

DRAFT SUBSEQUENT

ENVIRONMENTAL IMPACT REPORT

**MORENO VALLEY MALL
REDEVELOPMENT PROJECT**

SCH NO. 2022040136



Lead Agency



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- Appendix G: Traffic Impact Analysis
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1.0 EXECUTIVE SUMMARY

1.1 Project Overview

The California Environmental Quality Act (CEQA) Guidelines require the preparation of an Environmental Impact Report (EIR) to be produced as a full disclosure document. In order to comply with CEQA Guidelines, the EIR must (1) inform agency decision-makers and the general public of the direct and indirect potentially significant environmental effects of a proposed action; (2) identify feasible or potentially feasible mitigation measures to reduce or eliminate potentially significant adverse impacts; and (3) identify and evaluate reasonable alternatives to a project. In accordance with §15168 of the State CEQA Guidelines (Title 14 of the California Code of Regulations [CCR]), this Draft SEIR (State Clearinghouse No. 2022040136) that has been prepared for the Moreno Valley Mall Redevelopment Project (Project) and has been prepared by the City of Moreno Valley (City).

1.2 Project Objectives

The following objectives have been established for the Project by the City and Project applicant:

- A plan that allows for the revitalization of the Project Area, adapting to changing market conditions and providing economic benefits to the City.
- A long-term development plan that encourages and facilitates new uses of high quality and design.
- A mixed-use village that serves as a regional anchor to the area and draws upon the vibrancy of established neighborhoods, businesses, and community amenities nearby.
- Integration of the Project into an established urban fabric and established neighborhoods in the immediate vicinity.
- A mixture of uses that reduces vehicle miles traveled through internal capture of trips and carries out the intent of the City's Climate Action Plan.
- A plan that facilitates private investment in the development.
- Flexibility in development while achieving community goals.
- Creation of new and future employment opportunities.
- A mixture of high-quality housing and ground level commercial uses.
- A circulation system responsive to the needs of vehicular, bicycle, and pedestrian travel.
- Landscaping appropriate to the level of development and sensitive to surrounding areas.
- Architecture which responds to and enhances the property with timeless architectural style.
- A visually harmonious development as viewed both internally and externally.
- A project that has an architectural language promoting the varied uses while working with the contextual and regional vernacular of southern California.
- Provision of adequate parking including a shared parking program.

1.3 Project Description

The Project site consists of the redevelopment of the existing Moreno Valley Mall (excluding the JC Penny and Macy's parcels), including the following APNs: 291-110-032, 291-110-033, 291-110-034, and 291-110-035. Town Circle is a loop road surrounding the mall site. The mall has primary access via Frederick Street and Day Street from SR-60 and Eucalyptus Avenue from I-215 (refer to **Figure 3-2, Project Vicinity**). The Project proposes revitalization and redevelopment of a portion of the existing Moreno Valley Mall (excluding the existing JC Penny and Macy's parcels). Key features of the concept plan are noted in the following summary (refer to **Figure 3-4, Conceptual Site Plan**). The applicant's proposed parcel map is shown in **Figure 3-3, Conceptual Land Use Plan**.

The following entitlement applications are associated with the proposed Project:

- **Specific Plan Amendment (SP-200) – PEN21-0168** proposes to amend and supersede the Towngate Specific Plan (SP-200). The Specific Plan Amendment (SPA) details development standards and guidelines that will apply to the Project and to any future development within the planning areas established by the SPA. Additionally, the SPA details Project objectives and guidelines for the proposed developments.
- **Tentative Parcel Map – PEN 22-0061** proposes the delineation of the Project site into 22 parcels to allow for additional and more refined land uses within the Project area as shown in **Figure 3-3, Conceptual Land Use Plan**.

1.4 Unavoidable Significant Impacts

The Project's potentially significant impacts are defined in **Section 4.1, Aesthetics** through **Section 4.8, Utilities and Service Systems** of this Draft SEIR. As noted in these sections, most of the potentially significant impacts identified can be mitigated to a less than significant level through the implementation of feasible mitigation measures. There are unavoidable significant impacts associated with air quality and greenhouse gas emissions, as summarized below:

- Air Quality
 - The Project would conflict or obstruct implementation of an applicable air quality plan.
 - The Project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
 - The Project would result in significant cumulative air quality impacts.
- Greenhouse Gas Emissions
 - The Project would generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment.
 - The Project would conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions.
 - The Project would result in significant cumulative GHG emissions.

1.5 Alternatives to the Project

State CEQA Guidelines §15126.6(a) requires a Draft EIR to “describe the range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but will avoid or substantially lessen any of the significant effects of the Project and evaluate the comparative merits of the alternatives.” In response to the potentially significant impacts that were identified, the EIR includes the following alternatives for consideration by decision-makers upon action related to the Project:

Alternative 1: No Redevelopment

The purpose of describing and analyzing a No Project Alternative is to allow decision-makers the ability to compare the impacts of approving the Project with impacts of not approving the Project. The No Project analysis is required to discuss the existing conditions (at the time the NOP was published on April 26, 2022), as well as what would be reasonably expected to occur in the foreseeable future, if the Project were not approved, based on current plans and consistent with available infrastructure and services.

Under the No Redevelopment Alternative, the following would occur:

- The Applicant would not improve the site with the proposed development of new multi-family residential, hotel, and office buildings.
- The existing mall would not undergo improvements and other existing buildings and parking areas would continue to occupy the site.
- The proposed street improvements would not be installed, nor would the applicant contribute to street improvements identified in the Canyon Springs TIA as described in **Section 4.7, Transportation**.
- Utility improvements would not be implemented.
- Relocations and improvements to the on-site transit center would not occur.

Alternative 2: No Project/Existing Specific Plan

Consistent with State CEQA Guidelines §15126.6, the No Project/Existing Specific Plan Alternative assumes development of the Project site pursuant to existing General Plan and zoning designations, which would be pursuant to the current SP-200.

Under the No Project/Existing Specific Plan Alternative, the following would occur:

- Redevelopment would occur consistent with the Project site’s current General Plan Zoning designation of Mixed-Use Community Overlay District and Land Use designation of Center Mixed Use (CEMU), which allows for a maximum density of 35 dwelling units per acre, or a maximum of 3,252 dwelling units, and maximum permitted floor area ratio of 1.25.
- Development of an additional mall anchor at the site would occur as assumed by SP-200.

Alternative 3: Reduced Density

The Reduced Density Alternative would entail the redevelopment of the existing Moreno Valley Mall and the proposed office, residential, and hotel uses, but at a smaller development density than what was proposed for the Project. For the purposes of this analysis, a 25% reduction in density was assumed.

