however, due to the physical location and Project improvements, there would be minimal risk of on- or off-site flooding that would result from the Project. The Project is not near the ocean or other water body with the potential to be at risk of seismically-induced tidal phenomena. Furthermore, the Project would not utilize, store, or otherwise contain pollutants that would be at risk of release if inundated. Therefore, hazards related to the potential release of pollutants due to inundation caused by a flood, tsunami, and/or seiche are considered to be negligible. A less than significant impact would result from the Project related to this threshold, and no mitigation is required.

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

Response:

Less Than Significant Impact. The RWQCB prepares and maintains the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan). The Basin Plan sets water quality standards in the Santa Ana River Basin by establishing beneficial uses for specific water bodies and designating numerical and narrative water quality objectives. The Basin Plan sets water quality objectives for the Project Site and its surrounding areas. Water quality thresholds identified in the Basin Plan are intended to reduce pollutant discharge and ensure that water bodies are of sufficient quality to meet their designated beneficial uses. The Project would not conflict with the water quality standards outlined in the Basin Plan or worsen water quality conditions in any 303(d)-listed water body. As discussed above in response to threshold X(a), pollutant discharge during construction would be avoided through compliance with the Construction General Permit including the preparation and implementation of a SWPPP. Once the Project is constructed, the Project would consist of a residential development. Pollutants generated during Project operations would be treated using two bioretention basins. Therefore, the Project would not be a source of pollutants for downstream water bodies and the Project would thereby not conflict with the Basin Plan.

As discussed previously in response to threshold X(b), a GSP was approved by EMWD in 2021, which establishes sustainability indicators for the groundwater basin. The Project would not directly conflict with the Sustainable Management Criteria, Projects and Management Actions, or Plan Implementation chapters of the GSP plan (EMWD 2021b). Therefore, less than significant impacts would result from the Project, and no mitigation is required related to this threshold.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒

Response:

No Impact. The Project Site is vacant and is located at the northernmost portion of Morton Road where residential uses are currently established. As such, the Project does not physically divide the established community to the south. Additionally, there are roads or trails that connect any established communities at the Project Site. Under the Project, residential uses in the development immediately south of the Project Site would have the same vehicular, bicycle, and pedestrian access along Morton Road as during existing conditions. Therefore, the Project would result in no impacts related to this threshold, and 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?	☐	☐	☒	☐

Response:

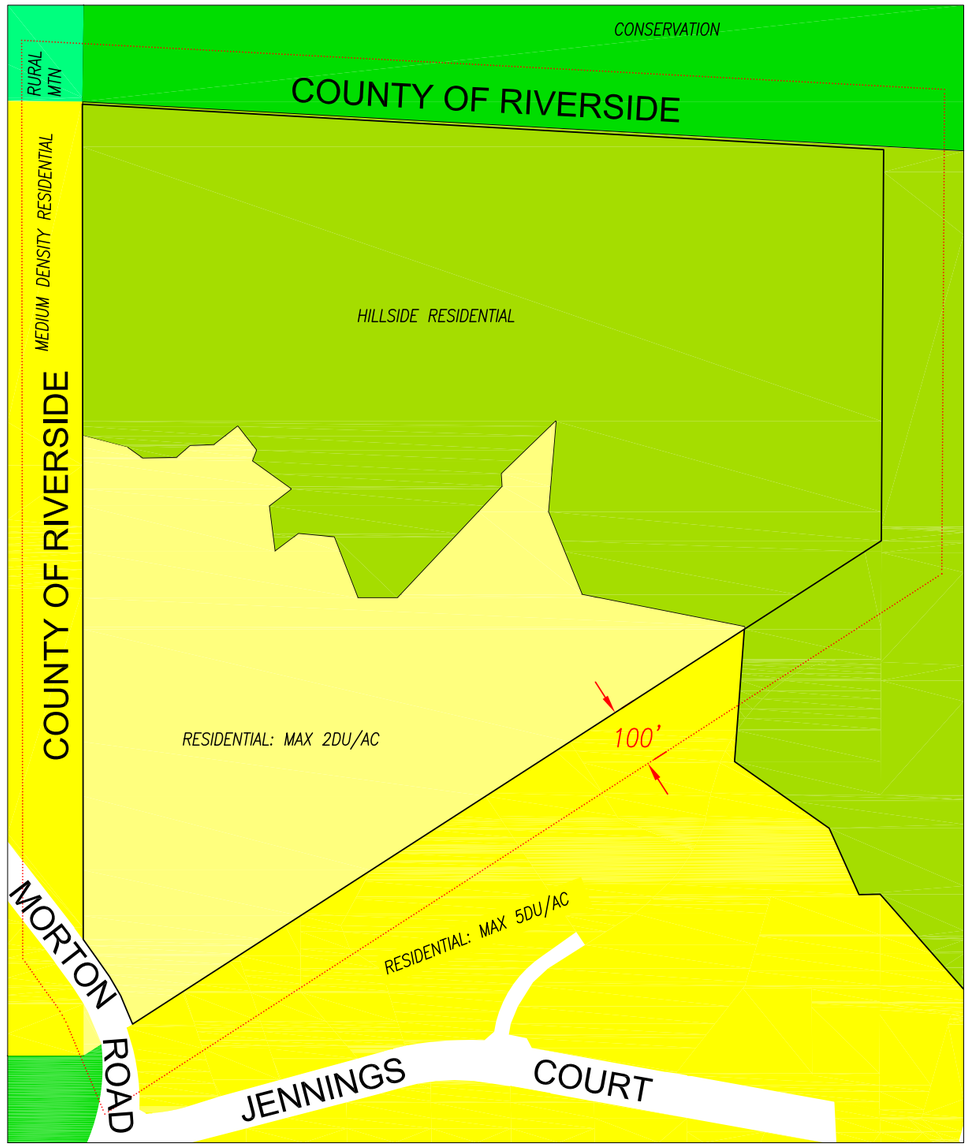
Less Than Significant Impact. The Project has been designed to be consistent with the R10 and OS general plan land use designations, the R10 and OS zoning districts (development standards), and the allowable development density permitted by those designations. The Project would require a General Plan Amendment to amend the City of Moreno Valley General Plan Land Use Map to change the land use designation for the Project Site from "Residential 2 (R2)" and "Hillside Residential (HR)" to "Residential 10 (R10)" and "Open Space (OS)" designations. The Project would also require a change of Zone to amend the City of Moreno Valley Zoning Map to change the zoning designation for the Project Site from "Residential 2 (R2) District" and "Hillside Residential (HR)" to ""Residential 10 (R10)" and "Open Space (OS) zones. Existing and proposed land use designations and zoning for the Project Site are provided in Figures 7 and 8 respectively.

A Planned Unit Development (PUD) has been prepared for the Project (UEG 2022c, Appendix J). The PUD describes the overall design concept for the Project as well as design standards and guidelines. By implementing the following design points that have been incorporated into Project Design, this Project meets these City design objectives for PUDs:

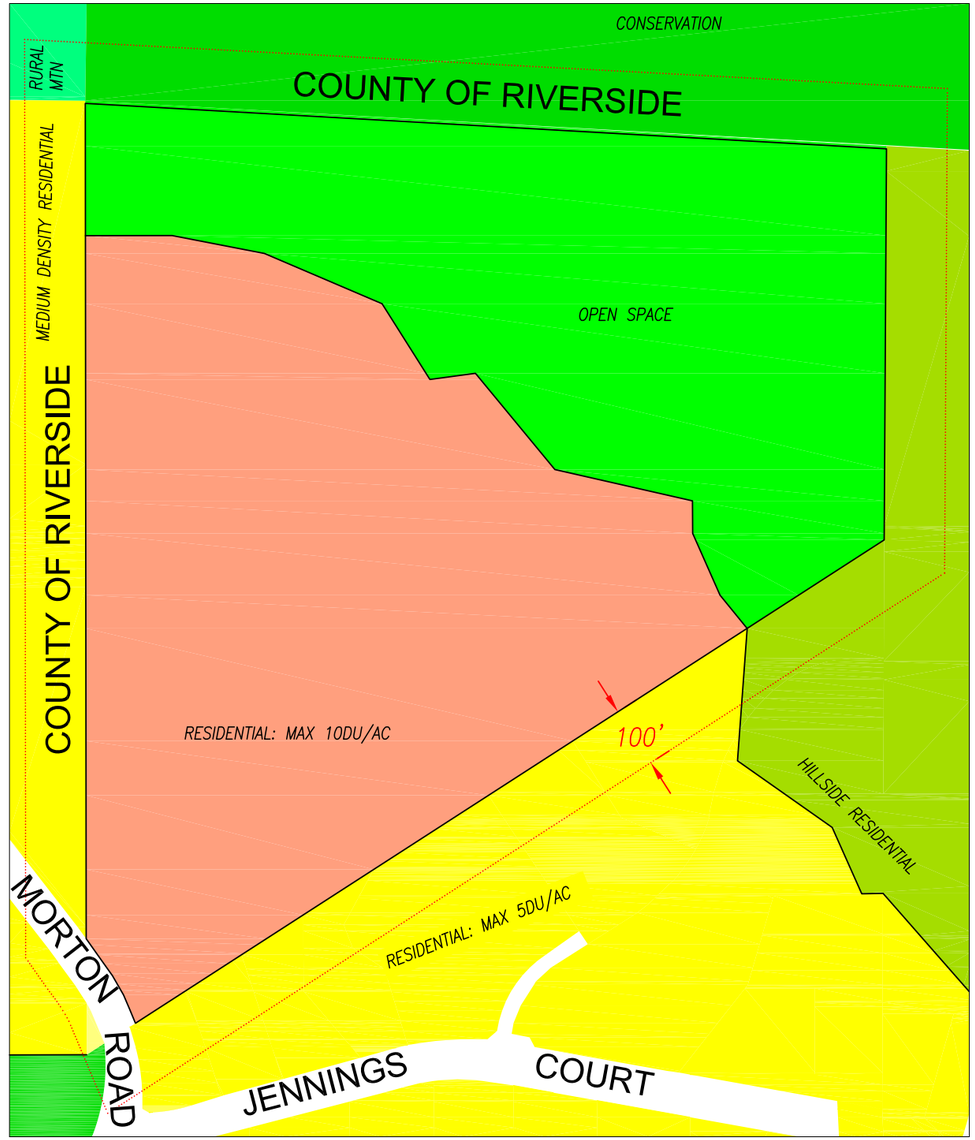
- Provides innovation and diversity in housing choices that would not otherwise be possible according to the strict application of the site development regulations in this title because the detached condominium concept provides its residents with the benefits of single-family homeownership while also conferring on them the benefits of shared community living.
- Provides access to adjacent natural resources, open space, onsite recreational facilities through the dedication of nearly one-half of the property to open space that will interconnect with a regional trail system.
- Installation of storm water pollution control systems pursuant to the municipal storm water permit issued by the RWQCB.

