CITY OF MORENO VALLEY

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR SUNSET CROSSINGS

Tentative Tract Map 38443 (PEN22-0130) Sunset Crossings (North)

May 2024

Lead Agency
CITY OF MORENO VALLEY
14177 Frederick Street
Moreno Valley, CA 92552

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Project Description: The City of Moreno Valley is processing an application for a Tentative Tract Map (TTM 38443), for the development of a 135-unit single-family residential project on approximately 28.2 gross acres (23.1 net acres).

According to the City's most recent Land Use and Zoning Maps, the project site currently has land use and zoning designations of Residential 3 (R3). This is consistent with surrounding developments to the west and south of the project site, which are zoned Residential 3 (R3) and Downtown Center.

Project Location: The project site is located in the central portion of the City of Moreno Valley, north of Alessandro Boulevard, east of Nason Street, south of Cottonwood Avenue, and west of Oliver Street. The project site consists of three parcels, identified as Assessor Parcel Numbers (APNs) 488-190-028, 488-190-027, and 488-190-005. Regional access to the project site is provided by State Route 60 (SR-60) and Interstate 215 (I-215). Local access to the project site is provided by Cottonwood Avenue. The regional and local vicinity of the project site are shown in ***Exhibit 1, Regional Vicinity*** and ***Exhibit 2, Project Location***.

Project Proponent: Highpoint MV, LLC

Findings:

It is hereby determined that, based on the information contained in the attached Initial Study, the project would not have a significant adverse effect on the environment.

Mitigation Measures:

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 Biological Resources				
BIO-1	A pre-construction clearance survey shall be conducted to reconfirm the absence of burrowing owl (BUOW) within the project impact area and maintain compliance with the Multiple Species Habitat Conservation Plan (MSHCP), Migratory Bird Treaty Act (MBTA), and California Fish and Game Code (CFGC). In accordance with the MSHCP, the pre-construction clearance survey shall be conducted by a qualified	Project Applicant and qualified Biologist	Field Verification	City of Moreno Valley City of Moreno Valley Prior to Construction

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	biologist no more than 30 days prior to initiating any ground disturbing activities to avoid direct take of BUOWs. Once the survey is completed, the qualified biologist shall prepare and submit a final report documenting the results of the clearance survey to the City of Moreno Valley for review and file. If no BUOWs or occupied burrows are detected, project activities may begin, and no additional avoidance or minimization measures would be required.			
BIO-2	No less than 60 days prior to initiating project activities, a qualified bat biologist shall conduct a bat roosting habitat suitability assessment of any vegetation that may be removed, altered, or indirectly impacted by the project activities. Any locations identified as having potentially suitable bat roosting habitat by the qualified approved bat biologist shall be subject to additional nighttime surveys (bat surveys) during the summer months (i.e., June through August) to determine the numbers and bat species using the roost(s). The information collected during these additional bat surveys shall be used by the qualified bat biologist to develop species-specific measures to minimize impacts to roosting bats should bats be detected using the site. The bat surveys shall be conducted by the qualified bat biologist using an appropriate combination of visual inspection, sampling, exit counts, and acoustic surveys. The results of the pre-construction bat surveys shall be submitted to CDFW for review no less than 30 days prior to the initiation of project activities. If the presence of bats within the project is confirmed, avoidance	Project Applicant and qualified Biologist	Field Verification	City of Moreno Valley City of Moreno Valley Prior to Construction

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	and minimization measures, including the designation of buffers based upon the particular bat species found and phased removal of trees, shall be developed and submitted to CDFW for review and approval. If the site supports maternity roosts, the Project Applicant shall avoid disturbing those areas during the breeding season. If the site supports a maternity roost(s) or special-status species, the Project Applicant shall contact CDFW and conduct an impact assessment prior to commencing project activities to assist in the development of minimization and mitigation measures. The Project Applicant shall compensate for impacts and losses to maternity roosts and/or special-status bat habitat through a mitigation strategy approved by CDFW.			
BIO-3	If project-related activities are to be initiated during the nesting season (February 1 to August 31), a pre-construction nesting bird clearance survey shall be conducted by a qualified biologist no more than three (3) days prior to the start of any vegetation removal or ground disturbing activities. The qualified biologist shall survey all suitable nesting habitat within the project impact area, and areas within a biologically defensible buffer zone surrounding the project impact area. If no active bird nests are detected during the clearance survey, project activities may begin, and no additional avoidance and minimization measures shall be required. If an active bird nest is found, the species shall be identified, and a "no-disturbance" buffer shall be established around the active nest. The size of the "no-	Project Applicant and qualified Biologist	Field Verification	City of Moreno Valley City of Moreno Valley Prior to Construction

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	disturbance" buffer shall be increased or decreased based on the judgment of the qualified biologist and level of activity and sensitivity of the species. The qualified biologist shall periodically monitor any active bird nests to determine if project-related activities occurring outside the "no-disturbance" buffer disturb the birds and if the buffer shall be increased. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the "no-disturbance" buffer may occur following an additional survey by the qualified biologist to search for any new bird nests in the restricted area.			
BIO-4	Prior to initiation of construction, the Project Applicant shall obtain all necessary permits for impacts to Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW) jurisdictional areas. Mitigation for the loss of jurisdictional resources shall be negotiated with the resource agencies during the regulatory permitting process and shall ensure that mitigation to compensate for permanent impacts on jurisdictional resources is equivalent or superior to biological functions and values impacted by the proposed project.	Project Applicant	Permit issuance by CDFW and RWQCB	City of Moreno Valley City of Moreno Valley Prior to Construction
BIO-5	Prior to the issuance of a grading permit, the Project Applicant shall prepare and submit an Arborist Report to City of Moreno Valley to document the project's consistency with Chapter 9.17.030 of the Moreno Valley Municipal Code regarding the removal of heritage	Project Applicant	Field Verification	City of Moreno Valley City of Moreno Valley Prior to Issuance of Grading Permit

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	trees.			
BIO-6	Prior to initiation of construction, the Project Applicant shall purchase re-establishment or establishment credits within the Santa Jacinto Watershed through the Riverpark Mitigation Bank at a 3:1 ratio. Other offsite options for mitigation include the Riverside-Corona Regional Conservation District (RCRCD) In Lieu Fee (ILF) program, the Barry Jones mitigation bank, permittee-responsible mitigation, or other agency-approved mitigation provider. If the Santa Ana River Watershed In-Lieu Fee Program (RCRCD ILF Program) is selected, the Project Applicant shall retain a qualified biologist to prepare an equivalency analysis report and habitat monitoring and management plan (HMMP) for submittal to the Wildlife Agencies prior to construction activities. The equivalency analysis shall document the biological lift and the functions and values provided by the mitigation site and the HMMP shall describe the offsite compensatory mitigation and identifies the establishment and reestablishment performance criteria for the proposed mitigation. The long-term funding mechanism for post-restoration habitat maintenance and land management entity shall also be identified and approved by the Wildlife Agencies prior to the start of construction.	Project Applicant	Mitigation Bank Purchase Receipt	City of Moreno Valley City of Moreno Valley Prior to Construction
4.5 Cultural Resources				
CUL-1	In the event that any subsurface cultural resources are encountered during earth-moving activities, all work within 50 feet shall be halted	Project Applicant and qualified archeologist	In Field Review	City of Moreno Valley City of Moreno Valley During Construction

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	until an archaeologist can evaluate the findings and make recommendations. Prehistoric materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash, and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, hand stones). Historical materials might include wood, stone, or concrete footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, metal, glass, ceramics, and other refuse. The archaeologist may evaluate the find in accordance with federal, State, and local guidelines, including those set forth in the California Public Resources Code Section 21083.2, to assess the significance of the find and identify avoidance or other measures as appropriate. A qualified archaeologist must meet the Secretary of the Interior's Professional Qualifications Standards for archaeology.			
CUL-2	If human remains are found during project construction, those remains shall receive proper treatment in accordance with State of California Health and Safety Code Sections 7050.5-7055. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are discovered during excavation of a site. As required by state law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code shall be implemented, including notification of the County Coroner,	Project Applicant and qualified archeologist	In Field Review	City of Moreno Valley City of Moreno Valley During Construction

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	notification of the Native American Heritage Commission, and consultation with the individual identified by the Native American Heritage Commission to be the "most likely descendant." If human remains are found during excavation, excavation shall stop in the vicinity of the find and any area that is reasonably suspected to overlie adjacent remains until the County Coroner has been called out, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains.			
4.7 Geology and Soils				
GEO-1	Full-time paleontological monitoring shall be conducted during ground disturbance in undisturbed geologic contexts (i.e., bedrock and outcrops below existing asphalt and base) which have the potential to contain significant paleontological resources. Ground disturbance refers to activities that impact subsurface geologic deposits, such as grading, excavation, boring, etc. Activities taking place in current topsoil or within previously disturbed fill sediments, e.g., clearing, grubbing, pavement rehabilitation, do not require paleontological monitoring. Bedrock can occur at varying depths depending on the portion of the project area. Prior to grading or excavation in sedimentary rock material other than topsoil, the applicant shall retain a Society of Vertebrate Paleontology (SVP) qualified paleontologist. The qualified paleontologist shall monitor, or supervise the monitoring being	Project Applicant and qualified paleontologist	In Field Review	City of Moreno Valley City of Moreno Valley During Construction

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	performed by a paleontological monitor, of earth-moving activities. If any paleontological resources are discovered at the project area during construction or during any ground-disturbance activities at any depth, the paleontological monitor, in discussion with the qualified paleontologist, shall notify the on-site construction supervisor, who shall temporarily halt work or redirect all such activities within 100 feet of the discovery. At this time, the Project Applicant shall consult with the qualified paleontologist to assess the significance of the find to determine the appropriate treatment. The assessment shall follow SVP (2010) standards for identification, evaluation, disclosure, avoidance, recovery, and/or curation, as appropriate. If any find is determined to be significant, appropriate avoidance measures recommended by the qualified paleontologist shall be followed unless avoidance is determined to be unnecessary or infeasible. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. The recommendations of the qualified paleontologist shall be implemented with respect to the evaluation and recovery of fossils, after which the on-site construction supervisor shall be notified and shall direct work to continue in the location of the fossil discovery. Any fossils recovered during mitigation shall be cleaned, identified, catalogued, and permanently curated with an accredited and permanent scientific institution with a research interest in the materials. If no fossils have been recovered			

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	after 50 percent of excavation has been completed, full-time monitoring may be modified to weekly spot-check monitoring at the discretion of the qualified paleontologist. The qualified paleontologist may recommend to the client to reduce paleontological monitoring based on observations of specific site conditions during initial monitoring (e.g., if the geologic setting precludes the occurrence of fossils). The recommendation to reduce or discontinue paleontological monitoring in the project area shall be based on the professional opinion of the qualified paleontologist regarding the potential for fossils to be present after a reasonable extent of the geology and stratigraphy has been evaluated. A qualified professional paleontologist is a professional with a graduate degree in paleontology, geology, or related field, with demonstrated experience in the vertebrate, invertebrate, or botanical paleontology of California, as well as at least one year of full-time professional experience or equivalent specialized training in paleontological research (i.e., the identification of fossil deposits, application of paleontological field and laboratory procedures and techniques, and curation of fossil specimens), and at least four months of supervised field and analytic experience in general North American paleontology.			
4.17 Transportation				
TRA-1	The following project-specific improvements shall be constructed as design features in conjunction	City Traffic Engineer	Plan Review	City of Moreno Valley City of Moreno Valley

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	with development of the site, and proposed improvement plans shall be submitted to the City for review and approval prior to the issuance of a grading permit: • General Plan Buildout Year 2040: Street A and Alessandro Boulevard. Modify the southbound approach by restricting outbound traffic to right-out access only. Add an eastbound left-turn lane to include eastbound left turns into the project.			Prior to Issuance of Grading Permit
TRA-2	A construction work zone Traffic Management Plan (TMP) that complies with State/federal standards as prescribed in the California Manual on Uniform Traffic Control Devices (CA MUTCD) shall be submitted to the City for review and approval prior to the issuance of a grading permit or start of construction. The plan shall identify any roadway, sidewalk, bicycle route, or bus stop closures and detours as well as haul routes and hours of operation. All construction-related trips shall be restricted to off-peak hours to the extent possible.	City Traffic Engineer	Plan Review	City of Moreno Valley City of Moreno Valley Prior to Issuance of Grading Permit
4.18 Tribal Cultural Resources				
TCR-1	**Archaeological Monitoring.** Prior to the issuance of a grading permit, the Project Applicant shall retain a professional archaeologist to conduct monitoring of all ground-disturbing activities. The Project Archaeologist shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction. The Project	Project Applicant and qualified archeologist	In Field Review	City of Moreno Valley City of Moreno Valley During Construction

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	Archaeologist, in consultation with the Consulting Tribe(s) including the Pechanga Band of Indians and the Morongo Band of Indians, the contractor, and the City, shall develop a CRMP as defined in 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.			
TCR-2	**Native American Monitoring.** Prior to the issuance of a grading permit, the Project Applicant shall secure agreements with the Pechanga Band of Indians and the Morongo Band of Mission Indians, for tribal monitoring. The Project Applicant is also required to provide a minimum of 30 days advance notice to the tribes of all ground-disturbing 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.	Project Applicant and qualified Native American Monitor	In Field Review	City of Moreno Valley City of Moreno Valley During Construction

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
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 consultation pursuant to the definition in AB 52 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 AB 52 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 AB 52. 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	Project Applicant and qualified Archeologist	Plan Approval by City and Consulting Tribes	City of Moreno Valley City of Moreno Valley Prior to Construction

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	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			
TCR-4	**Cultural Resource Disposition.** In the event that Native American cultural resources are discovered during the course of ground-disturbing activities (inadvertent discoveries), 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: 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 Mitigation Measure TCR-1. This shall include measures and provisions to protect the future reburial area from any	Project Applicant and qualified archeologist	In Field Review	City of Moreno Valley City of Moreno Valley During Construction

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	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 Mitigation Measure TCR-3. 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. 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."			
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,	Project Applicant and qualified archeologist	In Field Review	City of Moreno Valley City of Moreno Valley During Construction

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	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 (Code of Federal Regulations, Title 36, Section 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 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.			

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
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). No photographs are to be taken except by the coroner, with written approval by the consulting Tribe[s].	Project Applicant and qualified archeologist	In Field Review	City of Moreno Valley City of Moreno Valley During Construction
TCR-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).	Project Applicant and qualified archeologist	In Field Review	City of Moreno Valley City of Moreno Valley During Construction
TCR-8	**Archeology Report - Phase III and IV.** Prior to final inspection, the Project Applicant /permit holder shall prompt the Project Archeologist to submit two (2)	Project Applicant and qualified archeologist	Monitoring Report Submittal	City of Moreno Valley City of Moreno Valley Prior to Final Inspection

No.	Mitigation Measure	Responsible Party	Monitoring Action	Enforcement Agency Monitoring Agency Monitoring Phase
	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).			

1. INTRODUCTION AND PROJECT DESCRIPTION

A. PURPOSE AND PROJECT OVERVIEW

The City of Moreno Valley is processing an application for a Tentative Tract Map (TTM 38443), for the development of a 135-unit single-family residential project on approximately 28.2 gross acres (23.1 net acres). The proposed Sunset Crossings TTM 38443 Project (project) is further described in Section I.C, below.

This Initial Study has been prepared pursuant to the California Environmental Quality Act (CEQA; California Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.).

B. PROJECT LOCATION AND DESCRIPTION OF SURROUNDING AREA

The project site is located in the central portion of the City of Moreno Valley, north of Alessandro Boulevard, east of Nason Street, south of Cottonwood Avenue, and west of Oliver Street. The project site consists of three parcels, identified as Assessor Parcel Numbers (APNs) 488-190-028, 488-190-027, and 488-190-005. Regional access to the project site is provided by State Route 60 (SR-60) and Interstate 215 (I-215). Local access to the project site is provided by Cottonwood Avenue. The regional and local vicinity of the project site are shown in ***Exhibit 1, Regional Vicinity*** and ***Exhibit 2, Project Location***.

Based upon a review of the City's 2006 General Plan land use map dated July 11, 2006, the project site currently has a land use and zoning designation of Residential (R3). Based on a review of the 2040 Land Use and Zoning Maps, the project site continues to have land use and zoning designations of Residential (R3) and Suburban Residential (R3), respectively, with an allowable maximum density of 3 dwelling units per acre [du/ac], as shown in ***Exhibit 3, Land Use***. This is consistent with surrounding residential development to the north, east, and south. Based on both the 2006 General Plan and the 2040 General Plan, the properties to the east and south of the project site are also zoned either Residential (R3), Residential (R5) or Downtown Center (DC). The neighborhoods to the north are zoned Residential Agriculture (RA2). Land uses to the west of the project site are zoned Downtown Center (DC). There are three existing educational facilities adjacent to the project site, including Moreno Elementary School (approximately 0.4-mile west of the project site); Mountain View Middle School (approximately 0.6-mile northwest of the project site); and Valley View High School (approximately 0.3-mile northwest of the project site).

C. PROJECT DESCRIPTION

The proposed project would create 135 single-family detached residential lots on an approximately 28.2-gross-acre site (TTM38443) with a density of approximately 5.8 du/ac. A General Plan Amendment and a Change of Zone are required to change the land use designation from Residential 3 (R3) to Residential 10 (R10), which allows a maximum density of 10 dwelling units per acre and apply the applicable zoning district. A Conditional Use Permit is required to

approve a Planned-Unit Development to establish unique standards for future residential units and site development.

As indicated in in Section 9.03.020, *Residential Development Districts*, of the Moreno Valley Municipal Code, the primary purpose of areas designated R10 Residential 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 is intended as an area for the development of attached residential dwelling units, as well as mobile home parks at a maximum allowable density of ten (10) dwelling units per net acre. Following approval of the General Plan Amendment and Change of Zone, the project would be consistent with the land use designation and zoning classification associated with the project site.

Development Concept

As illustrated in ***Exhibit 4, Conceptual Site Plan*** and ***Exhibit 5, Tentative Tract Map 38443,*** the single-family residential development would consist of 135 residential units with the minimum and maximum lot sizes proposed to range from 4,500 to 6,000 square feet. The maximum building height of the residences would be 26 feet, 6.5 inches. The development includes a 2.4-acre park located in the northern portion of the site. The development would be supported by internal private streets, sewer and water access, and the installation of right-of-way improvements including curb, gutter, sidewalks, and streetlights.

The project would be constructed to conform with Moreno Valley Municipal Code, Title 9, *Planning and Zoning*, and the City's adopted design standards and guidelines, which include design standards related to building size, height, setback, and materials, as well as landscaping, signage, and other considerations.

Utilities

The following utilities/infrastructure systems and services are available at the project site. Refer to ***Exhibit 6, Preliminary Grading and Utility Plan.***

- *Water and Sewer*. Water and sewer services would be provided to the project by the main water purveyor to the community, which is Eastern Municipal Water District (EMWD).
- *Drainage*. The Moreno, Sunnymead, and West End Master Drainage Plans cover the vast majority of land within Moreno Valley's city limits, including the project site, and are administered by the Riverside County Flood Control and Water Conservation District (RCFCWCD).
- *Dry Utilities*. Electricity and natural gas services would be provided to the project site by Southern California Edison (SCE) and Southern California Gas Company (SoCalGas), respectively.

Access and Circulation

Access to the project site would be provided via a northern driveway that would be located on Cottonwood Avenue and a western driveway that would be located on Nason Street. In addition, the project would add a connection to Bay Avenue that would allow access to Nason Street. It should be noted that for General Plan Buildout conditions, an additional access point located on Alessandro Boulevard would be available via the adjacent project for TTM 38442. All project access and circulation improvements would be designed and constructed consistent with City design and engineering standards, as described in detail in Section 4.17, Transportation, of this IS/MND. The project would be subject to the City's Development Impact Fee (DIF) fee program and the Western Riverside Council of Governments' (WRCOG) Transportation Uniform Mitigation Fee (TUMF) program and would be required to pay the requisite DIF and TUMF fees at the rates then in effect pursuant to the DIF and TUMF ordinances.

Drainage

Once the site has been developed, a proposed storm drain system would convey water runoff from the proposed residential development to a detention/extended detention basin (referred to in the WQMP as Extended Detention Basin 2) located in the southern portion of the project site; refer to ***Exhibit 7, WQMP Site Plan***. A second detention basin will be constructed in the park located in the northern portion of the site. This basin will be in operation until the existing offsite detention basin located on private property east of the project site is maintained and operated by the City of Moreno Valley and/or Riverside County Flood Control District. These basins will control outlet flows and treat stormwater and would have a bottom section that will be utilized as a Best Management Practice (BMP) to treat the Design Capture Volume (DCV). Stormwater runoff would pond over a sand filter section to allow runoff to receive treatment. An outlet structure would be provided within the basin with orifice openings above the water quality water surface elevation to outlet 100-year storms to the proposed Line H in Street A. The outlet structure has been designed to decrease developed flows to pre-construction rates before discharging runoff to Line H.

Landscaping

Ornamental water-efficient landscaping, including a variety of trees, shrubs, vines, and ground cover and would be installed throughout the project site. Planting materials would be selected in accordance with Moreno Valley Municipal Code Chapter 9.17, *Landscape and Water Efficiency Requirements*, and the City's adopted design standards and guidelines.

Project Construction and Phasing

Construction activities for the project would occur over 38 months and would begin in September 2024 with the opening for project occupancy in November 2027. Construction activities would occur in the following stages: site preparation, grading, building construction, architectural coating, and paving. Pursuant to Moreno Valley Municipal Code Chapter 8.14.040(E), *Hours of*

Construction, construction activities would be limited to between the hours of 7:00 a.m. to 8:00 p.m. Monday through Friday, excluding holidays and from 8:00 a.m. to 4:00 p.m. on Saturday, unless written approval is obtained from the City building official or City engineer.

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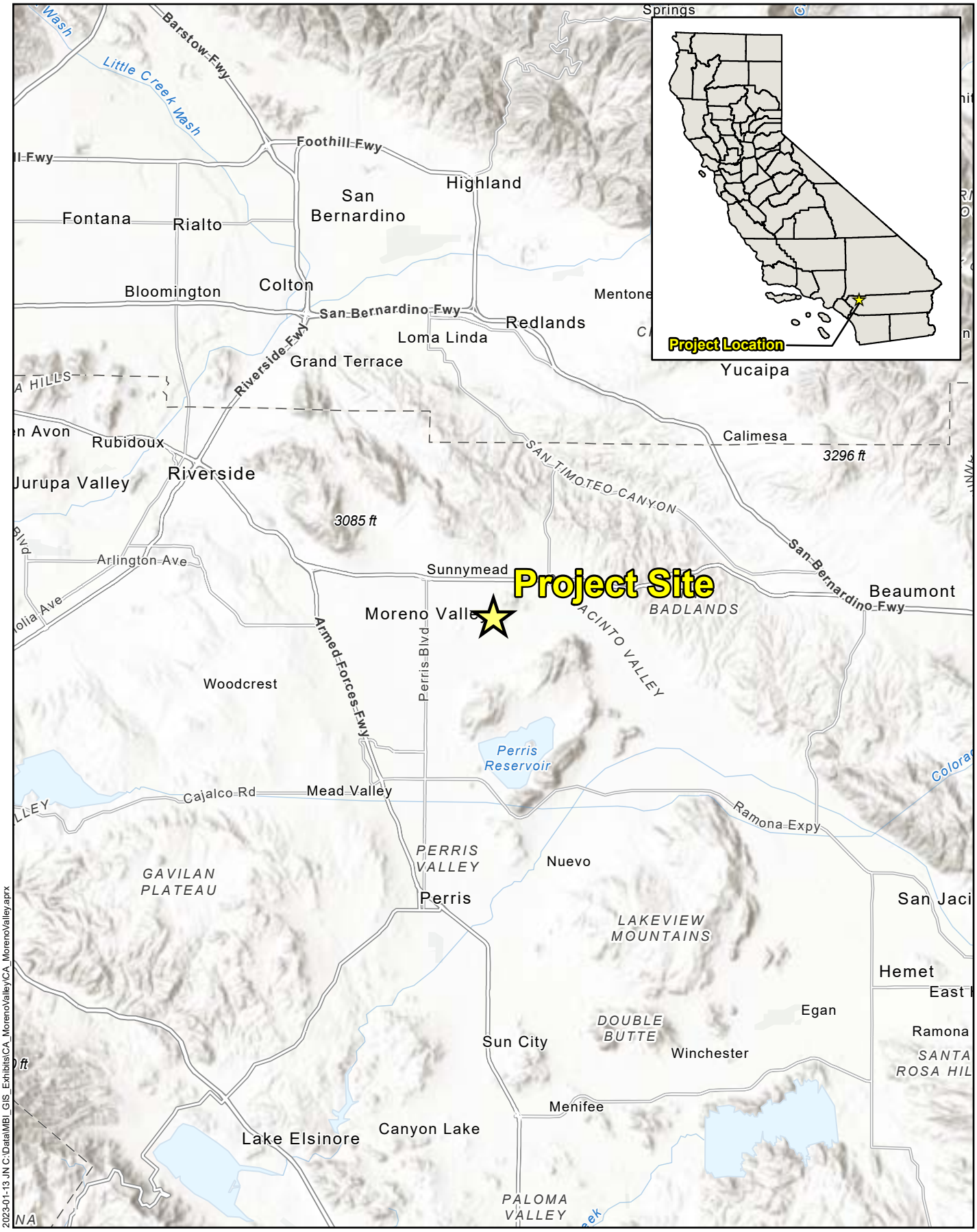

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Michael Baker INTERNATIONAL

Source: Esri, NASA, NGA, USGS, Loma Linda University, UC Riverside, City of Moreno Valley, County of Riverside, California State Parks, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA

SUNSET CROSSINGS TTM 38443
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Regional Vicinity

Exhibit 1

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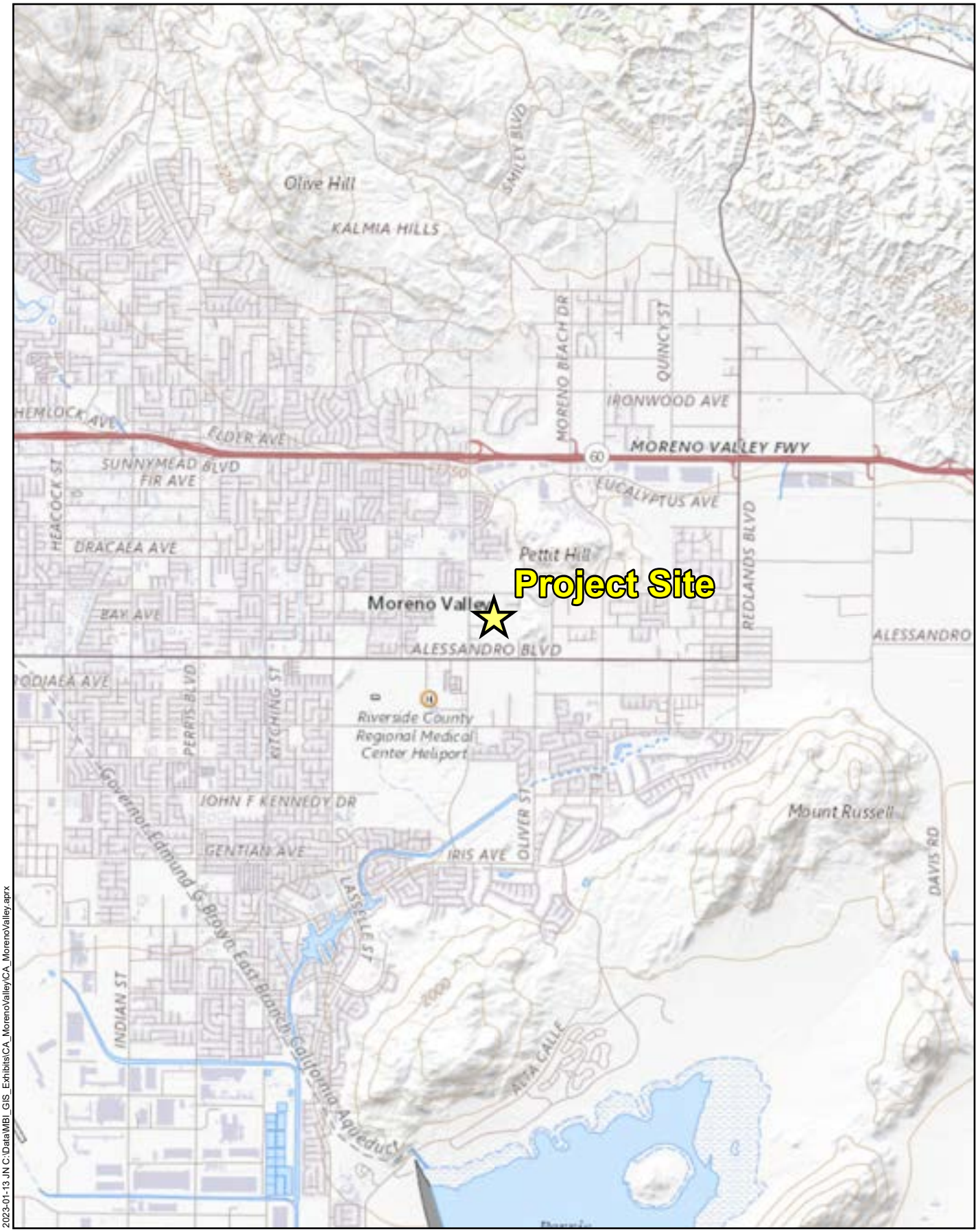

2023-01-13 JN C:\Data\MBI_GIS_Exhibits\CA_MorenoValley\CA_MorenoValley.aprx

SUNSET CROSSINGS TTM 38443
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Project Location

Michael Baker INTERNATIONAL

0 0.5 1 Miles

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information

Exhibit 2

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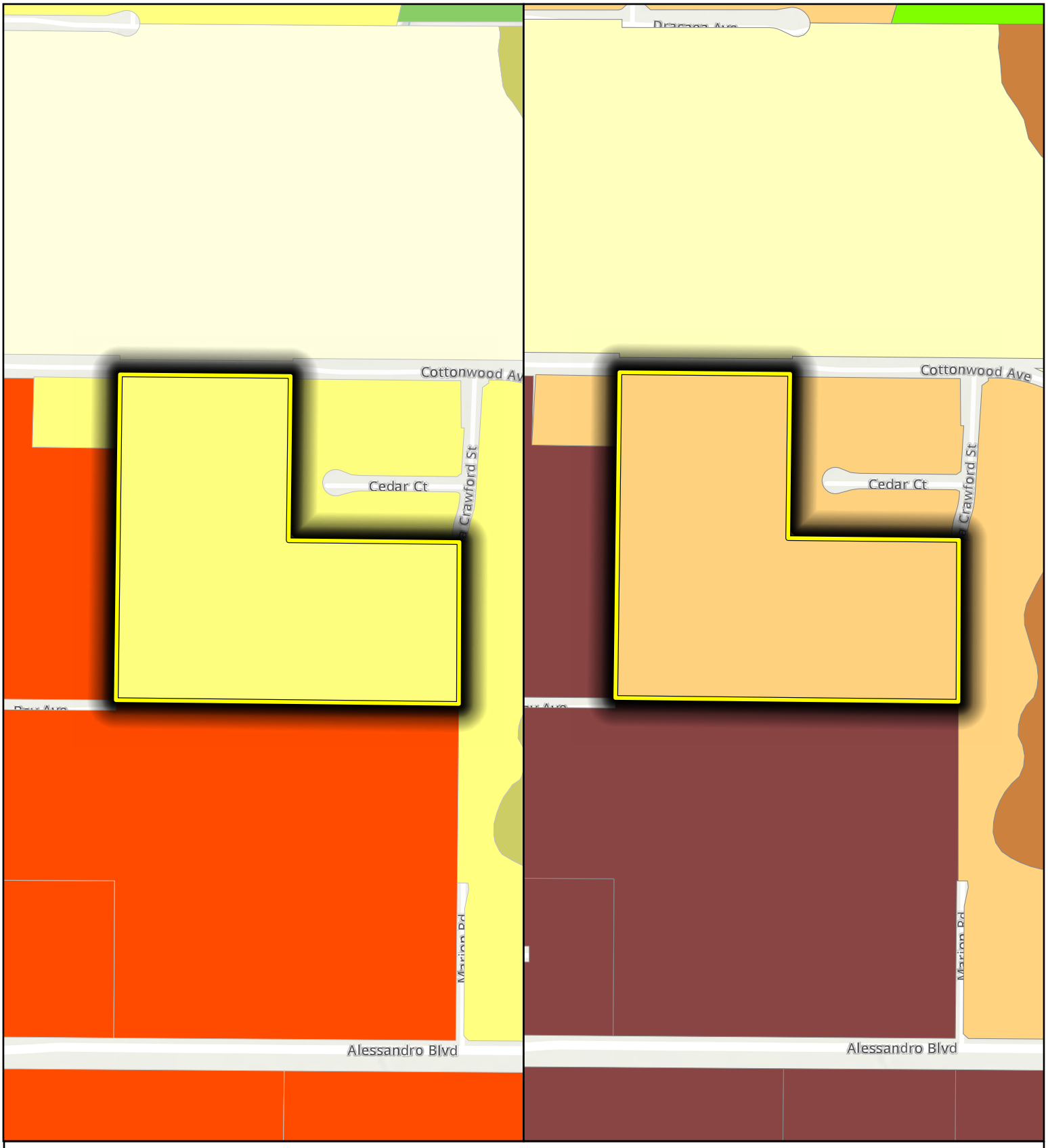