Under the Reduced Density Alternative, the following would occur:

- The multi-family residential buildings would develop 408 dwelling units less than the Project, with reduced building heights and/or building footprints.
- The hotel uses would be developed at a scale 45,500 square feet smaller than the Project.
- The office uses would be developed at a scale 15,000 square feet smaller than the Project.
- Under this Alternative, development would occur at a FAR of 2.48.

Alternative 4: No Residential

The No Residential Alternative presents a Project variation in which the proposed Project site would be developed as proposed with the exception of the 1,627 residential units that would be developed as part of the unadulterated Project.

Under the No Residential Alternative, the following would occur:

- The areas proposed for development of residential land uses under the Project would remain in their existing conditions.
- Development of the proposed commercial uses would still occur.

Environmentally Superior Alternative

State CEQA Guidelines requires that an Environmentally Superior Alternative be identified; that is, an alternative that would result in the fewest or least significant environmental impacts. The No Project Alternative is the Environmentally Superior Alternative because it would avoid many of the proposed Project's impacts. If the "No Project" Alternative is the Environmentally Superior Alternative, CEQA Guidelines §15126.6(e)(2) requires that another alternative that could feasibly attain most of the Project's basic objectives be chosen as the Environmentally Superior Alternative. With regards to the remaining development alternatives, the Reduced Density Alternative was evaluated as the Environmentally Superior Alternative as it best meets Project objectives with the least impact to the environment. Refer to **Section 6.0, Alternatives** to the Project for more information.

Areas of Controversy

The State CEQA Guidelines §15123 (b)(2) and (3) require that a Draft SEIR identify areas of controversy known to the lead agency, including issues raised by other agencies and the public and issues to be resolved, including the choice among alternatives and whether, or how to, mitigate the significant effects. A Notice of Preparation (NOP) of the Project was circulated on April 6, 2022 with a 30-day public review period ending on May 6, 2022. The NOP was recirculated on April 26, 2022 which extended the public

review period by another 30-days, ending on May 26, 2022. The following issues of concern have been identified during the review period of the distribution of the NOP and public meeting:

- Affordable housing
- Air quality and health issues for residents near freeways; health risk assessment
- Community Benefits Agreement
- Complete streets and cycling amenities
- Covered bus stops and higher demand for public transportation
- Maintaining dark skies; increased light pollution
- Drought tolerant plants and trees
- Evergreen tree buffer between SR-60 and residential
- High number of multi-family dwelling units
- Increased traffic and freeway congestion; improvements to freeway exits
- Maximum uses of solar on rooftops
- Necessity of hotel space
- Need for more open/green space throughout the Project
- Recycling within Mall itself
- Residential security and potential need for police substation
- Utilization of local skilled and trained workforce; local hire mandates to this end

1.6 Summary of Environmental Impacts & Mitigation Measures

The following table is a summary of significant impacts and proposed mitigation measures associated with the Project as identified in this Draft SEIR. Refer to **Sections 4.1** through **4.8**, for a detailed description of the environmental impacts and mitigation measures for the Project. All impacts of the Project can be mitigated to less than significant levels with the exception of air quality and greenhouse gas emissions.

Table 1-1: Summary of Significant Impacts and Proposed Mitigation Measures

Resource Impact	Level of Significance	Mitigation Measure(s)
Section 4.2, Air Quality		
<p>Impact 4.2-1 Would the Project conflict with or obstruct implementation of the applicable air quality plan?</p>	<p>Significant and Unavoidable Impact</p>	<p>Feasible mitigation measures are proposed to lessen the severity of impacts; however, the residual significance of this impact would be significant and unavoidable.</p> <p>Refer to MM AQ-1 through MM AQ-6, below.</p>
<p>Impact 4.2-2 Would the proposed project, 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?</p>	<p>Significant and Unavoidable Impact</p>	<p>Feasible mitigation measures are proposed to lessen the severity of impacts; however, the residual significance of this impact would be significant and unavoidable.</p> <p>MM AQ-1: Prior to issuance of grading permits, the applicant shall prepare and submit documentation to the City of Moreno Valley that demonstrate the following:</p> <ul style="list-style-type: none"> • All off-road diesel-powered construction equipment greater than 50 horsepower meets California Air Resources Board Tier 4 Final off-road emissions standards or incorporate CARB Level 3 Verified Diesel Emission Control Strategy (VDECS). Requirements for Tier 4 Final equipment shall be included in applicable bid documents and successful contractor(s) must demonstrate the ability to supply such equipment. A copy of each unit’s Best Available Control Technology (BACT) documentation (certified tier specification or model year specification), and CARB or SCAQMD operating permit (if applicable) shall be provided to the City at the time of mobilization of each applicable unit of equipment. • All on-road heavy-duty haul trucks shall be model year 2010 or newer if diesel fueled. • Construction equipment shall be properly maintained according to manufacturer specifications. All equipment maintenance records and data sheets, including design specifications and emission control tier classifications shall be kept on-site and furnished to the lead agency or other regulators upon request. • All construction equipment and delivery vehicles shall be turned off when not in use, or limit on-site idling for no more than 5 minutes in any 1 hour. • On-site electrical hookups to a power grid shall be provided for electric construction tools including saws, drills, and compressors, where feasible, to reduce the need for diesel powered electric generators. Construction contracts shall require all off-road equipment with a power rating below 19 kilowatts (25 horsepower) (e.g., plate compactors, pressure washers, etc.) used during project construction to be battery powered. • Prepare a construction traffic control plan detailing the locations of equipment staging areas, material stockpiles, proposed road closures, and