According to the PUD, the Project is intended as a planned residential community offering innovative cluster housing options in the lower lying portion of the site and open space on the remainder of the site. The development would include a community park, open space, and a common community design identity. This development plan coupled with the unique location of this property would provide multiple housing alternatives for both entry-level buyers, young families, and retirees, as well as student and faculty for the University of California-Riverside.

EXISTING GENERAL PLAN



PROPOSED GENERAL PLAN



Source: United Engineering Group, 2022

Land Use Map

Figure 7

Gateway Heights Project

N W E S

PSOMAS

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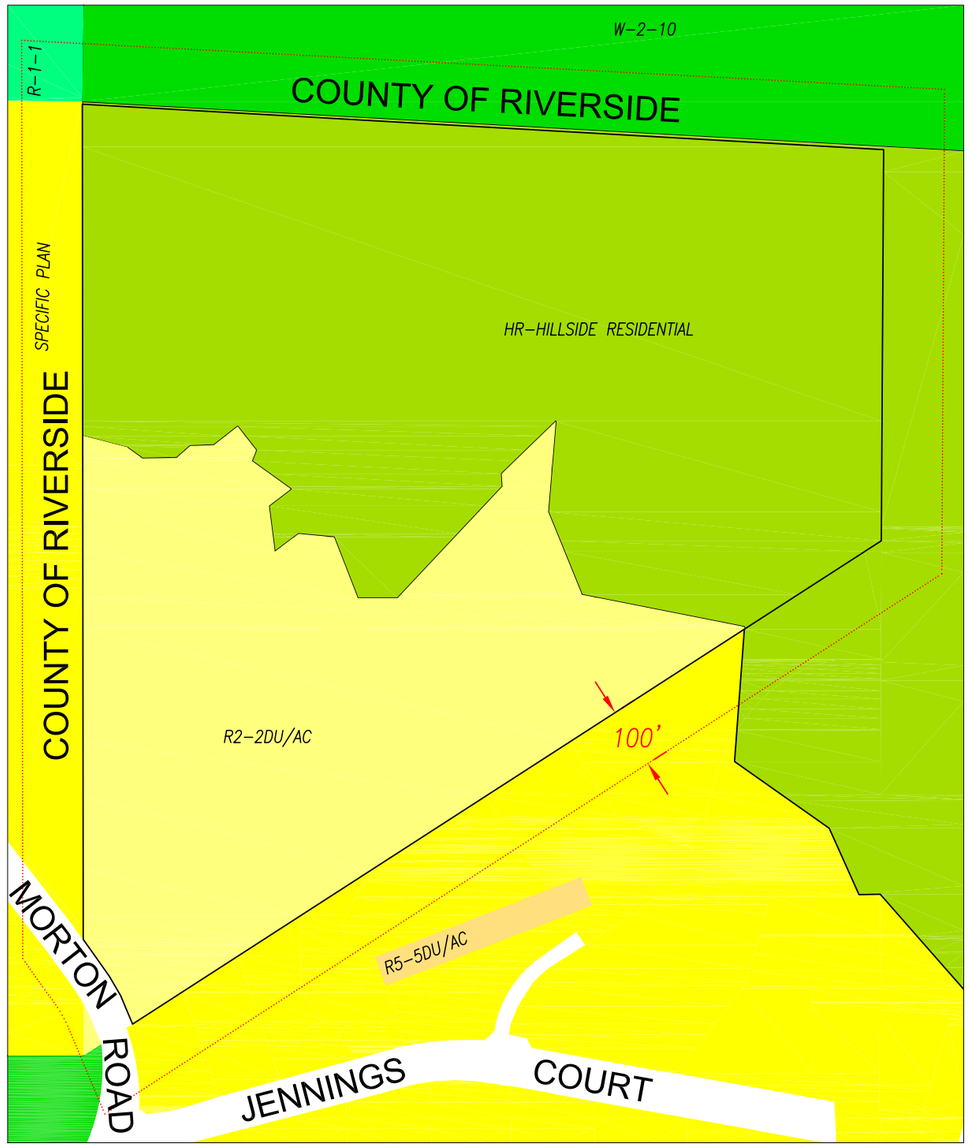
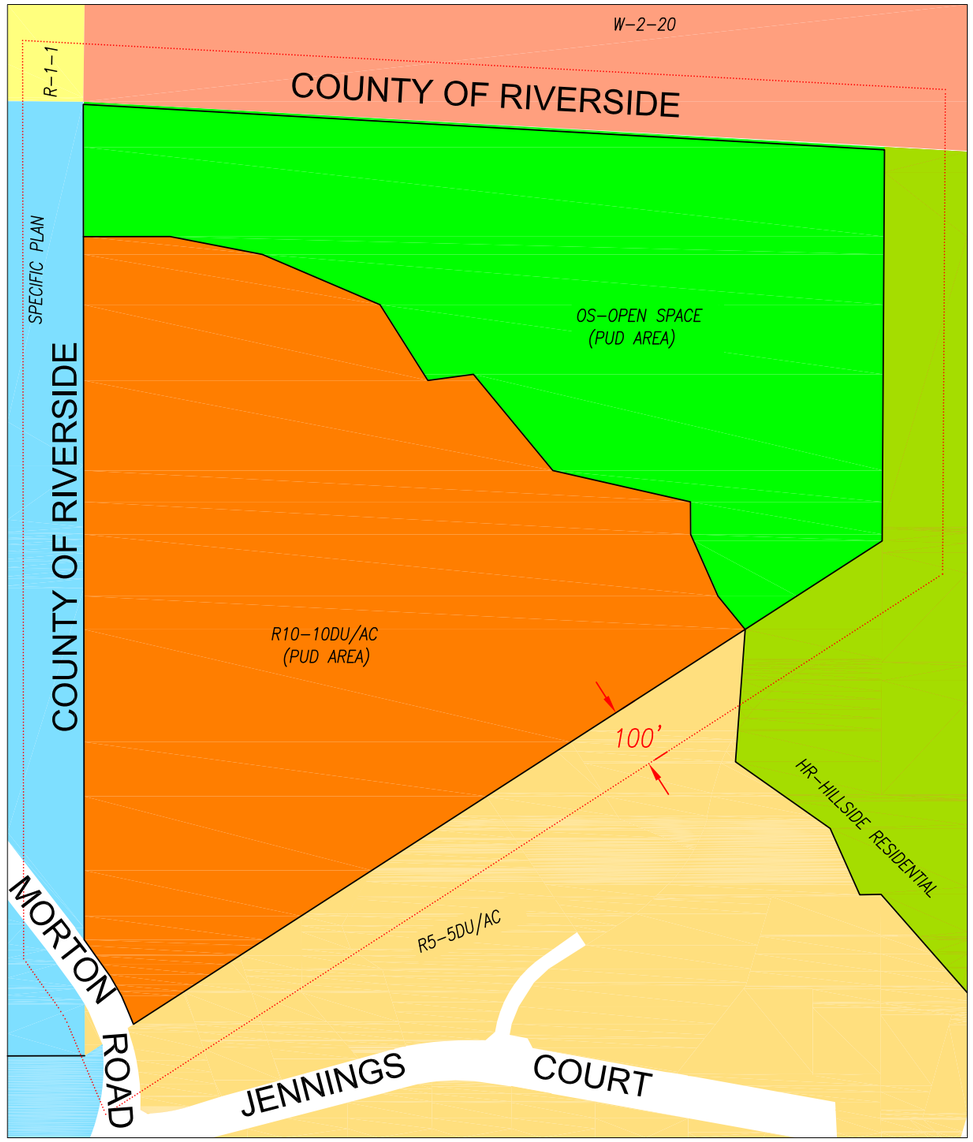
EXISTING ZONING



PROPOSED ZONING



Source: United Engineering Group, 2022

Preliminary Zoning Map

Figure 8

Gateway Heights Project

PSOMAS

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

The R10 (Residential 10) district designated area of the Project Site would total 16.59 acres of the 32.56 acre property and would contain 108 units, with a density of 6.51 units per acre. This density is well within allowances of the proposed General Plan designation of R10 (10 units per net acre). The remaining 16.10 acres would be changed to OS and designated for conservation. In addition to the open space, the Project would also provide a community park located in the center of the development.

The residential uses within the Project would consist of cluster units in varying sizes ranging from 4-unit to 10-unit clusters. This development would be subject to the requirements in Chapter 9.03.040 (Residential Site Development Standards) and 9.03.060 (Planned Unit Developments) of the City of Moreno Valley's municipal code. The introduction of a multifamily residential housing product type at the urbanized edge of the City's residential neighborhoods that currently abuts a hillside / open space area, represents an incompatibility issue, when viewed from traditional planning transects theory, which is defined as a series of zones that transition from sparse rural areas to the dense urban core of a city. It typically associates multifamily residential as an appropriate "buffer zone" between low-density residential areas and commercial/mixed use areas. Here, the Project proposes a multifamily residential project adjacent to the rural / open space edge and away from the city core or area of intensity (i.e., near the 60 Freeway / Railroad areas to the south). However, this pattern of urban development will likely change in the future due to the adopted Gateway Center Specific Plan (GCSP), located within Unincorporated Riverside County on the west side of Morton Road. The GCSP is a 317-acre mixed-use master-planned community that will introduce medium and high-density residential neighborhoods around a business park / commercial office / regional commercial centers closer to the SR-60 Freeway/ Railroad rights-of-way. The GCSP will introduce medium density residential uses at five (5) dwelling units per acre immediately adjacent to the Project Site, on the west side of Morton Road. As such, the subject Project's proposed Planned Unit Development density of 6.51 units per acre on the 16.59-acre portion would be compatible with future land development patterns in the larger vicinity. Therefore, with the approval of the General Plan Amendment and Zone Change described above for the Project, less than significant impacts would result related to zoning and land use designations.