General Plan Land Use

- R2 Residential
- R3 Residential
- Hillside Residential
- Downtown Center
- Parks/Open Space

General Plan Zoning

- Downtown Center
- Large Lot Residential
- Residential Agriculture 2 DU/AC
- Suburban Residential
- Open Space/Park

0 200 400 600

Feet

SUNSET CROSSINGS TTM 38443

Initial Study/Mitigated Negative Declaration

LAND USE

Exhibit 3

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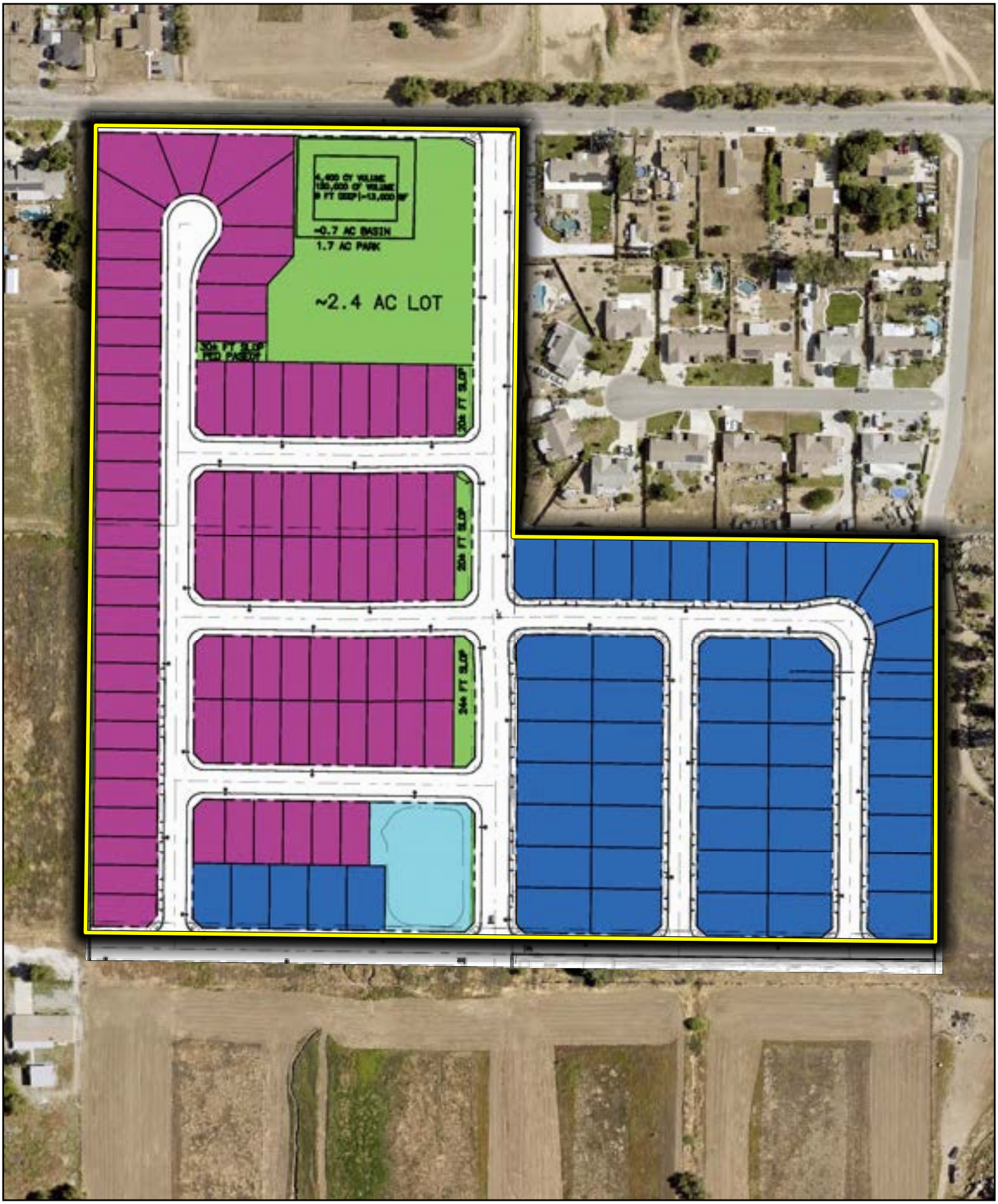

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Feet

SUNSET CROSSINGS TTM 38443

Initial Study/Mitigated Negative Declaration

CONCEPTUAL SITE PLAN

Exhibit 4

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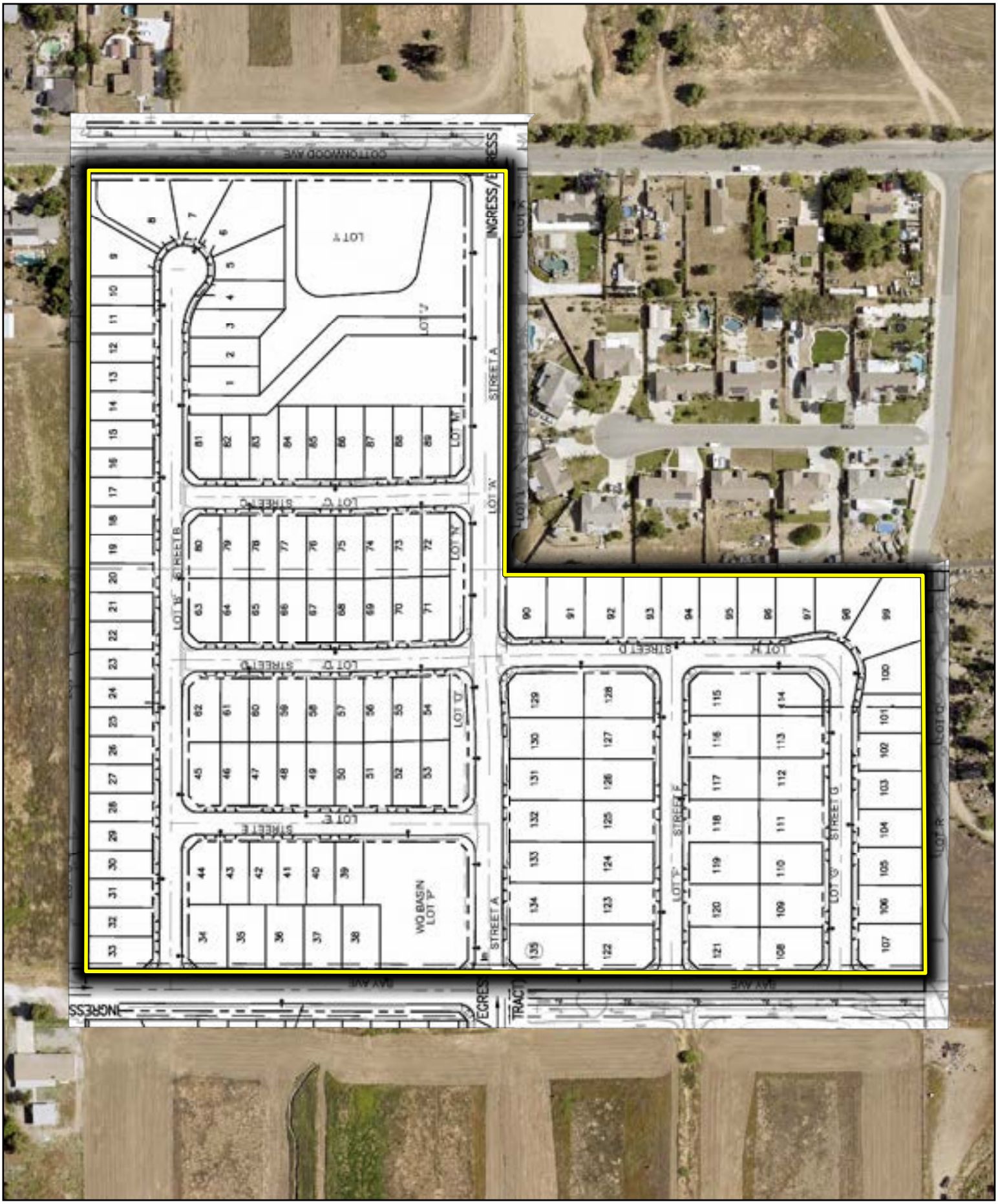

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SUNSET CROSSINGS TTM 38443

Initial Study/Mitigated Negative Declaration

TENTATIVE TRACT MAP 38443

Exhibit 5

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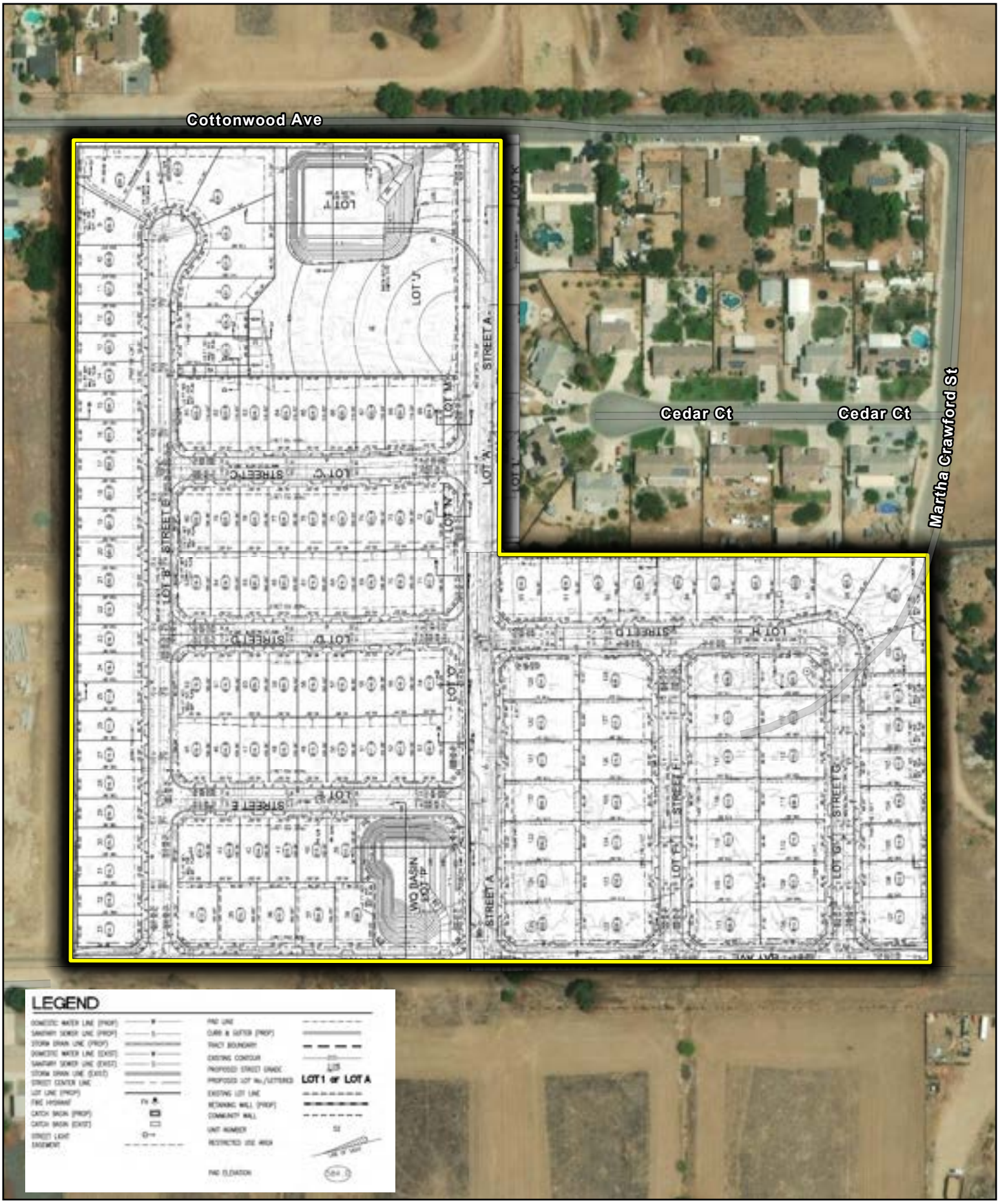

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SUNSET CROSSINGS TTM 38443

Initial Study/Mitigated Negative Declaration

PRELIMINARY GRADING AND UTILITY PLAN

Exhibit 6

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SUNSET CROSSINGS TTM 38443
Initial Study/Mitigated Negative Declaration

WQMP SITE PLAN

Exhibit 7

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2. ENVIRONMENTAL SETTING

A. Regulatory Setting

In 2006, the City conducted a comprehensive update of its 1996 General Plan, resulting in the City of Moreno Valley General Plan (2006 General Plan), which was adopted on July 11, 2006. This document can be found on the City's website at https://moval.gov/city_hall/general-plan.html. The City recently prepared a General Plan Update 2040 (2040 General Plan), which was adopted on June 15, 2021, and can be found on the City's website at https://moval.gov/cdd/documents/general-plan-adopted.html.

The City's Zoning Code (current through Ordinance 981) can be found on the Moreno Valley Municipal Code hosting website at:
https://library.qcode.us/lib/moreno_valley_ca/pub/municipal_code.

The Zoning Code is located under Title 9, *Planning and Zoning,* of the Moreno Valley Municipal Code.

B. Physical Setting

The project site consists of approximately 28.2 gross acres (23.1 net acres) located north of Alessandro Boulevard, east of Nason Street, south of Cottonwood Avenue, and west of Oliver Street. Alessandro Boulevard and Nason Street are both classified as a Divided Arterial in the General Plan Circulation Element, with 110 feet of right-of-way. The project site consists of three parcels, identified as APNs 488-190-028, 488-190-027, and 488-190-005, which are currently undeveloped. The project site is vacant and is primarily comprised of disturbed land that is dominated by ruderal/weedy and ornamental plant species. The site topography is relatively flat terrain with elevations ranging from approximately 1,611 to 1,644 feet above mean sea level.

Land uses surrounding the project include office, public (educational) facilities, and residential uses that are consistent with their respective permitted densities and complete with right-of-way improvements such as sidewalks, lighting, and landscaping.

3. ENVIRONMENTAL CHECKLIST FORM

A.Project Information

1.	**Project Title:**		Sunset Crossings TTM 38443 Project
2.	**Lead Agency Name and Address**		City of Moreno Valley Planning Division 14177 Frederick Street Moreno Valley, CA 92552
3.	**Contact Person and Phone Number**		Julia Descoteaux, Senior Planner 951.413.3209 juliad@moval.org
4.	**Project Location**		North of Alessandro Boulevard, east of Nason Street, south of Cottonwood Avenue, and west of Oliver Street (APNs 488-190-028, 488-190-027, and 488-190-005).
5.	**Project Sponsor Name and Address**		Highpointe MV I, LLC Ross Yamaguchi, Director of Community Development 530 Technology, Suite 100 Irvine, CA 92618 ross.yamaguchi@highpointeinc.com
6.	**2006 and 2040 General Plan Designation Existing**		Residential (R3)
	General Plan Designation Proposed		Residential (R10)
7.	**Zoning Existing**		Suburban Residential (R3)
	Zoning Proposed		Suburban Residential (R10)
8.	**Description of Project**		Tentative Parcel Map for the development of a 135-unit single-family residential project on approximately 28.2 gross acres (23.1 net acres).
9.	**Surrounding Land Use Designations and Zoning**		
	North	Land Use Designation	Residential: Max. 2 du/ac (R2)
		Zoning	Residential Agriculture (RA2)
	East	Land Use Designation	Residential (R3)
		Zoning	Residential (R3)
	South	Land Use Designation	Downtown Center (DC) and Residential (R3 and R5)
		Zoning	Downtown Center (DC) and Residential (R3 and R5)

	West	Land Use Designation	Downtown Center (DC)
		Zoning	Downtown Center (DC)
10.	**Other Required Public Agency Approvals**		
	• California Department of Fish and Wildlife 1602 Streambed Alteration Agreement		
	• Eastern Municipal Water District (EMWD) – Water and wastewater connection permits		
	• Santa Ana Regional Water Quality Control Board – Section 401/Porter Cologne Act Permit, National Pollutant Discharge Elimination System (NPDES) Approval		
	• State Water Resources Control Board – Stormwater Pollution Prevention Plan (SWPPP) Approval		
11.	**Have California Native American Tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3? If so, has consultation begun?**		
	Note: Conducting consultation early in the 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 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File based on 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. The City has established a Tribal Historic Preservation Office (THPO) contact list pursuant to Public Resources Code Section 21080.3. The City has distributed letters to applicable THPOs on the City's contact list, providing initial information about the project and inviting consultation. Tribal consultation was completed in 2023 and the City has incorporated the requested mitigation measures and cultural resources report updates. See Section 4.18, *Tribal Cultural Resources*, of this IS/MND for additional information.		

B.Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact requiring mitigation to be reduced to a level that is less than significant as indicated in the checklist on the following pages.

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

C.Determination

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

☐ 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.

City Representative

Julia Descoteaux
Principal Planner

5/31/2024
Date

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4. ENVIRONMENTAL ANALYSIS

4.1 AESTHETICS

Would the proposed project:					
Issues		Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?			X	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

DISCUSSION

1(a) Have a substantial adverse effect on a scenic vista?

Determination: Less Than Significant Impact.

A scenic vista is generally defined as a view of undisturbed natural lands exhibiting a unique or unusual feature that comprises an important or dominant portion of the viewshed.[1] Scenic vistas may also be represented by a particular distant view that provides visual relief from less attractive views of nearby features. Other designated Federal and State lands, as well as local open space or recreational areas, may also offer scenic vistas if they represent a valued aesthetic view within the surrounding landscape of nearby features.

According to the 2006 General Plan, the major aesthetic resources within the City include views of the mountains and southerly views of the valley. The major scenic resources within the city are visible from SR-60, the major transportation route in the area. In addition, as discussed in the 2006 General Plan and shown on Figure 7-2, Major Scenic Resources, Moreno Peak is part of a prominent landform located south of SR-60 along Moreno Beach Drive, which is visible from the project site.

According to the *Map OSRC-3: Scenic Resources and Ridgelines*, of the City's 2040 General Plan, the project site is located adjacent to a designated view corridor. Distant views of the Bernasconi

[1] A viewshed is the geographical area which is visible from a particular location.

Hills to the southeast and the Box Springs Mountains to the north are afforded from vantage points throughout the majority of the City. Under clear atmospheric conditions, motorists and pedestrians traveling along Nason Street and Alessandro Boulevard have partial views of these scenic resources, as the viewshed is obstructed by off-site trees, overhead powerlines, and buildings. Thus, the project would not have a substantial adverse effect on a scenic vista in this regard and impacts would be less than significant. However, these views are distant, obstructed, and not expansive. The proposed project would have a maximum building height of 26 feet, 6.5 inches, or two stories, consistent with surrounding development. As such, it is not expected that the new residential buildings would block views of or from the identified scenic resources. Impacts to scenic resources would be less than significant.

1(b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Determination: No Impact.

There are no officially designated State scenic highways in the City. The nearest scenic highways are State Route 74 (SR-74) (designated as eligible for listing), located approximately 12 miles south of the project site, and State Route 243 (SR-243) (officially designated), located approximately 18 miles east of the project site.[2] Views of the project site are not afforded from SR-74 or SR-243 due to intervening topography, structures, and vegetation. Thus, the project would not substantially damage scenic resources within a State scenic highway. No impact would occur in this regard.

1(c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Determination: Less Than Significant Impact.

The proposed project includes grading and construction of a 135-unit single-family residential development and would include installation of right-of-way improvements, including sidewalk, street lighting, and landscaping. The project site is located within a moderately developed portion of the City and is surrounded by single-family residential development to the north, east, and south, and by office and educational facilities to the west. Thus, for the purposes of this threshold, the analysis considers whether the project would conflict with applicable zoning or other regulations governing scenic quality.

The architectural design of the project would adhere to the requirements of 2040 General Plan Land Use and Community Character Element Policy LCC.3-15, which requires that new project designs provide building placement variations, roofline variations, architectural projections, and other embellishments to enhance the visual interest along residential streets. The project design would also adhere to the 2040 General Plan Land Use and Community Character Element Policy

[2] California Department of Transportation State Scenic Highway System Map. nd. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa Accessed December 20, 2022.

LCC.3-13, which states that new and retrofitted fences and walls should incorporate landscape elements and changes in materials or texture to deter graffiti and add visual interest. In addition, as described previously, upon approval of the proposed Zone Change from Residential (R3) to Residential (R10), the proposed project would be consistent with development standards required by the R10 land use and zoning designation, as well as the both the 2006 and 2040 General Plan Conservation Element and Land Use and Community Character Element (respectively) goals and policies related to scenic quality.

While project implementation would change the visual quality of the site and its surroundings, the proposed project would not degrade the visual quality of the project area because the project is consistent with the City's design guidelines and is consistent with the surrounding development. Therefore, with adherence to the City's design policies and goals, impacts would be less than significant.

1(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Determination: Less Than Significant Impact.

As the project is located in a moderately urbanized area, existing sources of light and glare typically come from vehicles traveling on Alessandro Boulevard and Nason Street, streetlights, exterior lighting on surrounding development and sports fields associated with Valley View High School located 0.3-mile to the northwest, and reflection from windows and roofs on the surrounding development.

Construction Impacts

Project construction could result in temporary glare impacts as a result of construction equipment and materials present at the site. However, based on the project's limited scope of construction activities, these sources of glare would not be substantial, compared to the existing building materials present in the surrounding area. Construction of the proposed project would be restricted to the City's permitted construction hours in accordance with Moreno Valley Municipal Code Chapter 8.14.040, *Miscellaneous Standards and Regulations*, which are limited to between the hours of 7:00 a.m. to 8:00 p.m. Monday through Friday, excluding holidays and from 8:00 a.m. to 4:00 p.m. on Saturday. Although some lighting may be required in the early morning or late evening, this lighting would be minimal and consistent with the existing sources of light from the surrounding residential uses, as well as the lights from traffic along Alessandro Boulevard. Therefore, no adverse light or glare impacts to adjacent properties would result from temporary construction activities and impacts would be less than significant.

Operational Impacts

Project operations would create new light sources from interior and exterior illumination associated with building materials, windows, exterior lighting, and security lighting. Interior and exterior lighting would conform to the California Green (CALGreen) Building Standards Code and Moreno Valley Municipal Code Article VI, *Applications for Lighting*, Chapter 9.16.280, *General Requirements*. All outdoor lighting would be automatic and programmable to turn on at certain

times as necessary as well as adjustable to dim the light intensity between 40 percent and 80 percent to meet the efficiency requirements of California's Building Energy Efficiency Standards (Title 24, Parts 6 and 11).

Although the project would increase light and glare in the surrounding area, light and glare produced on-site would be similar to that of the surrounding development. Adherence to State and local standards and regulations would reduce impacts to less than significant levels. Impacts would be less than significant.

MITIGATION MEASURES

None required.

4.2 AGRICULTURE AND FORESTRY RESOURCES

Would the proposed project:					
Issues		Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information 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 proposed 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 nonagricultural use?			X	
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	
c)	Conflict with existing zoning for, or cause rezoning of, forestland (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))?				X
d)	Result in the loss of forestland or conversion of forestland to non-forest use?				X
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use?			X	

DISCUSSION

2(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 nonagricultural use?

Determination: Less Than Significant Impact.

The California Department of Conservation (DOC) manages the Farmland Mapping and Monitoring Program (FMMP), which identifies and maps significant farmland in the State of California.[3] Pursuant to Public Resources Code Section 21060.1, farmland is classified using a system of five categories: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land. The classification of farmland as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland is based on the suitability of soils for agricultural production, as determined by a soil survey conducted by the National Resources Conservation Service.

According to the FMMP, a majority of the project site is identified as "Farmland of Local Importance" with a small portion of land within the project site being identified as "Other Land." The site is not identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Farmland of Local Importance is farmland important to the local agricultural economy as determined by the County Board of Supervisors and a local advisory committee. Per the City's 2006 General Plan, agricultural land within the City is generally leased to farm operators. Few, if any of the farms within the valley are owner-operated. Four major types of agriculture take place in Moreno Valley: grazing, fruit orchards, dry grain farming, potato and fruit crop farming and poultry production. Nearly all of the remaining agricultural use occurs in the rural eastern portion of Moreno Valley. The 2040 General Plan and General Plan EIR state that a variety of economic factors have caused farming to decrease substantially over recent decades. The City has a long history of agricultural use dating back to when Moreno Valley was originally settled in the 1850s, however, the high cost of land, the high cost of water and energy, fragmented ownership patterns, and market conditions have limited potential returns on investment, which have combined to disincentivize the continuation of agricultural production. As such, urban development has encroached on agricultural land within Moreno Valley over time as agricultural production is no longer a strong component of the City's economy.

Both the City's 2040 General Plan and General Plan EIR account for the conversion of agricultural uses to urban uses as a result of new development and do not propose any permanent preservation of agricultural land. The proposed project is consistent with both the City's 2006 and 2040 General Plan as the project site is located within a planning area identified for urban development and anticipated conversion of agricultural land to non-agricultural urban uses. Further, the project site is not designated as agriculture on the City's existing land use map, but rather, it is designated as residential land use. As such, development under the 2006 and 2040

[3] California Department of Conservation. n.d. Important Farmland Finder website. Accessed December 21, 2022. https://www.conservation.ca.gov/dlrp/fmmp.

General Plan is consistent with the orderly transition of agricultural land to other urban and rural land uses pursuant to the 2006 General Plan Parks, Recreation and Open Space Element Objective 4.1, and 2040 General Plan Open Space and Resource Conservation Element Policy OSCR.1-6. Therefore, the impacts would be less than significant.

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

Determination: Less Than Significant Impact.

As previously discussed, the project site has land use and zoning designations of Residential (R3) and Suburban Residential (R3) with an allowable maximum density of 3 dwelling units per acre [du/ac]. This is consistent with surrounding residential development to the north, east, and south. The properties to the west, east and south of the project site are zoned Residential (R3) or Residential (R5). The neighborhoods to the north are zoned Residential Agriculture (RA2).

Given that the proposed project's density would be 5.8 du/ac, the project would require a General Plan Amendment to change the site's land use designation from Residential: Max. 3 du/ac R3) to Residential: Max. 10 du/ac (R10) and a Change of Zone from Suburban Residential 3 (R3) to Suburban Residential 10 (R10). However, the proposed project is located within a planning area identified by both the City's 2006 and 2040 General Plan for urban development and is therefore consistent with the objectives of the General Plans. Following approval of the General Plan Amendment and Zone Change, the project would be consistent with the land use designation and zoning designations associated with the project site.

Further, no agricultural operations currently occur at the project site and the project site is not covered under an existing Williamson Act contract. Thus, impacts related to conflicting with existing zoning for agricultural use or a Williamson Act contract would be less than significant.

2(c) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timber and zoned Timberland Production (as defined by Government Code Section 51104(g))?

Determination: No Impact.

The City does not have any zoning classifications for forestland, timberland, or timberland production zones. The project site is zoned Residential (R3) and Suburban Residential (R3) and is not occupied or used for forestland or timberland. As such, project implementation would not conflict with existing zoning of, or result in the rezoning of forestland, timberland, or timberland zoned Timberland Production. Therefore, no impact would occur.

2(d) Result in the loss of forestland or conversion of forestland to non-forest use?

Determination: No Impact.

Refer to Response 4.2(c). No impact would occur in this regard.

2(e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use?

Determination: Less Than Significant Impact.

Refer to Responses 4.2(a) through 4.2(d). Less than significant impacts would occur in this regard.

MITIGATION MEASURES

None required.

4.3 AIR QUALITY

Would the proposed project:					
Issues		Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?			X	
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?			X	
c)	Expose sensitive receptors to substantial pollutant concentrations?			X	
d)	Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?			X	

The analysis and findings throughout this section are based on the *Air Quality, Energy and Greenhouse Gas Emissions Impact Modeling Data* (Air Quality, Energy and Greenhouse Gas Data) prepared by Michael Baker International, dated January 12, 2023, provided as **Appendix 1** of this IS/MND.

DISCUSSION

3(a) Conflict with or obstruct implementation of the applicable air quality plan?

Determination: Less Than Significant Impact.

The project is located within the South Coast Air Basin (Basin), which is governed by the South Coast Air Quality Management District (SCAQMD). On December 2, 2022, the SCAQMD Governing Board adopted the *2022 Air Quality Management Plan* (2022 AQMP). The 2022 AQMP incorporates the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions and updated emission inventory methodologies for various source categories. Additionally, the 2022 AQMP utilized information and data from the Southern California Association of Governments (SCAG) and its *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS). According to SCAQMD, if a project is consistent with the 2022 AQMP that is intended to bring the Basin into attainment for all criteria pollutants, it is considered to have less than significant cumulative impacts. According to the SCAQMD CEQA *Air Quality Handbook*, in order to determine consistency with 2022 AQMP, two main criteria must be addressed:

Criterion 1:

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for

a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

a) *Would the project result in an increase in the frequency or severity of existing air quality violations?*

Since the consistency criteria identified under the first criterion pertains to pollutant concentrations, rather than to total regional emissions, an analysis of the project's pollutant emissions relative to localized pollutant concentrations is used as the basis for evaluating project consistency. As discussed in Response 4.3(c), localized concentrations of carbon monoxide (CO), nitrogen oxide (NO_X), particulate matter less than 10 microns in diameter (PM_{10}), and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) would be less than significant during project construction and operation. Therefore, the proposed project would not result in an increase in the frequency or severity of existing air quality violations.

b) *Would the project cause or contribute to new air quality violations?*

As discussed in Responses 4.3(b) and 4.3(c), the proposed project would result in emissions that are below the SCAQMD thresholds for regional and localized emissions. Therefore, the project would not have the potential to cause or affect a violation of the ambient air quality standards.

c) *Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?*

The proposed project would result in less than significant impacts with regard to regional and localized concentrations during project construction and operation; refer to Reponses 4.3(b) and 4.3(c). As such, the project would not delay the timely attainment of air quality standards or 2022 AQMP emissions reductions.

Criterion 2:

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the Basin focuses on the attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether or not the project exceeds the assumptions utilized in preparing the forecasts presented in the 2022 AQMP. Determining whether or not a project exceeds the assumptions reflected in the 2022 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) *Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?*

A project is consistent with the 2022 AQMP in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the 2022 AQMP. In the case of the 2022 AQMP, three sources of data form the basis for the

projections of air pollutant emissions: the General Plan, SCAG's regional growth forecast, and SCAG's 2020-2045 RTP/SCS. The 2020-2045 RTP/SCS also provides socioeconomic forecast projections of regional population growth.

Based on both the 2006 and 2040 General Plan Land Use Maps, the project site currently has land use and zoning designations of Residential (R3) and Suburban Residential (R3), respectively, with an allowable maximum density of 3 dwelling units per acre (du/ac). The proposed project would develop 135 single-family residential units on approximately 28.2 gross acres (23.1 net acres). The density of the project would be approximately 5.8 du/ac, which is not within the allowable density of 3 du/ac for the existing R3 land use/zoning designation. Therefore, the project requires a General Plan Amendment to change the site's land use designation from Residential: Max. 3 du/ac (R3) to Residential: Max. 10 du/ac (R10) and a Change of Zone from Suburban Residential 3 (R3) to Suburban Residential 10 (R10). The project also requires approval of a Tentative Tract Map (TTM 38443). Following approval of the General Plan Amendment and Change of Zone, the project would be consistent with the land use designation and zoning classification associated with the project site.

Based on the City's average household size of 3.70[4], the 135 residential units would introduce up to 500 additional residents within the City. The City's current population is 209,407 persons as of January 1, 2022.[5] The forecast population in 2045 is 266,800 persons.[6] The project's potential growth-inducing impacts would be considered less than significant since the 500 additional residents represents only a 0.24 percent increase from the City's current population and 0.84 percent of the City's population increase between 2022 and 2045. Thus, the project would be consistent with the types, intensity, and patterns of land use envisioned for the site and vicinity. As the SCAQMD has incorporated these same projections into the 2022 AQMP, it can be concluded that the project would be consistent with the projections. A less than significant impact would occur with regard to 2022 AQMP consistency with the project.

b) Would the project implement all feasible air quality mitigation measures?

The project would be required to comply with all applicable SCAQMD rules and regulations, including Rule 403 that requires excessive fugitive dust emissions controlled by regular watering or other dust prevention measures and Rule 1113 that regulates the ROG content of paint. As such, the project meets this AQMP consistency criterion.

c) Would the project be consistent with the land use planning strategies set forth in the AQMP?

