CITY OF MORENO VALLEY

INITIAL STUDY FOR VALLEY GARDENS APARTMENTS 13989 MORENO ROSE PLACE MORENO VALLEY

VALLEY GARDENS APARTMENTS
CASE NUMBERS PEN21-0250 (Plot Plan) and PEN21-0251 (Tentative Parcel Map)

AUGUST, 2023

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

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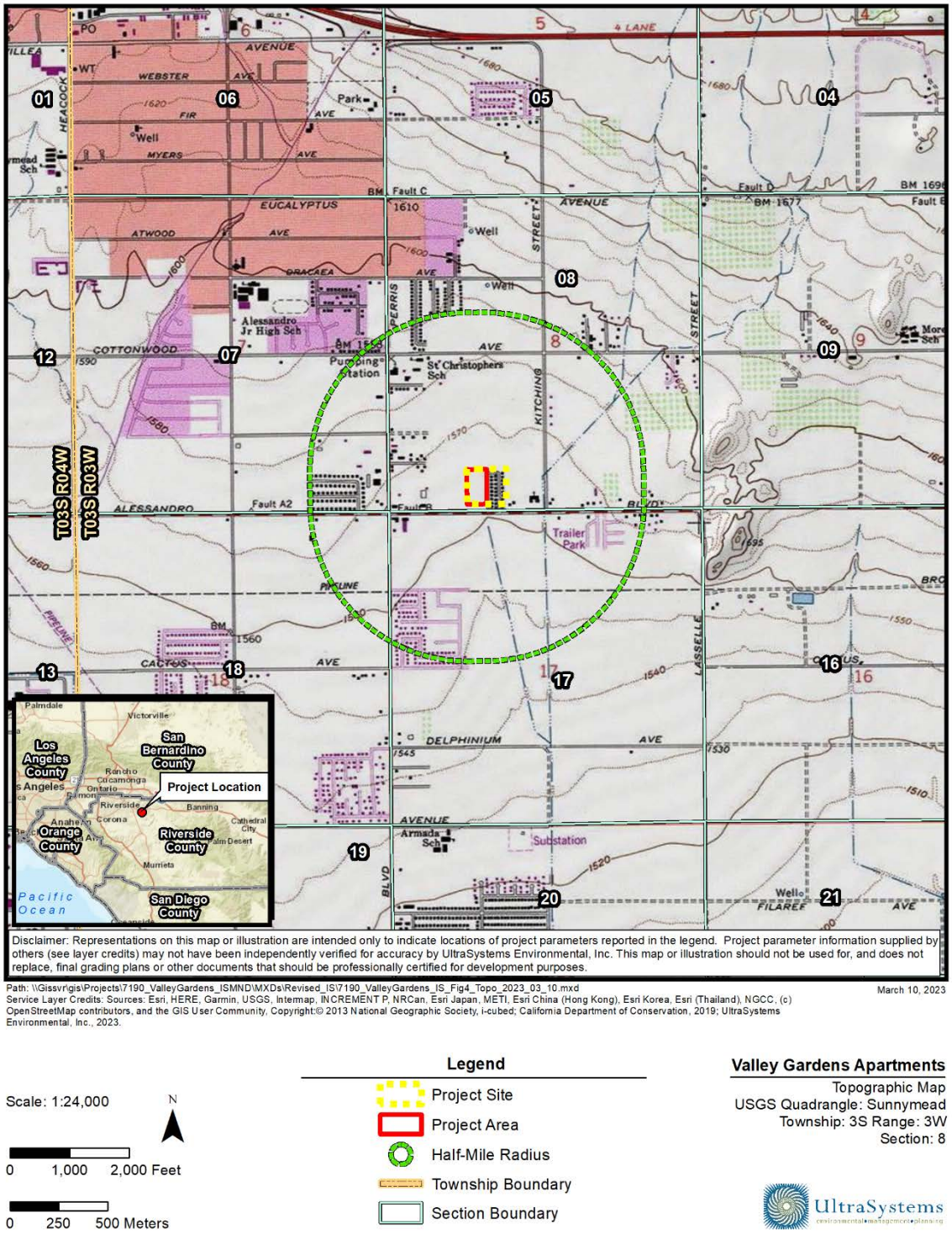
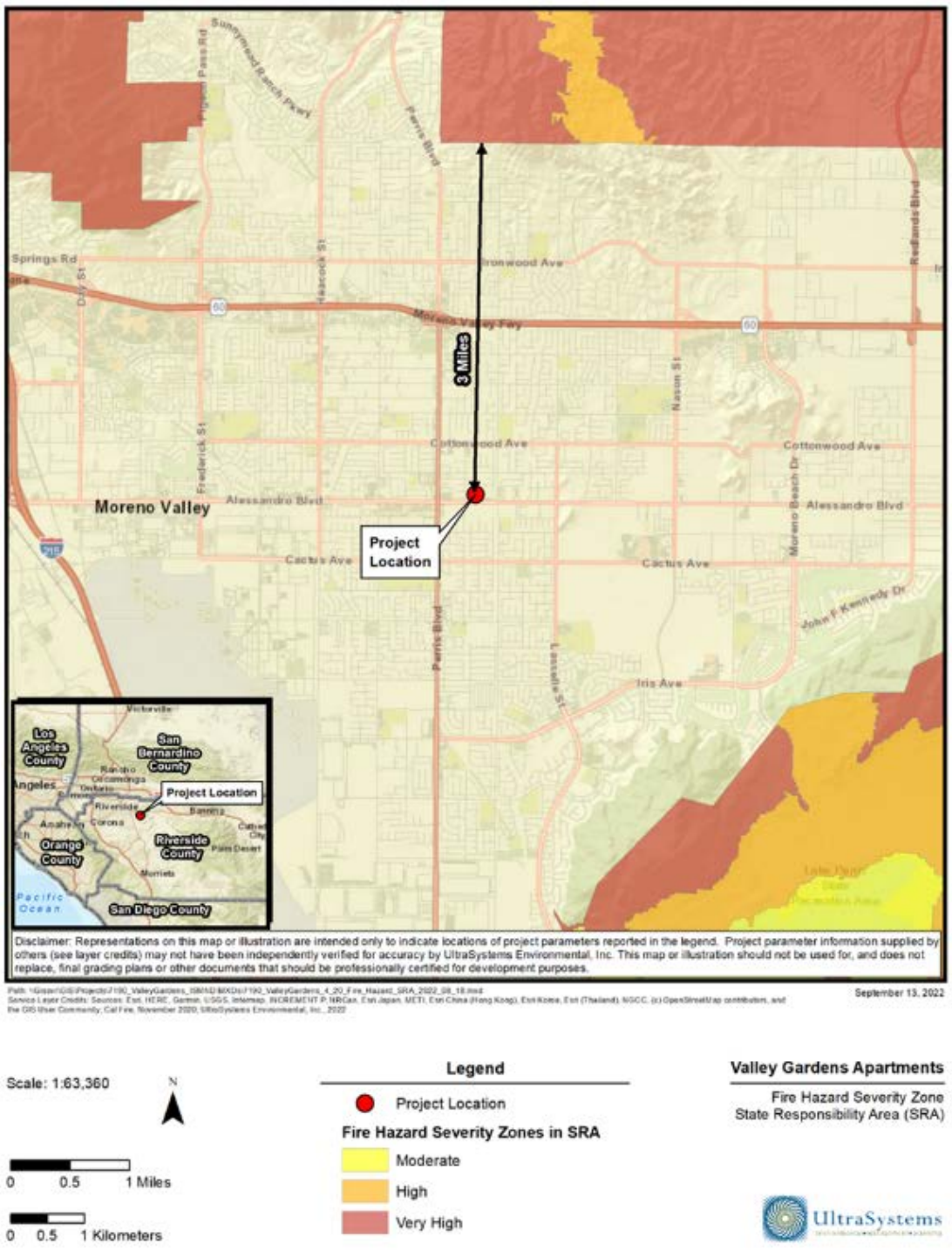


Figure 28 - Fire Hazard Severity Zones – State Responsibility Area



TABLES

MITIGATION MONITORING AND REPORTING PROGRAM

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in conformance with § 21081.6 of the Public Resources Code and § 15097 of the CEQA Guidelines, which requires all state and local agencies to establish monitoring or reporting programs whenever approval of a project relies upon a Mitigated Negative Declaration or an Environmental Impact Report. The MMRP ensures implementation of the measures being imposed to mitigate or avoid the significant adverse environmental impacts identified through the use of monitoring and reporting. Monitoring is generally an ongoing or periodic process of project oversight; reporting generally consists of a written compliance review that is presented to the decision-making body or authorized staff person.

It is the intent of the MMRP to: (1) provide a framework to document implementation of the required mitigation; (2) identify monitoring/reporting responsibility; (3) provide a record of the monitoring/reporting; and (4) ensure compliance with those Mitigation Measures that are within the responsibility of the City and/or Applicant to implement.

The following table lists impacts, mitigation measures adopted by the City of Moreno Valley in connection with approval of the proposed project, level of significance after mitigation, responsible and monitoring parties, and the project phase in which the measures are to be implemented.

Only those environmental topics for which mitigation is required are listed in this Mitigation Monitoring and Reporting Program.

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
4.4 Biological Resources				
a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	**MM BIO-1 Focused Burrowing Owl (BUOW) Surveys** The project area is located within an MSHCP Burrowing Owl Survey Area and contains suitable habitat to potentially support BUOW in the future. Therefore, a focused BUOW survey is required by the MSHCP. A qualified biologist would conduct a focused BUOW survey in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (MSHCP Survey Guidelines; Riverside County TLMA, 2006) within 30 days prior to ground disturbance. Following the completion of the focused BUOW survey, the biologist would prepare a letter report in accordance with the MSHCP Survey Guidelines summarizing the results of the survey. The report would be submitted to the City of Moreno Valley prior to initiating any ground disturbance activities. If no BUOWs or signs of BUOW are observed during the survey and concurrence is received from EPD and CDFW, project activities may begin and no further mitigation would be required. If BUOW or signs of BUOW are observed during the survey, the site would be considered occupied. The biologist would implement protection measures listed below and contact the city, EPD, and CDFW to assist in the development of avoidance, minimization, and mitigation measures, prior to commencing project activities. The list of potential measures to avoid and minimize impacts to BUOWs described in the above section would be implemented. **BUOW Protection Measures** If BUOWs or signs of BUOW are observed during the survey, then the site would be considered occupied and the biologist shall contact the City of Moreno Valley, EPD, and CDFW to assist in the development of avoidance, minimization, and mitigation measures discussed below, prior to commencing project activities (Riverside County TLMA, 2006). **Planning BUOW Protection Measures** Grading, construction, and other project activities on all grassland habitat will be delayed until the qualified biologist has implemented burrow exclusion and closure. No ground-disturbing activities within 50 meters (165 feet) of an active BUOW burrow will be permitted until burrow exclusion and closure have been implemented. No destruction of foraging habitat will be permitted until burrow exclusion and closure have been implemented. **Pre-Construction BUOW Protection Measures** Prior to the initiation of grading and construction activities, the biologist shall implement passive relocation of an active BUOW burrow by installing a one-way	Project Applicant and Qualified Biologist	Field Verification	1. City of Moreno Valley 2. City of Moreno Valley 3. Before Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	door and then permanently excluding the BUOW from returning once it is confirmed that no BUOW individuals remain in the burrow. A biological monitor will visit the site daily to verify that the burrow is empty by monitoring and scoping the burrow. Considering that there is not adequate BUOW habitat of at least 6.6 acres to which an excluded BUOW pair can relocate, the project applicant shall pay a Local Development Mitigation Fee to the County of Riverside to offset the impacts to the BUOW. All surveys and reporting required by the MSHCP will be complied with including a focused BUOW survey. **Construction BUOW Protection Measures** A biological monitor will be onsite to monitor any BUOW or signs of BUOW. If any BUOW are observed then the biologist will consult with the County EPD and CDFW to determine the appropriate measures.			
	MM BIO-2: Pre-Construction Breeding Bird Survey • To maintain compliance with the MBTA and Fish and Game Code, and to avoid impacts or take of migratory non-game breeding birds, their nests, young, and eggs, the following measures will be implemented. The measures below will help to reduce direct and indirect impacts caused by construction on migratory non-game breeding birds to less than significant levels. • Project activities that will remove or disturb potential nest sites, such as open ground, trees, shrubs, grasses, or burrows, during the breeding season would be a potential significant impact if migratory non-game breeding birds are present. Project activities that will remove or disturb potential nest sites will be scheduled outside the breeding bird season to avoid potential direct impacts on migratory non-game breeding birds protected by the MBTA and Fish and Game Code. The breeding bird nesting season is typically from February 15 through September 15, but can vary slightly from year to year, usually depending on weather conditions. Removing all physical features that could potentially serve as nest sites will also help to prevent birds from nesting within the project site during the breeding season and during construction activities. • If project activities cannot be avoided during February 15 through September 15, a qualified biologist will conduct a pre-construction breeding bird survey for breeding birds and active nests or potential nesting sites within the limits of project disturbance. The survey will be conducted at least seven days prior to the onset of scheduled activities, such as mobilization and staging. It will	Project Applicant and Qualified Biologist	Field Verification	1. City of Moreno Valley 2. City of Moreno Valley 3. Before and During Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	end no more than three days prior to vegetation, substrate, and structure removal and/or disturbance. • If no breeding birds or active nests are observed during the pre-construction survey or they are observed and will not be impacted, project activities may begin and no further mitigation will be required. • If a breeding bird territory or an active bird nest is located during the pre-construction survey and will potentially be impacted, the site will be mapped on engineering drawings and a no-activity buffer zone will be marked (fencing, stakes, flagging, orange snow fencing, etc.) a minimum of 100 feet in all directions or 500 feet in all directions for listed bird species and all raptors. The biologist will determine the appropriate buffer size based on the type of activities planned near the nest and the type of bird that created the nest. Some bird species are more tolerant than others of noise and activities occurring near their nest. This no-activity buffer zone will not be disturbed until a qualified biologist has determined that the nest is inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by project activities. Periodic monitoring by a biologist will be performed to determine when nesting is complete. Once the nesting cycle has finished, project activities may begin within the buffer zone. • If listed bird species are observed within the project site during the pre-construction survey, the biologist will immediately map the area and notify the appropriate resource agency to determine suitable protection measures and/or mitigation measures and to determine if additional surveys or focused protocol surveys are necessary. Project activities may begin within the area only when concurrence is received from the appropriate resource agency. • Birds or their active nests will not be disturbed, captured, handled or moved. Active nests cannot be removed or disturbed; however, nests can be removed or disturbed if determined inactive by a qualified biologist.			
	MM BIO-3: Biological Monitor As per the MSHCP requirements stated in Volume 1, Appendix C2 of the MSHCP, a qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint (Riverside County, 2003). • A biological monitor shall monitor activities that result in tree or vegetation removal to minimize the likelihood of inadvertent impacts on nesting birds and special-status wildlife species, with special attention given to any	Project Applicant and Qualified Biologist	Field Verification	1. City of Moreno Valley 2. City of Moreno Valley 3. During Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	protected species observed during the pre-construction breeding bird surveys. Monitoring shall also be conducted periodically during construction activities to ensure no new nests are built during any vegetation removal or building demolition activities between February 1 and August 31. The biological monitor shall ensure that all BMPs, avoidance, protection and mitigation measures described in the relevant project permits and reports are in place and are adhered to. • The biological monitor shall have the authority to temporarily halt all construction activities and all non-emergency actions if sensitive species and/or nesting birds are identified and would be directly affected. The monitor shall notify the appropriate resource agency and consult if needed. If necessary, the biological monitor shall relocate the individual outside of the work area where it will not be harmed. Work can continue at the location if the applicant and the consulted resource agency determine that the activity will not result in adverse effects on the species. • The appropriate agencies shall be notified if a dead or injured protected species is located within the project site. Written notification shall be made within 15 days of the date and time of the finding or incident (if known) and must include; location of the carcass, a photograph, cause of death (if known), and other pertinent information.			
	MM BIO-4: Construction Best Management Practices • Project work crews will be directed to use BMPs where applicable. These measures will be identified prior to construction and incorporated into the construction operations. • Implementation of this conservation measure will help to avoid, eliminate or reduce impacts on sensitive biological resources, such as special-status terrestrial wildlife species, to less than significant levels. Standard BMPs as outlined in the MSHCP (MSHCP, Volume 1, Appendix C3) and that apply to construction of this project, and that are not incorporated to other mitigation measures proposed for this project are as follows: • Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements. • Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials	Project Applicant and Construction Contractor	Field Verification	1. City of Moreno Valley 2. City of Moreno Valley 3. During Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS, and CDFW, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas. • The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.			
4.5 Cultural Resources				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	**MM CR 1 Archaeological Monitoring.** Prior to the issuance of a grading permit, the Developer shall retain a professional archaeologist to conduct monitoring of all ground disturbing activities located on Parcel 1 of Parcel Map 38599. 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 Pechanga Band of Indians, Morongo Band of Mission Indians, the contractor, and the City, shall develop a Cultural Resources Monitoring Plan (CRMP) as defined in CR-3. The Project archeologist shall attend the pre-grading meeting with the City, the construction manager and any contractors, and Consulting Tribal representatives; 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	Qualified Archaeologist and Project Construction Contractor	Field Verification	1. City of Moreno Valley Planning Department 2. City of Moreno Valley Planning Department 3. During construction activities
	MM CR 2 Native American Monitoring. Prior to the issuance of a grading permit(s), the Developer shall secure agreements with the Pechanga Band of Indians and Morongo Band of Mission Indians, for tribal monitoring. The Developer 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.	Qualified Archaeologist and Project Construction Contractor	Field Verification	1. City of Moreno Valley Planning Department 2. City of Moreno Valley Planning Department 3. During construction activities
	MM CR 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 AB52	Qualified Archaeologist and Project	Field Verification	1. City of Moreno Valley Planning Department

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	to address the details, timing and responsibility of all archaeological and cultural activities that will occur on the project site. A consulting Tribe is defined as a Tribe that initiated the AB 52 tribal consultation process for the Project, has not opted out of the AB52 consultation process, and has completed AB 52 consultation with the City as provided for in Cal Pub Res Code Section 21080.3.2(b)(1) of AB52. Details in the Plan shall include: a. Project description and location b. Project grading and development scheduling; c. Roles and responsibilities of individuals on the Project; d. The pre-grading meeting and Cultural Resources Worker Sensitivity Training details; e. The protocols and stipulations that the contractor, City, Consulting Tribe (s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, human remains/cremations, sacred and ceremonial items, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation. f. The type of recordation needed for inadvertent finds and the stipulations of recordation of sacred items. g. Contact information of relevant individuals for the Project.	Construction Contractor		2. City of Moreno Valley Planning Department 3. During construction activities
	MM CR 4 Cultural Resource Disposition. In the event that Native American cultural resources are discovered during the course of ground disturbing activities (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries: a. One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the City of Moreno Valley Planning Department: i. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place they were found with no development affecting the integrity of the resources. ii. Onsite reburial of the discovered items as detailed in the treatment plan required pursuant to Mitigation Measure CR-3. This shall include measures and provisions to protect the future	Qualified Archaeologist and Project Construction Contractor	Field Verification	1. City of Moreno Valley Planning Department 2. City of Moreno Valley Planning Department 3. During construction activities

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	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 CR-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.			
	MM CR 5 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 and/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.	Qualified Archaeologist and Project Construction Contractor	Field Verification	1. City of Moreno Valley Planning Department 2. City of Moreno Valley Planning Department 3. During construction activities
	MM CR 6 Inadvertent Finds. If potential historic or cultural resources are uncovered during excavation or construction activities at the project site (Parcel 1 of Parcel Map 38599) that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to Project approval, all ground disturbing activities in the affected area within 100 feet of the uncovered resource must cease immediately and a qualified person meeting the Secretary of the Interior's standards (36 CFR 61), Tribal Representatives, and all site monitors per the Mitigation Measures, shall be consulted by the City to evaluate the find, and as appropriate recommend alternative measures to avoid, minimize or mitigate negative effects on the historic, or prehistoric resource. Further ground disturbance shall not resume within the area of the discovery until a treatment plan has been prepared and approved by all Consulting Parties, then work may resume after the treatment plan has been completed. 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	Qualified Archaeologist and Project Construction Contractor	Field Verification	1. City of Moreno Valley Planning Department 2. City of Moreno Valley Planning Department 3. During construction activities

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	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 CR-3 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 and Consulting Tribes for their review and approval prior to implementation of the said plan. **MM CR 7 Archeology Report - Phase III and IV.** Prior to final inspection, the developer/permit holder shall prompt the Project Archeologist to submit two (2) copies of the Phase III Data Recovery report (if required for the Project) and the Phase IV Cultural Resources Monitoring Report that complies with the Community Development Department's requirements for such reports. The Phase IV report shall include evidence of the required cultural/historical sensitivity training for the construction staff held during the pre-grade meeting. The Community Development Department shall review the reports to determine adequate mitigation compliance. Provided the reports are adequate, the Community Development Department shall clear this condition. Once the report(s) are determined to be adequate, two (2) copies shall be submitted to the Eastern Information Center (EIC) at the University of California Riverside (UCR) and one (1) copy shall be submitted to the Consulting Tribe(s) Cultural Resources Department(s). **Level of Significance After Mitigation** With implementation of mitigation measures **MM CUL-1** through **MM CUL-7** described above, the project would result in less than significant impacts to archaeological resources.			
c) Disturb any human remains, including those interred outside of	**MM CR 8 Human Remains**. If human remains and/or cremations are discovered, no further disturbance shall occur in the affected area until the County Coroner has made necessary findings as to origin. a. Should human remains and/or cremations be encountered on the surface or during any and all ground-disturbing activities (i.e.,	Qualified Archaeologist and Project Construction Contractor	Field Verification	1. City of Moreno Valley Planning Department 2. City of Moreno Valley Planning Department

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
formally dedicated cemeteries?	clearing, grubbing, tree and bush removal, grading, trenching, fence post placement and removal, construction excavation, excavation for all water supply, electrical, and irrigation lines, and landscaping phases of any kind), work in the immediate vicinity of the discovery shall immediately stop within a 100-foot perimeter of the discovery. The area shall be protected; project personnel/observers will be restricted. The County Coroner is to be contacted within 24 hours of discovery. The County Coroner has 48 hours to make his/her determination pursuant to State and Safety Code §7050.5. and Public Resources Code (PRC) § 5097.98. b. In the event that the human remains and/or cremations are identified as Native American, the Coroner shall notify the Native American Heritage Commission within 24 hours of determination pursuant to subdivision (c) of HSC §7050.5. c. The Native American Heritage Commission shall immediately notify the person or persons it believes to be the Most Likely Descendant (MLD). The MLD has 48 hours, upon being granted access to the Project site, to inspect the site of discovery and make his/her recommendation for final treatment and disposition, with appropriate dignity, of the remains and all associated grave goods pursuant to PRC §5097.98 **No photographs are to be taken except by the coroner, with written approval by the consulting Tribe[s].**			3. During construction activities
	MM CR 9 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). **Level of Significance After Mitigation** With adherence to applicable codes and regulations protecting cultural resources and with implementation of mitigation measures **MM CUL-8** and **MM**	Qualified Archaeologist and Project Construction Contractor	Field Verification	1. City of Moreno Valley Planning Department 2. City of Moreno Valley Planning Department 3. During construction activities

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	CUL-9 described above, the proposed project would result in less than significant impacts to human remains.			
4.7 Geology and Soils				
Threshold 4.7d): Would the project be located on expansive soil, as defined in Table 18-1 B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	**MM GEO-1** Incorporation of and compliance with the Conclusions and Recommendations detailed in the Preliminary Geotechnical Engineering Investigation. All grading operations and construction shall be conducted in conformance with the recommendations included in the geotechnical report on the project site that has been prepared by NorCal Engineering, titled Preliminary Geotechnical Engineering Investigation (NorCal, 2020). Design, grading, and construction shall be performed in accordance with the requirements of the City of Moreno Valley and the California Building Code (CBC) applicable at the time of grading, appropriate local grading regulations, and the recommendations of the project geotechnical consultant as summarized in a final written report, subject to review by the City of Moreno Valley Community Development Department, or designee, prior to commencement of grading activities.	Project Applicant, Project Architect, and Project Construction Contractor	Implement Recommendations	1. City of Moreno Valley Planning Department 2. City of Moreno Valley Planning Department 3. During project design and project construction activities
Threshold 4.7 f): Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**MM GEO-2** Prior to the issuance of the grading permit, the applicant shall provide a letter to the City of Moreno Valley Planning Department, or designee, from a qualified paleontologist stating that the paleontologist has been retained to provide services for the project. The paleontologist shall develop, as needed, a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist on site for review and approval by the City. The PRIMP shall require that the paleontologist perform paleontological monitoring of any ground-disturbing activities within undisturbed native sediments during mass grading, site preparation, and underground utility installation. The project paleontologist may reevaluate the necessity for paleontological monitoring after 50 percent or greater of the excavations have been completed. In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered. Criteria for discard of specific fossil specimens will be made explicit. If the qualified paleontologist determines that impacts on a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include	Project Applicant, Qualified Paleontologist, and Construction Contractor	Monitoring, Assessment, Recovery, and Curation	1. City of Moreno Valley Planning Department 2. City of Moreno Valley Planning Department 3. During project construction activities

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	recovering a sample of the fossiliferous material prior to construction, monitoring work and halting construction if a significant fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage, and treatment shall be done at the Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.			
4.13 Noise				
Threshold 4.13 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?	**MM N-1** The following noise control measures shall be applied to new single-family dwellings exposed to noise along major roadways: a. Install sound barriers (masonry walls or walls with earth berms) between residences and noise sources. b. Install double-paned or similar sound rated windows. c. Provide sound insulating exterior walls and roofing systems. d. Locate and/or design attic vents to minimize sound propagation into each home. e. Provide forced-air ventilation systems. f. Place dwellings as far as practical from the noise source.	Project Applicant and Project Construction Contractor	Contract Specifications	1. City of Moreno Valley Planning Department 2. City of Moreno Valley Planning Department 3. During construction
	MM N-2 Acoustical analyses shall be conducted for new residential development along State Route 60. Noise control measures shall be required to reduce the amount of noise to acceptable levels (limit interior noise levels with doors and windows closed to 45 CNEL).			
	MM N-3 Discourage residential uses where current or projected exterior noise due to aircraft over flights will exceed 65 CNEL (Policy 6.3.2).			
	MM N-4 New commercial and industrial activities (including the placement of mechanical equipment) shall be evaluated and designed to mitigate noise impacts on adjacent uses (Policy 6.5.1).			
	MM N-5 Construction activities shall be operated in a manner that limits noise impacts on surrounding uses (Policy 6.5.2).			
	MM N-6			

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	The City shall re-evaluate designated truck routes in terms of noise impact on existing land uses to determine if those established routes and the hours of their use should be adjusted to minimize exposure to truck noise (Program 6-3).			
	MM N-7 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 (Policy 6.3.1): a. New single-family and multiple-family residential buildings shall be insulated to achieve an interior noise level of 45 CNEL or less. Such buildings shall include sound-insulating 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.			
	MM N-8 Where the future noise environment is likely to exceed 70 CNEL due to overflights from the joint-use airport at March, new buildings containing uses that are not addressed under Policy 6.3.1 shall require insulation to achieve interior noise levels recommended in the March Air Reserve Base Air Installation Compatible Use Zone Report (Policy 6.3.3).			
	MM N-9 The City shall enforce the California Administrative Code, Title 24 noise insulation standards for new multi-family housing developments, motels and hotels (Policy 6.3.5).			
	MM N-10 Building construction shall be prohibited between 8 p.m. and 6.am. during the week and 8 p.m. and 7 a.m. weekends and holidays (Policy 6.3.6).			

APPENDICES (Separate Documents)

A Project Plans
B CalEEMod Input and Results for Air Quality Analysis
C Biological Resources Evaluation
D Cultural Resources Assessment
E1 Paleontological Records Search
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INITIAL STUDY (IS) FOR VALLEY GARDENS APARTMENTS PROJECT

BACKGROUND INFORMATION AND PROJECT DESCRIPTION:

1. **Project Case Number(s):**

2. **Project Title:** Valley Gardens Apartments

3. **Public Comment Period:** August 31, 2023 to September 20, 2023

4. **Lead Agency:** City of Moreno Valley
   Danielle Harper-Scott, Planning Department
   14177 Frederick Street
   Moreno Valley, CA 92552
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   danielleh@moval.org

5. **Documents Posted At:** https://moval.gov/cdd/documents/about-projects.html

6. **Prepared By:** Betsy Lindsay, President/CEO
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   blindsay@ultrasystems.com

7. **Project Sponsor:**

Applicant/Developer	**Property Owner**
Tran & Mai-Anh Chung	Tran & Mai-Anh Chung
39903 Camden Court	39903 Camden Court
Temecula, CA 92591	Temecula, CA 92591
951/413-3224	951/413-3224
Ibtchung@gmail.com	Ibtchung@gmail.com

8. **Project Location:** northwest corner of the intersection of Alessandro Boulevard and Sarah Street (currently an unpaved private street), 33º55'05.39" N/117º 13'17.54" W, APN 906-080-18

9. **General Plan Designation:** COMU

Corridor Mixed Use

10. **Specific Plan Name and Designation:** none

11. **Existing Zoning:** COMU

Corridor Mixed Use

The proposed apartment project is allowed under the COMU General Plan land use designation and zoning.

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

Table 1 - Summary of Existing Land Use, Zoning and Specific Plan Designations

	Land Use	General Plan	Zoning
Project Site	Vacant land and Single-family homes	Corridor Mixed-Use (COMU)	Corridor Mixed-Use (COMU)
North	Single-family homes	R5 Residential (R5)	Residential 5 District (R5)
South	Multi-family homes	Corridor Mixed-Use (COMU)	Corridor Mixed-Use (COMU)
East	Single-family homes	R10 Residential (R10) and Corridor Mixed-Use (COMU)	Residential 5 District (R5) and Corridor Mixed-Use (COMU)
West	Single-family homes	R5 Residential (R5)	Residential 5 District (R5)

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

Environmental Setting

Project Location
The proposed Valley Gardens Project is located at the northwest corner of the intersection of Alessandro Boulevard and Sarah Street (currently an unpaved private street) in the City of Moreno Valley. The project parcel is a portion of an existing 8.99-acre site (APN 479-220-024) that will be divided into two parcels, the westerly one of which will be the 4.6-acre project parcel. Refer to **Figure 1** to **Figure 3**, which depict the project site's location in a regional, city, and vicinity scale.

Project Setting
The eastern portion of the project site is currently developed with Victory Gardens Homes, a 30-unit single family detached rental project built in 1956. Each of the homes has 1,180 square feet of living area in a 3-bedroom/1-bath configuration. The western 4.6 acres of the site, which will be the location of the proposed Valley Gardens rental apartment

project, is currently vacant and undeveloped; it has been mowed or disked regularly to maintain its clear condition. The site slopes very gently from north to south, from approximately 1,568 feet above mean sea level (amsl) at the north to 1,560 feet amsl at the south. Single-family homes surround the project site on the west, north and east, with a church building (Quinn A.M.E. Church) located adjacent to the southeast corner of the project site; the southern boundary of the site is Alessandro Boulevard. See Figure 4 - Topographic Map**Figure** 4, which depicts the topography of the site, and surrounding area. Site photographs are provided in **Figure 5**.

Land Use and Zoning

The land use, zoning, and specific plan designations of the project site and its immediate vicinity are listed in **Table 1**. The project site has a General Plan land use designation of Corridor Mixed Use (COMU; City of Moreno Valley, 2022a), and a zoning designation of Corridor Mixed Use (COMU; City of Moreno Valley, 2022b). Permitted uses under the COMU designation include a full range of commercial uses, as well as multi-family residential development at a density of 15 to 25 units per acre.

Figure 1 - Regional Location

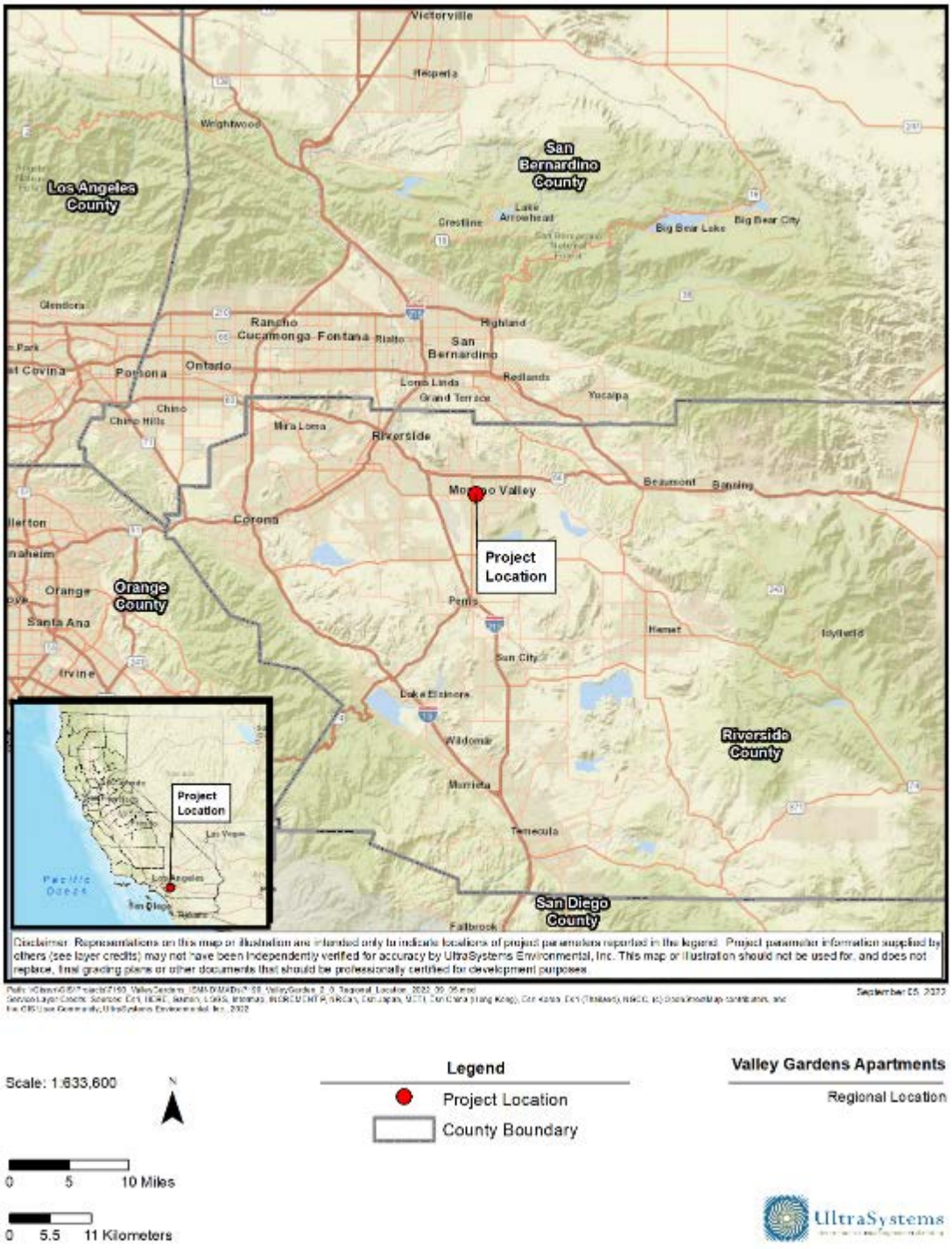

Figure 2 - Project Vicinity

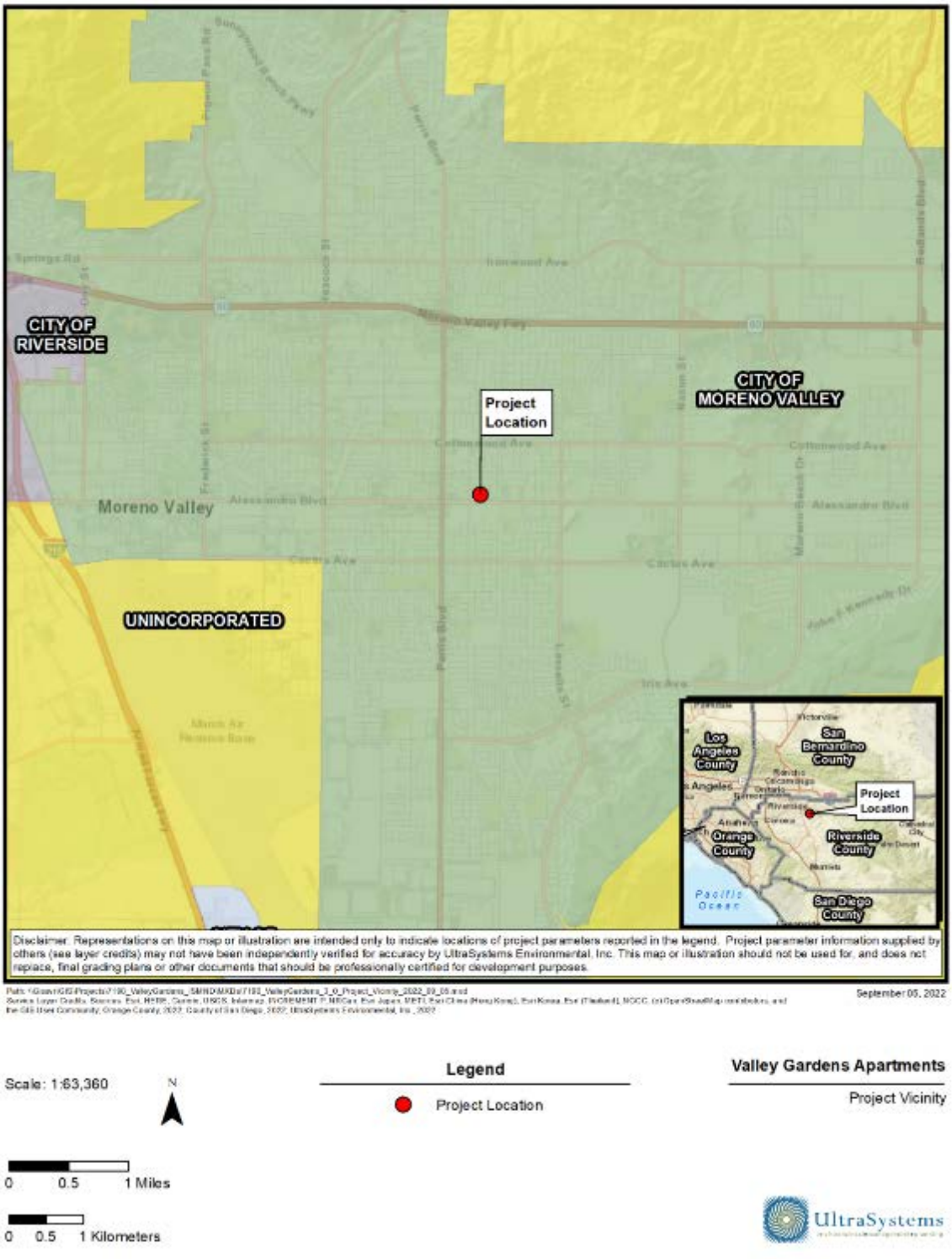

Figure 3 - Project Location

Path: \\Gissvr\gis\Projects\7190_ValleyGardens_ISMND\MXDs\Revised_IS\7190_ValleyGarden_IS_Fig3_Project_Location_2023_03_10.mxd March 10, 2023
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community; UltraSystems Environmental, Inc., 2023

Scale: 1:1,920

N

0 80 160 Feet

0 20 40 Meters

Legend

Project Site

Project Area

Valley Gardens Apartments

Project Location

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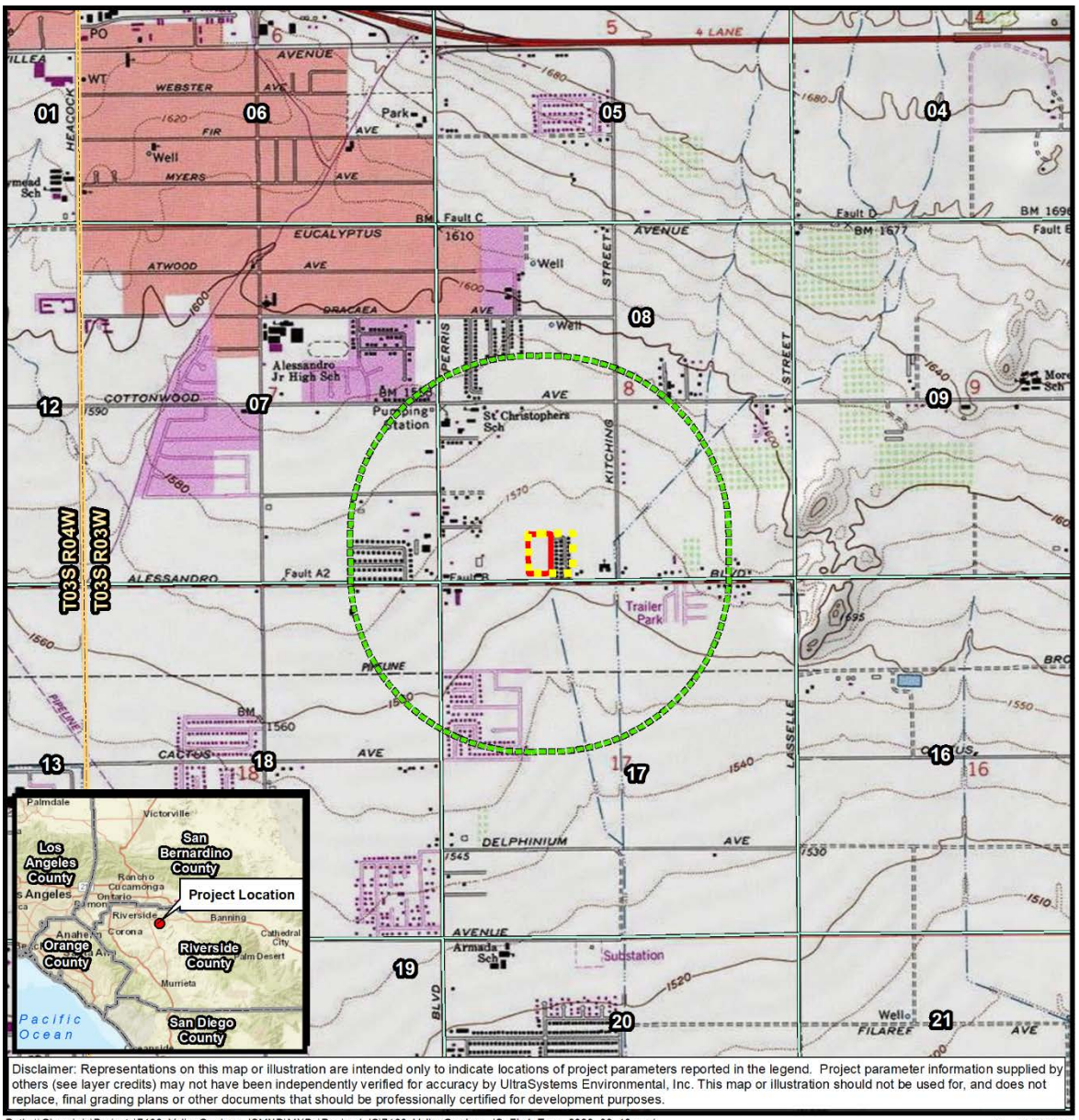
Figure 4 - Topographic Map



Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes.

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March 10, 2023

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Copyright:© 2013 National Geographic Society, i-cubed; California Department of Conservation, 2019; UltraSystems Environmental, Inc., 2023.

Scale: 1:24,000

N

0 1,000 2,000 Feet

0 250 500 Meters

Legend

- Project Site
- Project Area
- Half-Mile Radius
- Township Boundary
- Section Boundary

Valley Gardens Apartments

Topographic Map
USGS Quadrangle: Sunnymead
Township: 3S Range: 3W
Section: 8

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Figure 5 - Project Site Photographs

PHOTO 1: View looking at the northern portion of the project site.

PHOTO 2: View looking at the southern portion of the project site along Alessandro Boulevard.

PHOTO 3: View looking at the eastern portion of the project site along Sarah Drive.

PHOTO 4: View looking at the western portion of the project site along Sarah Drive

Source: UltraSystemas, 2022

Existing Characteristics of the Site

Climate and Air Quality

The project site is located within the South Coast Air Basin (SCAB), a 6,600-square-mile area encompassing all of San Bernardino County. A persistent high-pressure area that commonly resides over the eastern Pacific Ocean largely dominates regional meteorology. The distinctive climate of this area is determined primarily by its terrain and geographic location. Local climate is characterized by warm summers, mild winters, infrequent rainfall, moderate daytime onshore breezes, and moderate humidity. Ozone (O_3) and pollutant concentrations tend to be lower along the coast, where the onshore breeze disperses pollutants toward the inland valley of the SCAB and adjacent deserts. However, as a whole, the SCAB fails to meet National Ambient Air Quality Standards (NAAQS) for O_3 and fine particulate matter ($PM_{2.5}$), and is classified as a "nonattainment area" for those pollutants.

Geology and Soils

Topography within the project site is relatively flat. The project site's geology is a mixture of fill and natural soils. The fill is classified as brown, clayey silt with some sand, gravel, concrete and rootlets. The natural soil is classified as brown, silty clay (NorCal Engineering, 2021, p. 2). The project site is not located within an Alquist-Priolo fault or a liquefaction zone (NorCal Engineering, 2021, p. 5).

Hydrology

Surface topography of the project site is relatively flat. Under existing conditions, stormwater generated on the project site enters existing municipal storm drain inlets located on Alessandro Boulevard, near the southwest and southeast corners of the project site. This storm drain (Sunnymead Master Drainage Plan Line M-11) flows east into the Kitching Street Channel, which in turn discharges into the Perris Valley Channel approximately three miles south. The Perris Valley Channel is tributary to the San Jacinto River, a known water of the U.S. (RCFCD, 2022). The project site is located within Zone X, an area outside of the flood hazard zone (FEMA, 2008).

Biology

The project site is located in an urbanized area, and provides generally low-quality habitat for special status plant and wildlife species. No special status species were found during the project site survey. Further details can be found in **Section 4.4**, Biological Resources.

Public Services

Fire Services

Fire and emergency medical services are provided by Moreno Valley Fire Department (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. MVFD is the primary response agency for fires, emergency medical service, hazardous materials incidents, traffic accidents, terrorist acts, catastrophic weather events, and technical rescues for the city.

MVFD also provides a full range of fire prevention services including public education, code enforcement, plan check and inspection services for new and existing construction, and fire investigation. Through a master mutual aid agreement, MVFD is obligated to provide fire apparatus to other jurisdictions in the region to assist in handling emergency calls for service, just as those jurisdictions are obligated to provide resources to the city. There are six fire stations within the city (RECON Environmental Inc., 2021, p. 4.15-1 to 4.15-2).

Police Services

The Moreno Valley Police Department (MVPD) provides law enforcement services that enhance, protect, and promote the quality of life for local residents, businesses, and visitors. MVPD operates out of the Moreno Valley Station, located in the Civic Center Complex at Alessandro and Frederick, with satellite substations in several other locations throughout the city (RECON Environmental Inc., 2021, p. 4.15-5 to 4.15-6).

School Services

Moreno Valley Unified School District (MVUSD) provides school services to the city. MVUSD serves Kindergarten through 12th grade across 39 existing school sites (RECON Environmental Inc., 2021, p. 4.15-7).

Library Services

The Moreno Valley Public Library provides services and programs furthering educational development and cultural vitality of patrons of all ages and backgrounds in the Moreno Valley area (RECON Environmental Inc., 2021, p. 4.15-16).

Utilities

Eastern Municipal Water District (EMWD) provides water and wastewater services to the project site. Moreno Valley Utilities (MVU) provides electricity to the project site. SoCal Gas provides natural gas to the project site. Waste Management provides solid waste services to the project site (RECON Environmental Inc., 2021, p. 4.17-1 to 4.17-4).

Project Description

Project Background

The City of Moreno Valley (City) is processing a request to implement a series of discretionary actions that would ultimately allow for the development of a rental apartment project (project) northwest of the intersection of Alessandro Boulevard and Sarah Street (currently an unpaved private street) in the City of Moreno Valley in Riverside County, California (Assessor's Parcel 479-220-024). Per requirements in Chapter 9.02 of the Moreno Valley Municipal Code, Planning Commission approval will be sought for a Major Development Review (9.02.030) and Plot Plan Review (9.02.070). In addition, administrative approval by the city's Community Development Director and Planning

Commission approval of a Parcel Map will be requested under provisions in Chapter 9.14 (9.14.240).

The parcel currently contains approximately 8.99 acres (gross), and will be divided into two parcels through a new Tentative Parcel Map (see

Figure 6). The eastern half of the site is currently developed with a 30-home single family detached rental project, while the western half is vacant and undeveloped. Under the new Tentative Parcel Map, Parcel 1 will contain approximately 4.6 acres, and will be the site of the proposed project. The project proposes development of 64 apartment units in eight two-story buildings on the project site. The City is the Lead Agency for the purposes of the CEQA.

The City's General Plan Land Use designation and zoning category for the site are Corridor Mixed Use (COMU), which permits a residential density of 15 to 20 units per acre; the proposed density would be approximately 13.9 units per acre. The COMU designation was established as part of the 2040 General Plan update, which was approved by the City Council (including certifying the related Final Program Environmental Impact Report) on June 15, 2021. Changes to the Zoning Ordinance, including establishing the COMU zone (Ordinance No. 981) were adopted on August 3, 2021.[1]

Project Overview

The project would consist of: (1) utilities improvements; (2) construction of eight new residential buildings and an office/mail room building; and (3) project site driveways, parking, amenities and landscaping. **Table 2** summarizes the proposed project features. The project would include 64 two- and three-bedroom units, totaling 160 bedrooms, all to be built in a single phase. **Figure 7** shows a conceptual site plan depicting the layout of the proposed project buildings and onsite amenities.

Table 2 - Summary of Proposed Project Features

New Construction	Proposed Uses/Features	Square Feet	No. of Stories	Approximate Building Height
8 residential buildings	8 units each	69,984	2	28 feet 11 inches
1 building	Office and mail room	747	1	14 feet 6 inches
Usable Open Space	Total of private space and common open space	86,302		

[1] On July 15, 2021, The Sierra Club filed a Petition for Writ of Mandate challenging the City's adoption of its General Plan update – including the changes to the Zoning Ordinance in Ordinance No. 981 – for alleged violations of the California Environmental Quality Act. (Sierra Club v. The City of Moreno Valley, Riverside Superior Court Case No. CVRI2103300.) The ongoing litigation could potentially result in the invalidation of the City's General Plan and reversion to prior zoning laws.

New Construction	Proposed Uses/Features	Square Feet	No. of Stories	Approximate Building Height
Trash Enclosures	Two trash enclosures, one each along north and south driveways.			
Parking Spaces	The project proposes 160 parking spaces consisting of 85 covered spaces; 53 standard parking spaces; 16 future electric vehicle (FEV) spaces, 4 ADA spaces and 2 ADA Van spaces.			
Common/Open Space	BBQ Area, large grassy common space area in center of project near Buildings 3, 4, 5 and 6.			