Also, the City's General Plan EIR Land Use chapter lists the following plans and policies as having been adopted for the purpose of avoiding or mitigating an environmental effect: the City of Moreno Valley Municipal Code; Specific Plans including the City of Moreno Valley Redevelopment Plan, the Western Riverside County MSHCP, the Air Installation Compatible Use Zone (AICUZ) Study, and the SCAG Regional Plan; the SCAG Growth Management Plan, and the WRCOG Sub-Regional Comprehensive Plan. An analysis of how the Project relates to each of these related plans and policies is provided below in Table 12.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

TABLE 12
ANALYSIS OF CONSISTENCY WITH PLANS, POLICIES, AND ORDINANCES

Plan, Policy, or Ordinance	Consistency Analysis
Section 9.03.040 of the Moreno Valley Municipal Code	Section 9.03.040 of the Moreno Valley Municipal Code provides general site development standards for residential uses. As noted above, the Project proposes a General Plan Amendment and a Change of Zone. The City's design review would ensure that the Project is fully compliant with the development standards for the proposed zones within the Project Site.
Moreno Valley Specific Plans	The Project Site is not located in any local Specific Plans as designated in the General Plan. However, there is an adopted GCSP as explained above that will introduce medium-density residential uses at 5 du/acre to the west of Morton Road.
Moreno Valley Redevelopment Plan	The Project is not subject to the Moreno Valley Redevelopment Plan.
Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)	The Project Site is not located in any MSHCP Criteria Area or Area Plan subunit. The Project area is located within a predetermined Survey Area for narrow endemic plant species and for burrowing owl. Surveys were conducted in 2021 and no targeted plant species or burrowing owl were found within the Project Site. The Project Site does not occur within or adjacent to an MSHCP Core, Linkage, Constrained Linkage, or Non-Contiguous Habitat Block. Therefore, an Urban/Wildland Interface analysis pursuant to Section 6.1.4 of the MSHCP is not required. Riparian/riverine features occur within the Project Site, which would be impacted by the Project. Therefore, a DBESP was prepared and has been reviewed and approved by the RCA to ensure compliance with the requirements of the MSHCP (Dudek 2022b).
March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan	As described in response to threshold IX(e), based on a review by the ALUC Director, the Project was found to be consistent with the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, with implementation of standard conditions included in the letter to avoid and minimize potential impacts to aircraft related to lighting, glare, and bird strikes (ALUC 2020). Therefore, the Project would result in less than significant impacts and no mitigation is required.
SCAG Regional Plan and Growth Management Plan	The Project is internally consistent with the City's General Plan which assumed a low-density residential development on the overall 32.56-acre site and the Project will be developed using a clustered housing pattern on a 16.59-acre portion of the site (3.32 du/acre on the overall 32.56-acre site). Therefore, the Project would not conflict with the SCAG Regional Plan or Growth Management Plan.
WRCOG Sub-Regional Comprehensive Plan	During review of the Project, City staff would ensure that the Project complies with regional goals and objectives of the WRCOG Sub-Regional Comprehensive Plan; therefore, the Project would not conflict with this plan.
Source: Psomas 2021.	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Because the Project would not conflict with any of these plans or policies, the Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Less than significant impacts would result from the Project related to this threshold, and no mitigation is required.

XII. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Response:

No Impact. According to the Environmental Impact Report prepared for the City of Moreno Valley General Plan (Moreno Valley 2021c), there are no regionally or statewide significant mineral resources are located within the City. Therefore, no impacts would result related to these thresholds, and no mitigation is required.

XIII. NOISE – Would the project result in:				
a) 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?	☐	☐	☒	☐

Response:

Less than Significant Impact. Sound pressure levels are described in decibel (dB), which are units measured on a logarithmic scale. A doubling of the energy of a noise source (such as doubling of traffic volume) would increase the noise level by 3 dB. The human ear is not equally sensitive to all frequencies within the sound spectrum. To accommodate this phenomenon, the A-scale was devised; the A-weighted decibel scale (dBA) approximates the frequency response of the average healthy ear when listening to most ordinary everyday sounds and is used in this analysis.

Human perception of noise has no simple correlation with acoustical energy. Due to subjective thresholds of tolerance, the annoyance of a given noise source is perceived very differently from person to person. The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at 3 feet is approximately 60 dBA, while loud jet engine noises at 1,000 feet equate to 100 dBA, which can cause serious discomfort.

Several rating scales (or noise "metrics") exist to analyze the effects of noise on a community. These scales include the equivalent noise level (L_{eq}) and the community noise equivalent level (CNEL). Average noise levels over a period of minutes or hours are usually expressed as dBA L_{eq}, which is the equivalent noise level for that period of time. The period of time averaging may be specified; $L_{eq(3)}$ would be a 3-hour average. When no period is specified, a one-hour average is assumed. Noise of short duration (i.e., substantially less than the averaging period) is averaged into ambient noise during the period of interest. Thus, a loud noise lasting many seconds or a few minutes may have minimal effect on the measured sound level averaged over a one-hour period.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

To evaluate community noise impacts, CNEL was developed to account for human sensitivity to nighttime noise. CNEL represents the 24-hour average sound level with a penalty for noise occurring at night. The CNEL computation divides a 24-hour day into three periods: daytime (7:00 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime (10:00 PM to 7:00 AM). The evening sound levels are assigned a 5-dBA penalty, and the nighttime sound levels are assigned a 10-dBA penalty prior to averaging with daytime hourly sound levels.

Construction Noise

The City regulates construction noise through Section 8.14.040(E) and through Noise regulations contained in 11.80.030(D)(7) of the Municipal Code by limiting construction activities to 7:00 AM to 7:00 PM from Monday through Friday excluding holidays and from 8:00 AM to 4:00 PM on Saturdays. Construction is not permitted on Sundays or holidays. The City's Noise Ordinance prohibits any person from operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of eight p.m. and seven a.m. the following day such that the sound there from creates a noise disturbance, except for emergency work by public service utilities or for other work approved by the city manager or designee.

Future development implemented under the Project could result in a temporary ambient noise increase due to construction activities. Construction noise typically occurs intermittently and varies depending upon the nature or phase of construction (e.g., demolition; land clearing, grading, and excavation; erection). Construction noise would be short term and would include noise from activities such as site preparation, truck hauling of material, pouring of concrete, and the use of power tools. Noise would also be generated by construction equipment use, including earthmovers, material handlers, and portable generators, and could reach high noise levels for brief periods.

The loudest noises during construction are typically from pile driving and blasting. No pile driving or blasting is planned for the Project.

As discussed in Section 4.13 of the MoVal 2040 Project EIR, hourly average noise levels would be approximately 83 dBA Leq at 50 feet from the center of construction activity when assessing three pieces of common construction equipment working simultaneously. Noise levels would vary depending on the nature of the construction activities including the duration of specific activities, the equipment involved, the location of the sensitive receivers, and the presence of intervening barriers. Construction noise levels of 83 dBA Leq at 50 feet would attenuate to 80 dBA Leq at 70 feet. Therefore, significant impacts would occur if sensitive land uses are located closer than 70 feet of construction activities (Moreno Valley 2021b).

The nearest sensitive receptors to the Project Site are homes on the north side of Jennings Court and Hillmer Court, within 50 feet from the southern boundary of the Project Site and within 350 feet from the center of proposed construction activity. With a bulldozer or scraper operating at the southern boundary of the Project Site with a maximum, intermittent short term noise level of 85 dBA, the noise level at the nearest home would be 79 dBA. Assuming a noise source of 83 dBA L_{eq} at the center of the Site, the noise level at the closest sensitive receptor would be approximately 66 dBA L_{eq}. This would be less than the 80 dBA L_{eq} threshold of significance used in the MoVal 2040 Project EIR. The impact would be less than significant.

Operational Noise – On-site Sources

Operational noise sources associated with the Project would include, but are not limited to, mechanical HVAC (heating, ventilating, and air conditioning) units; landscape maintenance equipment; and vehicles entering and exiting the Project Site. The Moreno Valley Municipal Code, Section 11.80.030 (C) prohibits noise generation in excess of 60 dBA L_{eq} in the daytime and 55 dBA L_{eq} in the nighttime at 200 feet from the property line (Moreno Valley 2021a). Typical outdoor HVAC units may have noise levels from 65 to 75 dBA at a distance of 3 feet. Project HVAC units would be located 100 feet or more north of the property line. HVAC noise levels 200 feet south of the property line would be 45 to 55 dBA, which would not exceed

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

the nighttime noise level requirement. Vehicle noise would be intermittent and would not exceed 55 dBA at 200 feet from the property line. The impact would be less than significant.

Operational Noise – Project-Generated Traffic

As stated in the MoVal 2040 Project EIR, long-term traffic noise that affects sensitive land uses would be considered substantial and constitute a significant noise impact if the project would:

- Increase noise levels by 5 dB or more where the no project noise level is less than 60 CNEL;
- Increase noise levels by 3 dB or more where the no project noise level is 60 CNEL to 65 CNEL; or
- Increase noise levels by 1.5 dB or more where the no project noise level is greater than 65 CNEL.

The Project would generate an estimated 80 trips during the a.m. peak hour, 107 trips in the p.m. peak hour, and 1,020 total daily trips (Translutions 2021). The greatest impact for traffic noise increase would be the addition of Project traffic on the roadway with the least No Project traffic volume, which is Morton Road, north of Wordsworth Road. Based on the peak hour data in the traffic impact analysis (TIA), the No Project average daily traffic volume is less than 1,000 vehicles per day on Morton Road (Translutions 2021). The No Project noise level would be less than 55 dBA CNEL and would trigger the 5 dB significance threshold.

Comparison of the Project Completion Without Project traffic volumes to the Project Completion With Project traffic volumes shows a 270 percent increase in traffic volume. Assuming no change in average speed or fraction of trucks in the vehicle mix, the traffic noise increase would be approximately 4.4 dBA. This value is less than the 5 dBA significance threshold. The impact would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

Response:

Less than Significant Impact. Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is normally associated with activities such as railroads or vibration-intensive stationary sources but can also be associated with construction equipment such as jackhammers, pile drivers, and hydraulic hammers.