[4] State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State*, 2021-2022 with 2020 Census Benchmark, May 2022, https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/, accessed December 27, 2022.

[5] Ibid.

[6] Southern California Association of Governments, *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy Demographics & Growth Forecast*, September 3, 2020.

Land use planning strategies set forth in the 2022 AQMP are primarily based on the 2020-2045 RTP/SCS. The project is proposing to build 135 single-family residential dwelling units and the existing Riverside Transit Agency (RTA) bus stops are located less than half a mile to the southwest of the project site. Further, in compliance with CALGreen Code, all single-family residential units of the project would install solar ready roofs and be electric vehicle (EV) charging capable by including a listed raceway within each dwelling unit to accommodate EV charging stations. Therefore, the project would be consistent with the actions and strategies of the 2020-2045 RTP/SCS. The project would be constructed to conform with Moreno Valley Municipal Code, Title 9, *Planning and Zoning*, and the City's adopted design standards and guidelines, which include design standards related to building size, height, setback, and materials, as well as landscaping, signage, and other considerations. In addition, as discussed above, the project would be consistent with both the 2006 and 2040 General Plan land use designation with the approval of the Tentative Tract Map, General Plan Amendment, and Change of Zone. As such, the project is consistent with the land use planning strategies set forth in the AQMP.

In conclusion, the determination of 2022 AQMP consistency is primarily concerned with a project's long-term influence on the Basin's air quality. The project would not result in a long-term impact on the region's ability to meet State and Federal air quality standards. Also, the project would be consistent with the 2022 AQMP's goals. As discussed above, the project's long-term influence would also be consistent with the SCAQMD and SCAG's goals and policies and is, therefore, considered consistent with the 2022 AQMP. Impacts associated with compliance with the 2022 AQMP would be less than significant.

(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?

Determination: Less Than Significant Impact.

CRITERIA POLLUTANTS

Carbon Monoxide (CO). CO is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. CO replaces oxygen in the body's red blood cells. Individuals with a deficient blood supply to the heart, patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes are most susceptible to the adverse effects of CO exposure. People with heart disease are also more susceptible to developing chest pains when exposed to low levels of carbon monoxide.

Ozone (O_3). O_3 occurs in two layers of the atmosphere. The layer surrounding the Earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratosphere (the "good" ozone layer) extends upward from about 10 to 30 miles and protects life on Earth from the sun's harmful ultraviolet rays. "Bad" O_3 is a photochemical pollutant, and needs volatile organic compounds (VOCs), NO_x,

and sunlight to form; therefore, VOCs and NO_x are O_3 precursors. To reduce O_3 concentrations, it is necessary to control the emissions of these O_3 precursors. Significant O_3 formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O_3 concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O_3 in the upper atmosphere (stratosphere) protects the Earth from harmful ultraviolet radiation, high concentrations of ground-level O_3 (in the troposphere) can adversely affect the human respiratory system and other tissues. O_3 is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible to the health effects of O_3. Short-term exposure (lasting for a few hours) to O_3 at elevated levels can result in aggravated respiratory diseases such as emphysema, bronchitis and asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Nitrogen Dioxide (NO_2). NO_x are a family of highly reactive gases that are a primary precursor to the formation of ground-level ozone and react in the atmosphere to form acid rain. NO_2 (often used interchangeably with NO_x) is a reddish-brown gas that can cause breathing difficulties at elevated levels. Peak readings of NO_2 occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). NO_2 can irritate and damage the lungs and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to NO_2 concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO_2 may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter (PM_{10}). PM_{10} refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM_{10} arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM_{10} scatters light and significantly reduces visibility. In addition, these particulates penetrate into lungs and can potentially damage the respiratory tract. On June 19, 2003, the California Air Resources Board (CARB) adopted amendments to the Statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).

Fine Particulate Matter ($PM_{2.5}$). Due to recent increased concerns over health impacts related to $PM_{2.5}$, both State and Federal $PM_{2.5}$ standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In 1997, the U.S. Environmental Protection Agency (EPA) announced new $PM_{2.5}$ standards. Industry groups challenged the new standard in court and the implementation of the standard was blocked. However, upon appeal by the EPA, the United States Supreme Court reversed this decision and upheld the EPA's new standards. On January 5, 2005, the EPA published a final rule in the Federal Register that designates the basin as a nonattainment area

for Federal $PM_{2.5}$ standards. On June 20, 2002, CARB adopted amendments for Statewide annual ambient particulate matter air quality standards. These standards were revised and established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current state standards during some parts of the year, and the Statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging.

Sulfur Dioxide (SO_2). SO_2 is a colorless, irritating gas with a rotten egg smell; it is formed primarily by the combustion of sulfur-containing fossil fuels. SO_2 is often used interchangeably with SO_x. Exposure of a few minutes to low levels of SO_2 can result in airway constriction in some asthmatics.

Volatile Organic Compounds (VOC). VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include CO, CO_2, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The SCAQMD uses the terms VOC and ROG interchangeably (see below).

Reactive Organic Gases (ROG). Similar to VOC, ROG are also precursors in forming O_3 and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_x react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant.

SHORT-TERM CONSTRUCTION EMISSIONS

The project involves construction activities associated with grading, building construction, paving, and architectural coating applications. The project would be constructed over approximately 38 months and would involve approximately 341,140 cubic yards of cut and 344,601 cubic yards of fill, resulting in 3,461 cubic yards of soil import. Exhaust emission factors for typical diesel-powered heavy equipment are based on the California Emissions Estimator Model version 2020.4.0 (CalEEMod) program defaults. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site. The analysis of daily construction emissions has been prepared utilizing CalEEMod. Refer to ***Appendix 1, Air Quality, Energy and Greenhouse Gas Data***, for the CalEEMod outputs and results. ***Table 1, Project-Generated Construction Emissions***, presents the anticipated daily short-term construction emissions.

Table 1: Project-Generated Construction Emissions

Emissions Source	Pollutant (pounds/day)[1,2]					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Year 1	3.39	34.56	28.65	0.06	5.58	2.93
Year 2	3.28	32.42	28.28	0.06	5.49	2.85
Year 3	1.62	13.47	18.37	0.04	1.54	0.77
Year 4	43.33	13.45	18.24	0.04	1.54	0.77
Maximum Daily Emissions	***43.33***	***34.56***	***28.65***	***0.06***	***5.58***	***2.93***
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Notes:
1. Emissions were calculated using CalEEMod version 2020.4.0. Winter emissions represent the worst case.
2. The reduction/credits for construction emissions are based on "mitigation" included in CalEEMod and are required by the SCAQMD Rules. The adjustments applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces two times daily; cover stockpiles with tarps; and limit speeds on unpaved roads to 15 miles per hour. The emissions results in this table represent the "mitigated" emissions shown in Appendix 1.

Source: Refer to Appendix 1 for assumptions used in this analysis.

Fugitive Dust Emissions

Construction activities are a source of fugitive dust emission that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project area. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways (including demolition as well as construction activities). Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from grading, excavation and construction is expected to be short-term and would cease upon project completion. Most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health.

Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particulate health concerns is the amount of PM_{10} generated as part of fugitive dust emissions. PM_{10} poses a serious health hazard alone or in combination with other pollutants. $PM_{2.5}$ is mostly produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. $PM_{2.5}$ is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_X and SO_X combining with ammonia. $PM_{2.5}$ components from material in the Earth's crust, such as dust, are also present, with the amount varying in different locations.

The project would implement required SCAQMD dust control techniques (i.e., daily watering), limitations on construction hours, and adhere to SCAQMD Rules 402 and 403 (which require watering of inactive and perimeter areas, track out requirements, etc.), to reduce PM_{10} and $PM_{2.5}$ concentrations. As depicted in ***Table 1***, total PM_{10} and $PM_{2.5}$ emissions would not exceed the

SCAQMD thresholds during construction. Thus, PM_{10} and $PM_{2.5}$ emissions impacts associated with project construction would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, construction worker commutes to the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to/from the site. As presented in ***Table 1***, construction equipment and worker vehicle exhaust emissions (i.e., ROG, NO_X, CO, SO_2, PM_{10} and $PM_{2.5}$) would not exceed the established SCAQMD thresholds for all criteria pollutants. Therefore, impacts in this regard would be less than significant.

ROG Emissions

In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are O_3 precursors. In accordance with the methodology prescribed by the SCAQMD, ROG emissions associated with paving and architectural coating have been quantified with the CalEEMod model. As required by SCAQMD Regulation XI, Rule 1113 – *Architectural Coating*, all architectural coatings would comply with specifications on painting practices as well as regulation on the ROG content of paint. ROG emissions associated with the proposed project would be less than significant; refer to ***Table 1***.

Total Daily Construction Emissions

As indicated in ***Table 1***, criteria pollutant emissions during construction of the proposed project would not exceed the SCAQMD significance thresholds. Thus, total construction related air emissions would be less than significant.

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a toxic air contaminant by CARB in 1986.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the California Department of Conservation Division of Mines and Geology, serpentinite and ultramafic rocks are not known to occur within the project area. Thus, no impacts would occur in this regard.

LONG-TERM OPERATIONAL EMISSIONS

Operational emissions generated by both stationary and mobile sources would result from normal daily activities on the project site after occupation (i.e., increased concentrations of ROG, NO_X, SO_X, PM_{10}, $PM_{2.5}$, and CO). Mobile source emissions would be generated by the motor vehicles traveling to and from the project site. Stationary area source emissions would be generated by the reapplication of architectural coatings, operation of landscape maintenance equipment, potential machinery, and use of consumer products. Stationary energy emissions would result from natural gas consumption associated with the project. Emissions associated with each source are detailed in ***Table 2, Project-Generated Operational Emissions***, and are discussed below.

Table 2: Project-Generated Operational Emissions

Emissions Source	Pollutant (pounds/day)[1]					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Summer Emissions						
Area	5.78	2.35	11.99	0.01	0.24	0.24
Energy	0.11	0.96	0.41	0.01	0.08	0.08
Mobile	3.62	4.55	35.25	0.08	9.19	2.49
Total Summer Emissions	***9.52***	***7.86***	***47.65***	***0.10***	***9.51***	***2.81***
Significance Threshold[2]	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***
Project Winter Emissions						
Area	5.78	2.35	11.99	0.01	0.24	0.24
Energy	0.11	0.96	0.41	0.01	0.08	0.08
Mobile	3.08	4.83	31.25	0.08	9.19	2.49
Total Winter Emissions	***8.98***	***8.14***	***43.65***	***0.10***	***9.51***	***2.81***
Significance Threshold[2]	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Notes:
1. Emissions were calculated using CalEEMod version 2020.4.0.
2. Regional daily thresholds are based on the SCAQMD significance thresholds.

Refer to Appendix 1 for assumptions used in this analysis.

Mobile Source

Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_X, SO_X, PM_{10}, and $PM_{2.5}$ are all pollutants of regional concern (NO_X and ROG react with sunlight to form O_3 [photochemical smog], and wind currents readily transport SO_X, PM_{10}, and $PM_{2.5}$). However, CO tends to be a localized pollutant, dispersing rapidly at the source.

The mobile source emissions were calculated using the trip generation data provided in the *Moreno Valley TTM 38443 Residential Traffic Impact Analysis* (Traffic Analysis) developed by Translutions, Inc. (dated August 5, 2022, revised June 21, 2023). According to the Traffic Analysis,

the proposed project would generate approximately 1,254 average daily trips, including 93 trips during a.m. peak hour and 125 trips during p.m. peak hour trips. As shown in ***Table 2***, emissions generated by vehicle traffic associated with the project would not exceed established SCAQMD thresholds. Impacts from mobile source emissions would be less than significant.

Area Source Emissions

Area source emissions would be generated from consumer products, area architectural coatings, and landscaping equipment associated with the development of the proposed project. The project would use all-electric landscaping equipment throughout the project site and conservatively, has not been accounted for in ***Table 2***. As shown in ***Table 2***, area source emissions during both summer and winter would not exceed established SCAQMD thresholds. Impacts would be less than significant in this regard.

Energy Source Emissions

Energy source emissions would be generated as a result of natural gas usage associated with the proposed project; refer to ***Table 2***. The project has been designed to exceed Title 24 standards and would install high efficiency lighting fixtures and energy efficient appliances and conservatively, all of which have not been accounted for in ***Table 2***. Energy source emissions during both summer and winter would not exceed established SCAQMD thresholds; refer to ***Table 2***. Impacts in this regard would be less than significant.

Total Operational Emissions

As shown in ***Table 2***, the total operational emissions for both summer and winter would not exceed established SCAQMD thresholds. Impacts in this regard would be less than significant.

AIR QUALITY HEALTH IMPACTS

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age, gender]). In particular, O_3 precursors, VOCs and NO_x, affect air quality on a regional scale. Health effects related to O_3 are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the project's less than significant increases in regional air pollution from criteria air pollutants would have nominal or negligible impacts on human health.

Further, as noted in the Brief of Amicus Curiae by the SCAQMD, the SCAQMD acknowledged it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants

interact and form.[7] Furthermore, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD), SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.[8]

The SCAQMD acknowledges that health effects quantification from O_3, as an example is correlated with the increases in ambient level of O_3 in the air (concentration) that an individual person breathes. SCAQMD's Brief of Amicus Curiae states that it would take a large amount of additional emissions to cause a modeled increase in ambient O_3 levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's *2012 Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NO_x and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce O_3 levels at highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify O_3-related health impacts caused by NO_x or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. Thus, as the project would not exceed SCAQMD thresholds for construction and operational air emissions, the project would have a less than significant impact for air quality health impacts.

(c) Expose sensitive receptors to substantial pollutant concentrations?

Determination: Less Than Significant Impact.

Localized Significance Thresholds

Localized Significance Thresholds (LSTs) were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized air quality impacts. The SCAQMD provides the LST lookup tables for one-, two-, and five-acre projects emitting CO, NO_X, $PM_{2.5}$, and/or PM_{10}. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The SCAQMD recommends that any project over five acres should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors. The project site is located within Source Receptor Area (SRA) 24, Perris Valley. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction and operational impacts (stationary sources only).

[7] South Coast Air Quality Management District, *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

[8] San Joaquin Valley Air Pollution Control District, *Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

Sensitive Receptors

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The closest sensitive receptors are single-family residences adjoining to the west and northeast of the project site.

Construction LST

The SCAQMD's guidance on applying CalEEMod to LSTs specifies the number of acres a particular piece of equipment would likely disturb per day.[9] SCAQMD provides LST thresholds for one-, two- and five-acre site disturbance areas. Based on information obtained from CalEEMod, the project would disturb approximately three acres per day. Therefore, LST thresholds for two-acre were conservatively utilized for the construction LST analysis. As the nearest sensitive receptors adjoin the project site, the lowest available LST values for 25 meters were used.

Table 3, Localized Emissions Significance, shows the localized construction-related emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ compared to the LSTs for SRA 24. It is noted that the localized emissions presented in ***Table 3*** are less than those in ***Table 1*** because localized emissions include only on-site emissions (e.g., from construction equipment and fugitive dust) and do not include off-site emissions (e.g., from hauling activities). As shown in ***Table 3***, the project's localized construction emissions would not exceed the LSTs for SRA 24. Therefore, localized significance impacts from project-related construction activities would be less than significant.

[9] The number of acres represent the total acres traversed by grading equipment. In order to properly grade a piece of land, multiple passes with equipment may be required. The disturbance acreage is based on the equipment list and days of the grading phase according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday.

Table 3: Localized Emissions Significance

Maximum Emissions	Maximum Daily Emissions (pounds/day)[6]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Year 1 [1,5]	34.52	28.05	5.36	2.87
Year 2 [2,5]	32.38	27.72	5.27	2.79
Year 3 [3,5]	12.47	16.08	0.53	0.50
Year 4 [4,5]	12.47	16.08	0.53	0.50
Maximum Daily Emissions	**34.52**	**28.05**	**5.36**	**2.87**
LST Mass Rate Screening Criteria	*170.0*	*883.0*	*7.0*	*4.0*
Thresholds Exceeded?	***No***	***No***	***No***	***No***

Notes:
1. Maximum on-site daily emissions occur during grading phase for NOx, CO, PM_{10}, and $PM_{2.5}$ in Year 1.
2. Maximum on-site daily emissions occur during grading phase for NOx, CO, PM_{10}, and $PM_{2.5}$ in Year 2.
3. Maximum on-site daily emissions occur during building construction phase for NOx, CO, PM_{10}, and $PM_{2.5}$ in Year 3.
4. Maximum on-site daily emissions occur during building construction phase for NOx, CO, PM_{10}, and $PM_{2.5}$ in Year 4.
5. Modeling assumptions include compliance with SCAQMD Rule 403 which requires the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces two times daily; cover stockpiles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour.
6. The Localized Significance Threshold Mass Rate Screening Criteria was determined using Appendix C of the SCAQMD *Final Localized Significant Threshold Methodology* guidance document for pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$. The Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction (approximately three acres; conservatively, the two-acre threshold was used) and Source Receptor Area 24.

Source: Refer to Appendix 1 for assumptions used in this analysis.

Operational LST

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend extended periods queuing and idling at the site (e.g., warehouse or transfer facilities). The proposed project does not include such uses. Thus, due to the lack of such emissions, no long-term LST analysis is needed. Operational LST impacts would be less than significant in this regard.

Carbon Monoxide Hotspots

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels (e.g., adversely affecting residents, school children, hospital patients, and the elderly).

The Basin is designated as an attainment/maintenance area for the federal CO standards and an attainment area under State standards. There has been a decline in CO emissions even though vehicle miles traveled (VMT) on U.S. urban and rural roads have increased; estimated anthropogenic CO emissions have decreased 68 percent between 1990 and 2014. In 2014, mobile sources accounted for 82 percent of the nation's total anthropogenic CO emissions.[10] Three

[10] U.S. Environmental Protection Agency, *Carbon Monoxide Emissions*, https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=10, accessed December 28, 2022.

major control programs have contributed to the reduced per-vehicle CO emissions, including exhaust standards, cleaner burning fuels, and motor vehicle inspection/maintenance programs.

According to the SCAQMD *CEQA Air Quality Handbook*, a potential CO hotspot may occur at any location where the background CO concentration already exceeds 9.0 parts per million (ppm), which is the 8-hour California ambient air quality standard. As previously discussed, the site is located in SRA 24. Communities within SRAs are expected to have similar climatology and ambient air pollutant concentrations. The monitoring station representative of SRA 24 is the Riverside – Rubidoux station, which is located approximately 14 miles northwest of the site. The maximum CO concentration at Riverside – Rubidoux station was measured at 0.783 ppm in 2022.[11] Given that the background CO concentration does not currently exceed 9.0 ppm, a CO hotspot would not occur at the project site. Therefore, CO hotspot impacts would be less than significant in this regard.

Air Quality Health Impacts

As evaluated above, the project's air emissions would not exceed the SCAQMD's LST thresholds, and CO hotpots would not occur as a result of the proposed project. Therefore, the project would not exceed the most stringent applicable federal or State ambient air quality standards for emissions of CO, NO_X, PM_{10}, or $PM_{2.5}$. It should be noted that the ambient air quality standards are developed and represent levels at which the most susceptible persons (children and the elderly) are protected. In other words, the ambient air quality standards are purposefully set in a stringent manner to protect children, elderly, and those with existing respiratory problems. Thus, an air quality health impact would be less than significant in this regard.

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

Determination: Less Than Significant Impact.

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified by the SCAQMD as being associated with odors.

Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon project completion. In addition, the project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by requiring equipment to be shut off when not in use or limiting idling time to no more than five minutes. Compliance with these existing regulations would further reduce the detectable odors from heavy-duty equipment exhaust. The project would also be required to comply with the SCAQMD Rule 1113

[11] California Air Resources Board, *AQMIS2: Air Quality Data*, https://www.arb.ca.gov/aqmis2/aqdselect.php, accessed December 28, 2022.

– *Architectural Coating*, which would minimize odor impacts from ROG emissions during architectural coating. Any odor impacts to existing adjacent land uses would be short-term and negligible. As such, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

MITIGATION MEASURES

None required.

4.4 BIOLOGICAL RESOURCES

Would the proposed project:					
	Issues	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?		X		
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 Wildlife or US Fish and Wildlife Service?		X		
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?				X
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		
f)	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan?		X		

The analysis and findings throughout this section are based on the following technical studies:

- *Sunset Crossing Tentative Tract Map 38443 Habitat Assessment and Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis* (Habitat Assessment and MSHCP Consistency Analysis), prepared by Michael Baker International, dated November 2022, revised February 2023, and as provided as **Appendix 2A** of this IS/MND**;**
- *Results of Focused Burrowing Owl (Athene cunicularia) Surveys for Sunset Crossing TTM 38443 – City of Moreno Valley, Riverside County, California* (Focused Burrowing

Owl Surveys), prepared by Michael Baker International, dated November 2, 2022, and provided as **Appendix 2B** of this IS/MND; and

- *Delineation of State and Federal Jurisdictional Waters for the Sunset Crossing TTM 38443 Project – City of Moreno Valley, Riverside County, California* (Jurisdictional Delineation), prepared by Michael Baker International, dated October 27, 2022, and provided as **Appendix 2C** of this IS/MND.
- *Determination of Biologically Equivalent or Superior Preservation Report for the Sunset Crossing TTM 38443 Project – City of Moreno Valley, Riverside County, California* (DBESP), prepared by Michael Baker International, dated February 2022, revised September 2023, and provided as **Appendix 2D** of this IS/MND.

Environmental Setting

The project area is located within a partially developed portion of the City of Moreno Valley with generally flat topography throughout. Natural habitats within the project site have been eliminated due to routine weed abatement activities (i.e., disking, tilling), resulting in heavily disturbed and compacted surface soils. As such, native vegetation communities do not occur, and the project site is primarily comprised of disturbed land that is dominated by ruderal/weedy and ornamental plant species. Plant species observed in the disturbed areas include common fiddleneck (*Amsinckia intermedia*), wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), short-podded mustard (*Hirschfeldia incana*), and telegraph weed (*Heterotheca grandiflora*). In addition, some individual mulefat (*Baccharis salicifolia*) occurs along the northwest boundary of the project site. The project site is not located within any federally designated Critical Habitat.

Developed areas were also observed along the northern boundary and along the eastern boundary of the project site. Disturbed habitat comprises approximately 22.26 acres of the project site and developed areas make up approximately 7.13 acres of the project site.

Land uses in the immediate vicinity of the project area include vacant, residential, and commercial land uses. Vacant, undeveloped land is located to the north, south, and east of the project site, while residential uses are located along the west, northwest, and northeast boundaries of the site. A small portion of the western side of the project site was being actively used for a construction yard for a commercial development along the project's western boundary at the time of the field survey.

The project site is located within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) administered by the Western Riverside County Regional Conservation Authority (RCA). The City of Moreno Valley is a signatory to the MSHCP.

DISCUSSION

4(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

Determination: Less Than Significant Impact with Mitigation Incorporated.

Sensitive Plant Species

Forty (40) special-status wildlife species have been recorded in the USGS *El Casco, Perris, Riverside East, Steele Peak,* and *Sunnymead, California* 7.5-minute quadrangles by the CNDDB. The MSHCP calls for focused studies of habitat evaluations for narrow endemic plant species. According to the Habitat Assessment and MSHCP Consistency Analysis, the disturbed state of the project site does not provide suitable habitat for any special-status species recorded in the California Natural Diversity Database (CNDDB) or California Native Plant Society (CNPS) searches due to the lack of natural vegetation communities and routine weed abatement. Therefore, no special-status plant species are expected to occur on the project site.

Sensitive Wildlife Species

Forty-three (43) special-status wildlife species have been recorded in the USGS *El Casco, Perris, Riverside East, Steele Peak,* and *Sunnymead, California* 7.5-minute quadrangles by the CNDDB. One (1) special-status wildlife species was observed during the field survey: Cooper's hawk (*Accipiter cooperii*; a State Watch List [WL] species). Based on the results of the field survey and a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, it was determined that the project site has a low potential to support burrowing owl *(Athene cunicularia)* (BUOW) (a State Species of Special Concern [SSC]), California horned lark (*Eremophila alpestris actia*; a State WL species), western mastiff bat (*Eumops perotis californicus*; a State SSC), and western yellow bat (*Lasiurus xanthinus*; a State SSC). All remaining special-status wildlife species identified by the CNDDB database are not expected to occur within the project site.

Stephens' kangaroo rat (genus *Dipodomys*)

Stephens' kangaroo rat (SKR) is federally listed as endangered, and State listed as threatened. SKR occurs in western Riverside County, existing in fragmented populations due to the urban landscape. Separate from the MSHCP, U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) issued the Riverside County Habitat Conservation Agency a Section 10(a) Permit and CFGC Section 2081 Management Authorization in 1996 establishing the Long-Term Stephens' Kangaroo Rat Habitat Conservation Plan (HCP). Based on a review of the SKR HCP, the survey area is located outside the boundaries of the SKR HCP and associated Core Reserves; the San Jacinto Core Reserve is located approximately 2.5 miles to the southeast of the project site. Although the project site is approximately 2.5 miles from a well-established population to the north of Perris Reservoir, the site is separated by extensive development, primarily residential, and as a result combined with the lack of suitable on-site habitat the survey area is not expected to support SKR.

Burrowing owl *(Athene cunicularia)*

The burrowing owl is designated as a species of special concern by CDFW and is a fully covered species under the MSHCP. The species is typically found in grassland, shrub steppe, and desert habitat types, however, can also be found in agricultural areas, ruderal fields, and pastures, as well as in urban environments such as vacant lots, flood control facilities, and open spaces. Burrowing owls require underground burrows or other cavities for nesting, roosting and shelter. Burrows used by the owls are usually dug by other species such as California ground squirrel (*Spermophilus beecheyi*) and round-tailed ground squirrel (*Citellus tereticaudus*). As such, the presence of colonial mammal burrows is often an indication that burrowing owls may be present. Burrowing owls have also been found occupying man-made cavities, such as buried and non-functioning drainpipes, standpipes, and dry culverts.

Focused BUOW surveys were conducted in April, May, and June 2022 following the MSHCP survey protocol, *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area.* No BUOWs, sign (i.e., pellets, feathers, castings, or whitewash), occupied burrows, or remnant burrows were observed. However, the project site is sparsely vegetated with a variety of low-growing plant species that allow for open line-of-sight and foraging opportunities for BUOW. In accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area*, if BUOW habitat occurs onsite, both focused surveys and pre-construction clearance surveys are required.

The proposed project would implement **Mitigation Measure BIO-1** to ensure potential impacts to burrowing owls are reduced to a less than significant level by requiring a pre-construction survey prior to ground-disturbing activities. With implementation of **Mitigation Measure BIO-1**, impacts to burrowing owl would be less than significant.

Mammals

One (1) mammal species was observed during the field survey: California ground squirrel (*Otospermophilus beecheyi*). The project site and surrounding area provide suitable habitat for additional mammalian species adapted to living in edge or urban environments. However, the routine weed abatement and surrounding development limits the potential for mammalian species to occur. Other common mammalian species that may occur within the survey area include coyote (*Canis latrans*), opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), desert cottontail (*Sylvilagus audubonii*), and raccoon (*Procyon lotor*). Bats occur throughout most of southern California and may use the project area as foraging habitat although it is heavily disturbed. Bats have been known to occur in the area. Therefore, a bat roosting habitat suitability assessment of any vegetation that may be removed, altered, or indirectly impacted by project activities is required, as described in **Mitigation Measure BIO-2**. With implementation of **Mitigation Measure BIO-2**, potential impacts to bats would be reduced to a less than significant level.

Birds

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly

authorized in the regulations or by permit. The state of California has incorporated the protection of birds of prey in California Fish and Game Code (CFGC) Sections 3800, 3513, and 3503.5. All raptors and their nests are protected from take or disturbance under the MBTA (16 United States Code [USC] Section 703 et seq.) and California statute (CFGC Section 3503.5).

Direct impacts to native vegetation communities and removal of trees during project construction could result in direct impacts to bird nests, which would be considered significant absent mitigation. The project site provides marginal foraging and nesting habitat for a variety of resident and migrant bird species that are adapted to a high degree of disturbance such as traffic, noise, and light pollution associated with the surrounding development. Additionally, the project site provides nesting habitat for avian species that nest on the open ground (e.g., killdeer [*Charadrius vociferus*], western meadowlark [*Sturnella neglecta*]). No nests were observed within the project site during the field survey.

Construction activities that occur during the avian nesting season (generally February 1 to August 31) could disturb nesting sites for bird species protected under the Fish and Game Code or MBTA. The removal of existing ornamental trees and bird houses during the nesting season could result in direct harm to nesting birds, while noise, light, and other man-made disturbances may cause nesting birds to abandon their nests.

Implementation of **Mitigation Measure BIO-3**, which requires a pre-construction nesting bird clearance survey to determine the presence/absence, location, and status of any active nests on or adjacent to the project site, would reduce potential impacts to nesting and migratory birds to less than significant by limiting the removal of trees, shrubs, or any other potential nesting habitat to outside the avian nesting season, which generally extends from February 1 through August 31. If the nesting bird clearance survey indicates the presence of nesting birds, **Mitigation Measure BIO-3** requires buffers to ensure that any nesting birds are protected pursuant to the MBTA. Impacts for both sensitive wildlife species and migratory birds would be reduced to a less than significant level with mitigation incorporated.

4(b) Have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

Determination: Less Than Significant Impact with Mitigation Incorporated.

A Jurisdictional Delineation report was prepared for the project to document the results of a literature review and formal delineation of onsite State and federal jurisdictional waters, including wetlands; refer to **Appendix 2C**. Additionally, a DBESP report was prepared to address potential MSHCP riparian/riverine areas located onsite; refer to **Appendix 2D**. The DBESP describes the potential impacts and proposed mitigation measures to ensure the post-project functions and values are biological equivalent or superior, and in compliance with the MSHCP.

According to the Jurisdictional Delineation that was conducted for the project, two ephemeral drainage features, Aquatic Feature 1 (AF-1) and Aquatic Feature 2 (AF-2), were identified within the project site and survey area during the April 12, 2022, site visit. Following review of the

Determination of Equivalent or Superior Preservation (DBESP) by the Wildlife Agencies, an additional field verification of the riparian/riverine resources associated with AF-1 was conducted on June 16, 2023. These drainages are described below.

Aquatic Feature 1 (AF-1)

AF-1 collects/transports municipal stormwater from the adjacent residential development and surrounding foothills north of the project site, undergrounds beneath Cottonwood Avenue, and discharges into the northeastern corner of the project site and survey area via a corrugated concrete pipe culvert with concrete wingwalls. The offsite upstream portion of AF-1 appears to be the feature that has been mapped by both the National Wetlands Inventory (NWI) and National Hydrography Dataset (NHD). Flows drain south into a riprap-lined flood control channel which is confined by residential development on both banks. Approximately 360 linear feet downstream, AF-1 begins to transition from the riprap-lined flood control channel to an incised earthen channel. A small culvert with concrete wingwalls is located on the eastern bank in this transitional area. At the time of the site visit, the culvert was obstructed by sediment resulting in a small erosional rill. A minimal amount of saturated soil and surface water were noted in the immediate location of the obstructed culvert and rill on the eastern bank, but not within the main channel bed or the surrounding banks. No other standing or flowing water was observed in association with AF-1.

AF-1 continues south for approximately 180 linear feet and then begins to meander southwest towards the southern project boundary where it is no longer constrained by residential development on either bank. A large concrete retaining wall is located along the southern project site boundary and flows appear to be conveyed beneath this retaining wall, likely via a pipe or culvert; however, a significant amount of sediment deposition has occurred in the immediate vicinity of the retaining wall which reduces visibility. Additionally, a large debris-filled non-jurisdictional erosional rill occurs immediately northwest of where AF-1 flows beneath the retaining wall and exits the project site and survey area. AF-1 exhibited clear evidence of hydrology, such as a natural line impressed on the bank, change in particle size distribution, presence of a wrack line, and shelving.

Upon review of historic aerial imagery, the southern half of the channel appears to have migrated west by over 200 feet since 2011. Soils adjacent to either side of the channel consist of a sandy alluvium and were historically deposited by drainage flows. Higher volumes of water during the 2023 rainy season produced stronger flows resulting in the channel becoming more deeply incised than what was observed in 2022. The active floodplain was used to delineate the limits of riparian/riverine for the project because it is associated with the current “flows [that are present] for all or a portion of the year”.