Resource Impact	Level of Significance	Mitigation Measure(s)
		<p>hours of construction operations, and designing the plan to minimize impacts to roads frequented by passenger cars, pedestrians, bicyclists, and other non-truck traffic.</p> <ul style="list-style-type: none"> • Provide information on transit and ridesharing programs and services to construction employees. <p>MM AQ-2: Low VOC Paint. The Project Applicant shall require by contract specifications commercial development to use interior and exterior architectural coatings (paint and primer including parking lot paint) products that have a volatile organic compound rating of 50 grams per liter or less. Contract specifications shall be reviewed and approved by the City of Moreno Valley prior to the issuance of occupancy permits. This measure shall be made a condition of approval for continued upkeep of the property.</p> <p>MM AQ-3: Vehicle Trip Reduction. Develop a qualifying Commute Trip Reduction (CTR)/ Transportation Demand Management (TDM) plan to reduce mobile GHG emissions for all uses. The TDM plan shall be approved by the City of Moreno Valley prior to the issuance of building permits and incorporated into the Project’s Codes Covenants and Restrictions (CC&Rs). The TDM plan shall discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. The following measures shall be incorporated into the TDM plan.</p> <p>TDM Requirements for Non-Residential Uses:</p> <p>The Project Applicant shall consult with the local transit service provider on the need to provide infrastructure to connect the Project with transit services. Evidence of compliance with this requirement may include correspondence from the local transit provider(s) regarding the potential need for installing bus turnouts, shelters, or bus stops at the site.</p> <p>The portion of the TDM plan for non-residential uses shall include, but not be limited to the following potential measures: ride-matching assistance, preferential carpool parking, flexible work schedules for carpools, half-time transportation coordinators, providing a website or message board for coordinating rides, designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles, and including bicycle end of trip facilities. This list may be updated as new methods become available. Verification of this measure shall occur prior to building permit issuance for the commercial uses.</p> <p>TDM Requirements for Residential Units:</p> <p>Rental Units. Upon a residential dwelling being rented or offered for rent, the Project Applicant shall notify and offer to the tenant or prospective tenant, materials describing public transit, ridesharing, and nonmotorized commuting opportunities</p>

Resource Impact	Level of Significance	Mitigation Measure(s)
		<p>in the vicinity of the development. The materials shall be approved by the City of Moreno Valley. The materials shall be provided no later than the time the rental agreement is executed. This information shall be submitted to the City of Moreno Valley Planning Division for review and approval, prior to the issuance of the first certificate of occupancy.</p> <p>MM AQ-4: Prohibition of Fireplaces. The installation of wood-burning and natural gas devices shall be prohibited. The purpose of this measure is to limit emissions of ROG, NOX, particulate matter and visible emissions from wood-burning and natural gas devices used for primary heat, supplemental heat, or ambiance. This prohibition shall be noted on the deed and/or lease agreements for future property owners/tenants to obey.</p> <p>MM AQ-5: Electric Landscape Equipment. Prior to the issuance of occupancy permits, the Planning Division shall confirm that the Project’s Codes Covenants and Restrictions (CC&Rs) and/or tenant lease agreements include contractual language that all landscaping equipment used on-site shall be 100 percent electrically powered. All residential and non-residential properties shall be equipped with exterior electrical outlets to accommodate this requirement. This requirement shall be included in the third-party vendor agreements for landscape services for the building owner and tenants, as applicable.</p> <p>MM AQ-6: Low VOC Cleaning Supplies. Prior to the issuance of occupancy permits, the Planning Division shall confirm that the Project’s Codes CC&Rs and/or tenant lease agreements include contractual language that all cleaning products used in public spaces will be EPA Safer Choice certified. This requirement shall be included in the third-party vendor agreements for the building owner and tenants, as applicable.</p>
Section 4.3, Cultural Resources		
<p>Impact 4.3-1 Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</p>	<p>Less than Significant with Mitigation Incorporated</p>	<p>MM CUL-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. 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), the contractor, and the City, shall develop a CRMP as defined in MM CUL-3. The Project archeologist shall attend the pre-grading meeting with the City, the construction manager and any contractors and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The archaeological monitor shall have the authority to temporarily halt and redirect earth moving activities in the affected area in the event that suspected archaeological resources are unearthed.</p>

Resource Impact	Level of Significance	Mitigation Measure(s)
		<p>MM CUL-2: Native American Monitoring. Prior to the issuance of a grading permit, the Developer shall secure agreements with the consulting Tribe(s) that request tribal monitoring for tribal monitoring. The City 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.</p> <p>MM CUL-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:</p> <ul style="list-style-type: none"> a. Project description and location b. Project grading and development scheduling; c. Roles and responsibilities of individuals on the Project; d. The pre-grading meeting and Cultural Resources Worker Sensitivity Training details; e. The protocols and stipulations that the contractor, City, Consulting Tribe (s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation. f. The type of recordation needed for inadvertent finds and the stipulations of recordation of sacred items. g. Contact information of relevant individuals for the Project. <p>MM CUL-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:</p>

Resource Impact	Level of Significance	Mitigation Measure(s)
		<p>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:</p> <ul style="list-style-type: none"> 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. On-site reburial of the discovered items as detailed in the treatment plan required pursuant to Mitigation Measure CR-1. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments as defined in 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. <p>MM CUL-5: The City shall verify that the following note is included on the Grading Plan:</p> <p>"If any suspected archaeological resources are discovered during ground –disturbing activities and the Project Archaeologist or Native American Tribal Representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the Project Archaeologist and the Tribal Representatives to the site to assess the significance of the find."</p> <p>MM CUL-6: Inadvertent Finds. If potential historic or cultural resources are uncovered during excavation or construction activities at the project site that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to Project approval, all ground disturbing activities in the affected area within 100 feet of the uncovered resource must cease immediately and a qualified person meeting the Secretary of the Interior's standards (36 CFR 61), Tribal Representatives, and all site monitors per the Mitigation Measures, shall be consulted by the City to evaluate the find, and as appropriate recommend alternative measures to avoid, minimize or mitigate negative effects on the historic, or prehistoric resource. Further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. Work shall be allowed to continue outside of the buffer area and will be monitored by additional archeologist and Tribal Monitors, if needed. Determinations and recommendations by the consultant shall be immediately submitted to the Planning Division for consideration, and implemented as deemed appropriate by the Community Development Director, in consultation with the State Historic Preservation Officer (SHPO) and any and all Consulting Native American</p>

Resource Impact	Level of Significance	Mitigation Measure(s)
		<p>Tribes as defined in CR-2 before any further work commences in the affected area. If the find is determined to be significant and avoidance of the site has not been achieved, a Phase III data recovery plan shall be prepared by the Project Archeologist, in consultation with the Tribe, and shall be submitted to the City for their review and approval prior to implementation of the said plan.</p> <p>MM CUL-7: Human Remains. If human remains are discovered, no further disturbance shall occur in the affected area until the County Coroner has made necessary findings as to origin. If the County Coroner determines that the remains are potentially Native American, the California Native American Heritage Commission shall be notified within 24 hours of the published finding to be given a reasonable opportunity to identify the “most likely descendant.” The “most likely descendant” shall then make recommendations, and engage in consultations concerning the treatment of the remains (California Public Resources Code 5097.98). (GP Objective 23.3, CEQA).</p> <p>MM CUL-8: 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).</p> <p>MM CUL-9: 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).</p>
Section 4.4, Greenhouse Gas Emissions		
<p>Impact 4.4-1 Would the Project generate GHG emissions, either directly or indirectly, that could have a significant impact on the environment?</p>	<p>Significant and Unavoidable Impact</p>	<p>Refer to MM AQ-3 and MM AQ-5 in <i>Section 4.2, Air Quality</i> above.</p> <p>MM GHG-1: Prior to the issuance of a building permit, the Project Applicant shall provide documentation to the City of Moreno Valley demonstrating that the new</p>