Figure 6 - Tentative Parcel Map

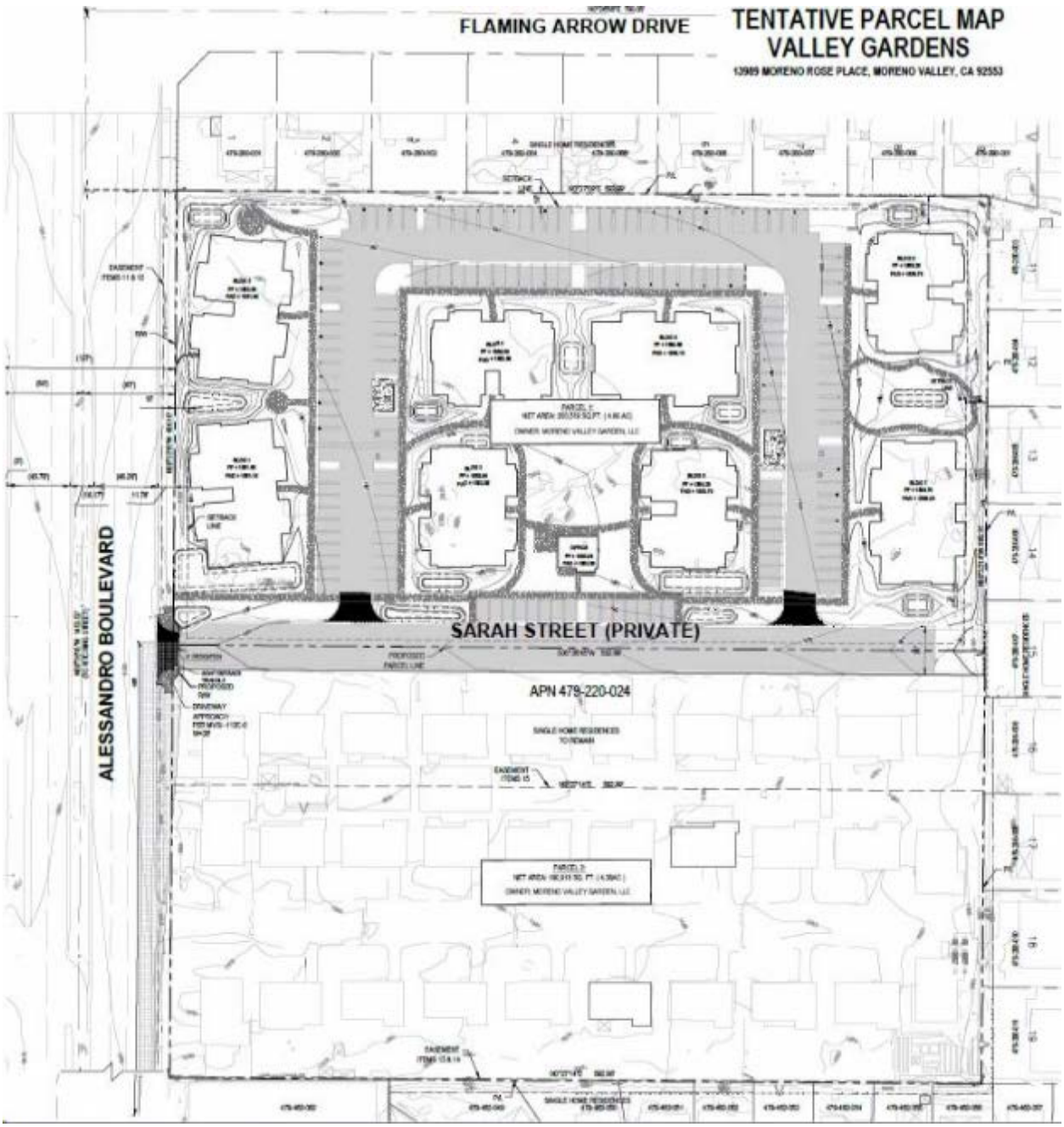
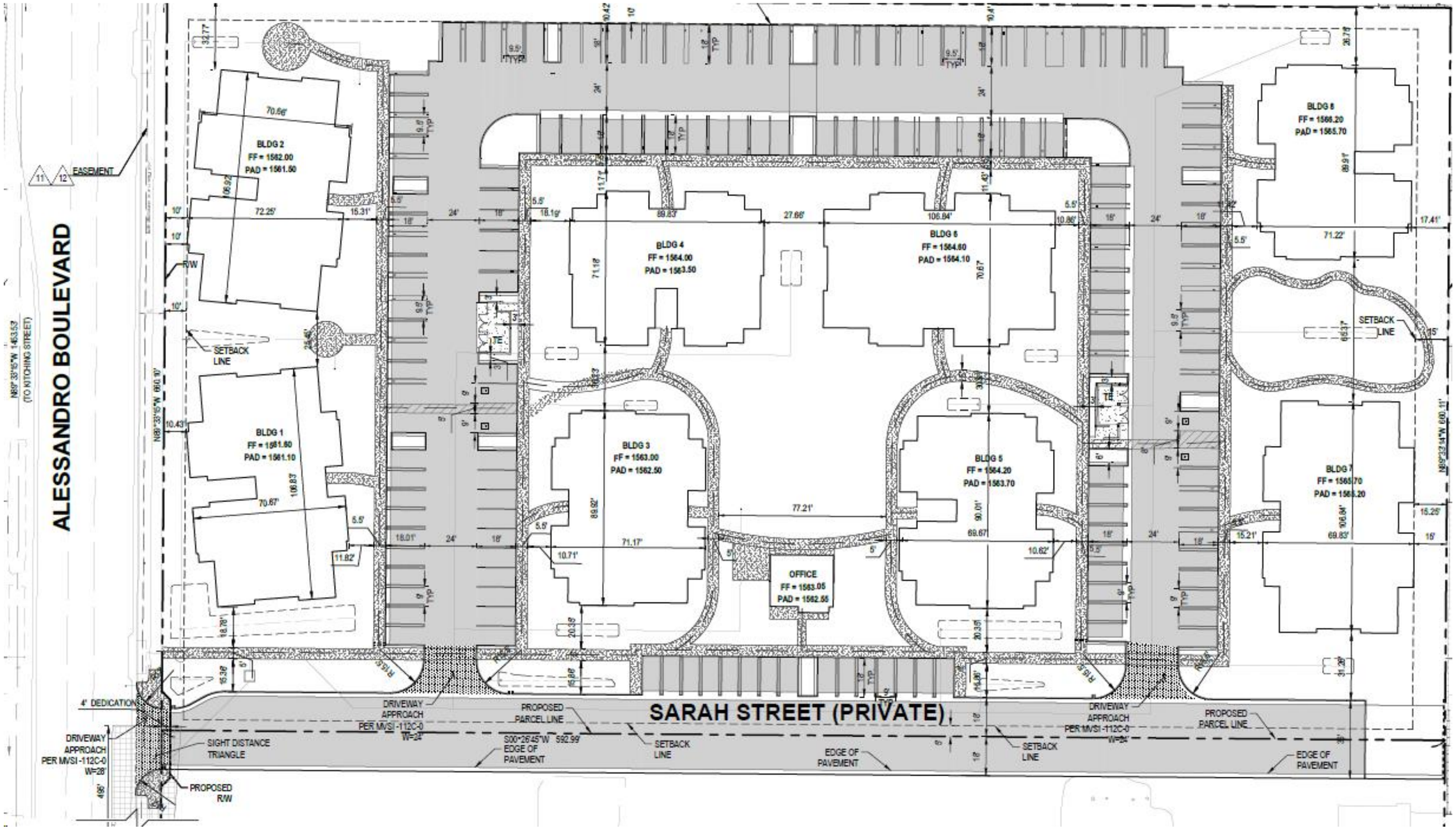


Figure 7 - Proposed Site Plan



Proposed Project Features

New Buildings

The project proposes the development of eight residential buildings with a total of 64 two- and three-bedroom units. Each building contains eight units; four buildings only have two-bedroom plans, while the remaining four buildings have only three-bedroom plans. Four buildings (three with three-bedroom plans and one with two-bedroom plans) are located near the north and south edges of the site, while three buildings with two-bedroom plans and one with three-bedroom plans are located in the center of the site, arrayed around the grassy common area. Each building has two stories, with ADA units on the first floor and non-ADA units on the second floor; units are stacked so that the first and second floors are identical in layout. Access to second-floor units in each building is by a stairway at the center of each building.

A building for the project management office and mail room comprising 747 square feet will be located at the east edge of the grassy common area, between Buildings 3 and 5.

Figure 8 and **Figure 9** show floor plans for the apartments. The project proposes a gross area of 69,984 square feet of new residential living space and 747 square feet of office/mail room space. The total footprint of the nine buildings would be 37,387 square feet, or approximately 18.6 percent of the project site. The project includes three basic floor plans (with an ADA and non-ADA version of each), as summarized in **Table 3 - Floor Plans** below. Each plan features a patio (first floor) or balcony (second floor), with a storage area and closet for forced air unit and water heater located off the patio or balcony.

Table 3 - Floor Plans

Floor Plan*	Bedrooms/ Baths	Living Area (sf)	Balcony/ Patio (sf)	No. of Units	Total Living Area (sf)
2A-ADA-Type 1	2/2	963	103/189	8	7,704
2A-ADA-Type 2	2/2	987	103/189	8	7,896
3A-ADA	3/2	1,212	102/186	16	19,392
2A-Type 1	2/2	963	103/189	8	7,704
2A-Type 2	2/2	987	103/189	8	7,896
3A	3/2	1,212	102/186	16	13,392
TOTALS				**64**	**69,984**

*ADA units are first floor, non-ADA units are second floor.
Source: Irwin Partners Architects, June 20, 2022

Figure 8 - Two-Bedroom Floorplans

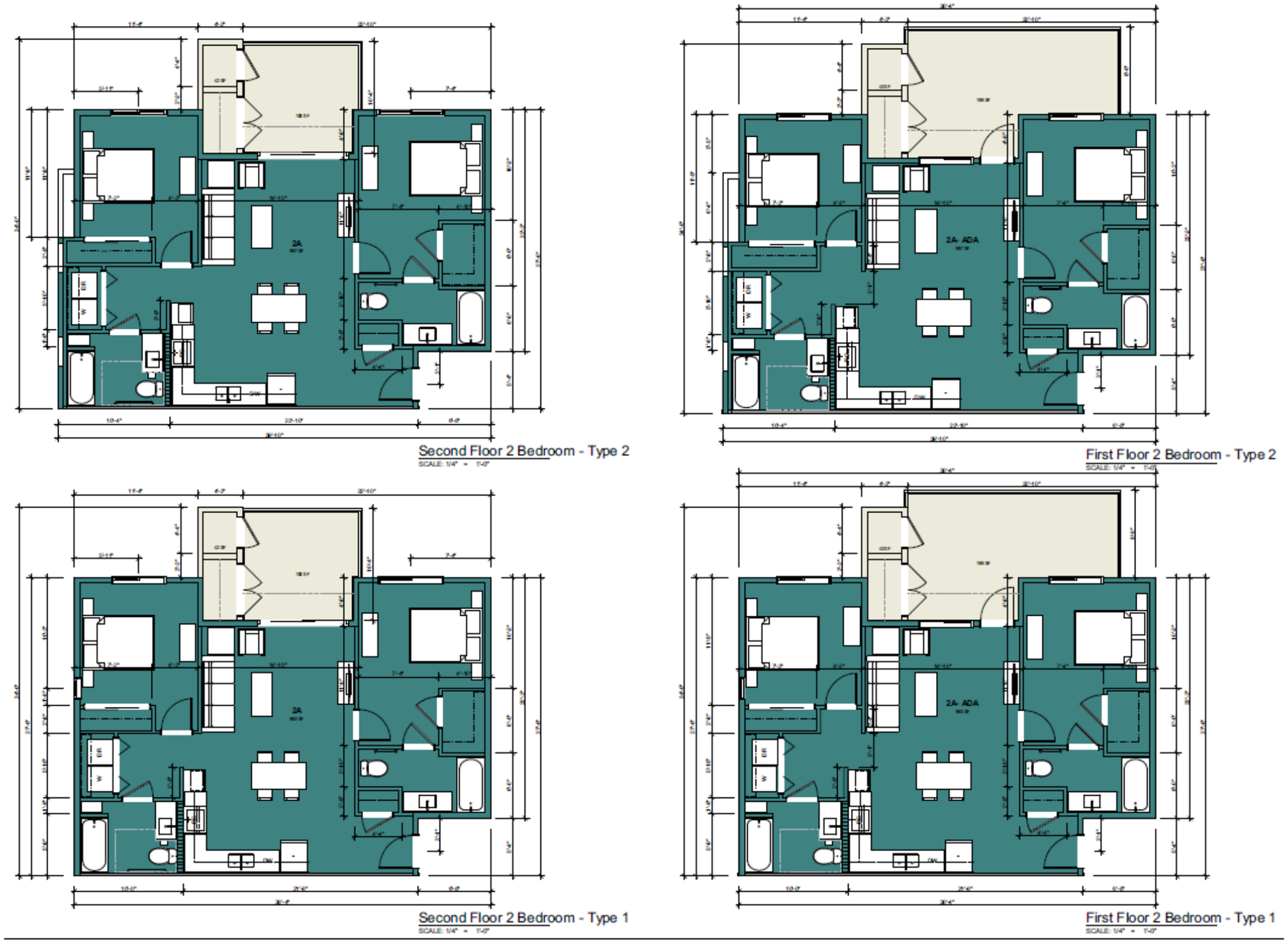
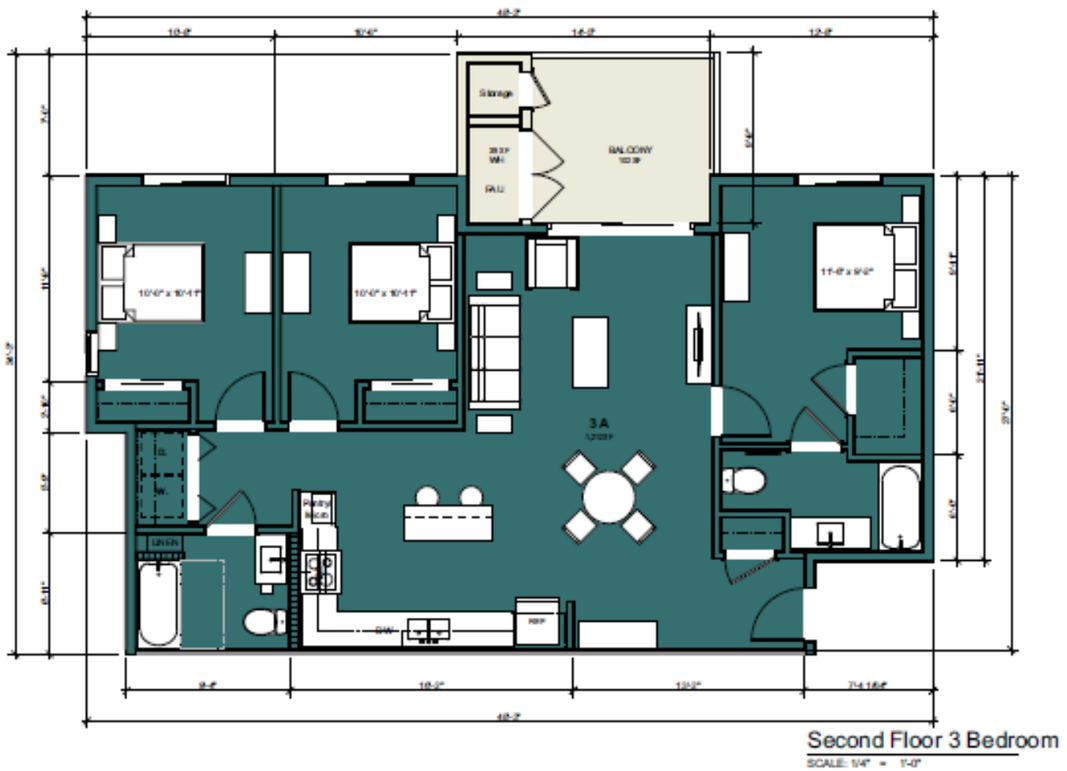
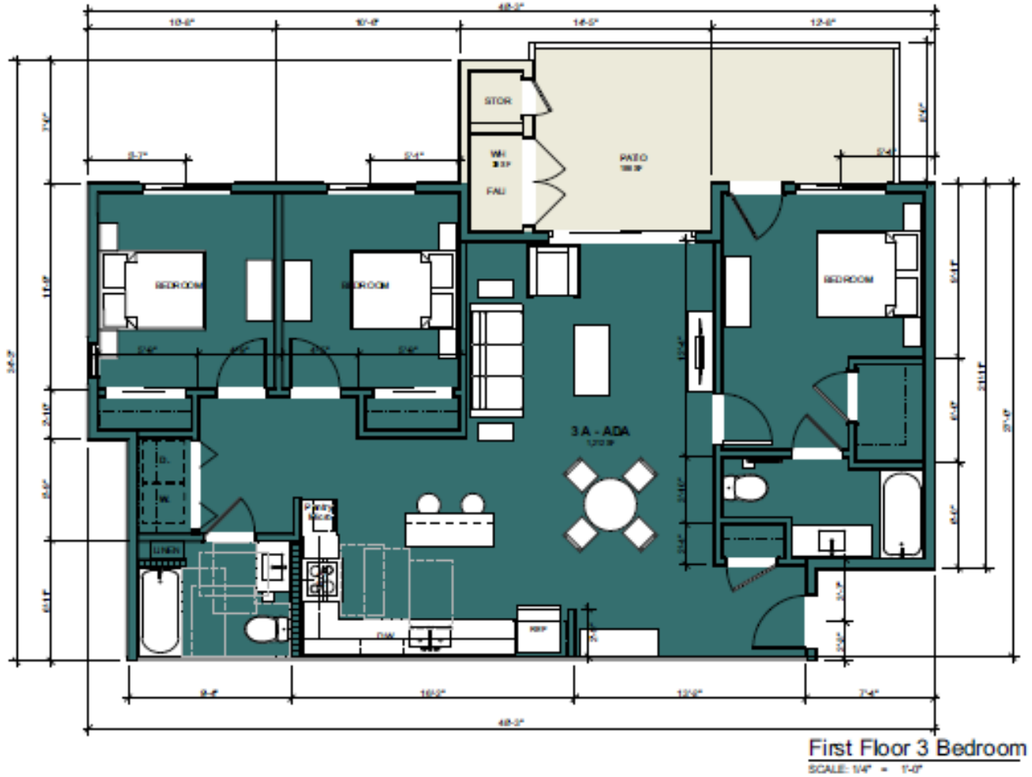


Figure 9 - Three-Bedroom Floorplans





The project proposes an architectural style to complement the surrounding neighborhood. The project architecture includes both wall and roof plane articulation and would carry the design elements to each elevation, including the inner portions of the site and all detached structures, such as trash enclosures. **Figure 10** shows the proposed elevations and color boards of the residential buildings. The character and scale of the surrounding neighborhood were carefully considered to ensure that the project architecture and massing blends in with the existing surrounding uses. **Figure 11** shows 3D views of the project from various perspectives.

Energy-efficient features, including insulated and glazed windows and low-E coating on windows, would be incorporated into building design to comply with the provisions of the California Green Building Code, Title 24, Part 11 of the California Code of Regulations.

Trash Enclosures

The project proposes two trash enclosures, one along the north driveway and one along the south driveway.

3.1.4 Landscaping

The site plan includes several landscaped areas totaling 73,958 square feet (accounting for approximately 36.9 percent of the project site. **Figure 12** shows the landscaping envisioned for the proposed project. At project completion, approximately 122,648 square feet (61.2 percent of site area) would be impervious, consisting of 85,261 square feet of parking/paved area plus building footprints totaling 37,387 square feet.

The project would provide approximately 86,302 square feet of usable open space.

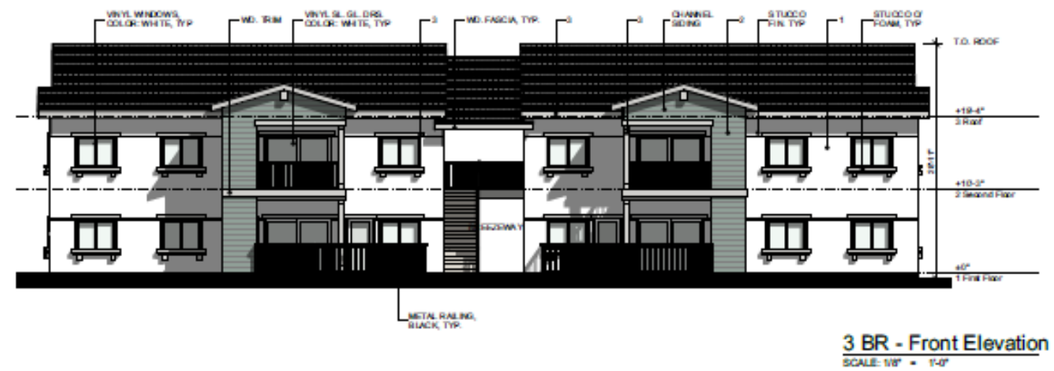
Fire Lanes/Turn-around

A turnaround area that meets Fire Department requirements will be provided at the end of Sarah Street (i.e., cul-de-sac, hammerhead, etc.). Sarah Street will be paved, with curb and gutter on both sides, but will remain a private street.

Onsite Amenities for Residents

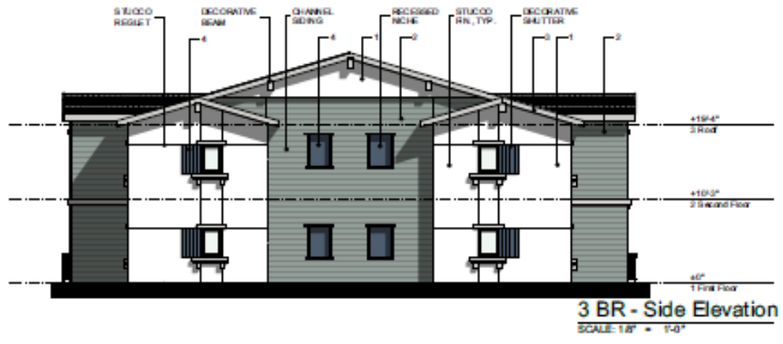
As noted, the project provides 86,302 square feet of open space, compared to a City requirement of 19,200 square feet (300 square feet per unit). In addition, a BBQ area and covered patio are planned adjacent to the office/mail room building.

Figure 10 - Representative Building Elevations and Color Boards



3 BR - Front Elevation
SCALE: 1/8" = 1'-0"

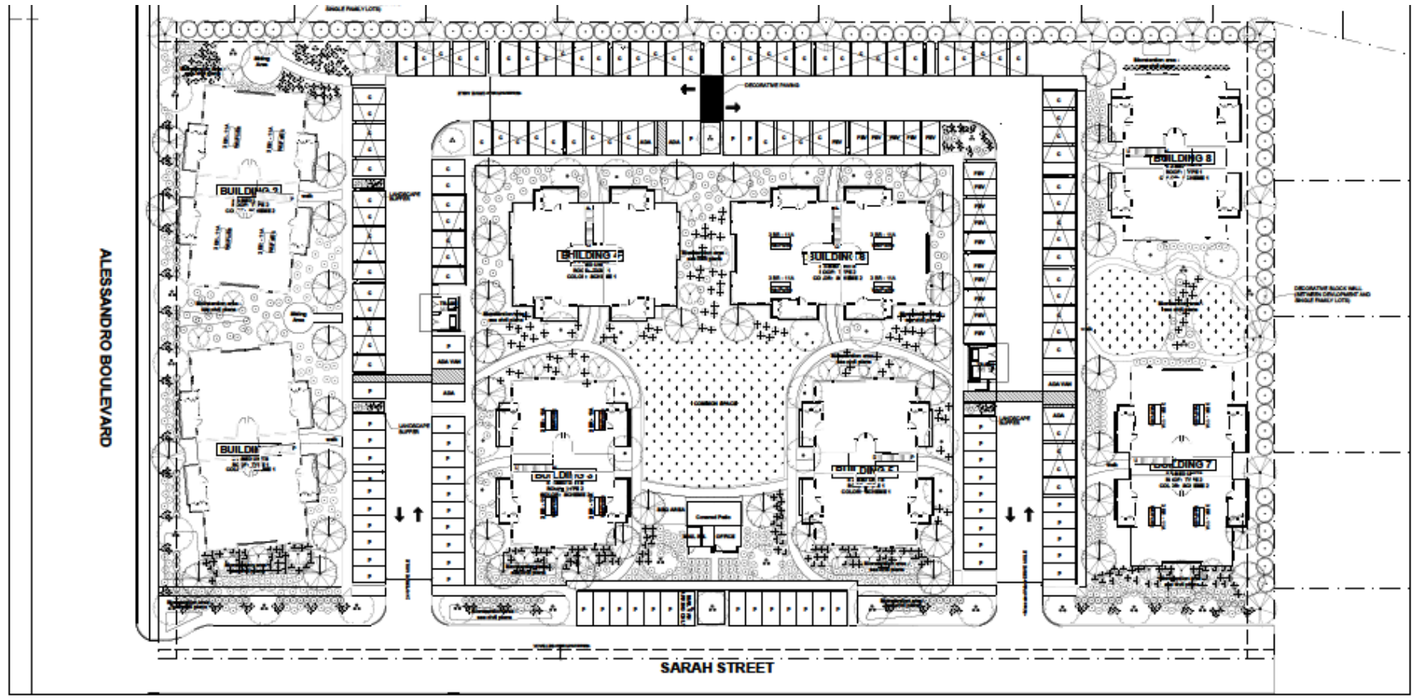
3 BR - Rear Elevation
SCALE: 1/8" = 1'-0"



3 BR - Side Elevation
SCALE: 1/8" = 1'-0"

Figure 11 - 3D Views of Project

Figure 12 - Preliminary Landscape Plan



PLANT SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY	WATER USE	MATURE HEIGHT	MATURE WIDTH
	Agave attenuata	Foxtail Agave	5 gal.	67	Low	10' - 0' ht.	5 - 0' w.
	Arbutus unedo 'Oktoberfest'	Oktoberfest Strawberry Tree	15 gal.	26	Low - Medium	6 - 10 ht.	
	Caesalpinia pulcherrima	Red Bird Of Paradise	5 gal.	114	Low - Medium	6 - 10' ht.	6 - 10' w.
	Dianella caerulea 'Cassa' TM	Cassa Blue Flax Lily	1 gal.	101	Medium	6 - 10' ht.	1 - 3' w.
	Dietes vegeta 'Variegata'	Variegated African Iris	5 gal.	205	Medium	10 - 30' ht.	1 - 3' w.
	Lomandra longifolia 'Breeze' TM	Breeze Mat Rush	—	126	Low	10 - 30' ht.	1 - 3' w.
	Muhlenbergia capillaris 'Pink Cloud'	Pink Cloud Pink Muhly Grass	1 gal.	147	Low - Medium	3 - 5' ht.	3 - 5' w.
	Muhlenbergia rigens	Deer Grass	5 gal.	167	Low - Medium	3 - 5' ht.	3 - 5' w.
	Olea europaea 'Little Ollie' TM	Little Ollie Olive	5 gal.	66	Very low - Low		
	Phormium tenax 'Bronze Baby'	Bronze Baby New Zealand Flax	5 gal.	66	Low - Medium	10 - 30' ht.	1 - 3' w.
	Rhaphiolepis umbellata 'Minor'	Dwarf Yedda Hawthorne Standard	5 gal.	33	Low - Medium	3 - 5' ht.	3 - 5' w.
	Salvia clevelandii 'Allen Chickering'	Allen Chickering Cleveland Sage	1 gal.	16	Very low - Low	3 - 5' ht.	3 - 5' w.
	Strelitzia reginae	Bird Of Paradise	15 gal.	25	Medium	< - 5' ht.	3 - 5' w.

PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	WATER USE	MATURE HEIGHT	MATURE WIDTH
	Cercidium x 'Desert Museum'	Desert Museum Palo Verde	15 gal.		9	Very low	15 - 40 ht.	15 - 25' w.
	Lagerstroemia indica x fauriei 'Natchez'	Natchez Crape Myrtle	15 gal.		16	Low - Medium	15 - 25' ht.	15 - 25' w.
	Laurus x 'Saratoga'	Saratoga Hybrid Laurel	15 gal.		79	Low - Medium	25 - 40 ht.	15 - 25' w.
	Lophostemon confertus	Brisbane Box	15 gal.		16	Medium	25 - 60 ht.	15 - 25' w.
	Olea europaea 'Fruitless' Multi-branching	Fruitless Olive	24"	Box	27	Very low - Low	15 - 25' ht.	15 - 25' w.
	Pistacia chinensis 'Keith's Radiance' TM	Chinese Pistache	15 gal.		46	Low - Medium	25 - 40 ht.	

GROUND COVERS	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	QTY	WATER USE	MATURE HEIGHT	MATURE WIDTH
	Stenotaphrum x 'Sunclipse'	Sunclipse St. Augustine Grass	sod			9,670 sf			

CONCEPTUAL LANDSCAPE PLAN
SCALE: 1" = 30'

Site Access, Circulation and Parking

Site ingress and egress would be provided by two 24-foot-wide driveways located on Sarah Street (a private street that intersects with Alessandro Boulevard near the southeast corner of the site). Access to parking and the buildings would be via a main driveway running through the site, to the north of Buildings 1 and 2, to the west of Buildings 4 and 6, and to the south of Buildings 7 and 8. Sidewalks and pedestrian travel paths are proposed throughout the site.

The project proposes 160 parking spaces, as required by code. Of the total, 103 spaces are covered, 37 are standard uncovered parking spaces, four are accessible (one ADA van, one ADA covered and two ADA standard uncovered) and 16 are future electric vehicle charging spaces.

Exterior Lighting

The project proposes area lighting throughout the project site. The project will have site lighting which will include street lighting on Sarah Street and the interior drive aisle as necessary, carport lighting under all carports, path lighting along the paths between and around the buildings, as well as building lighting (wall packs), and the open breezeways will also be lit. All lights will be LED and dark sky compliant.

Lighting for the project would comply with the requirements of the City's Municipal Code. Specifically, the project would be required to comply with City of Moreno Valley Municipal Code § 9.08.100, Lighting, which states the following relating to Multiple Family Residential Uses:

a. *All outdoor lighting associated with residential uses shall be fully shielded and directed away from adjacent residential properties. Such lighting shall not exceed one-quarter foot-candle minimum maintained lighting measured from within five feet of any property line, and shall not blink, flash, oscillate or be of unusually high intensity or brightness.*

b. *All lighting installations shall be designed and installed with full cutoff and be fully shielded to reduce glare and light trespass.*

c. *The maximum wattage for residential lighting shall be one hundred (100) watts incandescent or equivalent light intensity and twenty-six (26) watts compact fluorescent or equivalent light intensity, except as allowed for parking lot lighting and recreational courts.*

d. *Parking lot lighting for designated multiple-family residential parking areas shall meet the requirements included in subsection (C)(4).*

Project Entry Signage

No monument signage is proposed.

Perimeter Fencing and Exterior Walls

Decorative block walls will separate the project from existing residential development along the east, west and north property lines to separate the project from the adjacent single-family homes. No fence is proposed separating the project from surrounding streets.

Utilities

The project would require a sewer, domestic water, fire water, irrigation and dry utilities connections to existing utility infrastructure.

Sanitary Sewer – Sewer service is provided by Edgemont Community Services District. The project proposes connecting to an existing sewer in Alessandro Boulevard.

Domestic Water - New domestic water meters would be installed as required to meet project demands in compliance with the requirements of the city's Public Works Department. Water would be provided by Eastern Municipal Water District, which serves this area of the city of Moreno Valley.

Fire Water - The project will meet the City-required minimum fire flow of 1,500 gallons per minute (gpm) at 20 pounds per square inch (psi) residual for a duration of two hours.

Dry Utilities -Moreno Valley Utility (MVU) would provide electricity to the project site. Service will be provided from Vault V1339 located on the north side of Alessandro Boulevard. There is a 5-inch conduit stub along the project frontage. Southern California Gas Company (SoCalGas) provides natural gas service.

Stormwater – Stormwater will gravity flow to the existing storm drain in Alessandro Boulevard. A Water Quality Management Program (WQMP; see **Figure 13**) and Storm Water Pollution Prevention Plan (SWPPP) have been submitted to the City. Proposed onsite drainage includes 16 Drainage Management Areas (DMAs) with bioretention basins and one DMA with a Modular Wetland System.

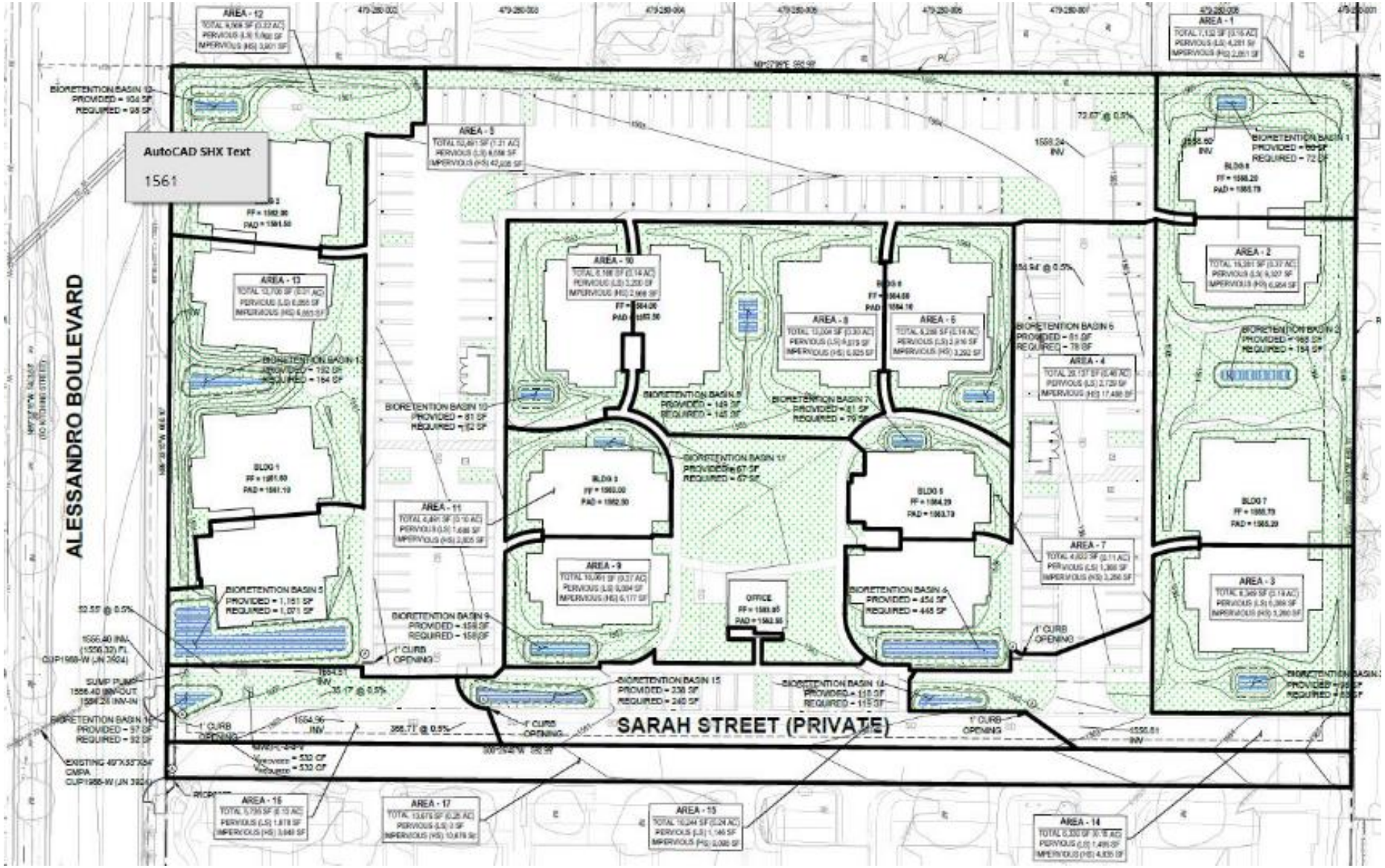
Trash Service -The City of Moreno Valley provides trash, recycling and special waste handling services to residents and businesses through a contract with Waste Management. (City of Moreno Valley, 2022).

Telecommunications – Cable television and internet service are available from a number of providers, including Frontier Communication, Sunesys and Verizon Wireless. It is anticipated that new cable television connections would be needed to serve the project.

Security Features

Entrances to the project off Sarah Street will be ungated, and no project perimeter fencing is planned along either Alessandro Boulevard or Sarah Street. Block walls will separate the project from neighboring single-family homes to the north and west of the site.

Figure 13 - Preliminary WQMP Site Plan



Sustainability Features

The project will include solar panels on all carports, as well as the use of bioretention basins throughout the site. All applicable requirements of the California Energy Code and the California Green Building Code multifamily mandatory requirements will be met.

Offsite Improvements

Construction would need to occur in Alessandro Boulevard to connect the utility lines for the proposed project to the existing main lines.

Construction Activities

For safety reasons, temporary barricades would be used to limit access to the site during project construction and maintain safe access for construction workers. Construction would occur during daylight and during regular business hours. Lighting for the construction site would be limited to the minimum amount of light needed for safety and security.

Site grading would involve raw cut of 1,112 cubic yards (cy); raw fill of 7,626 cy; and net import of approximately 6,514 cy of soil. After site preparation is completed, infrastructure such as sewer laterals and storm drains would be installed and/or connected to existing facilities. The building foundations would be poured and framing of the buildings would begin. The final steps of construction would involve interior furnishings, detail work, and completion of common areas and outside landscaping.

The 200,519 square-foot (4.60 acre) site is currently undeveloped pervious surface. The building footprint would be 37,387 square feet, hardscape area would be 85,261 square feet, and landscaped area would be 73,958 square feet. Therefore, the project would result in the conversion of 122,648 square feet (61%) to impervious surface on the project site.

The only offsite improvements would be installation of utility laterals and connections of laterals to mains. The construction contractor would use heavy equipment during grading; estimated numbers and types of equipment per construction phase are identified below in **Table 4**. Construction staging would be limited to the project site; no offsite areas would be used.

Construction Employees

Project construction workers would park their vehicles on the project site. Below is the anticipated number of construction employees by construction phase:

- **Grading:** 10 employees
- **Offsite Phase:** 15 employees
- **Vertical / Sitework Phase:** 50 employees

Construction Schedule and Equipment

Construction of all 64 units will commence as soon as permits are approved, which is anticipated in second or third quarter (Q2 or Q3) of 2023, with a construction duration of 14 months, with expected completion in fourth quarter (Q4) of 2024.

Construction is broken down into different phases, as detailed in **Table 4** below.

Table 4 - Construction Phasing and Equipment Details

Phase/Months	Number of pieces of equipment	Equipment	Number of working days
Grading Phase: 1 month	4	Scrapers	10
	1	Blade	5
	1	Loader	5
	• +/- 60 truckloads of export- 14 yds per truck • 1 working day of trucking, Assuming 60 loads per day		
Offsite Phase: 1 month	2	Backhoes/excavators	15
	2	Loaders	5
Vertical/Site Work Phase: 12 months	2	Large forklift (Pettibone)	140
	2	Bobcat (skid-steer)/ mini excavator	55
	1	Standard Skiploader	45

Source: Brent Matthews, Consolidated Contracting, September 27, 2022

Discretionary Actions

The proposed project is permitted under the existing zoning (COMU) and General Plan land use designation (COMU). The project requires a plot plan with a hearing and a tentative parcel map. Both approvals require approval by the Planning Commission

Other Permits and Approvals

Following the City's approval of the Initial Study/Mitigated Negative Declaration, the following permits/approvals, as shown in **Table 5,** would be required prior to construction.

Table 5 - Permits and Approvals

Agency	Permit or Approval
City of Moreno Valley Community Development - Building & Safety Division	Site Plan review and approval, and Grading and Building Permits

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

    Notices were sent by the City on November 18, 2022 to 8 tribes. To date, three tribes – Morongo Band of Mission Indians, Pechanga and Rincon Band of Luiseno Indians – have responded with requests for consultation. The City is in the process of setting up meetings with responding tribes.

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

    None

16. **Other Technical Studies Referenced in this Initial Study (Provided as Appendices):**

    A Project Plans
    B CalEEMod Input and Results for Air Quality Analysis
    C Biological Resources Evaluation
    D Cultural Resources Assessment
    E1 Paleontological Records Search
    E2 Geotechnical Report
    E3 Geotechnical Site Investigations
    F Phase I Environmental Site Assessment
    G1 Preliminary Water Quality Management Plan
    G2 Preliminary Hydrology Report
    H Ambient Noise Measurement Data
    I Limited VMT Analysis

17. **Acronyms:**

AAQS	ambient air quality standards
AB 32	California Global Warming Solutions Act of 2006 (Assembly Bill 32)
AB 52	Assembly Bill 52
ACM(s)	Asbestos-Containing Material(s)
ADA	Americans with Disabilities Act
AFY	Acre-feet per year
AIA	Airport Influence Area
AMI	Area Median Income
amsl	above mean sea level
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQA	Air Quality Analysis
AQMP	Air Quality Management Plan
AR4	Fourth Assessment Report
ARB	California Air Resources Board
BAU	business as usual

BIOS	Biogeographic Information and Observation System
BMPs	Best Management Practices
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CALFIRE	California Department of Forestry and Fire Protection
CAL Green	California Green Building Standards
Caltrans	California Department of Transportation
CAO(s)	Cleanup and Abatement Order(s)
CAPCOA	California Air Pollution Control Officers Association
CASGEM	California Statewide Groundwater Elevation Monitoring
CAT	Climate Action Team
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDO(s)	Cease and Desist Order(s)
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
cfs	cubic feet per second
CGS	California Geological Survey
CH_4	methane
CHRIS	California Historic Resources Inventory System
City	City of Moreno Valley
CMP	Congestion Management Program
CMP	corrugated metal pipe
CMPHS	CMP Highway System
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
COMU	Corridor Mixed-Use
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRC	California Residential Code
CWA	Clean Water Act
DAMP	Drainage Area Management Plan
dB	decibel
dBA	A-weighted decibel scale
DOC	California Department of Conservation
DOSH	California Division of Safety and Health
DTSC	Department of Toxic Substances Control
du/ac	Dwellling units per acre
DWR	Department of Water Resources
EIC	Eastern Information Center
EIR	Environmental Impact Report
EMS	Emergency Medical Services
EMWD	Eastern Municipal Water District
EO	Executive Order
EPA	Environmental Protection Agency

ESA	Endangered Species Act
ESA	Environmental Site Assessment
ESRL	Earth System Research Laboratory
EV	electric vehicle
EVCS	electric vehicle charging station
°F	degrees Fahrenheit
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zones
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	greenhouse gases
GIS	Geographic Information System
GPCD	gallons per capita per day
gpd	gallons per day
GWP	global warming potential
HABS	Historic American Building Survey
HCP	Habitat Conservation Plan
HFCs	hydroflourocarbons
HU	Hydrologic Unit
HVAC	heating, ventiliation and air conditioning
IPCC	Intergovernmental Panel on Climate Change
ISA	International Society of Arboriculture
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
L_{90}	noise level that is exceeded 90% of the time
L_{eq}	equivalent noise level
LBP	Lead-Based Paint
LID	Low Impact Development
L_{max}	root mean square maximum noise level
LOS	Level of Service
LRA	Local Responsibility Area
LSTs	Localized Significance Thresholds
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MLD	Most Likely Descendant
MM(s)	mitigation measure(s)
MMRP	Mitigation Monitoring and Reporting Program
$MMTCO_2e$	million metric tons of CO2e
MND	Mitigated Negative Declaration
MPAH	Master Plan of Arterial Highways
MRZ	Mineral Resource Zone
MS4	Municiple Separate Storm Sewer permit
MT	Metric tons
MVFD	Moreno Valley Fire Department
MVPD	Moreno Valley Police Department
MVUSD	Moreno Valley Unified School District
MVU	Moreno Valley Utility
MWD	Metropolitan Water District
N_2O	nitrous oxide

NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
National Core	National Community Renaissance
NASA	National Aeronautics and Space Administration
NCCP	Natural Communities Conservation Plan
ND	Negative Declaration
NFPA	National Fire Protection Association
NO	nitric oxide
NO_x	nitrogen oxides
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
O_3	Ozone
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Pb	lead
PCB	polychlorinated biphenyl
PFCs	perfluorocarbons
PM	particulate matter
PM_{10}	respirable particulate matter
$PM_{2.5}$	fine particulate matter
ppm	parts per million
PPV	peak particle velocity
R-5	Suburban Residential
RCRA	Resource Conservation and Recovery Act
RCTC	Riverside County Transportation Commission
RECs	Recognized Environmental Condition(s)
RHNA	Regional Housing Needs Allocation
RMS	root mean square
ROG	Reactive organic gases
ROW	Right-of-way
RPS	Renewables Portfolio Standard
RTA	Riverside Transit Agency
RWQCB	Regional Water Quality Control Board
§	section
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SF_6	sulfur hexafluoride
SIP	State Implementation Plan
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SR-60	State Route 60
SRA	State Responsibility Area
SRAs	source receptor areas
SRRE	Source Reduction and Recycling Element
STIP	Statewide Transportation Improvement Program
SUSMP	Standard Urban Stormwater Mitigation Plan
SWPPP	Stormwater Pollution Prevention Plan

SWRCB	State Water Resources Control Board
TAPs	Transportation Assembly Points
TAZ	Traffic Analysis Zone
T-C	Town Center zoning designation
TCRs	Tribal Cultural Resources
TMP	Traffic Management Plan
UCR	University of California Riverside
UFPO	Urban Forest Protection Ordinance
UEI	Ultrasystems Environmental, Inc.
U.S.	United States
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
VdB	vibration decibels
VCP	vitrified clay pipe
VHFHSZ(s)	very high fire hazard severity zone(s)
VMT	vehicle miles traveled
VOC	volatile organic compound
WEG	wind erodibility group
WQMP	Water Quality Management Plan
WRI	World Resources Institute
ybp	years before present

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

DETERMINATION (To be completed by the Lead Agency):

On the basis of this initial evaluation:

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

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

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

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

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

Danielle Harper-Scott — 8/29/23

Signature — Date

Danielle Harper-Scott — City of Moreno Valley

Printed Name — For

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a Lead Agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the Lead Agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The Lead Agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or another CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a) Earlier Analyses Used. Identify and state where they are available for review.

    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources. A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

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

Response:

A "visual environment" includes the built environment (development patterns, buildings, parking areas, and circulation elements) and natural environment (such as hills, vegetation, rock outcroppings, drainage pathways, and soils) features. Visual quality, viewer groups and sensitivity, duration, and visual resources characterize views. Visual quality refers to the general aesthetic quality of a view, such as vividness, intactness, and unity. Viewer groups identify who is most likely to experience the view. High sensitivity land uses include residences, schools, playgrounds, religious institutions, and passive outdoor spaces such as parks, playgrounds, and recreation areas. Duration of a view is the amount of time that a particular view can be seen by a specific viewer group. Visual resources refer to unique views, and views identified in local plans, from scenic highways, or of specific unique structures or landscape features.

Less than Significant Impact

Scenic vistas generally include extensive panoramic views of natural features, unusual terrain, or unique urban or historic features, for which the field of view can be wide and extend into the distance, and focal views that focus on a particular object, scene or feature of interest.

As detailed in the city's General Plan Open Space and Resource Conservation Element, the principal scenic resources are all visible from the State Route (SR)-60 freeway, which is approximately 1.5 miles north of the project site. Although the project site is not near the SR-60, there are distant views of the Box Springs mountains to the north, Moreno Peak to the northeast, and the San Bernardino and San Jacinto mountains to the east. Views from the project site of the distant mountain vistas are obstructed due to intervening structures and the large distance between the project site and mountains.

The proposed project would develop several two-story apartment buildings that would have a maximum height of approximately 29 feet, which is well under the city's allowable maximum building height of 60 feet for the project site, and would be of similar height to the surrounding one- to two-story single and multi-family developments that surround the project site. Additionally, as detailed in **Section 3.0**, the proposed project would be designed with materials and colors that would complement the surrounding area. Therefore, due to the existing blocked views and the project's similar building height to the surrounding developments, the proposed project would have less than significant impacts in regards to scenic vistas.

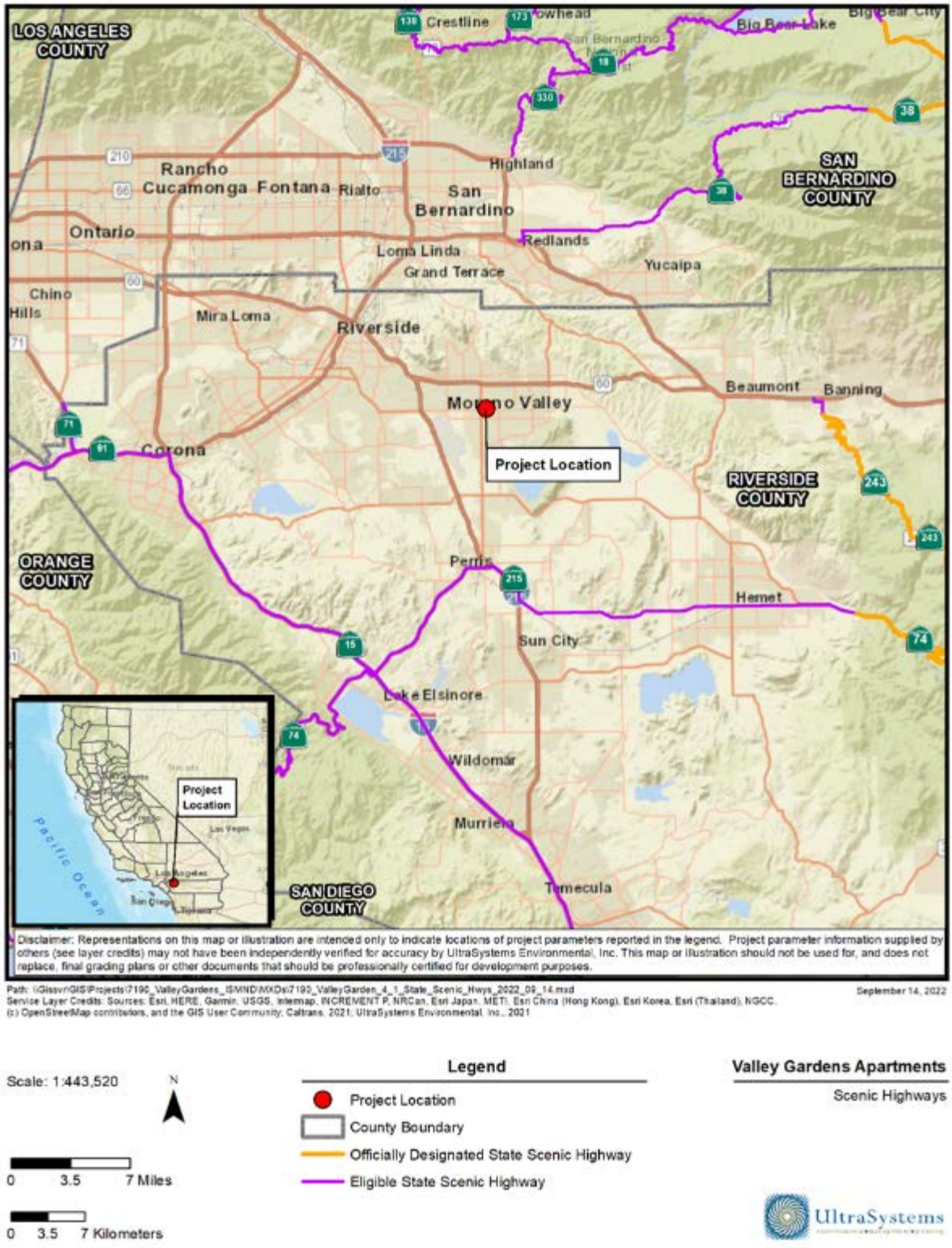
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

Response:

No Impact

The California Department of Transportation (Caltrans) provides information regarding officially designated or eligible state scenic highways, designated as part of the California Scenic Highway Program. The closest official designated state scenic highway to the project site is a portion of the State Route (SR)-243 freeway, which is approximately 20 miles east of the project site (refer to **Figure 14** below). Due to the large distance between the project site and SR-243, construction and implementation of the project would have no impacts on state scenic highways.