The riprap-lined and soft-bottomed portions of AF-1 exhibited similar vegetation comprised of upland disturbance-tolerant non-native plant species consistent with the surrounding uplands; however, these species generally occurred in sparser patches within AF-1. Dominant species included foxtail barley (*Hordeum murinum*, FACU), foxtail brome (*Bromus rubens*, UPL), red stemmed filaree (*Erodium cicutarium*, UPL), ripgut brome (*Bromus diandrus,* UPL), sagebrush combseed (*Pectocarya linearis*, UPL), stinknet (*Oncosiphon piluliferum*, FACU), and summer

mustard (*Hirschfeldia incana*, UPL). Additionally, a small amount of hydrophytic vegetation comprised of tall flatsedge (*Cyperus eragrostis*, FACW) and willowherb (*Epilobium ciliatum*, FACW) was observed in association with the obstructed culvert on the eastern bank. The large tree in the middle of the property and visible on the aerial imagery was no longer present on the project site during the 2023 site visit. Therefore, vegetated areas outside of the current active floodplain are not considered riparian/riverine. Within the project site and survey area, AF-1 measures a total of approximately 1,444 linear feet.

Aquatic Feature 2 (AF-2)

AF-2 originates offsite as an ephemeral drainage which drains stormwater and other surface flows from the surrounding residential developments and foothills north of the project site; flows are conveyed south via a corrugated metal pipe underneath Cottonwood Avenue and enter the northwestern portion of the project site and survey area via a corrugated metal pipe with broken concrete wingwalls. AF-2 flows south for approximately 611 linear feet as an unmaintained ephemeral earthen drainage before transitioning to discontinuous unconfined/overland sheet flow which ultimately fans out and infiltrates on the northwestern potion of the project site. No standing or flowing surface water was observed within the AF-2 during the field survey. However, evidence of an ordinary high water mark (OHWM) ranging from 5 to 10 feet in width was observed via a natural line impressed on the bank, change in particle size distribution, presence of a wrack line, and shelving.

AF-2 exhibited the same upland vegetation as AF-1 with a predominance of ripgut brome and summer mustard and occasional patches of bare sandy soil. A patch of Peruvian pepper trees (*Schinus molle,* FACU) occurs in the northern portion of AF-2 in association with the residential development immediately to the west. Additionally, a small patch of mature mulefat (*Baccharis salicifolia*, FAC) occurs approximately 230 feet downstream of where AF-2 enters the project site and survey area.

Findings

AF-1 occurs within the eastern portion of the project site and survey area and does not exhibit a surface hydrologic connection to any Relatively Permanent Water (RPW) or Traditionally Navigable Water (TNW). Flows from AF-1 continue south offsite and drain into a roadside ditch which runs easterly along the northern side of Alessandro Boulevard before emptying into a small concrete culvert. Flows from AF-1 are then conveyed onto the property south of Alessandro Boulevard via a concrete culvert where AF-1 then transitions to discontinuous unconfined/overland sheet flow which ultimately fans out and infiltrates offsite. Furthermore, AF-1 appears to be an ephemeral feature which flows only in direct response to precipitation. Therefore, AF-1 would not qualify as a water of the U.S. (WoUS) and would not fall under the regulatory authority of the U.S. Army Corps of Engineers (USACE). However, based on the results of the field delineation, AF-1 does comprise approximately 0.27-acre (1,444 linear feet) of Regional Water Quality Control Board (RWQCB) non-wetland waters of the State/CDFW vegetated streambed (consisting of 0.27-acre located within the project site and an additional <0.01 acre located within the survey area).

AF-2 occurs within the northwestern portion of the project site and survey area and also does

not exhibit a surface hydrologic connection to any RPW or TNW. Flows from AF-2 transition to discontinuous unconfined/overland sheet flow which ultimately fans out and infiltrates within the western portion of the project site. Furthermore, AF-2 appears to be an ephemeral feature which flows only in direct response to precipitation. Therefore, AF-2 would not qualify as a WoUS and would not fall under the regulatory authority of the USACE. However, based on the results of the field delineation, AF-2 does comprise a total of 0.10-acre (611 linear feet) of RWQCB non-wetland waters of the State/CDFW vegetated streambed (consisting of less than 0.001-acre located within the project site and an additional 0.10-acre located within the survey area), and approximately 0.02-acre of CDFW associated riparian (consisting of less than 0.01-acre located within the project site and an additional 0.02-acre located within the survey area).

Therefore, based on the findings of the Jurisdictional Delineation, the project proponent is required to obtain both a Waste Discharge Requirement (WDR) from the RWQCB prior to impacts occurring within RWQCB jurisdictional areas, and a Section 1602 Streambed Alteration Agreement (SAA) from the CDFW prior to impacts occurring within CDFW jurisdictional areas, as described in **Mitigation Measure BIO-4**. With implementation of **Mitigation Measure BIO-4**, potential impacts to riparian habitat or other sensitive natural communities would be reduced to a less than significant level.

4(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?

Determination: No Impact.

Based on the results of the Jurisdictional Delineation Report that was conducted for the project, no State or federally protected wetlands are located within the project site. No impact would occur in this regard.

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

Determination: Less Than Significant Impact.

The project site is located within a moderately developed area of Moreno Valley. However, the site has undeveloped, vacant land around it, particularly to the north and south, that could function as something of a movement corridor for mammals. However, surrounding roads and development have fragmented the connection between the survey area and surrounding open space and naturally occurring vegetation communities. The disturbed landscape of the survey area and absence of vegetation for cover most likely precludes the movement of wildlife through the survey area. Further, elevated noise levels, vehicle traffic, lighting, and human presence associated with Nason Street, Alessandro Boulevard, Cottonwood Avenue, and surrounding residential development all decrease the suitability of the project site to be used as a wildlife movement corridor or linkage. Therefore, a less than significant impact relative to migratory wildlife corridors would occur.

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

Determination: Less Than Significant Impact With Mitigation Incorporated.

The Moreno Valley Municipal Code addresses tree removal on all land uses, for all projects, in all districts requiring City approval. The Moreno Valley Municipal Code addresses requirements for preservation and protection of heritage trees within the City located on both private and public property. Under Title 9 Chapter 9.17 of the Moreno Valley Municipal Code, the City has identified two tree species as "heritage trees." Based on the Habitat Assessment and MSHCP Consistency Analysis, the olive trees (*Olea europaea*) located near the northwestern corner of the site qualify as heritage trees according to the definition in Chapter 9.17.030, *Landscape and Irrigation Design Standards,* which states that heritage trees include any tree which "defines the historical and cultural character of the city including older Palm and Olive trees, and/or any tree designated as such by official action" and include any tree which "is fifteen (15) inch diameter measured twenty-four (24) inches above ground level or that have reached a height of fifteen (15) feet or greater." In addition, some of the trees surrounding abandoned residences that were demolished in August 2022 may qualify as "heritage trees" according to the definition in Chapter 9.17.030. Under Chapter 9.17.030 of the Moreno Valley Municipal Code, the removal of heritage trees requires the review of the ecological historical preservation board.

Therefore, the Habitat Assessment and MSHCP Consistency Analysis recommends that an arborist conduct a tree survey on-site and prepare and submit an Arborist Report to City of Moreno Valley to document the project's consistency with Chapter 9.17.030 of the Moreno Valley Municipal Code regarding the removal of heritage trees, as described in **Mitigation Measure BIO-5**. With implementation of **Mitigation Measure BIO-5**, the project would not conflict with a local policy protecting biological resources and potential impacts to heritage trees would be reduced to a less than significant level.

4(f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan?

Determination: Less Than Significant Impact with Mitigation Incorporated.

The project site is located within the boundaries of the MSHCP. According to the RCA's online MSHCP Information Application, the project site is not located within any Subunits, Criteria Cells, Conservation Areas, Cores/Linkages, or Public/Quasi-Public (P/QP) Lands identified by the MSHCP. However, the project site is located within a designated survey area for BUOW and is subject to the procedures outlined in the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area*. In addition, the protection of species associated with riparian/riverine resources and vernal pools is also required by the MSHCP and is discussed below.

Burrowing Owl

Based on the Focused Burrowing Owl Surveys conducted for the project and as discussed above in Impact 4(a), no BUOWs, BUOW sign, occupied BUOW burrows, or remnant BUOW burrows

were observed on or within the vicinity of the survey area. Therefore, project-related activities are not expected to result in any direct or indirect impacts to BUOWs or occupied BUOW burrows on or within the vicinity of the survey area. However, as discussed in Response 4.4(a) above, it is recommended that pre-construction surveys be conducted prior to any ground disturbance to avoid direct take of burrowing owls, as described in **Mitigation Measure BIO-1**.

Riparian/Riverine Resources

As discussed above, two ephemeral drainage features were recorded within the survey area (AF-1 and AF-2). Based on the project's DBESP, AF-1 and AF-2 qualify as riparian/riverine resources associated with Section 6.1.2 of the MSHCP. Table 4 summarizes the total amount of existing and impacted riparian/riverine resources within the project site.

Table 4: Summary of Impacts to Riparian/Riverine Resources within the Survey Area

Riparian/Riverine Resource	Total within the Project Site	Impact Type (acre)	
		Permanent Impact	Temporary Impact
Riverine			
AF-1	0.64	0.64[1]	0.00
AF-2	0.10	<0.001	0.10
Riverine (Subtotal)	*0.74*	*0.64*	*0.10*
Riparian			
AF-1	0.00	0.00	0.00
AF-2	0.02	0.01	0.01
Riparian (Subtotal)	*0.02*	*0.01*	
TOTAL IMPACTS		**0.65**	**0.11**

Notes:
1. Permanent impacts include both direct and indirect effects. Since the project boundary bisects the length of the north half of AF-1, it is anticipated that the direct impact to the portion of the channel within the project site boundary would indirectly affect the remainder of the channel just outside of the project site boundary. Therefore, it is anticipated that the direct and indirect effect on the entirety of AF-1 would be considered a permanent impact.

Refer to Appendix 2D.

As identified in Table 4, a total of 0.76 acres of riparian/riverine resources pursuant to Section 6.1.2 of the MSHCP occur within the project site. Of this, permanent impacts would occur on 0.64 acre riverine and 0.01-acre riparian habitat, whereas temporary impacts would occur on 0.10 acre riverine and 0.01-acre riparian habitat. Riparian/riverine resources within the survey area do not provide suitable habitat for listed riparian-associated species in Section 6.1.2, or for riparian-associated species that would benefit from preservation of the onsite riparian habitat.

Implementation of compensatory mitigation at no less than 3:1 for direct effects on riparian/riverine resources would provide equivalent preservation. **Mitigation Measure BIO-6** would require purchase of credits for at a 3:1 ratio from Riverpark Mitigation Bank or other mitigation bank approved by the Wildlife Agencies. Payment of compensatory mitigation would

ensure the project would be biologically equivalent or superior to existing conditions and the functions and values of the replacement would be biologically equivalent or superior.

Vernal Pools

One of the factors for determining the presence of vernal pools would be demonstrable evidence of seasonal ponding in an area of topographic depression that is not subject to flowing waters. Prior to conducting the habitat assessment, a review of historical aerial photographs was conducted. In addition, a review of the USDA *Custom Soil Resource Report for Western Riverside Area, California,* was also conducted to determine the soil associations within the project site. The MSHCP lists two general classes of soils known to be associated with special-status plant species and presence of vernal pool habitat: clay soils and Traver-Domino Willow association soils. The specific clay soils known to be associated with special-status species/vernal pool habitat within the MSHCP Plan Area include Bosanko, Auld, Altamont, and Porterville series soils, whereas Traver-Domino Willows association includes saline-alkali soils largely located along floodplain areas of the San Jacinto River and the Salt Creek flood control channel.

Based on a review of the *Custom Soil Resource Report for Western Riverside Area, California*, none of the soil classes (e.g., Bosanko, Auld, Altamont, and Porterville series and Traver-Domino Willows association) known to be associated with vernal pool habitat occur within the project site. The mapped soils throughout the project site primarily consist of sandy loam textures and not the clay soil textures which are needed to form the impermeable restrictive duripan layer below the soils surface. Therefore, no direct or indirect impacts are expected to occur relative to vernal pools.

Conclusion

With implementation of **Mitigation Measure BIO-1** and **Mitigation Measure BIO-6**, the project would not conflict with the provisions of the MSHCP, and potential impacts would be reduced to a less than significant level.

MITIGATION MEASURES

BIO-1 A pre-construction clearance survey shall be conducted to reconfirm the absence of burrowing owl (BUOW) within the project impact area and maintain compliance with the Multiple Species Habitat Conservation Plan (MSHCP), Migratory Bird Treaty Act (MBTA), and California Fish and Game Code (CFGC). In accordance with the MSHCP, the pre-construction clearance survey shall be conducted by a qualified biologist no more than 30 days prior to initiating any ground disturbing activities to avoid direct take of BUOWs. Once the survey is completed, the qualified biologist shall prepare and submit a final report documenting the results of the clearance survey to the City of Moreno Valley for review and file. If no BUOWs or occupied burrows are detected, project activities may begin, and no additional avoidance or minimization measures would be required.

BIO-2 No less than 60 days prior to initiating project activities, a qualified bat biologist shall conduct a bat roosting habitat suitability assessment of any vegetation that may be removed, altered, or indirectly impacted by the project activities. Any locations

identified as having potentially suitable bat roosting habitat by the qualified approved bat biologist shall be subject to additional nighttime surveys (bat surveys) during the summer months (i.e., June through August) to determine the numbers and bat species using the roost(s). The information collected during these additional bat surveys shall be used by the qualified bat biologist to develop species-specific measures to minimize impacts to roosting bats should bats be detected using the site. The bat surveys shall be conducted by the qualified bat biologist using an appropriate combination of visual inspection, sampling, exit counts, and acoustic surveys. The results of the pre-construction bat surveys shall be submitted to CDFW for review no less than 30 days prior to the initiation of project activities.

If the presence of bats within the project is confirmed, avoidance and minimization measures, including the designation of buffers based upon the particular bat species found and phased removal of trees, shall be developed and submitted to CDFW for review and approval. If the site supports maternity roosts, the Project Applicant shall avoid disturbing those areas during the breeding season.

If the site supports a maternity roost(s) or special-status species, the Project Applicant shall contact CDFW and conduct an impact assessment prior to commencing project activities to assist in the development of minimization and mitigation measures. The Project Applicant shall compensate for impacts and losses to maternity roosts and/or special-status bat habitat through a mitigation strategy approved by CDFW.

BIO-3 If project-related activities are to be initiated during the nesting season (February 1 to August 31), a pre-construction nesting bird clearance survey shall be conducted by a qualified biologist no more than three (3) days prior to the start of any vegetation removal or ground disturbing activities. The qualified biologist shall survey all suitable nesting habitat within the project impact area, and areas within a biologically defensible buffer zone surrounding the project impact area. If no active bird nests are detected during the clearance survey, project activities may begin, and no additional avoidance and minimization measures shall be required. If an active bird nest is found, the species shall be identified, and a “no-disturbance” buffer shall be established around the active nest. The size of the “no-disturbance” buffer shall be increased or decreased based on the judgment of the qualified biologist and level of activity and sensitivity of the species. The qualified biologist shall periodically monitor any active bird nests to determine if project-related activities occurring outside the “no-disturbance” buffer disturb the birds and if the buffer shall be increased. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the “no-disturbance” buffer may occur following an additional survey by the qualified biologist to search for any new bird nests in the restricted area.

BIO-4 Prior to initiation of construction, the Project Applicant shall obtain all necessary permits for impacts to Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW) jurisdictional areas. Mitigation for the loss of jurisdictional resources shall be negotiated with the resource agencies during the

regulatory permitting process and shall ensure that mitigation to compensate for permanent impacts on jurisdictional resources is equivalent or superior to biological functions and values impacted by the proposed project.

BIO-5 Prior to the issuance of a grading permit, the Project Applicant shall prepare and submit an Arborist Report to City of Moreno Valley to document the project's consistency with Chapter 9.17.030 of the Moreno Valley Municipal Code regarding the removal of heritage trees.

BIO-6 Prior to initiation of construction, the Project Applicant shall purchase re-establishment or establishment credits within the San Jacinto Watershed through the Riverpark Mitigation Bank at a 3:1 ratio. Other offsite options for mitigation include the Riverside-Corona Regional Conservation District (RCRCD) In Lieu Fee (ILF) program, the Barry Jones mitigation bank, permittee-responsible mitigation, or other agency-approved mitigation provider. If the Santa Ana River Watershed In-Lieu Fee Program (RCRCD ILF Program) is selected, the Project Applicant shall retain a qualified biologist to prepare an equivalency analysis report and habitat monitoring and management plan (HMMP) for submittal to the Wildlife Agencies prior to construction activities. The equivalency analysis shall document the biological lift and the functions and values provided by the mitigation site and the HMMP shall describe the offsite compensatory mitigation and identifies the establishment and reestablishment performance criteria for the proposed mitigation. The long-term funding mechanism for post-restoration habitat maintenance and land management entity shall also be identified and approved by the Wildlife Agencies prior to the start of construction.

SIGNIFICANCE OF IMPACT AFTER MITIGATION

With implementation of **Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, BIO-5**, and **BIO-6**, as well as adherence to the standard conditions and requirements, the project would comply with the requirements of the MSHCP, MBTA and Moreno Valley Municipal Code. Compliance would reduce impacts to less than significant levels.

4.5 CULTURAL RESOURCES

Would the proposed project:					
	Issues	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a)	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?				X
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

The analysis and findings throughout this section are based on the *Cultural Resources Identification Report for the TTM 38443 Residential Homes Project, City of Moreno Valley, Riverside County, California* (Cultural Resources Assessment) prepared by Michael Baker International, dated December 2, 2022, and revised September 13, 2023, and provided as **Appendix 3** of this IS/MND.

DISCUSSION

5(a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

Determination: No Impact.

The Cultural Resources Assessment conducted for the proposed project included an archaeological field survey, archaeological sensitivity analysis, and a records search to identify previously recorded prehistoric and historic cultural resources and cultural resource surveys within a 0.5-mile radius of the project area. The records search was conducted by the Eastern Information Center (EIC) of the California Historical Resources Information System at the California State University, Fullerton.

Eastern Information Center Results

No cultural resources are located within the project area. A total of 20 resources are documented within the 0.5-mile search radius, including 12 prehistoric sites consisting of bedrock milling features. The resources also include three buildings or building complexes, three water storage or conveyance features, and two asphalt paved streets. In addition, the records search found that 22 cultural resources studies have been conducted within a 0.5-mile radius of the project area, four of which included the project area. No resources were identified as part of these studies.

The records search results also indicated that the directories checked (including the National Register of Historic Places [NRHP], National Historic Landmarks [NHL], California Register of

Historic Resources [CRHR], California Historical Landmarks [CHL] list, the California Points of Historical Interest [CPHI] list, and the California Built Environment Resource Directory [BERD] for Riverside County), showed that there were no listed properties within the project area.

Historical Maps and Photographs Review

The project site remained undeveloped until it was cultivated with citrus trees in 1938. A review of historical maps identified one small, rectangular building at the south end of the project site in 1963. By 1968, two buildings are depicted along Cottonwood Avenue and less than 10 percent of the project site is used for agricultural practices. By 1980, the two buildings continue to be depicted within the project site along Cottonwood Avenue, however, the citrus trees have been removed. By 2012, the buildings have also been removed. Aerial photographs show that after 2012, modern residential subdivisions began to infill the land west of the project site.

Pedestrian Survey Results

No archaeological resources were identified during the pedestrian survey of the project area. The project area consists of a vacant dirt lot. Soils consist of tan-colored sandy loam with 10 percent gravel inclusions at the surface. Observed vegetation throughout the project area included tobacco tree, sunflowers, datura, and silverleaf nightshade. Disturbances observed included dirt push piles, open pits, and gravel piles in the northern and eastern portions of the project area.

Sacred Lands File Results

A Sacred Lands File search was sent to the Native American Heritage Commission (NAHC) for any Native American cultural resources that may be affected by the project. In addition, the names of Native Americans who may have information or concerns about the project was also requested. The NAHC responded via email and stated that a search of the Sacred Lands File provided negative results. The NAHC also provided a list of Native American contacts and the City conducted Tribal consultation with the listed Tribes, which is discussed in Section 4.18, *Tribal Cultural Resources*, of this IS/MND.

Conclusion

The EIC records search, literature and historical map review, historical society consultation, NAHC Sacred Lands File search, and cultural resources field survey identified no historical resources as defined by CEQA Section 15064.5(a) within the project site. Therefore, no impact relative to historical resources would occur.

5(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Determination: Less Than Significant Impact with Mitigation Incorporated.

Based on the Cultural Resources Assessment, no archaeological resources were identified in the records searches or during the pedestrian survey. Prehistoric and historic-period archaeological sensitivity is low. There are no reliable sources of natural surface water within close proximity to the project. The closest water sources appearing on USGS topographic maps are ephemeral washes. Ethnographic documentation indicates that the project area is within Cahuilla territory but identified no villages or place names within or adjacent to the project area itself. In addition,

the project site has been previously disturbed by building construction, utility installations, and farming. As a result of the Cultural Resources Assessment, the project site has been thoroughly surveyed, and no surface indications of sites, including bedrock milling features that may indicate the presence of subsurface archaeological deposits, were observed.

The project site is highly disturbed and unlikely to yield any significant buried archaeological resources. Nonetheless, there is a potential for disturbing previously unknown archaeological resources during excavation into native soil. As such, in accordance with the Cultural Resources Assessment, potential impacts would be avoided through the implementation of **Mitigation Measure CUL-1** below, which requires that, in the event of unanticipated subsurface discoveries, all work within 50 feet shall be halted until an archaeologist can evaluate the findings and make recommendations.

5(c) Disturb any human remains, including those interred outside of formal cemeteries?

Determination: Less Than Significant Impact with Mitigation Incorporated.

No conditions exist that suggest human remains are likely to be found on the project site. However, construction activities, particularly grading, could potentially disturb human remains interred outside of a formal cemetery. Thus, the potential exists that human remains may be unearthed during grading and excavation activities associated with project construction. In the event that human remains are discovered during grading or other ground-disturbing activities associated with the proposed project, those remains shall receive proper treatment in accordance with State of California Health and Safety Code Sections 7050.5-7055, as described in **Mitigation Measure CUL-2** below. Therefore, impacts would be reduced to a less than significant level.

MITIGATION MEASURES

CUL-1 In the event that any subsurface cultural resources are encountered during earth-moving activities, all work within 50 feet shall be halted until an archaeologist can evaluate the findings and make recommendations. Prehistoric materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash, and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials might include wood, stone, or concrete footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, metal, glass, ceramics, and other refuse. The archaeologist may evaluate the find in accordance with federal, State, and local guidelines, including those set forth in the California Public Resources Code Section 21083.2, to assess the significance of the find and identify avoidance or other measures as appropriate. A qualified archaeologist must meet the Secretary of the Interior's Professional Qualifications Standards for archaeology.

CUL-2 If human remains are found during project construction, those remains shall receive proper treatment in accordance with State of California Health and Safety Code Sections 7050.5-7055. Specifically, Health and Safety Code Section 7050.5 describes

the requirements if any human remains are discovered during excavation of a site. As required by state law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code shall be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission, and consultation with the individual identified by the Native American Heritage Commission to be the "most likely descendant." If human remains are found during excavation, excavation shall stop in the vicinity of the find and any area that is reasonably suspected to overlie adjacent remains until the County Coroner has been called out, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains.

SIGNIFICANCE OF IMPACT AFTER MITIGATION

Implementation of **Mitigation Measure CUL-1** would ensure that any archaeological resources inadvertently discovered during project grading or construction activities would be protected consistent with the recommendations of a qualified archaeologist, thereby reducing impacts to a less than significant level.

Implementation of **Mitigation Measure CUL-2** would ensure that any human remains inadvertently discovered during project grading or construction activities would be protected consistent with the investigation and recommendations of the County Coroner, thereby reducing impacts to a less than significant level.

4.6 ENERGY

Would the proposed project:					
	Issues	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b)	Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?			X	

The analysis and findings throughout this section are based on the *Air Quality, Energy and Greenhouse Gas Emissions Impact Modeling Data* (Air Quality, Energy and Greenhouse Gas Data) prepared by Michael Baker International, dated January 12, 2023, provided as **Appendix 1** of this IS/MND.

REGULATORY FRAMEWORK

State

California Building Energy Efficiency Standards (Title 24)

The 2022 California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6), commonly referred to as "Title 24," became effective on January 1, 2023. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2022 Title 24 standards encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expand solar photovoltaic and battery storage standards, strengthen ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Title 24 standards.

California Green Building Standards

The 2022 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as CALGreen, went into effect on January 1, 2023. CALGreen is the first-in-the-nation mandatory green buildings standards code. The California Building Standards Commission developed CALGreen in an effort to meet the State's landmark initiative Assembly Bill (AB) 32 goals, which established a comprehensive program of cost-effective reductions of greenhouse gas (GHG) emissions to 1990 levels by 2020. CALGreen was developed to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, and healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to

the environmental directives of the administration. CALGreen requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g., lighting, heating/ventilation and air conditioning [HVAC], and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials.

Senate Bill 100

Senate Bill (SB) 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours (kWh) of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; 60 percent by December 31, 2030; and 100 percent by December 31, 2045. The bill requires the California Public Utilities Commission (CPUC), California Energy Commission (CEC), State board or the California Air Resources Board (CARB), and all other State agencies to incorporate the policy into all relevant planning. In addition, SB 100 requires the CPUC, CEC, and CARB to utilize programs authorized under existing statutes to achieve that policy and, as part of a public process, issue a joint report to the Legislature by January 1, 2021, and every four years thereafter, that includes specified information relating to the implementation of SB 100.

California Energy Commission Integrated Energy Policy Report

In 2002, the California State Legislature adopted Senate Bill (SB) 1389, which requires the California Energy Commission (CEC) to develop an Integrated Energy Policy Report (IEPR) every two years. SB 1389 requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices, and use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety.

The CEC adopted the 2021 integrated energy policy report (2021 IEPR) Volume I, Volume II, and Volume IV on February 1, 2022 and Volume III on February 24, 2022.[12] The 2021 IEPR provides information and policy recommendations on advancing a clean, reliable, and affordable energy system for all Californian.[13] Volume I of the 2021 IEPR addresses actions needed to reduce the GHG emissions related to the buildings in which California live and work, with an emphasis on energy efficiency; Volume II examines actions needed to increase the reliability and resiliency of California's energy system; Volume III looks at the evolving role of gas in California' energy system; and Volume IV reports on California's energy demand outlook, including a forecast to 2035 and long-term energy demand scenarios of 2050. The 2021 IEPR builds on the goals and

[12] California Energy Commissions, *2021 Integrated Energy Policy Report*, https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2021-integrated-energy-policy-report, accessed January 4, 2023.

[13] California Energy Commissions, *Final 2021 Integrated Energy Policy Report Volume I Building Decarbonization*, February 2022.

work in response to AB 758 (Energy: energy audit), SB 350 (Clean Energy and Pollution Reduction Act), AB 3232 (Zero-emissions buildings and sources of heat energy), and the 2019 IEPR to further a comprehensive approach toward decarbonizing buildings in a cost-effective and equitable manner. For the 2021 IEPR, the CEC extends the forecast timeframe to 15 years to coincide with several state goals that are planned for 2035 and improves methodologies to better quantify and predict the likelihood, severity, and duration of future extreme heat events.

Local

The City of Moreno Valley General Plan

Both the 2006 and 2040 General Plans contain applicable energy related goals and policies, which are shown below:

2006 General Plan

Goal 2.5: Maintenance of systems for water supply and distribution; wastewater collection, treatment, and disposal; solid waste collection and disposal; and energy distribution which are capable of meeting the present and future needs of all residential, commercial, and industrial customers within the City of Moreno Valley.

> Policy 2.2.15: Encourage the use of innovative and cost effective building materials, site design practices and energy and water conservation measures to conserve resources and reduce the cost of residential development.

Objective 6.7: Reduce mobile and stationary source air pollutant emissions.

> Policy 6.7.6: Require building construction to comply with the energy conservation requirements of Title 24 of the California Administrative Code.

Objective 7.5: Encourage efficient use of energy resources.

> Policies:
>
> 7.5.1: Encourage building, site design, and landscaping techniques that provide passive heating and cooling to reduce energy demand.
>
> 7.5.2: Encourage energy efficient modes of transportation and fixed facilities, including transit, bicycle, equestrian, and pedestrian transportation. Emphasize fuel efficiency in the acquisition and use of City-owned vehicles.
>
> 7.5.4 Encourage efficient energy usage in all city public buildings.
>
> 7.5.5 Encourage the use of solar power and other renewable energy systems.

2040 General Plan

Goal OSRC-3: Use energy and water wisely and promote reduced consumption.

> Policies:
>
> OSRC 3.1: Promote energy conservation throughout the community and encourage the use of renewable energy systems and technologies to supplement or replace traditional building energy systems.

OSRC 3.5: Promote the retention and reuse of rainwater onsite and promote the use of rain barrels or other rainwater reuse systems throughout the community.

OSRC 3.6: Encourage new development to incorporate as many water-wise practices as feasible in their design and construction.

OSRC 3.8: Conserve water through the planting and maintenance of trees, which will provide for the capture of precipitation and runoff to recharge groundwater, in addition to providing shading for other landscaping to reduce irrigation requirements. Ensure that any 'community greening' projects utilize water-efficient landscape.

CEQA GUIDELINES APPENDIX F

CEQA Guidelines Appendix F is an advisory document that assists in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. The analysis on Response 4.6(a) relies on Appendix F of the CEQA Guidelines, which includes the following criteria to determine whether this threshold of significance is met:

- Criterion 1: The project energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- Criterion 2: The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- Criterion 3: The effects of the project on peak and base period demands for electricity and other forms of energy.
- Criterion 4: The degree to which the project complies with existing energy standards.
- Criterion 5: The effects of the project on energy resources.
- Criterion 6: The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Quantification of the project's energy usage is presented and addresses Criterion 1. The discussion on construction-related energy use focuses on Criteria 2, 4, and 5. The discussion on operational energy use is divided into transportation energy demand and building energy demand. The transportation energy demand analysis discusses Criteria 2, 4, and 6, and the building energy demand analysis discusses Criteria 2, 3, 4, and 5.

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

Determination: Less Than Significant Impact.

PROJECT-RELATED SOURCES OF ENERGY CONSUMPTION

This analysis focuses on three sources of energy that are relevant to the proposed project: electricity, natural gas, and transportation fuel for vehicle trips and off-road equipment

associated with project construction and operations. The analysis of the operational electricity/natural gas usage is based on the California Emissions Estimator Model version 2020.4.0 (CalEEMod) modeling results for the project. The project's estimated electricity/natural gas consumption is based primarily on CalEEMod's default settings for Riverside County, and consumption factors provided by the Southern California Edison (SCE) and the Southern California Gas Company (SoCalGas), the electricity and natural gas providers for the City and project site. The results of the CalEEMod modeling are included in ***Appendix 1, Air Quality, Energy and Greenhouse Gas Data***. The amount of operational fuel consumption was estimated using the California Air Resources Board's (CARB) EMission FACtor 2021 (EMFAC2021) computer program which provides projections for typical daily fuel usage in Riverside County, and the project's annual vehicle miles traveled (VMT) outputs from CalEEMod. The estimated construction fuel consumption is based on EMFAC2021 model and the project's construction equipment list, timing/phasing, and house of duration for construction equipment, as well as vendor, hauling, and construction worker trips.

The project's estimated energy consumption is summarized in ***Table 4, Project and Countywide Energy Consumption***. As shown in ***Table 4***, the project's energy usage would constitute an approximate 0.0125 percent increase over Riverside County's typical annual electricity consumption and an approximate 0.0573 percent increase over Riverside County's typical annual natural gas consumption. The project's construction and operational vehicle fuel consumption would increase Riverside County's consumption by 0.2419 percent and 0.0335 percent, respectively (**Criterion 1**).

Table 5: Project and Countywide Energy Consumption

Energy Type	Project Annual Energy Consumption[1]	Riverside County Annual Energy Consumption[2]	Percentage Increase Countywide[2]
Electricity Consumption	1,067 MWh	8,510,527 MWh	0.0125%
Natural Gas Consumption	37,905 therms	66,164,358 therms	0.0573%
Fuel Consumption			
• Construction Fuel Consumption[3]	89,008 gallons	36,798,212 gallons	0.2419%
• Operational Automotive Fuel Consumption[3]	237,789 gallons	710,266,011 gallons	0.0335%

Notes:
2. As modeled in CalEEMod version 2020.4.0.
3. The project increases in electricity and natural gas consumption are compared to the total consumption in Riverside County in 2021. The project increases in construction and automotive fuel consumption are compared with the projected Countywide fuel consumption in 2023 and 2025, respectively.

   Riverside County electricity consumption data source: California Energy Commission, *Electricity Consumption by County*, http://www.ecdms.energy.ca.gov/elecbycounty.aspx, accessed January 4, 2023.

   Riverside County natural gas consumption data source: California Energy Commission, *Gas Consumption by County*, http://www.ecdms.energy.ca.gov/gasbycounty.aspx, accessed January 4, 2023.
4. Project fuel consumption calculated based on CalEEMod results. Countywide fuel consumption is from the California Air Resources Board EMFAC2021 model.

Refer to Appendix 1 for assumptions used in this analysis.