Construction generally includes a wide range of activities that can generate groundborne vibration. In general, blasting and demolition of structures generate the highest vibrations. Heavy trucks can also generate groundborne vibrations, which vary depending on vehicle type, weight, and pavement conditions. Potholes, pavement joints, discontinuities, differential settlement of pavement, and other anomalies all increase the vibration levels from vehicles passing over a road surface. Construction vibration is normally of greater concern than vibration of normal traffic on streets and freeways with smooth pavement conditions.

The peak particle velocity (ppv) or the root mean square (rms) velocity is usually used to describe vibration amplitudes. The ppv is defined as the maximum instantaneous peak of the vibration signal and the rms is defined as the square root of the average of the squared amplitude of the signal. The ppv is more appropriate for evaluating potential building damage and is also used for evaluating human response. The units for ppv velocity are normally inches per second (in/sec).

The Municipal Code does not establish quantified limits for vibration levels (Moreno Valley 2021a). Section 9.10.170 states that "No vibration shall be permitted which can be felt at or beyond the property line." Caltrans defines a distinctly perceptible vibration level as 0.24 ppv in/sec (Caltrans 2013).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

As stated in the MoVal 2040 Project EIR, the Federal Transit Administration (FTA) provides construction vibration damage criteria for various types of buildings. The appropriate threshold for Project vibration analysis is 0.2 ppv in/sec, which is the FTA criterion for non-engineered timber and masonry buildings.

Pile driving and blasting are generally the sources of the most severe vibration during construction. Neither pile driving nor blasting would be used during Project construction. Conventional construction equipment would be used for grading activities. Table 13 summarizes typical vibration levels measured during construction activities for various vibration-inducing pieces of equipment.

TABLE 13
VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	ppv at 25 ft (in/sec)
Vibratory roller	0.210
Large bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
ppv: peak particle velocity; ft: feet; in/sec: inches per second. Source: Caltrans 2013; FTA 2006.	

As shown in Table 13, a vibratory roller would produce the largest vibration. Vibration from a vibratory roller would be less than the 0.2 ppv in/sec significance criterion for building damage and the 0.24 ppv in/sec distinctly perceptible level at distances of 30 feet or greater. Project construction is not anticipated within 30 feet of the southern property line. The impact would be less than significant.

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?	☐	☐	☒	☐

Response:

Less than Significant Impact. March Air Reserve Base, a joint-use civilian and military facility, is located approximately 4.2 miles south-southwest of the Project Site. The northernmost 60 dBA CNEL aircraft noise contour is located south of the Project Site and across highway SR-60. Therefore, aircraft noise at the site is less than 60 dBA CNEL. Noise levels less than 65 dBA CNEL are “Normally Acceptable” for residential land uses according to the 2021 General Plan Update Noise Element (Moreno Valley 2021b). Therefore, the Project would not expose residents to excessive aircraft noise levels. The impact would be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. 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 road or other infrastructure)?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The Project is not anticipated to generate substantial unplanned population growth. Using an estimate of 2.95 persons per dwelling unit for residential development (United States Census Bureau 2021), the 108-unit Project could generate approximately 319 residents. It is unlikely that all the Project residents would be new residents to the City as some current City residents would likely relocate to the Project Site. However, for purposes of providing a conservative analysis, it is assumed that the Project would result in a net increase of 319 residents to the City. This additional population would represent approximately 0.0015 percent of the current City of Moreno Valley population estimate of 209,426 persons for the year 2021 (DOF 2021), and approximately 0.0012 percent of the projected population of 256,600 persons by 2040 (Moreno Valley 2021b). This minimal population growth would not be considered substantial unplanned population growth and would be consistent with the zoning and planned use of the Project Site. The Project includes no commercial or other land uses that would generate jobs, so indirect population growth is not anticipated to result from the Project. The extension of infrastructure to the subject site is not anticipated to generate future developments in the City of Moreno Valley due to the Open Space designations and hillside terrain located north and east of the site, which will not allow further development. Furthermore, the City is currently updating the City's General Plan to meet the City's Regional Housing Needs Assessment (RHNA) allocation for the Sixth Cycle Housing Element Update, which is a total of 13,627 units of total new construction. Targeted residential density changes are included to provide for higher density housing to support the meeting of state obligations under RHNA. Therefore, the Project would not result in substantial unplanned population growth and less than significant impacts would result.

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

Response:

No Impact. The Project would result in a residential development and would not require the demolition of any existing residential structures. Therefore, implementation of the Project would not displace existing housing or people and would not require the construction of replacement housing.

XV. PUBLIC SERVICES – Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☒	☐

Response:

Less Than Significant Impact. Fire protection services for the Project Site would be provided by the Moreno Valley Fire Department. The Towngate Station is the nearest station to the Project Site. The Towngate Station was jointly constructed by the City of Moreno Valley and the City of Riverside. The Towngate Station is a three bay facility that can house two engine companies, a truck company, and additional resources as needed. Currently, there is one paramedic engine assigned to this station which

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

services the west side of Moreno Valley. Current equipment based at this station includes the following: one Type 1 engine, one Type 1 reserve engine, and one Paramedic Squad (Moreno Valley 2021b). Construction of the proposed 108 residential units would result in approximately 319 new residents and 108 units which would incrementally increase the demand for fire protection services, including administrative tasks associated with approval and construction of the Project (e.g., building plan check) and response to fire service calls once the Project is occupied. This minor increase in demand for fire protection services is not expected to independently require the construction of new or alteration of existing fire protection facilities to maintain an adequate level of fire protection service to the Project area. However, to maintain current levels of response times the Fire Department may need to add to their existing staffing to accommodate the Project as well as other cumulative projects in the vicinity (Moreno Valley 2021b).

Also, cumulatively, the Project along with others in the vicinity would likely necessitate construction of additional fire stations. The Moreno Valley Fire Department's Strategic Plan has identified potential locations of future fire stations within the City. However, the Project as well as other future development in the City would be required to pay a Development Impact Fee (DIF) that would be used exclusively for future facility improvements necessary to ensure contribution of its fair share of the cost of facilities and equipment. Payment of the DIF, as required by **RR PUB-2**, would allow future site-specific development to contribute to its fair share cost of facilities and equipment due to the increased demand for fire protection services (Moreno Valley 2021b). The construction of future fire department facilities would be subject to separate environmental review.

Furthermore, compliance with fire protection design standards during Project-specific site planning and construction design processes (as described in **RR PUB-1**) would ensure that the Project would not inhibit the ability of fire protection or paramedic crews to respond at optimum levels. Less than significant impacts would result related to this threshold, and no mitigation is required.

ii) Police protection?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The Project includes the addition of new homes that would increase the population and demand for police service at the Project Site above existing conditions. Police protection services for the Project Site are provided by the Moreno Valley Police Department (MVPD). Since incorporation, the City has maintained an annual contract with the Riverside County Sheriff's Department for police protection and crime prevention services. The City's existing General Plan (Moreno Valley 2021b) established a police staffing standard of at least 1 officer per 1,000 residents, as feasible given budget constraints. The Patrol Division of MVPD provides first responders to crimes in progress and to calls for service assigned by dispatch. The unit contains nine supervising sergeants, 64 sworn patrol officers, 3 K-9 teams, and 10 nonsworn officers. The MVPD receives approximately 400 to 450 calls per day. Calls to the MVPD are prioritized and assigned by urgency, from greatest urgency (Priority 1) through non-emergency calls. Priority 1 calls include emergency calls which require immediate response, when vehicular pursuit is in process, or when there is reason to believe that an immediate threat to life exists. Priority 2 calls include injured persons, robberies in progress, bomb threats, car jackings, rape, and stolen vehicles. Priority 3 calls include assault, prowlers, disturbances, tampering with vehicles, and burglary alarms. The MVPD has a response target of six minutes or less for Priority 1 calls, 15 minutes or less for Priority 2 calls, and 35 minutes or less for Priority 3 calls. MVPD operates out of the Moreno Valley Station, located in the Civic Center Complex at Alessandro and Frederick, with satellite substations in several other locations throughout the city (Moreno Valley 2021b).

The City is planning an expansion of the Civic Center complex that would include a remodeled Public Safety Building capable of accommodating roughly 600 total personnel, as well as a satellite police substation in the southeastern part of the City to service anticipated demand from new development (Moreno Valley 2021b). These two additional facilities would provide space necessary for additional staffing to provide police protection services under Project buildout. As specified in **RR PUB-2**, the Project would be subject

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

to the payment of a DIF that would be used exclusively for future facility improvements necessary to ensure contribution of its fair share of the cost of facilities and equipment determined to be necessary to adequately accommodate new development in the City. Payment of the DIF would allow future site-specific development to contribute to its fair share cost of facilities and equipment due to the increased demand for police protection facilities. The construction of future police facilities would be subject to environmental review. Therefore, the Project would result in less than environmental impacts related to the expansion of police services.

iii) Schools?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The Project would result in the addition of new households with school-age children that would increase attendance at local schools. The Moreno Valley Unified School District (MVUSD) serves the Project Site. The Project Site would be served by Seneca Elementary School (0.49-mile south), Vista Heights Middle School (3.83 miles east), and Canyon Springs High School (3.83 miles east). MVUSD is the third largest school district in Riverside County, serving approximately 77 square miles that includes portions of the City, a small portion of the City of Riverside, and unincorporated regions in Riverside County. MVUSD serves Kindergarten through 12th grade across 39 existing school sites, with 32,763 students enrolled in the 2018–2019 school year (Moreno Valley 2021b). MVUSD has identified the need to construct additional schools to meet future enrollment demand. Construction of future schools could result in environmental impacts (Moreno Valley 2021b). At the time future schools are proposed, they would require separate environmental review and compliance with regulations in existence at that time would address potential environmental impacts related to the construction and operation of new schools. Furthermore, prior to issuance of a building permit, the Developer shall pay new development fees to the MVUSD pursuant to Section 65995 of the *California Government Code.* As an option to the payment of developer fees, the MVUSD and the Developer can enter into a facility and funding agreement, if approved by both parties. Evidence that agreements have been executed shall be submitted to the Community Development Department, or fees shall be paid with each building permit. Given the considerations above, the Project would result in less than significant impacts related to this threshold, and no mitigation is required.

iv) Parks?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The City's Parks and Community Services Department maintains approximately 482 acres of parkland within the Planning Area, which consists of seven community parks, 24 neighborhood parks, four specialty parks and 15 miles of trails/greenways existing and proposed park and recreational facilities (Moreno Valley 2021b). The City has established a park service standard of 3.0 acres of parkland per 1,000 residents to ensure that access to parks is adequate and commensurate with the size of the community. With 675.77 acres of existing and planned parkland, Moreno Valley currently has 2.68 acres per thousand residents, below the established service ratio. The City owns several properties that may be developed in the future as parks. Development of these facilities would provide new recreational open space to satisfy future demand. The City requires that new residential developments, such as the Project, be required to dedicate land for new park facilities or pay a fee that can be used for acquisition of parkland as needed to meet the community-wide standard, pursuant to Section 3.40.020 of the Moreno Valley Municipal Code, at the time of subdivision map approval or issuance of building permits, which is a codification of State "Quimby Act" requirements. Construction of these future parks could result in environmental impacts, including disturbances or conversion of habitat, water pollution during construction, increased noise levels, and an increase in impermeable surfaces. At the time future parks are proposed, they would require a separate environmental review and compliance with regulations in existence

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

at that time would address potential environmental impacts related to the construction and operation of new parks.