Figure 14 - State Scenic Highways



ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐

Response:

Less than Significant Impact

The project site is located within an urbanized area. Therefore, **Table 6** below analyzes whether the project adheres to applicable policies in regards to scenic quality.

Table 6 - Project Compliance with Applicable City of Moreno Valley General Plan Policies Regarding Scenic Quality

Policy	Compliance
Goal OSRC-2: Preserve and respect Moreno Valley's unique cultural and scenic resources, recognizing their contribution to local character and sense of place	
Policy OSRC.2-1: Limit development on hillsides and ridgelines where structures interrupt the skyline.	The project is located on a relatively flat portion of the city and is not located within or adjacent to hillsides and ridgelines. Therefore, the project would not conflict with this policy.
Policy OSRC.2-3: Minimize alteration of the topography, drainage patterns and vegetation of land with slopes of ten percent or more and maintain development standards to protect the environmental and aesthetic integrity of hillside areas.	The proposed project would be developed on a relatively flat undeveloped project site. Additionally, as detailed throughout this document, the proposed project would adhere to all applicable development standards and create a development that would create a more attractive community. Therefore, the project would not conflict with this policy.
Policy OSRC.2-4: Reduce or avoid visual intrusion from energy and telecommunications infrastructure. Encourage the undergrounding of utility lines wherever feasible and promote the use of "stealth" designs that locate wireless infrastructure on existing poles, buildings and other structures.	All project utility lines would be installed underground. Therefore, the project would not conflict with this policy.
Policy OSRC.2-5: Recognize Gilman Springs Road, Moreno Beach Drive, and State Route 60 as local scenic roads and provide large setbacks from scenic roads, as possible, to avoid encroachment of buildings on scenic views of the surrounding mountains. The view of Mystic Lake from Gilman Springs Road should also be protected.	The project site is not located along or adjacent to any of the city's scenic roads. As detailed in **Section 4.1a)**, the project would not significantly impact any scenic resources. Therefore, the project would not conflict with this policy.
Source: Dyett and Bhatia, 2021, p. 10-12	

As detailed above, the proposed project would adhere to all applicable regulations in regard to scenic quality. Therefore, impacts would be less than significant.

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

Response:

Less Than Significant Impact

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Project construction and operation would adhere to City of Moreno Valley Municipal Code Section 9.08.100, Lighting, to ensure that project lightning would not cause significant light or glare impacts to the surrounding area. Therefore, impacts would be less than significant.

Sources:

1. Dyett & Bhatia, 2021. City of Moreno Valley-Climate Action Plan. Accessed online at https://www.moval.org/cdd/documents/general-plan-update/draft-docs/ClimateActionPlan/Draft-MV-CAP.pdf, on December 7, 2022.
2. Google Earth Pro V 7.3.2.5491 (May 12, 2022). City of Moreno Valley, Riverside County, California, U.S.A. 33°55'05.96"N-117°13'17.22"W. Eye alt 4,843 ft. Available at https://earth.google.com/web/. Accessed on October 20, 2022.
3. City of Moreno Valley Municipal Code, 2022. Accessed online at https://library.qcode.us/lib/moreno_valley_ca/pub/municipal_code, accessed on October 24, 2022.

II. AGRICULTURE AND FOREST RESOURCES

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

Would the project:

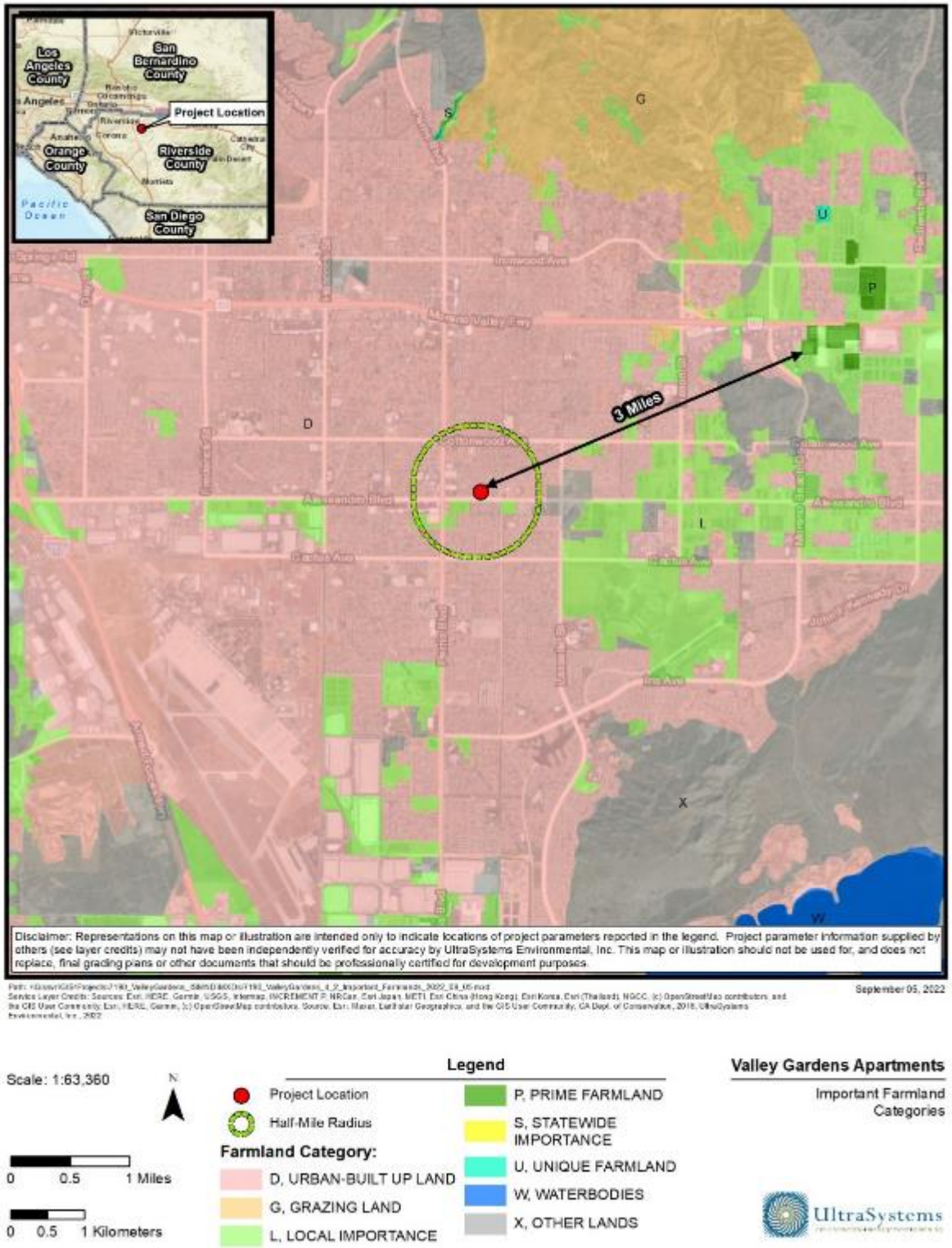
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

Response:

No Impact

Farmland-related classifications of the project site and surrounding uses are designated by the California Department of Conservation Division of Land Resource Protection (DLRP). The project site is designated as "Urban-Built Up Land" while surrounding areas are "Urban-Built Up Land" and "Farmland of Local Importance" (see **Figure** 15 below). Therefore, no farmland would be converted to non-agricultural use and no impacts would occur.

Figure 15 - Important Farmland Categories



ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

Response:

No Impact

Williamson Act contracts restrict the use of privately-owned land to agriculture and compatible open-space uses under contract with local governments; in exchange, the land is taxed based on actual use rather than potential market value. Williamson Act contracts are made only on land within agricultural reserves; the project site is not within an agricultural reserve. The project site is zoned Corridor Mixed Use (COMU), and is not zoned for agricultural use. Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and no impact would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒

Response:

No Impact

The project site is zoned Corridor Mixed Use (COMU); the site is not zoned for forest, timberland, or timberland production use. Therefore, project development would not conflict with zoning for forest land or timberland, and no impact would occur.

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

Response:

No Impact

The project site and surroundings are not cultivated for forest resources. Therefore, project development would not result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

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

Response:

a) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact

The project site is vacant and is surrounded by residences to the east, west and north, and Alessandro Boulevard to the south. There is Local Importance Farmland near the project site; the nearest such farmland is within 0.5 mile to the southwest, and to the southeast. Closest Prime Farmland is three miles to the northeast of project side. No forest land is present on or near (within 0.25 mile) the project site. As explained in XI Land Use and Planning, the City's General Plan Land Use designation and zoning category for the project site are Corridor Mixed Use (COMU). Consistency analysis shows that proposed project is consistent with the City of Moreno Valley General Plan 2040 Land Use, Zoning, and Urban Design Element goals and policies.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Therefore, project development would not indirectly cause conversion of farmland to non-agricultural use or conversion of forest land to non-forest use, and no impact would occur.

Sources:

1. DOC, 2016. California Important Farmland Finder. Accessed online at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed in October 7,2022.

III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. **Would the project:**				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

Response:

Pollutants of Concern

Criteria pollutants are air pollutants for which acceptable levels of exposure can be determined and an ambient air quality standard has been established by the U.S. Environmental Protection Agency (USEPA) and/or the California Air Resources Board (ARB). The criteria air pollutants of concern are nitrogen dioxide (NO_2), carbon monoxide (CO), particulate matter (PM_{10} and $PM_{2.5}$), sulfur dioxide (SO_2), lead (Pb), and ozone, and their precursors, such as reactive organic gases (ROG) (which are ozone precursors). Since the Valley Gardens Apartments Project would not generate appreciable SO_2 or Pb emissions,[2] it is not necessary for the analysis to include those two pollutants. Presented below is a description of the air pollutants of concern and their known health effects.

Nitrogen oxides (*NO_x*) serve as integral participants in the process of photochemical smog production and are precursors for certain particulate compounds that are formed in the atmosphere. The two major forms of NO_x are nitric oxide (NO) and NO_2. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO_2 is a reddish-brown pungent gas formed by the combination of NO and oxygen. NO_2 is an acute respiratory irritant and eye irritant and increases susceptibility to respiratory pathogens. A third form of NO_x, nitrous oxide (N_2O), is a greenhouse gas (GHG).

Carbon monoxide (*CO*) is a colorless, odorless non-reactive pollutant produced by incomplete combustion of carbon substances (e.g., gasoline or diesel fuel). The primary adverse health effect associated with CO is its binding with hemoglobin in red blood cells, which decreases the ability of these cells to transport oxygen throughout the body. Prolonged exposure can cause headaches, drowsiness, or loss of equilibrium; high concentrations are lethal.

Particulate matter (*PM*) consists of finely divided solids or liquids, such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulate matter are now regulated. Respirable particles, or PM_{10}, include that portion of the particulate matter with an aerodynamic diameter of 10 micrometers (i.e., 10 one-millionths of a meter or 0.0004 inch) or less. Fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 micrometers (i.e., 2.5 one-millionths of a meter or 0.0001 inch) or less. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind action on the arid landscape also contributes substantially to the local particulate loading. Fossil fuel combustion accounts for a sizable portion of $PM_{2.5}$. In addition, particulate matter forms in the atmosphere through reactions of NO_x and other compounds (such as ammonia) to form inorganic nitrates and sulfates. Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in those people who are naturally sensitive or susceptible to breathing problems.

Reactive organic gases (*ROG*) are compounds comprised primarily of atoms of hydrogen and carbon that have high photochemical reactivity. The major source of ROG is the incomplete combustion of fossil

2 Sulfur dioxide emissions will be below 0.04 pound per day during construction and below 0.04 pound per day during operations.

fuels in internal combustion engines. Other sources of ROG include the evaporative emissions associated with the use of paints and solvents, the application of asphalt paving and the use of household consumer products. Some ROG species are listed toxic air contaminants, which have been shown to cause adverse health effects; however, most adverse effects on human health are not caused directly by ROG, but rather by reactions of ROG to form other criteria pollutants such as ozone. ROG are also transformed into organic aerosols in the atmosphere, contributing to higher levels of fine particulate matter and lower visibility. The term "ROG" is used by the ARB for air quality analysis and is defined essentially the same as the federal term "volatile organic compound" (VOC).

Ozone (O_3) is a secondary pollutant produced through a series of photochemical reactions involving ROG and NO_x. Ozone creation requires ROG and NO_x to be available for approximately three hours in a stable atmosphere with strong sunlight. Because of the long reaction time, peak ozone concentrations frequently occur downwind of the sites where the precursor pollutants are emitted. Thus, O_3 is considered a regional, rather than a local, pollutant. The health effects of O_3 include eye and respiratory irritation, reduction of resistance to lung infection and possible aggravation of pulmonary conditions in persons with lung disease. Ozone is also damaging to vegetation and untreated rubber.

Table 7 - Federal and State Attainment Status

Pollutants	Federal Classification	State Classification
Ozone (O_3)	Nonattainment	Nonattainment
Particulate Matter (PM_{10})	Attainment	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Unclassified/ Attainment	Nonattainment
Nitrogen Dioxide (NO_2)	Unclassified/ Attainment	Attainment
Sulfur Dioxide (SO_2)	Unclassified/Attainment	Attainment
Sulfates	Unclassified	Attainment
Lead (Pb)	Unclassified/ Attainment	Attainment
Hydrogen Sulfide (H_2S)	Unclassified	Unclassified
Visibility Reducing Particles	Unclassified	Unclassified

Sources: ARB, 2022a.

Climate/Meteorology

The project site is located wholly within the South Coast Air Basin (SCAB), which includes all of Orange County, as well as the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The distinctive climate of the SCAB is determined by its terrain and geographical location. The SCAB is in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. Thus, the climate is mild, tempered by cool sea breezes. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The annual average temperature varies little throughout the 6,600-square-mile SCAB, ranging from the low 60s to the high 80s. However, with a less pronounced oceanic influence, the inland portion shows greater variability in the annual minimum and maximum temperatures. The mean annual maximum and minimum temperatures in the project area—as determined from the nearest weather station, which is Riverside Fire Station 3, California (047470), approximately 9.8 miles northwest of the project site with a period of record from 1893 to 2016—are 79.5 degrees Fahrenheit (°F) and 48.6°F, respectively.

During the period of record, the average annual rainfall measured 10.21 inches, which occurs mostly during the winter and relatively infrequently during the summer. Monthly precipitation averages approximately 1.89 inches during the winter (December, January, and February), approximately 0.94

inches during the spring (March, April, and May), approximately 0.49 inch during the fall (September, October, and November), and approximately 0.07 inch during the summer (June, July, and August).

Local Air Quality

The SCAQMD has divided the SCAB into source receptor areas (SRAs), based on similar meteorological and topographical features. The project site is in SCAQMD's Hemet/Elsinore air monitoring area (SRA 24), and is served by the SCAQMD's Perris station, 8.97 miles south at 237 ½ North D Street, Perris. This station monitors ozone and PM_{10}. The SCAQMD's Riverside-Rubidoux station, 12.41 miles northwest of the project site at 5888 Mission Boulevard, Riverside, monitors $PM_{2.5}$ and NO_2. All stations in the SCAB ceased monitoring CO in 2012. The ambient air quality data in the project vicinity as recorded from 2019 through 2021, along with applicable standards, are shown in **Table 8**.

Table 8 - Ambient Air Quality Monitoring Data

Air Pollutant	Standard/Exceedance	2019	2020	2021
Ozone	Max. 1-hour Concentration (ppm)	0.118	0.125	0.117
	Max. 8-hour Concentration (ppm)	0.096	0.106	0.094
	# Days > Federal 8-hour Std. of 0.070 ppm	64	74	55
	# Days > California 1-hour Std. of 0.09 ppm	28	34	25
	# Days > California 8-hour Std. of 0.070 ppm	66	77	60
PM_{10}	Max. National 24-hour Concentration (µg/m^3)	97	92.3	77.5
	Est. # Days > Fed. 24-hour Std. of 150 µg/m^3	0	ND	ND
	Federal Annual Average (50 µg/m^3)	25.8	33.4	30.4
$PM_{2.5}$	Max. National 24-hour Concentration (µg/m^3)	55.7	59.9	82.1
	# Days > Fed. 24-hour Std. of 35 µg/m^3	5	12	11
	State Annual Average (12 µg/m^3)	11.2	14.1	13.2
NO_2	Max. State 1-hour Concentration (ppm)	0.060	0.060	0.060
	State Annual Average (0.030 ppm)	0.014	0.014	0.014
	# Days > California 1-hour Std. of 0.18 ppm	0	0	0

Source: ARB, 2022b.

ND - There was insufficient (or no) data available to determine the value.

Air Quality Management Plan (AQMP)

The SCAQMD is required to produce plans to show how air quality will be improved in the region. The California Clean Air Act (CCAA) requires that these plans be updated triennially to incorporate the most recent available technical information. A multi-level partnership of governmental agencies at the federal, state, regional, and local levels implement the programs contained in these plans. Agencies involved include the USEPA, ARB, local governments, SCAG, and SCAQMD. The SCAQMD and the SCAG are responsible for formulating and implementing the AQMP for the SCAB. The SCAQMD updates its AQMP every three years.[3]

The 2016 AQMP was adopted by the SCAQMD Board on March 3, 2017, and on March 10, 2017 was submitted to the ARB as part of the California State Implementation Plan (SIP). It focuses largely on reducing NO_x emissions as a means of attaining the 1979 one-hour ozone standard by 2022, the 1997 eight-hour ozone standard by 2023, and the 2008 eight-hour standard by 2031. The AQMP prescribes a variety of current and proposed new control measures, including a request to the USEPA for increased regulation of mobile source emissions. The NO_x control measures will also help the SCAB attain the 24-hour standard for $PM_{2.5}$.[4]

[3] Adoption of the successor AQMP has been delayed. The public review period for this document, the "Revised Draft 2022 AQMP," ended October 18, 2022. Internet: http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan. Accessed October 20, 2022.

[4] NO_x is a precursor to several inorganic nitrate compounds (such as ammonium nitrate) that form in

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Sensitive Receptors

Some people, such as individuals with respiratory illnesses or impaired lung function because of other illnesses, persons over 65 years of age, and children under 14, are particularly sensitive to certain pollutants. Facilities and structures where these sensitive people live or spend considerable amounts of time are known as sensitive receptors. For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours. Commercial and industrial facilities are not included in the definition of sensitive receptor, because employees typically are present for shorter periods of time, such as eight hours. Therefore, applying a 24-hour standard for PM_{10} is appropriate not only because the averaging period for the state standard is 24 hours, but because the sensitive receptor would be present at the location for the full 24 hours.

The nearest sensitive receptors to the project site are single-family residences adjacent to the north, east and west of the project site.

Applicable South Coast Air Quality Management District Rules

Rule 403 (Fugitive Dust Rule)

During construction, the project would be subject to SCAQMD Rule 403 (fugitive dust). SCAQMD Rule 403 does not require a permit for construction activities, per se; rather, it sets forth general and specific requirements for all construction sites (as well as other fugitive dust sources) in the SCAB. The general requirement prohibits a person from causing or allowing emissions of fugitive dust from construction (or other fugitive dust source) such that the presence of such dust remains visible in the atmosphere beyond the property line of the emissions source. SCAQMD Rule 403 also prohibits construction activity from causing an incremental PM_{10} concentration impact, as the difference between upwind and downwind samples at the property line of more than 50 micrograms per cubic meter as determined through PM_{10} high-volume sampling. The concentration standard and associated PM10 sampling do not apply if specific measures identified in the rules are implemented and appropriately documented.

Other requirements of Rule 403 include not causing or allowing emissions of fugitive dust that would remain visible beyond the property line; no track-out extending 25 feet or more in cumulative length and all track-out to be removed at conclusion of each workday; and using the applicable best available control measures included in Table 1 of Rule 403.

Rule 1113 (Architectural Coatings)

Construction of this project will include the application of architectural coatings and be subject to SCAQMD Rule 1113 (Architectural Coatings). Among other applicable entities, Rule 1113 requires anyone who applies, stores at a worksite, or solicits the application of architectural coatings use coatings that contain VOC less than or equal to the VOC limits specified in Table 1 of the rule.

Impact Analysis

a) Would the project conflict with or obstruct implementation of the applicable air quality plan**?**

Less than significant Impact

The SCAQMD has developed criteria in the form of emissions thresholds for determining whether emissions from a project are regionally significant. They are useful for estimating whether a project is likely to result in a violation of the NAAQS and/or whether the project is in conformity with plans to achieve attainment. SCAQMD's significance thresholds for criteria pollutant emissions during construction activities and project operation are summarized in **Table 9**. A project is considered to have a regional air quality impact if emissions from its construction and/or operational activities exceed the corresponding SCAQMD significance thresholds.

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the atmosphere and become part of the $PM_{2.5}$ load. Therefore, reducing NO_x emissions will help reduce atmospheric $PM_{2.5}$.

Table 9 - SCAQMD Thresholds of Significance

Pollutant	Mass Daily Thresholds (Pounds/Day)	
	Construction	Operation
Nitrogen Oxides (NOx)	100	55
Volatile Organic Compounds (VOC)	75	55
Respirable Particulate Matter (PM10)	150	150
Fine Particulate Matter (PM2.5)	55	55
Sulfur Oxides (SOX)	150	150
Carbon Monoxide (CO)	550	550
Lead	3	3

Source: SCAQMD, 2019.

Air Quality Methodology

Estimated criteria pollutant emissions from the project's onsite and offsite project activities were calculated using the California Emissions Estimator Model (CalEEMod), Version 2020.4.0. CalEEMod is a planning tool for estimating emissions related to land use projects. Model-predicted project emissions are compared with applicable thresholds to assess regional air quality impacts. As some construction plans have not been finalized, CalEEMod defaults were used for construction offroad equipment and on-road construction trips and vehicle miles traveled. It was also assumed that the construction contractor would comply with all pertinent provisions of SCAQMD Rule 403.[5] Because compliance is mandatory for all development projects, these emission-reducing requirements do not constitute mitigation under CEQA.

For the purpose of this analysis, construction activities for the Valley Gardens Apartments Project are anticipated to be almost 14 months and would begin in August 2023 and end in October 2024. There would be five construction phases:

Site Preparation.
Grading.
Building Construction.
Paving.
Architectural Coating.

There would be no overlap of construction activities among any of the phases. **Table 10** shows the project schedule used for the air quality, GHG emissions (**VII**) and noise (**XIII**) analyses.

Table 10 - Construction Schedule

Construction Phase	Start	End
Site Preparation	August 1, 2023	August 14, 2023
Grading	August 15, 2023	September 11, 2023
Building Construction	September 12, 2023	August 20, 2024
Paving	August 21, 2024	September 17, 2024
Architectural Coating	September 18, 2024	October 15, 2024

These construction activities would temporarily create emissions of dusts, fumes, equipment exhaust, and other air contaminants. Mobile sources (such as diesel-fueled equipment onsite and traveling to and from the project site) would primarily generate NO_X emissions. The quantity of emissions generated daily would vary, depending on the amount and types of construction activities occurring at the same time.

As shown in **Table 11**, construction emissions would not exceed SCAQMD regional thresholds. Therefore, the project's short-term regional air quality impacts would be less than significant. Refer to **Appendix B1** of this document for the air quality calculations.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 11 - Maximum Daily Regional Construction Emissions

Construction Activity	Maximum Emissions (lbs/day)				
	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Emissions, 2023	2.7	27.6	18.9	10.3	5.8
Maximum Emissions, 2024	22.3	13.8	17.8	1.2	0.7
SCAQMD Significance Thresholds	*75*	*100*	*550*	*150*	*55*
Significant? (Yes or No)	**No**	**No**	**No**	**No**	**No**

Source: Calculated by UltraSystems with CalEEMod (Version 2020.4.0) (CAPCOA, 2022).

Regional Operational Emissions

The primary source of operational emissions would be vehicle exhaust emissions generated from project-induced vehicle trips, known as "mobile source emissions." Other emissions, identified as "energy source emissions," would be generated from energy consumption for water, space heating, and cooking equipment, while "area source emissions," would be generated from structural maintenance and landscaping activities, and use of consumer products. CalEEMod was also used to estimate operational emissions.

As seen in **Table 12**, for each criteria pollutant, operational emissions would be below the pollutant's SCAQMD significance threshold. Therefore, operational criteria pollutant emissions would be less than significant

Table 12 - Maximum Daily Project Operational Emissions

Emission Source	Pollutant (lbs/day)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Area Source Emissions	1.68	0.06	5.28	0.03	0.03
Energy Source Emissions	0.03	0.24	0.10	0.02	0.02
Mobile Source Emissions	1.62	2.12	15.91	3.79	1.03
Total Operational Emissions	**3.3**	**2.4**	**21.3**	**3.8**	**1.1**
SCAQMD Significance Thresholds	*55*	*55*	*550*	*150*	*55*
Significant? (Yes or No)	**No**	**No**	**No**	**No**	**No**

Source: Calculated by UltraSystems with CalEEMod (Version 2020.4.0) (CAPCOA, 2022).

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

Response:

5 Rule 403 applies to fugitive dust emissions. All projects in the SCAQMD are required to implement dust control measures such as regularly wetting disturbed soils.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Less Than Significant Impact

Since the SCAB is currently in nonattainment for ozone and $PM_{2.5}$, related projects may exceed an air quality standard or contribute to an existing or projected air quality exceedance. The SCAQMD neither recommends quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the cumulative emissions generated by multiple cumulative projects. Instead, the District recommends that a project's potential contribution to cumulative impacts be assessed by utilizing the same significance criteria as those for project-specific impacts. Furthermore, the SCAQMD states that if an individual development project generates less-than-significant construction or operational emissions impacts, then the development project would not contribute to a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

As discussed above, the mass daily construction and operational emissions generated by the project would not exceed any of the SCAQMD's significance thresholds. Also, as discussed below, localized emissions generated by the Project would not exceed the SCAQMD's Localized Significance Thresholds (LSTs). Therefore, the project would not contribute a cumulatively considerable increase in emissions for the pollutants which the SCAB is in nonattainment. Thus, cumulative air quality impacts associated with the project would be less than significant.

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

Response:

Less than Significant Impact

Construction of the project would generate short-term and intermittent emissions. Following the SCAQMD's *Final Localized Significance Threshold Methodology*, only onsite construction emissions were considered in the localized significance analysis. The single-family housing immediately north, east and west of the project site are the nearest sensitive receptors (less than 25 meters away).[6] LSTs for projects in Source Receptor Area 24 (Hemet/Elsinore Area) were obtained from tables in Appendix C of the aforementioned methodology. **Table 13** shows the results of the localized significance analysis for the project. Localized short-term air quality impacts from construction of the project would be less than significant.

Table 13 - Results of Unmitigated Localized Significance Analysis

Nearest Sensitive Receptor	**Maximum Onsite Construction Emissions (pounds/day)**			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Maximum daily unmitigated emissions	27.5	18.2	10.1	5.7
SCAQMD LST for 5 acres @ 25 meters	*270*	*1577*	*13*	*8*
Significant (Yes or No)	**No**	**No**	**No**	**No**

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

[6] According to SCAQMD guidance, a receptor closer than 25 meters to the source may be assumed to be 25 meters away.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Response:

Less than Significant Impact

Odors can cause a variety of responses. The impact of an odor results from interacting factors such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception.

The SCAQMD recommends that odor impacts be addressed in a qualitative manner. Such an analysis shall determine whether the project would result in excessive nuisance odors, as defined under the California Code of Regulations and § 41700 of the California Health and Safety Code, and thus would constitute a public nuisance related to air quality. Land uses typically considered associated with odors include wastewater treatment facilities, waste disposal facilities, or agricultural operations. The proposed project is not a land use typically associated with emitting objectionable odors. It would involve the use of diesel construction equipment and diesel trucks during construction. However, project-generated emissions would rapidly disperse in the atmosphere and would not be noticeable to the nearby public. Therefore, the project would not generate a significant odor impact during construction or operation.

Sources:

1. USEPA, 2011. Air Quality Guide for Nitrogen Dioxide. Office of Air and Radiation. EPA-456/F-11-003.
2. USEPA, 2022a. What is CO?
3. USEPA, 2022b. Particulate matter (PM).
4. USEPA, 2020a. What is Ozone? Accessed online at https://www.epa.gov/ozone-pollution-and-your-patients-health/what-ozone, on October 5, 2022.
5. ARB, 2022a. State and Federal Attainment Status
6. SCAQMD, 1993. CEQA Air Quality Handbook. Diamond Bar, CA.
7. WRCC, 2022. Western U.S. Climate Historical Summaries, Western Regional Climate Center.
8. ARB, 2022b. iADAM Air Quality Data Statistics. California Air Resources Board.
9. SCAQMD, 2017. Final 2016 Air Quality Management Plan. South Coast Air Quality Management District.
10. (CAPCOA, 2022. California Emissions Estimator Model®, Version 2020.4.0. California Air Pollution Control Officers Association. Accessed online at: http://www.aqmd.gov/caleemod/user's-guide on January 27, 2023.
11. Chico, T. and Koizumi, J., 2008. Final Localized Significance Threshold Methodology. South Coast Air Quality Management District, Diamond Bar, California.
12. SCAQMD, 2019. SCAQMD Air Quality Significance Thresholds. South Coast Air Quality Management District.

IV. BIOLOGICAL RESOURCES – Would the project:

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

Response:

Methodology

UltraSystems biologists researched readily available information including relevant literature, databases, agency websites, various previously completed reports and management plans, GIS data, maps, aerial imagery from public domain sources, and in-house records to identify the following: 1) habitats, special-

status plant and wildlife species, jurisdictional waters, critical habitats, and wildlife corridors that may occur in and near the project site; and 2) local or regional plans, policies, and regulations that may apply to the project. Plant and wildlife species protected by federal agencies, state agencies, and nonprofit resource organizations, such as the California Native Plant Society (CNPS), are collectively referred to as "special-status species." Some of these plant and wildlife species are afforded special legal or management protection because they are limited in population size, and typically have a limited geographic range and/or habitat.

- Information on California plants for education, research and conservation, provided by Calflora.
- California Department of Fish and Wildlife California Wildlife Habitat Relationships (CWHR) Life History Accounts and Range Maps.
- California Department of Fish and Wildlife BIOS Habitat Connectivity Viewer.
- United States Geological Survey (USGS) 7.5-Minute Topographic Map *Sunnymead* Quadrangle and current aerial imagery.
- The Web Soil Survey, provided by the United States Department of Agriculture (USDA) Natural Resources Conservation Service.
- California Natural Diversity Database (CNDDB), provided by the California Department of Fish and Wildlife.
- Information, Planning and Conservation (IPaC), provided by the US Fish and Wildlife Service (USFWS).
- Inventory of Rare and Endangered Plants of California, 8th Edition, provided by the California Native Plant Society.
- Critical Habitat Portal, provided by the USFWS.
- National Wetlands Inventory (NWI) National Wetlands Mapper, provided by the USFWS.
- National Hydrography Dataset, provided by the USGS.
- Sawyer, J.O., T. Keeler-Wolf, J.M. Evens, 2009. A Manual of California Vegetation, Second Edition, provided by California Native Plant Society Press.
- EPA Waters GeoViewer, provided by USEPA.

Less than Significant with Mitigation Incorporated

Plant and wildlife species listed under the federal Endangered Species Act (ESA) or under the California Endangered Species Act (CESA) are referred to collectively as "listed species" in this Section. Plant and wildlife species not listed under ESA or CESA but still protected by federal agencies, state agencies, local or regional plans such as the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), and/or nonprofit resource organizations, such as the California Native Plant Society (CNPS), are collectively referred to as "sensitive species" in this section. The term "special-status species" is used when collectively referring to both listed and sensitive species.

Environmental Setting

The City of Moreno Valley is in western Riverside County, California. Residential developments and associated paved surfaces and landscaped areas surround the project and comprise the biological study area (BSA), shown in **Figure 16**. The project site is located in an urbanized area, and provides generally low-quality habitat for special status plant and wildlife species. The project site itself has a relatively flat topography, with elevations ranging from 1,560 feet to 1,568 feet above mean sea level (amsl). The project site is currently undeveloped.

Under existing conditions, stormwater generated on the project site enters existing municipal storm drain inlets located on Alessandro Boulevard, near the southwest and southeast corners of the project site. This storm drain (Sunnymead Master Drainage Plan Line M-11) flows east into the Kitching Street Channel, which in turn discharges into the Perris Valley Channel approximately three miles south. The Perris Valley Channel is tributary to the San Jacinto River, and known water of the U.S.

Habitat Assessment Survey

UltraSystems Environmental, Inc (UEI) biologist Dr. Michael Tuma conducted a biological resources reconnaissance survey (field survey) on August 27, 2022 to assess the habitats, plants and wildlife that occur within the BSA. Two land cover types occur within the BSA and they are each described later in this section. The project area has been mowed or disked regularly to maintain its cleared condition. There is also evidence of dumping and vehicle use across the site. Several ornamental trees are distributed in offsite residential areas in the BSA. Plant and wildlife species were recorded during the habitat

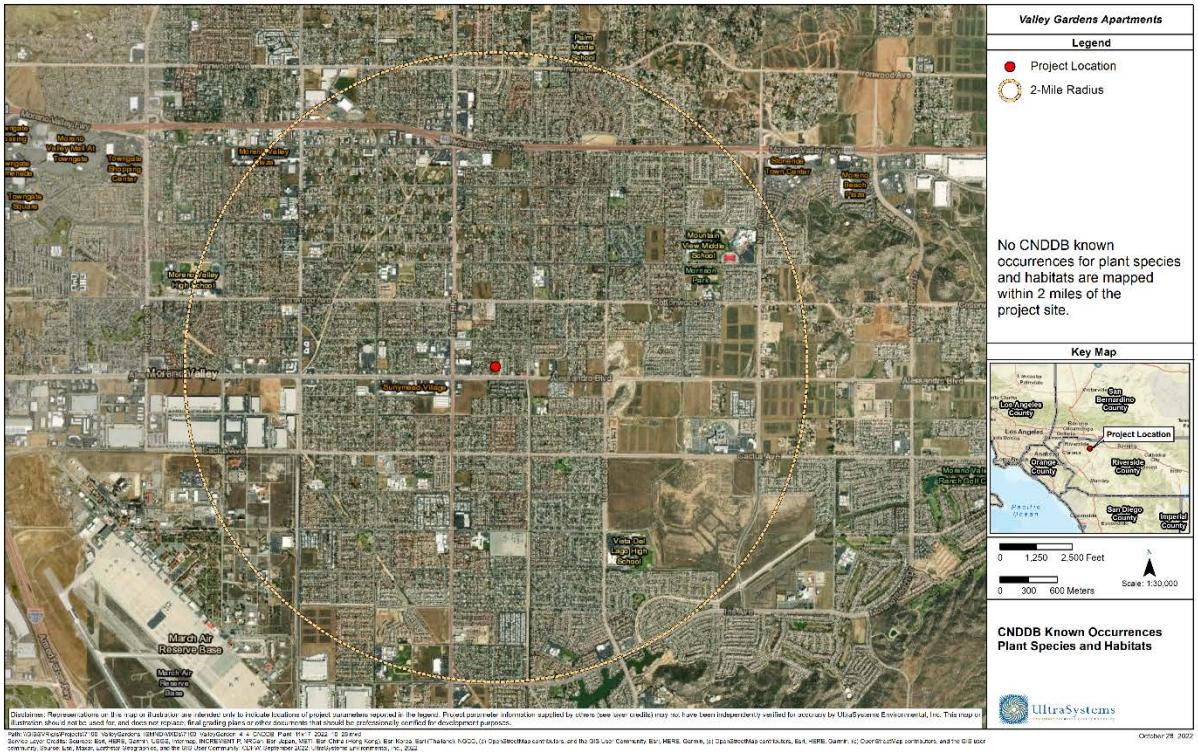
assessment survey and other survey (see Appendix C1, Plant and Wildlife Species Recorded During the Field Surveys).

Figure 16 - Project Location and Biological Study Area

Impacts to Special Status Plants

Based on a literature review and query from publicly available databases for reported occurrences within a ten-mile radius of the project site, there were ten listed and 14 sensitive plant species identified by one of the following means: reported in the plant inventory, recognized as occurring based on previous surveys or knowledge of the area, or observed during the habitat assessment survey or other surveys. No sensitive plant species has been recorded within two miles of the BSA (see **Figure 17)**. These 24 total species are not expected to occur in the BSA because there is lack of suitable conditions to support them. These species are listed in **Appendix C2**, *Special-Status Species Inventory and Potential Occurrence Determination*. No special-status plant species were observed during the surveys. None of the special-status plant species are expected to occur within the BSA; therefore, it is anticipated that construction of the project will not result in impacts to special-status plant species within the BSA.

Figure 17 - CNDDB Known Occurrences Plant Species and Habitats



Impacts to Special-Status Wildlife

Literature Review Results and Discussion

Based on a literature review and query from publicly available databases for reported occurrences within a ten-mile radius of the project site, there were 14 listed and 33 sensitive wildlife species identified by one of the following means: reported in the wildlife inventory, or recognized as occurring based on previous surveys or knowledge of the area. Refer to Error! Reference source not found.**,** which displays wildlife species identified in the CNDDB wildlife inventory within a two-mile radius of the BSA. Of those 47 total species, one listed and five sensitive wildlife species were determined to have a low potential to occur in the BSA. These species are listed in **Appendix C3**, *Special-Status Species Inventory and Potential Occurrence Determination*.

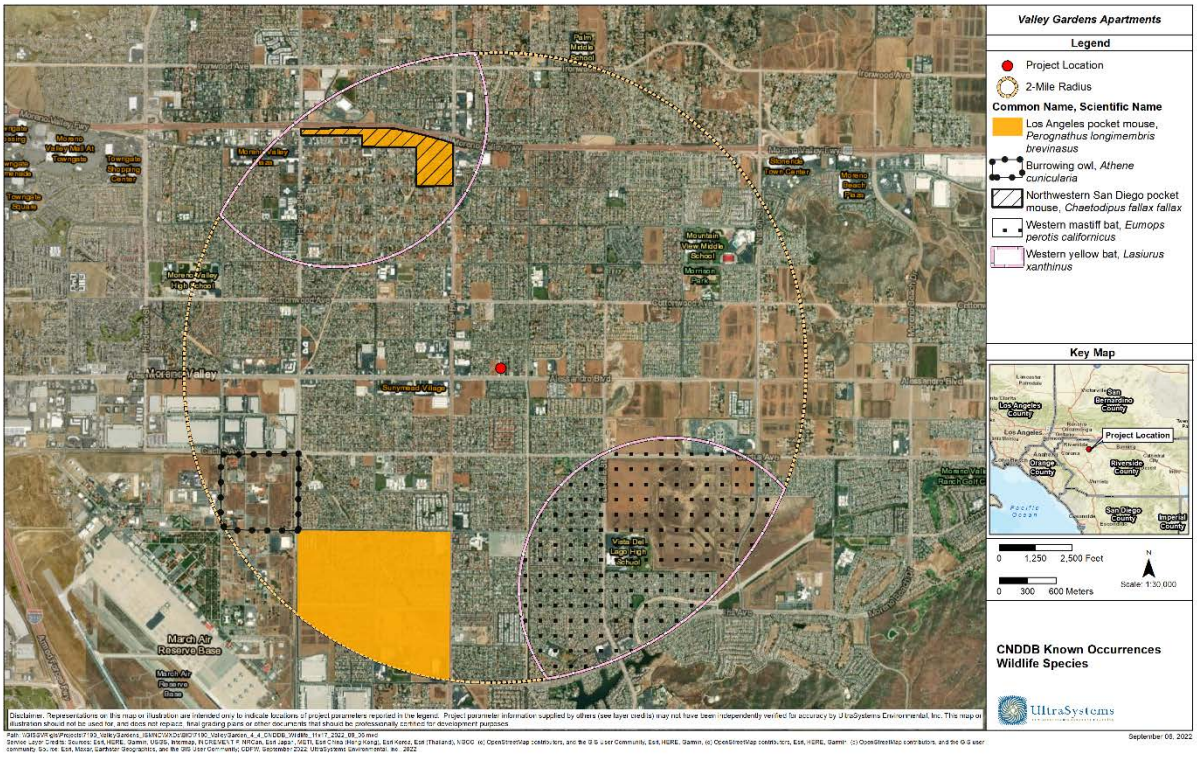
It is anticipated that construction of the project will have less than a significant impact on these special-status wildlife species because they were determined to have only a low potential to occur and the project BSA does not offer suitable nesting habitat for these species. Occurrence of these species in the BSA would likely be restricted to occasional foraging as there is no evidence that the BSA provides suitable habitat to support resident populations of these species.

The following four special-status species in the wildlife inventory were determined to have a low potential to occur in the BSA; none of these species were observed during the surveys:

- Burrowing owl (*Athene cunicularia*) SSC, BCC, WRCMSHCP: Covered (c), Season of Concern: burrowing sites and some wintering sites.
- California horned lark (*Eremophila alpestris actia*) WL, WRCMSHCP: Covered.
- Cooper's hawk (*Accipiter cooperii*) WL.
- Monarch butterfly (*Danaus plexippus*) FC: California overwintering population.

California horned lark, Cooper's hawk, and monarch butterfly may occur on the project site for occasional foraging activities but were not observed during surveys and do not appear to reside permanently within the BSA. The project site is surrounded by residential developments which limit the availability of quality foraging habitat for species within the BSA. Additionally, there is a high level of traffic and traffic noise which may make the habitat less desirable for occupation by many special-status species. Thus, it is anticipated that construction of the project would have less than a significant impact on the species listed above.

Figure 18 - CNDDB Known Occurrences Wildlife Species



Mitigation Measures

MM BIO-1: Focused Burrowing Owl Surveys

The project area is located within an MSHCP Burrowing Owl Survey Area and contains suitable habitat to potentially support BUOW in the future. Therefore, a focused BUOW survey is required by the MSHCP. A qualified biologist would conduct a focused BUOW survey in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* within 30 days prior to ground disturbance.

Following the completion of the focused BUOW survey, the biologist would prepare a letter report in accordance with the MSHCP Survey Guidelines, summarizing the results of the survey. The report would be submitted to the City of Moreno Valley prior to initiating any ground disturbance activities.

If no BUOWs or signs of BUOW are observed during the survey and concurrence is received from EPD and CDFW, project activities may begin and no further mitigation would be required.

If BUOW or signs of BUOW are observed during the survey, the site would be considered occupied. The biologist would implement protection measures listed below and contact the City, EPD, and CDFW to assist in the development of avoidance, minimization, and mitigation measures, prior to commencing project activities. The list of potential measures to avoid and minimize impacts to BUOWs described in the above section would be implemented.

BUOW Protection Measures

If BUOWs or signs of BUOW are observed during the survey, then the site would be considered occupied and the biologist shall contact the City of Moreno Valley, EPD, and CDFW to assist in the development of avoidance, minimization, and mitigation measures discussed below, prior to commencing project activities.

Planning BUOW Protection Measures

Grading, construction, and other project activities on all grassland habitat will be delayed until the qualified biologist has implemented burrow exclusion and closure. No ground-disturbing activities within 50 meters of an active BUOW burrow will be permitted until burrow exclusion and closure have been implemented. No destruction of foraging habitat will be permitted until burrow exclusion and closure have been implemented.

Pre-Construction BUOW Protection Measures

Prior to the initiation of grading and construction activities, the biologist shall implement passive relocation of an active BUOW burrow by installing a one-way door and then permanently excluding the BUOW from

returning once it is confirmed that no BUOW individuals remain in the burrow. A biological monitor will visit the site daily to verify that the burrow is empty by monitoring and scoping the burrow.

Considering that there is not adequate BUOW habitat of at least 6.6 acres to which an excluded BUOW pair can relocate, the project applicant shall pay a Local Development Mitigation Fee to the County of Riverside to offset the impacts to the BUOW. All surveys and reporting required by the MSHCP will be complied with including a focused BUOW survey.

Construction BUOW Protection Measures

A biological monitor will be onsite to monitor any BUOW or signs of BUOW. If any BUOW are observed then the biologist will consult with the County EPD and CDFW to determine the appropriate measures.

MM BIO-2: Pre-Construction Breeding Bird Survey

- To maintain compliance with the MBTA and Fish and Game Code, and to avoid impacts or take of migratory non-game breeding birds, their nests, young, and eggs, the following measures will be implemented. The measures below will help to reduce direct and indirect impacts caused by construction on migratory non-game breeding birds to less than significant levels.
- Project activities that will remove or disturb potential nest sites, such as open ground, trees, shrubs, grasses, or burrows, during the breeding season would be a potential significant impact if migratory non-game breeding birds are present. Project activities that will remove or disturb potential nest sites will be scheduled outside the breeding bird season to avoid potential direct impacts on migratory non-game breeding birds protected by the MBTA and Fish and Game Code. The breeding bird nesting season is typically from February 15 through September 15, but can vary slightly from year to year, usually depending on weather conditions. Removing all physical features that could potentially serve as nest sites will also help to prevent birds from nesting within the project site during the breeding season and during construction activities.
- If project activities cannot be avoided during February 15 through September 15, a qualified biologist will conduct a pre-construction breeding bird survey for breeding birds and active nests or potential nesting sites within the limits of project disturbance. The survey will be conducted at least seven days prior to the onset of scheduled activities, such as mobilization and staging. It will end no more than three days prior to vegetation, substrate, and structure removal and/or disturbance.
- If no breeding birds or active nests are observed during the pre-construction survey or they are observed and will not be impacted, project activities may begin and no further mitigation will be required.
- If a breeding bird territory or an active bird nest is located during the pre-construction survey and will potentially be impacted, the site will be mapped on engineering drawings and a no activity buffer zone will be marked (fencing, stakes, flagging, orange snow fencing, etc.) a minimum of 100 feet in all directions or 500 feet in all directions for listed bird species and all raptors. The biologist will determine the appropriate buffer size based on the type of activities planned near the nest and the type of bird that created the nest. Some bird species are more tolerant than others of noise and activities occurring near their nest. This no-activity buffer zone will not be disturbed until a qualified biologist has determined that the nest is inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by project activities. Periodic monitoring by a biologist will be performed to determine when nesting is complete. Once the nesting cycle has finished, project activities may begin within the buffer zone.
- If listed bird species are observed within the project site during the pre-construction survey, the biologist will immediately map the area and notify the appropriate resource agency to determine suitable protection measures and/or mitigation measures and to determine if additional surveys or focused protocol surveys are necessary. Project activities may begin within the area only when concurrence is received from the appropriate resource agency.
- Birds or their active nests will not be disturbed, captured, handled or moved. Active nests cannot be removed or disturbed; however, nests can be removed or disturbed if determined inactive by a qualified biologist.

MM BIO-3: Biological Monitor

- As per the MSHCP requirements stated in Volume 1, Appendix C2 of the MSHCP, A qualified project biologist shall monitor construction activities for the duration of the project to ensure that

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.

- A biological monitor shall monitor activities that result in tree or vegetation removal to minimize the likelihood of inadvertent impacts on nesting birds and special-status wildlife species, with special attention given to any protected species observed during the pre-construction breeding bird surveys. Monitoring shall also be conducted periodically during construction activities to ensure no new nests are built during any vegetation removal or building demolition activities between February 1 and August 31. The biological monitor shall ensure that all BMPs, avoidance, protection and mitigation measures described in the relevant project permits and reports are in place and are adhered to.
- The biological monitor shall have the authority to temporarily halt all construction activities and all non-emergency actions if sensitive species and/or nesting birds are identified and would be directly affected. The monitor shall notify the appropriate resource agency and consult if needed. If necessary, the biological monitor shall relocate the individual outside of the work area where it will not be harmed. Work can continue at the location if the applicant and the consulted resource agency determine that the activity will not result in adverse effects on the species.
- The appropriate agencies shall be notified if a dead or injured protected species is located within the project site. Written notification shall be made within 15 days of the date and time of the finding or incident (if known) and must include; location of the carcass, a photograph, cause of death (if known), and other pertinent information.

MM BIO-4: Construction Best Management Practices

- Project work crews will be directed to use BMPs where applicable. These measures will be identified prior to construction and incorporated into the construction operations.
- Implementation of this conservation measure will help to avoid, eliminate or reduce impacts on sensitive biological resources, such as special-status terrestrial wildlife species, to less than significant levels. Standard BMPs as outlined in the MSHCP (MSHCP, Volume 1, Appendix C3) and that apply to construction of this project, and that are not incorporated to other mitigation measures proposed for this project are as follows:
- Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
- Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS, and CDFW, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
- The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

Level of Significance After Mitigation

Special-status plants are not anticipated to occur within the BSA and thus not anticipated to incur impacts as a result of project activities. As discussed above, birds including those addressed under the MBTA and Fish and Game Code are anticipated to be indirectly impacted as a result of the project activities; therefore, mitigation is required. With implementation of mitigation measures **BIO-1** through **BIO-4,** the proposed project would have less than significant impacts, either directly or through habitat modifications, to special-status wildlife species.

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

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

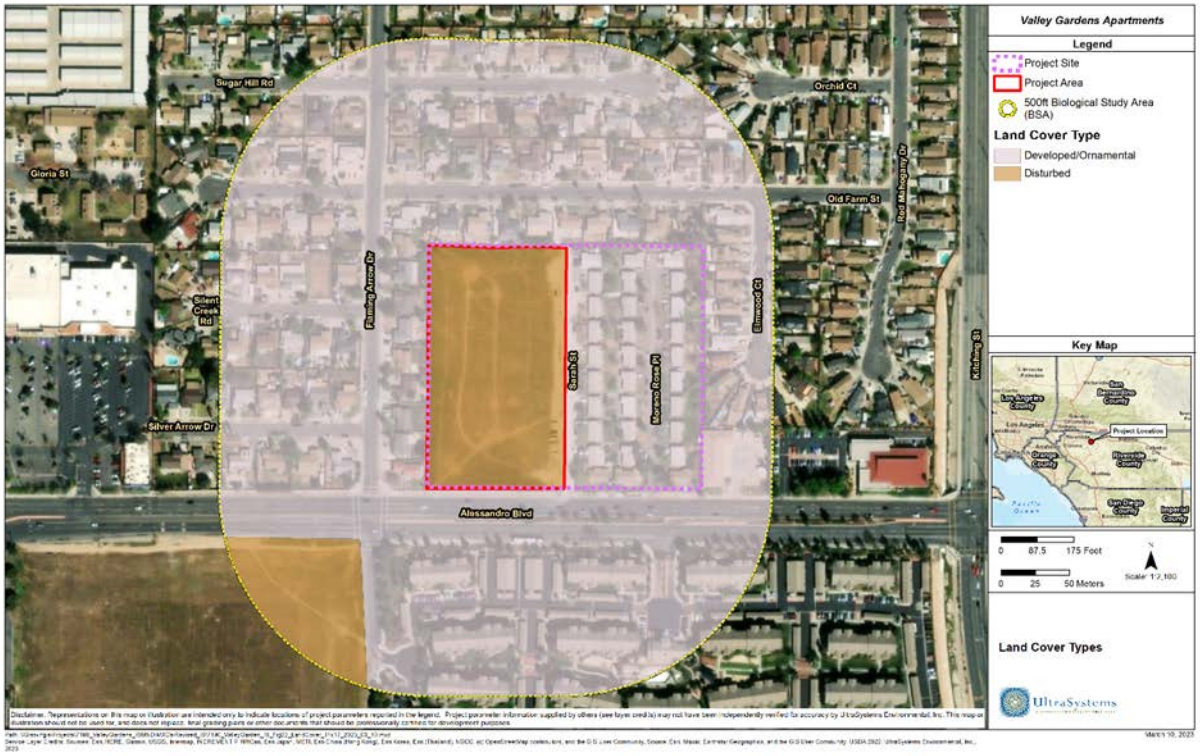
No Impact

The project site is situated on relatively level ground, and no ephemeral, intermittent, or perennial streams or rivers were identified in the literature review or observed during the biological survey. Vegetation on the project site primarily consists of non-native annual grasses and forbs. Areas off the project site within the BSA contain residential areas with several ornamental and native trees, and landscaped areas with ornamental turf lawns and plants. The land cover types observed within the BSA are described below.