CONSTRUCTION-RELATED ENERGY CONSUMPTION

During construction, the project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during grading, paving, building construction, and architectural coatings. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that heavy-diesel equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with latest U.S. Environmental Protect Agency (EPA) and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction (**Criterion 4**).

Substantial reduction in energy inputs for construction materials can be achieved by selecting green building materials composed of recycled materials that require less energy to produce than non-recycled materials.[14] The integration of green building materials can help reduce environmental impacts associated with the extraction, transport, processing, fabrication, installation, reuse, recycling, and disposal of these building industry source material.[15] The project-related incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. As indicated in ***Table 4***, the project's fuel consumption from construction would be approximately 89,008 gallons, which would increase construction off-road fuel use in the County by approximately 0.2419 percent. As such, construction would have a nominal effect on the local and regional energy supplies (**Criterion 2**). It is noted that construction fuel use is temporary and would cease upon completion of construction activities. 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 the region or State (**Criterion 5**). Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. As such, a less than significant impact would occur in this regard.

OPERATIONAL ENERGY CONSUMPTION

[14] California Department of Resources Recycling and Recovery, *Green Building Materials*, https://www.calrecycle.ca.gov/greenbuilding/materials#Material, accessed January 4, 2023.

[15] Ibid.

Transportation Energy Demand

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with Federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. ***Table 4*** provides an estimate of the daily fuel consumed by vehicle traveling to and from the project site. Based on the *Moreno Valley TTM 38443 Residential Traffic Impact Analysis* (Traffic Analysis) developed by Translutions, Inc., dated August 5, 2022, and revised June 21, 2023, the proposed project would generate approximately 1,254 average daily trips. As indicated in ***Table 4***, project operational daily trips are estimated to consume approximately 237,789 gallons of fuel per year, which would increase the County's automotive fuel consumption by 0.0335 percent. The project does not propose any unusual features that would result in excessive long-term operational fuel consumption (**Criterion 2**).

The key drivers of transportation-related fuel consumption are job locations/commuting distance and many personal choices on when and where to drive for various purposes. Those factors are outside of the scope of the design of the proposed project. However, the project would be located within half a mile of an existing bus stop, and provide bicycle parking spaces on-site, which would promote alternative modes of transportation (**Criterion 4** and **Criterion 6**).

Therefore, fuel consumption associated with vehicle trips generated by the project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. A less than significant impact would occur in this regard.

Building Energy Demand

The CEC developed 2020 to 2035 forecasts for energy consumption and peak demand in support of the 2021 IEPR for each of the major electricity and natural gas planning areas and the State based on the economic and demographic growth projections.[16] CEC forecasts that the Statewide annual average growth rates of energy demand between 2021 and 2030 would be 1.3 percent to 2.3 percent for electricity and less than 0.1 percent to 0.8 percent increase for natural gas.[17] As shown in ***Table 4***, operational energy consumption of the project would represent approximately 0.0125 percent increase in electricity consumption and 0.0573 percent increase in natural gas consumption over the current Countywide usage, which would be significantly below CEC's forecasts and the current Countywide usage. Therefore, the project would be consistent with the CEC's energy consumption forecasts. As such, the project would not require additional energy capacity or supplies (**Criterion 2**). Additionally, the proposed project would be a residential development and the energy consumption would peak in the evening, similar to other residential developments. As a result, the project would not result in unique or more intensive peak or base

[16] California Energy Commission, *Final 2021 Integrated Energy Policy Report Volume IV California Energy Demand Forecast*, February 2022. Annual average growth rates of electricity demand and natural gas per capita demand are shown in Figure 10 and Figure 14, respectively.

[17] Ibid.

period electricity demand (**Criterion 3**).

The proposed residential building would be required to comply with 2022 Title 24 Building Energy Efficiency Standards, which provides minimum efficiency standards related to various building features, including appliances, space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the 2022 Title 24 standards significantly reduces energy usage. The Title 24 Building Energy Efficiency Standards are updated every three years and become more stringent between each update, as such, complying with the latest 2022 Title 24 standards would make the proposed project more energy efficient than existing buildings built under the earlier versions of the Title 24 standards. In addition, the project would use energy efficient appliances, which have been accounted for in ***Table 4*** (**Criterion 4**).

Furthermore, the electricity provider, SCE, is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 to 60 percent of total procurement by 2030. Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The increase in reliance of such energy resources further ensures that new development projects will not result in the waste of the finite energy resources (**Criterion 5**).

Therefore, the project would not cause wasteful, inefficient, and unnecessary consumption of building energy during project operation, or preempt future energy development or future energy conservation. A less than significant impact would occur in this regard.

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

Determination: Less Than Significant Impact.

The proposed project's consistency with the applicable measures in the City's General Plan for a new single-family home development are shown in ***Table 5, Consistency with General Plan Policies***. Furthermore, the project would be required to comply with 2022 Title 24 standards and 2022 CALGreen Code. Therefore, by complying with General Plan goals and policies, the project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and impacts will be less than significant.

Table 6: Project Consistency with General Plan Policies

Goals and Policies	Project Consistency Analysis
Goal OSRC-3: Use energy and water wisely and promote reduced consumption.	
OSRC 3.1: Promote energy conservation throughout the community and encourage the use of renewable energy systems and technologies to supplement or replace traditional building energy systems.	**Consistent**. The project would be required to comply with 2022 Title 24 standards and 2022 CALGreen Code. Further, in compliance with CALGreen Code, all single-family residential units of the project would install solar ready roofs and be electric vehicle (EV) charging capable by including a listed raceway within each dwelling unit

Goals and Policies	Project Consistency Analysis
	to accommodate EV charging stations. As such, the project would be consistent with this measure.
OSRC 3.5: Promote the retention and reuse of rainwater onsite and promote the use of rain barrels or other rainwater reuse systems throughout the community.	**Consistent**. The project would provide a water detention basin and storm drainage system in the southern portion of the site, which would provide rainwater retention. As such, the project would be consistent with this measure.
OSRC 3.6: Encourage new development to incorporate as many water-wise practices as feasible in their design and construction.	**Consistent**. As previously stated, the project would install low-flow water features, water-efficient irrigation, and drought-tolerant landscaping. As such, the project would the retain and reuse of rainwater throughout the community and would be consistent with this measure.
OSRC 3.8: Conserve water through the planting and maintenance of trees, which will provide for the capture of precipitation and runoff to recharge groundwater, in addition to providing shading for other landscaping to reduce irrigation requirements. Ensure that any 'community greening' projects utilize water-efficient landscape.	**Consistent.** **T**he project would provide approximately 1.7 acres of parkland in the northern portion of the site and a water detention basin and storm drainage system in the southern portion of the site. As a result, the project would conserve water through the planting and maintenance of trees, which will help in the capture of precipitation and runoff to recharge groundwater. Furthermore, the project would use water efficient irrigation, and drought-tolerant landscaping. As such, the project would be consistent with this measure.
Source: The City of Moreno Valley, *General Plan 2040*, June 15, 2021	

MITIGATION MEASURES

None required.

4.7 GEOLOGY AND SOILS

Would the proposed project:						
Issues			Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Expose people or structures to 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?			X	
	ii)	Strong seismic ground shaking?			X	
	iii)	Seismic-related ground failure, including liquefaction?			X	
	iv)	Landslides?				X
b)	Result in substantial soil erosion or the loss of topsoil?				X	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?				X	
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X	
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?					X
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X		

The analysis and findings throughout this section are based on the *Design-Level Geotechnical Exploration Proposed 50-Acre Residential Development South of Cottonwood Avenue, North of Alessandro Boulevard Moreno Valley, California* (Geotechnical Evaluation), prepared by Leighton and Associates, Inc., dated May 19, 2022, and provided as **Appendix 4** of this IS/MND.

DISCUSSION

7(a) Expose people or structures to 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?

Determination: Less Than Significant Impact.

According to the Geotechnical Evaluation, there are no known active faults traversing the site. The project site is also not located in an Earthquake Fault Zone as mapped by the California Geological Survey.[18] The closest mapped active fault that could affect the project site is the Claremont fault, which is located approximately 2.9 miles to the northeast. Therefore, the potential for fault rupture at the site is considered low. Although no active faults traverse the project site, as a condition of issuance of building and grading permits, the project would be required to comply with the requirements of the Alquist-Priolo Earthquake Fault Zoning Act, as well as with the 2022 California Building Code (CBC), which includes specific design measures intended to maximize structural stability in the event of an earthquake. Construction of the project would also be required to comply with current seismic design parameters and all other recommendations as contained in the Geotechnical Evaluation to ensure structural integrity in the event of an earthquake. Impacts would be less than significant.

ii) Strong seismic ground shaking?

Determination: Less Than Significant Impact.

The project site is located in seismically active Southern California with numerous fault systems in the region. As such, it should be anticipated that the project site will experience moderate to strong ground shaking in the near future. However, as a condition of issuance of grading and building permits, the project would be required to comply with current CBC seismic design parameters and all other recommendations as contained in the Geotechnical Evaluation. Compliance with these parameters would require proposed residential homes to be designed and constructed to withstand expected seismic activity and associated potential hazards, thereby minimizing risk to the public and property. The project would be designed and developed consistent with the CBC and standard engineering practices and reviewed in conjunction with the City Engineer. Therefore, the impacts would be less than significant.

[18] California Geological Survey *Earthquake Zones of Required Investigation* interactive web map; accessed January 3, 2023; https://maps.conservation.ca.gov/cgs/EQZApp/

iii) Seismic-related ground failure, including liquefaction?

Determination: Less Than Significant Impact.

Liquefaction

Liquefaction is the loss of soil strength or stiffness due to a buildup of pore-water pressure during severe ground shaking. Liquefaction is associated primarily with loose (low density), saturated, fine-to-medium grained, cohesionless soils. As the shaking action of an earthquake progresses, the soil grains are rearranged, and the soil densifies within a short period of time. Rapid densification of the soil results in a buildup of pore-water pressure. When the pore-water pressure approaches the total overburden pressure, the soil reduces greatly in strength and temporarily behaves similarly to a fluid. Effects of liquefaction can include sand boils, settlement, and bearing capacity failures below structural foundations.

Groundwater was not encountered within the exploratory borings performed for the Geotechnical Evaluation at a depth of 51.5 feet below ground surface (bgs). According to published groundwater studies encompassing the project site area, the depth to groundwater beneath the site in circa 1971 was approximately 190 feet bgs.

Based on the Geotechnical Evaluation, the sites near surface soils consist of silty sand of low plasticity. The southern areas of the site correspond to mapped areas of Quaternary Young Alluvial Fan deposits. This unit is defined as having a moderate susceptibility to liquefaction. These younger alluvial fan deposits are underlain by Pleistocene age very old fan deposits that are generally not susceptible to liquefaction. Given an absence of groundwater encountered beneath the site at or above a depth of 50 feet bgs, the potential constraint to the proposed development due to liquefaction and related seismic-induced settlement is considered very low. In addition, the Riverside County Map, My County interactive mapping website has mapped portions of the site as having a low liquefaction potential and portions of the site as having a moderate liquefaction potential.[19] The State of California has not prepared liquefaction hazard maps for this area.

During a strong seismic event, and in the absence of groundwater, seismically induced settlement can still occur within loose to medium dense and dry or moist granular soils. Settlement caused by ground shaking is often non-uniformly distributed, which can result in differential settlement. Based on the design earthquake and a Peak Ground Acceleration (PGA) of 0.89g, the magnitude of dynamic dry settlement is estimated to be on the order of approximately 4.0 inches, assuming remedial grading is performed in compliance with the Geotechnical Evaluation. Given the similar lithology of the onsite soil units and implementation of proposed remedial grading, anticipated dynamic settlement is expected to occur over a widespread area of the site. As such, the differential settlement is not expected to exceed 1-inch in a 30-foot horizontal distance.

Therefore, impacts relative to seismic-related ground failure including liquefaction would be less than significant.

19 Riverside County Map My County interactive mapping website; accessed January 3, 2023; https://gis1.countyofriverside.us/Html5Viewer/index.html?viewer=MMC_Public

iv) Landslides?

Determination: No Impact.

The proposed project is not expected to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death from landslides. Although the project site is in an area of high seismic activity, because of the relatively flat terrain on the site and the surrounding properties, the site is at little risk for landslides. No impact would occur.

7(b) Result in substantial soil erosion or the loss of topsoil?

Determination: Less Than Significant Impact.

Proposed construction activities would include clearing the site of debris and/or vegetation, soil excavation, grading, asphalt paving, residential home building construction, and landscaping. Such activities would disturb site soils, exposing them to the erosive effects of wind and water. However, all construction activities related to the proposed project would be subject to implementation of BMPs for erosion control, as required under National Pollutant Discharge Elimination System (NPDES) regulations pursuant to the federal Clean Water Act. NPDES requirements for construction projects of one acre or more in area are set forth in the Construction General Permit issued by the State Water Resources Control Board (State Water Board Order No. 2009-0009-DWQ). Furthermore, the project's land clearing, grading, and construction activities would be required to comply with SCAQMD Rules 403 and 403.2 regulating fugitive dust emissions, thus minimizing wind erosion from such ground-disturbing activities. Therefore, the proposed project would not generate substantial erosion. Soil erosion impacts would be less than significant.

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

Determination: Less Than Significant Impact.

Refer to Discussion 7a)iii and 7a)iv, above. Based on the low liquefaction and landslide potential, depth to groundwater, and flat topography, the project site is not considered to be located on a geologic unit or soil that is unstable or could become unstable as a result of the project. A less than significant impact would occur.

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

Determination: Less Than Significant Impact.

Expansion Index (EI) testing performed on representative samples collected from the project site and has indicated that the site near surface soils consist of silty sand of low plasticity and are expected to possess very low expansion potential (EI<21). The expansion potential of the very old alluvial fan deposits may be higher where containing locally greater concentrations of clay (EI<51). The Geotechnical Evaluation recommended that foundation elements for the proposed residential homes be composed of entirely engineered fill soils and should be designed in

accordance with the CBC. Therefore, with the project conditioned to adhere to this recommendation, impacts in regard to expansive soils would be reduced to less than significant.

7(e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Determination: No Impact.

The proposed project would be served by the municipal sewer system of the Eastern Municipal Water District (EMWD) and would therefore have no need for a septic system or other alternative wastewater disposal system. There would be no impact.

7(f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Determination: Less Than Significant Impact With Mitigation Incorporated.

The project is underlain by Young alluvial fan deposits (Qyf) and Very old alluvial fan deposits (Qvof). Young alluvial fan deposits, from the late Pleistocene (129,000 years ago to 11,700 years ago) and Holocene (11,700 years ago to present) epochs are predominantly composed of gray sand, cobble, and gravel deposits derived from sedimentary sources. In eastern Moreno Valley, where the project is located, these deposits are well developed and consist mostly of sand and gravel-sand. Very old alluvial fan deposits from the early Pleistocene (2.5 million years ago to 773,000 years ago) consist of well-dissected, well-indurated, reddish-brown sand deposits, containing minor gravel.

According to the Paleontological Resources portion of the Cultural Resources Assessment that was prepared for the project, a paleontology collection records search was conducted for locality and specimen data on October 13, 2022. The records search did not find previously known fossil localities within the project area. However, multiple localities were identified bearing vertebrate fossils within 1.5 miles of the project area from similar sedimentary deposits as found on the project area, including Pleistocene fossil specimens associated with ancient horse (Equus sp.) and giant ground sloth (*Megalonyx jeffersoni*). Additionally, Pleistocene units in the region are known to contain Pacific mastodon (*Mammut pacificus*), Columbian mammoth (*Mammuthus columbi*), ancient bison (*Bison* sp.), and many others. Supplemental searches were also conducted with a 5-mile search radius of the project area, which identified two additional localities that have been reported within five miles of the project site.

Paleontological records search and fossil locality searches indicate that potentially fossil-bearing units are present in the project area since the same Pleistocene-age deposits outside of the project area have contained fossils. The Holocene-age deposits in the project area have a low sensitivity, but Pleistocene-age alluvial sediments may underlie these younger sediments at a relatively shallow depth. Per mitigation impact guidelines set forth by the Society of Vertebrate Paleontology, due to the fossil sensitivity of the rock formations present within the project area (paralic deposits of middle to late Pleistocene), the project area has a high potential to disturb paleontological resources within undisturbed bedrock. Therefore, full-time paleontological monitoring would be required during ground disturbing activities, as described in **Mitigation**

Measure GEO-1. With implementation of **Mitigation Measure GEO-1**, potential impacts to undiscovered paleontological resources would be reduced to a less than significant level.

MITIGATION MEASURES

GEO-1 Full-time paleontological monitoring shall be conducted during ground disturbance in undisturbed geologic contexts (i.e., bedrock and outcrops below existing asphalt and base) which have the potential to contain significant paleontological resources. Ground disturbance refers to activities that impact subsurface geologic deposits, such as grading, excavation, boring, etc. Activities taking place in current topsoil or within previously disturbed fill sediments, e.g., clearing, grubbing, pavement rehabilitation, do not require paleontological monitoring. Bedrock can occur at varying depths depending on the portion of the project area.

Prior to grading or excavation in sedimentary rock material other than topsoil, the applicant shall retain a Society of Vertebrate Paleontology (SVP) qualified paleontologist. The qualified paleontologist shall monitor, or supervise the monitoring being performed by a paleontological monitor, of earth-moving activities. If any paleontological resources are discovered at the project area during construction or during any ground-disturbance activities at any depth, the paleontological monitor, in discussion with the qualified paleontologist, shall notify the on-site construction supervisor, who shall temporarily halt work or redirect all such activities within 100 feet of the discovery.

At this time, the Project Applicant shall consult with the qualified paleontologist to assess the significance of the find to determine the appropriate treatment. The assessment shall follow SVP (2010) standards for identification, evaluation, disclosure, avoidance, recovery, and/or curation, as appropriate. If any find is determined to be significant, appropriate avoidance measures recommended by the qualified paleontologist shall be followed unless avoidance is determined to be unnecessary or infeasible. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. The recommendations of the qualified paleontologist shall be implemented with respect to the evaluation and recovery of fossils, after which the on-site construction supervisor shall be notified and shall direct work to continue in the location of the fossil discovery. Any fossils recovered during mitigation shall be cleaned, identified, catalogued, and permanently curated with an accredited and permanent scientific institution with a research interest in the materials.

If no fossils have been recovered after 50 percent of excavation has been completed, full-time monitoring may be modified to weekly spot-check monitoring at the discretion of the qualified paleontologist. The qualified paleontologist may recommend to the client to reduce paleontological monitoring based on observations of specific site conditions during initial monitoring (e.g., if the geologic setting precludes the occurrence of fossils). The recommendation to reduce or discontinue paleontological monitoring in the project area shall be based on the professional

opinion of the qualified paleontologist regarding the potential for fossils to be present after a reasonable extent of the geology and stratigraphy has been evaluated.

A qualified professional paleontologist is a professional with a graduate degree in paleontology, geology, or related field, with demonstrated experience in the vertebrate, invertebrate, or botanical paleontology of California, as well as at least one year of full-time professional experience or equivalent specialized training in paleontological research (i.e., the identification of fossil deposits, application of paleontological field and laboratory procedures and techniques, and curation of fossil specimens), and at least four months of supervised field and analytic experience in general North American paleontology.

SIGNIFICANCE OF IMPACT AFTER MITIGATION

With implementation of **Mitigation Measure GEO-1**, as well as adherence to the standard conditions and requirements, potential impacts regarding geology and soils (paleontological resources) would be reduced to a less than significant level.

4.8 GREENHOUSE GAS EMISSIONS

Would the proposed project:					
	Issues	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b)	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

DISCUSSION

The analysis and findings throughout this section are based on the *Air Quality, Energy and Greenhouse Gas Emissions Impact Modeling Data* (Air Quality, Energy and Greenhouse Gas Data) prepared by Michael Baker International, dated January 12, 2023, provided as **Appendix 1** of this IS/MND.

Background

Global Climate Change

California is a substantial contributor of global greenhouse gases (GHGs), emitting over 431 million tons of carbon dioxide (CO_2) per year.[20] Climate studies indicate that California is likely to see an increase of three to four degrees Fahrenheit over the next century. Methane (CH_4) is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which is to increase the earth's ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of CO_2, CH_4, and nitrous oxide (N_2O) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found that CO_2 concentrations ranged from 180 to 300 parts per million (ppm). For the period from approximately 1750 to the present, global CO_2 concentrations increased from a pre-industrialization period concentration of 280 to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range. As of January 2023, the highest

[20] California Environmental Protection Agency, *California Greenhouse Gas Emissions for 2000 to 2020*, https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf, accessed January 3, 2023.

monthly average concentration of CO_2 in the atmosphere was recorded at 419 ppm.[21]

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 ppm carbon dioxide equivalent (CO_2e)[22] concentration is required to keep global mean warming below 2 degrees Celsius (°C), which in turn is assumed to be necessary to avoid dangerous climate change.

Regulatory Framework

Various Statewide and local initiatives to reduce the State's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation is necessary to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

State

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500-38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on Statewide GHG emissions. AB 32 requires that Statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to AB 1493 (Pavley Bill) should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then the California Air Resources Board (CARB) should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

Senate Bill 375

Senate Bill (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 (MPOs) to adopt a sustainable communities' strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in that MPOs regional transportation plan. CARB, in consultation with MPOs, is required to provide each affected region with GHG reduction targets emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets are to be

21 Scripps Institution of Oceanography, Carbon Dioxide C*oncentration at Mauna Loa Observatory*, https://scripps.ucsd.edu/programs/keelingcurve/, accessed January 3, 2023.

22 Carbon Dioxide Equivalent (CO2e) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects may not be eligible for funding.

Executive Order S-3-05

Executive Order S-3-05 set forth a series of target dates by which Statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The Executive Order directed the California Environmental Protection Agency (Cal/EPA) Secretary to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary is required to submit biannual reports to the Governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with Executive Order S-3-05, the Cal/EPA Secretary created the California Climate Action Team, made up of members from various State agencies and commissions. The Climate Action Team released its first report in March 2006, which proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through State incentive and regulatory programs.

Title 24, Part 6

The California Energy Efficiency Standards for Residential and Nonresidential Buildings, Title 24, Part 6 of the California Code of Regulations (CCR) and commonly referred to as "Title 24," were established in 1978 in response to a legislative mandate to reduce California's energy consumption. Part 6 of Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2022 Title 24 standards was adopted in August 2021. The 2022 Title 24 standards encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expand solar photovoltaic and battery storage standards, strengthen ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, would be required to comply with the 2022 Title 24.

Title 24, Part 11

The California Green Building Standards Code (CCR Title 24, Part 11), commonly referred to as CALGreen, is a Statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in five green building topical areas. The current version of the CALGreen Code went into effect on January 1, 2023. Buildings whose permit applications

are applied for on or after January 1, 2023, would be required to comply with the 2022 CALGreen Code.

Senate Bill 32

Signed into law on September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). SB 32 authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

CARB Scoping Plan

On December 11, 2008, CARB adopted its Scoping Plan, which functions as a roadmap to achieve the California GHG reductions required by AB 32 through subsequently enacted regulations. CARB's Scoping Plan contains the main strategies California would implement to reduce the projected 2020 "Business-as-Usual" (BAU) emissions to 1990 levels, as required by AB 32. These strategies are intended to reduce carbon dioxide equivalent (CO_2e) emissions by 174 million metric tons. This reduction of 42 million metric tons carbon dioxide equivalent ($MTCO_2e$), or almost ten percent from 2002 to 2004 average emissions, would be required despite the population and economic growth forecasted through 2020. CARB's Scoping Plan calculates 2020 BAU emissions as those expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, commercial and residential, industrial, etc.). CARB used three-year average emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. When CARB's Scoping Plan process was initiated, 2004 was the most recent year for which actual data was available. The measures described in CARB's Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observes that "a mid-term Statewide emission limit will ensure that the State stays on course to meet our long-term goal." On January 20, 2017, CARB released the proposed Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. The 2017 Scoping Plan Update establishes a new Statewide emissions limit of 260 million $MTCO_2e$ for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030.

On December 15, 2022, CARB released the *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan), which identifies the strategies achieving carbon neutrality by 2045 or earlier. The 2022 Scoping Plan contains the GHG reductions, technology, and clean energy mandated by statutes. The 2022 Scoping Plan was developed to achieve carbon neutrality by 2045 through a

substantial reduction in fossil fuel dependence, while at the same time increasing deployment of efficient non-combustion technologies and distribution of clean energy. The plan would also reduce emissions of short-lived climate pollutants (SLCPs) and would include mechanical CO_2 capture and sequestration actions, as well as emissions and sequestration from natural and working lands and nature-based strategies. Under 2022 Scoping Plan, by 2045, California aims to cut GHG emissions by 85 percent below 1990 levels, reduce smog-forming air pollution by 71 percent, reduce the demand for liquid petroleum by 94 percent compared to current usage, improve health and welfare, and create millions of new jobs. This plan also builds upon current and previous environmental justice efforts to integrate environmental justice directly into the plan, to ensure that all communities can reap the benefits of this transformational plan.

Regional

Southern California Association of Governments

On September 3, 2020, the Regional Council of SCAG formally adopted *the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments – Connect SoCal* (2020–2045 RTP/SCS). The SCS portion of the 2020-2045 RTP/SCS highlights strategies for the region to reach the regional target of reducing GHGs from autos and light-duty trucks by 8 percent per capita by 2020, and 19 percent by 2035 (compared to 2005 levels). Specially, these strategies are:

- Focus growth near destinations and mobility options;
- Promote diverse housing choices;
- Leverage technology innovations;
- Support implementation of sustainability policies; and
- Promote a green region.

Furthermore, the 2020-2045 RTP/SCS discusses a variety of land use tools to help achieve the state-mandated reductions in GHG emissions through reduced per capita vehicle miles traveled (VMT). Some of these tools include center focused placemaking, focusing on priority growth areas, job centers, transit priority areas, as well as high quality transit areas and green regions.

Local

City of Moreno Valley Climate Action Plan

The City of Moreno Valley *Climate Action Plan* (CAP) was adopted on June 15, 2021. The CAP addresses the SB 32 target that recommends local governments achieving the target of 6.0 $MTCO_2e$ per capita per year by 2030 and 2.0 $MTCO_2e$ per capita per year by 2050 in their CAPs. The CAP has adopted a proposed target of 4.0 $MTCO_2e$ per capita per year by 2040, which was determined using a linear trajectory in emissions reduction between 2030 and 2050. GHG emissions associated with the proposed project would be less than significant if the project would generate emissions below the per capita target and is consistent with the CAP policies.

Transportation Measures

Transportation was found to be the largest contributor to GHG emissions. The following transportation measure is applicable to the project:

TR-5: Implement trip reduction programs in new residential, commercial, and mixed-use developments.

Residential Measures

The residential strategies identify opportunities to reduce residential emissions through energy-efficient improvements, energy audits, and citywide programs. The following residential measure is applicable to the project:

R-2: Require new construction and major remodels to install interior real-time energy smart meters in line with current utility provider (e.g., Moreno Valley Utility, SCE) efforts.

Off-Road Equipment

The following strategies target opportunities to minimize emissions from construction and landscaping equipment, with the added benefit of improving air quality and public health:

OR-1: Encourage residents and businesses to use efficient lawn and garden maintenance equipment or to reduce the need for landscape maintenance through native planting.

- Partner with the SCAQMD to establish a voluntary exchange program for residential electric lawnmowers and backpack-style leaf blowers.
- Require new buildings to provide electrical outlets in an accessible location to facilitate use of electric-powered lawn and garden equipment.
- In project review, encourage the replacement of high maintenance landscapes (like grass turf) with native vegetation to reduce the need for gas-powered lawn and garden equipment.

OR-2: 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.

- Require provision of clear signage reminding construction workers to limit idling.
- Require project applicants to limit GHG emissions through one or more of the following measures: substitute electrified or hybrid equipment for diesel/gas powered, use alternative-fueled equipment on site, avoid use of on-site generators.

Threshold of Significance

Amendments to CEQA Guidelines Section 15064.4 were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions and gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. This section recommends certain factors to be considered in the determination of significance (i.e., the extent to which a project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and the extent

to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHGs). The amendments do not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (CEQA Guidelines Section 15064.7(c)). The California Natural Resources Agency has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and therefore GHG emissions should be analyzed in the content of CEQA's requirements for cumulative impact analyses (CEQA Guidelines Section 15064(h)(3)).[23, 24] A project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements to avoid or substantially lessen the cumulative problem within the geographic area of the project.[25]

The CAP reflects guidelines established in the 2017 Scoping Plan prepared by the CARB. The 2017 Scoping Plan, designed to implement the State's not-to-exceed GHG emission targets set in EO S-3-15 and SB 32, recommends that local governments target 6.0 $MTCO_2e$ per capita per year in 2030 and 2.0 $MTCO_2e$ per capita per year in 2050 in their CAPs. The proposed 2040 target of 4.0 $MTCO_2e$ per capita per year is determined using a linear trajectory in emissions reduction between 2030 and 2050. Furthermore, the methodology for evaluating the project's impacts related to GHG emissions also focuses on its consistency with Statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions.

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

Determination: Less Than Significant Impact.

Project-Related Sources of Greenhouse Gases

Project-related GHG emissions include emissions from direct and indirect sources. Project implementation would result in direct and indirect emissions of CO_2, N_2O, and CH_4, and would not result in other GHGs that would facilitate a meaningful analysis. Therefore, this analysis focuses on these three forms of GHG emissions. Direct project-related GHG emissions include emissions from construction activities, area sources, and mobile sources, while indirect sources include emissions from energy consumption, water demand, and solid waste generation. The California Emissions Estimator Model (CalEEMod), version 2020.4.0, was used to calculate direct and indirect project-related GHG emissions. The project proposes to construct a 135-unit single-

23 California Natural Resources Agency, *Final Statement of Reasons for Regulatory Action*, pp. 11-13, 14, 16, December 2009, https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/Final_Statement_of_Reasons.pdf, accessed September 22, 2022.

24 State of California Governor's Office of Planning and Research, *Transmittal of the Governor's Office of Planning and Research's Proposed SB97 CEQA Guidelines Amendments to the Natural Resources Agency*, April 13, 2009, https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/C01.pdf, accessed September 22, 2022.

25 California Code of Regulations Section 15064(h)(3).

family housing development with park use. Based on the City's average household size of 3.70[26], the 135 units would introduce up to 500 additional residents within the City. ***Table 6, Estimated Greenhouse Gas Emissions***, presents the estimated CO_2, N_2O, and CH_4 emissions associated with the proposed project. Refer to ***Appendix 1, Air Quality, Energy and Greenhouse Gas Data,*** for CalEEMod outputs.

Table 7: Estimated Greenhouse Gas Emissions

Source	CO_2	CH_4		N_2O		Total Metric Tons of CO_2e[2,3]
	Metric tons/year[1]	Metric tons/year[1]	Metric tons of CO_2e[1,3]	Metric tons/year[1]	Metric tons of CO_2e[1,3]	
Direct Emissions						
Construction (amortized over 30 years)[4]	46.85	0.01	0.25	<0.01	0.21	47.32
Area Source	34.44	<0.01	0.07	<0.01	0.18	34.68
Mobile Source	1332.06	0.07	1.70	0.07	19.50	1,353.24
Total Direct Emissions	*1,413.35*	*0.08*	*2.02*	*0.07*	*19.89*	*1,435.24*
Indirect Emissions						
Energy Consumption	391.55	0.02	0.50	0.01	1.70	393.73
Solid Waste	7.98	0.47	11.80	0.00	0.00	19.76
Water Demand	37.18	0.29	7.20	0.01	2.10	46.47
Total Indirect Emissions	*436.71*	*0.78*	*19.5*	*0.02*	*3.8*	*459.96*
Total Project-Related Emissions[3]	*1,895.20 $MTCO_2e$/year*					
Total Project-Related Emissions per capita	***3.82 $MTCO_2e$/year per capita***					
Moreno Valley CAP 2040 CAP Target	*4.0 $MTCO_2e$/year per capita*					
Exceeds Threshold?	***No***					

Notes:

Carbon dioxide equivalent = CO_2e; metric tons of carbon dioxide equivalent per year = $MTCO_2e$ per year

1. Project emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD.
2. Totals may be slightly off due to rounding.
3. Carbon dioxide equivalent values calculated using the U.S. Environmental Protection Agency Website, *Greenhouse Gas Equivalencies Calculator*, http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator, accessed January 3, 2023.
4. Total project construction GHG emissions equate to 1,419.65 $MTCO_2e$. Value shown is amortized over the lifetime of the project (assumed to be 30 years).

[26] State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State*, 2021-2022 with 2020 Census Benchmark, May 2022, https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/, accessed January 3, 2023.

Refer to Appendix 1, *Air Quality/Greenhouse Gas/Energy Analysis*, for detailed model input/output data.

Direct Project-Related Sources of Greenhouse Gases

Construction Emissions. Construction GHG emissions are typically summed and amortized over the lifetime of the project (assumed to be 30 years), then added to the operational emissions.[27] As shown in ***Table 6***, the proposed project would result in 47.32 $MTCO_2e$ per year when amortized over 30 years (or a total of 1,419.65 $MTCO_2e$ in 30 years).