Based on the population increase estimate of 319 new residents, a total of 0.957 acres of new parkland must be dedicated and improved with the Project, unless in lieu fees are paid. The Project proposes a 0.89-acre neighborhood park and a total of 3.1 acres of open space consisting of common-area, trails, and the neighborhood park area within the Project Site boundaries. The Project's provision of these 3.1-acres of parkland per 319 anticipated residents added by the Project exceeds the City's goal of 3.0-acres per 1,000 residents, for new residents. However, the Quimby Act regulations require that "public parks" open to the general public be provided. If the Project proposes to add a neighborhood park that is owned and maintained by the Homeowners Association, this would not meet Quimby Act regulations. Similarly, if linear parks or public trails are open to the general public, they could count as part of the Quimby "3 Acre/1,000 residents" standard.

The increase in Project residents would increase the demand on public parks and recreational facilities in the nearby vicinity. However, because the Project results in a relatively small number of new residents to the City's existing population and provides on-site recreational amenities, the increased use of existing public park facilities would not be at a level that would result in a substantial deterioration of existing facilities or require the need for new or physically altered facilities. Furthermore, as required by **RR PUB-2**, the Developer would be required to pay the DIF, a portion of which is used for parkland dedication and park improvements. Although the Project's impacts to City park facilities would be less than significant, payment of required DIF would further reduce any potential impacts on City parks and recreational facilities associated with the increased demand and use of the facilities. Therefore, based on this analysis, less than significant impacts would result from the Project, and no mitigation is required.

v) Other public facilities?	☐	☐	☒	☐

Response:

Less than Significant Impact. The Moreno Valley Public Library provides services and programs to the City, including the Project Site. The library has three branch locations. The Main Branch facility is located on the old Midland Middle School site, reconstructed in 1987 to house the library as well as a senior and community center. The library has since grown to occupy the entire 16,000-square-foot building. The Mall branch satellite location, opened in 2017, is located at 22500 Town Circle, and is the nearest to the Project Site approximately 4.13-miles away. The Iris Plaza Branch, opened in 2020, is located at 16170 Perris Boulevard. The three public libraries offer a wide array of books and technological resources that are suited to serve patrons of all ages, supporting a culture of learning and civic involvement. The Project would be subject to the payment of a DIF, as required by **RR PUB-2**, that would be used exclusively for future facility improvements necessary to ensure contribution of its fair share of the cost of facilities, including libraries. Payment of the DIF would allow future site-specific development to contribute to its fair share cost of facilities and equipment due to the increased demand for libraries. Construction of future libraries could result in environmental impacts, including disturbances or conversion of habitat, water pollution during construction, increased noise levels, and an increase in impermeable surfaces. At the time future libraries are proposed, they would require a separate environmental review and compliance with regulations in existence at that time would address potential environmental impacts related to the construction and operation of new libraries. Therefore, based on this analysis, less than significant impacts would result from the Project, and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Mitigation Program:

Regulatory Requirement

RR PUB-1 The Developer shall comply with all applicable codes, ordinances, and regulations, including the most current edition of the California Fire Code and the City of Moreno Valley Municipal Code, regarding fire prevention and suppression measures; fire hydrants; fire access; water availability; and other, similar requirements. Prior to issuance of building permits, the City of Moreno Valley Community Development Department and the Moreno Valley Fire Department shall verify compliance with applicable codes and that appropriate fire safety measures are included in the Project design. All such codes and measures shall be implemented prior to occupancy.

RR PUB-2 The Developer shall pay all applicable Development Impact Fees (DIFs) prior to the issuance of building permits, for parkland dedication, parkland improvements, public safety facilities, other governmental facilities, and outside agency fees including school district fees.

XVI. RECREATION – Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	☐	☐	☒	☐

Response:

Less than Significant Impact. See response above to threshold XV(iv) for a related response. In summary, the Project would result in an increase of 319 residents and usage of parks. However, the Project includes the provision of a neighborhood park within the Project Site and would pay the City's DIF for parkland in lieu fees as needed and as required by **RR PUB-2**, which would ensure that the Project pays its fair share for any required new parks or improved park facilities. Less than significant impacts would result from the Project related to this threshold, and no mitigation is required.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which have an adverse physical effect on the environment?	☐	☐	☐	☒

Response:

No Impact. The Project includes the development of a neighborhood park within the Project Site and the impacts of the park has been addressed through the impact analysis presented throughout this document. The Project also includes the rezoning and dedication of portions of the Project Site, which may be developed by the City or others with recreational trails or other facilities at some time in the future. Any future trails or other recreational facilities within these areas would be subject to a separate environmental review. Therefore, no impacts would result from the Project related to this threshold, and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – Would the project:				
a) Conflict with program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The Project's consistency with programs, plans, ordinances, and policies related to the circulation system is evaluated below.

General Plan – Circulation Element:

The Circulation Element of the City's General Plan includes an evaluation of the regional transportation system, as well as City goals and policies related to circulation. The Project would not directly conflict with any of the goals or policies contained in the Circulation Element. The Project would support the City in implementing Goal C-2 of the Circulation Element, which is to plan, design, construct, and maintain a local transportation network that provides safe and efficient access throughout the city and optimizes travel by all modes. The Project includes local roads that have been designed to allow for safe paths of travel for vehicular, bicycle, and pedestrian users. As a result of Senate Bill 743 (SB 743), a Project's impacts on vehicular Level of Service (LOS) are no longer considered an environmental impact. Therefore, the Project's effects on vehicular LOS are disclosed separately in the Project's Traffic Impact Analysis, provided as Appendix K. Recommended LOS-related conditions of approval are provided therein to ensure consistency with City LOS standards that are contained in the Circulation Element.

Bicycle Master Plan:

The City's Bicycle Master Plan contains an analysis of existing conditions, an evaluation of opportunities and constraints for improving the City's bicycle system, and goals, policies, and objectives relating to bicycling (Moreno Valley 2014). The Bicycle Master Plan does not have any goals, policies, or objectives that relate directly to developments; therefore, the Project would not conflict with the Bicycle Master Plan. Furthermore, the Project's internal roadways have been designed to include shoulders that could be used by bicyclists.

Conclusion

As discussed above, the Project would not conflict with a circulation-related program, plan, ordinance, or policy. The Project would result in less than significant impacts relative to this threshold, and no mitigation is required.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐

Response:

Less Than Significant Impact. Based on the City of Moreno Valley Transportation Impact Analysis Preparation Guide for Vehicles Miles Traveled and Level of Service Assessment, a project located in a low VMT area can be effectively screened out from a project-level VMT assessment. To identify if the Project is in a low VMT-generating area, the WRCOG screening tool was applied using VMT per capita. Figure 16 presented within the Traffic Impact Analysis (Appendix K) shows the low VMT area screening for the Project, which shows that the Project Transportation Analysis Zone (TAZ) based VMT per capita is 15.45 miles. The jurisdictional VMT per capita is 19.04 miles. Since the Project TAZ VMT per capita is lower than the City's VMT per capita, the Project is considered to be in a low VMT generating TAZ and presumed to

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

have a less than significant impact on VMT (Translutions 2021). No additional analysis is required and no mitigation measures are required.

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

Response:

Less Than Significant Impact. The design of driveways and other project access locations would be based on City Code, which sets the standard for such design. And the project does not propose any incompatible land uses, because only new residences are being proposed on a site that is adjacent to single family residential uses to the south. New roads and sidewalks within the Project Site are not anticipated to increase traffic hazards as they will comply with engineering industry standards for new roads, as reviewed and approved by the City of Moreno Valley's Land Development Department. The Project will create a slight realignment of the Morton Road street right-of-way to be adjusted towards the east near the project entry in order to create added street frontage. However, the re-designed street right-of-way will conform to acceptable standards for street geometry and grading principles, and will not create any increased hazards. Therefore, the Project impact is considered less than significant.

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

Response:

Less Than Significant Impact. The proposed new roadway connection to Morton Road and internal roadways would be designed in accordance with all applicable design and safety standards required by adopted fire codes, safety codes, and building codes established by the City's Land Development and Fire Departments. The Project would not increase delays on street segments substantially; therefore, the Project would not result in inadequate emergency access, and the Project impact is considered less than significant.

XVIII. TRIBAL CULTURAL RESOURCES – Would the project:				
a) 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:				
i) 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	☐	☐	☐	☐

Response: The Project is subject to Assembly Bill 52 (AB 52) (Chapter 532, Statutes of 2014), which establishes a formal consultation process for California tribes as part of the CEQA process and equates significant impacts on "tribal cultural resources" with significant environmental impacts (Public Resources Code [PRC] § 21084.2). AB 52 requires that lead agencies undertaking CEQA review evaluate, just as they do for other historical and archeological resources, a project's potential impact to a tribal cultural resource. The City must notify all Tribal Governments that have been previously registered for AB 52 consultation interest with the City about the Notice of Intent to Adopt a Mitigated Negative Declaration, and offer a 30-day review period in which to request "formal government-to-government consultation".