Land Cover Type Mapping

The observed land cover types are briefly described below, and are illustrated in **Figure 19.** Neither of the land cover types, Developed/Ornamental and Disturbed, are classified as sensitive natural communities in the California Department of Fish and Wildlife's (CDFW's) *California Natural Community List*.

Figure 19 - Land Cover Types



Disturbed

The project area is entirely comprised of disturbed land cover type. There is also an area off the project site mapped as disturbed land cover in the southwestern segment of the BSA. Disturbed land cover type consists of areas that have been physically disturbed and are no longer contain native or naturalized vegetation associations, but continue to retain a soil substrate. Vegetation in these areas generally consists of non-native, ruderal or ornamental plant species that typically establish dominance in these disturbed conditions. There is evidence that the project is regularly mowed or disked to maintain its cleared condition. The project area contains bare ground interspersed with non-native annual grasses and non-native annual forbs. All of the project area, approximately 4.5 acres, was mapped as disturbed land cover. Approximately 6.3 acres of disturbed land cover was mapped in offsite areas within the BSA.

Developed/Ornamental

The areas off the project site within the BSA are mapped as developed/ornamental land cover type. These areas include man-made structures such as residential homes, sidewalks, buildings, parks, other associated infrastructure, and ornamental landscaping consisting of exotic or non-native plant species, that occur in parks, gardens and yards. In the BSA, this land cover type contains residential developments,

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

associated paved areas and infrastructure, and areas landscaped with ornamental vegetation. Approximately 37.2 acres of developed/ornamental land cover was mapped in the BSA. Ornamental trees observed within the BSA include Chinaberry tree (*Melia azedarach*), crapemyrtle (*Lagerstroemia indica*), Chinese elm (*Ulmus parvifolia*), Mexican fan palm (*Washingtonia robusta*), queen palm (*Syagrus romanzoffiana*), and olive (*Olea europaea).*

The BSA does not support riparian habitat or other sensitive natural communities. Both the literature review and results of the reconnaissance level field survey indicate that riparian habitat or other sensitive natural communities do not occur on the project site. Therefore, construction of the project would not result in impacts on any riparian habitat or sensitive natural communities identified in local, regional state, or federal plans, policies, or regulations. No impact would occur and no mitigation is proposed.

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

Response:

No Impact

Drainages, depressions, and other topographic features that would be conducive to wetlands formation were not identified within the BSA. A field investigation for wetlands and other waters of the U.S. or State determined that the project site does not contain drainages with a definable bed, bank, channel, or evidence of an ordinary high-water mark, nor wetland hydrology, wetland soils, or wetland plants. It was determined that state or federal protected wetlands and other waters do not occur on the project site. No impact would occur and mitigation is not required.

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

Response:

No Impact

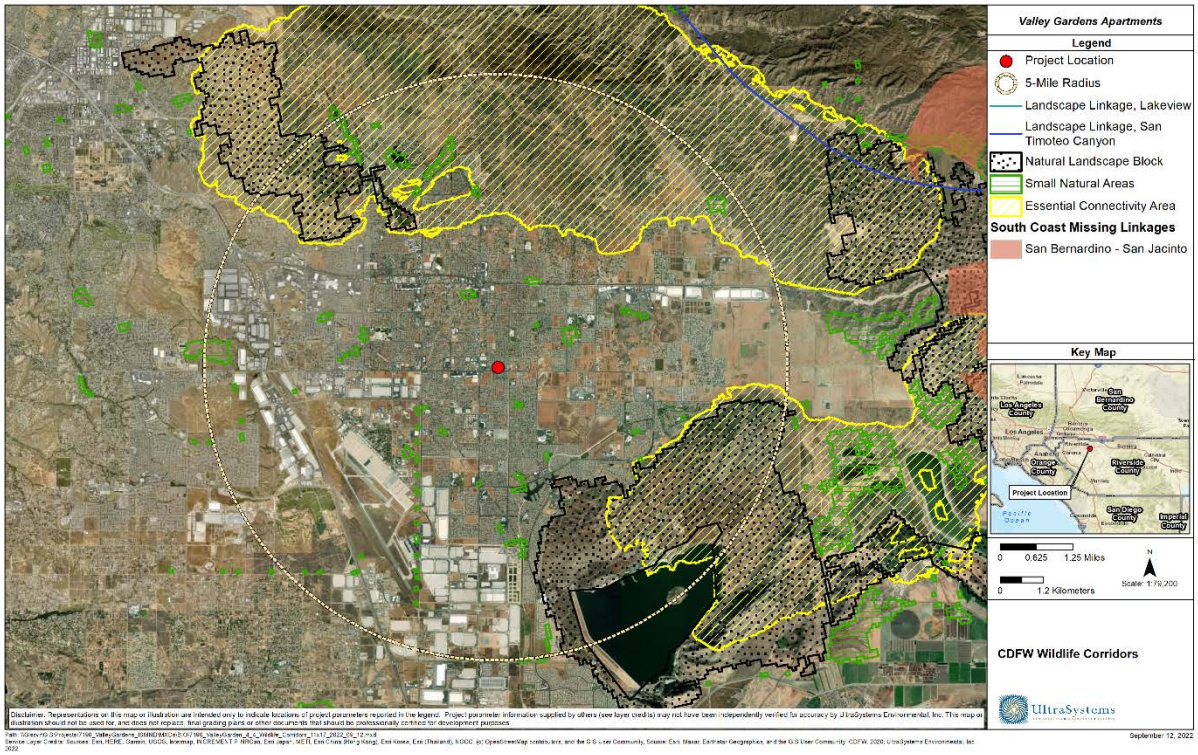
Reports, information, and databases associated with the MSHCP and the Western Riverside County – Regional Conservation Authority (RCA) MSHCP Information Map (MSHCP Information Map) located on the RCA website were used to identify criteria areas within the BSA. Per the MSHCP Information Map, the project site is not within a proposed/existing core, habitat block, or linkage. Existing Core Area O is located approximately 3.6 miles northeast of the project site. Proposed Linkage 4 is located approximately four miles north of the project site. Proposed Constrained Linkage 7 is located approximately 2.5 miles northwest of the project site and connects to Proposed Constrained Linkage 8. Additionally, the BSA does not overlap with any CDFW wildlife corridors. The nearest CDFW Essential Connectivity Areas are located approximately 2.5 miles north and southeast of the project, the nearest Small Natural Area is located approximately 0.6 miles southeast from the project, and the nearest Natural Landscape Block is located approximately 2.5 miles southeast from the project. (see **Figure 20)**

Construction and operation of the proposed project would not interfere with the movement of any native resident or migratory fish or wildlife species or with native resident or migratory wildlife corridors. No impact would occur, and mitigation is not proposed.

Impacts to native wildlife nursery sites (e.g., bat maternity roosts) resulting from the project activities are not anticipated. No signs of bats were observed during field surveys. There would be no direct impacts to wildlife nursery sites anticipated as a result of the project. Therefore, no mitigation is proposed

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Figure 20 - CDFW Wildlife Corridors



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

Response:

No Impact

The project does not contain biological resources protected by local ordinances or policies, such as a tree ordinance. Discussion of the project's consistency with the MSHCP is provided below in **IV.**

The project site is located within the Reche Canon/Badlands MSHCP plan area in Western Riverside County. Each project located within the plan area must be consistent with the MSHCP. **Table 14** provides a list of MSHCP conditions that were considered for this analysis.

Table 14 - MSHCP Project Review Checklist

MSHCP Conditions	Yes	No
Are riverine/riparian/wetland habitats or vernal pools present?		√
Is the project located in Narrow Endemic Plant Species Survey Area?		√
Is the project located in a Criteria Area or Public/Quasi-Public Land?		√
Is the project located in Criteria Area Amphibian Survey Area?		√
Is the project located in Criteria Area Burrowing Owl Survey Area?	√	

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Is the project located in Criteria Area Mammal Survey Area?				√
Is the project located adjacent to MSHCP Conservation Areas?				√

MSHCP Vernal Pools and Fairy Shrimp

The BSA was assessed for areas meeting the MSHCP's definition of vernal pools and fairy shrimp habitat during the field survey. It was determined that the BSA does not have vernal pools or wetlands that could support fairy shrimp species and none are expected to occur on the project site; therefore, listed fairy shrimp, such as the Riverside fairy shrimp, Santa Rosa Plateau fairy shrimp, and vernal pool fairy shrimp, are not expected to be present within the BSA. No wetlands were identified onsite (see **Section 4.4 (c)** for further discussion). UltraSystems determined that focused surveys for fairy shrimp and vernal pools are not required.

MSHCP Riparian/Riverine Birds

The BSA was assessed for areas meeting the MSHCP's definition of riparian/riverine birds during the field survey. It was determined that the BSA does not provide sufficient riparian habitat to support riparian or riverine birds, including the listed LBV, SWFL, or cuckoo. No drainages or other areas with permanent standing water that could support riparian or riverine habitat occur within the BSA. The giant reed stand that occurs onsite does not provide suitable habitat for LBV, SWFL, or cuckoo. Consequently, it was determined that there is no habitat within the BSA that functions as breeding habitat for the LBV, SWFL, or cuckoo and these birds are not expected to nest onsite. Based on the site conditions within the BSA, UltraSystems determined that focused surveys for these birds are not required.

MSHCP Criteria Area Amphibians

No suitable aquatic habitat for MSHCP Criteria Area amphibians was identified within the BSA during the field surveys. In addition, the MSHCP Information Map Report indicated that the BSA was not within a MSHCP amphibian survey area. Consistent with the MSHCP, focused surveys are not required.

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

Response:

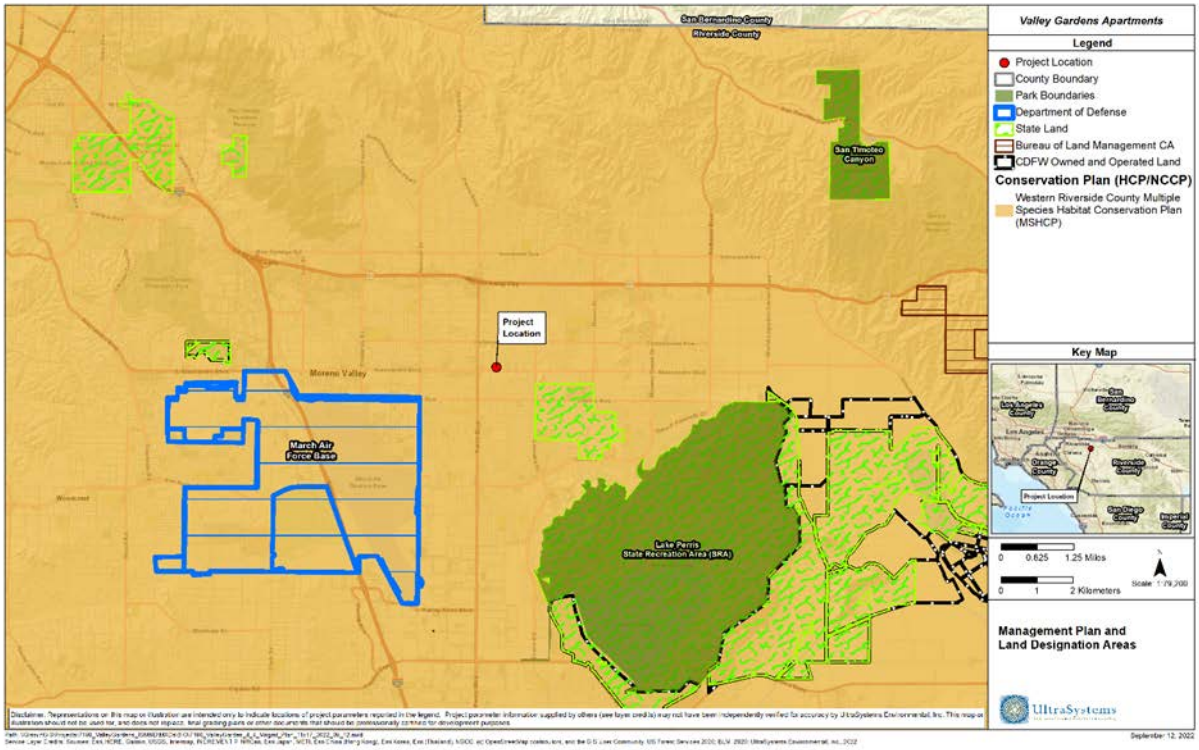
<u>Less Than Significant with Mitigation Incorporated</u>

The BSA is within the MSHCP Area (see **Figure 21)**. Focused burrowing owl surveys (**BIO-1**), instatement of a qualified biological monitor (**BIO-3**), and implementation of MSHCP best management practices (**BIO-4**) are required per the MSHCP. These measures are previously discussed in Section a). An analysis of consistency with the policies of the MSHCP is provided in **Table 14**, and is also discussed in **Section IV (a).** Project activities would not conflict with the provisions of the MSHCP after implementation of these abovementioned mitigation measures.

<u>Level of Significance After Mitigation</u>

With implementation of mitigation measures **BIO-1, BIO-3**, and **BIO-4** which are previously discussed in **Section IV (a)** and are required by the MSHCP, the proposed project would have less than significant impacts to biological resources covered by the MSHCP.

Figure 21 - Management Plan and Land Designation Areas



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ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

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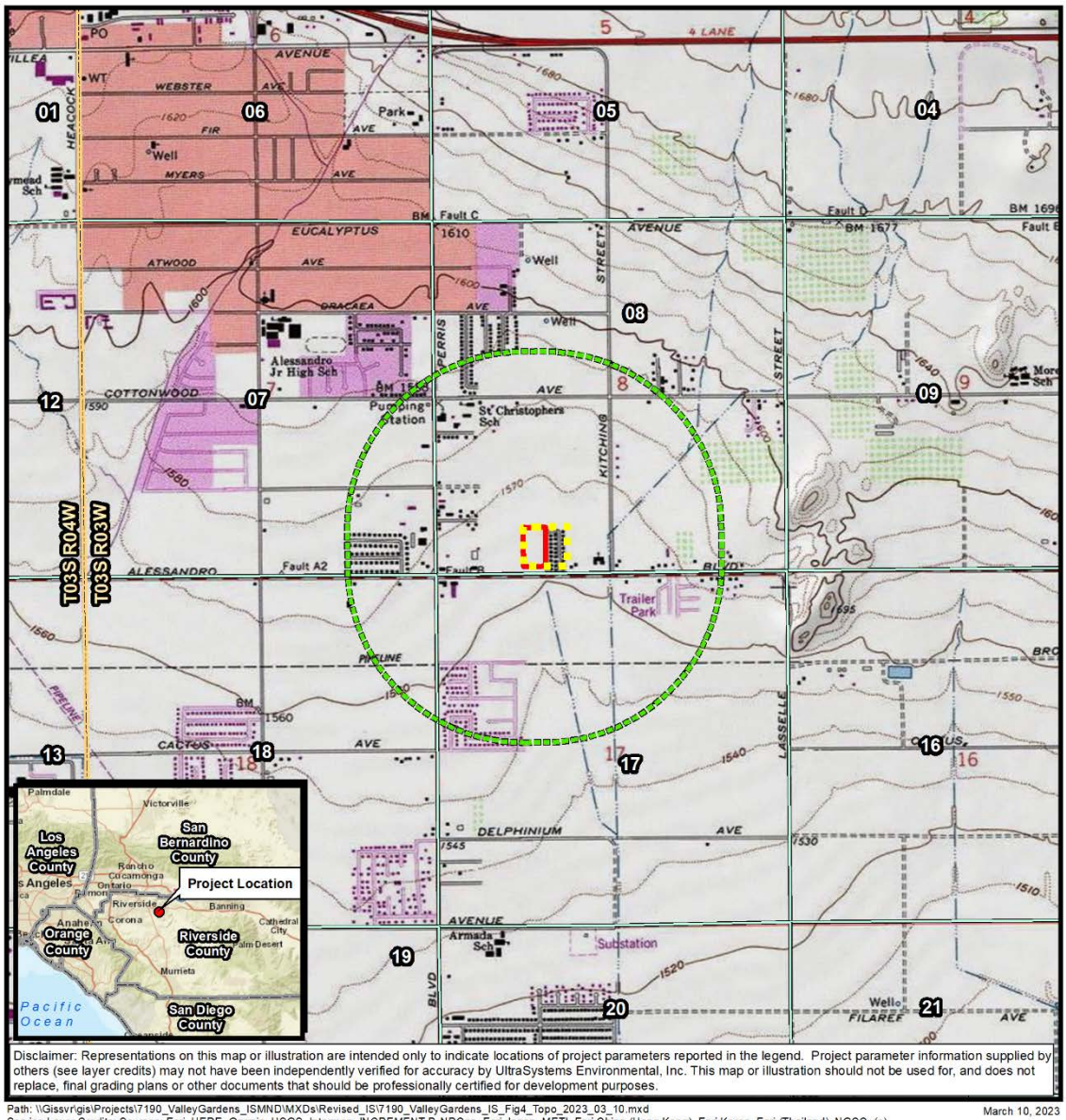
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒

Response:
Information from the Phase I Cultural Resources Inventory for the Valley Gardens Project, City of Moreno Valley prepared January 2023 (see Appendix D), prepared by UltraSystems (O'Neil, Doukakis and Johnson, 2023), has been included in this section.

Methodology
A cultural resources analysis was conducted for the proposed project site (refer to **Figure 22**) that included a California Historic Resources Inventory System (CHRIS) records and literature search at the Eastern Information Center (EIC) located at the University of California, Riverside. The geographic scope of the cultural resource records search included the project site and an area encompassing a 0.5-mile radius outside of the project boundary. This search was initiated by Megan B. Doukakis, Assistant Project Archaeologist, on August 23, 2022; the EIC records search was received on September 19, 2022. Additionally, a request was made to the Native American Heritage Commission (NAHC) by Stephen O'Neil, Cultural Resources Manager, to conduct a search of their Sacred Lands File (SLF) for potential traditional cultural properties as well as to provide a list of local Native American tribal organizations to contact. The NAHC request was made on September 1, 2020, and a reply was received on October 6, 2022; letters were sent to the listed tribes on October 13, 2022 and follow-up telephone calls were conducted on November 3, 2022. A pedestrian field survey of the project site was conducted on September 13, 2022.

Figure 22 - Topographic Map



Existing Conditions

As noted, a cultural resources records search was requested from the EIC, the local CHRIS facility, on August 23, 2022, and the results were received on September 19, 2022. Based on the cultural resources records search, no prehistoric cultural resource sites or isolates have been previously recorded within the project area boundary and there are no known prehistoric cultural resource sites or isolates recorded within the 0.5-mile radius buffer zone surrounding the project boundary. In addition, there were no historic cultural resource sites listed within the project boundary, though there were three recorded historic-era cultural resources located in the 0.5-mile buffer zone. No prior surveys included the project parcel, though

seven previous cultural resource studies were within portions of the 0.5-mile buffer of the project (see Section 4.1 and Tables 4.1-1 and Table 4.1-2 in Appendix D). The pedestrian field survey undertaken for this project did not observe the presence of prehistoric or historic period resources (see Section 4.3 in Appendix D).

No Impact

A historical resource is defined in § 15064.5(a)(3) of the *CEQA Guidelines* as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. Resources listed in or determined eligible for the California Register of Historic Resources (CRHR), included in a local register, or identified as significant in a historic resource survey are also considered as historical resources under CEQA.

Similarly, the National Register of Historic Places (NRHP) criteria (contained in Code of Federal Regulations Title 36 § 60.4) are used to evaluate resources when complying with Section 106 of the National Historic Preservation Act. Specifically, the National Register criteria state that eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that (a) are associated with events that have made a significant contribution to the broad patterns of our history; or (b) that are associated with the lives of persons significant in our past; or (c) that embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction; or (d) that have yielded or may be likely to yield, information important to history or prehistory.

A substantial adverse change in the significance of a historical resource, as a result of a project or development, is considered a significant impact on the environment. Substantial adverse change is defined as physical demolition, relocation, or alteration of a resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. Direct impacts are those that cause substantial adverse physical change to a historic property. Indirect impacts are those that cause substantial adverse change to the immediate surroundings of a historic property, such that the significance of a historical resource would be materially impaired.

The cultural resources records search conducted at the EIC determined that there are no historic-era resources within the project boundary. There were three historic-era resources that have been recorded within a 0.5-mile radius of the area of potential effect (APE) of the project (Table 4.1-1 in Appendix D). Approximately 830 feet east of the project boundary is 33-007276, consisting of a vernacular wood frame building, constructed circa 1920. There is also 33-007379, a vernacular ranch house constructed circa 1896 that is recorded approximately 0.80 miles west northwest of the project boundary that appears to have been recently demolished. The third historic site, 33-015454, consists of remnants of two early- to mid-twentieth century residences approximately 1,000 feet southeast of the project boundary. An additional historic apartment building was evaluated under the National Register in the Office of Historic Preservation's Built Environmental Resource Directory and determined ineligible for the National Register by consensus through Section 106 process (Section 4.4 in Appendix D).

According to records at the EIC, no cultural resource surveys have included a portion of the project APE, while seven surveys have been conducted within the 0.5-mile radius project buffer (Section 4.1.2 and Table 4.1-2 in Appendix D). As a result of the field survey, no historic buildings were identified within the project site. No other cultural resources were observed during the survey.

There are no historic properties within the project boundary listed with the NRHP or the CRHR. The results of the research for this cultural resources study indicates there would be no impact on historical resources that would be adversely affected by construction of the project.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐

Response:

Less than Significant Impact with Mitigation Incorporated

An archaeological resource is defined in § 15064.5(c) of the CEQA Guidelines as a site, area or place determined to be historically significant as defined in § 15064(a) of the CEQA Guidelines, or as a unique archaeological resource defined in § 21083.2 of the Public Resources Code as an artifact, object, or site that contains information needed to answer important scientific research questions of public interest or that has a special and particular quality such as being the oldest or best example of its type, or that is directly associated with a scientifically-recognized important prehistoric or historic event or person.

The past vacant status of the project site suggests that ground on the project site has been minimally disturbed, with the native soil remaining. The cultural resources investigation conducted by UltraSystems, which included a CHRIS records search of the project site and buffer zone, a search of the SLF by the NAHC, and pedestrian field survey, suggests there is a low potential that undisturbed unique archaeological resources exist on the project site.

The result of the pedestrian survey was negative for both prehistoric and historic sites and isolates on the project site.

Based on the EIC cultural resources records search, it was determined that there are no prehistoric or historic cultural resource previously recorded within the project site boundary. Within the half-mile buffer zone, there have been three recorded historic-era residential resources**.** Descriptions of these resources are summarized in Table 4.1-1 in the cultural resources technical report (refer to Appendix D). One additional historic apartment building was identified in the 0.5-mile radius from the Office of Historic Preservation's Built Environmental Resource Directory and determined ineligible for the National Register by consensus through the Section 106 process.

There have been seven previous cultural resource studies within the 0.5-mile buffer of the project (Table 4.1-2 in Appendix D). None of these surveys intersects the current project boundary. Three of the cultural resources studies assessed the potential impact of new telecommunications facilities, three of the cultural resources studies investigated the potential impact of apartments and commercial development, and one archaeological survey was for a linear water pipeline. (Refer to Section 4.1 and Tables 4.1-1 and 4.1-2 in Appendix D.)

A NAHC SLF search was conducted on and in the area of the project site. The NAHC letter of October 6, 2022 indicated that the SLF search was negative for the presence of traditional cultural property within this area. Twenty six representatives of 16 Native American tribes were contacted on October 13, 2022 by mail and email, requesting a reply if they have knowledge of cultural resources in the area that they wished to share and asking if they had any questions or concerns regarding the project. These tribes included:

- Agua Caliente Band of Cahuilla Indians
- Augustine Band of Cahuilla Mission Indians
- Cabazon Band of Mission Indians
- Cahuilla Band of Indians
- Los Coyotes Band of Cahuilla and Cupeño Indians
- Morongo Band of Mission Indians
- Pala Band of Mission Indians
- Pechanga Band of Mission Indians
- Quechan Tribe of the Fort Yuma Reservation
- Ramona Band of Cahuilla
- Rincon Band of Luiseño Indians
- San Manuel Band of Mission Indians
- Santa Rosa Band of Mission Indians
- Serrano Nation of Mission Indians
- Soboba Band of Luiseno Indians
- Torres-Martinez Desert Cahuilla Indians

There have been five direct responses to the outreach contacts. On October 14, 2022, Omar Aceves, Tribal Operations Clerk for the Augustine Band of Cahuilla Indians responded via email indicating that they are unaware of specific cultural resources that may be affected by the proposed project and to contact them if any cultural resources are found during the project. On October 17, 2022 Historic Preservation Officer Jill McCormick of the Quechan Tribe of the Fort Yuma Reservation responded via email indicating that the tribe has no comments on this project and defer to the more local Tribes and support their decisions on the project. On October 18, 2022, Cultural Resources Analyst Ryan Nordness of the San Manuel Band of Mission Indians responded via email indicating that the proposed project is located outside of Serrano ancestral territory. On October 25, 2022, Nicole Raslich, Archaeological Technician of the Agua Caliente Band of Cahuilla Indians responded via email indicating that the project area is not located within the boundaries of the tribe's Reservation; Ms. Raslich did request a copy of the cultural resources inventory report and a copy of the records search with associated survey reports and site records from the information center. On November 3, 2022, Paul Macarro, Cultural Coordinator for the Pechanga Reservation indicated that the tribe knows of Traditional Cultural Properties in the area and is very concerned with possible resources in the project area; the tribe requested copies of the information center records, to participate in AB 52 consultation, and to have an archaeological monitor and tribal monitor present at the project during ground disturbing activities.

Following up on the initial contacts, telephone calls were conducted by Ms. Doukakis on November 3, 2022, to complete the outreach process. In the November 3, 2022 call, Joseph Ontiveros of the Cultural Resource Department for the Soboba Band of Luiseño Indians indicated that the tribe has a concern with the project area, stating there is an identified Traditional Cultural Property in the area related to the Cahuilla culture. Mr. Ontiveros indicated that the area is significant and that they can provide specifics to the lead agency during AB 52 consultation. Jacob, with the EPA Department for the Los Coyotes Band of Cahuilla and Cupeño Indians, indicated that they have no comment on the project.

Six telephone calls were placed with no answer and so messages were left describing the project and requesting a response. These were to Ann Brierty, Tribal Historic Preservation Officer, and Chairperson Robert Martin of the Morongo Band of Mission Indians; Shasta Gaughen, Tribal Historic Preservation Officer for the Pala Band of Mission Indians; Cheryl Madrigal, Tribal Historic Preservation Officer for the Rincon Band of Luiseño Indians; Doug Welmas, Chairperson for the Cabazon Band of Indians; and Wayne Walker, Co-Chairperson for the Serrano Nation of Mission Indians. A call to Mark Cochrane, Co-Chairperson for the Serrano Nation of Mission Indians indicated that the phone line was disconnected and so no message could be left. The tribal receptionists for the Torres-Martinez Desert Cahuilla Indians and the Pechanga Band of Luiseño Indians took messages. The tribal receptionist for the Rincon Band of Luiseño Indians indicated that we should contact Cheryl Madrigal for a response (which had already been done). The tribal receptionists for the following tribes indicated that we could reach them through email: John Gomez, Environmental Coordinator for the Ramona Band of Cahuilla; Joseph Hamilton, Chairperson for the Ramona Band of Cahuilla; and Lovina Redner, Tribal Chair for the Santa Rosa Band of Cahuilla Indians (which had already been done). The tribal receptionist for the Cahuilla Band of Indians, Elizabeth Ruiz, indicated that UEI should forward our original email to her. This was done the same day. There have been no further responses to date from these tribes (see Attachment C in Appendix D).

Based on the results of the records search and the onsite field survey, it is unlikely that cultural resources or tribal resources would be adversely affected by construction of the project. However, grading activities associated with development of the project would cause new subsurface disturbance and may result in the unanticipated discovery of unique historic and/or prehistoric archaeological resources. In the event of an unanticipated discovery, implementation of mitigation measures **MM CR-1** through **MM CR-7** described below would ensure that impacts on archaeological resources would be less than significant.

Mitigation Measure

MM CR 1 Archaeological Monitoring. Prior to the issuance of a grading permit, the Developer shall retain a professional archaeologist to conduct monitoring of all ground disturbing activities located on Parcel 1 of Parcel Map 38599. 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 Pechanga Band of Indians, Morongo Band of Mission Indians, the contractor, and the City, shall develop a Cultural Resources Monitoring Plan (CRMP) as defined in CR-3. The Project archeologist shall attend the pre-grading meeting with the City, the construction manager and any contractors, and Consulting Tribal representatives; and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The archaeological monitor shall have the authority to temporarily halt and redirect earth moving activities in the affected area in the event that suspected archaeological resources are unearthed.

MM CR 2 Native American Monitoring. Prior to the issuance of a grading permit(s), the Developer shall secure agreements with the Pechanga Band of Indians and Morongo Band of Mission Indians, for tribal monitoring. The Developer 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.

MM CR 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 AB52 to address the details, timing and responsibility of all archaeological and cultural activities that will occur on the project site. A consulting Tribe is defined as a Tribe that initiated the AB 52 tribal consultation process for the Project, has not opted out of the AB52 consultation process, and has completed AB 52 consultation with the City as provided for in Cal Pub Res Code Section 21080.3.2(b)(1) of AB52. Details in the Plan shall include:

h. Project description and location
i. Project grading and development scheduling;
j. Roles and responsibilities of individuals on the Project;
k. The pre-grading meeting and Cultural Resources Worker Sensitivity Training details;
l. The protocols and stipulations that the contractor, City, Consulting Tribe (s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, human remains/cremations, sacred and ceremonial items, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.
m. The type of recordation needed for inadvertent finds and the stipulations of recordation of sacred items.
n. Contact information of relevant individuals for the Project.

MM CR 4 Cultural Resource Disposition. In the event that Native American cultural resources are discovered during the course of ground disturbing activities (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries:

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 CR-3. 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 CR-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.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

MM CR 5 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 and/or Native American Tribal Representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the Project Archaeologist and the Tribal Representatives to the site to assess the significance of the find.

MM CR 6 Inadvertent Finds. If potential historic or cultural resources are uncovered during excavation or construction activities at the project site (Parcel 1 of Parcel Map 38599) that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to Project approval, all ground disturbing activities in the affected area within 100 feet of the uncovered resource must cease immediately and a qualified person meeting the Secretary of the Interior's standards (36 CFR 61), Tribal Representatives, and all site monitors per the Mitigation Measures, shall be consulted by the City to evaluate the find, and as appropriate recommend alternative measures to avoid, minimize or mitigate negative effects on the historic, or prehistoric resource. Further ground disturbance shall not resume within the area of the discovery until a treatment plan has been prepared and approved by all Consulting Parties, then work may resume after the treatment plan has been completed. 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 CR-3 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 and Consulting Tribes for their review and approval prior to implementation of the said plan.

MM CR 7 Archeology Report - Phase III and IV. Prior to final inspection, the developer/permit holder shall prompt the Project Archeologist to submit two (2) copies of the Phase III Data Recovery report (if required for the Project) and the Phase IV Cultural Resources Monitoring Report that complies with the Community Development Department's requirements for such reports. The Phase IV report shall include evidence of the required cultural/historical sensitivity training for the construction staff held during the pre-grade meeting. The Community Development Department shall review the reports to determine adequate mitigation compliance. Provided the reports are adequate, the Community Development Department shall clear this condition. Once the report(s) are determined to be adequate, two (2) copies shall be submitted to the Eastern Information Center (EIC) at the University of California Riverside (UCR) and one (1) copy shall be submitted to the Consulting Tribe(s) Cultural Resources Department(s).

Level of Significance After Mitigation

With implementation of mitigation measures **MM CR-1** through **MM CR-7** described above, the project would result in less than significant impacts to archaeological resources.

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

Response:

Less than Significant Impact with Mitigation Incorporated

As previously discussed in **Section 4.5.b** above**,** the project would be built on relatively undisturbed land that has not been previously graded and is in a suburban area. No human remains have been previously identified or recorded onsite.

The project proposes grading activities for the installation of infrastructure including water, sewer, and utility lines, and for construction of the proposed buildings. Grading would involve new subsurface disturbance and could result in the unanticipated discovery of unknown human remains, including those interred outside of formal cemeteries. In the unlikely event of an unexpected discovery, implementation of mitigation measures **CR-8** and **CR-9** would ensure that impacts related to the accidental discovery of human remains would be less than significant.

California Health and Safety Code § 7050.5 specifies the procedures to follow during the unlikely discovery of human remains. CEQA § 15064.5 describes determining the significance of impacts on archaeological and historical resources. California Public Resources Code § 5097.98 stipulates the notification process during the discovery of Native American human remains, descendants, disposition of human remains, and associated grave goods.

Mitigation Measure

MM CR 8 Human Remains. If human remains and/or cremations are discovered, no further disturbance shall occur in the affected area until the County Coroner has made necessary findings as to origin.

d. Should human remains and/or cremations be encountered on the surface or during any and all ground-disturbing activities (i.e., clearing, grubbing, tree and bush removal, grading, trenching, fence post placement and removal, construction excavation, excavation for all water supply, electrical, and irrigation lines, and landscaping phases of any kind), work in the immediate vicinity of the discovery shall immediately stop within a 100-foot perimeter of the discovery. The area shall be protected; project personnel/observers will be restricted. The County Coroner is to be contacted within 24 hours of discovery. The County Coroner has 48 hours to make his/her determination pursuant to State and Safety Code §7050.5. and Public Resources Code (PRC) § 5097.98.

e. In the event that the human remains and/or cremations are identified as Native American, the Coroner shall notify the Native American Heritage Commission within 24 hours of determination pursuant to subdivision (c) of HSC §7050.5.

f. The Native American Heritage Commission shall immediately notify the person or persons it believes to be the Most Likely Descendant (MLD). The MLD has 48 hours, upon being granted access to the Project site, to inspect the site of discovery and make his/her recommendation for final treatment and disposition, with appropriate dignity, of the remains and all associated grave goods pursuant to PRC §5097.98

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

MM CR 9 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).

Level of Significance After Mitigation

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
With adherence to applicable codes and regulations protecting cultural resources and with implementation of mitigation measures **MM CR-8** and **MM CR-9** described above, the proposed project would result in less than significant impacts to human remains.				
MMVI. ENERGY – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐

Response:

Less than Significant Impact

According to CEQA Guidelines § 15126.2(d), "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified." Therefore, the purpose of this analysis is to identify any significant irreversible environmental effects of project implementation that cannot be avoided.

Construction Impact Analysis

The following forms of energy are anticipated to be expended during project construction:

- Diesel fuel for off-road equipment (gallons).
- Electricity to deliver water for use in dust control (kilowatt-hours [kWh]).
- Motor vehicle fuel for worker commuting, materials delivery and waste disposal (gallons).

Transportation Energy

Project construction would consume energy in the form of petroleum-based fuels associated with the use of offroad construction vehicles and equipment on the project site, construction workers' travel to and from the project site, and delivery and haul truck trips hauling solid waste from and delivering building materials to the project site.

During project construction, trucks and construction equipment would be required to comply with the ARB's anti-idling regulations. ARB's In-Use Off-Road Diesel Fueled Fleets regulation would also apply. Vehicles driven to or from the project site (delivery trucks, construction employee vehicles, etc.) are subject to fuel efficiency standards established by the federal government. Therefore, project construction activities regarding fuel use would not result in wasteful, inefficient, or unnecessary use of energy.

Electricity

Electricity would be supplied to the project site by Moreno Valley Electric Utility (MVU) and would be obtained from the existing electrical lines in the vicinity of the project site. Construction of the project's electrical infrastructure is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

During project construction, energy would be consumed in the form of electricity associated with the conveyance and treatment of water used for dust control and, on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. Due to the fact that electricity usage associated with lighting and construction equipment that utilizes electricity is not easily quantifiable or readily available, the estimated electricity usage during project construction is speculative. Lighting used during project construction would comply with Title 24 standards and requirements (such as wattage limitations). This compliance would ensure that electricity use during project construction would not result in the wasteful, inefficient, or unnecessary use of energy. Lighting would be used in compliance with applicable City of Moreno Valley Municipal Code requirements to create enough light for safety.

Natural Gas

Natural gas is supplied to the project site by Southern California Gas Company (SoCalGas). SoCalGas is the primary distributor of retail and wholesale natural gas across Southern California, including the City of Moreno Valley.

Both construction and operation of the project would lead to the consumption of limited, slowly renewable, and non-renewable resources, committing such resources to uses that future generations would be unable to reverse. The new development would require the commitment of resources that include (1) building materials, (2) fuel and operational materials/resources, and (3) the transportation of goods and people to and from the project.

Operational

Energy would be consumed during project operations related to space and water heating, water conveyance, solid waste disposal, and vehicle trips of residents and vendors. Project operation energy usage, which was estimated by the California Emissions Estimator Model (CalEEMod) as part of the air quality and greenhouse gas emissions analyses (refer to **III** and **VIII**), is shown in **Table 15**.

Table 15 - Estimated Project Operational Energy Use

Energy Type	Units	Value	Per Capita[a]
Onroad Motor Vehicle Travel (Fuel)[b]	Gallons gasoline/year	60,244	187
	Gallons diesel/year	8,615	0.35
Electricity Use	Kilowatt-hours per year	266,877	1,126
Natural Gas Use	1,000 BTU per year	968,058	4,085

[a] Based upon estimated residential population of 237; see **XIV**. The per capita value for the onroad motor vehicle fuel consumption is calculated from the fuel consumption by passenger vehicles.

[b] Onroad Motor Vehicle Fuel Consumption calculated by UltraSystems using EMFAC2021(v1.0.2) emissions inventory web platform tool and CalEEMod (2020.4.0); see Appendix B.

Natural Gas Use and Electricity Use calculated by UltraSystems with CalEEMod (2020.4.0).

The proposed project would adhere to applicable federal, state, and local requirements for energy efficiency, including Title 24 standards. The project design includes one hundred additional parking spaces with solar panel overhead structures. Additionally, there would not be any inefficient, wasteful, or unnecessary energy usage in comparison to similar development projects of this nature regarding construction-related fuel consumption. Therefore, the implementation of the proposed project would result in less than significant impacts on energy resources.

Continued use of energy resources is consistent with the anticipated growth within the city and the general vicinity and would not result in energy consumption requiring a significant increase in energy production for the energy provider. Therefore, the energy demand associated with the project would be less than significant.

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

Response:

Less than Significant Impact

The applicable state plans that address renewable energy and energy efficiency are the Title 24 Building Energy Efficiency Standards, the Title 24 California Green Building Standards Code (CALGreen), and the Renewable Portfolio Standard[7]

Title 24 Building Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6, of the California Code of Regulations) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Compliance with Title 24 will result in decrease in GHG emissions. The provisions of Title 24, Part 6 apply to all buildings for which an application for a building permit or renewal of an existing permit is required by law. They regulate design and construction of the building envelope, space-conditioning and water-heating systems, indoor and outdoor lighting systems of buildings, and signs located either indoors or outdoors. Title 24, Part 6 specifies mandatory, prescriptive and performance measures, all designed to optimize energy use in buildings and decrease overall consumption of energy to construct and operate residential and nonresidential buildings. Mandatory measures establish requirements for manufacturing, construction, and installation of certain systems, equipment, and building components that are installed in buildings.

The Title 24 standards are updated on a three-year schedule, with the most current 2022 standards adopted on August 11, 2021. In December, 2021, they were approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The Building Energy Efficiency Standards (Energy Code) apply to newly constructed buildings, additions, and alterations. They are a vital pillar of California's climate action plan. The 2022 Energy Code will produce benefits to support the state's public health, climate, and clean energy goals. It encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code. Public Resources Code §§ 25402, subdivisions (a)-(b), and 25402.1 emphasize the importance of building design and construction flexibility by requiring the CEC to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space.

Title 24 California Green Building Standards Code

The proposed project would be designed with energy-efficient features, including insulated and glazed windows and low-E coating on windows, and ENERGY STAR appliances, and will be built in compliance with the California Green Building Standards Code (Title 24, Part 11), commonly referred to as the CALGreen Code. The CALGreen Code is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics.

Renewable Portfolio Standard

California's Renewable Portfolio Standard (RPS) was established in 2002 by the California State Senate in Senate Bill (SB) 1078. The RPS promotes diversification of the state's electricity supply and decreased reliance on fossil fuel energy sources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. The RPS initial goal was to achieve a 20 percent renewable energy mix by 2020, and has been accelerated and increased by Executive Orders (EOs) S-14-08 and S-21-09 to a goal of 33 percent by 2020. In April 2011, SB 2 (1X) codified California's 33 percent RPS goal. SB 350 (2015) increased California's renewable energy mix goal to 50 percent by year 2030. SB 100 (2018) further increased the standard set by SB 350 establishing the RPS goal of 44 percent by the end of 2024, 52 percent by the end of 2027, and 60 percent by 2030. This bill also says that it is the policy of the state that eligible renewable energy resources and zero-carbon

[7] Renewable portfolio standards (RPS), also referred to as renewable electricity standards (RES), are policies designed to increase the use of renewable energy sources for electricity generation. These policies require or encourage electricity suppliers to provide their customers with a stated minimum share of electricity from eligible renewable resources.

resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045.

Moreno Valley Utility (MVU), the electricity provider for the project, is currently meeting RPS goals and is on track to achieve future RPS goals. Thus, electricity provided to the project is expected to come from renewable sources. Implementation of the project would not interfere with MVU's progress towards achieving RPS goals. Therefore, the project would not conflict with or obstruct implementation of CALGreen and the California Energy Code, or with MVU's implementation of RPS, and impacts would be less than significant.

Furthermore, MVU is a municipally-owned utility company, which provides the City with an avenue to directly influence consumer behavior through programs and incentives that encourage energy conservation. MVU runs energy efficiency programs that offer retrofits, rebates, and energy audits to residential and commercial customers.

City of Moreno Valley Energy Efficiency and Climate Action Strategy

On October 9, 2012, the Moreno Valley City Council approved the Energy Efficiency and Climate Action Strategy and the related Greenhouse Gas Analysis. The Strategy and Analysis documents identify potential programs and policies to reduce overall City energy consumption and increase the use of renewable energy. The Strategy also prioritizes implementation of programs, policies, and projects based upon energy efficiency, cost efficiency and potential resources

City of Moreno Valley Climate Action Plan

The City of Moreno Valley adopted its Climate Action Plan (CAP) in 2021, which includes community-wide strategies for reducing greenhouse gas emissions generated by transportation, industrial facilities, residential and commercial buildings, municipal activities, and off-road equipment. CAP strategies promote transportation demand management programs, enhance transit services, incentivize energy efficient upgrades and construction, streamline installation of solar panels, support urban greening, and more.

The proposed project is required to be compliant with all the applicable energy-related policies listed in the CAP and City of Moreno Valley General Plan 2040. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

Sources:

1. ARB, 2016. Changes to California's Commercial Vehicle Idling Regulation.
2. ARB, 2022. EMFAC (Emission Factor 2021 v1.0.2 webtool). California Air Resources Board.
3. CAPCOA, 2022. California Emissions Estimator Model®, Version 2020.4.0. California Air Pollution Control Officers Association. Accessed online at: http://www.aqmd.gov/caleemod/user's-guide on January 27, 2023.
4. EIA (U.S. Energy Information Administration). 2022. Renewable Portfolio Standards.
5. CEC, 2022. 2022 Building Energy Efficiency Standards (Title 24, Part 6). Adopted August 11, 2021.
6. RECON Environmental, Inc. 2021a. City of Moreno Valley Final Environmental Impact Report.
7. Dyett & Bhatia, 2021. City of Moreno Valley-Climate Action Plan. Accessed online at https://www.moval.org/cdd/documents/general-plan-update/draft-docs/ClimateActionPlan/Draft-MV-CAP.pdf, on December 7, 2022.
8. Dyett and Bhatia, 2021a. City of Moreno Valley Climate Action Plan. Accessed online at: https://moval.gov/city_hall/general-plan2040/MV-CAP.pdf accessed on December 7, 2022.

VII. GEOLOGY AND SOILS – Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the	☐	☐	☒	☐

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
State Geologist for the area or based on other substantial evidence of a known fault? Refer to https://www.conservation.ca.gov/cgs/Documents/SP_042.pdf				

Response:

The information in this section is based on the following two technical reports:

- Preliminary Geotechnical Engineering Investigation, Proposed Multi-Unit Residential Development - Located North of Alessandro Boulevard and East of Flaming Arrow Drive, in the City of Moreno Valley, California. Prepared by NorCal Engineering (NorCal). dated August 27, 2021. A complete copy of this report is included as **Appendix E1** to this IS/MND.
- Paleontological Records Search for the proposed Valley Gardens Apartments Project in the City of Moreno Valley, California. Prepared by Natural History Museum of Los Angeles County, dated September 4, 2022. A complete copy of this report is included in **Appendix D2** to this IS/MND.

Less than Significant Impact

The Alquist-Priolo Zones Special Studies Act defines active faults as those that have experienced surface displacement or movement during the last 11,000 years. As shown in **Figure 23,** the project site is not located within an Alquist-Priolo Earthquake Fault Zone. The nearest Alquist-Priolo Earthquake Fault Zone to the project site is the Claremont Fault, 4.5 miles to the northeast. As shown in **Figure 24,** the nearest regionally active fault is the San Jacinto Fault, also 4.5 miles to the northeast.

Although the project is a seismically active region of Southern California, the project would be constructed in accordance with standard engineering practices and design criteria prescribed by the current California Building Code (CBC; Title 24 California Code of Regulations [CCR]), which would reduce the significance of potential impacts of seismic and geologic hazards. The CBC also dictates detailed design requirements, structural design, soils, and foundations considerations, and regulates the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to reduce the effects of seismic shaking and adverse soil conditions. This would ensure that public safety risks are minimized due to any potential seismic shaking event. Therefore, impacts due to an Alquist-Priolo Earthquake Fault or other known active fault would be less than significant.

Figure 23 - Alquist Priolo Fault Zones

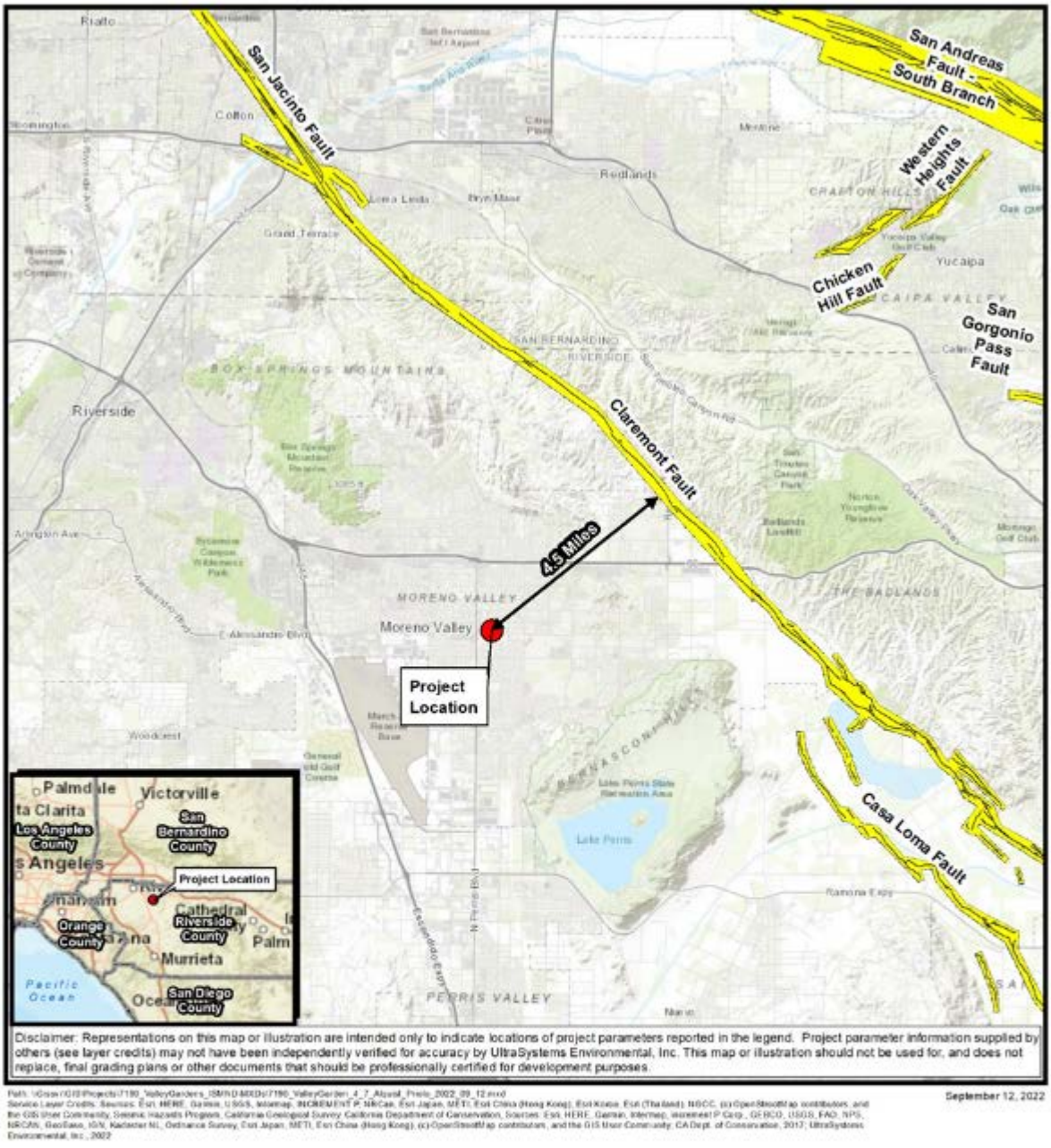
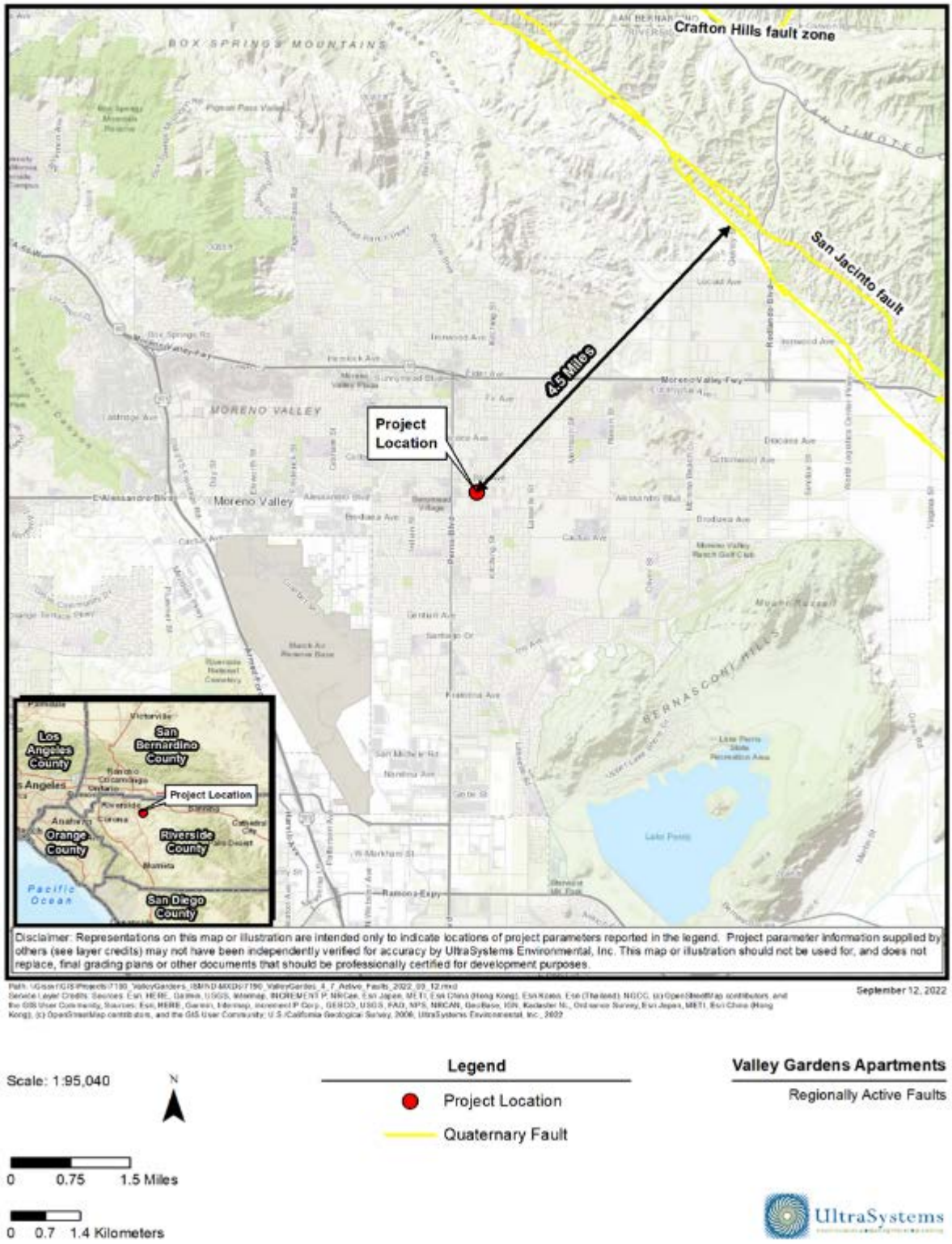


Figure 24 - Regionally Active Faults



ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Strong seismic ground shaking?	☐	☐	☒	☐

Response:

Less than Significant Impact

Seismic shaking is measured by the moment magnitude (Mw), which is the seismic moment of an earthquake, converted to a magnitude scale that roughly parallels the original Richter scale (ML). Since the Mw is not based on the same measurements as ML (local or surface-wave), the different magnitudes may vary, particularly for larger quakes. The Mw scale is based on the seismic moment and is uniformly applicable to all sizes of earthquakes. Because it associates directly with the energy released from an earthquake, it is the standard in modern seismology.