Area Source. Area source emissions were calculated using CalEEMod and project-specific land use data. Project-related area sources include exhaust emissions from landscape maintenance equipment. The project would use all electric landscape equipment. The project would directly result in 34.68 $MTCO_2e$ per year from area source emissions; refer to ***Table 6***.

Mobile Source. Based on *Moreno Valley TTM 38443 Residential Traffic Impact Analysis* (Transportation Analysis) developed by Translutions, Inc., dated August 5, 2022, and revised June 21, 2023, the proposed project would generate approximately 1,254 average daily trips. The project would result in approximately 1,353.24 $MTCO_2e$ per year of mobile source generated GHG emissions; refer to ***Table 6***.

Indirect Project-Related Sources of Greenhouse Gases

Energy Consumption. Energy consumption emissions were calculated using CalEEMod and project-specific land use data. SCE would provide electricity to the project site. The project proposes to install high efficiency lighting and energy efficient appliances. The project would indirectly result in 393.73 $MTCO_2e$ per year due to energy consumption; refer to ***Table 6***.

Water Demand. The project would install low-flow water fixtures and utilize water-efficient irrigation systems and draught-tolerant landscaping. Emissions from indirect energy impacts due to water supply would result in 46.47 $MTCO_2e$ per year; refer to ***Table 6***.

Solid Waste. Solid waste associated with operations of the proposed project would result in 19.76 $MTCO_2e$ per year; refer to ***Table 6***.

Total Project-Related Sources of Greenhouse Gases

As shown in ***Table 6***, the total amount of project related GHG emissions from direct and indirect sources combined would total 1,895.20 $MTCO_2e$ per year. As the project would introduce up to 500 additional residents within the City, the project would generate approximately 3.82 $MTCO_2e$ per year per capita and would not exceed the per capita target for 2040 of 4.0 $MTCO_2e$ per year per capita.

[27] The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008).

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Determination: Less Than Significant Impact.

The GHG plan consistency for the project is based on the project's consistency with the CARB 2022 Scoping Plan, the SCAG 2020-2045 RTP/SCS, and the City's CAP. The 2022 Scoping Plan identifies reduction measures necessary to achieve the goal of carbon neutrality by 2045 or earlier. Actions that reduce GHG emissions are identified for each AB 32 inventory sector. The SCAG 2020-2045 RTP/SCS includes strategies for the region to reach the regional target of reducing GHG from transportation sector. The City's CAP contains goals and policies that would help implement energy efficient measures and would subsequently reduce GHG emissions within the City.

Consistency with 2020-2045 RTP/SCS

On September 3, 2020, the Regional Council of SCAG formally adopted the 2020-2045 RTP/SCS. The 2020-2045 RTP/SCS includes performance goals that were adopted to help focus future investments on the best-performing projects, as well as different strategies to preserve, maintain, and optimize the performance of the existing transportation system. The SCAG 2020-2045 RTP/SCS is forecasted to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by eight percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets adopted in March 2018. Five key SCS strategies are included in the 2020-2045 RTP/SCS to help the region meet its regional VMT and GHG reduction goals, as required by the State. ***Table 7¸ Project Consistency with 2020-2045 RTP/SCS,*** shows the project's consistency with the five key SCS strategies found within the 2020-2045 RTP/SCS that help the region meet its regional VMT and GHG reduction goals, as required by the State. As shown therein, the proposed project would be consistent with the GHG emission reduction strategies contained in the 2020-2045 RTP/SCS.

Table 8: Project Consistency with 2020-2045 RTP/SCS

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Focus Growth Near Destinations and Mobility Options		
• Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations • Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets • Plan for growth near transit investments and support implementation of first/last mile strategies • Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods • Encourage design and transportation options that	**Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable**	**Consistent.** The project consists of a 135-unit single-family development. The project site is currently vacant and would redevelop the underutilized land to accommodate new growth by increasing the housing development within the City. Also, the project site is located near existing bus stops serviced by Riverside Transit Agency (RTA) located less than half a mile to the

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations) • Identify ways to "right size" parking requirements and promote alternative parking strategies (e.g., shared parking or smart parking)	**Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.**	southwest of the project site. Additionally, the project would provide bicycle parking spaces, which would promote alternative modes of transportation that can reduce VMT. As such, the project would be consistent with this reduction strategy.
Promote Diverse Housing Choices		
• Preserve and rehabilitate affordable housing and prevent displacement • Identify funding opportunities for new workforce and affordable housing development • Create incentives and reduce regulatory barriers for building context sensitive accessory dwelling units to increase housing supply • Provide support to local jurisdictions to streamline and lessen barriers to housing development that supports reduction of greenhouse gas emissions	**PGA, Job Centers, HQTAs, NMA, TPAs, Livable Corridors, Green Region, Urban Greening.**	**Consistent.** The project would involve development of a single-family residential community near the existing bus stops which increases housing supply and supports reduction of GHG emissions. Therefore, the project would promote diverse housing choice by increasing housing within the City and is consistent with this reduction strategy.
Leverage Technology Innovations		
• Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space • Improve access to services through technology—such as telework and telemedicine as well as other incentives such as a "mobility wallet," an app-based system for storing transit and other multi-modal payments • Identify ways to incorporate "micro-power grids" in communities, for example solar energy, hydrogen fuel cell power storage and power generation	**HQTA, TPAs, NMA, Livable Corridors.**	**Consistent.** The project would comply with all applicable 2022 Title 24 and CALGreen building codes at the time of construction. The project would install high efficiency lighting and use energy efficient appliances. The project would provide solar ready roofs in accordance with the 2022 Title 24 standards and CALGreen Code. Therefore, the proposed development would leverage technology innovations and help the City, County, and State meet its GHG reduction goals. The project would be consistent with this reduction strategy.
Support Implementation of Sustainability Policies		
• Pursue funding opportunities to support local sustainable development implementation projects that reduce greenhouse gas emissions • Support statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations	**Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit**	**Consistent.** As previously discussed, the project site is located near existing bus stops serviced by RTA. Further, the project would comply with sustainable practices included in

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
• Support local jurisdictions in the establishment of Enhanced Infrastructure Financing Districts (EIFDs), Community Revitalization and Investment Authorities (CRIAs), or other tax increment or value capture tools to finance sustainable infrastructure and development projects, including parks and open space • Work with local jurisdictions/communities to identify opportunities and assess barriers to implement sustainability strategies • Enhance partnerships with other planning organizations to promote resources and best practices in the SCAG region • Continue to support long range planning efforts by local jurisdictions • Provide educational opportunities to local decisions makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy	**Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.**	the 2022 Title 24 standards and CALGreen Code, such as installation of water-efficiency irrigation, and drought-tolerant landscaping. Thus, the project would be consistent with this reduction strategy.
Promote a Green Region		
• Support development of local climate adaptation and hazard mitigation plans, as well as project implementation that improves community resiliency to climate change and natural hazards • Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration • Integrate local food production into the regional landscape • Promote more resource efficient development focused on conservation, recycling and reclamation • Preserve, enhance and restore regional wildlife connectivity • Reduce consumption of resource areas, including agricultural land • Identify ways to improve access to public park space	**Green Region, Urban Greening, Greenbelts and Community Separators.**	**Consistent.** The proposed project is a housing development in an urbanized area and would therefore not interfere with regional wildlife connectivity or agricultural land. The project would be required to comply with sustainable practices included in 2022 Title 24 standards and CALGreen Code, which would help reduce energy consumption and reduce GHG emissions. Thus, the project would support efficient development that reduces energy consumption and GHG emissions. The project would be consistent with this reduction strategy.

Source: Southern California Association of Governments, *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*, September 3, 2020.

Consistency with 2022 CARB Scoping Plan

The 2022 Scoping Plan identifies reduction measures necessary to achieve the goal of carbon neutrality by 2045 or earlier. Actions that reduce GHG emissions are identified for each AB 32 inventory sector. Provided in ***Table 8, Consistency with the 2022 Scoping Plan: AB 32 GHG Inventory Sectors***, is an evaluation of applicable reduction actions/strategies by emissions source category to determine how the project would be consistent with or exceed reduction

actions/strategies outlined in the 2022 Scoping Plan.

Table 9: Consistency with the 2022 Scoping Plan: AB 32 GHG Inventory Sectors

Actions and Strategies	Project Consistency Analysis
Smart Growth / Vehicles Miles Traveled (VMT)	
Reduce VMT per capita to 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045.	**Consistent**. The project proposes to build a single-family residential development with park uses. Based on the *TTM 38443 Residential VMT Analysis,* prepared by Translutions, dated August 5, 2022, and revised June 21, 2023, the project generated VMT under Baseline Year and Year 2040 with project conditions does not exceed the City's per capita VMT. Additionally, the project would provide bicycle parking spaces, which would promote alternative modes of transportation that can reduce VMT. As such, the project would be consistent with this action.
New Residential and Commercial Buildings	
All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030.	**Consistent**. The project is expected to consist of natural gas heating and/or cooking on-site. The City of Moreno Valley has not adopted an ordinance or program limiting the use of natural gas for on-site cooking and/or heating. However, if adopted, the project would comply with the applicable goals or policies limiting the use of natural gas equipment in the future. Furthermore, the project would install high efficiency lighting and appliances and is also expected to use all electric landscaping equipment. As such, the project would be consistent with this action.
Food Products	
Achieve 7.5% of energy demand electrified directly and/or indirectly by 2030 and 75% by 2045.	**Consistent**. As mentioned above, the City of Moreno Valley has not adopted an ordinance or program limiting the use of natural gas for on-site cooking and/or heating. However, if adopted, the project would comply with the applicable goals or policies limiting the use of natural gas equipment in the future. As such, the project would be consistent with the action.
Non-combustion Methane Emissions	
Divert 75% of organic waste from landfills by 2025.	**Consistent**. The project would be required to demonstrate compliance with AB 341, which requires a waste reduction target of 75 percent for residential uses. As such, the project would be consistent of this action.

Source: California Air Resources Board, *2022 Scoping Plan*, November 16, 2022.

Consistency with City of Moreno Valley CAP

The proposed project's consistency with the applicable measures in the 2021 CAP for a new single-family home development are shown in ***Table 9, Consistency with City's Applicable CAP Policies***.

Table 10: Consistency with City's Applicable CAP Policies

Actions and Strategies	Project Consistency Analysis
Transportation Measures	
TR-5: Implement trip reduction programs in new residential, commercial, and mixed-use developments.	**Consistent**. The project proposes to build a single-family residential development with park uses. Based on the *TTM 38443 Residential VMT Analysis,* prepared by Translutions, dated August 5, 2022, and revised June 21, 2023, the project generated VMT under Baseline Year and Year 2040 with project conditions does not exceed the City's per capita VMT. Additionally, the project would provide bicycle parking spaces, which would promote alternative modes of transportation that can reduce VMT. As such, the project would be consistent with this measure.
Residential Measures	
R-2: 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.	**Consistent**. The project would install smart energy meters in line with current utility provider (e.g., MVU, SCE) efforts.
Off-Road Equipment	
OR-1: Encourage residents and businesses to use efficient lawn and garden maintenance equipment or to reduce the need for landscape maintenance through native planting. ○ Partner with the SCAQMD to establish a voluntary exchange program for residential electric lawnmowers and backpack-style leaf blowers. ○ Require new buildings to provide electrical outlets in an accessible location to facilitate use of electric-powered lawn and garden equipment. ○ In project review, encourage the replacement of high maintenance landscapes (like grass turf) with native vegetation to reduce the need for gas-powered lawn and garden equipment.	**Consistent**. The project would be required to implement the 2022 Title 24 Part 11 and CalGreen building standards that require that the homes include electrical outlets on the exterior of the proposed homes to allow for plug-in electrical landscaping equipment to be used for lawn and garden maintenance. As such, the project would be consistent with this measure.
OR-2: Reduce emissions from heavy-duty construction equipment by limiting idling based on SCAQMD	**Consistent. T**he project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which

Actions and Strategies	Project Consistency Analysis
requirements and utilizing cleaner fuels, equipment, and vehicles. ○ Require provision of clear signage reminding construction workers to limit idling. ○ Require project applicants to limit GHG emissions through one or more of the following measures: substitute electrified or hybrid equipment for diesel/gas powered, use alternative-fueled equipment on site, avoid use of on-site generators.	minimizes the idling time of construction equipment either by requiring equipment to be shut off when not in use or limiting idling time to no more than five minutes. As such, the project would be consistent with this measure.

Source: City of Moreno Valley, *Climate Action Plan*, June 15, 2021

MITIGATION MEASURES

None required.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Would the proposed project:					
	Issues	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or a public airport or public use airport, result in a safety hazard for people residing or working in the project area? For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?			X	
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g)	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				x

DISCUSSION

9(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Determination: Less Than Significant Impact.

Exposure of the public or the environment to hazardous materials can occur through improper handling or use of hazardous materials or hazardous wastes particularly by untrained personnel, a transportation accident, environmentally unsound disposal methods, or fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted, the concentration and type of hazardous material or wastes present, and the proximity of sensitive receptors.

Project construction could expose construction workers and the public to temporary hazards related to the transport, use, and maintenance of construction materials (i.e., oil, diesel fuel, transmission fluid, etc.). These activities would be short-term, and the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard. All project construction activities would demonstrate compliance with the applicable laws and regulations governing the use, storage, and transportation of hazardous materials, ensuring that all potentially hazardous materials are used and handled in an appropriate manner. Impacts concerning the routine transport, use, or disposal of hazardous materials during project construction would be less than significant.

9(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?

Determination: Less Than Significant Impact.

CONSTRUCTION IMPACTS

During project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and federal law. Construction impacts in this regard would be less than significant.

OPERATIONAL IMPACTS

Hazardous materials are not typically associated with single-family residential uses. Anticipated hazardous materials use may include minor cleaning products and the occasional use of

pesticides and herbicides for landscape maintenance. Compliance with applicable laws and regulations governing the use, storage, and transportation of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts to occur. As such, impacts concerning the significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would not occur with project implementation. Therefore, potential hazardous materials impacts relative to operation of the project would be less than significant.

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

Determination: Less Than Significant Impact.

There are no existing schools within one-quarter mile of the proposed project site. The nearest elementary school is Moreno Elementary School at 26700 Cottonwood Avenue, located approximately 0.4-mile west of the project site. The nearest middle school is Mountain View Middle School at 13130 Morrison Street, located approximately 0.6-mile northwest of the project site. The nearest high school is Valley View High School at 13135 Nason Street, approximately 0.3-mile northwest of the project site.

There is one proposed elementary school located at the parcel adjoining the project site to the west (APN 488-190-034, owned by the Moreno Valley Unified School District [MVUSD]). However, operation and maintenance of the proposed project would not produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. Therefore, the proposed project would not result in impacts related to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. A less than significant impact would occur in this regard.

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

Determination: Less Than Significant Impact.

Existing and past land use activities are used as potential indicators of hazardous material storage and use. For example, many historic sites, historic and current, have soil or groundwater contamination as a result of spills of hazardous substances and petroleum products. Other hazardous materials sources include leaking underground storage tanks in commercial and rural areas. Government Code Section 65962.5 requires the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB) to compile and update a regulatory sites listing (per the criteria of the Section).

Based upon a review of the EnviroStor database managed by the DTSC,[28] no records of federal Superfund, State Response, Voluntary Cleanup, Corrective Action or Evaluation occur within one mile of the project site; however, one, record of a School Cleanup was reported at the parcel adjoining the project site to the west (APN 488-190-034, owned by the MVUSD) on which an elementary school is proposed, as noted above. This record indicates that there was former agriculture land onsite that was used as a citrus orchard from at least 1938 to 2004, as well as a 500-gallon diesel Above Storage Tank (AST) that was removed on July 11, 2017, by the former landowner. A gasoline powered windmill, located in the center of the field, was also removed in early 2018. Correspondence from the DTSC to the MVUSC dated August 29, 2019, acknowledges that, to evaluate the impact from residual agricultural chemicals and the above ground storage tank, the site was investigated for arsenic, lead, organochlorine pesticides (OCPs) and petroleum hydrocarbons. Lead and dieldrin were detected above screening levels. Additional investigation was conducted to define the extent of contamination and identified near surface soil impacted with hazardous constituents in small, isolated areas. The human health risk screening evaluation that was performed to evaluate the risk posed by detected lead and OCPs indicated that these detections were below the level of concern for protection of public health and the site is adequate for unrestricted land use. The DTSC concurred with the conclusion that further environmental investigation of the site was not required and approved the site's environmental assessment.

Based upon a review of the SWRCB Geotracker website, no records of LUST Cleanup Sites, Cleanup Program Sites, or Military Cleanup, Privatized, or UST Sites occur within one mile of the project site.[29]

No work is proposed within the vicinity of the former school cleanup site and no contaminated soils are expected to be present in the project area. Since the project site is not listed as a hazardous materials site and there are no known active hazardous materials sites within one mile of the site, implementation of the project would not create a significant hazard to the public or the environment. Therefore, a less than significant impact would occur in this regard.

9(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or a public airport or public use airport, result in a safety hazard for people residing or working in the project area? For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?

Determination: Less Than Significant Impact.

The project site is not located within two miles of an airport. The nearest airport is the March Air

1 Department of Toxic Substances Control, EnviroStor Website. https://www.envirostor.dtsc.ca.gov/public/ Accessed January 17, 2023.

[29] State Water Resources Control Board, Geotracker website, https://geotracker.waterboards.ca.gov/map/?myaddress=California&from=header&cqid=3152875602 Accessed January 17, 2023.

Reserve Base located approximately 3.8 miles southwest of the project site.[30] According to the March Air Reserve Base Land Use Compatibility Plan, the project is not located in a compatibility zone. Additionally, the residential development would not be of a sufficient height to require modifications to the existing air traffic patterns at the airport and, therefore, would not affect aviation traffic levels or otherwise result in substantial aviation-related safety risks. Therefore, a less than significant impact would occur relative to airport safety hazards.

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

Determination: Less Than Significant Impact.

Activities associated with the project would not impede existing emergency response plans for the project site and/or other land uses in the project vicinity. The project does not propose changes to the City's circulation system, such as sharp curves or dangerous intersections, and would not introduce incompatible uses to area roadways. Furthermore, should partial lane closures be required as part of project construction activities, implementation of a traffic management plan would minimize congestion and ensure safe travel, including emergency access in the project vicinity. Therefore, the impacts would be less than significant.

9(g) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Determination: No Impact.

As discussed in Section 4.20, *Wildfire,* the project site is located in a moderately developed area surrounded by residential and commercial uses and is not located in a zone designated as Very High Fire Hazard by the California Department of Forestry and Fire Protection (CalFire). Urban levels of fire protection would be provided to the project area. In addition, the project would adhere to building codes and any conditions included through review by the Moreno Valley Fire Department (MVFD). No impact would occur in this regard.

MITIGATION MEASURES

None required.

[30] Riverside County Airport Land Use Commission, March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, November 13, 2014.

4.10 HYDROLOGY AND WATER QUALITY

Would the proposed project:					
	Issues	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			X	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	i) Result in substantial erosion or siltation on- or off-site?			X	
	ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
	iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
	iv) Impede or redirect flood flows?			X	
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

The analysis and findings throughout this section are based on the following technical studies:

- *Preliminary Drainage Report to Support Tract No. 38442 and 38443* (Drainage Report), prepared by Proactive Engineering Consultants, dated August 30, 2022, and revised March 18, 2023, and as provided as **Appendix 5A** of this IS/MND; and

- *Project Specific Water Quality Management Plan* (WQMP Report), prepared by prepared by Proactive Engineering Consultants, dated August 30, 2022, and revised March 18, 2023, and as provided as **Appendix 5B** of this IS/MND.

DISCUSSION

10(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Determination: Less Than Significant Impact.

As part of Section 402 of the Clean Water Act, the USEPA has established regulations under the NPDES program to control direct stormwater discharges. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, which include construction activities. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality. The project site is located within the jurisdiction of the Santa Ana RWQCB.

Impacts related to water quality typically range over three different periods: 1) during the earthwork and construction phase, when the potential for erosion, siltation, and sedimentation would be the greatest; 2) following construction, prior to the establishment of ground cover, when the erosion potential may remain relatively high; and 3) following completion of the project, when impacts related to sedimentation would decrease markedly, but those associated with urban runoff would increase.

Project construction could result in short-term impacts to water quality due to the handling, storage, and disposal of construction materials, maintenance and operation of construction equipment, and earthmoving activities. These potential pollutants could damage downstream waterbodies. Dischargers whose projects disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the SWRCB's General Permit for Discharges of Stormwater Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ (Construction General Permit). The Construction General Permit requires the Project Applicant to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would specify BMPs to be used during project construction to minimize or avoid water pollution, thereby reducing potential short-term impacts to water quality. Upon completion of the project, the Project Applicant would be required to submit a Notice of Termination to the SWRCB to indicate that construction has been completed.

To further minimize the potential for accidental release of pollutants during project construction, the routine transport, use, and disposal of construction materials would be required to adhere to applicable State and local standards and regulations for handling, storage, and disposal of hazardous substances; refer to Section 4.9, *Hazards and Hazardous Materials,* of this IS/MND. Compliance with such measures would prevent such substances from entering downstream water bodies via stormwater runoff and adversely affect existing water quality. Following

conformance with the Construction General Permit, SWPPP, and implementation of BMPs, the project's short-term impacts to water quality and waste discharge requirements would be less than significant.

The project would be required to implement BMPs to minimize operational impacts to water quality. As detailed in the project's WQMP Report, potential sources of runoff pollutants include landscaping/outdoor pesticide use, nutrients, oil and grease and runoff from impervious surfaces. As a result, the WQMP includes permanent and operational source control BMPs pursuant to the construction of on-site storm drain inlets, drain lines, a catch basin and BMP management of landscape planning, efficient irrigation, roof runoff controls, storm drain signage and private street sweeping. With implementation of these BMPs, the project's impacts to water quality would be less than significant.

10(b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?

Determination: Less Than Significant Impact.

Project development would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management. The project site is not currently used for groundwater recharge purposes. Water for the project would be provided by EMWD and the project would connect to the existing water system. Thus, project implementation would not substantially decrease groundwater supplies nor interfere substantially with groundwater recharge. Impacts would be less than significant in this regard.

10(c)(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?

Determination: Less Than Significant Impact.

According to the project's WQMP Report, approximately 815,783 SF of impervious surfaces would be created as a result of project development. Although the project would result in an increase in impervious surfaces, the proposed project overall would not substantially alter the existing drainage pattern of the site.

In its current condition, stormwater runoff from the project site sheet flows south towards Alessandro Boulevard. There are currently no impervious concrete surfaces on the project site. As discussed in the project's Drainage Report**,** a new storm drain system would be built in accordance with the Moreno Master Drainage Plan. In the developed condition, a proposed storm drain system would convey runoff from the project site to a proposed detention basin, which would capture water quality flows and provide runoff treatment for the required Design Capture Volume (DCV). Flows that exceed the DCV would be routed through an outlet structure

with openings above the water quality water surface elevation to outlet 100-year storms to the proposed Line H in Street A. The outlet structure would be designed to decrease developed flows before discharging runoff to Line H.

The Drainage Report also discusses construction of a second onsite detention basin within the park site. There is an existing Cottonwood Sediment Basin (located on private property) north of the intersection of Cottonwood Avenue and Street A, to which the City has lost maintenance rights and access. The City is currently in negotiations to re-acquire maintenance and access rights to Cottonwood Sediment Basin; however, until these rights re-acquired, the proposed sediment basin within the park site will be operated (refer to ***Exhibit 6, WQMP Site Plan***). Runoff from the existing Cottonwood Sediment Basin would be directed to the proposed sediment basin via re-routing of the existing culvert from the existing basin. Based on a review of the existing tributary area, the Cottonwood Sediment Basin may receive approximately 430 cubic feet per second (cfs) of bulked flow in a 100-year event. By re-routing the existing headwall and adding an additional headwall/culverts within City right-of-way, a total of approximately 265 cfs would be captured and routed to the proposed sediment basin within the project site. The remaining approximately 165 cfs would be bypassed to proposed Street A. Street capacity calculations demonstrate Street A can handle the offsite flow without flooding private property.

As discussed in Response 4.10(a) above, the project would comply with the requirements of the Construction General Permit under the NPDES program, which would result in preparation of an SWPPP that outlines necessary BMPs to minimize erosion and water quality impacts during construction. In addition, as discussed in Response 4.4(b) in Section 4.4, *Biological Resources*, the project would be required to obtain both a Waste Discharge Requirement (WDR) from the RWQCB prior to impacts occurring within RWQCB jurisdictional areas, and a Section 1602 Streambed Alteration Agreement (SAA) from the CDFW prior to impacts occurring within CDFW jurisdictional areas, as described in **Mitigation Measure BIO-4.** Therefore, project development would not result in significant erosion or siltation impacts due to changes in drainage patterns and impacts would be less than significant.

10(c)(ii)Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Determination: Less Than Significant Impact.

Refer to Responses 4.4(b) and 4.10(c)(i) above. The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Impacts would be less than significant.

10(c)(iii) Would the project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Determination: Less Than Significant Impact.

Refer to Responses 4.10(c)(i), 4.10(c)(ii) and 4.10(c)(iii), above. On-site stormwater runoff associated with the project would be engineered to be conveyed through public street improvements and on-site infiltration to dispose of stormwater. Additionally, with the required implementation of a SWPPP and WQMP as discussed above, the proposed project would not generate a substantial source of polluted runoff. The project would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems. A less than significant impact would occur.

10(c)(iv) Would the project impede or redirect flood flows?

Determination: Less Than Significant Impact.

The project site is relatively flat. The proposed project would include the development of a storm drainage system consistent with City requirements to convey stormwater runoff to a 90-inch RCP in Alessandro Boulevard. Stormwater management practices as required under Moreno Valley Municipal Code Chapter 8.10, *Stormwater/Urban Runoff Management and Discharge Controls,* would further reduce any impacts to a less than significant level. In addition, proposed on-site storm drain inlets, drain lines, catch basins, underground infiltration/retention chambers, front yard typical/onsite landscaping and streetscape landscaping to Cottonwood Avenue would assist in minimizing the potential for impediment or redirect flood flows. Therefore, the impacts would be less than significant.

10(d) In flood hazard, tsunami, or seiche zones, would the project result in a risk release of pollutants due to project inundation?

Determination: No Impact.

Based on a review of the Federal Emergency Management Agency's (FEMA) National Flood Hazard Layer Viewer, the project site is located within Flood Insurance Rate Map (FIRM) Panel Number 06065C0770G.[31] Specifically, the project site is located in Zone X and described as an area of minimal flood hazard. Therefore, no impact would occur in this regard.

The proposed project site is located approximately 42 miles inland from the Pacific Ocean. Due to this location, tsunamis are not considered a threat. No impact would occur in this regard.

The nearest water body to the project site is Lake Perris located approximately 3.5 miles to the south. Therefore, because the proposed project is not adjacent to any marine or inland water bodies, impacts from seiche are not expected to occur. No impact would occur in this regard.

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

Determination: Less Than Significant Impact.

[31] Federal Emergency Management Agency. n.d. National Flood Hazard Layer Viewer. Accessed January 3, 2023. https://www.fema.gov/national-flood-hazard-layer-nfhl.

The project site is located in the Santa Ana River Hydrologic Unit in the South Coast Hydrologic Region. The Santa Ana RWQCB oversees basin planning and water quality in the Santa Ana River Hydrologic Unit. The Santa Ana RWQCB prepares the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) to protect local surface waters and groundwater basins. The Basin Plan designates beneficial uses of waters in the region and provides objectives to maintain or improve water quality in the region.

The California Department of Water Resources (DWR) has initiated a technical process called Basin Prioritization, which utilizes the best available data and information to classify California's 515 groundwater basins into one of four categories high-, medium-, low-, or very low-priority, based on eight components that are identified in the California Water Code Section 10933(b). Each basin's priority determines which provisions of California Statewide Groundwater Elevation Monitoring (CASGEM) and the Sustainable Groundwater Management Act (SGMA) apply. SGMA requires medium- and high-priority basins to develop groundwater sustainability agencies (GSAs), develop groundwater sustainability plans (GSPs) and manage groundwater for long-term sustainability. Based on a search of the DWR's online SGMA Basin Prioritization Dashboard, the project site is located in a groundwater basin area (San Jacinto Groundwater Basin) designated as "high priority."[32]

While the San Jacinto Groundwater Basin is deemed a high priority basin, it is not deemed critically overdrafted, by DWR, and the Groundwater Sustainability Plan (GSP) is required to be developed by 2022 and implemented by 2042. The GSP will document basin conditions and basin management will be based on measurable objectives and minimum thresholds defined to prevent significant and unreasonable impacts to the sustainability indicators defined in the GSP.

As described in Response 4.10(c)(i) above, the project would install an underground infiltration/retention chamber to satisfy the requirements of the NPDES permit. Since the NPDES permit is intended to protect water quality, compliance with the permit would ensure that the project would not impair existing or potential beneficial uses of nearby or downstream water bodies and would not conflict with or obstruct implementation of the Basin Plan. The proposed project does not propose the drilling of a well to obtain groundwater for consumption. The project would not conflict with a groundwater management plan. Impacts would be less than significant.

MITIGATION MEASURES

None required.

[32] California Department of Water Resources SGMA Basin Prioritization Dashboard. Nd. https://gis.water.ca.gov/app/bp-dashboard/final/ Accessed January 9, 2023.

4.11 LAND USE AND PLANNING

Would the proposed project:					
	Issues	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a)	Physically divide an established community?				X
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?			X	

DISCUSSION

11(a) Physically divide an established community?

Determination: No Impact.

The physical division of an established community is typically associated with construction of a linear feature, such as a major highway or railroad tracks, or removal of a means of access, such as a local road or bridge, which would impair mobility within an existing community or between a community and an outlying area.

None of the proposed project components would constitute a barrier that would physically divide an established community. No new linear features are included in the project. Access to and movement throughout the project area and the City would not be physically impaired due to the project.

Therefore, the proposed project would not physically divide an established community and no impact would occur.

11(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?

Determination: Less Than Significant Impact.

As discussed above, the proposed project seeks to develop 135 single-family detached residential units on the project site. In order to develop the site as a residential community, the project would require the approval of the following:

- General Plan Amendment. The project includes a proposal to change the General Plan land use designation from Residential (R3) to Residential (R10).
- Zone Change. The project includes a proposal to change the zoning designation from Suburban Residential (R3) to Suburban Residential (R10).

- Tentative Tract Map No. 37443 is a request to subdivide 28.2 gross acres (23.1 net acres) into 135 single-family residential lots with private internal streets, street lighting, sewer, water, and perimeter block wall.
- Design Review. The project is required to submit plans to the City to determine that the project meets the City's design guidelines.

The proposed residential development is consistent with the proposed General Plan Amendment and Zone Change with approval by the City Council. Furthermore, the project-level review of the project includes a site design review for compliance with site-specific development standards, as outlined in the Moreno Valley Municipal Code, Title 9, *Planning and Zoning*, and other applicable ordinances. Following the approval of the above actions, the proposed project would not conflict with any land use plan, policy, or regulation, nor would it result in negative environmental effects as a result as evidenced by policy reviews assessed throughout this Initial Study. Impacts would be less than significant.

MITIGATION MEASURES

None required.

4.12 MINERAL RESOURCES

Would the proposed project:					
	Issues	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the State?				X
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated in a local general plan, specific plan, or other land use plan?				X

DISCUSSION

12(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

Determination: No Impact.

According to the 2006 General Plan, the mineral resources known to be located within the City are common materials: sand, gravel and rock. Sand and gravel is used to make concrete and as road base. As of the 2006 General Plan, there was one active sand and gravel quarry on record within the City's sphere of influence: the Jack Rabbit Canyon, which was inactive as of 2001.

According to Figure 4.12-1, *Mineral Resource Zones*, of the City's 2040 General Plan EIR, the majority of the City, as well as the project site, is located within an area classified by the State Mining and Geology Board as Mineral Resource Zone 3 (MRZ-3), which are areas containing known or inferred mineral occurrences of undetermined mineral resource significance. However, as the site is surrounded by urbanized areas, any potential mining activities on the site would be limited by the surrounding land uses. In addition, the project site has no history of use as a mineral resource recovery operation. As such, the project site is not considered a source for mineral resources, and project development would not result in the loss of availability of known mineral resources. No impacts would occur in this regard.

12(b) Result in the loss of availability of a locally important mineral resource recovery site delineated in a local general plan, specific plan, or other land use plan?

Determination: No Impact.

Refer to Response 4.12(a), above. No mineral resources are anticipated within the project area. No impact would occur.

MITIGATION MEASURES

None required.

4.13 NOISE

Would the proposed project result in:					
	Issues	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
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?			X	
b)	Generation of excessive groundborne vibration or groundborne noise levels?			X	
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?				X

The analysis and findings throughout this section are based on the *Noise Impact Modeling Data* (Noise Data) prepared by Michael Baker International, dated December 14, 2022, provided as **Appendix 6** of this IS/MND.