Resource Impact	Level of Significance	Mitigation Measure(s)
		<p>development portions of the Project, excluding existing retail spaces, (upon buildout) will meet or exceed 2019 CALGreen Tier 2 standards in order to exceed 2019 Title 24 energy efficiency standards by a minimum of 20 percent. In addition, the Project shall demonstrate additional measures to reduce overall on-site energy consumption by 20 percent, such as: 1) install solar photovoltaic (PV) panels or other source of renewable energy generation on-site; or 2) otherwise acquire energy from the local utility that has been generated by renewable sources (for example, Southern California Edison Green Rate).</p> <p>MM GHG-2: For residential projects, all major appliances (e.g., dishwashers, refrigerators, clothes washers and dryers, and water heaters) provided/installed shall be Energy Star certified or of equivalent energy efficiency where applicable. These appliances must be included on the building plans and specifications and verified by the City’s Building and Safety Division during plan check and prior to the issuance of the Certificate of Occupancy.</p> <p>MM GHG-3: The development shall divert a minimum of 75 percent of landfill waste. Prior to issuance of certificate of occupancy, a recyclables collection and load area shall be constructed in compliance with City standards for recyclable collection and loading areas.</p>
<p>Impact 4.4-2 Would the Project conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions?</p>	<p>Significant and Unavoidable Impact</p>	<p>Refer to MM AQ-3 through MM AQ-5 in <i>Section 4.2, Air Quality</i> and MM GHG-1 through MM GHG-3, above.</p>
<p>Section 4.7, Transportation</p>		
<p>Impact 4.7-1 Would the Project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?</p>	<p>Less Than Significant Impact with Mitigation Incorporated</p>	<p>Please note, this mitigation is provided within the SP-200 and has been modified to conform to the Project. Edits that are represented by strikethrough show deletion as it is not relevant to the Project. Text that has <u>underline</u> has been added to the mitigation measure to clarify or make more relevant to the Project</p> <p>MM TRA-1: Construct all streets internal to the project to full ultimate cross-sections as adjacent Project development occurs <u>and according to all applicable state and City of Moreno Valley Standards. Construction of new driveways shall be reviewed and approved by the City of Moreno Valley’s Public Works prior to construction.</u></p>

2.0 INTRODUCTION AND PURPOSE

2.1 Purpose of the Environmental Impact Report

This document is a Draft Subsequent Environmental Impact Report (Draft SEIR) prepared for the City of Moreno Valley (City) for the Moreno Valley Mall Redevelopment project (Project) in compliance with the California Environmental Quality Act (CEQA) Guidelines, §15162. CEQA is a statute that requires local and state agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. The CEQA Guidelines are located within the California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, §15000-15387, while the CEQA Statute is codified as Public Resources Code (PRC) §21000-21189.57.

The purpose of this Draft SEIR is to review the existing conditions, analyze potential environmental impacts, and identify feasible mitigation measures to reduce potentially significant effects of the proposed Project. **Section 3.0, Project Description**, provides detailed descriptions of the construction and operational components of the Project. **Section 4.0, Environmental Impact Analysis**, discusses the regulatory environment, existing conditions, environmental impacts, and mitigation measures for the Project. Following public review of the Draft SEIR, a Final SEIR will be prepared, in which the City will respond to public comments on the Draft SEIR.

This Draft SEIR has been prepared on behalf of the City of Moreno Valley as the Lead Agency under CEQA. This Project entails the redevelopment of a portion of the existing Moreno Valley Mall and the construction of retail and restaurant commercial space, office space, hotels and residential development on approximately 65 acres of land within the northwestern portion of the City, west of the intersection of Centerpoint Drive and Town Circle, Moreno Valley. Additionally, the Project will be accompanied by a Specific Plan Amendment to amend and supersede Specific Plan No. 200 – Towngate Specific Plan (SP-200), previously approved October 27, 1987, to allow a mix of retail and residential land uses within the planning area of the SP-200.

2.2 Previous Analysis and Subsequent EIR

The Towngate Specific Plan Environmental Impact Report (SP-200 EIR) was adopted in 1987 for the Moreno Valley Mixed Used Development. The Towngate Specific Plan (SP-200) was adopted in 1987 with reliance on the environmental analysis contained in the SP-200 EIR. The SP-200 EIR (State Clearinghouse Number 1985112507) is incorporated by reference.

In the section discussing Subsequent EIRs, CEQA Guidelines §15162 provides that:

- (a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:
 - (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

This document is a Draft SEIR to the prior SP-200 EIR focused on impact topics not anticipated or adequately covered by the existing environmental analysis for the area defined as Planning Area 2 by SP-200. This Draft SEIR evaluates the potential environmental impacts that might reasonably be anticipated to result from the mall redevelopment proposed under the Project. The analysis in this Draft SEIR includes updated existing conditions of the Moreno Valley Mall area. Since the certification of the SP-200 EIR several improvements have been made to the Project site, new resource areas and sections have been added to the CEQA Guidelines, and new information is available now that was not previously known about the potential impacts of development in 1987. As such, this Project's Draft SEIR is intended to fully analyze the impacts of the Project. It should be noted that information from the SP-200 EIR presented within this Draft SEIR is provided for information purposes only and is not the sole basis for analysis of Project-related impacts.

2.3 Compliance with CEQA

According to the CEQA Guidelines §15064(f)(1) and CEQA Statute §21100, preparation of an EIR is required whenever a project may result in a significant effect on the environment. An EIR is an informational document used to inform public agency decision-makers and the general public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the Project that could feasibly attain most of the basic objectives of the Project while substantially lessening or avoiding any of the significant environmental impacts. Public agencies are required to consider the information presented in the EIR when determining whether to approve a project. CEQA requires that state and local government agencies consider the environmental effects of projects over which they have discretionary authority before taking action on those projects.

This Draft SEIR identifies and analyzes the environmental effects of the Project to the degree of specificity appropriate to the current proposed actions, as required by §15146 of the CEQA Guidelines. The analysis considers the activities associated with the Project in order to determine the short-term and long-term environmental effects associated with their implementation. This Draft SEIR discusses both temporary and permanent impacts and direct and indirect impacts of the Project, in addition to cumulative impacts associated with other past, present, and reasonably foreseeable future projects.