As shown in **Figures 23** and **24**, the project is located within a seismically active region of southern California, and all structures in the region are susceptible to collapse, buckling of walls, and damage to foundations from strong seismic ground shaking. The North Frontal fault system is eight miles east of the project site and has a probable Mw of 6.5 to 7.5. The proposed project would comply with applicable federal, state, and local regulations, including the current California Building Standards Code (Title 24, CCR), which would minimize the potential risks associated with strong seismic ground shaking. Therefore, impacts would be less than significant.

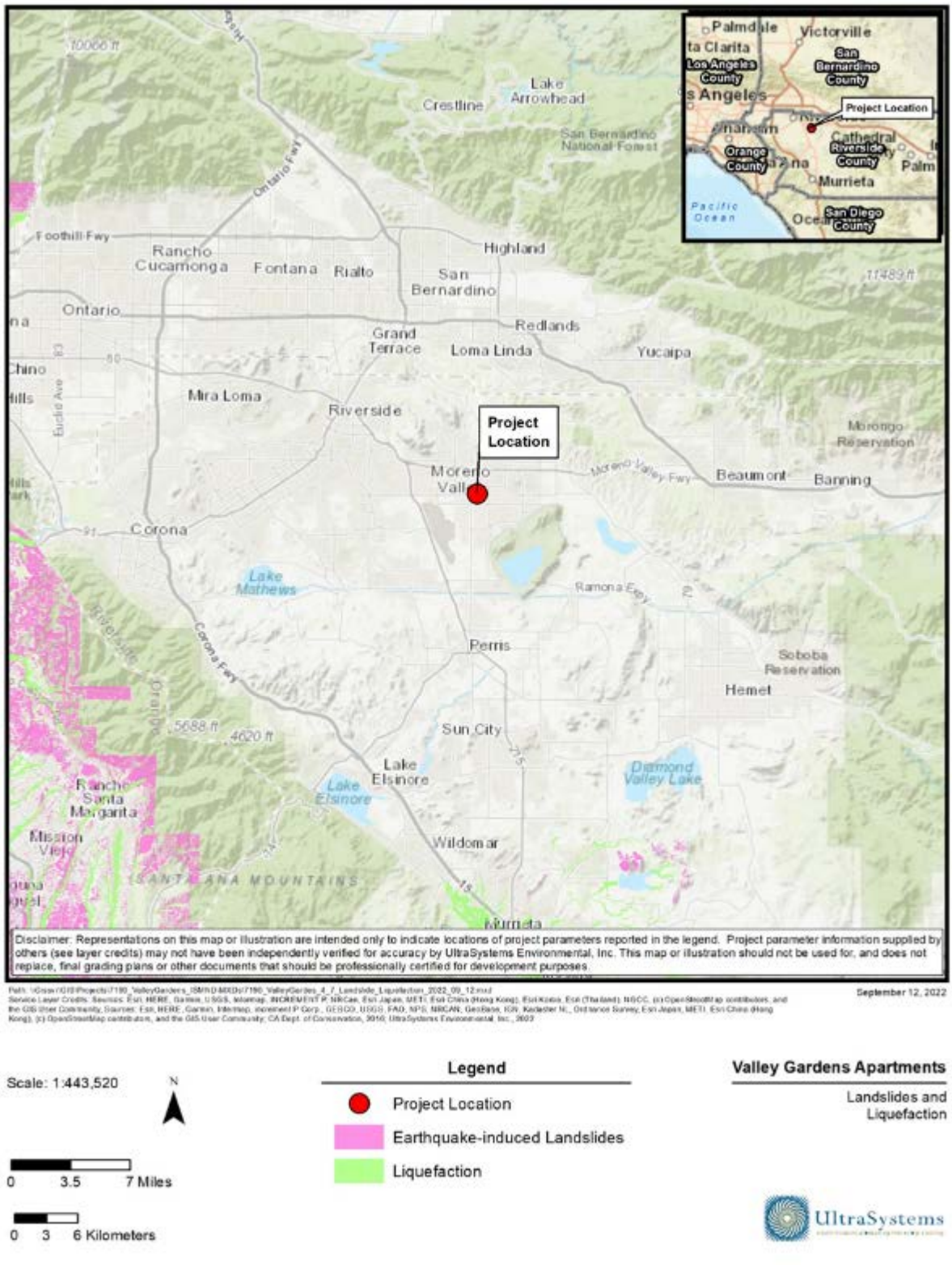
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒

Response:

No Impact

Liquefaction takes place when loosely packed, water-logged sediments at or near the ground surface lose their strength in response to strong ground shaking. Liquefaction occurring beneath buildings and other structures can cause major damage during earthquakes. Liquefaction typically occurs when saturated or partially saturated soils behave like a liquid, as a result of losses in strength and stiffness in response to applied stress caused by ground shaking or other sudden changes in stress conditions. The project site is not in a liquefaction zone and would not require further investigation for liquefaction (see **Figure 25**). Therefore, there would be no impact regarding liquefaction.

Figure 25 - Landslides and Liquefaction



ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
iv) Landslides?	☐	☐	☐	☒

Response:

No Impact

Landslides occur when the stability of the slope changes from a stable to an unstable condition. A change in the stability of a slope can be caused by several factors, acting together or alone. Natural causes of landslides include groundwater (pore water) pressure acting to destabilize the slope, loss of vegetative structure, erosion of the toe of a slope by rivers or ocean waves, weakening of a slope through saturation by snow melt or heavy rains, earthquakes adding loads to a barely stable slope, earthquake-caused liquefaction destabilizing slopes, and volcanic eruptions.

The topography within the project site is relatively flat with topography descending gradually from north to south on the order of a few feet. The site is currently vacant and covered in light vegetation. Additionally, the project site is not located within or adjacent to any landslide zones (see **Figure 25**). Due to the flat nature of the topography on and in the vicinity of the project site, there are no known landslides near the site, nor is the site in the path of any known or potential landslides. Therefore, the probability of slope stability hazards affecting the site is considered negligible and there would be no impact regarding landslides

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

Response:

a) Would the project result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact

Construction

Section 402 of the Federal Clean Water Act (CWA), as well as the state Porter-Cologne Water Quality Control Act (Porter-Cologne), require construction projects that may potentially result in soil erosion to implement best management practices (BMPs) to eliminate or reduce sediment and other pollutants in stormwater runoff. If one or more acres of soil would be disturbed, a National Pollutant Discharge Elimination System (NPDES) permit is required to be obtained. NPDES permits establish enforceable limits on discharges, require effluent monitoring, designate reporting requirements, and require construction and post-construction BMPs to eliminate or reduce point and non-point source discharges of pollutants, including soil.

As further in the Hydrology and Water Quality section, the project applicant would be required to obtain coverage under the Statewide General Construction Permit prior to project construction. This NPDES permit requires the Legally Responsible Person (LRP), such as the project owner, to prepare a Storm Water Pollution Prevention Plan (SWPPP) prior to ground-disturbing construction activities to identify construction BMPs to eliminate or reduce soil erosion and pollutants in stormwater and non-stormwater discharges (including soil erosion by wind) to stormwater sewer systems and other drainages. The LRP would upload Permit Registration Documents (PRDs) to the State Water Resources Control Board (SWRCB) online Stormwater Multi-Application and Report Tracking System (SMARTS). PRDs include a Notice of Intent (NOI), site map, risk assessment, SWPPP, post-construction water balance, annual fee, and signed certification statement by the LRP attesting to the validity of the information. These preventive measures during construction are intended to eliminate or reduce soil erosion. Therefore, construction-related impacts regarding soil erosion or the loss of topsoil would be less than significant.

Operation

The project site is located within an area that has generally flat topography. Impacts from soil erosion or the loss of topsoil would be less than significant because the proposed project must be designed to minimize, to the maximum extent practicable, the introduction of pollutants that may result in significant impacts generated from site runoff to the stormwater conveyance system. Additionally, the proposed project would create a much larger area of impermeable surfaces compared to the existing undeveloped land. Therefore, operation-related impacts regarding soil erosion or the loss of topsoil would be less than significant.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

Response:

Less Than Significant Impact

Landslides and Liquefaction

As described in **VII a)**, the project site is not located within a landslide or liquefaction zone (see **Figure 25**). Therefore, there would be less than significant impact regarding landslides and liquefaction.

Lateral Spreading

Seismically-induced lateral spreading involves primarily lateral movement of earth materials due to ground shaking. It differs from slope failure in that complete ground failure involving large movement does not occur due to the relatively smaller gradient of the initial ground surface. Lateral spreading is demonstrated by near-vertical cracks with predominantly horizontal movement of the soil mass involved. The topography at the project site and in the immediate vicinity of the site is gently sloping, with no significant nearby slopes or embankments and bedrock. Under these circumstances, the potential for lateral spreading at the project site is considered low. Therefore, impacts from lateral spreading would be less than significant.

Subsidence

The major cause of ground subsidence is the excessive withdrawal of groundwater. Soils with high silt or clay content are particularly susceptible to subsidence. The project site is not in an area of subsidence (USGS, 2022c). Project development would not exacerbate hazards related to ground subsidence. Therefore, no impacts related to subsidence would occur.

Collapsible Soils

Collapse occurs in saturated soils in which the space between individual particles is filled with water. This water exerts pressure on the soil particles which influences how tightly the particles themselves are pressed together. The soils lose their strength beneath buildings and other structures.

The site is not mapped within a zone of potentially liquefiable soils (refer to **Figure 4.7-3**). Additionally, the proposed project would comply with applicable federal, state, and local regulations, including the current California Building Standards Code (Title 24, CCR), which would minimize the potential risks associated with soil collapse. Therefore, impacts would be less than significant and no mitigation would be required.

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

Response:

Less than Significant Impact with Mitigation Incorporated

Expansive soils are fine-grained silts and clays which are subject to swelling and contracting. The amount of this swelling and contracting is subject to the amount of fine-grained clay materials present in the soils and the amount of moisture either introduced into or extracted from the soils. Expansive soils are divided into five categories ranging from "very low" to "very high." Expansion indices are assigned to each classification and are included in the laboratory testing section. If the expansion index of the soils on the project site is 33 as shown in Table 4.7-1, placing it in the “low” classification.

Table 16 - Maximum Density Tests

Sample	Classification	Optimum Moisture (%)	Maximum Dry Density (lbs/ft^3)	EI[1]	LL[2]	PL[3]	PI[4]	pH[5]	ER[6]	SO4[7]	Cl[8]
T3 @ 1'	Silty Sandy CLAY	10.5	128.0	33				7.0	15,320	ND[9]	111
T3 @ 5'	Silty Sandy CLAY				18	17	1				
T3 @ 10'	Silty Sandy CLAY				26	17	9				

Source: Preliminary Geotechnical Investigation. August 27, 2021.
[1]EI = Expansion Index
[2]LL = Liquid Limit
[3]PL = Plasticity Index
[4]PI = Plasticity Index
[5]pH = power of Hydrogen
[6]ER = Electrical Resistivity
[7]SO4 = Sulfate (% by weight)
[8]Cl = Chloride (ppm - mg/kg)
[9]ND = Not-Detected

Expansive soils shrink and swell with changes in soil moisture. Soil moisture may change from landscape irrigation, rainfall, and utility leakage. Repeated changes in soil volume due to water content fluctuations may compromise structure foundations. The expansion index of soil can be determined by that soil's plasticity index, which is one of the standard measures (Atterberg limits) used to indicate the plasticity characteristics of the soil; the expansion index is the range of water content in which a soil exhibits the characteristics of a plastic solid and the plastic limit is the water content that corresponds to an arbitrary limit between the plastic and semisolid states of soil. As shown in **Table 16**, the soil mapped on the project site has a plasticity index of one (at five feet) and nine (at 10 feet) on the site; when the plasticity index is less than five, contact is entirely elastic.

The proposed project is located in an area of expansive clay soils and may be subject to more movement and "hairline" cracking of walls and slabs than similar projects situated on non-expansive sandy soils. The Preliminary Geotechnical Investigation (see **Appendix E1)** provided recommendations that developers and property owners may take to reduce the amount of movement over the life of the development. The measures are detailed in the Expansive Soils Guidelines within the Preliminary Geotechnical Investigation. Implementation of **MM GEO-1** would further minimize hazards from expansive soils, in accordance with the City of Moreno Valley and the CBC requirements.

Additionally, the project would be designed and constructed in accordance with the requirements of the City of Moreno Valley and the CBC, which require soil tests to be performed on sites where expansive soils may occur (CBSC 2020, § 1803.5.3) and include building foundation requirements appropriate to site-specific conditions, such as expansive soils.

Mitigation Measure

MM GEO-1 Incorporation of and compliance with the Conclusions and Recommendations detailed in the Preliminary Geotechnical Engineering Investigation. All grading operations and construction shall be conducted in conformance with the recommendations included in the geotechnical report on the project site that has been prepared by NorCal Engineering, titled Preliminary Geotechnical Engineering Investigation. Design, grading, and construction shall be performed in accordance with the requirements of the City of Moreno Valley and the California Building Code (CBC) applicable at the time of grading, appropriate local grading regulations, and the recommendations of the project geotechnical consultant as summarized in a final written report, subject to review by the City of Moreno Valley Community Development Department, or designee, prior to commencement of grading activities.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Level of Significance After Mitigation

Impacts resulting from unstable soils would be less than significant after the implementation of mitigation measure **GEO-1**, which requires the implementation of applicable recommendations from the Preliminary Geotechnical Investigation for the proposed project.

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

Response:

No Impact

The project site would connect to the City of Moreno Valley's existing sewer system; therefore, the project would not use septic tanks or alternative wastewater disposal systems. For this reason, no impacts associated with septic tanks or alternative wastewater disposal systems would occur.

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

Response:

b) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact with Mitigation Incorporated

Site exploration revealed the existing earth materials to consist of fill and natural soil. The soils encountered are described as follows:

- **Fill:** A fill soil classified as a brown, clayey SILT with some sand and occasional gravel, concrete, and rootlets was encountered across the site to a depth of 1.0 to 1.5 feet below the ground surface. These soils were noted to be soft to medium stiff and dry.
- **Natural:** An undisturbed native soil classifying as brown, silty sandy CLAY was encountered beneath the fill soils. The native soils were observed to be medium-stiff to stiff and dry to damp.

Vertebrate fossils known from the region—in the records of the Los Angeles County Natural History Museum—are listed below in **Table 17**. Project development would involve the disturbance of soil and sediment for the construction of buildings, parking lots, and other improvements. Such disturbances could damage fossils that may be present in sediments under the site. This impact could be potentially significant. In the event of an unexpected discovery, implementation of mitigation measure **GEO-2** would ensure paleontological resources or unique geologic features are not significantly affected. Impacts in this regard would be mitigated to less than significant levels, with the implementation of required mitigation measures.

Table 17 - Paleontological Records Search Results

Locality Number	Location	Formation	Taxa	Depth
LACM VP 4540	The junction of Jackrabbit Trail & Gilman Springs Road; San Jacinto Valley	Unnamed Formation (Pleistocene, gravel pit)	Horse family (Equidae)	Unknown
LACM VP 7618-7622, CIT 132, CIT 133	San Timoteo Badlands; E of Moreno & NW of Eden Hot Springs	San Timoteo Formation	Horse family (Equidae); Camel family (Camelidae)	Surface

LACM VP 1635; LACM IP 437	Soboba Indian Reservation; five miles east of San Jacinto	Unnamed Formation (Pleistocene)	Monkfish (*Squatina*), Stickleback (*Gasterosteus*); Invertebrates – insect (*Sobobapteron kirkbaye*), brachiopod (*Terebratalia hemphili*)	Unknown
LACM VP 4619	Wineville Ave, Eastvale, CA	Unnamed Formation (Pleistocene)	Mammoth (*Mammuthus*)	100 feet bgs
LACM VP 7811	W of Orchard Park, Chino Valley	Unnamed Formation (eolian, tan silt; Pleistocene)	Whip snake (*Masticophis*)	9-11 feet bgs
LACM VP 1207	The hill on the east side of the sewage disposal plant; 1 mile N-NW of Corona	Unnamed Formation (Pleistocene)	Bovidae	Unknown

Source: Los Angeles County Natural History Museum (NHMLA), 2022 (Appendix E1)
VP = Vertebrate Paleontology
IP = Invertebrate Paleontology
Bgs = below-ground surface

Mitigation Measure

MM GEO-2 Prior to the issuance of the grading permit, the applicant shall provide a letter to the City of Moreno Valley Planning Department, or designee, from a qualified paleontologist stating that the paleontologist has been retained to provide services for the project. The paleontologist shall develop, as needed, a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist on site for review and approval by the City. The PRIMP shall require that the paleontologist perform paleontological monitoring of any ground-disturbing activities within undisturbed native sediments during mass grading, site preparation, and underground utility installation. The project paleontologist may reevaluate the necessity for paleontological monitoring after 50 percent or greater of the excavations have been completed. In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered. Criteria for discard of specific fossil specimens will be made explicit. If the qualified paleontologist determines that impacts on a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous material prior to construction, monitoring work and halting construction if a significant fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage, and treatment shall be done at the Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.

Level of Significance After Mitigation

With the implementation of **MM GEO-2**, potential impacts on paleontological resources would be reduced to a less than significant level.

Sources:

1. USGS (U.S. Geological Survey), 2022a. Earthquake Glossary.
2. SCEDC (Southern California Earthquake Data Center), 2022. Significant Earthquakes and Faults: San Jacinto Fault Zone.
3. USGS (U.S. Geological Survey), 2022b. What is liquefaction?
4. NorCal (NorCal Engineering Soils and Geotechnical Consultants), 2021. Preliminary Geotechnical Investigation, Proposed Multi-Unit Residential Development

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

5. SWRCB, 2022. State Water Resources Control Board Construction Stormwater Program. Accessed online at https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html on September 23, 2022.
6. CBC, 2022. 2022 California Building Code, Title 24, § 1803.5.3. Accessed online at https://codes.iccsafe.org/s/CABC2022P1/chapter-18-soils-and-foundations/CABC2022P1-Ch18-Sec1803.5.3#:~:text=1803.5.-,3Expansive%20soil.,where%20such%20soils%20do%20exist on January 27, 2023.

VIII. GREENHOUSE GAS EMISSIONS – Would the project:

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

Response:

Background Information on Greenhouse Gas Emissions

Life on earth depends on energy coming from the sun. About half the light reaching Earth's atmosphere passes through the air and clouds to the surface, where it is absorbed and then radiated upward in the form of infrared heat. About 90% of this heat is then absorbed by carbon dioxide (CO_2) and other greenhouse gases (GHG) and radiated back toward the surface, which is warmed to a life-supporting average of 59 degrees Fahrenheit (°F).

Human activities are changing the natural greenhouse. Over the last century, the burning of fossil fuels such as coal and oil has increased the concentration of atmospheric CO_2. This happens because the coal or oil burning process combines carbon in the fuel with oxygen in the air to make CO_2. To a lesser extent, the clearing of land for agriculture, industry, and other human activities has increased concentrations of GHGs.

GHGs are defined under the California Global Warming Solutions Act of 2006 (AB 32) as CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6). Associated with each GHG species is a "global warming potential" (GWP), which is a value used to compare the abilities of different GHGs to trap heat in the atmosphere. GWPs are based on the heat-absorbing ability of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years). The GWPs of CH_4 and N_2O are 25 and 298, respectively. "Carbon dioxide equivalent" (CO_2e) emissions are calculated by weighting each GHG compound's emissions by its GWP and then summing the products. HFCs, PFCs, and SF_6 would not be emitted in significant amounts by Valley Gardens Apartments Project (project) sources, so they are not discussed further.

Carbon Dioxide (CO_2) is a colorless, odorless gas consisting of molecules made up of two oxygen atoms and one carbon atom. CO_2 is produced when an organic carbon compound (such as wood) or fossilized organic matter (such as coal, oil, or natural gas) is burned in the presence of oxygen. Since the industrial revolution began in the mid-1700s, industrial activities have increased in scale and distribution. Prior to the industrial revolution, CO_2 concentrations were stable at a range of 275 to 285 parts per million (ppm). The National Oceanic and Atmospheric Administration's Earth System Research Laboratory indicates that global concentration of CO_2 was 414.57 ppm in September 2022. These concentrations of CO_2 exceed by far the natural range over the last 650,000 years (180 to 300 ppm) as determined from ice cores.

Methane (CH_4) is a colorless, odorless non-toxic gas consisting of molecules made up of four hydrogen atoms and one carbon atom. CH_4 is combustible, and is the main constituent of natural gas, a fossil fuel. CH_4 is released when organic matter decomposes in low oxygen environments. Natural sources include wetlands, swamps and marshes, termites, and oceans. Anthropogenic sources include the mining of fossil fuels and transportation of natural gas, digestive processes in ruminant animals such as cattle, rice paddies, and the buried waste in landfills. Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH_4. Other anthropogenic sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide (N_2O) is a colorless, non-flammable gas with a sweetish odor, commonly known as "laughing gas," and sometimes used as an anesthetic. N_2O is naturally produced in the oceans and in rainforests. Manmade sources of N_2O include the use of fertilizers in agriculture, nylon and nitric acid production, cars with catalytic converters and the burning of organic matter. Concentrations of N_2O also began to rise at the beginning of the industrial revolution.

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically un-reactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source but were first synthesized in 1928. They were used for refrigerants, aerosol propellants, and cleaning solvents. Because of the discovery that they can destroy stratospheric ozone, an ongoing global effort to halt their production was undertaken and has been extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years. The project is not expected to emit any CFCs.

Hydrofluorocarbons (HFCs) are synthesized chemicals that are used as a substitute for CFCs. Out of all the GHGs, HFCs are one of three groups with the highest GWP. HFCs are synthesized for applications such as automobile air conditioners and refrigerants. The project is not expected to emit any HFCs.

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface can destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture. The project is not expected to emit any PFCs.

Sulfur Hexafluoride (SF_6) is an extremely potent greenhouse gas. SF_6 is very persistent, with an atmospheric lifetime of more than a thousand years. Thus, a relatively small amount of SF_6 can have a significant long-term impact on global climate change. SF_6 is human-made, and the primary user of SF_6 is the electric power industry. Because of its inertness and dielectric properties, it is the industry's preferred gas for electrical insulation, current interruption, and arc quenching (to prevent fires) in the transmission and distribution of electricity. SF_6 is used extensively in high voltage circuit breakers and switchgear, and in the magnesium metal casting industry. The project is not expected to emit SF_6.

Regulatory Setting

GHGs are regulated at the national, state, and air basin level; each agency has a different degree of control. The United States Environmental Protection Agency (USEPA) regulates at the national level; the California Air Resources Board (ARB) regulates at the state level; and the South Coast Air Quality Management District (SCAQMD) regulates at the air basin level in the Valley Gardens Apartments project area.

Federal Regulations

The USEPA collects several types of GHG emissions data. These data help policy makers, businesses, and the USEPA track GHG emissions trends and identify opportunities for reducing emissions and increasing efficiency. The USEPA has been maintaining a national inventory of GHG emissions since 1990 and in 2009 established mandatory reporting of GHG emissions from large GHG emissions sources. EPA is also getting GHG reductions through partnerships and initiatives, evaluating policy options, costs, and benefits, advancing the science, partnering internationally and with states, localities, and tribe, and helping communities adapt.

Corporate Average Fuel Economy (CAFE) Standards

In May 2010, the USEPA finalized the first-ever national GHG emissions standards under the Clean Air Act, and the National Highway Traffic Safety Administration (NHTSA) finalized Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. The 2010 CAFE standards were for model year 2012 through 2016 light-duty vehicles. In April 2020, NHTSA and USEPA amended the CAFE and GHG emissions standards for passenger cars and light trucks and established new less stringent standards, covering model years 2021 through 2026.

Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule

On September 27, 2019, the USEPA and the NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program, revoked California's authority to set its own GHG emissions standards and set zero emission vehicle (ZEV) mandates in California. The loss of the ZEV sales requirements would likely result in additional gasoline-fueled vehicles being sold in the State and criteria emissions increasing. On April 30, 2020, USEPA and NHTSA issued the Final SAFE Rule, which relaxed the federal GHG emissions and CAFE standards and would probably have resulted in increased CO_2 emissions. However, this regulation was repealed on December 21, 2021 by the Biden administration.

State Regulations

Executive Order S 3-05

On June 1, 2005, the governor issued EO S 3-05, which set the following GHG emission reduction targets:

- By 2010, reduce GHG emissions to 2000 levels;

- By 2020, reduce GHG emissions to 1990 levels;
- By 2050, reduce GHG emissions to 80% below 1990 levels.

To meet these targets, the Climate Action Team (CAT)[8] prepared a report to the Governor in 2006 that contained recommendations and strategies to help ensure that the targets in EO S-3-05 are met.

Assembly Bill 32 (AB 32)

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006, also known as AB 32. AB 32 focuses on reducing GHG emissions in California. GHGs, as defined under AB 32, include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. AB 32 required that GHGs emitted in California be reduced to 1990 levels by the year 2020. The ARB is the state agency charged with monitoring and regulating sources of emissions of GHGs that cause global warming. AB 32 also required that by January 1, 2008, the ARB determine what the statewide GHG emissions level was in 1990, and it must approve a statewide GHG emissions limit, so it may be applied to the 2020 benchmark. The ARB approved a 1990 GHG emissions level of 427 million metric tons of CO_2e ($MMTCO_2e$), on December 6, 2007, in its Staff Report. Therefore, in 2020, emissions in California were required to be at or below 427 $MMTCO_2e$.

Under the "business as usual or (BAU)" scenario established in 2008, statewide emissions were increasing at a rate of approximately one percent per year as noted below. It was estimated that the 2020 estimated BAU of 596 $MMTCO_2e$ would have required a 28 percent reduction to reach the 1990 level of 427 $MMTCO_2e$.

Climate Change Scoping Plan

The first AB 32 Scoping Plan contained the main strategies to achieve the 2020 emissions cap. The plan was developed by the ARB with input from the Climate Action Team and proposed a comprehensive set of actions designed to reduce overall carbon emissions in California, improve the environment, reduce oil dependency, diversify energy sources, and enhance public health while creating new jobs and improving the state's economy. The GHG reduction strategies contained in the AB 32 Scoping Plan included direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system.

In May 2014, the ARB adopted the First Update to the AB 32 Scoping Plan. This update identified the next steps for California's leadership on climate change. It described progress made to meet the near-term objectives of AB 32 and defined California's climate change priorities and activities for the next several years. It also framed activities and issues facing the state as it develops an integrated framework for achieving both air quality and climate goals in California beyond 2020.

In the original AB 32 Scoping Plan, the ARB approved a total statewide GHG 1990 emissions level and 2020 emissions limit of 427 million metric tons (MT) of CO2e. As part of the update, the ARB revised the 2020 Statewide limit to 431 million MT of CO2e, an approximately one percent increase from the original estimate. The 2020 business as usual forecast in the update is 509 million MT of CO2e. The state would need to reduce those emissions by 15.3 percent to meet the 431 million MT of CO2e 2020 limit.

In November 2017, the ARB published the 2017 AB 32 Scoping Plan, which built upon the former AB 32 Scoping Plan and Updates by outlining priorities and recommendations for the state to achieve its 2030 GHG target of a 40 percent reduction in GHGs by 2030, compared to 1990 levels. The major elements of the framework proposed are: enhancement of the Renewables Portfolio Standard (RPS) and the Low Carbon Fuel Standard (LCFS); a Mobile Source Strategy, Sustainable Freight Action Plan, Short Lived Climate Pollutant Reduction Strategy, Sustainable Communities Strategies, and a Post 2020 Cap and Trade Program; a 20 percent reduction in GHG emissions from the refinery sector; and an Integrated Natural and Working Lands Action Plan.

In November 2022, the ARB circulated its Final 2022 Scoping Plan Update, which adds upon carbon neutrality to the former Scoping Plan. It identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 or earlier. Through the lens of carbon neutrality, the plan expands the scope to more meaningfully consider how our natural and working lands (NWL) contribute to our long-term climate goal. The draft environmental analysis was recirculated in July 2022.

[8] The Climate Action Team (CAT) members are state agency secretaries and the heads of agencies, boards, and departments, led by the Secretary of the California Environmental Protection Agency (Cal/EPA). They coordinate statewide efforts to implement global warming emission reduction programs and the state's Climate Adaptation Strategy.

Renewables Portfolio Standard (Scoping Action E-3)

The CEC estimates that in 2000 about 12% of California's retail electric load was met with renewable resources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. California's current RPS is intended to increase that share to 33% by 2020. Increased use of renewables will decrease California's reliance on fossil fuels, thus reducing emissions of GHGs from the electricity sector. Most recently, Governor Brown signed into legislation Senate Bill (SB) 350 in October 2015, which requires retail sellers and publicly-owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030.

Senate Bill 375 (SB 375)

Senate Bill (SB) 375 passed the Senate on August 30, 2008, and was signed by the Governor on September 30, 2008. Per SB 375, the transportation sector is the largest contributor of GHG emissions and contributes approximately 45 percent of the GHG emissions in California, with automobiles and light trucks alone contributing almost 30 percent. SB 375 indicates that GHGs from automobiles and light trucks can be reduced by new vehicle technology. However, significant reductions from changed land use patterns and improved transportation also are necessary. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Executive Order B-30-15

On April 29, 2015, the Governor issued EO B-30-15, which added an interim target of GHG emissions reductions to help ensure that the State meets its 80 percent reduction by 2050, as set in EO S-3-05. The interim target is to reduce GHG emissions by 40 percent by 2030. It also directs State agencies to update the Scoping Plan, update the Adaptation Strategy every three years, and take climate change into account in their planning and investment strategies. Additionally, it requires the State's Five-Year Infrastructure Plan to take current and future climate change impacts into account in all infrastructure projects.

Title 24

Although not originally intended to reduce GHGs, California Code of Regulations Title 24 Part 6: California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The standards are updated every three years to allow consideration and possible incorporation of new energy efficient technologies and methods. The 2022 Energy Code, adopted August 11, 2021 by the CEC and approved by the California Building Standards Commission in December 2021, will take effect for all buildings whose permit applications are applied for on or after January 1, 2023.

Local Regulations

City of Moreno Valley's Climate Action Plan

The Moreno Valley Climate Action Plan (CAP) is designed to reinforce the City's commitment to reducing GHG emissions, and to demonstrate how the City will comply with the State of California's GHG emission reduction standards. The CAP includes:

- An inventory of the city's GHG emissions.
- Forecasts of future GHG emissions.
- Measures to reduce GHG emissions consistent with State requirements.
- Monitoring and reporting processes to ensure targets are me.t

State-Mandated Local GHG Emissions Targets and Guidelines

The CAP reflects guidelines established in the 2017 Scoping Plan prepared by the California Air Resources Board (CARB). The Scoping Plan, designed to implement the State's not-to-exceed GHG emission targets set in Executive Order S-3-15 and Senate Bill 32, recommends that local governments target six metric tons carbon dioxide equivalent ($MTCO_2e$) per capita per year in 2030 and two $MTCO_2e$ per capita per year in 2050 in their CAPs. The proposed 2040 target of four $MTCO_2e$ per capita per year is determined using a linear trajectory in emissions reduction between 2030 and 2050.

The total emissions are projected to increase from 866,410 $MTCO_2e$ per year in 2018 to 1,411,346 $MTCO_2e$ per year in 2040 (an increase of 63 percent). Therefore, the future emissions depicted in **Table 18** present how GHG emissions may increase in Moreno Valley.

Table 18 - GHG Emissions Forecast and Targets (MTCO2e per year)

Year	GHG Emissions ($MTCO_2e$)	Per Capita Emissions ($MTCO_2e$ per capita)	GHG Emissions Target ($MTCO_2e$ per capita)
2018	866,410	4.17	-
2030	-	-	6.0
2040 BAU	1,411,346	5.50	4.0
2050	-	-	2.0

Source: Dyett & Bhatia, 2021

Thresholds of Significance

Neither the SCAQMD nor the State CEQA Guidelines Amendments has adopted specific quantitative thresholds of significance for addressing a project's GHG emissions. Nonetheless, § 15064.4 of the CEQA Guidelines serves to assist lead agencies in determining the significance of the impacts of GHGs. As required in § 15064.4 of the CEQA Guidelines, this analysis includes an impact determination based on the following: (1) an estimate of the amount of GHG emissions resulting from the project; (2) a qualitative analysis or performance based standards; (3) a quantification of the extent to which the project increases GHG emissions as compared to the existing environmental setting; and (4) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Less than Significant Impact

Methodology

GHG emissions would come from both construction and operation of the proposed project. Construction of the project would result in temporary emissions of GHGs from fuel combustion by onsite construction equipment and by onroad vehicle traffic (i.e., worker commute and delivery truck trips). Operational direct GHG emissions would come from onroad mobile sources and onsite area sources, such as landscaping. Indirect GHG emissions would come from energy use, water supply, wastewater, and solid waste.[9] A detailed summary of the assumptions and the model data used to estimate the project's potential GHG emissions is provided in **Appendix F**.

Short-term GHG emissions are those construction emissions that do not recur over the life of the project. The major construction phases included in this analysis are grading, building construction, paving, and architectural coating. Emissions are from offroad construction equipment and onroad travel, such as worker commuting; vendor deliveries; and truck hauling of soil, building materials and construction and demolition waste.

Other GHG emissions would occur continually after buildout. GHGs are emitted from buildings because of activities for which electricity and natural gas are typically used as energy sources. Combustion of carbon-based fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions. The project's primary direct source of annual GHG emissions will be onroad mobile sources. GHGs are also emitted during the generation of electricity from fossil fuels; when produced offsite, these emissions are indirectly associated with the project. Indirect GHG emissions also result from the production of electricity used to convey, treat, and distribute water and wastewater. A final indirect GHG emission source is decomposition of organic waste that is generated by the project and transported to landfills.

Criteria pollutant emissions from the Valley Gardens Apartments project's onsite and offsite project construction activities were calculated using CalEEMod, Version 2020.4.0, which was described in **Section III**. The results of this analysis are presented in **Table 19**. The annual GHG emissions from the project construction activities would be 157.44 metric tons in 2023 and 260.9 metric tons in 2024. The total construction GHG emissions would be **418.34 metric tons**. Consistent with SCAQMD recommendations and to ensure that construction emissions are assessed in a quantitative sense,

[9] Indirect emission sources are those for which the project is responsible, but which are not located at the project site.

construction GHG emissions have been amortized over a 30-year period. The amortized value, **13.9 MTCO$_2$e**, has been added to the project's annual operational GHG emissions. (See below.) Modeling results are in **Appendix B.** For each construction year, annual GHG emissions would be far below the threshold of 3,000 MT of CO_2e per year and therefore would be less than significant. No mitigation is necessary.

Table 19 - Project Construction Related GHG Emissions

Year/Phase	Annual Emissions (MT)			
	CO_2	CH_4	N_2O	CO_2e
2023	156.19	0.036	0.00114	157.44
2024	258.89	0.053	0.00227	260.90
Total	**415.08**	**0.09**	**0.00**	**418.34**

Source: Calculated by UltraSystems with CalEEMod (Version 2020.4.0) (CAPCOA, 2021).

Operational GHG Emissions

The operational GHG emissions calculated by CalEEMod Version 2020.4.0 are shown in **Table 20**. Total annual unmitigated emissions from the project including the amortized construction emissions would be **682.9 MTCO$_2$e per year**. Energy production and mobile sources account for about 93 percent of these emissions.[10]

Table 20 - Project Operational GHG Emissions

Emissions Source	Estimated Project Generated CO_2e Emissions (Metric Tons per Year)
Area Sources	1.10
Energy Demand (Electricity & Natural Gas)	99.54
Mobile (Motor Vehicles)	532.99
Solid Waste Generation	14.81
Water Demand	20.56
Construction Emissions[a]	13.9
Total	**682.9**

[a] *Total construction GHG emissions were amortized over 30 years and added to those resulting from the operation of the project.*

Source: Calculated by UltraSystems with CalEEMod (Version 2020.4.0) (CAPCOA, 2021).

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

Response:

[10] Calculations are provided in **Appendix B**.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Less than Significant Impact

The City of Moreno Valley's CAP is designed to reinforce the City's commitment to reducing greenhouse gas (GHG) emissions and demonstrate how the City will comply with State of California's GHG emission reduction standards.

The City of Moreno Valley will periodically monitor and report on CAP implementation activities, for example, every five years thereafter. The monitoring report will include implementation status of each action and progress towards achieving the performance targets of the corresponding emissions reduction measure. The monitoring report will also include information on the status of the federal, state, regional, and local level emissions reduction strategies identified in Chapter 1 of the CAP. As was demonstrated in **XI**, the proposed project would have no impacts in relation to consistency with local land use plans, policies, or regulations. Therefore, the project would not hinder the GHG emission reductions of the General Plan Update.

Sources:

1. NASA, 2022. Global Climate Change: Vital Signs of the Planet. National Air and Space Administration.
2. GMI, 2022. What is a Global Warming Potential? And Which One Do I Use? GHG Management Institute.
3. IPCC, 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. 2007.
4. ESRL, 2022. Recent Global Monthly Mean CO2. Trends in Atmospheric Carbon Dioxide. Earth System Research Laboratory. National Oceanic and Atmospheric Administration.
5. USEPA, 2022g. Final Rule for Model Year 2012 - 2016 Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards.
6. ARB, 2020. Zero-Emission Vehicle Program
7. NHTSA (National Highway Traffic Safety Administration), 2021. Corporate Average Fuel Economy (CAFE) Preemption.
8. ARB, 2008. Climate Change Scoping Plan: a framework for change. California Air Resources Board.
9. ARB, 2014. First Update to the Climate Change Scoping Plan, Building on the Framework. California Air Resources Board.
10. ARB, 2017. California's 2017 Climate Change Scoping Plan. California Air Resources Board.
11. ARB, 2022c. Final 2022 Scoping Plan Update and Appendices.
12. Dyett & Bhatia, 2021. City of Moreno Valley-Climate Action Plan. Accessed online at https://www.moval.org/cdd/documents/general-plan-update/draft-docs/ClimateActionPlan/Draft-MV-CAP.pdf, on December 7, 2022.
13. CAPCOA (California Air Pollution Control Officers Association), 2021. California Emissions Estimator Model (CalEEMod) Version 2020.4.0. Prepared for the California Air Pollution Control Officers Association, in collaboration with South Coast Air Quality Management District and the California Air Districts.

IX. HAZARDS AND HAZARDOUS MATERIALS – Would the project:

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

Response:

The analysis in this section is based in part upon the Phase I Environmental Site Assessment (Phase I ESA) prepared by Priority One Environmental, Inc. dated July 23, 2021 (Appendix F1). The Phase I ESA presents information conducted from a site reconnaissance of the project area, historical developments of the project site, and a comprehensive database search to determine if the project site contains Recognized Environmental Conditions (RECs).

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Less than Significant Impact

The Phase I study determined that there are no recognized environmental conditions (REC) during the site reconnaissance or in records reviewed. The subject property consists of one parcel, located at 13989 Moreno Rose Place, Moreno Valley. Prior to 1956, the subject property was used as farm fields or was vacant land. In 1956, Sarah Street and Moreno Rose Place streets were developed to the east of the property along with single family homes. Currently, there are single family homes to the east, west and north of the project site. No environmental concerns were observed on the exterior grounds of the property. The subject property was listed in environmental records sources searched under the California Integrated Water Quality System (CIWQS), National Pollutant Discharge Elimination System Permits (NPDES), California Environmental Protection Agency Regulated Site Portal (CERS), Facility Index System (FINDS), Enforcement and Compliance History Online (ECHO), and Resource Conservation and Recovery Act Non – Generators (RCRA NonGen/NLR) databases.

Construction

Transportation of hazardous materials/waste is regulated by California Code of Regulations (CCR) Title 26. The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) enforce federal and state regulations and respond to hazardous materials transportation emergencies. Emergency responses are coordinated as necessary among federal, state and local governmental authorities and private persons through a state-mandated Emergency Response Plan. Due to the significant short-term risks to public health and the environment associated with hazardous waste management during transportation of wastes, specific Commercial Hazardous Waste Shipping Routes are designated with the intent of minimizing the distance that wastes are transported and the proximity to vulnerable locations.

Construction of the proposed project would involve transport, storage, and use of chemical agents, solvents, paints, and other hazardous materials commonly associated with construction activities. Chemical transport, storage, and use would comply with Resource Conservation and Recovery Act (RCRA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Occupational Safety and Health Administration (OSHA); California hazardous waste control law (California Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control); California Division of Safety and Health (DOSH); South Coast Air Quality Management District (SCAQMD); and the County of Riverside Department of Environmental Health (DEH) - Hazardous Materials Branch requirements. The construction contractor would maintain equipment and supplies onsite for containing and cleaning up small spills of hazardous materials, and in the event of a release of hazardous materials of quantity and/or toxicity that onsite workers could not safely contain and clean up, would notify the County of Riverside Department of Environmental Health Hazardous Materials Branch immediately. Therefore, compliance with applicable laws and regulations during project construction would reduce the potential for accidental releases of hazardous materials, and construction hazards impacts would be less than significant.

Operation

The proposed project would consist of: (1) utilities improvements; (2) construction of eight new residential buildings and an office/mail room building; and (3) project site driveways, parking, amenities and landscaping. The project would include 64 two- and three-bedroom units, totaling 160 bedrooms. Project operation would involve the transport, storage, use, and disposal of small amounts of hazardous materials for cleaning and landscaping purposes, such as commercial cleansers, paints, and lubricants for maintenance and upkeep of the proposed buildings and landscaping. These materials would be stored, handled, and disposed of in accordance with applicable regulations.

The proposed project would not involve the routine transport, use, or disposal of quantities of hazardous materials that may create a significant hazard to the public or environment. Therefore, hazardous materials impacts from project operation would be less than significant.

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?	☐	☐	☒	☐

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Response:

Less than Significant Impact

Construction

As mentioned above, the Phase I ESA report found no potential areas of concern/contamination on the project site. Additionally, the construction of the proposed project would adhere to applicable federal, state and local regulations in regard to the safe handling and transportation of hazardous materials during construction. The construction contractor would maintain equipment and supplies onsite for containing and cleaning up small spills of hazardous materials and would train construction workers on such containment and cleanup. In the event of a release of hazardous materials of quantity and/or toxicity that onsite construction workers could not safely contain and clean up, the project proponent would notify the County of Riverside Department of Environmental Health (DEH) - Hazardous Materials Branch immediately. Therefore, impacts would be less than significant during construction.

Prior to the commencement of site preparation, a Stormwater Pollution Prevention Plan (SWPPP) that includes Best Management Practices (BMPs) should be prepared and implemented during all construction activities. This includes good housekeeping of construction equipment, stockpiles and active construction areas, ensures that spill and leak prevention procedures are established, and that clean up kit and materials are readily available for use onsite during all construction activities. Compliance with all existing Federal, State, and local safety regulations governing the transportation, use, handling, storage, and disposal of potentially hazardous materials ensure that impacts due to temporary construction will be less than significant.

Operation

Project operation would involve the handling and storage of materials such as commercial cleansers, solvents and other janitorial or industrial-use materials, paints, and landscape fertilizers/pesticides during project operations. However, these materials would be stored, handled, and disposed of in accordance with applicable regulations and would not be stored in amounts that would create a significant hazard to the public or the environment through accidental release. The project would have a less than significant impact in this regard.

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

Response:

Less than Significant Impact

Two schools are within 0.25 mile of the project site: The Journey School is approximately 0.2 miles to the east and the Riverside County Education Academy is approximately 0.2 miles to the northwest.

The Sunnymead Montessori School and Ramona Elementary School is approximately 0.4 mile to the northwest of the project site.

Construction

During construction, the project would involve the use and handling of limited volumes of commonly used hazardous materials. Project personnel would ensure that use of hazardous materials during construction would adhere to applicable local, state, and/or federal regulations.

Project construction would not subject persons at schools to substantial hazards, and therefore impacts would be less than significant.

Operation

Project operations would involve the handling and storage of small amounts of hazardous materials such as cleansers, solvents, paints, fertilizers, and pesticides. However, these materials would be stored, handled, and disposed of in accordance with applicable regulations and would not be used or stored in amounts that would pose a hazard to persons at schools. Therefore, the project would have less than significant impacts in this regard.

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	☐	☐	☒	☐

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
result, would it create a significant hazard to the public or the environment?				

Response:

Less than Significant Impact

Government Code § 65962.5 requires the Department of Toxic Substances Control (DTSC) to compile and update, at least annually, lists of the following:
Hazardous waste and substances sites from the DTSC EnviroStor database.
Leaking Underground Storage Tank (LUST) sites by county and fiscal year in the State Water Resources Control Board (SWRCB) GeoTracker database.

Solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside waste management units.

SWRCB Cease and Desist Orders (CDOs), and Cleanup and Abatement Orders (CAOs).

Hazardous waste facilities subject to corrective action pursuant to § 25187.5 of the Health and Safety Code, identified by DTSC.

These lists are collectively referred to as the "Cortese List." The project site is not included on the Cortese List. No hazardous materials sites were identified on the project site. Adjacent sites were listed on multiple databases.
The Environmental Data Resources, Inc. has revealed the following findings for the project site:

- A review of the Resource Conservation and Recovery Act - Small Quantity Generator (RCRA-SQG) list, as provided by EDR, and dated 03/22/2021 has revealed that there are two RCRA-SQG sites within approximately 0.25 mile of the target property.
- A review of the Resource Conservation and Recovery Act – Very Small Quantity Generator (RCRA-VSQG) list, as provided by EDR, and dated 03/22/2021 has revealed that there is one RCRA-VSQG site within approximately 0.25 mile of the target property.
- A review of the Envirostor list, as provided by EDR, and dated 04/23/2021 has revealed that there are six Envirostor sites within approximately one mile of the target property.
- A review of the Leaking Underground Storage Tank (LUST) list, as provided by EDR, has revealed that there are six LUST sites within approximately 0.5 mile of the target property.
- A review of the Underground Storage Tank (UST) list, as provided by EDR, has revealed that there is one UST site within approximately 0.25 miles of the target property.
- A review of the Recycling Facilities in California Database (SWRCY) list, as provided by EDR, and dated 03/09/2021 has revealed that there is one SWRCY site within approximately 0.5 mile of the target property.
- A review of the proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination (SCH) list, as provided by EDR, and dated 04/23/2021 has revealed that there is one SCH site within approximately 0.25 mile of the target property.
- A review of the California Environmental Protection Agency Regulated Site Portal (CERS HAZ WASTE) list, as provided by EDR, and dated 04/19/2021 has revealed that there are four CERS HAZ WASTE sites within approximately 0.25 mile of the target property.
- A review of the Statewide Environmental Evaluation and Planning System Underground Storage Tank (SWEEPS UST) list, as provided by EDR, and dated 06/01/1994 has revealed that there is one SWEEPS UST site within approximately 0.25 mile of the target property.
- A review of the California Environmental Protection Agency Regulated Site Portal (CERS TANKS) list, as provided by EDR, and dated 04/19/2021 has revealed that there is one CERS TANKS site within approximately 0.25 mile of the target property.
- A review of the Facility Inventory Database (CA FID UST) list, as provided by EDR, and dated 10/31/1994 has revealed that there is one CA FID UST site within approximately 0.25 mile of the target property.
- A review of the Resource Conservation and Recovery Act Non - Generators (RCRA NonGen / NLR list), as provided by EDR, and dated 03/22/2021 has revealed that there are nine RCRA NonGen / NLR sites within approximately 0.25 mile of the target property.

- A review of the Facility Index System (FINDS) list, as provided by EDR, and dated 02/03/2021 has revealed that there is one FINDS site within approximately 0.001 mile of the target property.
- A review of the Enforcement and Compliance History Online (ECHO) list, as provided by EDR, and dated 04/04/2021 has revealed that there is one ECHO site within approximately 0.001 mile of the target property.
- A review of the Cortese list, as provided by EDR, and dated 03/22/2021 has revealed that there are three Cortese sites within approximately 0.5 mile of the target property.
- A review of the DRYCLEANERS list, as provided by EDR, has revealed that there are five DRYCLEANERS sites within approximately 0.25 mile of the target property.
- A review of the Historical Cortese (HIST CORTESE) list, as provided by EDR, and dated 04/01/2001 has revealed that there are two HIST CORTESE sites within approximately 0.5 mile of the target property.
- A review of the National Pollutant Discharge Elimination System Permits (NPDES) list, as provided by EDR, and dated 02/08/2021 has revealed that there is one NPDES site within approximately 0.001 mile of the target property.
- A review of the California Integrated Water Quality System (CIWQS) list, as provided by EDR, and dated 11/30/2020 has revealed that there is one CIWQS site within approximately 0.001 mile of the target property.
- A review of the California Environmental Protection Agency Regulated Site Portal (CERS) list, as provided by EDR, and dated 04/19/2021 has revealed that there is one CERS site within approximately 0.001 mile of the target property.
- A review of the EDR Historical Cleaner list, as provided by EDR, has revealed that there is one EDR Historical Cleaner site within approximately 0.125 mile of the target property.

The EDR identified 18 hazardous materials sites located within one mile of the project site. Some of these sites are included in Table 21 below. However, none of the sites listed are considered environmental concerns for the project site.