DISCUSSION

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear de-emphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. On this scale, the human range of hearing extends from approximately 3 dBA to around 140 dBA.

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3 dBA and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3 dBA per doubling of distance. Soft surfaces, such as uneven or

vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance.

There are a number of metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level (L_{eq}), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound. Noise exposure over a longer period of time is often evaluated based on the Day-Night Sound Level (L_{dn}). This is a measure of 24-hour noise levels that incorporates a 10-dBA penalty for sounds occurring between 10 p.m. and 7 a.m. The penalty is intended to reflect the increased human sensitivity to noises occurring during nighttime hours, particularly at times when people are sleeping and there are lower ambient noise conditions. Typical L_{dn} noise levels for light and medium density residential areas range from 55 dBA to 65 dBA.

Two of the primary factors that reduce levels of environmental sounds are increasing the distance between the sound source to the receiver and having intervening obstacles such as walls, buildings, or terrain features between the sound source and the receiver. Factors that act to increase the loudness of environmental sounds include moving the sound source closer to the receiver, sound enhancements caused by reflections, and focusing caused by various meteorological conditions.

REGULATORY FRAMEWORK

State

The State Office of Planning and Research (OPR) Noise Element Guidelines include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The OPR Noise Element Guidelines contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the community noise equivalent level (CNEL). ***Table 10, Land Use Compatibility for Community Noise Environments***, presents guidelines for determining acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

Table 11: Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low Density, Single-Family, Duplex, Mobile Homes	50 – 60	55 – 70	70 – 75	75 – 85
Residential – Multiple Family	50 – 65	60 – 70	70 – 75	70 – 85
Transient Lodging – Motel, Hotels	50 – 65	60 – 70	70 – 80	80 – 85

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70	60 – 70	70 – 80	80 – 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 – 70	NA	65 – 85
Sports Arenas, Outdoor Spectator Sports	NA	50 – 75	NA	70 – 85
Playgrounds, Neighborhood Parks	50 – 70	NA	67.5 – 75	72.5 – 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 – 70	NA	70 – 80	80 – 85
Office Buildings, Business Commercial, Professional	50 – 70	67.5 – 77.5	75 – 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 – 75	70 – 80	75 – 85	NA

Notes: NA = Not Applicable; L_{dn} = Day/Night Average; CNEL = community noise equivalent level; dBA = A-weighted decibels
Normally Acceptable - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Conditionally Acceptable - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Normally Unacceptable - New Construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Clearly Unacceptable – New construction or development should generally not be undertaken.

Source: State of California Governor's Office of Planning and Research, *General Plan Guidelines*, July 2017.

Local

Moreno Valley General Plan

The 2006 General Plan does not contain a Noise Element; rather, a chapter regarding noise is included within the General Plan Safety Element Section 6.4, "Noise." Chapter 9, Goals and Objectives, of the 2006 General Plan contains the following objectives and policies related to the project:

Objective 6.3: Provide noise compatible land use relationships by establishing noise standards utilized for design and siting purposes.

Policies:

6.3.1: The following uses shall require mitigation to reduce noise exposure where current or future exterior noise levels exceed 20 CNEL above the desired interior noise level:

a. Single and multiple family residential buildings shall achieve an interior noise level of 45 CNEL or less. Such buildings shall include soundinsulating windows, walls, roofs and ventilation systems. Sound barriers shall also be installed (e.g. masonry walls or walls with berms) between single-family residences and major roadways.

b. New libraries, hospitals and extended medical care facilities, places of worship and office uses shall be insulated to achieve interior noise levels of 50 CNEL or less.

c. New schools shall be insulated to achieve interior noise levels of 45 CNEL or less.

6.3.2: Discourage residential uses where current or projected exterior noise due to aircraft over flights will exceed 65 CNEL.

Objective 6.4: Review noise issues during the planning process and require noise attenuation measures to minimize acoustic impacts to existing and future surrounding land uses.

Policy 6.4.1: Site, landscape and architectural design features shall be encouraged to mitigate noise impacts for new developments, with a preference for noise barriers that avoid freeway sound barrier walls.

The Noise Element of the 2040 General Plan includes goals and policies seeking to promote the use of thoughtful planning and design to minimize unwanted noise in the community and promote a pleasant, healthy noise environment. The General Plan Noise Element contains the following goals and policies related to the project:

Goal N-1: Design for a pleasant healthy sound environment conducive to living and working.

Policy N.1-1: Protect occupants of existing and new buildings from exposure to excessive noise, particularly adjacent to freeways, major roadways, the railroad, and within areas of aircraft overflight.

Policy N.1-2: Guide the location and design of transportation facilities, industrial uses, and other potential noise generators to minimize the effects of noise on adjacent land uses.

Policy N.1-3: Apply the community noise compatibility standards (***Table 10***) to all new development and major redevelopment projects outside the noise and safety compatibility zones established in the March Air Reserve Base/ Inland Port Airport Land Use Compatibility (ALUC) Plan in order to protect against the adverse effects of noise exposure. Projects within the noise and safety compatibility zones are subject to the standards contained in the ALUC Plan.

Policy N.1-4: Require a noise study and/or mitigation measures if applicable for all projects that would expose people to noise levels greater than the "normally acceptable" standard and for any other projects that are likely to generate noise in excess of these standards.

Policy N.1-5: Noise impacts should be controlled at the noise source where feasible, as opposed to at the receptor end with measures to buffer, dampen, or

actively cancel noise sources. Site design, building orientation, building design, hours of operation, and other techniques, for new developments deemed to be noise generators shall be used to control noise sources.

Policy N.1-6: Require noise buffering, dampening, or active cancellation, on rooftop or other outdoor mechanical equipment located near residences, parks, and other noise sensitive land uses.

Policy N.1-7: Developers shall reduce the noise impacts on new development through appropriate means (e.g., double-paned or soundproof windows, setbacks, berming, and screening). Noise attenuation methods should avoid the use of visible sound walls where possible.

Goal N-2: Ensure that noise does not have a substantial, adverse effect on the quality of life in the community.

Policy N.2-3: Limit the potential noise impacts of construction activities on surrounding land uses through noise regulations in the Municipal Code that address allowed days and hours of construction, types of work, construction equipment, and sound attenuation devices.

Moreno Valley Municipal Code

The City's noise regulation is contained within the Moreno Valley Municipal Code. The following sections of the Municipal Code are applicable to the proposed project: *8.21.050 Grading Permit Requirements.*

2.O. Time of Grading Operations. Grading and equipment operations shall only be completed between the hours of seven a.m. to seven p.m. Monday through Friday, excluding holidays and from eight a.m. to four p.m. on Saturday. The city engineer may, however, permit grading or equipment operations before or after the allowable hours of operation if he or she determines that such operations are not detrimental to the health, safety, or welfare of residents or the general public. Permitted hours of operations may be shortened by the city engineer's finding of a previously unforeseen effect on the health, safety, or welfare of the surrounding community.

11.80.030 Prohibited Acts.

2.C. Non-impulsive Sound Decibel Limits. No person shall maintain, create, operate or cause to be operated on private property any source of sound in such a manner as to create any non-impulsive sound which exceeds the limits set forth for the source land use category in ***Table 11, Operational Noise Standards at 200 Feet from the Source***, when measured at a distance of two hundred (200) feet or more from the real property line of the source of the sound, if the sound occurs on privately owned property, or from the source of the sound, if the sound occurs on public right-of-way, public space or other publicly owned property. Any source of sound in violation of this subsection shall be deemed prima facie

to be a noise disturbance.

Table 12: Operational Noise Standards at 200 Feet from the Source

Source Land Use	Noise Level Standards (dBA Leq)	
	Daytime (8:00 a.m. to 10:00 p.m.)	Nighttime (10:01 p.m. to 7:59 a.m.)
Residential	60	55

Notes:

1. City of Moreno Valley Municipal Code, Chapter 11.80 Noise Regulation, Table 11.80.030-2 Maximum Sound Levels (in dB(A)) for Source Land Uses when measured at a distance of 200 feet from the property line of the source land use. Leq represents a steady state sound level containing the same total energy as a time varying signal over a given period.

2.D.7 Construction and Demolition. No person shall operate or cause 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. This section shall not apply to the use of power tools as provided below.

2.D.9 Power Tools. No person shall operate or permit the operation of any mechanical, electrical or gasoline motor-driven tool during nighttime hours so as to cause a noise disturbance across a residential real property boundary.

SIGNIFICANCE OF CHANGES IN TRAFFIC NOISE LEVELS

An off-site traffic noise impact typically occurs when there is a discernable increase in traffic and the resulting noise level exceeds an established noise standard. In community noise considerations, changes in noise levels greater than 3.0 dB are often identified as substantial, while changes less than 1 dB will not be discernible to local residents. A 5-dB change is generally recognized as a clearly discernable difference.

As traffic noise levels at sensitive uses likely approach or exceed the City's 65 dBA CNEL maximum noise standard at sensitive uses (e.g., residential uses), a 3.0 dB increase as a result of the project is used as the increase threshold for the project. Thus, the project would result in a significant noise impact if a permanent increase in ambient noise levels of 3.0 dB occurs upon project implementation and the resulting noise level exceeds the applicable exterior standard at a noise sensitive use.

EXISTING CONDITIONS

The project site is located in a moderately urbanized area. Noise sources in the project area include the use of mechanical equipment (e.g., heating, ventilation, and air conditioning [HVAC] units) and parking lot noise (e.g., cars parking, open and closing doors, and truck back-up beepers) associated with institutional and residential land uses surrounding the project site. The noise associated with these sources may represent a single-event noise occurrence, short-term, or long-term/continuous noise.

Existing Roadway Noise Levels

The majority of the existing mobile source noise in the project area is generated from vehicles traveling along Cottonwood Avenue, Alessandro Boulevard, and Nason Street. Mobile source noise was modeled using the Federal Highway Administration's Highway Noise Prediction Model (FHWA RD-77-108), which incorporates several roadway and site parameters. The model does not account for ambient noise levels. Noise projections are based on modeled vehicular traffic as derived from the *Moreno Valley TTM 38443 Residential Traffic Impact Analysis* (Transportation Analysis) prepared by Translutions, Inc. (dated August 5, 2022, and revised June 21, 2023); refer to ***Appendix 6, Noise Data***. Existing modeled traffic noise levels are detailed in ***Table 12, Existing Traffic Noise Levels***. As shown in ***Table 12***, noise within the area from mobile noise ranges from 56.5 dBA to 66.6 dBA at 100 feet from roadway centerline.

Table 13: Existing Traffic Noise Levels

Roadway Segment	Existing Conditions				
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)		
			70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour
Cottonwood Avenue					
Nason Street to Project's Western Boundary	4,314	56.5	-	-	59
Alessandro Boulevard					
Lasselle Street to Morrison Street	22,775	66.6	59	128	275
Morrison Street to Nason Street	22,307	66.0	54	116	250
Nason to Project's Western Boundary	24,320	66.3	57	123	264

Notes: ADT = average daily traffic; dBA = A-weighted decibels; CNEL = Community Noise Equivalent Level, - = contour is located within the roadway right-of-way.

Source: Based on traffic data within the *TTM 38443 Residential Traffic Impact Analysis* prepared by Translutions, Inc., dated August 5, 2022, and revised June 21, 2023.

Existing Ambient Noise Levels

In order to quantify existing ambient noise levels in the vicinity of the project site, six noise measurements were taken on December 14, 2022; refer to ***Table 13, Noise Measurements***. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the project site. Short-term (L_{eq}) measurements are considered representative of the noise levels throughout the day. As shown in ***Table 13***, the ambient recorded noise level in the project vicinity ranged between 46.6 dBA and 67.0 dBA L_{eq}. The results of the field measurements are included in ***Appendix 6.***

Table 14: Noise Measurements

Site No.	Location	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)	Peak (dBA)	Time
1	On the sidewalk of Martha Crawford Street	46.6	43.6	64.0	71.2	10:02 a.m.
2	On the sidewalk in front of 27258 Cedar Street residence	48.7	42.3	65.7	70.1	10:15 a.m.
3	Along the northern property line of 27132 Cottonwood Avenue	62.2	41.4	79.4	74.5	10:30 a.m.
4	Along the sidewalk of Nason Street, in front of Lord of Life Lutheran Church	67.0	45.7	78.4	78.0	10:46 a.m.
5	On the sidewalk of Larkmead Court	47.1	37.9	57.9	69.8	11:38 a.m.
6	At the intersection of Marion Road and Alessandro Boulevard	64.0	33.5	83.6	67.5	11:21 a.m.
Notes: dBA = A-weighted decibels, L_{eq} = Equivalent Sound Level; L_{min} = Minimum Sound Level; L_{max} = Maximum Sound Level, Peak = Highest Instantaneous Sound Level						
Source: Michael Baker International, December 14, 2022.						

Sensitive Receptors

Sensitive populations are more susceptible to the effects of noise than are the general population. Land uses considered sensitive by the State of California include schools, playgrounds, athletic facilities, hospitals, rest homes, rehabilitation centers, long-term care, and mental care facilities. Generally, a sensitive receptor is identified as a location where human populations (especially children, senior citizens, and sick persons) are present. Land uses less sensitive to noise are business, commercial, and professional developments. Noise receptors categorized as being least sensitive to noise include industrial, manufacturing, utilities, agriculture, natural open space, undeveloped land, parking lots, warehousing, and transit terminals. These types of land use often generate high noise levels. Moderately sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, and outpatient clinics. The closest sensitive receptors are single-family residences adjoining to the west and northeast of the project site.

IMPACT ANALYSIS

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?

Determination: Less Than Significant Impact.

It is difficult to specify noise levels that are generally acceptable to everyone; noise that is considered a nuisance to one person may be unnoticed by another. Standards may be based on documented complaints in response to documented noise levels or based on studies of the ability of people to sleep, talk, or work under various noise conditions.

SHORT-TERM CONSTRUCTION IMPACTS

Construction activities generally are temporary and have a short duration, resulting in periodic

increases in the ambient noise environment. Construction activities would occur over approximately 38 months and would include the following phases: grading, building construction, paving, and architectural coating. Ground-borne noise and other types of construction-related noise impacts would typically occur during the initial earthwork phases. This phase of construction has the potential to create the highest levels of noise. Typical noise levels generated by construction equipment are shown in ***Table 14, Maximum Noise Levels Generated by Typical Construction Equipment***. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be due to random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts).

Table 15: Maximum Noise Levels Generated by Typical Construction Equipment

Type of Equipment	Acoustical Use Factor[1]	L_{max} at 50 Feet (dBA)	L_{max} at 10 Feet (dBA)
Compressor	40	78	92
Concrete Mixer Truck	40	79	93
Dozer	40	82	96
Dump Truck	40	76	90
Excavator	40	81	95
Grader	40	85	99
Loader	40	79	93
Paver	50	77	94
Roller	20	80	98
Scraper	40	85	99
Tractor	40	84	98
Water Truck	40	80	89

Note:

1.Acoustical Use Factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

Source:Federal Highway Administration, Roadway Construction Noise Model (*FHWA-HEP-05-054*), January 2006.

Construction noise levels in the project vicinity would fluctuate depending on the particular type, number, and duration of usage for the varying equipment. The effects of construction noise largely depend on the type of construction activities occurring on any given day, noise levels generated by those activities, distances to noise-sensitive receptors, and the existing ambient noise environment in the receptor's vicinity. Construction generally occurs in several discrete phases, with each phase requiring different equipment with varying noise characteristics. These phases alter the characteristics of the noise environment generated on the proposed project site and in the surrounding community for the duration of the construction process.

The noise levels depicted in ***Table 14*** represent maximum sound levels (L_{max}), which are the highest individual sound occurring at an individual time period. The closest sensitive receptors to the project site are single-family residences located immediately adjacent to the project site to the west and northeast. At the distance of 10 feet, construction noise levels could range between

approximately 89 dBA and 99 dBA; refer to ***Table 14***. Although sensitive receptors may be exposed to increased noise levels during project construction, construction activities are a normal part of urban life. However, the project would be required to comply with the City's allowable construction hours (Municipal Code Section 11.80.030[D][7]). Municipal Code Section 11.80.030[D][7], *Construction and Demolition*, permits construction activities between 7:00 a.m. to 8:00 p.m. Monday through Sunday. Furthermore, grading operations shall be limited to the hours identified in Municipal Code Section 8.21.050(O) of 7:00 a.m. to 6:00 p.m., Monday through Friday, and 8:00 a.m. to 4:00 p.m. on Saturday. No grading operations are allowed on holidays. Compliance with the Municipal Code would minimize impacts from construction noise, as construction would be limited to the permitted times. By following Municipal Code standards, project construction activities would result in a less than significant noise impact.

LONG-TERM OPERATIONAL IMPACTS

Mobile Noise

The proposed project would include 135 single-family residential developments and park uses. Future buildout of the project could result in increased traffic and thus, increased traffic noise levels on-site and on adjacent roadways. According to the *Highway Traffic Noise Analysis and Abatement Policy and Guidance*, a doubling of traffic volumes would result in a 3.0 dB increase in traffic noise levels, which is barely detectable by the human ear.[33] As noted above, the project would result in a significant noise impact if a permanent increase in ambient noise levels of 3.0 dB occurs upon project implementation and the resulting noise level exceeds the applicable exterior standard at a noise sensitive use (65 dBA CNEL).

Existing Conditions

Roadway segment noise levels for the "Existing" and "Existing with Project" scenarios were compared to evaluate project-related operational noise impacts. According to ***Table 15, Existing and Existing Plus Project Traffic Noise Levels***, under the "Existing" scenario, noise levels at a distance of 100 feet from the roadway centerline would range from 56.5 dBA to 66.6 dBA. Under the "Existing with Project" scenario, noise levels at a distance of 100 feet from the roadway centerline would range from 57.2 dBA to 66.6 dBA. The increase in ambient noise between the two scenarios would range from 0.0 dBA to 0.7 dBA. As these noise level increases are below 3.0 dBA, a less than significant impact would occur in this regard.

[33] U.S. Department of Transportation, *Highway Traffic Noise Analysis and Abatement Policy and Guidance*, updated August 24, 2017, https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/polguide/polguide02.cfm, accessed on December 27, 2022.

Table 16: Existing and Existing Plus Project Traffic Noise Levels

	Existing					Existing With Project					Difference in dBA @ 100 Feet from Roadway
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet) 70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet) 70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour	
Cottonwood Avenue											
Nason Street to Project's Western Boundary	4,314	56.5	-	-	59	5,066	57.2	-	-	65	0.7
Alessandro Boulevard											
Lasselle Street to Morrison Street	22,775	66.6	59	128	275	26,089	66.6	60	129	277	0.0
Morrison Street to Nason Street	22,307	66.0	54	116	250	22,647	66.0	54	117	252	0.0
Nason to Project's Western Boundary	24,320	66.3	57	123	264	24,546	66.4	57	124	266	0.1

Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level; - = Contour located within the roadway right of way.

Source: Based on traffic data within the *TTM 38443 Residential Traffic Impact Analysis* prepared by Translutions, Inc., dated August 5, 2022, and revised June 21, 2023.

Future Conditions

The "Future Year 2040 without Project" and "Future Year 2040 with Project" scenarios were compared to evaluate mobile source project impacts. According to ***Table 16, Future Traffic Noise Levels***, under the "Future Year 2040 without Project" scenario, the noise level would range from 59.0 dBA to 67.3 dBA. Under the "Future Year 2040 with Project" scenario, the noise level would range from 59.9 dBA to 67.3 dBA. The increase in ambient noise between the two scenarios would range from 0.0 dBA to 0.9 dBA. As these noise level increases are below 3.0 dBA, a less than significant impact would occur in this regard.

Table 17: Future Traffic Noise Levels

	Buildout Year 2040					Buildout Year 2040 With Project					Difference in dBA @ 100 Feet from Roadway
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet) 70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet) 70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour	
Cottonwood Avenue											
Nason Street to Project's Western Boundary	4,259	59.0	-	-	85	5,281	59.9	-	-	98	0.9
Alessandro Boulevard											

	Buildout Year 2040					Buildout Year 2040 With Project					Difference in dBA @ 100 Feet from Roadway
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			
			70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour			70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour	
Lasselle Street to Morrison Street	27,063	67.3	66	142	305	27,377	67.3	66	143	308	0.0
Morrison Street to Nason Street	23,099	66.6	-	127	275	23,439	66.6	-	129	277	0.0
Nason to Project's Western Boundary	25,536	67.0	63	136	294	25,762	67.1	64	137	295	0.1

Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level; - = Contour located within the roadway right of way.

Source: Based on traffic data within the *TTM 38443 Residential Traffic Impact Analysis* prepared by Translutions, Inc., dated August 5, 2022, and revised June 21, 2023.

Stationary Noise

The project proposes to construct a 135-unit single-family residential development and park uses. Stationary noise sources associated with the project would include the operation of mechanical equipment, parking activities, and outdoor gathering area activities. Based on the Municipal Code, Chapter 11.80, *Noise Regulations*, the project shall not exceed noise levels greater than 60 dBA L_{eq} during daytime (8:00 a.m. to 10:00 p.m.) and 55 dBA L_{eq} during nighttime hours (10:00 p.m. to 8:00 a.m.) when measured at 200 feet from a noise source; refer to ***Table 11***. As such, stationary noise impacts have been analyzed at 200 feet.

Mechanical Equipment

Heating Ventilation and Air Conditioning (HVAC) units typically generate noise levels of approximately 60 dBA L_{eq} at 20 feet from the source.[34] The closest sensitive receptor to a proposed HVAC unit are the single-family residential uses located immediately adjacent to the west and northeast of the project site. At the distance of 200 feet, HVAC noise levels would attenuate to approximately 40 dBA, which is below City's exterior daytime and nighttime standards of 60 dBA and 55 dBA, respectively. Therefore, the nearest sensitive receptors would not be directly exposed to substantial noise from on-site mechanical equipment and impacts would be less than significant.

Parking Lot Activities

The proposed project would include a surface parking lot. Traffic associated with parking lots is

[34] Berger, Elliott H., et al., *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, June 26, 2015.

typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale. However, the instantaneous maximum sound levels generated by a car door slamming, engine starting up, and car pass-by may be an annoyance to adjacent noise-sensitive receptors. Estimates of the maximum noise levels associated with the parking lot activities attributed to the project are presented in ***Table 17, Maximum Noise Levels Generated by Parking Lots***.

Table 18: Maximum Noise Levels Generated by Parking Lots

Noise Source	Maximum Noise Levels at 50 Feet from Source
Automobile, door slamming	61 dBA L_{eq}
Automobile, warming up	36 dBA L_{eq}
Automobile, engine Idling	53 dBA L_{eq}
Source: Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, June 26, 2015.	

As shown in ***Table 17***, parking lot activities can result in noise levels up to 61 dBA at a distance of 50 feet. It is noted that parking lot noises are instantaneous noise levels compared to noise standards in the CNEL scale, which are averaged over time. As a result, actual noise levels over time resulting from parking lot activities would be far lower than the ambient noise levels identified in ***Table 13***. The proposed parking lot would have intermittent parking lot noise due to the movement of vehicles. The nearest sensitive receptors would be located immediately adjacent to the west and northeast of the project site. However, at the distance of 200 feet, noise levels from parking activities would range from 24 to 49 dBA and would be below the City's exterior daytime and nighttime standards of 60 dBA and 55 dBA, respectively. Therefore, noise associated with parking activities would not be audible to nearest sensitive receptors. Impacts would be less than significant in this regard.

Outdoor Gathering Areas

Noise generated by groups of people (i.e., crowds) is dependent on several factors including vocal effort, impulsiveness, and the random orientation of the crowd members. According to the U.S. Environmental Protection Agency, crowd noise is approximately 60 dBA at one meter (i.e., 3.28 feet) from the source.[35] Noise has a decay rate due to distance attenuation, which is calculated based on the Inverse Square Law. Based upon the Inverse Square Law, sound levels decrease by 6 dBA for each doubling of distance from the source. Within the proposed project boundaries, crowds have the potential to gather at proposed park uses in the southern and central portions of the project site. The nearest sensitive receptor are existing single-family residences located approximately 30 feet east of the proposed park use. At the distance of 200 feet, crowd noise would be approximately 26 dBA and would not exceed the City's exterior daytime and nighttime

[35] U.S. Environmental Protection Agency, *Community Noise*, 1971.

noise standards of 60 dBA and 55 dBA, respectively. Impacts would be less than significant in this regard.

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

Determination: Less Than Significant Impact.

Project construction can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

The Caltrans *Transportation and Construction Vibration Manual* identifies various vibration damage criteria for different building classes. This evaluation uses the Caltrans architectural damage criterion for continuous vibrations at new residential structures and modern industrial/commercial buildings of 0.5 inch-per-second (inch/second) PPV. The types of construction vibration impacts include human annoyance and building damage. Annoyance is assessed based on levels of perception, with a PPV of 0.01 inch/second being considered "barely perceptible," 0.04 inch/second as "distinctly perceptible," 0.1 inch/second as "strongly perceptible," and 0.4 inch/second as "severe." Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time.

Construction of the proposed project would occur over approximately 38 months and would include grading, paving, building construction, and architectural coatings. The highest degree of groundborne vibration would be generated during the grading phase due to the operation of bulldozers. The project is also expected to use vibratory rollers during the paving phase. However, the project would not require pavement within 35 feet of the closest sensitive receptors. As a result, vibratory rollers are not expected to operate within 35 feet from the nearest residential building to the northeast. Groundborne vibration levels associated with representative construction equipment are summarized in ***Table 18, Typical Vibration Levels for Construction Equipment***.

Table 19: Typical Vibration Levels for Construction Equipment

Equipment	Approximate peak particle velocity at 15 feet (inches/second)	Approximate peak particle velocity at 25 feet (inches/second)	Approximate peak particle velocity at 35 feet (inches/second)
Loaded Trucks	0.164	0.076	0.046
Large Bulldozers	0.192	0.089	0.054
Small Bulldozer/Tractors	0.007	0.002	0.002
Vibratory Rollers	NA	0.210	0.127

Notes: NA = Not Applicable
Calculated using the following formula:
$PPV_{equip} = PPV_{ref} \times (25/D)^{1.1}$
where:PPV (equip) = the peak particle velocity in in/sec of the equipment adjusted for the distance
PPV (ref) = the reference vibration level in in/sec from Table 12-2 of the FTA Transit Noise and Vibration Impact Assessment Guidelines
D = the distance from the equipment to the receiver

Source: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, April 2020.

As indicated in ***Table 18***, vibration velocities from typical heavy construction equipment operation would range from 0.002 to 0.089 inch/second PPV at 25 feet from the source of activity. The nearest structures to the project site are single-family residential buildings located immediately to the west and northeast of the project site. However, construction activities are expected to occur as close as 15 feet from the nearest sensitive receptor building. Groundborne vibration decreases rapidly with distance. As such, vibration velocities from typical heavy construction equipment operation would range from 0.008 to 0.244 inch/second PPV at 10 feet from the source of activity the construction activities. As previously noted, vibratory rollers are not expected to operate within 35 feet from the nearest residential building to the northeast. As such, the vibration level during the operation of vibratory rollers would be 0.127 inch/second PPV at 35 feet. As a result, construction groundborne vibration would not be capable of exceeding the 0.50 inch/second PPV significance threshold for vibration to the nearest structures and a less than significant impact would occur in this regard.

1) ***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?***

Determination: No Impact.

The closest public use airport to the project site is the March Air Reserve Base, located approximately 3.8 miles southwest of the project site. The project site is located outside of the March Air Reserve Base Airport influence area and is not located within the vicinity of a private airstrip or any airport land use plan, or within two miles of a public airport.[36] As such, no impacts would occur in this regard.

MITIGATION MEASURES

None required.

[36] Air Force Reserve Command, *Final Installations Compatible Use Zones Study March Air Reserve Base Riverside*, 2018, https://www.marchjpa.com/documents/docs_forms/AICUZ_2018.pdf, Accessed January 3, 2023.

4.14 POPULATION AND HOUSING

Would the proposed project:					
	Issues	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			X	

DISCUSSION

14(a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Determination: Less Than Significant Impact.

A project could induce population growth in an area either directly, through the development of new residences or businesses, or indirectly, through the extension of roads or other infrastructure. In 2022, the California Department of Finance estimated that Moreno Valley had an average household size of 3.70 persons per household.[37]

The most recent Regional Housing Needs Assessment (RHNA) allocation released by the Southern California Association of Governments (SCAG) for the City identifies the need for an additional 13,627 housing units in the City over the next eight years.[38] With 135 residential units as part of the proposed project, the project would generate approximately 500 residents and would accommodate approximately 1.0 percent of the City's RHNA allocation. Therefore, the project as proposed is consistent with the anticipated population growth that the City is required to plan for under its' 6th Cycle Housing Element.

The City's current population is 209,407 persons as of January 1, 2022.[39] The forecast population

[37] California Department of Finance. 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2021-2022 with 2020 Census Benchmark. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/. Accessed December 21, 2022.

[38] Southern California Association of Governments. 2022. 6th Cycle Final RHNA Allocation Plan. https://scag.ca.gov/sites/main/files/file-attachments/6th-cycle-rhna-final-allocation-plan.pdf?1616462966. Accessed December 21, 2022.

[39] Ibid.

in 2045 is 266,800 persons.[40] The project's potential growth-inducing impacts would be considered less than significant since the 500 additional residents represents only a 0.24 percent increase from the City's current population and 0.84 percent of the City's population increase between 2022 and 2045. Thus, the project would be consistent with the types, intensity, and patterns of land use envisioned for the site vicinity and with growth projections. Impacts would be less than significant.

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

Determination: No Impact.

The project site is currently vacant. There are no existing residences on-site. As such, project implementation would not displace existing people or housing. No impacts would occur in this regard.

MITIGATION MEASURES

None required.

[40] Southern California Association of Governments, *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy Demographics & Growth Forecast*, September 3, 2020.

4.15 PUBLIC SERVICES

Would the proposed project:					
	Issues	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
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 series:				
	i) Fire protection?			X	
	ii) Police protection?			X	
	iii) Schools?			X	
	iv) Parks?			X	
	v) Other public facilities?			X	

DISCUSSION

15(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 series:*

i) Fire protection?

Determination: Less Than Significant Impact.

Fire and emergency medical services are provided by MVFD, under contracts with the Riverside County Fire Department (RCFD) and the California Department of Forestry and Fire Protection (CAL FIRE) for provision of services as part of an integrated regional fire protection system. The MVFD operates seven fire stations in Moreno Valley. The nearest fire station to the project site is the Morrison Park Fire Station located approximately 0.6-mile west of the project site at 13400 Morrison Street.

The proposed project would create an increased demand for fire protection services as a result of the addition of new residents. However, the project would not induce significant or unplanned population growth; refer to Section 4.14, *Population and*

Housing. Further, the proposed project would be conditioned to comply with the requirements of the MVFD for emergency access, fire flow, fire protection standards, fire lanes, and other site design/building standards. The project would also be subject to the project design requirements set forth in the 2019 California Fire Code and the 2019 California Building Standards Code. The Project Applicant is required to comply with the provisions of the City of Moreno Valley's Development Impact Fee (DIF) Ordinance (Ordinance No. 695), which requires a fee payment that the City applies to the funding of public facilities, including fire protection facilities. Payment of these fees would offset the project's impacts to the acquisition, design, and construction of new fire facilities. Following collection of development impact fees and compliance with MVFD, California Fire Code (included in the Moreno Valley Municipal Code Chapter 8.36, *California Fire Code*), and CBC requirements, impacts to fire protection facilities would be less than significant.

ii) *Police protection?*

Determination: Less Than Significant Impact.

The Moreno Valley Police Department (MVPD) provides law enforcement services through a contract with the Riverside County Sheriff's Department (RCSD) for police protection services. Specifically, police protection services for the project area are provided by the MVDP located at 22850 Calle San Juan De Los Lagos in Moreno Valley, approximately 4.3 miles west of the project site.

The proposed project would create an increased demand for police protection services. However, the project would not induce significant or unplanned population growth; refer to Section 4.14, *Population and Housing.* The Project Applicant is required to comply with the provisions of the City of Moreno Valley's Development Impact Fee (DIF) Ordinance (Ordinance No. 695), which requires a fee payment that the City applies to the funding of public facilities, including police protection facilities. Payment of these fees would offset the project's impacts to the acquisition, design, and construction of new police facilities. The MVPD would have the opportunity to review the project design plans and include conditions that would be required in order for the applicant to be issued development permits. As a 135-unit residential development project, the proposed project is not expected to result in any unusual circumstances that may generate high demand for police protection services. Therefore, payment of the City's development impact fees would fully mitigate any potential impact on MVPD facilities. A less than significant impact would occur.

iii) *Schools?*

Determination: Less Than Significant Impact.