Also, because the Project involves a General Plan Amendment, the Project is also subject to Section 65352.3 of the CA Government Code (SB 18), which requires local planning agencies to provide

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

opportunities for involvement of California Native American tribes on the contact list maintained by the Native American Heritage Commission. The listed Tribes have up to 90 days to request consultation, unless a shorter time frame is agreed to by that Tribe.

Consultation under Assembly Bill 52 (AB 52) and Senate Bill 18 (SB 18) began on January 20, 2022 with letters being sent to the following tribes:

- Agua Caliente Band of Cahuilla Indians;
- Cahuilla Band of Indians;
- Torres-Martinez Desert Cahuilla Indians;
- Los Coyotes Band of Cahuilla Mission Indians;
- Morongo Band of Mission Indians;
- Pechanga Band of Luiseño Indians;
- Rincon Band of Luiseño Indians;
- San Manuel Band of Mission Indians;
- Santa Rosa Band of Mission Indians; and
- Soboba Band of Luiseño Indians.

The 90-day response period ended on April 19, 2022. Of the ten tribes contacted, two tribes requested to consult during the consultation process which included: Pechanga Band of Luiseño Indians and Rincon Band of Luiseño Indians. Additionally, the City received a request from Agua Caliente Band of Cahuilla Indians for Project documents but no formal request to consult.

The consulting tribes consider the area sensitive for tribal cultural resources because the Project Site lies within their traditional use areas and there are cultural resource sites that have been located in the larger vicinity. Also, two components of Site 33-15937 would be impacted by the Project, which consists of both prehistoric and historic-period components, including bedrock milling features, building foundations, a well, a cistern, and a refuse deposit. were determined not to meet CEQA definition of “historical resources” (CRM Tech 2018). Given this context, the consulting tribes requested inclusion of mitigation due to the potential of the Project to unearth previously undocumented tribal cultural resources during construction. As such, **MM TCR-1** through **MM TCR-10** are included, which require archaeological and Native American monitoring, preparation of a Cultural Resource Monitoring Plan, procedures for artifact disposition and inadvertent finds, and preparation of Phase III and IV reports. With implementation of **MM TCR-1** through **MM TCR-10**, impacts would be less than significant.

ii) 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.	☐	☐	☐	☐

Response: As discussed above, to avoid potential adverse effects to tribal cultural resources, **MM CUL-1** and **MM TCR-1** have been included to provide for Native American and archaeological monitoring of excavation and grading activities to avoid potential impacts to tribal cultural resources that may be unearthed by Project construction activities. No information has been provided to the Lead Agency

indicating any likelihood of uncovering tribal cultural resources on the Project Site, there are no known tribal cultural resources on or adjacent to the Project Site, and no potentially significant impacts are anticipated. Mitigation measures **MM CUL-1** and **MM TCR-1** through **TCR-10** are included in the event of any inadvertent discoveries during construction activities.

Additionally, as described previously under **RR CUL-1**, California Health and Safety Code, Section 7050.5 requires that if human remains are discovered in the Project Site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation. If the coroner determines that the remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Therefore, with implementation of **RR CUL-1**, **MM CUL-1,** and **MM TCR-1** through **MM TCR-10**, impacts to TCRs would be less than significant.

Mitigation Program:

Mitigation Measure

MM TCR-1: **Archaeological Monitoring.** Prior to the issuance of a grading permit, the Developer shall retain a professional archaeologist, who meets the U.S. Secretary of the Interior Standards, to conduct monitoring of all mass grading and trenching activities.

The Project Archaeologist, in consultation with the Consulting Tribe(s) including Pechanga Band of Luiseño Indians, the contractor, and the City, shall develop a CRMP as defined in **MM TCR-3**. The Project archeologist shall attend the pre-grading meeting with the City, the construction manager and any contractors and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The archaeological monitor shall have the authority to temporarily halt and redirect earth moving activities in the affected area in the event that suspected archaeological resources are unearthed.

MM TCR-2: **Native American Monitoring.** Prior to the issuance of a grading permit, the Developer shall secure agreements with the Pechanga Band of Luiseño Indians for tribal monitoring. The City is also required to provide a minimum of 30 days' advance notice to the tribes of all mass grading and trenching activities. The Native American Tribal Representatives shall have the authority to temporarily halt and redirect earth moving activities in the affected area in the event that suspected archaeological resources are unearthed. The Native American Monitor(s) shall attend the pre-grading meeting with the Project Archaeologist, City, the construction manager and any contractors and will conduct the Tribal Perspective of the mandatory Cultural Resources Worker Sensitivity Training to those in attendance.

MM TCR-3: In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries:

a. One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the City of Moreno Valley Planning Department:

    i. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place they were found with no development affecting the integrity of the resources.

    ii. Onsite reburial of the discovered items as detailed in the treatment plan required pursuant to **MM CUL-1**. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American

Tribal Governments as defined in **MM CUL-1**. The location for the future reburial area shall be identified on a confidential exhibit on file with the City, and concurred to by the Consulting Native American Tribal Governments prior to certification of the environmental document.

MM TCR-3: **Cultural Resource Monitoring Plan (CRMP).** The Project Archaeologist, in consultation with the Consulting Tribe(s), the contractor, and the City, shall develop a CRMP in to address the details, timing and responsibility of all archaeological and cultural activities that will occur on the Project Site. A consulting Tribe is defined as a Tribe that initiated the AB 52 tribal consultation process for the Project, has not opted out of the AB52 consultation process, and has completed AB 52 consultation with the City as provided for in Cal Pub Res Code Section 21080.3.2(b)(1) of AB52. Details in the Plan shall include:

a) Project description and location;

b) Project grading and development scheduling;

c) Roles and responsibilities of individuals on the Project;

d) The pre-grading meeting and Cultural Resources Worker Sensitivity Training details;

e) The protocols and stipulations that the contractor, City, Consulting Tribe(s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.

f) The type of recordation needed for inadvertent finds and the stipulations of recordation of sacred items.

g) Contact information of relevant individuals for the Project.

MM TCR 4: The City shall verify that the following note is included on the Grading Plan:

“If any suspected archaeological resources are discovered during ground disturbing activities and the Project Archaeologist or Native American Tribal Representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the Project Archaeologist and the Tribal Representatives to the site to assess the significance of the find."

MM TCR 5: **Inadvertent Finds**. If potential historic or cultural resources are uncovered during excavation or construction activities at the Project Site that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to Project approval, all ground disturbing activities in the affected area within 100 feet of the uncovered resource must cease immediately and a qualified person meeting the Secretary of the Interior's standards (36 CFR 61), Tribal Representatives, and all site monitors per the Mitigation Measures, shall be consulted by the City to evaluate the find, and as appropriate recommend alternative measures to avoid, minimize or mitigate negative effects on the historic, or prehistoric resource. Further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. Work shall be allowed to continue outside of the buffer area and will be monitored by additional archeologist and Tribal Monitors, if needed. Determinations and recommendations by the consultant shall be immediately submitted to the Planning Division for consideration, and implemented as deemed appropriate by the Community Development Director, in consultation with the State Historic Preservation Officer (SHPO) and any and all Consulting Native American Tribes as defined in **MM TCR-2** before any further work commences in the affected area. If the find is determined to be significant and avoidance of the site has not been achieved, a Phase III data recovery plan shall be

prepared by the Project Archeologist, in consultation with the Tribe, and shall be submitted to the City for their review and approval prior to implementation of the said plan.

MM TCR 6: **Human Remains**. If human remains are discovered, no further disturbance shall occur in the affected area until the County Coroner has made necessary findings as to origin. If the County Coroner determines that the remains are potentially Native American, the California Native American Heritage Commission shall be notified within 24 hours of the published finding to be given a reasonable opportunity to identify the “most likely descendant”. The “most likely descendant” shall then make recommendations, and engage in consultations concerning the treatment of the remains (California Public Resources Code 5097.98). (GP Objective 23.3, CEQA).

MM CR 7: **Non-Disclosure of Reburial Locations**. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code 6254 (r)., parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).

MM TCR 8: **Archeology Report - Phase III and IV.** Prior to final inspection, the developer/permit holder shall prompt the Project Archeologist to submit two (2) copies of the Phase III Data Recovery report (if required for the Project) and the Phase IV Cultural Resources Monitoring Report that complies with the Community Development Department's requirements for such reports. The Phase IV report shall include evidence of the required cultural/historical sensitivity training for the construction staff held during the pre-grade meeting. The Community Development Department shall review the reports to determine adequate mitigation compliance. Provided the reports are adequate, the Community Development Department shall clear this condition. Once the report(s) are determined to be adequate, two (2) copies shall be submitted to the Eastern Information Center (EIC) at the University of California Riverside (UCR) and one (1) copy shall be submitted to the Consulting Tribe(s) Cultural Resources Department(s).

MM TCR 9: In accordance with consultations and determinations made by the developer and the Pechanga Tribe, all recorded features within CA-RIV-8274 will be avoided except for bedrock milling feature (1), which is on Lot 8. The Pechanga Tribe shall work with the project archaeologist, the developer, and the grading contractor or appropriate personnel to determine a reasonable methodology for relocating these features. Attempts will be made to excavate and relocate these boulders to the open space preserve, should their size and depth permit. If the boulders cannot be moved intact due to feasibility constraints, an attempt will be made to transversally cut into them so as to free the exposed prehistoric features, allowing the slicks themselves to be relocated to the adjacent open space preserve. The current Department of Parks and Recreation (DPR) forms shall be updated, detailing which features were relocated, the process taken, and updated maps provided documentation of the features’ new location. The site record should clearly indicate that the features are not in their original location and why they were relocated.

MM TCR 10: Prior to any earthmoving activities, milling features 3 and 5 of CA-RIV-8274 will be fenced and identified as an Environmentally Sensitive Area (ESA). The Project Applicant will ensure that appropriate temporary fencing is installed (i.e., orange fabric/barrier fencing) to prevent any unintentional disturbances to features 3 and 5 of CA-RIV-8274 during any earthmoving activities on the project site. The fencing will be installed before clearing and grubbing and will not be removed until all earthmoving activities have been completed. The project archaeologist and Pechanga Tribal Monitor will be on site to monitor the fence installation and removal and will conduct daily inspections of the fencing to make sure that

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

it is intact and has not been breached. If the project archaeologist and/or Pechanga Tribal Monitor identify a breach of the fence, i.e., removal, cut, depressed, driven over or intentionally breached in any way, all work within a 25-foot buffer shall cease and the Project Applicant, City, project archaeologist and the Pechanga Tribe shall meet and confer as to the best method to repair the fencing. The person(s) responsible for the breach and the Construction Supervisor (or appropriate supervisory personnel) shall be required to retake the sensitivity training provided at the beginning of construction, in addition to any other remedies considered appropriate.