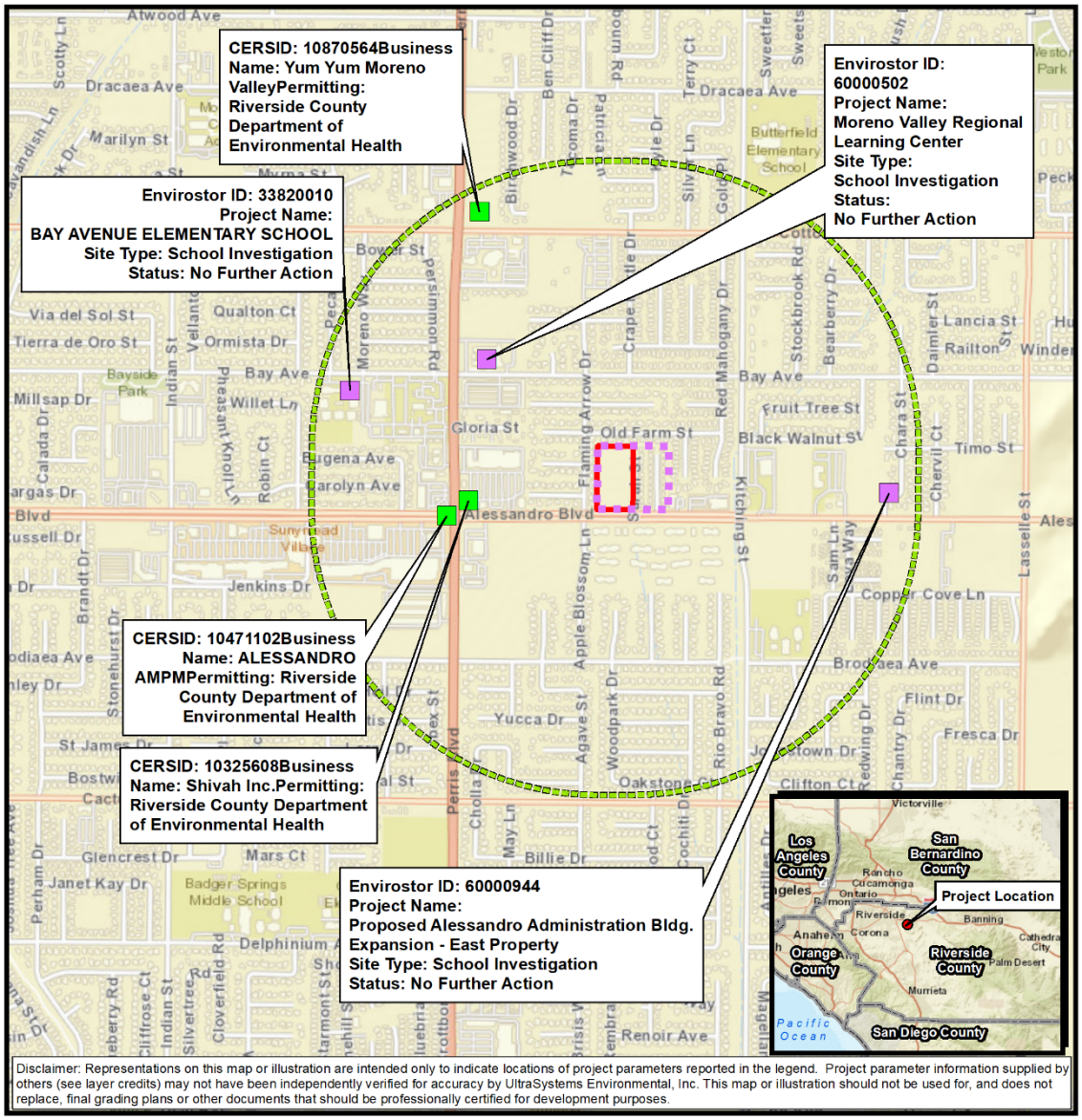
Table 21 - Selected Hazardous Materials Sites Within 1.0 Mile of The Project Site

Site Name/Address Distance and Direction from project site	Additional information
Jerelyn Ribeiro 13974 Sarah Street 0.01 mi. E	Database listed on: FINDS, ECHO, RCRA NonGen/NLR, Status: No violations found
Blue Banner Cleaners 13911 Elmwood Court 0.01 mi. E	Database listed on: EDR Historical Cleaner
Ross Stores Inc. 25070 Alessandro Boulevard 0.1 mi. W	Database listed on: RCRA NonGen/NLR Status: No violations found.
Bear Valley Cleaners 25030 Alessandro Boulevard 0.2 mi. W	Database listed on: RCRA-SQG, FINDS, ECHO, DRYCLEANERS, HWTS, HAZNET. Status: No violations found.
TOSCO 76 Gas Station 25020 Alessandro Boulevard 0.2 W	Database listed on: LUST, Cortese, CERS, HIST Cortese. Status: Completed - Case Closed

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ARCO Gas Station 24994 Alessandro Boulevard 0.3 W	Database listed on: LUST, CA FID UST, CERS, Cortese Status: Completed - Case Closed			
Source: PIE, 2021 (see Appendix F1).				

Review of the regulatory agency database report identified that most of the remaining sites that are plotted 0.25-mile or farther from the project site are situated hydraulically upgradient from the project site. Based on various factors such as distance, gradient relationship, estimated direction of groundwater flow, media impacted, and/or current regulatory status, these sites are not anticipated to have negatively impacted the environmental integrity of the project site. Therefore, impacts would be less than significant.
Figure 26 shows locations of Cortese List sites within a 0.5-mile radius of the project site.

Figure 26 - Project Cortese List Map



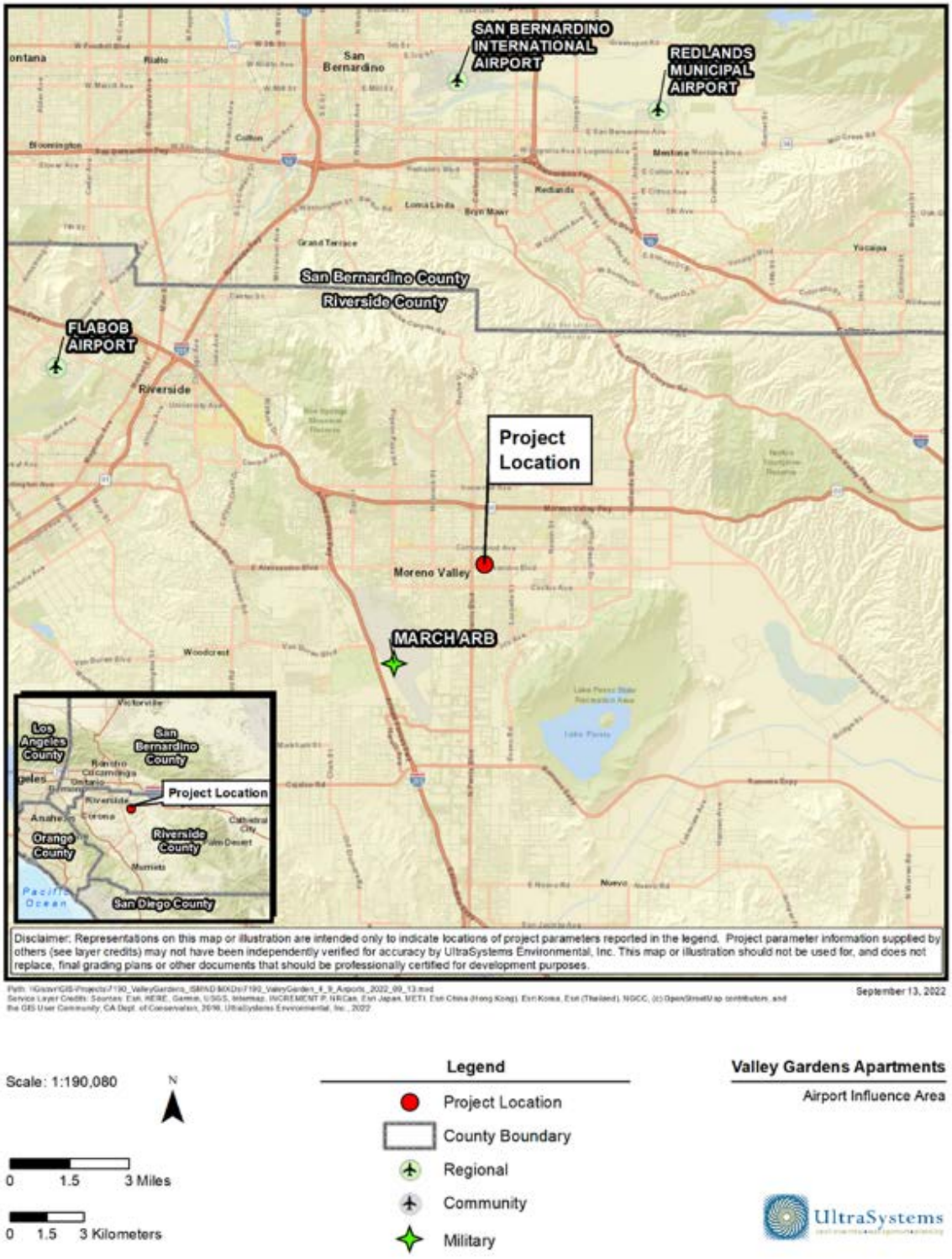
ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒

Response:

No Impact

The nearest airport is the March Air Reserve Base (March ARB) located approximately 2.6 miles southwest of the project site (see **Figure 27)**. The project site is outside of March ARB's zones where land uses are regulated to minimize aviation-related hazards to persons on the ground and outside of noise compatibility contours for the airport. Project development would not cause airport-related hazards, or excessive noise, to persons at the project site. No impact would occur and no mitigation is required. The nearest public-use airport is the Redlands Municipal Airport, located approximately 12 miles northeast of the project site.

Figure 27 - Airports in the Project Region



ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

Response:

Less than Significant Impact

Project construction could involve the temporary closure of a segment of a lane on Alessandro Boulevard, Sarah Street, or an entire segment of the roadway. Any plans for construction activity in the roadway right-of-way would require an encroachment permit from the City of Moreno Valley. The City Public Works/Engineering Department would review any encroachment permit applications to ensure that such construction did not impede emergency response to the project site or nearby properties; and did not create traffic hazards. Compliance with any conditions outlined in an encroachment permit is a condition of the permit. Impacts would be less than significant after City review and after project conformance with conditions outlined in any encroachment permit.

The project would comply with applicable City regulations, such as City's Fire Code in regard to providing adequate emergency access, as well as the California Building Standards Code. Prior to the issuance of building permits, the City of Moreno Valley would review project site plans, including location of all buildings, fences, access driveways and other features that may affect emergency access. Fire lanes would be provided for adequate emergency access. The site design for the proposed project includes access and fire lanes that would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. All onsite access and sight-distance requirements would be in accordance with City and Caltrans design requirements. The City's review process and compliance with applicable regulations and standards would ensure that adequate emergency access would be provided at the project site at all times.

The City of Moreno Valley Local Hazard Mitigation Plan (LHMP) was adopted by the City Council in 2017. The 2017 LHMP is an update to Moreno Valley's 2011 LHMP which the Moreno Valley City Council adopted on October 25, 2011 (Resolution No. 2011-102). The purpose of the City's LHMP is to provide a plan for reducing and/or eliminating risk in the City of Moreno Valley. The goals of the LHMP are to: protect life, property, and the environment; improve public awareness; protect the continuity of government; and improve emergency management preparedness, collaboration and outreach. Compliance with the City's LHMP would ensure that the project would have a less than significant impact in this regard.

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

Response:

Less than Significant Impact

The California Department of Forestry and Fire Protection (CAL FIRE) developed Fire Hazard Severity Zones (FHSZ) for State Responsibility Areas (SRA) and Local Responsibility Areas (LRA).

Very High Fire Hazard Severity Zone (VHFHSZ) designation refers to either:

a) wildland areas supporting high-to-extreme fire behavior resulting from climax fuels typified by well-developed surface fuel profiles (e.g., mature chaparral) or forested systems where crown fire is likely. Additional site elements include steep and mixed topography and climate/fire weather patterns that include seasonal extreme weather conditions of strong winds and dry fuel moistures. Burn frequency is typically high, and should be evidenced by numerous historical large fires in the area. Firebrands from both short- (<200 yards) and long-range sources are often abundant.

OR

b) developed/urban areas typically with high vegetation density (>70% cover) and associated high fuel continuity, allowing for frontal flame spread over much of the area to progress impeded by only isolated non-burnable fractions. Often where tree cover is abundant, these areas look very similar to adjacent wildland areas. Developed areas may have less vegetation cover and still be in this class when in the immediate vicinity (0.25 mile) of wildland areas zoned as Very High (see above).

The project site is not in or near a fire hazard severity zone (FHSZ) mapped by CAL FIRE within a State Responsibility Area (SRA, that is, where cities and counties are responsible for the costs of wildfire

prevention and suppression), or within a Local Responsibility Area (LRA) (see **Figure 28** and **Figure 29**, respectively). The project site is bounded on three sides by urban development; the nearest FHSZ to the site is in LRA approximately 2.1 miles to the northeast. Project development would not expose people or structures to substantial hazards from wildfire, and impacts would be less than significant.

Figure 28 - Fire Hazard Severity Zones – State Responsibility Area

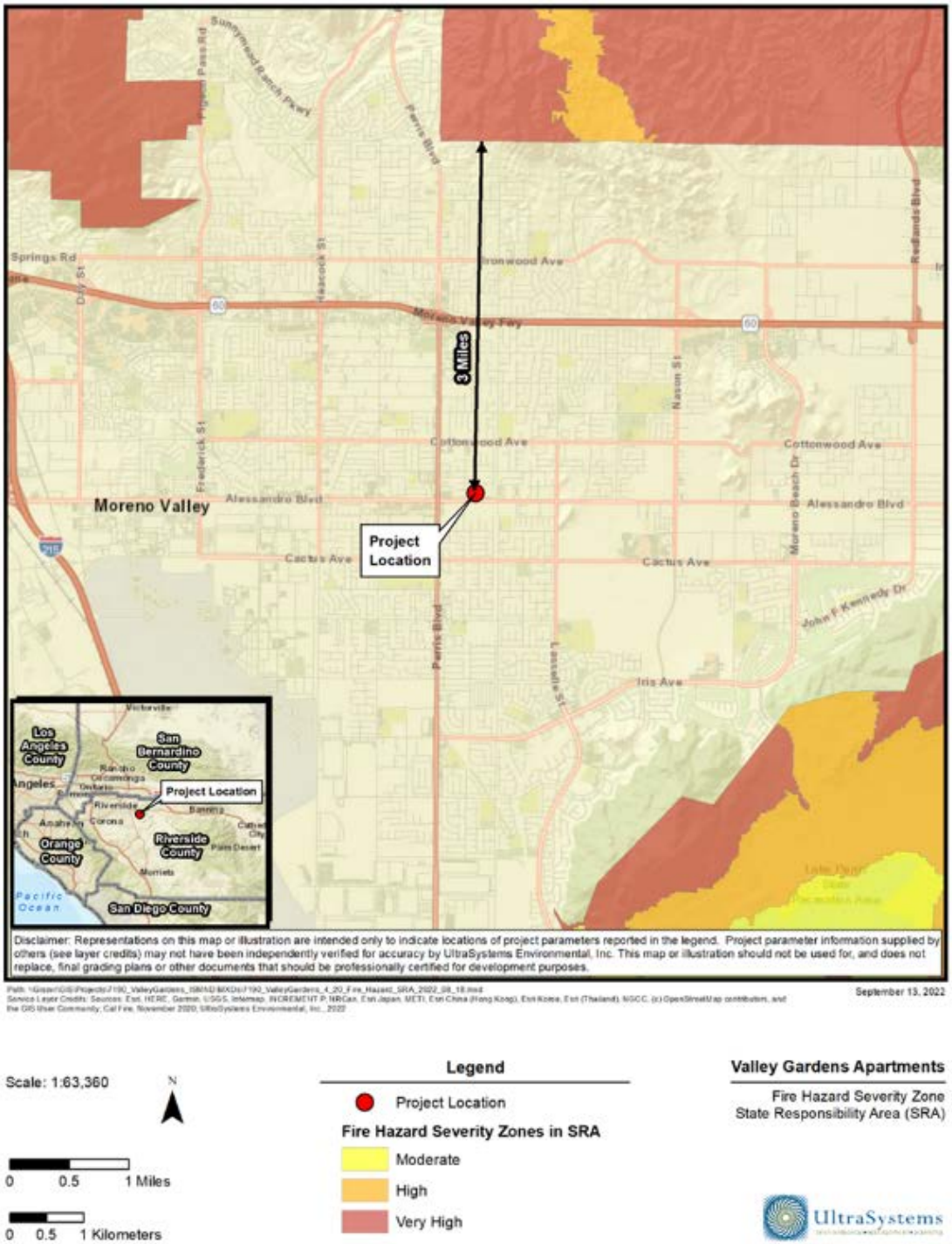
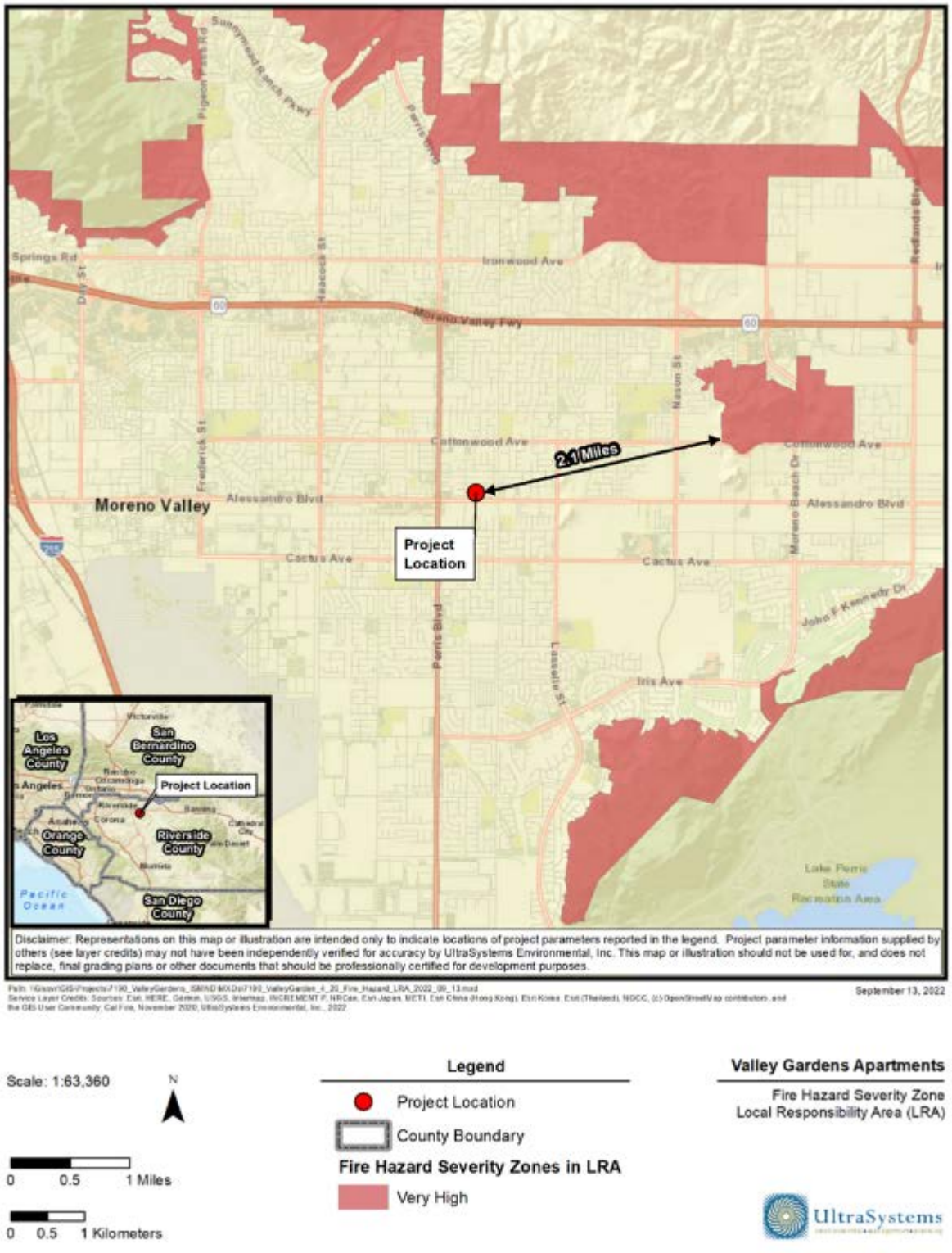


Figure 29 - Fire Hazard Severity Zones – Local Responsibility Area



ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Sources:

1. PIE, 2021. Priority One Environmental, Inc. Phase 1 Environmental Site Assessment Report, attached in Appendix F.
2. EDR, 2021. Environmental Database Reports. Sanborn Insurance Maps, Historical Aerial Photographs, and Historical Topographic Maps. Included in the Priority One Environmental's Phase 1 ESA Report – Appendix F.
3. RCLUC (Riverside County Airport Land Use Commission), 2014. March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan. Compatibility Factors Map, Exhibit MA-5, Adopted November 13, 2014.
4. City of Moreno Valley, 2017. Local Hazard Mitigation Plan. Moreno Valley High Fire Area Map, Figure 5-2. Accessed online at: https://moval.gov/departments/fire/pdf/haz-mit-plan.pdf on January 27, 2023.

X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐

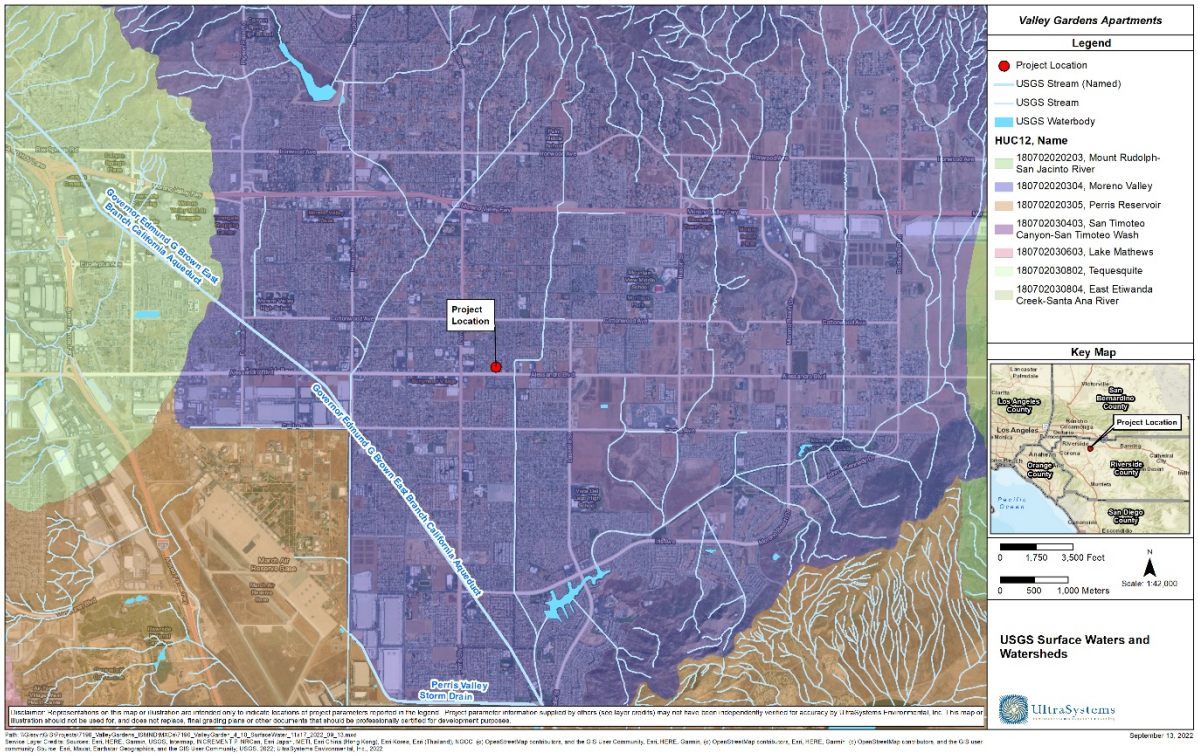
Response:

Less than Significant Impact

The California State Water Resources Control Board requires its nine Regional Water Quality Control Boards (RWQCBs) to develop water quality control plans (Basin Plans) designed to preserve and enhance water quality and protect the beneficial uses of all Regional waters. Specifically, Basin Plans designate beneficial uses for surface waters and groundwater, set narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State antidegradation policy, and describe implementation programs to protect all waters in the Regions. In addition, Basin Plans incorporate by reference all applicable State and Regional Board plans and policies, and other pertinent water quality policies and regulations. The proposed project is under the jurisdiction of the Santa Ana (Region 8) RWQCB.

As shown in **Figure 30,** the project site is located within the USGS Moreno Valley Hydrologic Unit (HU; HU Code 180702020304). The Moreno Valley HU drains an area of approximately 46 square miles. The Moreno Valley HU is within the larger Lower San Jacinto River HU (HUC 1807020203), which drains an area of approximately 364 square miles. Both HUs are contained within the larger Santa Ana watershed (HU Code 18070203; USEPA 2022).

Figure 30 – USGS Surface Waters and Watersheds



Under existing conditions, stormwater generated on the project site enters existing municipal storm drain inlets located on Alessandro Boulevard, near the southwest and southeast corners of the project site. This storm drain (Sunnymead Master Drainage Plan Line M-11) flows east into the Kitching Street Channel, which in turn discharges into the Perris Valley Channel approximately three miles south. The Perris Valley Channel is tributary to the San Jacinto River, a known water of the U.S.

Development of the project has the potential to result in two types of water quality impacts: (1) short-term impacts due to construction-related discharges; and (2) long-term impacts from operation. Temporary soil disturbance would occur during project construction, due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. Disturbed soils are susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the project area. Erosion and sedimentation affect water quality of receiving waters through interference with photosynthesis, oxygen exchange, and respiration, growth, and reproduction of aquatic species. Runoff from construction sites may include sediments and contaminants such as oils, fuels, paints, and solvents. Additionally, other pollutants such as nutrients, trace metals, and hydrocarbons can attach to sediment and be carried by stormwater into storm drains and natural drainages which discharge eventually to the Pacific Ocean.

Spills and mishandling of construction materials and waste may also potentially leave the project site and negatively impact water quality. The use of construction equipment and machinery may potentially result in contamination from petroleum products, hydraulic fluids, and heavy metals. Contamination from building preparation materials such as paints and solvents, and landscaping materials such as fertilizers, pesticides, and herbicides may also potentially degrade water quality during project construction. Trash and demolition debris may also be carried into storm drains and discharged into receiving waters.

Construction Pollutants Control

The SWRCB implements water quality regulations under the federal CWA and California Porter-Cologne Water Quality Control Act and require compliance with the National Pollutant Discharge Elimination System (NPDES) for discharges of stormwater runoff associated with a construction activity.

The project proponent is required by the California State Water Resources Control Board (SWRCB) to obtain coverage under a General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit; Order 2009 0009 DWQ, as amended) for projects which will disturb one or more acres of soil during construction. The Construction General Permit requires potential

dischargers of pollutants into waters of the U.S. to prepare a site specific Stormwater Pollution Prevention Plan (SWPPP), which establishes enforceable limits on discharges, requires effluent monitoring, designates reporting requirements, and requires construction best management practices (BMPs) to reduce or eliminate point and non-point source discharges of pollutants, including sediment, from stormwater and non-stormwater discharges. Additionally, BMPs must be maintained, inspected before and after each precipitation event, and repaired or replaced as necessary. Because the project is required by the SWRCB to comply with all applicable conditions of Construction General Permit Order 2009 0009 DWQ, potential violations of water quality standards or waste discharge requirements during project construction would be less than significant.

The SWRCB will provide Construction General Permit review and permitting for this project.

Operational Pollutant Controls

The National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporated Cities of Riverside County within the Santa Ana Region Area-Wide Urban Runoff Management Program (MS4 Program; Order No. R8-2010-0033, NPDES No. CAS 618033) regulates the discharge of pollutants into waters of the U.S. through stormwater and urban runoff conveyance systems, including flood control facilities. These conveyance systems are commonly referred to as municipal separate storm sewer systems (MS4s), or storm drains. In this context, the NPDES Permit is also referred to as an MS4 Permit.

Pursuant to the MS4 Permit, Principal Permittees (i.e., Riverside County Flood Control and Water Conservation District and the County of Riverside) and Co-Permittees (including the City of Moreno Valley) must regulate discharges of pollutants in urban runoff from man-made sources into storm water conveyance systems within their jurisdiction.

New development and redevelopment can significantly increase pollutant loads in stormwater and urban runoff, because increased population density results in proportionately higher levels of vehicle emissions, vehicle maintenance wastes, municipal sewage wastes, household hazardous wastes, fertilizers, pet waste, trash, and other pollutants. The MS4 Program requires new development and significant redevelopment projects must prepare a Water Quality Management Plan (WQMP) which incorporates post construction low impact development (LID) BMPs into project design to reduce or eliminate the quantity, and improve the quality of, stormwater being discharged from a project site.

A preliminary WQMP has been prepared for the proposed project site and is included herein as Appendix G1. The MS4 and the associated WQMP require the implementation of Low Impact Development (LID) features to ensure that most stormwater runoff is treated and retained onsite.

The project WQMP includes LID BMPs such as a combination of pervious areas, bioretention basins, and a modular wetland system to retain and treat stormwater generated on the project site by the Design Storm (Qd; 85th percentile, 24-hour storm event) for each Drainage Management Area (DMA) within the completed project. These LID BMPs are intended to minimize impervious areas, maximize infiltration capacity, and preserve the existing drainage patterns to mitigate the impacts of runoff and stormwater pollution as close to the source as possible. These facilities are highly effective at removing water pollutants such as sediment, nutrients, trash, metals, bacteria, oil and grease, and organic compounds while reducing the volume and intensity of stormwater flow leaving a site.

The project may also use structural BMPs, such as stenciling and signage for the storm drain system; specially-designed waste storage areas to reduce pollution introduction; efficient landscape design, water conservation, source control; and finish grade of landscaped areas at a minimum of one to two inches below top of curb, sidewalk, or pavement to retain water onsite. Non-structural source control BMPs may include BMP maintenance, spill contingency plan, litter/debris control program, employee training, catch basin inspection program, and vacuum sweeping of private streets and parking lots.

With implementation of construction and operational BMPs, potential impacts to water quality would be less than significant and mitigation is not proposed.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐

Response:

c) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact

The project site is in the San Jacinto Groundwater Basin (Basin ID 8-005). This basin underlies the San Jacinto, Perris, Moreno Valley, and Menifee Valleys in western Riverside County. The estimated storage capacity of this basin is 3,070,000 acre feet.

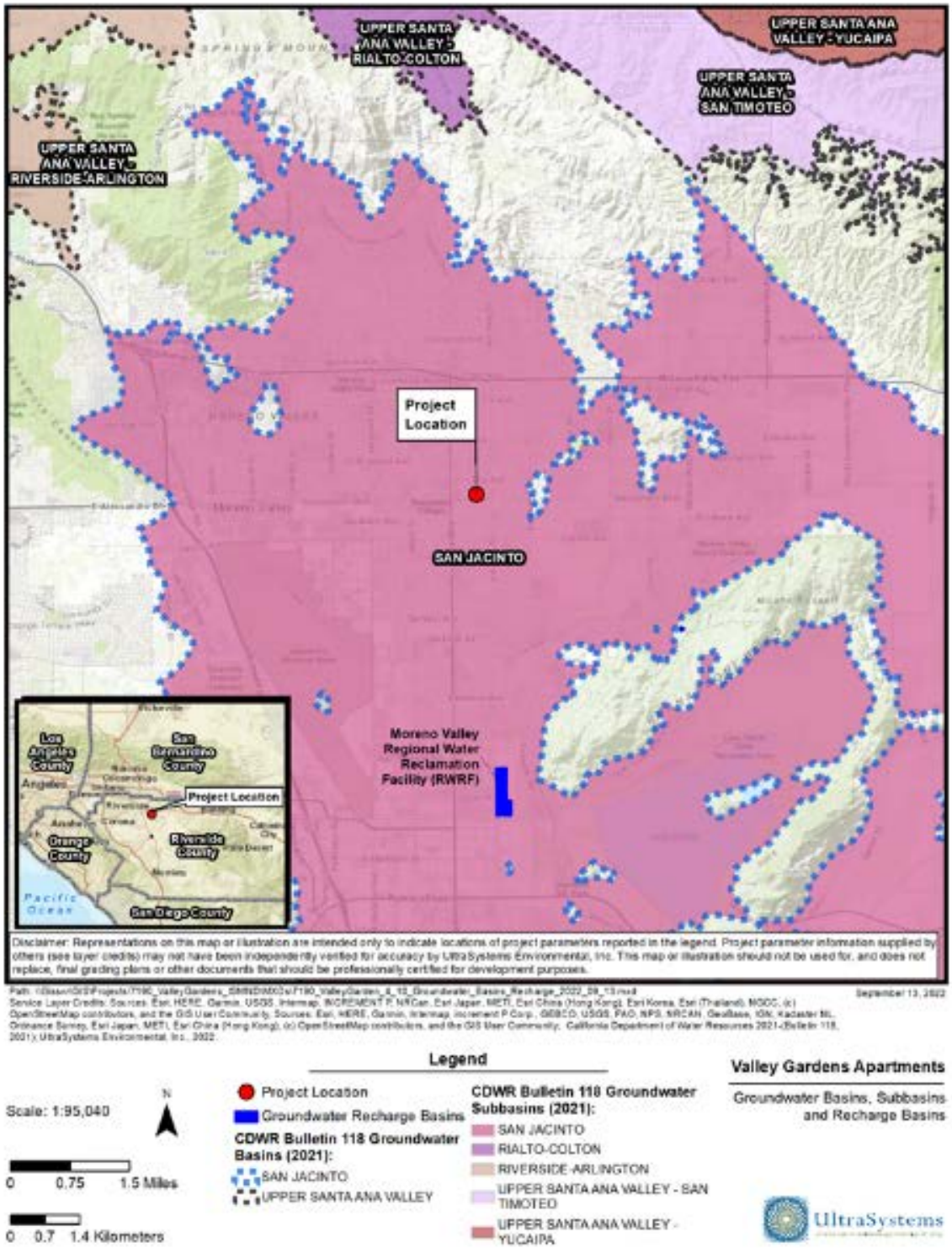
Water supplies for the project would be served by provided by the Eastern Municipal Water District (EMWD). The project does not include the installation and reliance on groundwater wells.

Approximately 20 percent of EMWD's water is supplied by EMWD groundwater wells. Most of the groundwater produced by EMWD comes from its wells in the Hemet and San Jacinto area. EMWD also has wells in the Moreno Valley, Perris Valley, and Murrieta areas. In 2017, EMWD implemented a program called Groundwater Reliability Plus (GW Plus), which includes the construction of new facilities in the San Jacinto Groundwater Basin to replenish the basin with water imported from the State Water Project during wet or average years for use during that same year, or to store for the future. The groundwater banking facilities include percolation basins, pipelines and three production wells (see **Figure 31)**.

The proposed project would be served by EMWD, whose water sources include 80 percent non-groundwater sources; additionally, EMWD runs a network of groundwater banking facilities to ensure that the Jan Jacinto Groundwater Basin is not at risk of groundwater depletion in the future.

Based on EMWD's GW Plus program, which minimizes the use of groundwater and emphasizes the use of recycled water, water banking, and other groundwater recharge facilities, the project would not substantially deplete groundwater supplies or result in a substantial net deficit in the aquifer volume or lowering of the local groundwater table. The project would have a less than significant impact in this regard and mitigation is not required.

Figure 31 – Groundwater Banking Facilities



ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐

Response:

Less Than Significant Impact

The project site is relatively flat, with elevations ranging from approximately 1,488 to 1,514 feet above mean sea level (amsl). There is no evidence of ephemeral, intermittent, or perennial drainages on the project site.

Construction

As described in **Section X a)** above, temporary soil disturbance would occur during project construction, due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. Disturbed soils are susceptible to high rates of erosion from wind and rain, resulting in erosion and sediment transport via stormwater runoff from the project area, which can increase siltation in downstream areas.

As detailed in **Section X a),** the project owner would be required to develop a SWPPP by a certified qualified SWPPP developer. The required SWPPP would be project-specific and would prescribe site-specific stormwater BMPs which would be intended to minimize or avoid having soil leave the project site, through either stormwater or wind, and thus minimize or avoid soil erosion onsite and siltation in receiving waters.

With implementation of a project-specific SWPPP, including proper maintenance and replacement of required stormwater BMPs (as necessary), potential impacts resulting in substantial erosion or siltation on- or offsite would be minimized or avoided, and impacts would be less than significant.

Operation

As detailed in **Section X a)**, the LID BMPs proposed as part of project design would minimize or avoid on- or offsite erosion and siltation by a combination of maintaining drainage patterns, installation of landscaping, and installation of LID BMPs which would prevent most erosion and prevent siltation-laden stormwater from leaving the site. Applicable regulations (e.g., the MS4 Permit) and installation of LID BMPs (e.g., site design, retention basins, modular wetlands, and pre-treatment BMPs, etc.), would limit stormwater discharges from the project and would reduce erosion and siltation during operation; therefore, impacts resulting from operation of the project would be less than significant.

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

Response: see below

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?	☐	☐	☒	☐

Response:

Less than Significant Impact

The project preliminary WQMP, included as Appendix G1 to this document, provides calculations and exhibits to estimate the values for the existing and proposed condition stormwater flows. It includes preliminary drawings illustrating the locations of proposed pervious areas, proposed bioretention basins, and the proposed modular wetland.

The preliminary Hydrology Report, included as Appendix G2 to this document, determined that the overall drainage patterns in the proposed condition are similar to the existing condition in terms of the overall drainage direction and that, due to a post-construction increase in impervious areas, the proposed site would generate more flow than under existing conditions. However, the LID BMPs (a storm drain system

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

that includes 16 vegetated bioretention basins [Areas 1 to 16] and Modular Wetland System [Area 17] proposed by the Preliminary WQMP would mitigate the post-construction increase in peak runoff from the site for the 2-, 5-, 10-, 25-, 50-, and 100-year storm events.

The proposed project would increase the amount of stormwater generated on the project site; however, the preliminary Hydrology Report concluded that, with implementation of the LID BMPs as described in the preliminary WQMP and the preliminary WQMP Site Plan, runoff of stormwater, including contaminated stormwater, from the proposed project would be mitigated.

The project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, 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. Impacts would be less than significant.

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

Response:

No Impact

The project site is located on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Riverside County, California and Incorporated Areas (Map Number 06065C0761G, effective August 28, 2008); the site is in Flood Hazard Zone X, defined on this FIRM as Areas of minimal flood hazard. The areas of minimal flood hazard, such as Zone X, are outside of the Special Flood Hazard Area (SFHA) and higher than the elevation of the 0.2-percent-annual-chance flood areas. The floodplain (i.e., flood hazard zone) nearest to the project site is the 100-year floodplain associated with Kitching Street Channel, an open storm drain channel which parallels Kitching Street and is located approximately 310 yards east of the project site.

The project site is located above the nearest FEMA Special Flood Hazard Area and the proposed project would not impede or redirect flood flows. No impact would occur, and mitigation is not required.

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

Response:

Less than Significant

Three dams or reservoirs are within a five-mile radius of the project site: Sunnymead Ranch Dam, Pigeon Pass Dam, and Perris Reservoir. The project would be located within the dam breach inundation areas of the Pigeon Pass Dam and would be at risk of flood hazards due to a dam breach at Pigeon Pass Dam. In the event of a breach at Pigeon Pass Dam, the southern portion of the project site would be at risk of inundation of approximately one to two feet of water, flooding portions of Alessandro Boulevard.

The project site would not be at risk of flood hazard resulting from a breach of the Sunnymead Ranch Dam or the Perris Reservoir and, as discussed previously, the project site is located above the 500-year floodplain and would not be at risk of inundation by the 100- or 500-year flood hazards.

The tsunami inundation area nearest to the project site is in the City of Dana Point, approximately 42 miles southwest of the project site; therefore, the project site would not be at risk of inundation by tsunami.

A seiche is an oscillating wave, formed by earthquakes or winds, in an enclosed or partially enclosed waterbody. The nearest waterbodies to the project site in which a seiche could form are Sunnymead Ranch Dam, Pigeon Pass Dam, and Perris Reservoir. The project site is not within the dam breach inundation areas mapped for Sunnymead Ranch Dam and Perris Reservoir; however, as discussed previously, the project site is within the mapped inundation area for Pigeon Pass Dam. A seiche would not be expected to release the volume of water that would be released by a dam failure, and it is anticipated that water released from Pigeon Pass Dam during a seiche would be restricted to the high inundation areas (maximum flood depth 10 to 15 feet) which are directed into Sunnymead Channel and Heacock Channel, away from the project site. The project would not be at risk of inundation by seiche.

The proposed project would be at slight risk from inundation by flood hazards related to dam failure inundation; however, the project would not be at risk of inundation by tsunami, or seiche, and would therefore not be at risk of release of pollutants due to tsunami or seiche. Impacts would be less than significant, and mitigation is not required.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Response:

No Impact

As discussed in Section 4.10 a), the proposed project would comply with the Construction General Permit by developing and implementing a site-specific SWPPP and construction stormwater BMPs throughout the construction phase, thus minimizing or avoid the potential for contaminated stormwater or releases of non-stormwater-related pollutants from entering local storm drains and reaching receiving waters. The proposed project would also comply with the MS4 Permit by incorporating LID BMPs into project design, which would avoid or minimize the volume of stormwater and amount of trash and other pollutants leaving the project, entering receiving waters, and impacting water quality and beneficial uses defined for these waters by the Basin Plan. In addition, the LID BMPs would allow stormwater infiltration into the local aquifer, similar to existing conditions and minimize or avoid impacts to groundwater quality and beneficial uses of the Upper Santa Ana Valley Groundwater Basin. The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan; no impact would occur, and mitigation is not required.

Sources:

1. RWQCB (Santa Ana Regional Water Quality Control Board). 1994. Water Quality Control Plan for the Santa Ana River Basin (Basin Plan), with amendments effective 2008, 2010, 2011, 2012, 2014, 2017, and 2019.
2. RCFCD (Riverside County Flood Control District). 2022. Master Drainage Plan for Riverside County. Available at http://content.rcflood.org/MDPADP/#. Accessed on October 24, 2022
3. RWQCB (Santa Ana Regional Water Quality Control Board). 2010 (as amended). National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporated Cities of Riverside County within the Santa Ana Region Area-Wide Urban Runoff Management Program (Order No. R8-2010-0033, NPDES No. CAS 618033).
4. Waber Consultants, Inc. 2022a. Preliminary Water Quality Management Plan for the Valley Gardens Project. Prepared for Moreno Valley Garden, LLC. October 21, 2022.
5. Waber Consultants, Inc. 2022b. Preliminary WQMP Site Plan for the Valley Gardens Project. Prepared for Moreno Valley Garden, LLC. October 18, 2022.
6. DWR. 2006. Bulletin 118, 2003 Basin Report for the San Jacinto Groundwater Basin. Revised in 2006.
7. EMWD (Eastern Municipal Water District. 2021. Groundwater Reliability Plus: Securing Our Future [information booklet].
8. Google Earth Pro V 7.3.2.5491 (May 12, 2022). City of Moreno Valley, Riverside County, California, U.S.A. 33°55'05.96"N-117°13'17.22"W. Eye alt 4,843 ft. Available at https://earth.google.com/web/. Accessed on October 20, 2022.
9. Waber Consultants, Inc. 2022c. Preliminary Hydrology Report for the Valley Gardens Project. Prepared for Moreno Valley Garden LLC. October 2022.
10. FEMA (Federal Emergency Management Agency). 2008. FEMA Flood Map Service Center: FIRMETTE for 33.918648° -117.221446°.
11. California Division of Safety of Dams ((DSOD). 2020). Pigeon Pass Dam Sunny Day Piping Failure Inundation Map Composite Showing Individual Breaches for Location 1 (East) and 2 (West). DWR Dam No. 1003-006; NID CA0080. Prepared for Riverside County Flood Control District. Available at https://fmds.water.ca.gov/maps/damim/. Downloaded on October 31, 2022.
12. State of California, 2021. Tsunami Hazard Area Map, Orange County; produced by the California Geological Survey and the California Governor's Office of Emergency Services; dated 2021, displayed at multiple scales.

XI. LAND USE AND PLANNING – Would the project:

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒

Response:

No Impact

The project site is surrounded by single-family residences to the north, east, and west, and multi-family residences to the south across Alessandro Boulevard. The site is currently vacant and not used for access between surrounding residential areas. Project development would not physically divide an established community, and no impact would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Response:

d) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact

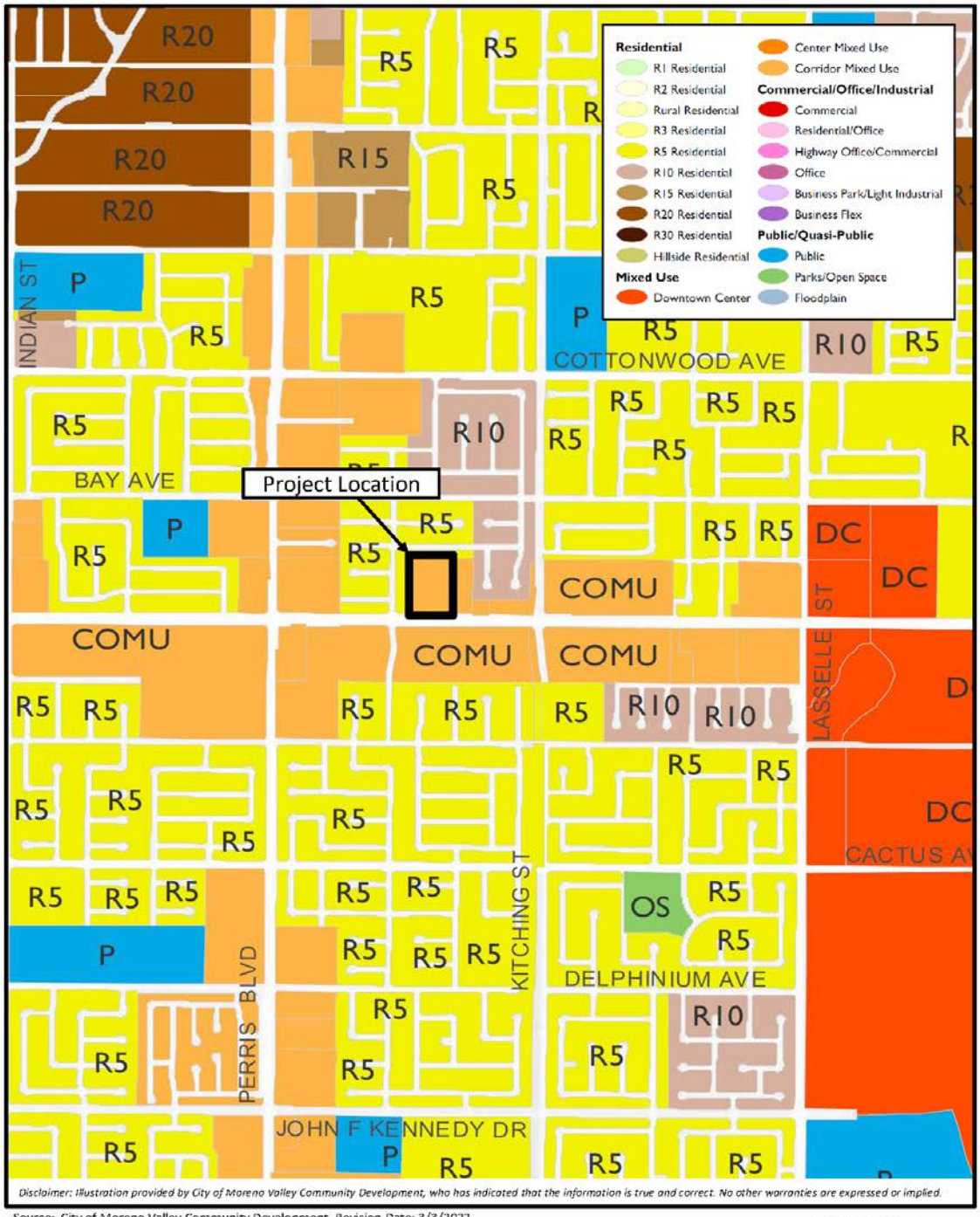
The project site has a General Plan land use designation of Corridor Mixed Use (refer to **Figure 32** below). The project site is zoned Corridor Mixed Use (see **Figure 33** below). The City's General Plan Land Use designation and zoning category for the site are Corridor Mixed Use (COMU), which permits a residential density of 15 to 20 units per acre; the proposed density would be approximately 13.9 units per acre. The COMU designation was established as part of the 2040 General Plan update, which was approved by the City Council (including certifying the related Final Program Environmental Impact Report) on June 15, 2021. Changes to the Zoning Ordinance, including establishing the COMU zone (Ordinance No. 981) were adopted on August 3, 2021.

A consistency analysis of the proposed project respecting relevant City of Moreno Valley General Plan 2040 Land Use, Zoning, and Urban Design Element goals and policies is provided below in **Table 22**. No adverse impact would occur.

Table 22 - Consistency Analysis: Proposed Project Compared to Relevant City of Moreno Valley General Plan Land Use, Zoning, And Urban Design Element Goals and Policies

Goals and Policies	Consistency Analysis
Goal LLC-1: Establish an identifiable city structure and framework that accommodates growth and development over the planning horizon.	
Policy LLC.1.4: Focus new development in centers and corridors so as to support the vitality of existing businesses, optimize the use of utility infrastructure, and reduce vehicle trip frequency, length, and associated emissions.	**Consistent:** The project is proposed for mixed-use zoning and would utilize existing infrastructure, adding vitality to the existing business community.
LCC.1-6: Promote infill development along Alessandro, Sunnymead, and Perris to create mixed use corridors with a range of housing types at mid-to-high densities along their lengths and activity nodes at key intersections with retail/commercial uses to serve the daily needs of local residents.	**Consistent:** The project site is an infill site on the north side of Alessandro, approximately 1,400 feet east of Perris Boulevard. It is surrounded by residential uses and nearby commercial businesses. The project would include 64 two- and three-bedroom units, totaling 160 bedrooms. Based on an estimated average household size in Moreno Valley of 3.70 persons, 237 persons would be accommodated at the project.
Sources: Land Use Community Character, City of Moreno Valley General Plan, 2040.	