The proposed project site is located within the boundaries of the MVUSD. The nearest elementary school is Moreno Elementary School at 26700 Cottonwood Avenue, located approximately 0.4-mile west of the project site. The nearest middle school is

Mountain View Middle School at 13130 Morrison Street, located approximately 0.6-mile northwest of the project site. The nearest high school is Valley View High School at 13135 Nason Street, approximately 0.3-mile northwest of the project site.

The project would not induce significant or unplanned population growth; refer to Section 4.14, *Population and Housing.* In addition, the project would be required to comply with Senate Bill (SB) 50 requirements, which allow school districts to collect impact fees from developers of new projects. According to Section 65997 of the California Government Code, payment of statutory fees is the exclusive method of mitigating environmental effects related to the adequacy of school facilities when considering the approval or the establishment of conditions for the approval of a development project. Thus, upon payment of required fees by the Project Applicant consistent with existing State requirements, impacts would be less than significant.

iv) *Parks?*

Determination: 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. Additionally, the City maintains joint use agreements with the MVUSD for off-hour use of some school facilities, including gymnasiums and swimming pools**.** The nearest park, Morrison Park, is approximately 0.45-mile northwest of the project site. In addition, according to both Figure 4-2, *Future Parklands and Acquisition Areas,* of the City's 2006 General Plan and Figure 4.15-2, *Existing and Planned Parks and Recreation Facilities*, of the City's 2040 General Plan EIR, there is a potential planned park site located approximately 0.2-mile northeast of the project site along Cottonwood Avenue. These facilities may be utilized by residents of the project.

The project would not induce significant or unplanned population growth; refer to Section 4.14, *Population and Housing.* As described previously, the project contains an outdoor open space for use by the residents comprised of one onsite park totaling 1.7 acres. In addition, Section 3.38.080, *Park Improvements Residential Development Impact Fees*, and Chapter 3.40, *Dedication of Land for Park Facilities and Payment of In-Lieu Fees,* of the Moreno Valley Municipal Code include requirements for mitigation fees in favor of park improvements and/or parkland dedication; where applicable, these fees would be included as a condition of the approval of the residential development. Therefore, this impact would be less than significant.

v) *Other public facilities?*

Determination: Less Than Significant Impact.

The project would not induce significant or unplanned population growth; refer to Section 4.14, *Population and Housing.* The project involves the development of a 135-unit single-family residential development and does not propose new or physically altered public facilities. Thus, the proposed project would not result in an increase in the demand for other governmental services such as economic development and other community support services commonly provided by the City. This impact would be less than significant.

MITIGATION MEASURES

None required.

4.16 RECREATION

Would the proposed project:					
	Issues	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b)	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

DISCUSSION

16(a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Determination: Less Than Significant Impact.

Refer to Response 4.15(a)(iv). It is not anticipated that the proposed project would generate a substantial number of new jobs or induce substantial unplanned population growth in the City. Additionally, the project would also be required to pay requisite development impact fees in accordance with Section 3.38.080, *Park Improvements Residential Development Impact Fees*, and Chapter 3.40, *Dedication of Land for Park Facilities and Payment of In-Lieu Fees,* of the Moreno Valley Municipal Code. Impacts would be less than significant in this regard.

16(b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Determination: Less Than Significant Impact.

Refer to Response 4.15(a)(iv). The proposed project includes recreational amenities for use by residents but would not include the construction or expansion of any public parks or recreational facilities. As described previously, the proposed project would not increase the demand for parks or other recreational facilities and would not require the construction or expansion of any such facilities. This impact would be less than significant.

MITIGATION MEASURES

None required.

4.17 TRANSPORTATION

Would the proposed project:					
Issues		Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?		X		
b)	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d)	Result in inadequate emergency access?		X		

The analysis and findings throughout this section are based on the *Moreno Valley TTM 38443 Residential Traffic Impact Analysis* (Traffic Analysis) prepared by Translutions, Inc., dated August 5, 2022 and revised June 21, 2023, and the *TTM 38442 and TTM 38443 Residential – VMT Analysis* (VMT Analysis) prepared by Translutions, Inc., dated August 5, 2022 and revised May 8, 2023, provided as **Appendix 7A** and **7B,** respectively, of this IS/MND.

DISCUSSION

17(a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Determination: Less Than Significant Impact With Mitigation Incorporated.

Methodology

State CEQA Guidelines Section 15064.3 was released on December 28, 2018, to address the determination of significance for transportation impacts. The new guideline requires that the analysis is based on vehicle miles traveled (VMT) instead of congestion (such as level of service, or LOS). The change in the focus of transportation analysis is the result of legislation (SB 743) and is intended to shift the emphasis from congestion to, among other things, reducing GHG emissions, promoting a diversity of land uses, and developing multimodal transportation networks. Pursuant to CEQA Guidelines Section 15064.3(c), this change in analysis is mandated to be used beginning July 1, 2020. Refer to Response 4.17(b) below for the project impacts relative to VMT.

However, as the City has maintained its requirement to utilize LOS as the mechanism for

quantifying transportation and circulation impacts of planned projects, the LOS analysis for the proposed project is presented below. LOS is used to qualitatively describe the performance of a roadway facility, ranging from LOS A (free-flow conditions) to LOS F (extreme congestion and system failure).

Study Area

Based on the trip generation and trip distribution of the proposed project, and based on discussion with City staff, the Traffic Analysis analyzed the following intersections and roadway segments for traffic operations:

Study Intersections

1. Lasselle Street and Alessandro Boulevard
2. Morrison Street and Alessandro Boulevard
3. Nason Street and Eucalyptus Avenue
4. Nason Street and Dracaea Avenue
5. Nason Street and Cottonwood Avenue
6. Nason Street and Alessandro Boulevard
7. Street A and Cottonwood Avenue
8. Street A and Alessandro Boulevard
9. Nason Street and Bay Avenue

Study Roadway Segments

1. Cottonwood Avenue from Nason Street to the project's western boundary
2. Alessandro Boulevard from Lasselle Street to Morrison Street
3. Alessandro Boulevard from Morrison Street to Nason Street
4. Alessandro Boulevard from Nason Street to the project's western boundary.

Existing Conditions

Roadways. Regional access to the project site is provided by SR-60 to the north and I-215 to the west. Local access to the project is provided by the following roadways:

- **Nason Street** is oriented in the north-south direction and is a four-lane roadway within the project study area. The City's circulation element designates Nason Street as a "Modified Divided Major Arterial." The speed limit on Nason Street is 40 miles per hour. On-street parking is prohibited.
- **Cottonwood Avenue** is oriented in the east-west direction and is a two-lane roadway within the project study area. The City's circulation element designates Cottonwood Avenue as a "Minor Arterial" roadway. The speed limit on Cottonwood Avenue is 40 miles per hour. On-street parking is prohibited.

- **Alessandro Boulevard** is oriented in the east-west direction and is a two-lane roadway within the project study area. The City's circulation element designates Alessandro Boulevard as an "Arterial" roadway. The speed limit on Alessandro Boulevard is 50 miles per hour. On-street parking is prohibited.
- **Lasselle Street** is oriented in the north-south direction and is a two-lane roadway within the project study area. The City's circulation element designates Lasselle Street as an "Arterial" roadway. The speed limit on Lasselle Street is 40 miles per hour. On-street parking is prohibited.
- **Morrison Street** is oriented in the north-south direction and is a four-lane roadway. The City's circulation element designates Morrison Street as a "Minor Arterial" roadway. The speed limit on Morrison Street is 35 miles per hour. On-street parking is prohibited.
- **Bay Avenue** is oriented in the east-west direction and is a 2-lane roadway. The City's circulation element designates Bay Avenue as a "Neighborhood Collector" roadway. The speed limit on Bay Avenue is 25 miles per hour. On-street parking is permitted.

Transit. Public transportation services within the project area include bus transit service provided by the Riverside Transit Agency (RTA). The closest transit route to the project is located on Nason Street via Route 31. Route 31 provides transit service on Nason Street within the project area. Route 31 has a major stop at the Riverside University Medical Center on the northwest corner of Nason Street and Cactus Avenue. Route 31 operates at 60 to 90-minute headways on weekdays.

Pedestrian/Bicycle Facilities. The City uses three types of bike path classifications including Class I multi-use paths, Class II bicycle lanes, and Class III bicycle routes. There are existing bike lanes on Nason Street within the project area. Pedestrian circulation within the City is primarily provided via sidewalks. There are existing sidewalks on Nason street, no sidewalks on Alessandro Boulevard, and limited sidewalks on Cottonwood Avenue adjacent to the project site. It should be noted that the City is proposing a Class II Bike Lane on Alessandro Boulevard from Kitching Street to Moreno Beach Drive, as well as a Class III Bike Route on Cottonwood Avenue from Nason Street to Moreno Beach Drive.

Project Trip Generation

The trip generation for the project is based on trip generation rates from the Institute of Transportation Engineers' (ITE) Trip Generation (11th Edition) and are based on Land Use 210 "Single-Family Detached Housing." Based on the trip generation calculation provided in the Traffic Analysis, the project is anticipated to generate 93 trips during the a.m. peak hour, 125 trips during the p.m. peak hour, and 1,254 daily trips.

Project Traffic Analysis

Both the City's 2006 and 2040 General Plans have established minimum target Levels of Services for study area intersections and roadways. LOS D is applicable to intersections that are adjacent to freeway on/off ramps, and adjacent to employment generating land uses. LOS C is applicable to all other intersections. For boundary intersections, LOS D Is assumed to be acceptable. Consistent with the acceptable LOS in the City's 2006 and 2040 General Plans, the City considers

the following criteria for application in a traffic study to identify infrastructure improvements required to provide acceptable operations. For signalized intersections, the City has established the following operating requirements:

- Any signalized study intersection operating at acceptable LOS without project traffic in which the addition of project traffic causes the intersection to degrade to unacceptable LOS shall identify improvements to provide acceptable LOS.
- Any signalized study intersection that is operating at unacceptable LOS without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

For unsignalized intersections, the City has established that an operational improvement would be required if the study determines that either section a) or both sections b) and c) occur:

a) The addition of project related traffic causes the intersection to degrade from an acceptable LOS to unacceptable LOS.

OR

b) The project adds 5.0 seconds or more of delay to an intersection that is already projected to operate without project traffic at unacceptable LOS,

AND

a) The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

If the conditions above are satisfied, improvements should be identified that achieve the following:

- LOS D or better for case a) above or to pre-project LOS and delay for case b) above.

Consistent with the City's acceptable LOS, the following roadway segment requirements should be considered, and improvements recommended if the project exceeds the noted operational goals:

- Any study roadway segment operating at acceptable LOS without project traffic in which the addition of project traffic causes the segment to degrade to unacceptable LOS should identify improvements to achieve acceptable LOS.

- Any roadway segment that operates at unacceptable LOS in the no project scenario where the project adds traffic in excess of 5 percent of the roadway capacity (e.g. a volume-to-capacity ratio increase of 0.05) should identify improvements to add capacity to the segment.

The Traffic Analysis prepared for the project concluded that under both Project Completion Year (2024) and General Plan Buildout (2040) conditions, multiple intersections and roadway segments within the project area would operate at a deficient level of service (LOS) both with and without the project. The City requires that circulation improvements be recommended if the

study area intersections and roadway segments don't meet the City's General Plan Consistency requirements, as described in the Traffic Analysis. These improvements can include conversion of stop control, signalization, changes to signal phasing, and/or addition of lanes as appropriate. Therefore, the project is required to implement mitigation.

As described in **Mitigation Measure TRA-1**, the following project-specific improvements shall be constructed as design features in conjunction with development of the site to reduce transportation impacts relative to the City's traffic guidelines:

- General Plan Buildout Year 2040: Street A and Alessandro Boulevard. Modify the southbound approach by restricting outbound traffic to right-out access only. Add an eastbound left-turn lane to include eastbound left turns into the project.

With implementation of **Mitigation Measure TRA-1**, the project would add less than 5.0 seconds of additional delay and would, therefore, fall below the thresholds set in the City's guidelines. As such, the project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. In addition, the project site has been designed to construct onsite roadway improvements consistent with City guidelines for private streets. The project would also pay Development Impact Fees as conditioned by the City. The fees shall be collected and utilized as needed by the City to construct the improvements necessary to maintain the required LOS and build or improve roads to their build-out level. Therefore, for the reasons stated above and with implementation of **Mitigation Measure TRA-1**, this impact would be reduced to a less than significant level.

17(b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Determination: Less Than Significant Impact.

Changes to the CEQA Guidelines Section 15064.3 became effective July 1, 2020, which require all lead agencies to adopt VMT as a replacement for automobile delay-based LOS as the new measure for identifying transportation impacts for land use projects. The City of Moreno Valley has prepared and adopted the *City of Moreno Valley Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment* in June 2020 to address changes to CEQA pursuant to SB 743 to include VMT analysis methodology, screening tools, and VMT thresholds.

For projects that require a VMT analysis and do not screen out, the guidelines recommend using home-based VMT/Capita (HB-VMT/Capita) for residential projects. The VMT analysis has been conducted using the RivTAM with City's 2040 General Plan. Based on the City guidelines, this analysis includes the project-generated VMT and project effect on VMT for the following scenarios:

- Notice of Preparation (NOP) Baseline conditions;
- NOP Baseline plus project conditions;
- Year 2040 without project conditions; and

- Year 2040 plus project conditions.

The City guidelines have established thresholds of significance for project-generated VMT for use as part of the environmental review process under CEQA. The following would result in a significant project generated VMT:

1. A project would have a significant VMT impact if, in the NOP baseline plus project scenario, its net VMT per capita exceeds the per capita VMT for Moreno Valley.

    a. If a project is consistent with regional RTP/SCS, then the cumulative impacts shall be considered less than significant subject to consideration of other substantial evidence. If is not consistent with the RTP/SCS, then it would have a significant VMT impact if its net VMT per capita exceeds the average VMT per capita for Moreno Valley for residential projects.

The project's effect on VMT compares how the project changes VMT on the network looking at Citywide VMT and comparing it to the no project condition. Based on data extracted from the "without project" model, the City's VMT are the following:

- Base Year Model:
    - VMT/Capita: 13.2
- Future Year Model:
    - VMT/Capita: 13.6

Project-Generated VMT Analysis

NOP Year (2022) Conditions. The NOP Year VMT/Capita for the project is 13.3 miles, while the City average is 13.4 miles. The project-generated VMT does not exceed the City's VMT per capita. Therefore, the project does not have a significant VMT impact based on the City's thresholds.

Year 2040 Conditions. The Year 2040 VMT/Capita for the project is 11.6 miles, while the City average is 13.6 miles. The project generated VMT does not exceed the City's VMT per capita. Therefore, the project does not have a significant VMT impact based on the City's thresholds.

Conclusion

The project generated VMT under NOP Year and Year 2040 with project conditions does not exceed the City's VMT per capita. Therefore, based on the City's VMT thresholds, impacts would be less than significant in this regard.

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

Determination: Less Than Significant Impact.

The project does not involve any unusual conditions, or hazardous design features, such as sharp curves or dangerous intersections, or incompatible uses. The Traffic Analysis recommended

roadway improvements (**Appendix 7)** would be constructed to be consistent with the identified roadway classifications and respective cross-sections in City's 2040 General Plan Circulation Element. The project access and project improvements (i.e., signage, buildings, and landscaping) would be designed in accordance with City standards so that adequate sight distance for drivers entering and exiting the site is maintained. On-site traffic signing and striping would be implemented in conjunction with detailed construction plans for the project site. With implementation of the recommended configuration of the driveways and frontage improvements as part of the project design, a less than significant impact would occur.

17(d) Result in inadequate emergency access?

Determination: Less Than Significant Impact With Mitigation Incorporated.

The access and circulation features on the project site would accommodate emergency ingress and egress. Access to the project site would be provided via a northern driveway that would be located on Cottonwood Avenue and a western driveway that would be located on Nason Street. In addition, the project would add a connection to Bay Avenue that would allow access to Nason Street. It should be noted that for General Plan Buildout conditions, an additional access point located on Alessandro Boulevard would be available via the adjacent project for TTM 38442. The proposed site access improvements would ensure that access is maintained for fire trucks, police units, and ambulance/paramedic vehicles.

The project is subject to the City's design review to ensure that the project as designed does not temporarily or permanently interfere with the provision of emergency access or with evacuation routes. All emergency access features are subject to and must satisfy the City of Moreno Valley design requirements and be approved by the Fire Department. To reduce potentially significant construction-related traffic impacts and as provided for in **Mitigation Measure TRA-2**, during periods when partial road closures are required, the Project Applicant shall be required to implement a temporary Traffic Management Plan (TMP) to minimize temporary impacts to emergency access and evacuation routes during the construction process. Therefore, the project would not result in inadequate emergency access and impacts would be reduced to less than significant.

MITIGATION MEASURES

TRA-1 The following project-specific improvements shall be constructed as design features in conjunction with development of the site, and proposed improvement plans shall be submitted to the City for review and approval prior to the issuance of a grading permit:

- General Plan Buildout Year 2040: Street A and Alessandro Boulevard. Modify the southbound approach by restricting outbound traffic to right-out access only. Add an eastbound left-turn lane to include eastbound left turns into the project.

TRA-2 A construction work zone Traffic Management Plan (TMP) that complies with State/federal standards as prescribed in the California Manual on Uniform Traffic

Control Devices (CA MUTCD) shall be submitted to the City for review and approval prior to the issuance of a grading permit or start of construction. The plan shall identify any roadway, sidewalk, bicycle route, or bus stop closures and detours as well as haul routes and hours of operation. All construction-related trips shall be restricted to off-peak hours to the extent possible.

SIGNIFICANCE OF IMPACT AFTER MITIGATION

With implementation of **Mitigation Measures TRA-1** and **TRA-2**, impacts relative to traffic and transportation would be reduced to a less than significant level.

4.18 TRIBAL CULTURAL RESOURCES

Would the proposed project:				
Issues	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
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)?		X		
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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

DISCUSSION

18(a)(i) 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 size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? 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?

18(a)(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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Determination: Less than Significant Impact with Mitigation Incorporated

In compliance with AB 52, the City distributed letters notifying the Native American Tribes that requested to be on the City's list for the purposes of AB 52 (Agua Caliente Band of Cahuilla Indians, Morongo Band of Mission Indians, San Manuel Band of Mission Indians, Rincon Band of Luiseno Indians, Pechanga Band of Indians and Soboba Band of Luiseno Indians) of the opportunity to consult with the City regarding the proposed project. Per AB 52, tribal governments have 30 days to respond to the City's request for consultation.

Tribal representatives from the Pechanga Band of Indians, Agua Caliente Band of Cahuilla Indians, San Manuel Band of Mission Indians, Rincon Band of Luiseno Indians, and the Morongo Band of Mission Indians requested consultation with the City. No response was received from the Soboba Band of Luiseno Indians. The tribes indicated during consultation that the site is located within the Pechanga and Morongo traditional use areas. However, no specific known tribal cultural resources were identified at the project site. All tribes who participated in the AB 52 consultation will be notified of any finds during construction and grading/ground disturbing activities will be halted until the resource is evaluated. The monitoring tribes are identified as the Morongo and Pechanga tribes, with Agua Caliente acting as monitoring tribe if Morongo and Pechanga decide not to monitor earthwork for the project.

To avoid impacting or destroying tribal cultural resources that may be inadvertently unearthed during the project's ground disturbing activities, **Mitigation Measures TCR-1** through **TCR-8** would be required. Implementation of **Mitigation Measures TCR-1** through **TCR-8** would reduce potentially significant impacts to tribal cultural resources to a less than significant level.

MITIGATION MEASURES

TCR-1 **Archaeological Monitoring.** Prior to the issuance of a grading permit, the Project Applicant shall retain a professional archaeologist to conduct monitoring of all ground-disturbing activities. The Project Archaeologist shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction. The Project Archaeologist, in consultation with the Consulting Tribe(s) including the Pechanga Band of Indians and the Morongo Band of Indians, the contractor, and the City, shall develop a CRMP as defined in 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.

TCR-2 **Native American Monitoring.** Prior to the issuance of a grading permit, the Project Applicant shall secure agreements with the Pechanga Band of Indians and the Morongo Band of Mission Indians, for tribal monitoring. The Project Applicant is also required to provide a minimum of 30 days advance notice to the tribes of all ground-disturbing 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.

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 consultation pursuant to the definition in AB 52 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 AB 52 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 AB 52. Details in the Plan shall include:

d. Project description and location

e. Project grading and development scheduling;

f. 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 resource 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.

TCR-4 **Cultural Resource Disposition.** In the event that Native American cultural resources are discovered during the course of ground-disturbing activities (inadvertent discoveries), 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:

b. 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 Mitigation Measure TCR-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 **Mitigation Measure TCR-3**. 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.

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."

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 (Code of Federal Regulations, Title 36, Section 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 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.

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). No photographs are to be taken except by the coroner, with written approval by the consulting Tribe[s].

TCR-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).

TCR-8 **Archeology Report - Phase III and IV.** Prior to final inspection, the Project Applicant /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).

SIGNIFICANCE OF IMPACT AFTER MITIGATION

With implementation of **Mitigation Measures TCR-1** through **TCR-8,** potentially significant impacts to tribal cultural resources would be reduced to a less than significant level.

4.19 UTILITIES AND SERVICE SYSTEMS

Would the proposed project:				
Issues	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
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?			X	
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?			X	
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?			X	

DISCUSSION

19(a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Determination: Less Than Significant Impact.

The project site is served by the following utilities:

- Electricity – Southern California Edison (SCE)
- Water – Eastern Municipal Water District (EMWD)
- Sewer – EMWD

- Storm Drain – Riverside County Flood Control and Water Conservation District (RCFCWCD)
- Cable – Comcast
- Telephone – Verizon
- Natural Gas – Southern California Gas Company (SoCalGas)

Electric Power, Natural Gas, and Telecommunications

The project site is located in a developed area of the City and is situated within close proximity to existing electric power, natural gas, and telecommunications facilities. Therefore, substantial new utility infrastructure would not be required with project implementation.

Water

The project would require water for the irrigation of landscaped areas. However, it is not expected that water demand would increase substantially with project implementation. Water for the project would be provided by EMWD and would connect to the existing water main located in adjacent roadways. Therefore, the expansion of off-site water facilities would not be required to serve the project.

Storm Drain

The project's stormwater needs are met by the City of Moreno Valley and the Riverside County Flood Control and Water Conservation District. In the developed condition, a proposed storm drain system would convey runoff from the proposed residential development to a sediment basin within the proposed park and/or the detention/extended detention basin located in the southern portion of the project site; refer to ***Exhibit 6, WQMP Site Plan***. The basins would control outlet flows and provide runoff treatment and would have a bottom section that will be utilized as a BMP to treat the Design Capture Volume (DCV). Stormwater runoff would pond over a sand filter section to allow runoff to receive treatment. An outlet structure would be provided within the basin with orifice openings above the water quality water surface elevation to outlet 100-year storms to the proposed Line H in Street A. The outlet structure has been designed to decrease developed flows before discharging runoff to Line H. Therefore, the expansion of off-site storm drain facilities would not be required to serve the project.

Wastewater Treatment

The project is located within the jurisdiction of the Santa Ana RWQCB, which applies requirements to the wastewater treatment facilities owned and operated by treatment providers. Sewer service is available from existing sewer lines in Cottonwood Avenue and Alessandro Boulevard. A sewer line would be installed throughout the project in conveying wastewater to a point of connection with the existing sewer line on Cottonwood Avenue. Therefore, the expansion of off-site wastewater facilities would not be required to serve the project.

19(b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Determination: Less Than Significant Impact.

The proposed project would result in an increased demand for water supplies from the 135 single-family residential units. To provide a conservative estimate of project water use, a generation rate derived from the most recent (2020) EMWD Urban Water Management Plan (UWMP) of 176 gallons per capita per day was used to estimate water demand from the project.[41] As described in Section 4.14, *Population and Housing*, the project would result in 500 additional residents at full occupancy. Based on EMWD's 2020 water use target of 176 gallons per capita per day, the 500 additional residents would generate a water demand of 87,296 gallons per day. Using this water demand rate, the project would result in an increase in water demand of 87,296 gallons per day, equivalent to approximately 97.8 acre-feet per year (AFY).

Water service would be provided to the project site by EMWD. EMWD imports water from the Metropolitan Water District (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, SWP water is treated, while at Skinner a combination of SWP water and CRA 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.

As set forth in the EMWD's most recent UWMP, EMWD has the supply needed to meet the demand of its customers through 2040. This 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. EMWD estimates that it, along with member agency local sources, would be able to supply 268,200 acre-feet of water in 2040. In addition, the receipt of a "will serve" letter from EMWD; payment of standard water connection fees; and payment of ongoing user fees would ensure that the project's impacts on existing water facilities are adequately offset. Therefore, the impacts would be less than significant.

19(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?

Determination: Less Than Significant Impact.

Wastewater disposal is regulated under the federal Clean Water Act and the State Porter-Cologne Water Quality Control Act. The Santa Ana RWQCB regulates wastewater discharges in Moreno Valley, including the project site, and implements the Clean Water Act and the Porter-Cologne

[41] Eastern Municipal Water District, 2020 Urban Water Management Plan, Table 5-1, p. 5-2.

Act by administering the NPDES, issuing water discharge permits, and establishing BMPs. The proposed project would receive wastewater conveyance services from the EMWD. Municipal wastewater is delivered to the one of EMWD's five regional water reclamation facilities which treat 46 million gallons of wastewater per day (MGD), and currently treats approximately 43 MGD of wastewater at its four active regional water reclamation facilities.[42]

Given the available capacities at EMWD wastewater treatment plants, it is anticipated that the EMWD has available capacity to accommodate the anticipated wastewater generated from the new residences developed onsite. Based on EMWD's 2015 Wastewater Collection System Master Plan, EMWD's wastewater generation criteria used for regional planning is a rate of 235 gallons per day (GPD) per residential unit. Therefore, the project would generate approximately 31,725 GPD.[43]

The project, therefore, would generate about 31,725 gallons of wastewater per day (GPD) or 0.0314 MGD. Since the project would only result in an increase of wastewater flows equal to 0.07 percent of current EMWD capacity,[44] adequate capacity is available to serve the proposed project. In addition, the receipt of a "will serve" letter from EMWD; payment of standard wastewater connection fees; and payment of ongoing user fees would ensure that the project's impacts on existing wastewater facilities are adequately offset. Impacts would be less than significant.

19(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?

Determination: Less Than Significant Impact.

Implementation of the project is anticipated to generate additional solid waste during the temporary, short-term construction phase, as well as the operational phase, but it would not be expected to result in inadequate landfill capacity. According to both the City's 2006 and 2040 General Plans, the majority of solid waste generated within the City is disposed of at Badlands Sanitary Landfill, located at 31125 Ironwood Avenue in Moreno Valley. Two other landfills within the county of Riverside, El Sobrante Landfill and Lamb Canyon Landfill, also have the capacity to serve the City. According to the California Department of Resources Recycling and Recovery (CalRecycle), the combined remaining capacity of these three landfills is approximately 178.8 million cubic yards.[45]

CalRecycle's residential waste generation rates estimate a generation rate for 12.23 pounds of waste per household per day. Assuming 135 households, the project would result in 1,651.1

[42] Eastern Municipal Water District website. https://www.emwd.org/wastewater-service Accessed January 11, 2023.

[43] Based on 135 units x 235 daily gallons per unit = 31,725 gallons daily.

[44] Based on 31,725 gallons per day demand ÷ 43,000,000 gallons per day capacity = 0.07 percent.

[45] CalRecycle website. n.d. SWIS Facility Detail. https://www2.calrecycle.ca.gov/SolidWaste/ Accessed January 11, 2023.

pounds of waste daily.[46] Considering the capacity of the above-mentioned landfills, solid waste generated by the proposed project could be accommodated by the landfills and would not have a significant impact on local landfill capacity.

All construction activities would be subject to conformance with relevant federal, State, and local requirements related to solid waste disposal. Specifically, the project would be required to demonstrate compliance with the California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939), which requires all California cities to "reduce, recycle, and re-use solid waste generated in the State to the maximum extent feasible." The California Integrated Waste Management Act of 1989 requires that at least 50 percent of waste produced is recycled, reduced, or composted. The project would also be required to demonstrate compliance with the Green Building Code, which includes design and construction measures that act to reduce construction-related waste though material conservation measures and other construction-related efficiency measures. Compliance with these programs would ensure the project's construction-related solid waste impacts are less than significant.

19(e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Determination: Less Than Significant Impact.

Refer to Response 4.19(d). The project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure. As such, the project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. A less than significant impact would occur.

MITIGATION MEASURES

None required.

[46] CalRecycle website. n.d. Estimated Solid Waste Generation Rates – Residential Sector Generation Rates. Accessed January 11, 2023. https://www2.calrecycle.ca.gov/wastecharacterization/general/rates

4.20 WILDFIRE

Would the proposed project:				
Issues	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
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?				X
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?				X
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?				X

DISCUSSION

20(a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Determination: No Impact.

The project site is located in a moderately developed urban area surrounded by residential and commercial uses. According to the CalFire Fire Hazard Severity Zone Viewer,[47] and the Adopted State Responsibility Area Fire Hazard Severity Zone Maps,[48] the project site is not located in a zone designated as a Very High Fire Hazard Severity Zone. The proposed project would be required to comply with the provisions of the City of Moreno Valley Emergency Operations Plan, Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan, and the emergency access requirements of the California Fire Code, which include but are not limited to providing access with adjoining uses and providing suitable access for emergency vehicles. In addition, emergency access to the site would be maintained during construction. Therefore, no impact would occur.

[47] CalFire. nd. Fire and Resource Assessment Program: FHSZ Viewer. Accessed January 3, 2023. https://egis.fire.ca.gov/FHSZ/

[48] CalFire. 2007. Map of CalFire's Fire Hazard Severity Zones in the Local Responsibility Area – Western Riverside County. Accessed January 3, 2023. https://osfm.fire.ca.gov/media/6754/fhszl_map60.pdf

20(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?

Determination: No Impact.

The project site is generally flat and does not support areas of steep slopes. In addition, the project site is located within an urbanized area of the city, where the risk of wildland fire is decreased. As such, the proposed project would not be located in a critical fire danger zone or adjacent to wildlands subject to wildfires. Urban levels of fire protection would be provided to the project area. In addition, the project would adhere to building codes and any conditions included through review by the MVFD. No impact would occur.

20(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?

Determination: No Impact.

The project site is located in a moderately developed area of the city and is situated within close proximity to existing electric power, natural gas, and telecommunications facilities. The proposed residential uses on-site would not include any features that would have the potential to exacerbate fire risk or result in temporary or ongoing impacts to the environment. The project would provide access to adjoining uses and suitable access for emergency vehicles. Emergency access to the site would be maintained during construction. No impact would occur.

20(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?

Determination: No Impact.

The project site is relatively flat with no major changes in elevation. There are no channels or creeks running through the project site. The project site is not located within a flood hazard area. In addition, there are no known landslides at the project site, nor is the site in the path of any known or potential landslides. Therefore, the project would not expose people or structures to risks involving flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. No impact would occur.

MITIGATION MEASURES

None required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

Would the proposed project:				
Issues	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Have the potential to 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, 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?		X		
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		X		
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

The following are mandatory findings of significance in accordance with Section 15065 of the CEQA Guidelines.

DISCUSSION

21(a) Have the potential to 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, 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?

Determination: Less Than Significant Impact with Mitigation Incorporated.

As discussed in Section 4.4, *Biological Resources*, after implementation of **Mitigation Measures BIO-**through **BIO-6**, the proposed project would result in less than significant impacts to biological resources. Similarly, as discussed in Sections 4.5, *Cultural Resources*, Section 4.7, *Geology and Soils*, and Section 4.18, *Tribal Cultural Resources*, after implementation of **Mitigation Measures CUL-1, CUL-2, GEO-1,** and **TCR-1** through **TCR-8,** the proposed project would result in less than significant impacts to human remains, archaeological resources, paleontological resources, and tribal cultural resources.

21(b) Have impacts that are individually limited, but cumulatively considerable?

Determination: Less Than Significant Impact with Mitigation Incorporated.

A significant impact may occur if the project, in conjunction with related projects proposed for development in the City, would result in impacts that are less than significant when viewed separately but would be significant when viewed together. When considering the proposed project in combination with other past, present, and reasonably foreseeable future projects in the vicinity of the project site, the proposed project does not have the potential to cause impacts that are cumulatively considerable. As detailed in the above discussions, the proposed project would not result in any significant and unmitigable impacts in any environmental categories. In all cases, the impacts associated with the project are limited to the project site or are of such a negligible degree that they would not result in a significant contribution to any cumulative impacts.

21(c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Determination: Less Than Significant Impact with Mitigation Incorporated.

The proposed project does not have the potential to cause substantial adverse effects to humans, either directly or indirectly, once mitigation measures are implemented. While a number of the proposed project's impacts were identified as having the potential to significantly impact humans, with implementation of the identified mitigation measures herein, and standard requirements, these impacts would be less than significant. Therefore, the proposed project would not cause significant adverse direct or indirect impacts to humans.

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