Sources:

1. Moreno Valley General Plan, adopted July 11, 2006
   - Chapter 7 – Conservation Element – Section 7.2 – Cultural and Historical Resources
2. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006
   - Section 5.10 – Cultural Resources
     - Figure 5.10-1 – Locations of Listed Historic Resource Inventory Structures
     - Figure 5.10-2 – Location of Prehistoric Sites
     - Figure 5.10-3 – Paleontological Resource Sensitive Areas
   - Appendix F – Cultural Resources Analysis, Study of Historical and Archaeological Resources for the Revised General Plan, City of Moreno Valley, Archaeological Associates, August 2003.
3. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code
4. Moreno Valley Municipal Code Title 7 – Cultural Preservation
5. Cultural Resources Inventory for the City of Moreno Valley, Riverside County, California, prepared by Daniel F. McCarthy, Archaeological Research Unit, University of California, Riverside, October 1987 (*This document cannot be provided to the public due to the inclusion of confidential information pursuant to Government Code Section 6254.10.*)

XIX. UTILITIES AND SERVICE SYSTEMS – 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 telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Response:

Less Than Significant Impact.

Water

The Project Site is served by EMWD. EMWD imports water from MWD that it uses to provide water supply to the City. The imported water received from MWD is treated at two treatment plants: Henry J. Mills (Mills) in Riverside and Robert A. Skinner (Skinner) in Winchester. At Mills, State Water Project water is treated, while at Skinner a combination of State Water Project water and Colorado River Aqueduct water is treated. Untreated water supplied by MWD is treated by EMWD at a microfiltration plant in Perris. An additional

microfiltration plant is located in Hemet, which provides untreated MWD water directly to a number of agricultural and wholesale customers. EMWD is increasing the use of recycled water, through expansion and maximization of the four regional water reclamation facilities (Moreno Valley 2021b).

The Project would generate an increase in water demand through the addition of approximately 319 people and 108 residential units; however, the neighboring properties are already served by water infrastructure. The Project includes trenching and installation of a water line to connect to the existing water main line located within Morton Road near the intersection with Jennings Court, which serves the existing residential development south of the Project Site. The impacts of these water-related improvements are disclosed in this Initial Study/Mitigated Negative Declaration (IS/MND), and no other relocation or expansion of water infrastructure is anticipated.

Wastewater

EMWD is responsible for all wastewater collection and treatment in its service area. EMWD's wastewater collection systems include: 1,534 miles of gravity sewer, 53 lift stations, and 4 operational regional water reclamation facilities (RWRFs), with interconnections between local collection systems serving each treatment plant. Inter-connections between the local collections systems serving each treatment plant allow for operational flexibility, improved reliability, and expanded deliveries of recycled water. All of EMWD's RWRFs produce tertiary effluent, suitable for all Department of Health Services permitted uses, including irrigation of food crops and full-body contact. EMWD treats all of the wastewater collected in its service area to tertiary standards and disposes of its recycled water in one of three ways: (1) customer sales, (2) discharge to Temescal Creek, or (3) percolation and evaporation while stored in ponds throughout EMWD. In 2015, EMWD collected 48,665 acre-feet of wastewater, treated 45,385 acre-feet of wastewater, and recycled 34,001 acre-feet of wastewater within its service area (Moreno Valley 2021b).

The Project would generate an increase in wastewater generation through the addition of approximately 319 people and 108 residential units; however, the neighboring properties are already served by wastewater infrastructure. The Project includes trenching and installation of a sewer line to connect to the existing sewer main line located within Morton Road near the intersection with Jennings Court, which serves the existing residential development south of the Project Site. The impacts of these wastewater-related improvements are disclosed in this IS/MND, and no other relocation or expansion of water infrastructure is anticipated. Furthermore, in July 2021 a will serve letter was received by the Developer confirming that EMWD is willing to provide water and sewer services to the Project (EMWD, July 2021a).

Stormwater

The Project includes the installation of hillside drainage, inlets, and storm drain lines to intercept and convey stormwater either along existing flow paths or to the Project's two combination detention and bioretention basins (e.g., Basins A and B). Basin overflows have been designed to connect downstream to two natural drainage courses, similar to pre-Project conditions. Project drainage and stormwater improvements are depicted in Figure 6, Preliminary BMP Site Plan from the Preliminary Water Quality Management Plan.

Electricity, Natural Gas, and Telecommunications

SCE and the Moreno Valley Electric Utility (MVU) provide electricity to the Planning Area. SCE, a subsidiary of Edison International, serves approximately 180 cities in 11 counties across central and southern California. Today SCE has over 6,500 residential and business clients in a service area that covers the eastern and southern portions of the city. Southern California Gas provides the City with natural gas service. SoCalGas' service territory encompasses approximately 20,000 square miles and more than 500 communities. No telecommunications facilities occur within the Project Site. The Project would install electricity, natural gas, and telecommunication lines onsite and would be responsible to connect to existing distribution lines offsite. The Project includes trenching between the Project Site and the intersection of Morton Road and Jennings Court to connect to electricity, natural gas, and telecommunications facilities.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Conclusion

The Project would not require the relocation or extension of utility infrastructure, beyond the connection to existing utility mainlines that are located within Morton Road southwest of the Project Site. Less than significant impacts would result related to these thresholds, 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?	☐	☐	☒	☐

Response:

Less than Significant Impact. EMWD's *2020 Final Urban Water Management* Plan (UWMP) is an update to the 2015 UWMP and was prepared in response to Water Code Sections 10610 through 10656 of the Urban Water Management Planning Act. Detailed information about EMWD's water demand, supply, and reliability is provided through 2040. As stated in the UWMP, EMWD's recycled water distribution system includes 135 miles of large diameter transmission pipelines, 6,000 acre feet of surface storage reservoirs (10 separate sites), and 4 regional pumping plants. As set forth in the UWMP, EMWD has the supply needed to meet the demand of its customers through 2040 (Moreno Valley 2021b). The conclusion is based on the assurances of MWD that it would be able to supply member agency demands, the reliability of local groundwater supplies achieved through groundwater management plans and the development of recycled water resources. The UWMP was developed based on future population projections prepared by SCAG, which assumed R2 and HR zoning for the Project Site (SCAG 2020).

The Project proposes a zone change, which would allow for a greater density for the Project Site, which may result in nominal increases in indoor water usage above what was assumed in the UWMP. However, this slight increase in residential density would have a negligible effect on City and regional water demand relative to the overall service area of the EMWD. In July 2021 a will serve letter was received by the Project Developer confirming that EMWD is willing to provide water and sewer services to the Project (EMWD, 2021a).

Using the Actual 2020 Gallons (of Water) Per Capita Per Day (GPCD) measurements reported in EMWD's 2020 UWMP of 125 GPCD, the new 319 residents that would reside within the Project site would result in an increased water demand above existing conditions of 39,875 gallons per day and 14,554,375 gallons per year, which is roughly 44.67 acre-feet of water annually. The Project's demand equates to 0.0007-percent of the 62,970 acre-feet of water that is anticipated to be available in 2025 by EMWD's 2020 UWMP.

Given the reasoning listed above, the Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years, and impacts would be less than significant.

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?	☐	☐	☒	☐

Response:

Less than Significant Impact. The City provides trash, recycling, and special waste handling services to residents and businesses through a contract with Waste Management. The majority of solid waste generated within the city is disposed of at Badlands Sanitary Landfill, located north of SR-60 and west of I-10 off Ironwood Avenue. Two other landfills within the County of Riverside, El Sobrante Landfill and Lamb

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Canyon Landfill, also have the capacity to serve the City. These three landfills have a combined remaining capacity of approximately 178.8 million cubic yards (Moreno Valley 2021b).

The Project involves demolition of limited paved surfaces within Morton Road to construct utility improvements and drainage facilities, which would generate debris that would need to be removed from the Project Site. The solid waste generated from the demolition Project could be accommodated within the permitted capacity of the El Sobrante Landfill. Also, Project implementation would result in the development of 108 residential units. Based on a solid waste generation rate of 4.9 pounds per person per day, assuming a maximum occupancy of 319, the Project's residential uses would generate approximately 1,563 pounds of trash per day (USEPA 2021).

The City's Building Code requires development projects to complete and submit a Waste Management and Recycling Plan for approval prior to issuance of building permits. The Waste Management and Recycling Plan for the Project would identify the project type, and estimate the amount of materials to be recycled during construction. The Project would also be required to complete a Diversion Report for review by the City's Building Department to demonstrate that the Project recycled a minimum of 50 percent of its construction waste. Future site-specific development under the Project would be required to complete a Waste Management and Recycling Plan and a Diversion Plan, which would ensure consistency with local and state requirements regarding waste diversion, including the California Integrated Waste Management Act. Additionally, the Project would also be required to implement organic waste recycling programs consistent with the requirements of AB 1826 and SB 1383. Therefore, the Project would not generate solid waste in excess of state or local standards, exceed the capacity of local infrastructure, or conflict with federal, State, or local management and reduction statutes and regulations related to solid waste, and impacts would be less than significant.

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

Response:

Less Than Significant Impact. The California Integrated Waste Management Act (AB 939), signed into law in 1989, established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. In addition, the bill established a 50 percent waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted. Per the requirements of the Integrated Waste Management Act, the Riverside County Board of Supervisors adopted the County of Riverside Countywide Integrated Waste Management Plan (CIWMP), which outlines the goals, policies, and programs the County and its cities implement to create an integrated and cost-effective waste management system that complies with the provisions of AB 939 and its diversion mandates.