Figure 32 – General Plan Land Use Designation



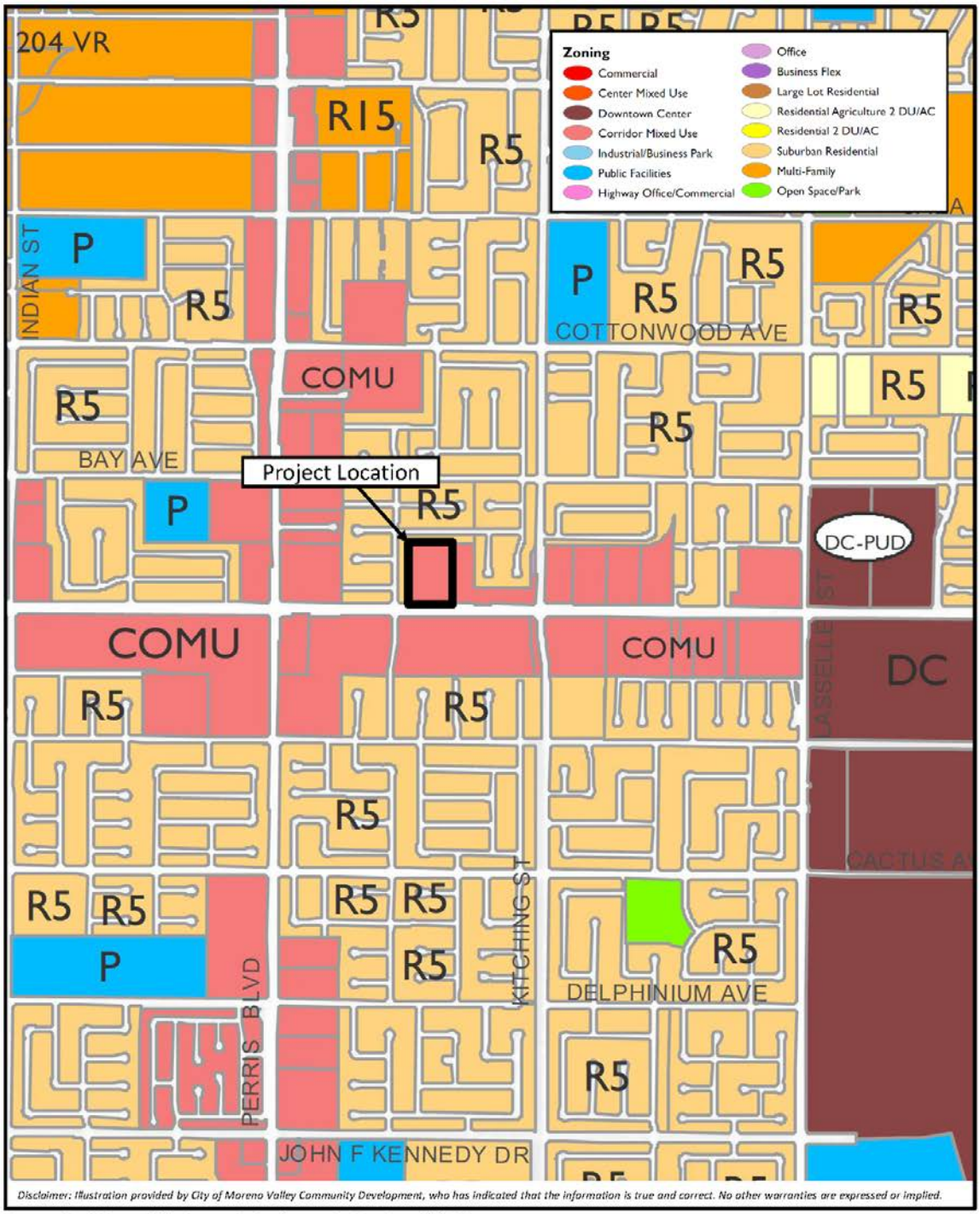
Source: City of Moreno Valley Community Development. Revision Date: 3/3/2022

UltraSystems

Valley Gardens Apartments Project

General Plan Land Use Designation

Figure 33 – Zoning Designation



Source: City of Moreno Valley Community Development. Revision Date: 8/1/2022

UltraSystems

Valley Gardens Apartments Project

Zoning Designation

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Sources:

1. City of Moreno Valley, 2022a. City of Moreno Valley General Plan Land Use Map, Revised March 3, 2022. Accessed online at: https://moval.gov/city_hall/general-plan2040/GP-LandUseMap.pdf. Accessed on October 21, 2022.
2. City of Moreno Valley, 2022b, City of Moreno Valley Zoning Map, Updated August 8, 2022. Accessed online at: https://moval.gov/city_hall/general-plan2040/NewZoning.pdf. Accessed on October 21, 2022.

XII. MINERAL RESOURCES – Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
And				
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Response:

No Impact

The project site is mapped as Mineral Resource Zone 3a (MRZ-3a) by the California Geological Survey (CGS), as shown on **Figure 34,** meaning that geologic data indicate that mineral deposits are likely to exist, but the significance of the deposit is undetermined. There are no active aggregate operations or land designated for Portland Cement Concrete-grade aggregate within the City of Moreno Valley. The project site is not located within a mapped Mineral Resource Sector. A mineral resource sector is an area currently permitted for mining and where land uses are compatible with mining. Mineral reserves are aggregate that has been determined to be acceptable for commercial use, are in properties owned or leased by aggregate producing companies, and for which permits have been issued allowing mining and processing of the material. Mineral resources include reserves and all of the potentially usable aggregate materials that may be mined in the future, but for which no permit allowing mining has been issued, or for which marketability has not yet been established.

The nearest mine to the project site mapped by the Division of Mines Reclamation (DMR) is a Markham Materials open pit sand and gravel location (site 91-33-0054) at the intersection of Markham Street and Day Street in the City of Perris, approximately 5.5 miles to the southwest of the project site. No mines mapped by DMR are within the City of Moreno Valley. No mineral resources in the city of Moreno Valley are identified in the City's General Plan. The nearest oil or gas well to the project site is a plugged well approximately 4.8 miles to the northeast, as shown on **Figure 35.**

The project site is surrounded by residential uses incompatible with mining. Project development would not cause a loss of availability of known mineral resources valuable to the region, and no impact would occur.

Figure 34 – Designated Mineral Resource Zone

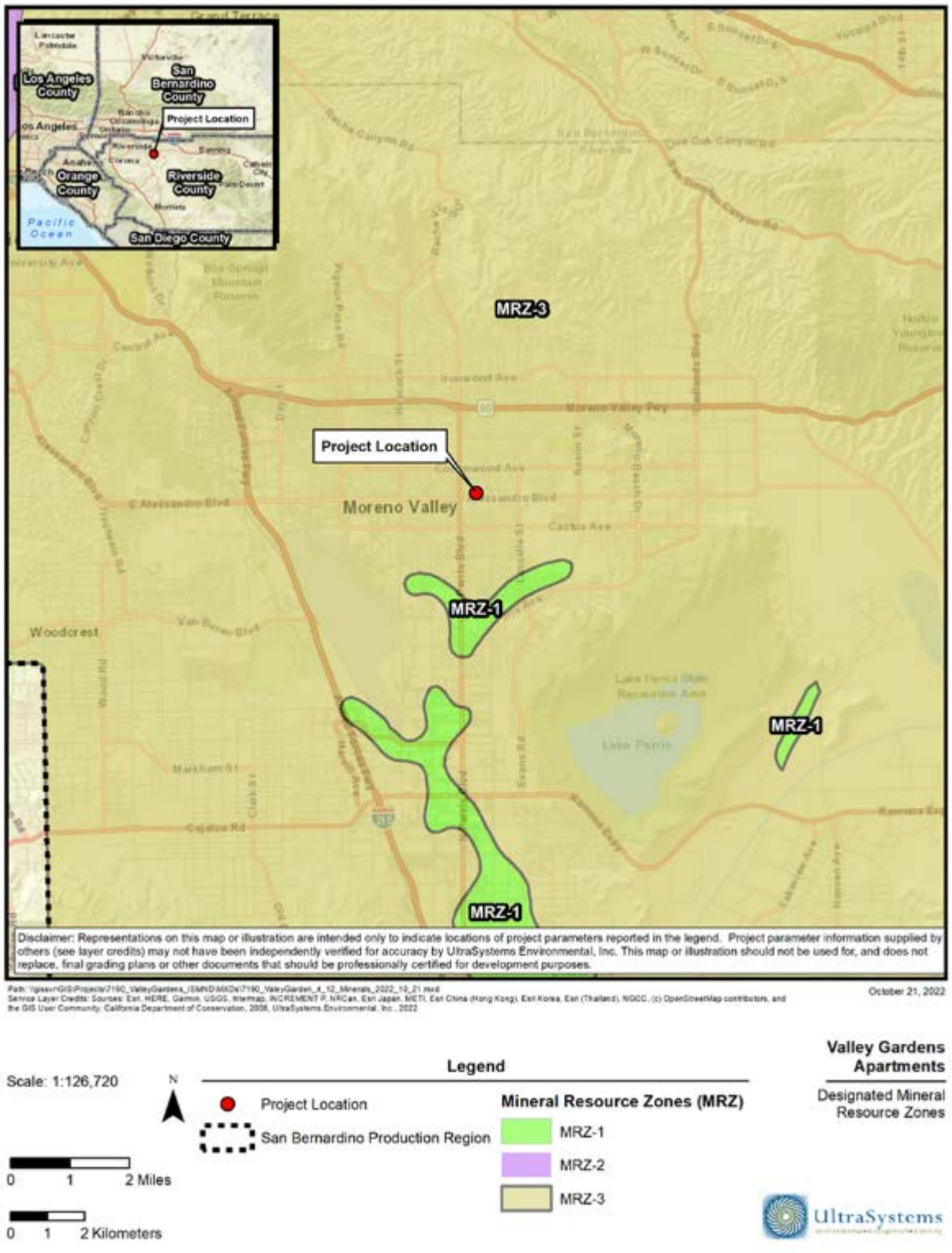
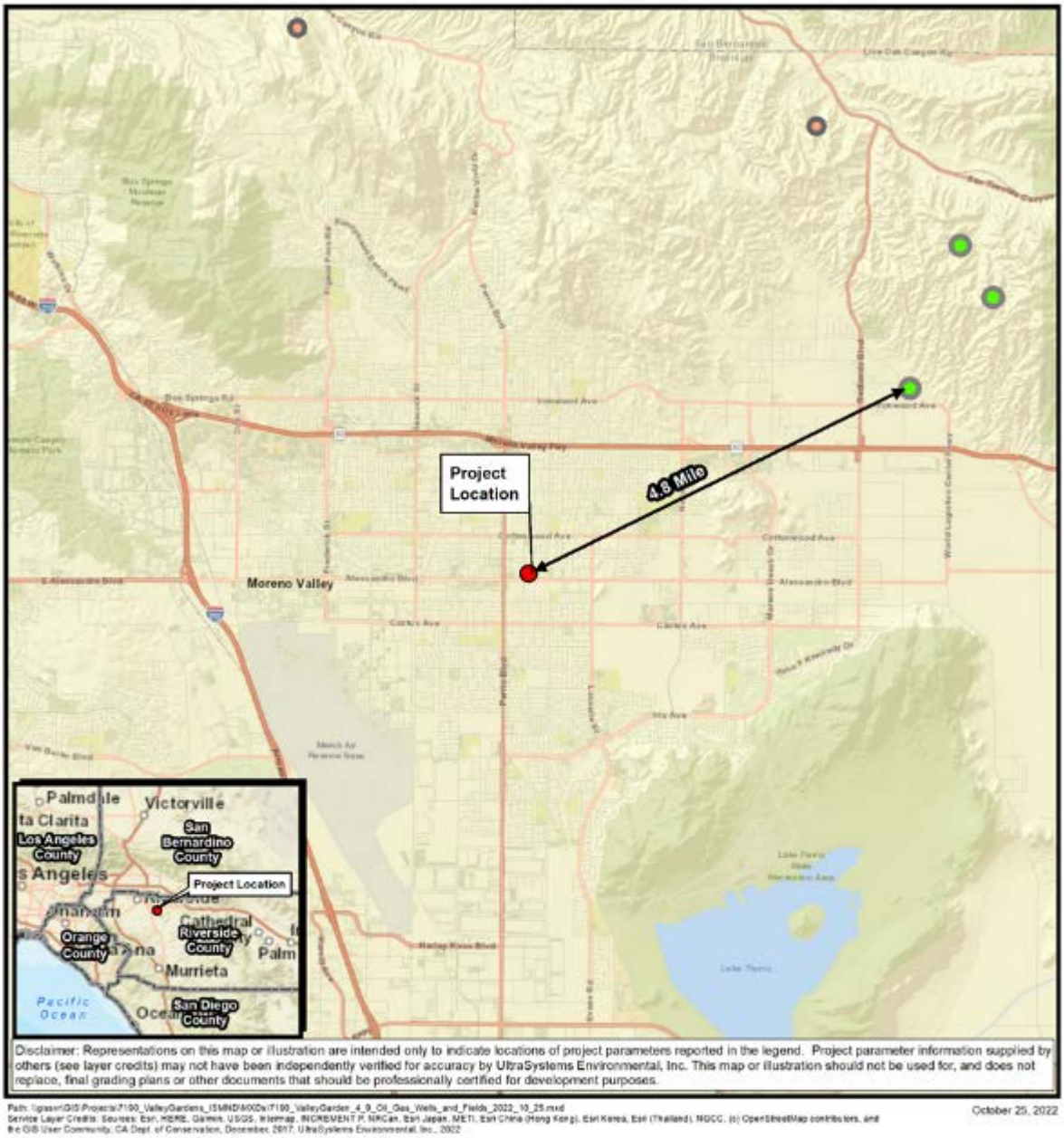


Figure 35 - Oil and Gas Wells



ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Sources:

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2. California Geological Survey (CGS). 2008a. Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the San Bernardino Production-Consumption Region, San Bernardino and Riverside Counties, California. Special Report 206, Plate 1.
3. California Geological Survey (CGS). 2008b. Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the San Bernardino Production-Consumption Region, San Bernardino and Riverside Counties, California.
4. DMR (Division of Mine Reclamation) DMR. 2022. Mines Online.
5. City of Moreno Valley, 2021. City of Moreno Valley General Plan 2040, Adopted June 15, 2021. Accessed online at https://www.moval.org/city_hall/general-plan2040/MV-GeneralPlan-complete.pdf. Accessed on October 21, 2022.

XIII. NOISE – Would the project result in:

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

Response:

Characteristics of Sound

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in hertz [Hz] or cycles per second), and duration (measured in seconds or minutes). The decibel (dB) scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Because the human ear is not equally sensitive to all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against upper and lower frequencies in a manner approximating the sensitivity of the human ear. The scale is based on a reference pressure level of 20 micropascals (zero dBA). The scale ranges from zero (for the average least perceptible sound) to about 130 (for the average human pain level).

Noise Measurement Scales

Several rating scales have been developed to analyze adverse effects of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people depends largely upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- L_{eq}, the equivalent noise level, is an average of sound level over a defined time period (such as 1 minute, 15 minutes, 1 hour or 24 hours). Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure.
- L_{90} is a noise level that is exceeded 90 percent of the time at a given location; it is often used as a measure of "background" noise.
- L_{max} is the root mean square (RMS) maximum noise level during the measurement interval. This measurement is calculated by taking the RMS of all peak noise levels within the sampling interval. Lmax is distinct from the peak noise level, which only includes the single highest measurement within a measurement interval.
- CNEL, the Community Noise Equivalent Level, is a 24-hour average Leq with a 4.77-dBA "penalty" added to noise during the hours of 7:00 p.m. to 10:00 p.m., and a 10-dBA penalty added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime. The logarithmic effect of these additions is that a 60-dBA 24-hour L_{eq} would result in a calculation of 66.7 dBA CNEL.

- L_{dn}, the day-night average noise, is a 24-hour average Leq with an additional 10-dBA "penalty" added to noise that occurs between 10 p.m. and 7 a.m. The L_{dn} metric yields values within 1 dBA of the CNEL metric. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such in this assessment.

Existing Noise

Moreno Valley is subject to typical urban noises such as noise generated by traffic, heavy machinery, and day-to-day outdoor activities. The city of Moreno Valley also has several transportation-related noise sources, including airport activity, railroad operations, major arterials and State Route 60. Noise sources that are not directly related to transportation include commercial and industrial centers, construction, and property maintenance activities.

UltraSystems Environmental Inc. conducted ambient noise sampling at four locations near the project site, as shown in

Figure 36**. Table 23** lists the measurement points, sampling locations, and measurement results. Details of the ambient sampling methods and results are provided in **Appendix E**.

The samples were taken between 10:30 a.m. and 1:42 p.m. on Thursday, October 6, 2022. The 15-minute L_{eq} values ranged from 47.6 to 67.9 dBA. The lowest of these values was measured at Point 3, which is located along Sarah Street. The maximum ambient noise level was recorded at Point 1, which is located in front of a single-family residence along Alessandro Boulevard and north of the project site.

Table 23 - Ambient Noise Measurement Results

Point	Data Set	Sampling Time	Address	Sound Level (dBA)			Notes
				Leq	Lmax	L90	
1	S014	1055-1110	13916 Flaming Arrow Drive	54.1	70.5	41.3	In front of a single-family residence
2	S015	1123-1138	25265 Old Farm Street	50.2	70.8	41.5	In front of a single - family residence
3	S013	1030-1045	13938 Sarah Street	47.6	62.3	42.7	In front of a single-family residence
4	S017	1236-1251	25480 Alessandro Boulevard	55.3	79.8	46.5	In front of Moreno Valley Public Library
5	S018	1327-1342	25560 Alessandro Boulevard	67.1	86.2	50.2	In front of The Journey School
6	S016	1404-1419	25251 Alessandro Boulevard	67.9	83.0	53.4	In front of a multi-family residence

Source: UltraSystems, 2022.

Figure 36 - Ambient Noise Monitoring Locations

Sensitive Land Uses
The closest sensitive receivers to the project site include the single-family residences to the west along Flaming Arrow Drive and the single-family neighborhood to the north along Old Farm Street. Sensitive receivers are shown in

. **Table 24** summarizes information about them.

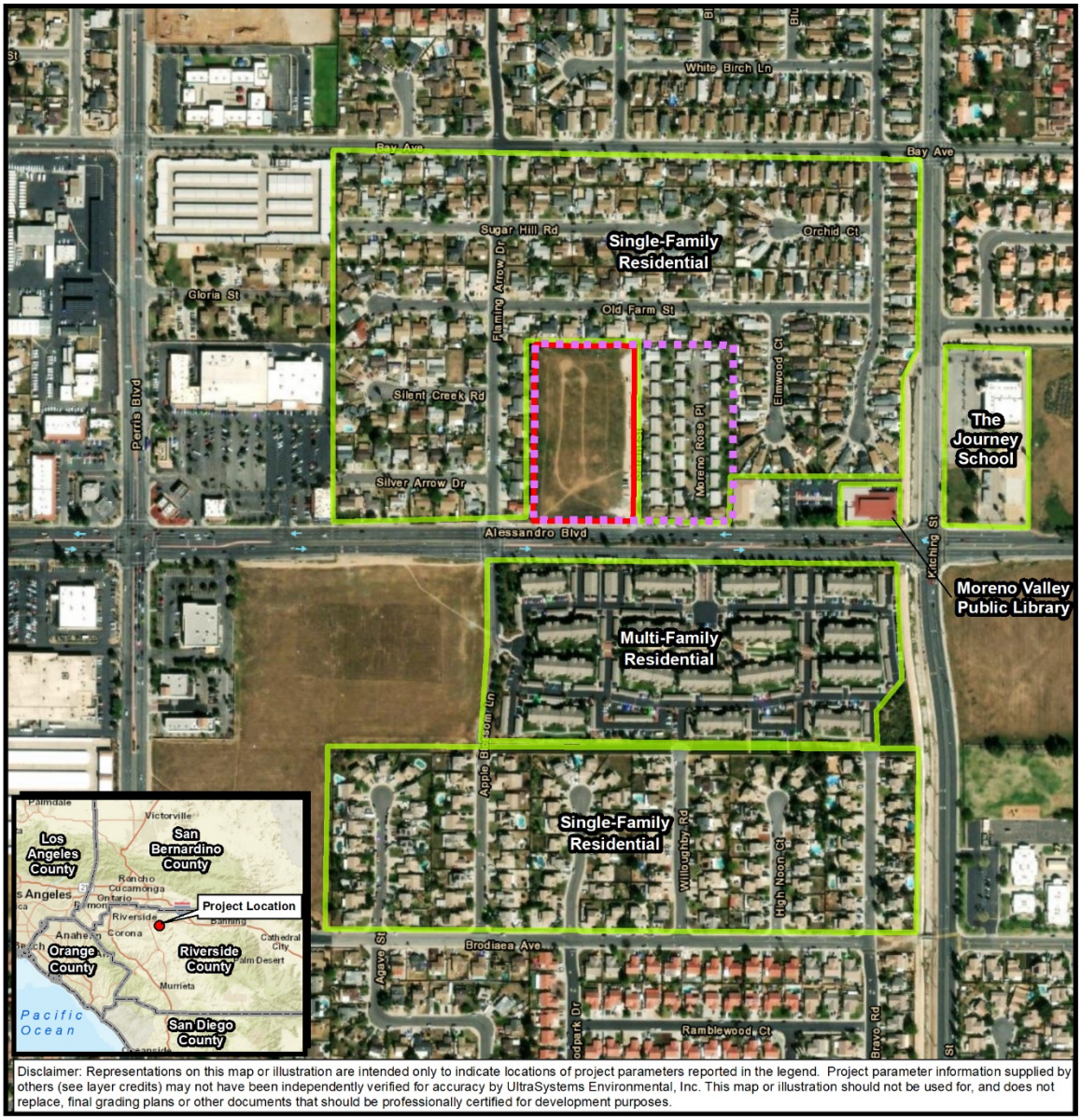
Table 24 - Sensitive Receivers in Project Area

Description	Location	Distance From Site Boundary (feet)[a]	Nearest Ambient Sampling Points
Single-Family Residence	13916 Flaming Arrow Drive	67	1
Single-Family Residence	25265 Old Farm Street	88	2
Single-Family Residence	13938 Sarah Street	110	3
Moreno Valley Public Library	25480 Alessandro Boulevard	670	4
The Journey School	25560 Alessandro Boulevard	1,145	5
Multi-Family Residence	25251 Alessandro Boulevard	420	6

a. These are not the distances used for noise exposure calculations.
See Figure 36 for locations of ambient noise sampling points.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Figure 37 - Sensitive Receivers in Project Area



Path: \\GISSVR\gis\Projects\7190_ValleyGardens_ISMND\MXDs\Revised_IS\7190_ValleyGarden_IS_Fig38_Sensitive_Receivers_2023_03_10.mxd March 10, 2023
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community; UltraSystems Environmental, Inc., 2023.

Scale: 1:5,400

N

0 225 450 Feet

0 50 100 Meters

Legend

- Project Site
- Project Area
- Sensitive Noise Receiver

Valley Gardens Apartments

Sensitive Noise Receivers

UltraSystems environmental•management•planning

Regulatory Setting

State of California

The most current guidelines prepared by the state noise officer are contained in Appendix D of the General Plan Guidelines issued by the Governor's Office of Planning and Research in 2017. These guidelines establish four categories for judging the severity of noise intrusion on specified land uses:

- **Normally Acceptable**: Is generally acceptable, with no mitigation necessary.
- **Conditionally Acceptable**: May require some mitigation, as established through a noise study.
- **Normally Unacceptable**: Requires substantial mitigation.
- **Clearly unacceptable**: Probably cannot be mitigated to a less-than-significant level.

The OPR noise compatibility guidelines assign ranges of CNEL values to each of these categories. The ranges differ for different types of sensitive receivers.

Moreno Valley General Plan Noise and Safety Element

The Moreno Valley General Plan has the following noise-related objectives and policies that apply to the proposed 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 sound insulating 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.

6.3.3 Where the future noise environment is likely to exceed 70 CNEL due to overflights from the joint-use airport at March, new buildings containing uses that are not addressed under Policy 6.3.1 shall require insulation to achieve interior noise levels recommended in the March Air Reserve Base Air Installation Compatible Use Zone Report.

6.3.4 Encourage residential development heavily impacted by aircraft over flight noise, to transition to uses that are more noise compatible.

6.3.5 Enforce the California Administrative Code, Title 24 noise insulation standards for new multi-family housing developments, motels and hotels.

6.3.6 Building shall be limited in areas of sensitive receptors.

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.

Policies:

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.

Objective 6.5

Minimize noise impacts from significant noise generators such as, but not limited to, motor vehicles, trains, aircraft, commercial, industrial, construction, and other activities.

Policies:

6.5.1 New commercial and industrial activities (including the placement of mechanical equipment) shall be evaluated and designed to mitigate noise impacts on adjacent uses.

6.5.2 Construction activities shall be operated in a manner that limits noise impacts on surrounding uses.

Moreno Valley Municipal Code

The Moreno Valley Municipal Code has two types of noise exposure limits. One type prohibits noise that can cause permanent hearing loss.[11] **Table 25** shows the maximum continuous sound levels and **Table 26** shows the maximum impulsive sound levels for avoiding hearing loss. The other type of limits prohibits sound levels that would create a "noise disturbance," which is defined as any sound that disturbs a reasonable person of normal sensitivities; exceeds certain sound level limits; or is plainly audible at a distance of 200 feet from the real property line of the source of the sound.[12] The limits set to prevent noise disturbances are presented in **Table 27**.

Table 25 - Maximum Continuous Sound Levels

Duration per Day Continuous Hours	Sound Level [dB(A)]
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105
0.5	110

Source: MVMC § 11.80.030(B)(1), Table 11.80.030-1.

11 Moreno Valley Municipal Code § 11.80.030(B)(1).

12 Moreno Valley Municipal Code § 11.80.020.

Table 26 – Maximum Impulsive Sound

Number of Repetitions per 24-Hour Period	Sound level [dB(A)]
1	145
10	135
100	125

Source: MVMC § 11.80.030(B)(1), Table 11.80.030-1A.

Table 27 - Maximum Sound Levels (IN Db(A)) For Source Land Uses[a]

Residential		Commercial	
Daytime	**Nighttime**	**Daytime**	**Nighttime**
60	55	65	60

Source: MVMC § 11.80.030(C), Table 11.80.030-2.

[a]When measured at a distance of 200 feet or more from the real property line of the source of the sound.

Finally, the Moreno Valley Municipal Code prohibits use of construction equipment that creates a noise disturbance between the hours of 8 p.m. on one day and 7 a.m. on the following day.[13]

Significance Thresholds

Two criteria were used for judging noise impacts. First, noise levels generated by the proposed project must comply with all applicable relevant federal, state, and local standards and regulations. Noise impacts on the surrounding community are limited by local noise ordinances, which are implemented through investigations in response to nuisance complaints. It is assumed that all existing regulations for the construction and operation of the proposed project will be enforced. In addition, the proposed project should not produce noise levels that are incompatible with adjacent noise-sensitive land uses.

The second measure of impact used in this analysis is a significant permanent increase in noise levels above existing ambient noise levels as a result of the introduction of a new noise source. An increase in noise level due to a new noise source has a potential to adversely impact people. The proposed project would have a significant noise impact if it would:

- Expose persons to or generate noise levels in excess of standards prescribed by the City of Moreno Valley Municipal Code; or
- Include construction activities within the hours prohibited by the Municipal Code, without a permit; or
- Increase operational exposures at sensitive receivers (mainly because of an increase in traffic flow) by 5 dBA CNEL or more.

Impact Analysis

Less than Significant Impact with Mitigation Incorporated

Noise impacts associated with housing and commercial projects include short term and long-term impacts. Construction activities, especially heavy equipment operation, would create noise effects on and adjacent to the construction site. Long term noise impacts include project generated onsite and offsite operational noise sources. Onsite (stationary) noise sources from the apartments would include operation of mechanical equipment such as air conditioners, landscape and building maintenance. Offsite noise would be attributable to project induced traffic, which would cause an incremental increase in noise levels within and near the project vicinity. This section also evaluates potential ground borne vibration that would be generated from the construction or operation of the proposed project.

Short-Term Construction Noise

The construction of the proposed project may generate temporary increases in ambient noise levels that exceed the thresholds of significance for this analysis. Noise impacts from construction activities are a function of the noise generated by the operation of construction equipment and onroad delivery and worker commuter vehicles, the location of equipment, and the timing and duration of the noise-generating activities. For the purpose of this analysis, it was estimated that the construction of the proposed project would begin in August 2023 and end in October 2024.

The types and numbers of pieces of equipment anticipated in each phase of construction and development were estimated by running the California Emissions Estimator Model (CalEEMod), Version 2020.4.0, and having the model generate land use-based default values. The CalEEMod equipment default values are based on a construction survey performed by the SCAQMD. **Table 28** lists the equipment expected to be used. For each equipment type, the table shows an average noise emission level (in dB at 50 feet, unless otherwise specified) and a "usage factor," which is an estimated fraction of operating time that the equipment would be producing noise at the stated level. Equipment use was matched to phases of the construction schedule. Note that attenuation by existing walls near Receiver 4 (Moreno Valley Public Library) was not estimated, because the unattenuated exposures at that location would be less than significant without the attenuation. (See below.)

Table 28 - Construction Equipment Noise Characteristics

Construction Phase	Equipment Type	Number of Pieces	Maximum Sound Level (dBA @ 50 feet)	Usage Factor	Composite Noise (dBA @ 50 feet)
Site Preparation	Rubber Tired Dozers	3	79	0.4	87.51
	Tractors/Loaders/Backhoes	4	85	0.37	
Grading	Excavators	1	80	0.38	87.41
	Graders	1	85	0.41	
	Rubber Tired Dozers	1	79	0.4	
	Tractors/Loaders/Backhoes	3	85	0.37	
Building Construction	Crane	1	83	0.29	88.35
	Forklift	3	77	0.2	
	Generator Sets	1	85	0.7	
	Tractor/Loader/Backhoe	3	85	0.37	
	Welders	1	74	0.45	
Paving	Paving Equipment	2	75	0.36	79,24
	Pavers	2	77	0.42	
	Rollers	2	74	0.38	
Architectural Coating	Air Compressor	1	81	0.48	77.81

Source: FHWA, 2006.

Results of the construction noise calculations are presented in **Table 30**. The most noise generating construction phase would be building construction, which would result in a maximum hourly L_{eq} of 73.4 dBA L_{eq} (ambient plus contribution from construction) across Sarah Street from the project site.

[13] Moreno Valley Municipal Code § 11.80.030(D)(7).

Table 29 - Estimated Maximum Construction Noise Exposures at Nearby Sensitive Receivers

Receiver	Ambient dBA L_{eq}	Construction dBA L_{eq}	New Total dBA L_{eq}[a]	Increase dBA L_{eq}
1 - 13916 Flaming Arrow Drive	54.1	73.3	73.4	19.3
2 - 25265 Old Farm Street	50.2	68.4	68.5	18.3
3 - 13938 Sarah Street	47.6	72.1	72.1	24.5
4 - 25480 Alessandro Boulevard (Moreno Valley Public Library)	55.3	57.4	59.5	4.2
5 - 25560 Alessandro Boulevard	67.1	52.8	67.3	0.2
6 - 25251 Alessandro Boulevard	67.9	64.0	69.4	1.5

At sensitive four sensitive receiver locations (1, 2, 3 and 6), noise from construction activities would exceed the residential 60-dBA limit in **Table 30**. However, all of these locations are within 200 feet of the project boundary. At sensitive receiver locations 4 and 5, noise from construction activities would be below the 60-dBA threshold. Therefore, short-term exposures from construction would be less than significant.

Table 31 also shows the increase in short-term exposures due to project construction. The increase ranges from 0.2 to 24.5 dBA L_{eq}. Increases at two other sensitive receivers would also exceed 5 dBA L_{eq}. Short-term increases in noise exposures were not used to determine significance because they are not permanent increases and many people will be absent from their residences during construction hours. Nevertheless, the project is subject to mitigation measures prescribed by the Moreno Valley General Plan Programmatic EIR (PEIR). Implementation of those measures will ensure that short-term impacts will remain less than significant.

Table 30 - Estimated Increases in CNEL at Residences due to Construction

Receiver	Ambient dBA L_{eq}	Construction dBA L_{eq}	New Total dBA L_{eq}[a]	Increase dBA L_{eq}
1 - 13916 Flaming Arrow Drive	54.1	73.3	73.4	19.3
2 - 25265 Old Farm Street	50.2	68.4	68.5	18.3
3 - 13938 Sarah Street	47.6	72.1	72.1	24.5
4 - 25480 Alessandro Boulevard (Moreno Valley Public Library)	55.3	57.4	59.5	4.2
5 - 25560 Alessandro Boulevard	67.1	52.8	67.3	0.2
6 - 25251 Alessandro Boulevard	67.9	64.0	69.4	1.5

Short-Term Mitigation Measures

Most of the noise mitigation measures required by the Moreno Valley General Plan PEIR are designed to reduce impacts of the surrounding area upon sensitive receivers in new developments. These do not apply to the proposed project, since CEQA requires analysis of the effects of the project upon the surrounding community. The applicable PEIR mitigation measures (renumbered here) are:

MM N1 Construction activities shall be operated in a manner that limits noise impacts on surrounding uses (Policy 6.5.2).

MM N2 Building construction shall be prohibited between 8 p.m. and 6.am. during the week and 8 p.m. and 7 a.m. weekends and holidays (Policy 6.3.6).
MM N3 Schedule construction so that the minimum number of pieces of equipment would be operating within the same vicinity simultaneously.

MM N4 Stockpiling and vehicle-staging areas shall be located as far as practical from noise-sensitive receptors during construction activities.

MM N5 Where practical, design construction site access such that delivery and dump trucks move through the site in a forward direction, without the need to back up (and activate back-up alarms).

MM N6 Where practical, replace proposed equipment with newer, and presumably quieter, models.

MM N7 Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with an intact and operational muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without the muffler.

MM N8 Ensure that all equipment items have the manufacturers' recommended noise abatement features, including but not limited to mufflers, engine enclosures, and engine vibration isolators; and that these noise-reducing features are intact and operational.

MM N9 Turn off idling equipment after no more than five minutes.

MM N10 Operate all equipment at the minimum power level needed to get the job done.

MM N11 Operate equipment so as to minimize banging, clattering, and buzzing.

Level of Significance After Mitigation

With implementation of mitigation measures **MM N1** through **MM N11** above, the project would result in less than significant impacts to sensitive receivers.

Operational Noise

Onsite

Onsite noise sources from the proposed rental apartment would include operation of mechanical equipment such as air conditioners, lawnmowers, leaf blowers, and building maintenance equipment; motor vehicles accessing, driving on, and exiting the parking lot; and use of air compressors, power tools and other vehicle maintenance equipment. Much of the vehicle maintenance will be done partly or completely indoors, thus reducing the propagation of noise offsite. Noise levels associated with operation of the project are expected to be comparable to those of nearby land uses. Noise from onsite sources would be less than significant.

Mobile Sources

The principal noise source in the project area is traffic on local roadways. The project may contribute to a permanent increase in ambient noise levels in the project vicinity due to project-generated vehicle traffic on nearby roadways and at major intersections.

The proposed project would generate an estimated 431 new daily vehicle trips. Existing roadway segment average daily traffic (ADT) data were obtained from the City of Moreno Valley.[14] ADT nearest the project is 22,100 trips per day. The project would therefore increase traffic by about 2 percent. Given the logarithmic nature of the decibel, traffic volume needs to be doubled in order for the noise level to increase by 3 dBA, the minimum level perceived by the average human ear. A doubling is equivalent to a 100% increase. Since the maximum increase in traffic in this road segment would be far below 100%, the increase in roadway noise experienced at sensitive receivers would not be perceptible to the human ear. Therefore, roadway noise associated with project operation would not expose a land use to noise levels that are considered incompatible with or in excess of adopted standards, and impacts would be less than significant.

[14] City of Moreno Valley Traffic Counts. 2017. Department of Public Works. https://moval.gov/departments/public-works/transportation/pdfs/traffic-counts.pdf. Accessed January 12, 2023. ADT value is for Alessandro Boulevard between Perris Boulevard and Kitching Street.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

Response:

Less than Significant Impact

Vibration is sound radiated through the ground. Vibration can result from a source (e.g., subway operations, vehicles, machinery equipment, etc.) causing the adjacent ground to move, thereby creating vibration waves that propagate through the soil to the foundations of nearby buildings. This effect is referred to as groundborne vibration. The peak particle velocity (PPV) or the root mean square (RMS) velocity is usually used to describe vibration levels. PPV is defined as the maximum instantaneous peak of the vibration level, while RMS is defined as the square root of the average of the squared amplitude of the level. PPV is typically used for evaluating potential building damage, while RMS velocity in decibels (VdB) is typically more suitable for evaluating human response.

The background vibration velocity level in residential areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for most people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

Construction Vibration

Construction activities for the project have the potential to generate low levels of groundborne vibration. The operation of construction equipment generates vibrations that propagate though the ground and diminishes in intensity with distance from the source. Vibration impacts can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage of buildings at the highest levels. The construction activities associated with the project could have an adverse impact on both sensitive structures (i.e., building damage) and populations (i.e., annoyance).

The FTA (2006) has published standard vibration levels for construction equipment operations, at a distance of 25 feet. The construction-related vibration levels were calculated at distances of 25 and 54 feet, the latter being the minimum distance from the site boundary to the middle of a nearby residence. Results are listed in **Table 31**. These calculations were based on the geometric mean distances from the construction activity to the closest sensitive receivers.

Table 31 - Vibration Levels of Typical Construction Equipment

Equipment	PPV at 25 feet (in/sec)	Vibration Decibels at 25 feet (VdB)	PPV at 54 feet (in/sec)	Vibration Decibels at 54 feet (VdB)
Loaded trucks	0.076	86	0.0326	76
Small bulldozer	0.003	58	0.0013	48
Large bulldozer	0.089	87	0.0381	77

Sources: Data at 25 feet from (FTA, 2006, p. 12-12); calculations by UltraSystems.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

As shown in **Table 31**, the peak particle velocity (PPV) of construction equipment at the nearest sensitive receiver (54 feet) is at most 0.038 inch per second, which is less than the FTA damage threshold of 0.12 inch per second PPV for fragile historic buildings. The maximum vibration decibels are 68 VdB, which are below FTA threshold for human annoyance of 80 VdB. Vibration impacts would therefore be less than significant. No mitigation is needed.

Operational Vibration

The project involves residential buildings and open spaces and would not involve the use of stationary equipment that would result in high vibration levels, which are more typical for large manufacturing and industrial projects. Groundborne vibrations at the project site and immediate vicinity currently result from heavy-duty vehicular travel (e.g., refuse trucks and transit buses) on the nearby local roadways, and the project would not result in a substantive increase of these heavy-duty vehicles on the public roadways. Therefore, vibration impacts associated with operation of the project would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Response:

No Impact

The nearest active public airport is Riverside Municipal Airport, located approximately 9.8 miles to the northwest of the project. Due to the project's distance from the nearest active airport, it is not located within the boundary of an Airport Influence Area (AIA), or within two miles of a public airport or public-use airport. As a result, the project would not expose people to safety hazards due to proximity to a public airport, and no impacts would occur.

Sources:

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5. BREEZE Software, 2021. California Emissions Estimator Model. User's Guide, Version 2020.4.0. Prepared for the California Air Pollution Control Officers Association, in collaboration with South Coast Air Quality Management District and the California Air Districts. December 2022.
6. RK (RK Engineering Group, Inc.), 2022. Valley Gardens Residential Project Trip Generation & Vehicle Miles Traveled (VMT) Study, City of Moreno Valley, CA. August 26, 2022.
7. FTA, 2006. Transit Noise and Vibration Impact Assessment. Accessed online at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdfon December 5, 2022.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?	☐	☐	☒	☐

Response:

Less than Significant Impact

Existing and forecasted demographic data for the City of Moreno Valley for 2021 and 2045 are shown below in **Table 32**. The population in the city is forecast to increase approximately 27 percent, the number of households is forecast to increase 31 percent, and employment is forecast to increase 50 percent during that period. The estimated total number of housing units in the city as of January 2022 was 58,004, consisting of 46,726 (81 percent of total) single-family detached, 1,127 (2 percent) single-family attached, 8,792 (15 percent) multifamily, and 1,359 (2 percent) mobile homes. The proposed project would accommodate direct population growth with construction of eight residential buildings with a total of 64 two- and three-bedroom units.

Table 32 - City of Moreno Valley Demographic Forecast

	2021	2045	Difference (2045 – 2021)	Percent Difference (2045 – 2021)
Population	209,407	266, 814	57,407	27.4%
Households[1]	58,004	76,199	18,195	31.4%
Employment	43,158[2]	64,916	21,758	50.4%

[1] A household is equivalent to an occupied housing unit
[2] 2020 data
Sources: CDF, 2022; SCAG, 2016, 2020; US Census Bureau, 2022

The Southern California Association of Governments (SCAG) has established a Regional Housing Needs Assessment (2021 RHNA) for the City of Moreno Valley for the period 2021 to 2029, as enumerated in **Table 33** below. Note that the total RHNA for City of Moreno Valley for the 2021-2029 period is 13, 627 units (1,703 per year average over eight years), which is a considerably faster increase than the 18,195 households forecast to be added over the extended 24-year period 2021-2045 (758 average per year).

Table 33 - Regional Housing Needs Assessment, City of Moreno Valley, 2021-2029

Income Category	Percent of Riverside County Median Income	Units
Very Low Income	<50	3,779
Low Income	50-80	2,051
Moderate Income	80-120	2,165
Above Moderate Income	>120	5,632
Total	Not applicable	**13,627**

Sources: SCAG 2021

The proposed project, consisting of 32 two-bedroom units and 32 three-bedroom units, is estimated to house 237 persons based on the average household size in the city of Moreno Valley of 3.70 persons in 2021.

The City's General Plan Land Use designation and zoning category for the site are Corridor Mixed Use (COMU), which permits a residential density of 15 to 20 units per acre; the proposed density would be approximately 13.9 units per acre. The COMU designation was established as part of the 2040 General Plan update, which was approved by the City Council (including certifying the related Final Program Environmental Impact Report) on June 15, 2021. Changes to the Zoning Ordinance, including establishing the COMU zone (Ordinance No. 981) were adopted on August 3, 2021.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
An adverse population and housing impact is one exceeding the regional forecast for the relevant jurisdiction. The estimated project occupancy at project completion, 237 residents, is approximately 0.4 percent of the forecast population increase of 57,407 persons in the City of Moreno Valley between 2021 and 2045. The proposed 64 residential units would be approximately 0.4 percent of the forecast increase of 18,195 households during the same period. The project is already accounted for in the City's General Plan. Therefore, impacts would be less than significant.				
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Response:

No Impact

No housing exists onsite and no one currently resides on the project site. Therefore, the project would not displace any housing or people and the project would not necessitate the construction of replacement housing. No impact would occur.

Sources:

1. CDF (California Department of Finance), 2022. Table E-5 Population and Housing Estimates.
2. SCAG, 2016. Demographics & Growth Forecast: The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Southern California Association of Governments.
3. US Census Bureau (USCB), 2022. City and Town Population Totals: 2020-2021 (revised May, 2022).

XV. PUBLIC SERVICES – Would the project:

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

Response:

Less than Significant Impact

Fire and emergency medical services are provided by Moreno Valley Fire Department (MVFD), under contracts with Riverside County and the California Department of Forestry and Fire Protection (CALFIRE) for the provision of services as part of an integrated regional fire protection system. MVFD is the primary response agency for fires, emergency medical services, hazardous materials incidents, traffic accidents, terrorist acts, catastrophic weather events, and technical rescues for the city. The Department also provides a full range of fire prevention services including public education, code enforcement, plan checks, inspection services for new and existing construction, and fire investigation.

MVFD operates out of seven fire stations, distributed throughout the city. The nearest existing fire station to the project site is Morrison Park Fire Station No. 99 at 13400 Morrison St, approximately 1.5 miles to the northeast. Station 99 is a two-bay facility that houses one paramedic engine company and is home to the City's two Battalion Chiefs.

The Department has not adopted service ratios for personnel or equipment but strives to achieve National Fire Protection Association (NFPA) standards for the organization and deployment of fire suppression operations (NFPA 1710) and adjusts staffing and equipment levels as needed, based on an ongoing assessment of activity in the city and calls for service. Existing facilities are located strategically where geographically possible to allow for a four-minute travel time, in accordance with NFPA 1710 standards. Travel time from Station 99 to the project site is approximately four minutes, within MVFD's response time goal.

The City's Schedule of City Fees, Charges, and Rates defines the fire development fees for new development within the city. Project development is expected to generate a small increase in calls for fire protection and emergency medical service. The project would pay the appropriate fire development fees required by the City of Moreno Valley.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Project operation would increase property tax and sales tax revenues to the city, some of which are expected to be allocated to MVFD. While the addition of eight new residential buildings with a total of 64 two- and three-bedroom units could generate a very slight increase in demands for fire protection and emergency medical services, it would not require the city to build a new or expanded fire station. Impacts related to the construction of new or expanded fire stations would be less than significant.				
ii) Police protection?	☐	☐	☒	☐

Response:

Less than Significant Impact

The Moreno Valley Police Department (MVPD) provides law enforcement services to the City of Moreno Valley. Since incorporation, the City has maintained an annual contract with the Riverside County Sheriff's Department for police protection and crime prevention services. The Sheriff's Department operates under the name of the Moreno Valley Police Department. MVPD is organized into five divisions: Administration, Detective, Patrol, Special Enforcement, and Traffic. The Patrol Division is staffed by nine sergeants, 64 sworn patrol officers, three K-9 teams, and 10 nonsworn officers. The police department provides a full range of protection and prevention services, including general law enforcement, traffic enforcement, investigations, and routine support services such as communications, evidence collection, analysis and preservation, training, administration, and records keeping. The Police Department also provides law enforcement services at the Riverside County Regional Medical Center and schools within Moreno Valley. MVPD operates out of the Moreno Valley Station located in the Civic Center Complex at Alessandro and Frederick, with satellite substations in several other parts of the city. The Department has adopted a zone policing strategy whereby officers are assigned to one of four areas of the city to improve response times to calls for service, help officers become more familiar with the community, and build relationships with local residents and business owners. Additionally, to fight crime and improve public safety, MVPD is increasingly making use of technology. MVPD employs a citywide camera surveillance system, one of the most advanced in the region, to remotely monitor parks and other key locations, permitting the Department to enhance public safety without adding police officers. MVPD also makes use of a computer-aided dispatch and records management system that allows rapid access to crime data, as well as digital cameras and automated license plate readers in patrol cars.

The city is divided into four zones; officers are assigned to specific zones. The boundary between zones 2 and 3 is on Alessandro Boulevard including along the site frontage. The Moreno Valley Police station is at 14177 Frederick Street at the intersection of Frederick Street and Alessandro Boulevard, approximately 2.25 miles from the project site. The city is planning an expansion of the Civic Center complex including a remodeled Public Safety Building capable of accommodating roughly 600 total personnel, as well as a new police substation in the southeastern part of the city to serve new and planned development.

Looking to the future, the city is planning an expansion of the Civic Center Complex that would include a remodeled Public Safety Building capable of accommodating an additional 420 personnel as well as a satellite police substation in the southeastern part of the city to service anticipated demand from new development. Continued investment in technology and resources will allow the Department to expand the camera system, implement advanced license reading applications, and offer video crime reporting services that allow residents to contact the Department and interact with officers in real time. As Moreno Valley grows in the coming years, the challenge will be to remain alert and responsive to changes that influence crime prevention efforts. Design of the built environment can also help prevent crime, reduce the fear of crime, and improve the quality of life in urban areas. Research has shown that the most effective deterrent to criminal activity is the risk of being caught, and the design of public spaces that places more eyes on the street and limit access points can create safer environments. Strategies for Crime Prevention Through Environmental Design (CPTED) include locating windows to overlook sidewalks and parking lots, increasing pedestrian and bicycle traffic, and selectively installing fencing, landscaping, or lighting to control access. Well-maintained buildings and grounds also signal alert, active owners and can deter criminal activity.

Calls to the MVPD are prioritized by urgency, from greatest urgency (Priority 1) through non-emergency calls. Priority 1 calls include emergency calls that require immediate response, when a vehicular pursuit is in process, or when there is reason to believe that an immediate threat to life exists. Priority 2 calls include injured persons, robberies in progress, bomb threats, carjackings, rape, and stolen vehicles. Priority 3 calls include assault, prowlers, disturbances, tampering with vehicles, and burglary alarms.

MVPD response time targets, and actual response times for 2019—the latest year for which data are available—are shown below in **Table 34**. Impacts related to the construction of new or expanded police stations would be less than significant.

Table 34 - Moreno Valley Police Department Response Time Targets

Call Type	Target	Response Time (2019) Minutes:Seconds
Priority 1	6	6:37
Priority 2	15	22:01
Priority 3	35	42:46

Source: (Recon, 2021)

iii) Schools?	☐	☐	☒	☐

Response:

Less than Significant Impact

Publicly funded primary and secondary education in Moreno Valley is provided by the Moreno Valley Unified School District (MVUSD). The MUVSD serves grades Kindergarten through 12th at 39 existing school sites including 23 elementary schools, six middle schools, four high schools, three alternative schools, one preschool, one adult education, and one charter school. The Moreno Valley Unified School District (MVUSD) serves over 35,000 students in a variety of K-12 education and support programs.

The project site is located within the boundaries of the three schools described below in **Table 35**. Butterfield Language Academy Elementary School is located 1.0 miles to the north, Mountain View Middle School is located 1.5 miles to the northeast, and Vista Del Lago High School is located 1.25 miles to the southeast of the project site.

Table 35 - Schools Serving the Project Site

School Name	Grade Levels [1]	Address	School Year Enrollment 2022-2023	Classrooms[1]	Capacity (Students)[1]	Remaining Capacity
Butterfield Language Academy	K-5	13400 Kitching Street	865[2]	48	1,200	335
Mountain View Middle School	6-8	13130 Morrison Street	1,319[3]	52	1,809	490
Vista Del Lago High School	9-12	15150 Lasselle Street	2,028[4]	100	2,700	672

Sources: [1](NTD, 2013), [2](Butterfield, 2022. p. 8), [3](Mountain View, 2022. p. 12), [4](Vista Del Lago, 2022. p. 5)
Note: Calculations include portable classroom capacity and classroom quantity.

The project is estimated to generate 47 students, as shown below in **Table 36**.

Table 36 - Estimated Project Student Generation

Project Proposed Dwelling Units	School Level	Student Generation per Household[1]	Total Student Generation
64	Elementary (K-5)	0.3314	21
64	Middle (6-8)	0.1702	11
64	High (9-12)	0.2281	15

Overall		**0.7297**	**47**
Source: [1](Recon, 2021. p. 4.15-8)			

After accounting for project student generation, the estimated remaining capacity is 314 at Butterfield Language Academy Elementary School, 479 at Mountain View Middle School, and 657 at Vista Del Lago High School as shown below in **Table 37.**

Table 37 - Project Impacts on School Capacities

School	School Year Enrollment 2022-2023	Capacity (Student) [1]	Remaining Capacity	Current Enrollment plus Project Student Generation	Remaining Capacity after Project Student Generation
Butterfield Language Academy	865[2]	1,200	335	886	314
Mountain View Middle School	1,319[3]	1,809	490	1,330	479
Vista Del Lago High School	2,028[4]	2,700	672	2,043	657
Sources: [1](NTD, 2013), [2](Butterfield, 2022. p. 8), [3](Mountain View, 2022. p. 12), [4](Vista Del Lago, 2022. p. 5)					

The School Facilities Act of 1986 and Senate Bill 50 allow school districts to collect Developer Fees/ School Impact Fees on the new assessable space of residential and commercial construction within the district boundary (pursuant to Education Code § 17620 and Government Code 65995 et al.). These fees may be utilized for the construction and reconstruction of school facilities (subject to limitations) within a district's boundary. In order to collect these fees, a district must "justify" through a detailed analysis utilizing set criteria in the law, that there is a net impact on the school facilities as a result of the new residential or commercial development. There are three levels of fees that can be assessed by the district.

On February 23, 2022, the State Allocation Board ("SAB") authorized an adjustment in the Statutory School Fee amounts for Moreno Valley Unified School District, pursuant to Government Code § 65995(b)(3), to $4.79 per square foot for assessable space of new residential construction ("Residential Statutory School Fees") and $0.78 per square foot of chargeable covered and enclosed space for the categories of new commercial/industrial construction ("Commercial/Industrial Fees" and collectively "Statutory School Fees").