Based on significance criteria, the effects of the Project are categorized as either “no impact,” “less than significant impact,” “less than significant impact with mitigation incorporated,” or “significant unavoidable impact.” Mitigation measures are recommended for potentially significant impacts, to avoid or lessen, to the extent feasible and possible, the Project’s environmental impacts. In the event the Project results in significant unavoidable impacts even with implementation of feasible mitigation measures, the decision-makers may approve the Project based on a “Statement of Overriding Considerations.” This determination requires the decision-makers to balance the benefits of the Project to determine if they outweigh identified unavoidable impacts.

The CEQA Guideline §15093 provides, in part, the following:

- (a) CEQA requires that the decision-maker balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the Project. If the benefits of the Project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.”
- (b) Where the decision of the public agency allows the occurrence of significant effects that are identified in the Final EIR but are not avoided or substantially lessened, the agency must state in writing the reason to support its action based on the Final EIR and/or other information on the record. The statement of overriding considerations shall be supported by substantial evidence in the record.
- (c) If an agency makes a Statement of Overriding Considerations, the statement should be included in the record of the Project approval and should be mentioned in the Notice of Determination.

2.4 Notice of Preparation/Early Consultation

In compliance with the CEQA Guidelines, the City provided opportunities for various agencies and the public to participate in the environmental review process. During preparation of the Draft SEIR, efforts were made to contact various Federal, State, regional, and local government agencies and other interested parties to solicit comments on the scope of review in this document. This included the distribution of a Notice of Preparation (NOP) to various responsible agencies, trustee agencies, and interested parties. Pursuant to CEQA Guidelines §15082 and PRC §21084.4, the City circulated the NOP directly to public agencies (including the State Clearinghouse Office of Planning and Research), special districts, and members of the public who had requested such notice. The NOP was distributed on April 6, 2022, with the 30-day public review period concluding on May 6, 2022.

Public Scoping Meeting

The City prepared a NOP for the Project and sent it to the general public and Local, State and Federal agencies on April 26, 2022. A public virtual scoping meeting was held on May 18, 2022, utilizing teleconference communications, and associated Federal, State, and local orders for safety requirements. The purpose of the scoping meeting was to obtain comments from the public and agencies regarding the scope of the environmental document.

A total of 16 comment letters were received in response to the NOP. The comment letters received during the NOP comment period; along with Scoping Reports for the NOP, providing a more detailed summary of the issues raised during the public scoping meeting, are included in **Appendix A, Notice of Preparation and Scoping Meeting**.

Scoping Meeting Summary

Areas of concern identified during the scoping period include:

- Traffic
- Air Quality Impacts and Greenhouse Gas Emissions
- Residential Property Values

Stakeholder Consultation

In addition to required CEQA consultation through the NOP Scoping process and SB 18/AB 52 consultation, the City and Project Applicant engaged in extensive stakeholder consultation since the release of the NOP in April 2022. This stakeholder outreach included focused consultation with key parties for which the Project Applicant will require permits or approvals, including but not limited to:

- Eastern Municipal Water District (EMWD)
- Moreno Valley Unified School District (MVUSD)
- Riverside County Airport Land Use Commission (ALUC)
- Riverside County Flood Control District (FCD)
- Riverside Transit Agency (RTA)
- Southern California Edison (SoCal Edison)
- The Gas Company
- United States Post Office
- Verizon Telephone
- Waste Management of Inland Valley
- AB52/SB18 Tribal Consultation

The results of the Project's cultural resources studies, along with the information received through the AB 52/SB 18 consultation process, is discussed in **Section 4.3, Cultural Resources**. The results of

discussions with the agencies identified above are further described in **Section 4.8, Utilities and Service Systems**.

2.5 Format of the EIR

The purpose of this Draft SEIR is to provide an environmental review of the Project, such that the City will be able to utilize this EIR to satisfy CEQA for Project-related permits or approvals and to provide CEQA analysis.

This Draft SEIR is organized into nine sections:

Section 1.0 Executive Summary provides a Project summary and summary of environmental impacts, and the proposed mitigation measures and alternatives.

Section 2.0 Introduction provides CEQA compliance information.

Section 3.0 Project Description provides Project history, as well as the environmental setting, Project characteristics and objectives, phasing, and anticipated permits and approvals that may be required for the Project.

Section 4.0 Environmental Impact Analysis provides a discussion of the existing conditions for each of the environmental impact areas. This section also describes methodologies for significance determinations, identifies both short-term and long-term environmental impacts of the Project, recommends mitigation measures to reduce the significance of environmental impacts, and identifies any areas of potentially significant and unavoidable impacts. This section includes a discussion of cumulative impacts that could arise as a result of the implementation of the Project. Environmental impacts of the Project are organized by the following topic areas:

- 4.1 Aesthetics
- 4.2 Air Quality
- 4.3 Cultural Resources
- 4.4 Greenhouse Gas Emissions
- 4.5 Land Use and Planning
- 4.6 Noise
- 4.7 Transportation and Traffic
- 4.8 Utilities and Service Systems

Section 5.0 Other CEQA Considerations, summarizes unavoidable significant impacts, and discusses significant irreversible environmental changes and growth-inducing impacts.

Section 6.0 Alternatives, describes potential Project alternatives, including alternatives considered but rejected from further consideration, the No Project Alternative, various Project Alternatives, and identifies the Environmentally Superior Alternative.

Section 7.0 Effects Found Not to Be Significant, describes potential impacts that have been determined not to be significant throughout the EIR process.

Section 8.0 EIR Consultation and Preparation identifies the CEQA Lead Agency and EIR preparation team, as well as summarizes the EIR consultation process.

Based on significance criteria, the effects of the proposed Project have been categorized as either “less than significant,” “less than significant with mitigation,” or “potentially significant.” Mitigation measures are recommended for potentially significant impacts, to avoid or lessen impacts. In the event the proposed Project results in significant impacts even after implementation of all feasible mitigation measures, the decision-makers are able to approve a proposed project based on a Statement of Overriding Considerations. This determination would require the decision-makers to provide a discussion of how the benefits of the proposed project outweigh identified unavoidable impacts. The CEQA Guidelines provide in part the following:

- CEQA requires that the decision-maker balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project. If the benefits of the project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.”
- Where the decision of the public agency allows the occurrence of significant effects that are identified in the Final EIR but are not mitigated, the agency must state in writing the reasons to support its action based on the Final EIR and/or other information in the record. This statement may be necessary if the agency also makes the finding under §15091 (a)(2) or (a)(3) of the CEQA Guidelines.
- If an agency makes a Statement of Overriding Considerations, the statement should be included in the record of the Project approval and should be mentioned in the Notice of Determination (CEQA Guidelines §15093).