In order to assist the City of Moreno Valley in achieving the mandated goals of the Integrated Waste Management Act, the Project's building occupant(s) would be required to work with future refuse haulers to develop and implement feasible waste reduction programs, including source reduction, recycling, and composting. Additionally, in accordance with the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code Section 42911), the Project is required to provide adequate areas for collecting and loading recyclable materials where solid waste is collected. The collection areas are required to be shown on construction drawings and be in place before occupancy permits are issued. Further, in compliance with AB 341, the future occupant(s) of the Project would be required to arrange for recycling services, if the occupant generates four (4) or more cubic yards of solid waste per week. The implementation of these mandatory requirements would reduce the amount of solid waste generated by the Project and diverted to landfills, which in turn would aid in the extension of the life of affected disposal sites. The Project would be required to comply with all applicable solid waste statutes and regulations; as such, impacts related to solid waste statutes and regulations would be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. 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?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The Project Site is located within a FHSZ in a Local Responsibility Area (LRA) (CALFIRE 2009). LRAs include incorporated cities, cultivated agriculture, lands, and portions of the desert. Local responsibility area fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government (CALFIRE 2007). Outside of the City of Moreno Valley Boundaries adjacent properties to the west, north, and east of the Project Site are located within a FHSZ in a State Responsibility Area (SRA) (CAL FIRE 2009). SRA is a legal term defining the area where the State has financial responsibility for wildland fire protection (CALFIRE 2007). As noted above in response to Threshold IX(f), the Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. As described in more detail in response to Threshold XVII(a), the Project would result in additional traffic on local roadways during construction and operation of the Project. However, this additional traffic would not degrade the level of service on these roads or at local intersections. As such, evacuation routes identified in local plans, including Box Springs Road, SR-60, and I-215 would not be significantly affected by the Project. Therefore, the Project would result in less than significant impacts related to this threshold, 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?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The Project Site, as well as much of the northern and eastern portions of the City of Moreno Valley, is subject to wildland fires. As noted above, the Project Site is located within and adjacent to a FHSZ. The Project would be constructed in compliance with the Fire Code, California Building Code, and the objectives, policies, and programs of the City's General Plan (Moreno Valley 2021b). Also, the Project includes the establishment and ongoing maintenance of fuel modification zones along the northern and eastern boundaries of the Project Site, as shown in the Fire Hazard Analysis and Approach memorandum that was prepared for the Project. Given the above considerations, the Project would not exacerbate wildfire risks, or expose Project occupants to pollutant concentrations from wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant, and 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?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The Project includes the installation and maintenance of infrastructure, including roads within the Project Site, as well as wet and dry utilities within the Project Site and within the existing, developed portions of Morton Road just south of the Project Site and north of the intersection with Jennings Court. These improvements have no features that would substantially exacerbate wildfire risks during construction, operation, or ongoing maintenance. Electrical and gas lines serving the Project would

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

be underground and within proposed and existing roadway rights-of-way. Also, as mentioned above, the Project includes the establishment and ongoing maintenance of fuel modification zones along the northern and eastern boundaries of the Project Site, as shown in the Fire Hazard Analysis and Approach memorandum that was prepared for the Project, which would result in reduced wildfire risks. Less than significant impacts would result from the Project relative to this threshold, and 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?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The Project Site is located upslope and directly adjacent to Morton Road. Stormwater flows from the Project Site would be conveyed and retained as described in more detail in response to threshold questions X (a–e) "Hydrology and Water Quality", which would avoid the potential for downslope or downstream flooding, and for significant alterations to existing drainage patterns. The Project would result in an increase in impervious surface coverage and minor alterations to ephemeral drainages that traverse the Project Site; however, the Project's drainage and water quality improvements would intercept, slow, and treat stormwater before it is allowed to flow into natural drainage courses away from the Site, similar to existing conditions. The Project's drainage design is depicted in Figure 6, Project Specific Water Quality Management Plan, which includes a system of hillside drainage facilities, inlets, and storm drain lines as well as two combination detention and bioretention basins. Through the implementation of this drainage design and stormwater BMPs, the Project would have less than significant impacts related to downslope and downstream flooding due to runoff and drainage changes.

The Project would have no effects on the stability of slopes outside of the Project Site. As described in response to threshold question VII(a)(iv) "Geology and Soils" there was no geologic literature that indicated the presence of landslides on or directly adjacent to the Project Site (LGC Geo-Environmental, Inc 2018a). Therefore, the Project would have less than significant impacts related to post-fire slope instability and landslide.

XXI. 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 endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐

Response:

Less Than Significant with Mitigation. Implementation of the Project would have the potential to degrade the quality of the existing environment as described below. Potential significant impacts have been identified related to Biological Resources (IV), Cultural Resources (Section V), Geology and Soils (VII), and Tribal Cultural Resources (XVIII). Mitigation measures have been identified related to individual resource-specific impacts. The Project has the potential to result in direct and indirect impacts to nesting coastal California gnatcatcher, white-tailed kite, loggerhead shrike and other nesting birds during construction activities. Implementation of **MM BIO-1,** which requires a pre-construction nesting bird survey be conducted if ground-

disturbing and/or vegetation clearance activities are scheduled to occur during the avian nesting season (typically February 15 through August 31), would reduce impacts to these species to less than significant levels. The Project Site and vicinity contains habitat suitable for burrowing owl, a non-listed special status species. Although a focused burrowing owl survey was conducted in 2021 and burrowing owl were determined to be absent, there is the potential for burrowing owl to colonize the Project Site or nearby vicinity prior to construction due to the presence of suitable habitat. If burrowing owl should colonize the Project Site or 500-foot vicinity prior to initiation of construction activities, impacts to burrowing owl could be significant. Implementation of **MM BIO-2**, which requires a pre-construction survey for burrowing owl be conducted would reduce any potential impact to less than significant levels. The Project would result in permanent impacts to drainages within the Project Site that are classified as non-wetland waters of the United States under the jurisdiction of USACE and the RWQCB, as streambed under the jurisdiction of CDFW on the Project Site, and as riverine resources pursuant to the MSHCP. **MM BIO-3** requires that the Developer obtain regulatory permits. **MM BIO-4** specifies minimum compensatory mitigation requirements for impacts to jurisdictional waters. With implementation of **MM BIO-2, MM BIO-3,** and **MM BIO-4**, the Project would result in less than significant impacts relative to fish or wildlife species habitat and would not cause fish or wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community.

The Project is under the jurisdiction of the City of Moreno Valley and the Project Site is within the MSHCP Plan Area. Compliance with the MSHCP is mandatory and any conflict with the MSHCP would be a significant impact. To prevent conflicts with the applicable sections of the MSHCP, the Developer must do the following: pay the applicable MSHCP Development Mitigation Fee (**MM BIO-5**); implement resource avoidance measures associated with burrowing owl and riparian/riverine resources (**MM BIO-2** and **MM BIO-4**); and comply with MSHCP Urban/Wildlife Interface Guidelines (**MM BIO-7** and **RR AES-1**). Through the implementation of **MM BIO-2, MM BIO-4,MM BIO-5, MM BIO-7, and RR AES-1,** any potential conflicts with the MSHCP would be avoided and no impacts would be anticipated. The Project Site is within the Stephens' Kangaroo Rat Habitat Conservation Plan boundary. With payment of the Stephens' Kangaroo Rat Habitat Conservation Plan Development Mitigation Fee (**MM BIO-7**), the Project would be consistent with the Stephens' Kangaroo Rat Habitat Conservation Plan and less than significant impacts would result from the Project.

Given the presence of archaeological resources in the vicinity of the Project, there is the possibility that undiscovered intact cultural resources, including archaeological resources may be present below the surface in native sediments. This would represent a significant impact. However, implementation of **MM CUL-1**, which requires that any suspected cultural (archaeological) resources inadvertently unearthed during grading be evaluated by a qualified archaeologist to determine their significance and the appropriate course of action, would reduce this impact to a level considered less than significant. Also, **MM CUL-2** has been incorporated, which requires archaeological monitoring for all ground disturbance activities that occur within 30 meters (100 feet) of Sites 33-015937 and 33-015938. With implementation of these measures, impacts to archaeological resources would be reduced to less than significant.

Implementation of the Project would increase exposure to strong seismic ground shaking to additional people. Also, the Project would result in increased risks related to earthquake-induced land sliding and expansive soils. Compliance with the applicable regulations, and proper grading, design, and building construction methods specified in the Geotechnical Report, as required in **MM GEO-1**, would ensure that impacts that may result from geologic conditions at the Project Site to less than significant.

Certain soils underlying portions of the Project Site are considered moderate to high sensitivity for intact paleontological resources. Impacts to paleontological resources, if encountered, would be significant without mitigation. Incorporation of **MM GEO-2** which requires that a qualified paleontologist be retained to observe grading activities in the Older Alluvial Fan and Alluvium deposits on the Project Site and to salvage and catalogue fossils as necessary, would ensure that impacts to fossil resources are reduced to below a level of significance.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

No information has been provided to the City during the tribal consultation process for this Project indicating any likelihood of uncovering tribal cultural resources on the Project Site. Further, there are no known tribal cultural resources on or adjacent to the Project Site, and no potentially significant impacts are anticipated. Nevertheless, in the event of any inadvertent discoveries of tribal cultural resources during construction activities, mitigation measures **MM TCR-1** through **MM TCR-10** have been incorporated into the Project, which require archaeological and Native American monitoring, preparation of a Cultural Resource Monitoring Plan, procedures for artifact disposition and inadvertent finds, and preparation of Phase III and IV reports..

All of these significant impacts related to the Project are mitigated to less than significant levels through the implementation of the mitigation measures discussed above. With incorporation of the mitigation measures identified above, the Project would result in less than significant impacts related to this threshold.

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 project, and the effects of probable future projects.)?	☐	☐	☒	☐

Response:

Less Than Significant Impact. The Project would not have adverse environmental impacts at a significant level. All potential significant impacts would be addressed with mitigation measures. No significant cumulative effects are anticipated because no resources would be adversely affected by the Project, or the Project effects would be localized and of limited extent. A less than significant impact would occur in relation to cumulatively considerable effects.

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

Response:

Less Than Significant with Mitigation. The Project would not cause significant adverse effects to human beings, either directly or indirectly with mitigation incorporated. As noted above due to the geologic conditions of the Project Site, seismic ground shaking, earthquake-induced land sliding, and expansive soils present a risk of substantial adverse effects to human beings if not mitigated. Therefore, the Project is required to implement proper grading, design, and building construction methods as specified in the Geotechnical Report, as required in **MM GEO-1** to ensure that impacts are reduced to less than significant levels.

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