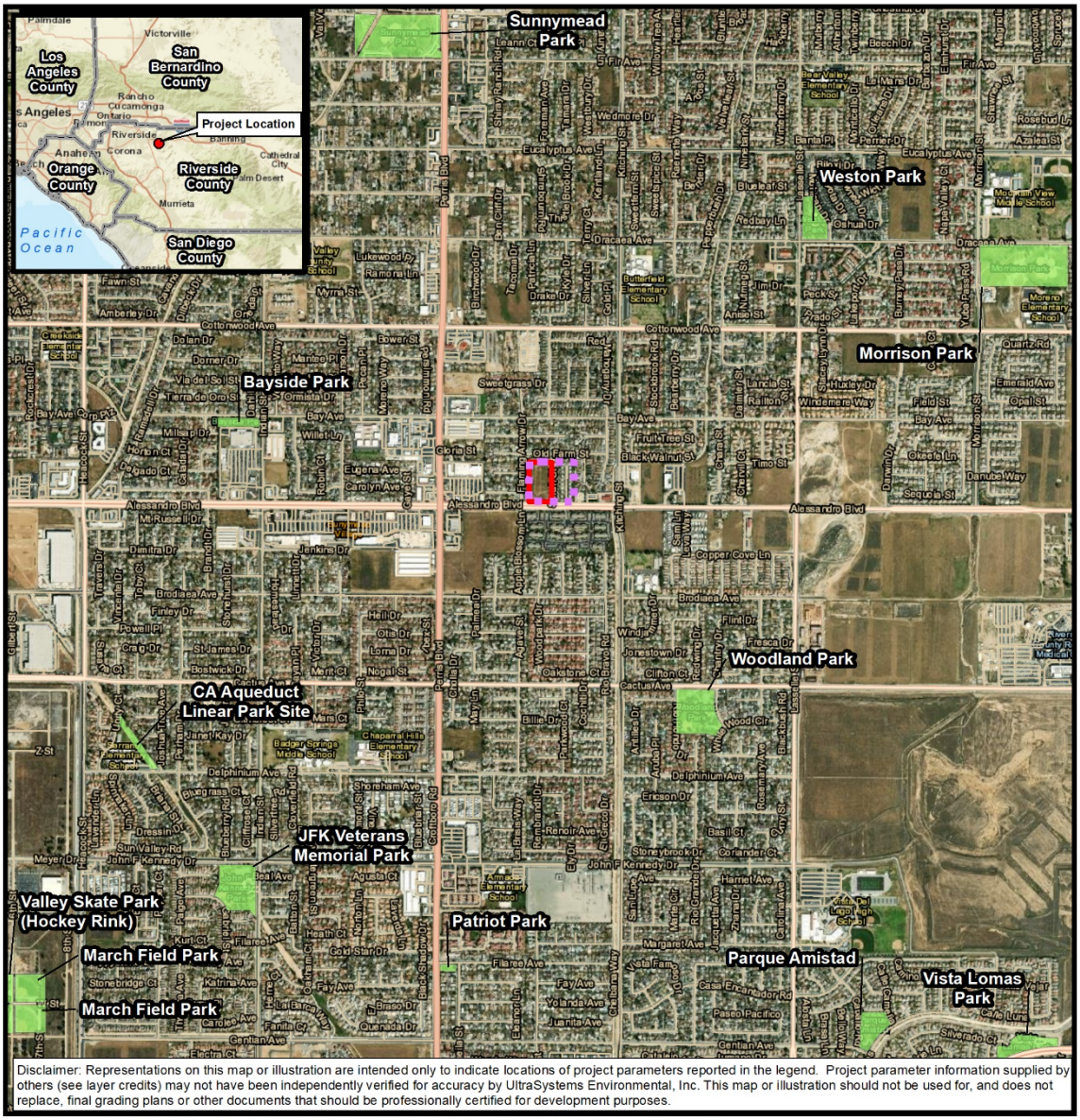
MVUSD does charge developer fees (Residential Statutory School Fees) for residential dwelling units per square foot of assessable space, as authorized by California Education Code § 65996. Project impacts on school facilities would be less than significant after payment of developer fees for schools. No mitigation is required.

iv) Parks?	☐	☐	☒	☐

Response:

The City of Moreno Valley Parks and Community Services maintains over 540 acres of parks and trails and hosts multiple programs for youth, adults, and seniors in five city facilities. The Parks and Community Services Department maintains approximately 482 acres of parkland in the city, including seven Community Parks, 24 Neighborhood Parks, four Specialty Parks, and 15 miles of trails and greenways. These facilities offer a variety of amenities from ball fields, basketball courts, and playgrounds to picnic tables, barbecues, and a demonstration garden that showcases sustainable gardening and landscaping practices. The nearest public park to the project site is Woodland Park, approximately 3,400 feet to the southeast as seen in **Figure 38**

Figure 38 - Nearby Parks and Facilities



Path: \\Gissvr\gis\Projects\7190_ValleyGardens_ISMND\MXDs\Revised_IS\7190_ValleyGarden_IS_Fig39_Parks_Recreation_2023_03_10.mxd March 10, 2023

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community; UltraSystems Environmental, Inc., 2023.

Scale: 1:24,000

N

0 1,000 2,000 Feet

0 250 500 Meters

Legend

Project Site

Project Area

City Park

Valley Gardens Apartments

Nearby Parks and Recreational Facilities

UltraSystems environmental•management•planning

The City of Moreno Valley has established a park service standard of 3.0 acres of parkland per 1,000 residents to ensure that access to parks is adequate and commensurate with the size of the community. With 671.28 acres of existing and planned parkland, Moreno Valley currently has 2.66 acres per thousand residents citywide, below the established service ratio. However, the City has identified approximately 67.69 acres of land for new parks, including the Markborough (43.16 acres) and Redlands (6.00 acres) properties, College Park undeveloped area (7.00 acres, dependent upon joint use agreement with Moreno Valley College), Morrison property undeveloped area (8.09 acres), and Rancho Verde Park (3.44 acres). Development of these facilities will provide new recreational open space to satisfy future demand, although with a projected population of over 252,000 in 2040, an additional 85.27 acres of parkland will be required to meet the established standard. New residential developments will be required to dedicate land for new park facilities or pay a fee that can be used for the acquisition of parkland as needed to meet the communitywide standard.

The project would pay Quimby fees as calculated by the schedule defined in **Table 38**. Furthermore, a city ordinance is enacted to implement the provisions of the Quimby Act which authorizes a city to require the dedication of land for park and recreation facilities, or a payment in-lieu incident to and as a condition of the approval of a tentative tract map, tentative parcel map for residential subdivisions, or a custom home approval.

Table 38 - Quimby Fee Schedule

Land Use	Fee (per Dwelling Unit)
Single-Family Dwelling Units	$2,124
Multi-Family Dwelling Units	$1,577
Senior Housing	$1,106

Source: (Moreno Valley, 2022e)

The proposed project, consisting of 32 two-bedroom units and 32 three-bedroom units, is estimated to house 237 persons based on the average household size in the city of Moreno Valley of 3.70 persons in 2021 (see **Section 4.14** Population and Housing), a modest increase in total City population. The ratio of parkland to the population after project development would be very slightly less than the current ratio. Project impacts on park facilities would be less than significant after payment of applicable development impact fees, and no mitigation is required.

v) Other public facilities?	☐	☐	☒	☐

Response:

Less Than Significant Impact

Library

The city has made important investments in libraries recently, most notably with the 2020 opening of the Iris Plaza Branch of the Moreno Valley Public Library system. There are three public libraries; the Main Branch, the Mall Branch, and the Iris Plaza Branch. The Main Branch at 25480 Alessandro Boulevard is approximately 700 feet to the east of the project site.

Project development would increase the use of and demand for collection items at the Moreno Valley Public Library. The parks and recreation facilities and related improvements for which dedication of land and/or payment of a fee is required are in accordance with the parks and recreation element of the general plan of the city of Moreno Valley. As a public facility, the library system is considered a strategic priority and would receive a portion of the fees collected under the Quimby Act as detailed in section **d)** above. The project's impacts on library facilities and services are expected to be less than significant.

Hospitals

Moreno Valley has a growing healthcare cluster, anchored by two full-service acute care hospitals, the Riverside University Health System Medical Center Main Campus (RUHS-MC) and Kaiser Permanente. Together, these complexes employ more than 4,900 people with plans for expansion.

The nearest hospital to the project site is RUHS-MC at 26520 Cactus Avenue, a 439-bed Medical Center, about 1.25 miles to the southeast. Project development is estimated to add 237 residents to the city as

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

previously discussed in **XIV.** Adequate hospital facilities are present in the project region for project residents, and project development would not require the construction of new or expanded hospitals. Impacts would be less than significant.

Sources:

1. Dyett & Bhatia, 2021. City of Moreno Valley-Climate Action Plan. Accessed online at https://www.moval.org/cdd/documents/general-plan-update/draft-docs/ClimateActionPlan/Draft-MV-CAP.pdf, on December 7, 2022.
2. Google Earth Pro V 7.3.2.5491 (May 12, 2022). City of Moreno Valley, Riverside County, California, U.S.A. 33°55'05.96"N-117°13'17.22"W. Eye alt 4,843 ft. Available at https://earth.google.com/web/. Accessed on October 20, 2022.
3. Dyett & Bhatia, 2021a. City of Moreno Valley General Plan 2040. Dated June 15, 2021. Accessed online at https://www.moval.org/cdd/documents/general-plan-adopted.html on January 27, 2023.
4. City of Moreno Valley, 2022b, City of Moreno Valley Zoning Map, Updated August 8, 2022. Accessed online at: https://moval.gov/city_hall/general-plan2040/NewZoning.pdf. Accessed on October 21, 2022.
5. RECON Environmental Inc. 2021. MoVal 2040 Draft Environmental Impact Report.
6. MVPD, 2022. Moreno Valley Police Department. Accessed online at https://moval.gov/departments/police/index.html on January 27, 2023.
7. NDT, 2013. Moreno Valley Unified School District Facilities Master Plan. Dated November 11, 2013. Accessed online at https://www.mvusd.net/apps/pages/index.jsp?uREC_ID=786774&type=d&pREC_ID=1181698 on October 26, 2022.
8. Butterfield, 2022. Butterfield Elementary Academy School Plan for Student Achievement Template. Accessed online at https://4.files.edl.io/431c/06/07/22/232332-57782790-42c5-4310-90c0-989eee3ea0c0.pdf on October 26, 2022.
9. Mountain View, 2022. Mountain View Middle School Academy School Plan for Student Achievement Template. Accessed online at https://4.files.edl.io/dd5c/06/07/22/231824-cc9d90ce-d886-4bbc-823e-106f65bef741.pdf on October 26, 2022.
10. Vista Del Lago, 2022. Vista del Lago High School Plan for Student Achievement Template. Accessed online at https://4.files.edl.io/54d5/06/07/22/232834-381a5181-4901-4b35-bf21-814b0462ce56.pdf on October 26, 2022.
11. City of Moreno Valley, 2022f. City of Moreno Valley Municipal Code Section 3.40.010. Accessed online at https://library.qcode.us/lib/moreno_valley_ca/pub/municipal_code/item/title_3-chapter_3_40-3_40_010 on October 27, 2022.
12. City of Moreno Valley, 2022e, City of Moreno Valley Quimby Fee Schedule Resolution, Dated April 5, 2022. Accessed online at https://www.moval.org/city_council/pdf/subcom-finan-4b.pdf on October 27, 2022.

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

Response:

Less than Significant Impact

Recreational services in the city of Moreno Valley are provided by the City's Parks and Community Services Department, which maintains approximately 482 acres of parkland in the city, including seven Community Parks, 24 Neighborhood Parks, four Specialty Parks and 15 miles of Trails/Greenways. The City's park acreage standard is three acres of public park land per 1,000 residents. The City's most recent (2021) estimated population of 211,600 gives a current service ratio of 2.28 acres per 1,000 residents which is below this performance standard.

Existing parks within one mile of the project site are:

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Bayside Park, 24435 Bay Avenue, 0.75 mile to the west spans 2.04 acres; facilities include barbecues, lighted basketball court, horseshoes, picnic tables and playground.
Weston Park, 13170 Lasselle Street, 0.9 mile to the northeast spans 4.14 acres; facilities include barbecues, lighted multi-use athletic fields, picnic tables, playground and lightedsoftball/baseball fields
Woodland Park, 25705 Cactus Avenue, 0.6 mile to the southeast spans 9.11 acres; facilities include barbecues, four lit basketball courts, pickleball court, picnic tables, playground, lighted softball/baseball fields and four lit tennis courts
Demand for parks is generated by the population in the parks' service areas. The project involves development of a 64-unit apartment complex; at buildout the project has a density of 13.9 dwelling units per acre and is estimated to house 237 persons based on the average household size in Moreno Valley of 3.70 persons in 2022, Therefore project development would create a demand for 0.71 acres of parkland based on the City's three acres per 1,000 residents standard, which would have negligible impact on the overall City service ratio; it would remain at 2.28 acres of parkland per 1000 residents. The project would include 86,302 square feet of usable open space. The proposed open space onsite would not be parkland open to the public and thus is not considered to reduce project-generated demand for parkland.
The city charges development impact fees for park facilities; the fee for multi-family units that have a density below 14 units per acre is $6,580 per unit. Project impacts on parkland and park facilities would be less than significant after payment of development impact fees for park facilities.

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

Response:

Less than Significant Impact
The project includes common and private open space. Project development would not change the service ratio and would not require development of park facilities. Therefore, project impacts would be less than significant.

Sources:

1. US Census Bureau (USCB), 2022. City and Town Population Totals: 2020-2021 (revised May, 2022)
2. City of Moreno Valley, 2021. City of Moreno Valley General Plan 2040, Adopted June 15, 2021. Accessed online at https://www.moval.org/city_hall/general-plan2040/MV-GeneralPlan-complete.pdf. Accessed on October 21, 2022.
3. City of Moreno Valley Municipal Code, 2022. Accessed online at https://library.qcode.us/lib/moreno_valley_ca/pub/municipal_code , accessed on October 24, 2022.
4. CDF (California Department of Finance), 2022. Table E-5 Population and Housing Estimates.

XVII. TRANSPORTATION – Would the project:

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

Response:
The following analysis is based on Valley Gardens Residential Project Trip Generation & Vehicle Miles Traveled (VMT) Study conducted by RK Engineering Group, dated August 26, 2021, for the proposed project (refer to **Appendix J**).

a) Would the project conflict with a program plan, ordinance or policy addressing circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact

Alessandro Boulevard is an east-west roadway designated a Divided Major Arterial Roadway in the City of Moreno Valley General Plan. The intersection of Alessandro Boulevard with Sarah Street is controlled by a stop sign on Sarah Street, an unimproved private drive. Sidewalks are present near the project site on both sides of Alessandro Boulevard; however, sidewalks are absent on Sarah Street as it is not a dedicated local street and is proposed as a private drive.

Alessandro Boulevard is the nearest existing bicycle facility to the project site, mapped in the City's General Plan as existing striped (Class II) bicycle lanes. The nearest public transit to the project site is Riverside Transit Agency (RTA) with a bus stop along Alessandro Boulevard adjacent to the project site. RTA provides routes within the city that connect to major destinations such as the Moreno Valley/March Field Metrolink Station, Perris Station Transit Center, University of California Riverside (UCR), and Moreno Valley Mall. Major Moreno Valley bus routes include routes 11, 16, 18, 19, 19A, 20, and 31. In addition, RTA has one commuter link express bus route. Route 208 connects the cities of Temecula, Murrieta, Perris, Moreno Valley, and Riverside. Commuter link express bus routes provide peak hour services for commuters in the morning and evening during weekdays. Route 31 also provides connections to Beaumont, Banning, Hemet, and San Jacinto, and passengers can transfer from Beaumont to Sunline Route 10 for service to the Coachella Valley. RTA also provides Dial-A-Ride services for seniors and persons with disabilities.

Applicable Plans, Ordinances, and Policies

Statewide Transportation Improvement Program (STIP)

The Statewide Transportation Improvement Program (STIP) is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the State Highway Account and other funding sources. The proposed project development is not a transportation project and would not conflict with the STIP.

Riverside County Congestion Management Program

The Riverside County Congestion Management Program (CMP) is included as Chapter IX of the Riverside County Long Range Transportation Study issued by the Riverside County Transportation Commission (RCTC) in 2019. The Congestion Management Program Roadway System includes all state highways in Riverside County; routes defined as Principal Arterials by Caltrans; and facilities linking cities/communities, and major activity centers. The RCTC determined that the traffic level of service (LOS) method that incorporated a "delay" analysis was the most applicable for CMP purposes.

As specified in the Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment (TIA Guidelines) a detailed LOS traffic impact analysis would be required if the project is expected to generate 100 or more peak hour trips, or if a major signalized intersection is expected to generate 50 or more project peak hour trips after the trips are distributed to the local roadway network. Based on the net trip generation, the proposed project is not required to prepare a traffic impact analysis and is not expected to result in any significant adverse impacts on the operations of the roadway network and intersections (See **Tables 39 and 40**). Therefore, the proposed project would not conflict with the Riverside County CMP.

Table 39 - ITE Trip Generation Rates[1]

Land Use	Units[2]	ITE Code	AM			PM			Daily
			In	Out	Total	In	Out	Total	
Multifamily Housing (Low-Rise) – Not Close to Rail Transit	DU	220	0.10	0.30	**0.40**	0.32	0.19	**0.51**	**6.74**

[1]Source: ITE Trip Generation Manual (11th Edition, 2021).
[2]DU = Dwelling Unit

Table 40 - ITE Trip Generation Rates[1]

Land Use (ITE Code)[1]	Quantity	Units[2]	AM			PM			Daily
			In	Out	Total	In	Out	Total	
Valley Gardens Residential Project (220)	64	DU	6	19	**25**	21	12	**33**	**431**

[1]Source: ITE Trip Generation Manual (11th Edition, 2021).
[2]DU = Dwelling Unit

Riverside County Measure A

Measure A was approved by Riverside County voters in November 1988, and re-approved in 2009, authorizing a sales tax to fund a variety of transportation projects in the County. The measure created transportation improvement projects in regard to freeways, streets and roads, transit, and environmental programs. The nearest Measure A project to the proposed project site is the Moreno Valley/March Field Station in Riverside approximately four miles to the west. This station serves Metrolink's 91/Perris Valley Line and is the midpoint between the Perris-Downtown Station and the Riverside-Downtown Station. The proposed project would not impede any Measure A projects and would not conflict with Riverside County Measure A.

City of Moreno Valley General Plan – Circulation Element

The city's circulation element has several goals and policies that apply to the proposed project. Refer to **Table 41** below which lists the applicable policies and how the proposed project would comply.

Table 41 - Project Compliance with The City of Moreno Valley General Plan Policies Regarding Mobility and Transportation

General Plan Element	Project Compliance
Goal C-1: Strengthen connections to the regional transportation network.	
Policy C.1-B: Work with property owners, in cooperation with RCTC, to reserve rights-of-way for freeways, regional arterial projects, transit, bikeways, and interchange expansion and potential Community and Environmental Transportation Acceptability Process (CETAP) corridors through site design, dedication, and land acquisition, as appropriate.	**Compliance:** Rights-of-way for regional arterial projects, transit, and bikeways along Alessandro Boulevard would be maintained with the proposed project.
Goal C-2: Plan, design, construct, and maintain a local transportation network that provides safe and efficient access throughout the city and optimizes travel by all modes.	
Policy C.2-5: Prohibit points of access from conflicting with other existing or planned access points. Require points of access to roadways to be separated sufficiently to maintain capacity, efficiency, and safety of the traffic flow.	**Compliance:** No new points of access are proposed along Alessandro Boulevard with Sarah Street becoming an improved private drive.
Goal C-3: Manage the City's transportation system to minimize congestion, improve flow and improve air quality	
Policy C.3-4: Require development projects to complete traffic impact studies that conduct vehicle miles traveled analysis and level of service assessment as appropriate per traffic impact study guidelines.	**Compliance:** Consistent with the City of Moreno Valley Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment the proposed project is screened out from a full VMT analysis. (See **Appendix J).**

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Source: (City of Moreno Valley, 2022a)

As detailed above, the proposed project would not conflict with any applicable policies from the city's General Plan addressing circulation system, including transit, roadway, bicycle and pedestrian facilities. Therefore, the project would have a less than significant impact in this regard.

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

Response:

Less than Significant Impact

Starting on July 1, 2020, agencies analyzing the transportation impacts of new projects must now look at a metric known as vehicle miles traveled (VMT) instead of LOS. VMT measures how much actual auto travel a proposed project would create on California roads.

The TIA Guidelines provide recommendations in the form of thresholds of significance and methodology for identifying VMT-related impacts. However, there are three steps of screening that may apply to effectively screen projects from the project level of assessment. These are summarized below:

- Step 1: Transit Priority Area (TPA) Screening
- Step 2: Low VMT Area Screening
- Step 3: Project Type Screening

As detailed in Step 2: Low VMT Area Screening, residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. A residential project is considered to be in a low VMT area if the project traffic analysis zone's (TAZ) VMT per capita does not exceed the City's Future Buildout VMT per capita.

As detailed below, the proposed project site is located within a Low-VMT Area. The project TAZ baseline VMT per capita was run for the Years 2018 and 2045. The project TAZ's baseline VMT per capita for the Year 2018 is 12.0, which is 8.69% less than the City's Future Buildout VMT per capita of 13.2. The project TAZ's baseline VMT per capita for the Year 2045 is 11.9, which is 9.36% less than the City's Future Buildout VMT per capita of 13.2. As a result, the proposed project can be presumed to have a less than significant impact on VMT under CEQA. Therefore, no further VMT analysis is required.

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

Response:

Less than Significant Impact

The proposed project would not alter the surrounding roadways. Vehicular access to the project would be provided by two driveways from Sarah Street. The intersections of the two proposed driveways with Sarah Street (private drive) would be perpendicular and would not cause hazards due to a geometric design feature. The project's circulation system, including driveways and parking areas, would be designed to meet the development standards of the city and would not result in uses or design features that would create traffic hazards. Therefore, impacts regarding increases in hazards due to geometric design features or incompatible uses would be less than significant.

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

Response:

Less than Significant Impacts

Construction

Project construction could involve the temporary closure of a segment of a lane on Alessandro Boulevard, Sarah Street, or an entire segment of the roadway. Any plans for construction activity in the roadway right-of-way would require an encroachment permit from the City of Moreno Valley. The City Public Works/Engineering Department would review any encroachment permit applications to ensure that such

construction did not impede emergency response to the project site or nearby properties; and did not create traffic hazards. Compliance with any conditions outlined in an encroachment permit is a condition of the permit. Impacts would be less than significant after City review and after project conformance with conditions outlined in any encroachment permit.

Operation

The project would comply with applicable city regulations, such as the requirement to comply with the City's fire code to provide adequate emergency access, as well as the California Building Standards Code. Prior to the issuance of building permits, the City of Moreno Valley would review project site plans, including the location of all buildings, fences, access driveways, and other features that may affect emergency access. The site design includes access and fire lanes that would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. All onsite access and sight-distance requirements would be in accordance with applicable design requirements. The city's review process and compliance with applicable regulations and standards would ensure that adequate emergency access would be provided. Therefore, the project would not result in inadequate emergency access and there would be less than significant impacts.

Sources:

1. RK (RK Engineering Group, Inc.), 2022. Valley Gardens Residential Project Trip Generation & Vehicle Miles Traveled (VMT) Study, City of Moreno Valley, CA. August 26, 2022.
2. City of Moreno Valley, 2022a. City of Moreno Valley General Plan Land Use Map, Revised March 3, 2022. Accessed online at: https://moval.gov/city_hall/general-plan2040/GP-LandUseMap.pdf. Accessed on October 21, 2022.
3. (Waber Consultants, 2022d) Preliminary Site Plan for Valley Gardens. Prepared for Moreno Valley Garden, LLC. October 16, 2022.
4. City of Moreno Valley, 2020b. Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment, Dated June 2020. Accessed online at https://www.moval.org/city_hall/departments/pub-works/transportation/TIA-Guidelines.pdf on December 19, 2022.
5. RCTC (Riverside County Transportation Commission), 2022a. Moreno Valley/March Field Station. Accessed online at https://www.rctc.org/projects/moreno-valley-march-field-station-improvements on December 19, 2022.
6. RCTC (Riverside County Transportation Commission), 2022b. Projects. Accessed online at https://www.rctc.org/projects on December 19, 2022.
7. City of Moreno Valley, 2022a. City of Moreno Valley General Plan Land Use Map, Revised March 3, 2022. Accessed online at: https://moval.gov/city_hall/general-plan2040/GP-LandUseMap.pdf. Accessed on October 21, 2022.
8. OPR (Governor's Office of Planning and Research), 2022. SB 743 Frequently Asked Questions.

XVIII. TRIBAL CULTURAL RESOURCES – Would the project:

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

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

Response:

Information from the Phase I Cultural Resources Inventory report, dated January 4, 2023 (see Appendix D), prepared by UltraSystems for the Valley Gardens Apartments Project is included in the analysis below.

Research for the Cultural Resources Inventory included a cultural resources record search at the Eastern Information Center (EIC), a Sacred Lands File (SLF) record search by the Native American Heritage Commission (NAHC), and a pedestrian survey assessment (see **Section V**). No prehistoric

archaeological resources were observed during the field survey. The cultural resource records and literature search at the EIC indicated that no prehistoric sites or isolates have been recorded within the project boundary or within the 0.5-mile radius. The cultural resources assessment indicates it is unlikely that prehistoric properties would be adversely affected by construction of the project. The SLF search by the NAHC resulted in negative findings for a traditional cultural resource in the project area.

No Impact

No prehistoric archaeological resources were observed during the archaeological field survey conducted September 13, 2022 as part of the cultural resources investigation (Section 4.3 in Appendix D). The results of the pedestrian assessment indicate that it is unlikely that prehistoric resources will be adversely affected by construction of the project.

No tribal cultural resources onsite are 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 § 5020.1(k). Additionally, the project site has not been recommended for historic designation for prehistoric and tribal cultural resources (TCRs). The SLF search by the NAHC resulted in negative findings for a traditional cultural resource in the project area (see Section 4.2 in Appendix D). No specific tribal resources have been identified by local tribes responding to inquiries for the Cultural Resources Inventory report. Therefore, the project would have no impact in this regard.

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

Response:

Less than Significant Impact with Mitigation Incorporated

Assembly Bill 52 (AB 52) requires meaningful consultation with California Native American Tribes on potential impacts on TCRs, as defined in Public Resources Code § 21074. TCRs are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources.

As part of the AB 52 process, Native American tribes must submit a written request to the lead agency to be notified of projects within their traditionally and culturally affiliated area. The lead agency must provide written, formal notification to those tribes within 14 days of deciding to undertake a project. The tribe must respond to the lead agency within 30 days of receiving this notification if they want to engage in consultation on the project, and the lead agency must begin the consultation process within 30 days of receiving the tribe's request. Consultation concludes when either (1) the parties agree to mitigation measures to avoid a significant effect on a tribal cultural resource, or (2) a party, acting in good faith and after reasonable effort, concludes mutual agreement cannot be reached.

The City of Moreno Valley (the lead agency) initiated AB 52 outreach to local tribes for the Valley Gardens Apartments project. The City Community Development department prepared and sent letters on November 18, 2022 from Julia Descoteaux, Senior Planner, Community Development, to the several tribes on their list for AB 52 contact, informing them of the project (Julia Descoteaux, personal communication, December 14, 2022). The letters were sent via certified mail to the tribes listed below.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

The letters conveyed that the recipient has 30 days from the receipt of the letter to request AB 52 consultation regarding the project.

- Agua Caliente Band of Cahuilla Indians
- Morongo Band of Mission Indians
- Pechanga Band of Indians Cultural Resources Department
- Rincon Band of Luiseno Indians
- San Manuel Band of Mission Indians
- Soboba Band of Luiseño Indians
- Torres-Martinez Desert Cahuilla Indians

There were responses from the San Manuel Band of Mission Indians (December 28, 2022) and the Agua Caliente Band of Cahuilla Indians (December 21, 2022) initially stating that that they declined consultation. The Morongo Band of Mission Indians (December 29, 2022), the Pechanga Band of Indians - Cultural Resources Department (January 5, 2023), and the Rincon Band of Luiseño Indians (December 21, 2022) responded requesting consultation. There was no response from the Torres-Martinez Desert Cahuilla Indians or the Soboba Band of Luiseño Indians. (Danielle Harper-Scott, personal communication, January 3, 2023 and January 9, 2023; Descoteaux 2022.)

A copy of the project Cultural Resources Inventory report was requested by Ms. Descoteaux to distribute to consulting tribes if requested; this report was provided by Mr. O'Neil, following final review by the City, on January 4, 2023 to Ms. Harper-Scott for distribution to the tribes.

The Rincon Band reviewed the Cultural Resources Inventory report; the City provided requested background information on January 13, 2023 as available. Rincon provided a letter April 4, 29023 stating: "The Rincon Band has reviewed the provided documents and will defer to the Pechanga Band of Indians and Soboba Band of Luiseño Indians for recommendations pertaining to archaeological and tribal monitoring as both Tribes indicated the cultural-sensitivity of the project site. We do request that the Rincon Band be notified of any changes in project plans. We have no further comments at this time and can conclude consultation." (Danielle Harper-Scott, personal communication, July 7, 2023.)

The Morongo Band received the City's suggested mitigation measures that had been accepted by Pechanga. A meeting was held between Morongo and the City June 1, 2023 at which time the tribe advised the City they wanted to modify the language of the mitigation measures. Morongo then sent red-line of the measures on June 14, 2023.

The Pechanga Band of Indians held a consultation meeting with the City on January 31, 2023 at which time requested information on the origin of fill-soil to be used in the project, and requested that the City apply its standard cultural mitigation measure(s) with language differentiating the western parcel of the project site from the eastern. This information was provided by the City January 13, 2023. (Harper-Scott, personal communication, February 1, 2023.) On April 17, 2023, the tribe accepted the initial suggested mitigation measures provided by the City. Revised measures provided by the City were sent to Pechanga for concurrence on June 15, 2023; these were accepted on July 6, 2023, at which time consultation was concluded. (Danielle Harper-Scott, personal communication, July 6, 2023.)

The Agua Caliente Band responded noting that the project is not within the boundaries of the Agua Caliente reservation. The City provided requested background information as available on January 13, 2023. Agua Caliente closed consultation on March 9, 2023.

The San Manuel Band of Mission Indians stated that the project area was outside of Serrano traditional territory and that they do not request consultation, but did request background information which the city provided January 13, 2023 as available.

The Morongo Band of Mission Indians responded requesting consultation. The City provided Morongo with the suggested mitigation measures that had been approved by the Pechanga Band. A meeting was held between the City and Morongo on June 1, 2023 at which time the tribe advised the City that they would like to modify the language of the mitigation measures. Morongo provided red-line comments on

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

June 14, 2023 for further clarification. (Danielle Harper-Scott, personal communication, July 6, 2023 and July 7, 2023.)

The City suggested TCR mitigation measures were accepted by Pechanga and Morongo and consultation was concluded.

No prehistoric archaeological resources were observed during the field survey. The cultural resources record search at the EIC found no record of prehistoric resources within the project boundary. The results of the pedestrian assessment were negative for prehistoric resources. The SLF search by the NAHC resulted in negative findings for a traditional cultural resource in the project area. The cultural resource study findings suggest that there is a low potential for finding prehistoric resources at the project site.

Land at the project site has remained relatively undisturbed vacant land from the early 20th century to the present, and the immediate area has been rural farm and broadly spaced residential since the 1950s. No human remains have been previously identified or recorded onsite. Therefore, while the potential for subsurface prehistoric cultural deposits is considered to be low. The region is known to have been heavily used for habitation and natural resource gathering by the local Luiseño tribe (see Section 2.2.2 in Appendix D), suggesting the potential for the presence of cultural material in the project area.

The project proposes to conduct construction-related grading. Grading activities associated with development of the project would involve subsurface disturbance and may result in the unanticipated discovery of TCRs. Implementation of **MMs CR-1** through **MM CR-9** (see **Section V. Cultural Resources** above) would ensure the proper identification and subsequent treatment of any significant cultural resources and human remains that may be encountered during ground-disturbing activities associated with Project development. With implementation of the requited mitigation, the Project's potential impact to significant tribal cultural resources would be reduced to less-than-significant.

Level of Significance After Mitigation

With implementation of **MM CR-1** through **MM CR-7,** potential project impacts on TCRs would be less than significant. With implementation of Mitigation Measures **MM CR-8** and **MM CR-9**, the proposed project would result in less than significant impacts to human remains and associated funerary objects.

Sources:

1. California Natural Resources Agency (CNRA), 2022. Tribal Affairs Departmental Overview; California Energy Commission Tribal Consultation Policy. Revised 09.21.2022. Accessed online at: www.resoiurces.ca.gov/initiatives/tribal affairs on November 15, 2022.

XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐

Response:

Less than Significant Impact

Water Treatment: The Eastern Municipal Water District (EMWD) supplies water to the project site. EMWD receives imported water from the Metropolitan Water District of Southern California (MWD). MWD delivers supply to member agencies from two sources, the Colorado River Aqueduct, which it owns and operates, and the State Water Project (SWP), owned and operated by the California Department of Water Resources (DWR). The Henry J. Mills (Mills) Water Treatment Plant treats water from Northern California

and provides it to EMWD through two connection points located in the northeast portion of EMWD's service area, which has a capacity of 220 million gallons per day. The proposed project would not require new or expanded water treatment facilities. The project would have a less than significant impact in this regard.

Wastewater Treatment: The project site is in the service area of EMWD's Moreno Valley Regional Water Reclamation Facility (RWRF). The RWRF has a capacity of 17,900 acre-feet per year (afy), treated 10,451 afy of wastewater in 2020, and had a residual capacity in 2020 of 7,449 afy.

It is estimated that the 64-unit Project would house approximately 237 persons as the average household size in the City is 3.70 persons. The Project would generate 100 gallons of wastewater per person per day, according to the City of Moreno Valley General Plan EIR. Therefore, the Project would generate about 0.0237 million gallons per day (MGD). The generation of 0.0237 MGD of wastewater is well within the available capacities at EMWD's Moreno Valley Regional Water Reclamation Facility.

Stormwater Drainage: The subject property is located along the north side of Alessandro Boulevard, east of Flaming Arrow Drive. The generally rectangular-shaped parcel is elongated in a north-to-south direction onto Alessandro Boulevard. As previously discussed under Hydrology and Water Quality, under existing conditions, stormwater generated on the project site enters existing municipal storm drain inlets located on Alessandro Boulevard, near the southwest and southeast corners of the project site. This storm drain (Sunnymead Master Drainage Plan Line M-11) flows east into the Kitching Street Channel, which in turn discharges into the Perris Valley Channel approximately three miles south. The Perris Valley Channel is a tributary to the San Jacinto River, and known water of the U.S.

The project proposes onsite drainage improvements including storm drains and storm drain inlets, modular wetland systems, and underground detention systems consisting of plastic pipes. A preliminary WQMP has been prepared for the proposed project site and is included herein as **Appendix G1**. The MS4 and the associated WQMP require the implementation of Low Impact Development (LID) features to ensure that most stormwater runoff is treated and retained onsite.

The project WQMP includes LID BMPs such as a combination of previous areas, bioretention basins, and a modular wetland system to retain and treat stormwater generated on the project site by the Design Storm for each Drainage Management Area (DMA) within the completed project. These LID BMPs are intended to minimize impervious areas, maximize infiltration capacity, and preserve the existing drainage patterns to mitigate the impacts of runoff and stormwater pollution as close to the source as possible. These facilities are highly effective at removing water pollutants such as sediment, nutrients, trash, metals, bacteria, oil and grease, and organic compounds while reducing the volume and intensity of stormwater flow leaving a site.

Electric Power: Moreno Valley Utility (MVU) provides electricity to the project site. During the fiscal year, 2019/2020 MVU provided approximately 201,765,902 kWh (kilowatt-hour) of electricity to its customers. The project site is in an urbanized area with existing electric distribution lines. The project would be constructed in accordance with all applicable regulations of the 2019 California Green Building Standards Code, Title 24, Part 11 (Title 24), and project development would not require the construction or relocation of electric power facilities. Therefore, a less than significant impact would occur.

Natural Gas: The Southern California Gas Company (SoCalGas) is the primary distributor of retail and wholesale natural gas across Southern California, including the City of Moreno Valley. SoCalGas provides services to residential, commercial, and industrial consumers, and also provides gas for electric generation customers. In its 2020 California Gas Report, SoCalGas analyzed a 16-year demand period, from 2020 to 2035, to determine its ability to meet projected demand.

SoCalGas expects total gas demand to decline 0.74 percent annually from 2020 to 2035 as a result of energy-efficiency standards and programs, renewable electricity goals, modest economic growth in its service region, and advanced metering infrastructure. Therefore, the anticipated natural gas supply is adequate to meet demand in the SoCalGas region, and the proposed project is not expected to impact this determination. Thus, no natural gas facilities would have to be constructed or relocated, and a less than significant impact would occur.

Telecommunications Facilities: Telecommunication services for the project site, including internet, phone, and television, are provided by AT&T, Verizon, Crown Castle, Questar, and Spectrum. The project construction contractor would contact the Underground Service Alert of Southern California ("Digalert") at least two days before beginning soil disturbance, pursuant to California Government Code § 4216. Any relocation of underground utilities onsite—or next to the site for installation of new utility laterals connecting to existing utilities—would be conducted at the expense of the project applicant and under permission

from the utility's owner. The proposed project would not interfere with the operation of existing utility facilities, and the impacts would be less than significant.

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

Response:

Less than Significant Impact

Water Supplies and Demands

The Eastern Municipal Water District (EMWD) supplies water to the project site. EMWD's 555-square-mile service area spans much of western Riverside County. EMWD is the retail water purveyor in most of its service areas and also wholesales water to several retail water purveyors in its service area. EMWD water supply in the project region is from northern California and imported via the State Water Project. EMWD imported water supplies, in other portions of its service area, also include water imported from the Colorado River via the Colorado River Aqueduct. EMWD imported water supplies in the project region, approximately the northwest third of EMWD's service area, are only from northern California.

Water is treated at the Metropolitan Water District's Mills Filtration Plant in the City of Riverside, which has a capacity of 220 million gallons per day. EMWD retail water supplies are forecast to increase from 115,916 acre-feet per year (afy) in 2020 to 178,700 afy in 2040, as shown below in **Table 42**. Water demands for 2025 through 2045 are based on population projections by the Southern California Association of Governments, which in turn are based on general plan land use projections. EMWD forecasts that it will have sufficient water supplies to meet demands in its service area through the 2025-2045 period in single-dry-year and multiple-dry-year conditions, as shown below in **Table 43**.

Table 42 - EMWD Systemwide Retail Water Supplies & Demands, Average Water Conditions

Supply Source	2020	2025	2030	2035	2040
Supplies					
Imported water	62,310	66,447	72,147	70,247	74,747
Other potable water supplies[1]	22,362	36,153	36,153	44,153	44,153
Recycled water supply[2]	39,642	43,330	49,020	54,500	59,800
Total	**124,314**	**145,930**	**157,320**	**168,900**	**178,700**
Water Demands					
	115,916	**145,930**	**157,320**	**168,900**	**178,700**
Difference					
	8, 398	**0**	**0**	**0**	**0**

Note: Measurements are done in AFY = Acre-Feet per Year

[1] Other potable water supplies consist of groundwater from the San Jacinto Groundwater Basin, some of which is desalinated at EMWD desalters, and purified water derived from treated wastewater and used as one of the water sources for recharging the San Jacinto Groundwater Basin.

[2] Non-potable water supplies consist of recycled treated wastewater and brackish groundwater from the San Jacinto Groundwater Basin used to supplement the recycled water system. The quantities shown here are recycled water only.

Source: EMWD, 2021, pp. 6-24 and 6-25.

Table 43 - EMWD Retail Water Supply Reliability, 2025-2040

	Normal Year		Single Dry Year		Multiple Dry Years[1]	
	Supply	**Demand**	**Supply**	**Demand**	**Supply**	**Demand**
2025	145,390	145,390	151,130	151,130	140,200	140,200

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

2030	157,320	157,320	162,820	162,820	150,800	150,800
2035	168,900	168,900	174,700	174,700	160,000	160,000
2040	178,700	178,700	184,700	184,700	168,000	168,000

Note: Measurements are done in AFY = Acre-Feet per Year
[1]Volumes are for the fifth of five consecutive dry years.
Source: EMWD, 2021 Urban Water Management Plan, pp. 7.8-7.10

The project would conform with the existing General Plan land use designation for the project site of Corridor Mixed-Use. Therefore, water demand by buildout of the project site in accordance with the General Plan designation was accounted for in EMWD's water demand forecasts. EMWD forecasts that it will be able to meet water demands in its service area in normal, single-dry-year, and multiple-dry-year conditions over the 2025-2040 period. Project development would not require EMWD to obtain new or increased water supplies, and impacts would be less than significant.

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

Response:

Less than Significant Impact
As described in **XVI a)** above, the volume of wastewater generated by the project represents only a small fraction of the existing daily capacity of the wastewater treatment facility providing service in the area. Therefore, the wastewater anticipated to be generated by the project would be within the existing capacity of the wastewater treatment provider and less than significant impacts would occur.

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

Response:

Less than Significant Impact
Waste Management, Inc. collects solid waste from businesses and residents in the City of Moreno Valley under contract with the City.
In 2019, the latest year for which data are available, approximately 97 percent of solid waste landfilled from the City of Moreno Valley was disposed of at two facilities, Badlands Sanitary Landfill near the City of Moreno Valley and El Sobrante Landfill near the City of Corona. As shown below in **Table 44**, the two landfills have a combined residual capacity of approximately 6,500 tons per day.

Table 44 - Landfills Serving Moreno Valley

Facility & Nearest City/Community	Remaining Capacity (cubic yards)	Daily Permitted Disposal Capacity (tons)	Actual Daily Disposal (tons)[1]	Residual Daily Disposal Capacity (tons)	Estimated Closing Date
Badlands Sanitary Landfill Moreno Valley, Riverside County	15,748,799	4,800	2,955	1,845	2022
El Sobrante Landfill Corona, Riverside County	143,977,170	16,054	11,398	4,656	2051
Total	**159,725,969**	**20,854**	**14,353**	**6,501**	

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

[1] Daily disposal calculated based on annual disposal tonnage assuming 300 operating days per year (i.e., six days per week less certain holidays).

Sources: (CalRecycle, 2019), (CalRecycle, 2023a), (CalRecycle, 2023b) (CalRecycle. 2021)

Construction

Project construction would generate solid waste requiring disposal at local landfills. Materials generated during the construction of the project would include paper, cardboard, metal, plastics, glass, concrete, lumber scraps, and other materials. Section 4.408.1, Construction Waste Reduction, Disposal, and Recycling, of Title 24 requires that at least 65 percent of the nonhazardous construction and demolition waste from residential construction operations be recycled and/or salvaged for reuse. Project construction would include recycling and/or salvaging at least 65 percent of construction and demolition waste in accordance with Title 24, § 4.408.2, 4.408.3, or 4.408.4. Even after the closure of the Badlands Landfill in 2022, sufficient disposal capacity would remain at the El Sobrante Landfill for solid waste generated by project construction. Therefore, construction-related impacts regarding excess solid waste would be less than significant.

Operation

Solid waste generation rates included in the 2006 General Plan EIR (not updated in the 2040 GP EIR), state that multi-family uses such as the Project can produce seven pounds of refuse per dwelling unit per day. It is estimated that 64 multi-family residences would generate about 448 pounds per day or 0.224 tons per day (448 / 2,000 (1 ton) = 0.224 tons), or 81.76 tons per year (7 x 64 x 365 = 163,520 pounds per year / 2,000 = 81.76 tons per year).

As previously stated, solid waste facilities can provide adequate disposal capacity for cumulative demand over at least the next twenty-five years. Combined with the state and City's mandatory source reduction and recycling programs, the Project is not forecast to cause a significant adverse impact on the waste disposal system due to the available capacities at nearby landfills. Therefore, the proposed project would have a less than significant potential to generate solid waste in excess of State or local standards, or over the capacity of local infrastructure, or otherwise, impair the attainment of solid waste reduction goals. Therefore, operational impacts regarding excess solid waste would be less than significant.

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

Response:

b) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

<u>Less Than Significant Impact</u>

Assembly Bill 341 (AB 341; Chapter 476, Statutes of 2011) increases the statewide waste diversion goal to 75 percent by 2020, and mandates recycling for commercial and multi-family residential land uses. The project would include storage areas for recyclable materials in accordance with AB 341.

Assembly Bill 1826 (AB 1826; California Public Resources Code §§ 42649.8 et seq.) requires the recycling of organic matter by businesses and multifamily residences of five or more units generating such wastes in amounts over certain thresholds. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. Multifamily residences are not required to have a food waste diversion program. The project does not propose uses that would generate substantial amounts of food waste, such as grocery retailing or restaurant use. Landscaping waste would be composted in accordance with AB 1826. Therefore, impacts regarding federal, state, and local management and reduction statutes and regulations related to solid waste would be less than significant.

Sources:

1. EMWD (Eastern Municipal Water District. 2021. Groundwater Reliability Plus: Securing Our Future [information booklet].
2. MWD, 2022, Metropolitan's Treatment Plants, Accessed online at https://www.mwdh2o.com/your-water/water-quality-and-treatment?keywords=Mills on January 30, 2023.

3. CDF (California Department of Finance), 2022. Table E-5 Population and Housing Estimates.
4. RECON Environmental Inc. 2021. MoVal 2040 Draft Environmental Impact Report.
5. RCFCD (Riverside County Flood Control District). 2022. Master Drainage Plan for Riverside County.
6. Waber Consultants, Inc. 2022a. Preliminary Water Quality Management Plan for the Valley Gardens Project. Prepared for Moreno Valley Garden, LLC. October 21, 2022.
7. Waber Consultants, Inc. 2022b. Preliminary WQMP Site Plan for the Valley Gardens Project. Prepared for Moreno Valley Garden, LLC. October 18, 2022.
8. (MVU, 2020) Moreno Valley Utility Annual Report 2019-2020. Accessed at https://www.moval.org/mvu/pubs/MVU-2020-AnnualReport/index.html on January 30, 2023.
9. (CGEU, 2020) 2020 California Gas Report. Accessed online at https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf on October 27, 2022.
10. CalRecycle, 2019. Jurisdiction Disposal by Facility. Accessed online at https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility on January 30, 2023.
11. CalRecycle. 2021. Solid Waste Landfill Data. Accessed online at https://www2.calrecycle.ca.gov/LandfillTipFees on January 30, 2023.
12. CalRecycle. 2023a. Badlands Sanitary Landfill SWIS. Accessed online at https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2245?siteID=2367 on January 30, 2023.
13. CalRecycle. 2023b. Badlands Sanitary Landfill SWIS. Accessed online at https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2245?siteID=2367 on January 30, 2023.

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

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

Response:

No Impact

The project site is not located in a Very High Fire Hazard Severity Zone (VHFHSZ) within a Local Responsibility Area (LRA), that is, where cities or counties are responsible for the costs of wildfire prevention and suppression. The nearest VHFHSZ in LRA to the project site is about 2.1 miles to the east in the city of Moreno Valley. The project site is not located in a State Responsibility Area (SRA), i.e., where the State is responsible for the costs of wildfire prevention and suppression. The nearest SRA to the project site is in unincorporated Riverside County approximately three miles to the north. Therefore, the proposed project would have no impact in this regard.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒

Response:

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

No Impact

As indicated under item a) above, the project site is not located in or near a SRA or a VHFHSZ within a LRA. Therefore, the proposed project would not, "due to slope, prevailing winds, and other factors,

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire" and as such would have no impact.				
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒

Response:

No Impact

The project site is not located in an SRA, nor is the project site in or near a VHFHSZ. The project would not require the installation or maintenance of infrastructure that may exacerbate fire risk. Therefore, the proposed project would have no impact in this regard.

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

Response:

No Impact

As indicated under item a) above the project site is not located in or near a SRA or a VHFHSZs within a LRA. Therefore, the proposed project would not, "expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes" and as such would have no impact.

Sources:

1. CAL FIRE, 2022, Fire Hazard Severity Zones. Accessed at https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/ on September 13, 2022
2. City of Moreno Valley, 2022g, MV Current Projects. Accessed at: https://www.moval.org/cdd/documents/about-projects.html#:~:text=Moreno%20Valley%20Mall%20Redevelopment&text=Remodeling%20the%20overall%20mall%20site,building%20of%20approximately%2060%2C000SF. Accessed on November 3, 2022.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

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

Response:

Less Than Significant Impact with Mitigation Incorporated

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
The project site is located in an urbanized area and provides generally low-quality habitat for special status plant and wildlife species. The project site itself has a relatively flat topography, with elevations ranging from 1,560 feet to 1,568 feet above mean sea level (AMSL). The project site is currently undeveloped. Two land cover types occur within the BSA and they are each described later in **IV**. The project area has been mowed or disked regularly to maintain its cleared condition. There is evidence of dumping and vehicle use across the site. Several ornamental trees are distributed in the offsite residential areas in the BSA. Plant and wildlife species were recorded during the habitat assessment survey and other surveys (see Attachment G of **Appendix C1**, *Plant and Wildlife Species Recorded During the Field Surveys*). To maintain compliance with the MSHCP, the project proponent will implement mitigation measure **BIO-1,** to survey the site for the presence of burrowing owls (BUOW) prior to the commencement of construction activities. If any BUOW is observed during the focused BUOW survey then the project proponent will confer with the City of Moreno Valley, the County of Riverside Environmental Programs Department (EPD), and CDFW to determine how to minimize impacts to existing BUOW. Implementation of mitigation measure **BIO-1** would reduce impacts to BUOW to a less than significant level. Areas of the project site within the biological study area (BSA) contain large ornamental trees that could potentially provide suitable nesting habitats for bird species (year-round residents, seasonal residents, and migrants). A majority of the birds observed during the field surveys and those birds that could potentially breed within the BSA are protected by the MBTA and Fish and Game Code § 3503, § 3503.5, and § 3513. Refer to the recommended mitigation measures referenced below which would reduce potential project impacts on biological resources. It is anticipated that vibration, dust, and other disturbances resulting from the project activities could adversely affect the nesting behaviors of these birds. Implementation of **BIO-2**, to conduct a focused BUOW survey as required by the MSHCP, would reduce impacts on BUOW to a less than significant level. Implementation of **BIO-3** and **BIO-4** would provide for a qualified biologist to monitor project activities and implementation of best management practices, as required by the MSHCP. Implementation of mitigation measures **BIO-1** thru **BIO-4** would reduce impacts to biological resources to less than significant. Impacts on archaeological resources that may be buried in site soils were determined to be significant without mitigation. Such impacts would be less than significant after the implementation of mitigation measure **CUL-1**. Impacts on human remains that may be buried in site soils were determined to be significant without mitigation. Implementation of mitigation measure **CUL-2** would reduce that impact to less than significant.				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)?	☐	☐	☒	☐
Response: **<u>Less than Significant Impact</u>** In the short term, there would be a potential for cumulative effects on traffic, air quality, and noise if other development projects were implemented concurrently with the project. However, there are no development projects within 0.5 miles of the project site listed on the City of Moreno Valley Community Development Current Project webpage.				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐
Response: **<u>Less than Significant Impact with Mitigation Incorporated</u>**				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
The project geotechnical evaluation report determined that the site is located in an area of expansive clay soils. Project impacts arising from expansive soils would be significant without mitigation. Mitigation measure **GEO-1** requires the implementation of applicable recommendations provided in the Preliminary Geotechnical Evaluation Report. Impacts related to unstable soils would be less than significant after the implementation of mitigation measure **GEO-1**. Project construction would generate noise at nearby residences exceeding the City of Moreno Valley Municipal Code limits. Implementation of mitigation measures **N-1** and **N-10**, the project would result in less than significant impacts to sensitive receivers. Tribal cultural resources could be buried in site soils. Project site grading and project construction could damage such resources. Implementation of mitigation measures **TCR-1** through **TCR-9** would reduce these impacts to less than significant. The AB 52 Process with the Native American tribes has been completed; all Native American concerns have been addressed by the City's nine Cultural Resource mitigation measures.				