2.6 Responsible and Trustee Agencies

State law requires that all EIRs be reviewed by Responsible and Trustee Agencies. A Responsible Agency, defined pursuant to CEQA Guidelines §15381, includes all public agencies other than the Lead Agency which have discretionary approval power over the project. A Trustee Agency is defined in §15386 of the CEQA Guidelines as a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the state of California. Implementation of the project would require subsequent actions or consultation from Responsible or Trustee Agencies. A brief description of some of the primary Responsible or Trustee Agencies that may have an interest in the project is provided below.

California Regional Water Quality Control Board (RWQCB) – Santa Ana Region (SAR)

The California Regional Water Quality Control Board (RWQCB) - Santa Ana Region (SAR) regulates water quality through the Federal Clean Water Act §401 certification process and oversees the National Pollutant Discharge Elimination System (NPDES), to protect water resources and control pollutants in runoff. The RWQCB is responsible for implementing permitting, compliance, and other activities to reduce pollutants in municipal, construction, and industrial storm water runoff, including overseeing the Municipal Separate Storm Sewer System (MS4) Permit (R8-2010-0033). Pursuant to the Municipal Code Chapter 8.10, the Project would be required to implement a WQMP to demonstrate compliance with the City’s MS4 permit and to minimize the release of potential waterborne pollutants. The City and County of Riverside are co-permittees of the RWQCB MS4 permit and is responsible for its implementation so submittal to the board is not required. A General Permit for Discharges of Storm Water Associated with

Construction Activity Construction General Permit Order 2009-0009-DWQ requires submittal to the board through the RWQCB SMARTS system.

Riverside County Airport Land Use Commission

The Riverside County Airport Land Use Commission (ALUC) assists local agencies by ensuring the development of compatible land uses in the vicinity of existing airports. Beginning in 2004, the Riverside County ALUC began adopted new versions of the airport land use compatibility plan (ALUCPs) for most Riverside County airports that are contained within a single, countywide document entitled Riverside County ALUCP. As a Responsible Agency, the Riverside County ALUC would review future development proposals within the planning area if applicable and make “consistency determinations” with the provisions and policies set forth in the March Air Reserve Base/Inland Port Airport (MARB/IPA) Land Use Compatibility Plan.

2.7 Incorporation by Reference

CEQA Guidelines §15150, which encourages incorporation by reference as a means of reducing redundancy and the length of environmental reports. Consistent with CEQA Guidelines §15150, this Draft SEIR incorporates the following documents by reference:

- City of Moreno Valley General Plan 2040 (Adopted June 15, 2021)
- Final Environmental Impact Report for the MoVal 2040: Moreno Valley Comprehensive Plan Update, Housing Element Update, and Climate Action Plan, June 2021 (State Clearinghouse No. 2020039022)
- City of Moreno Valley 2006 General Plan (Adopted July 11, 2006)
- Final Environmental Impact Report for the 2006 GP, July 2006 (State Clearinghouse No. 200091075)
- City of Moreno Valley Municipal Code
- Specific Plan No. 200 – Towngate Specific Plan (Adopted October 27, 1987)
- Final Environmental Impact Report, Specific Plan No. 200, certified March 1986 (State Clearinghouse No. 1985112507)

Where portions of the documents are relevant to the analysis in this Draft SEIR, the incorporated documents are briefly summarized. In compliance with CEQA Guidelines §15150, the documents listed are available to the public at the City of Moreno Valley Community Development Department.

The City of Moreno Valley General Plan 2040. The City of Moreno Valley had a General Plan Update (MoVal 2040 GP) that provides a vision for the future of Moreno Valley over the next 20 years. The MoVal 2040 GP sets goals, policies, and actions to fulfill the vision and provide a framework for development and future growth. The MoVal 2040 GP ultimately reflects the aspirations of the community to cultivate a family-friendly city with a modern brand and unique sense of place. As part of its General Plan, the City includes the following elements: 1) Land Use and Community Character; 2) Economic Development; 3) Circulation; 4) Parks and Public Services; 5) Safety; 6) Noise; 7) Environmental Justice; 8) Healthy Community; 9) Open Space and Resource Considerations; and 10) Housing Element.

The General Plan was used throughout this Draft SEIR since it contains policies and regulations relevant to the proposed Project.¹ This document is additionally available for review at:

<http://www.moval.org/cdd/documents/general-plan-documents.html>

Final Environmental Impact Report for the MoVal 2040 (SCH #2020039022). The Final Environmental Impact Report (MoVal 2040 Final EIR) for the City of Moreno Valley General Plan 2040 contains a thorough programmatic analysis of the environmental impacts associated with implementation of goals, policies, actions and projected buildout of the MoVal 2040 GP, the associated Housing Element Update, and the associated Climate Action Plan. Additionally, the MoVal 2040 Final EIR contains mitigation measures to minimize significant project impacts and explores reasonable alternatives to the project.

More information about the City's Final EIR for the Moreno Valley General Plan 2040 can be found here:

[http://www.moval.org/cdd/documents/general-plan-update/final-docs/Moval%202040 Final%20EIR with%20RTCs.pdf](http://www.moval.org/cdd/documents/general-plan-update/final-docs/Moval%202040%20Final%20EIR%20with%20RTCs.pdf)

The City of Moreno Valley 2006 General Plan. Now superseded by the MoVal 2040 GP, the City of Moreno Valley 2006 General Plan provided a vision for the future of Moreno Valley at the time of its adoption in 2006. The 2006 General Plan is a broad policy document that identifies the City's land use, circulation, environmental, economic and social goals and policies as they relate to land use and development; thereby, providing guidance to citizens, developers and decision-makers for development activity. As part of its General Plan, the City includes the following elements: 1) Community Development; 2) Economic Development; 3) Parks, Recreation and Open Spaces; 4) Circulation; 5) Safety; 6) Conservation; and 7) Housing.

This document is additionally available for review at:

http://www.moval.org/city_hall/general_plan.shtml

Final Environmental Impact Report for the 2006 GP (SCH #200091075). The Final Environmental Impact Report (2006 GP Final EIR) for the City of Moreno Valley 2006 General Plan contains a thorough programmatic analysis of the environmental impacts associated with implementation of goals, policies, actions and projected buildout of the 2006 GP. Additionally, the 2006 GP Final EIR contains mitigation measures to minimize significant project impacts and explores reasonable alternatives to the project.

More information about the City's Final EIR for the Moreno Valley 2006 General Plan can be found here:

http://www.moval.org/city_hall/general_plan.shtml

Moreno Valley Municipal Code. The Moreno Valley Municipal Code (City MC) establishes detailed zoning districts and regulations based on the General Plan. The Moreno Valley Zoning Code (Title 9: Planning and Zoning) serves as the primary implementation tool for the General Plan.

Note, although the MoVal 2040 GP was adopted and the Final EIR certified, the Final EIR has been litigated. Therefore, should the MoVal 2040 GP and/or EIR be set aside at the time the Moreno Valley Mall Redevelopment Project EIR comes before the City Council for consideration, this EIR also includes an analysis of Project consistency with the City's prior General Plan and Final EIR (see discussion below and in Section 4.5, Land Use and Planning).

The Moreno Valley MC can be accessed online at:

https://library.qcode.us/lib/moreno_valley_ca/pub/municipal_code

Specific Plan No. 200 – Towngate Specific Plan. The Towngate Specific Plan (SP-200) was adopted in 1987 and envisions a high-quality community offering a mix of residential housing opportunities and adjacent commercial development within the planning area. The planning area is approximately 500 acres located on the western portion of the City bounded by State Route 60 to the north, Cottonwood Avenue to the south, and Frederick Street to the east, and Day Street to the west. The planning area includes the Moreno Valley Mall, the City’s major shopping center. More recent commercial developments in this planning area include Towngate Crossing, Towngate Promenade, Towngate Square, and Towngate Center/Plaza. Proposals for new commercial/retail developments continue to this day.

Final Environmental Impact Report for Specific Plan No. 200 (SCH #1985112507; SP-200 Draft EIR). The Draft Environmental Impact Report was prepared for SP-200 and submitted in March 1986. The Final EIR was certified September 1986, SP-200 was approved October 27, 1987, and then revised per amendment on May 11, 1993. The land use plan and the conditions of approval contain features that serve to mitigate or reduce many of the impacts identified within the Draft EIR, especially those relating to noise and circulation/traffic.

More information about the SP200 Draft and Final EIR and associated Specific Plan documents can be viewed at the City of Moreno Valley Planning Department.

Certified Final Connect SoCal Program Environmental Impact Report (SCH #2019011061). The Southern California Association of Governments (SCAG), as Lead Agency, has prepared a Program Environmental Impact Report (PEIR) (SCH#2019011061) in accordance with the California Environmental Quality Act (CEQA) for Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy). The PEIR serves as a programmatic document that conducts a region-wide assessment of potential significant environmental effects of Connect SoCal. The Final PEIR was certified on May 7, 2020 by the Regional Council.

The complete Connect SoCal Program Environmental Impact Report is available at:

<https://scag.ca.gov/peir>

3.0 PROJECT DESCRIPTION

The City of Moreno Valley (City), acting as Lead Agency under the California Environmental Quality Act (CEQA), has prepared this Draft Subsequent Environmental Impact Report (Draft SEIR) for the Moreno Valley Mall Redevelopment Project (Project). The purpose of the Project Description is to provide an accurate, stable, and finite description of the Project to allow for meaningful review by local, state, and federal reviewing agencies, decision-makers, and interested parties. State CEQA Guidelines §15124 requires a project description to contain the following:

1. The precise location and boundaries of the proposed project shown on a detailed map and along with a regional location map;
2. A clearly written statement of the objectives of the proposed project including the underlying purpose of the project and project benefits. The statement of objectives must be detailed enough to allow a Lead Agency the opportunity to develop and evaluate project alternatives;
3. A description of the proposed project's technical, economic and environmental characteristics along with engineering and public service facilities details; and
4. A statement describing the intended uses of the Draft SEIR, including a chronological list of all necessary approvals and a roster of other agencies that may use the document, a list of required permits and approvals, and a list of related consultation and environmental review necessary under local, state, and federal laws, regulations, and policies.

An adequate project description need not be extensive, but it must be sufficient to allow for review and evaluation of the possible environmental impacts of a proposed project.

3.1 Project Background

The Moreno Valley Mall (MoVal Mall) has evolved over several decades, from the original shopping center to the present mall of approximately 93 acres with 1.03 million square feet (SF) of existing commercial uses. MoVal Mall makes up Planning Area 2 (PA 2) within the Towngate 200 Specific Plan (SP-200), which was originally approved by the City Council on October 27, 1987, and subsequently amended. Amendment 3, approved in 1991, re-targeted PA 2 land use to more commercial retail uses.

As part of the Project, a Specific Plan Amendment (SPA) would be completed and amending and modifying SP-200, creating two subareas: PA 2A and PA 2B. PA 2A would comprise approximately 58.6 acres with private internal driveways, parking facilities, and private and public infrastructure. The balance of the mall site (the existing Macy's and JCPenney retail stores) will become PA 2B and comprise approximately 33.9 acres including private drives and parking facilities. The SPA will establish the standards and guidelines for further development and redevelopment of PA 2A, while PA 2B will continue to defer to the standards and guidelines in SP-200.

This plan will modify the current zoning to allow more flexibility in the further development of the site, adding residential, retail, office and hospitality uses. This diverse mixture of uses implements the vision of the General Plan's Center Mixed Use land use designation for this site.

3.2 Project Location and Settings

The Moreno Valley Mall is bounded by a loop road (Town Circle) and is located south of State Route 60 (SR-60) and east of Interstate 215 (I-215). Regional access is from Frederick Street to the east and Day Street from the west. The MoVal Mall consists of approximately 92.9 acres, which includes the existing mall, surrounding parking, Town Circle private street, and the frontage parcel adjacent to SR-60. The “Project” addressed in this Draft SEIR focuses on proposed PA 2A, which excludes the existing Macy’s and JCPenney retail stores that are part of the overall mall site addressed in the SP-200 EIR. The proposed PA 2A is approximately 58.6 acres and is reflected in the SPA and in the proposed Tentative Parcel Map (TPM) No. 38420 for PA 2A (see **Figure 3-1, Regional Location** and **Figure 3-2, Project Vicinity**).

3.3 Project Site and Surrounding Land Use Considerations

The Project site is comprised of the existing MoVal Mall but excludes the Macy’s and JCPenney stores that accompany the mall. Much of the Project site is bordered by Town Circle, beyond which, the Project site is surrounded by highway to the north, existing multi-family residential and existing hospitality to the south, existing commercial uses to the east, and existing commercial uses to the west. There are large surface parking lots on-site as well as an above ground parking structure. Currently, there are several bus stops serving various Riverside Transit Agency service lines. Ornamental landscaping and open space are present on site and maintained by the MoVal Mall. Potable water and water treatment is provided on-site by underground utilities. Overall existing site conditions are detailed further in **Section 4.0, Environmental Impact Analysis**.

Land Use Designations and Zoning

Existing MoVal 2040 General Plan Land Use Designations

California Government Code (Title 7, Division 1, Chapter 3, Article 8, §65450–65457) permits adoption and administration of specific plans as an implementation tool for the local general plan. The Project must demonstrate consistency in regulations, guidelines, and programs with the goals and policies set forth in the general plan.

MoVal Mall is designated on the Land Use Map in the 2006 General Plan as Commercial.¹ The MoVal 2040 General Plan (GP) was adopted by the Moreno Valley City Council on June 15, 2021, which became immediately effective. The MoVal 2040 Land Use Element identifies the MoVal Mall and Project site as Center Mixed Use (CEMU) and is envisioned to be integrated, pedestrian-oriented places with a mix of uses including retail, dining, entertainment, offices, lodging, high density residential, recreational, and cultural facilities that cater to both visitors passing through and residents of surrounding neighborhoods. The General Plan’s CEMU designation allows for up to 3.34 million square feet of mixed uses at the MoVal Mall, inclusive of 2,150 residential units, based on a maximum floor area ratio (FAR) of 1.25 and a maximum of 30 units per acre. The approved SP-200 included modifying the Land Use Plan to increase the allowable density in medium and medium-high density zones as well as to incorporate a portion of the unincorporated portion of Riverside County into the City of Moreno Valley. The SP-200 looked to incorporate a mixed-use design throughout the specific plan area in order to create a central core or “town

¹ Refer to Section 4.5, Land Use and Planning, for an analysis of Project consistency with the City’s 2006 General Plan.

center complex” for the City. The SP-200 outlined residential areas ranging in housing densities of 4 to 20 dwelling units per acre, mixed-use commercial, medical facilities, schools, parks, and more. Planning Area 2 (PA 2) of the SP-200, within which the Project site is situated, called for a regional shopping center or for other commercial and other related uses to serve the needs of both the surrounding community and the local community. To this end, the Moreno Valley Mall was developed within this planning area.

Surrounding Land Uses

The Project site is comprised of the existing MoVal Mall but excludes the Macy’s and JCPenney stores that accompany the mall. Much of the Project site is bordered by Town Circle, beyond which, the Project site is surrounded by highway to the north, multi-family residential and hospitality to the south, commercial use to the east, and commercial uses to the west. Additional details below:

- North:** Moreno Valley Freeway (SR-60)
- South:** Town Circle, residential apartment homes, Hampton Inn & Suites, and 24-Hour Fitness.
- East:** Town Circle and commercial uses such as Burlington and Ross Dress for Less.
- West:** Town Circle and commercial uses such as Jerome’s Furniture and Lowe’s Home Improvement

3.4 Project Objectives

The Project and its associated Specific Plan Amendment implements the goals and policies of the City’s General Plan. The Project’s Specific Plan Amendment therefore serves as an extension of the General Plan and will be used as both a policy and a regulatory document. The purpose of this Project is to implement the vision laid out in the Project objectives by providing development standards and design guidelines to direct future development within the Project area. The goals for the redevelopment of the Project as described in the Specific Plan Amendment are to provide:

- A plan that allows for the revitalization of the Project Area, adapting to changing market conditions and providing economic benefits to the City.
- A long-term development plan that encourages and facilitates new uses of high quality and design.
- A mixed-use village that serves as a regional anchor to the area and draws upon the vibrancy of established neighborhoods, businesses, and community amenities nearby.
- Integration of the Project into an established urban fabric and established neighborhoods in the immediate vicinity.
- A mixture of uses that reduces vehicle miles traveled through internal capture of trips and carries out the intent of the City’s Climate Action Plan.
- A plan that facilitates private investment in the development.
- Flexibility in development while achieving community goals.
- Creation of new and future employment opportunities.
- A mixture of high-quality housing and ground level commercial uses.

- A circulation system responsive to the needs of vehicular, bicycle, and pedestrian travel.
- Landscaping appropriate to the level of development and sensitive to surrounding areas.
- Architecture which responds to and enhances the property with timeless architectural style.
- A visually harmonious development is viewed both internally and externally.
- A project that has an architectural language promoting the varied uses while working with the contextual and regional vernacular of southern California.
- Provision of adequate parking including a shared parking program.

Additionally, Project components would assist the City in meeting its objectives of:

- Providing additional housing and complying with state law requirements to meet Regional Housing Needs Assessment allocations; and
- Enhancing the City's fiscal resources by creating new revenue-generating uses and promoting economic development in the City.

3.5 Proposed Project

The "Project" addressed in this Draft SEIR includes all actions associated with the construction, operation and maintenance of the proposed Moreno Valley Mall Redevelopment Project. Key entitlement applications associated with this Project, and addressed in this Draft SEIR, include the SPA and a Tentative Parcel Map (these individual entitlement applications are described further following the Project Summary below, and are available for review at the City of Moreno Valley Planning Department).

Project Summary

The Project proposes revitalization and redevelopment of a portion of the existing MoVal Mall (excluding the existing JCPenney and Macy's parcels). The intent of the Project is to plan and integrate multiple uses across the site that enable crossover of professional, shopping, and resident populations. To this end, the Project site would be divided into 22 parcels. Each use is intended to grow density and increase value and attraction of the original commercial mall. Key features of the concept plan include the following:

- **Residential Northwest:** There is approximately 250 multi-family units proposed amongst two residential buildings in the northwest corner of the site, adjacent to the theater and existing two-level parking structure. Residential buildings would contain retail uses on the first floor with residential above.
- **Residential Southeast:** There are approximately 1,377 multi-family units proposed in the southeast portion of the site. The three residential buildings would be proposed in three phases and interconnected by pedestrian-scaled streetscapes. A commons greenway is proposed to connect this residential district to the existing mall's southeast entry. Residential buildings would contain retail uses on the first floor with residential above.
- **Hospitality:** There are two hotels proposed in the northeast parking field of the site. The two hotels would operate jointly out of one building. One hotel would have a capacity of 120 keys, and the second hotel would have a capacity of 150 keys with an event/conference space.

- **New Parking Structure:** New parking structures are proposed adjacent to residential land uses to provide parking for residents and visitors. These parking structures would be situated on the southeast portion of the Project site.
- **Entertainment:** The north lower-level parking field would be re-planned to accommodate an exterior entry/exit to the theater, and a new outdoor dining patio for multiple tenants.
- **Transit Center:** The existing Transit Center is proposed to be dispersed to multiple transit stops along the perimeter of the Project site on Town Circle to serve and connect various user populations which may include resident, workforce, student, and shopping/business markets.
- **Food Market:** The existing mall “Food Court” is planned to be redeveloped into a new interior and exterior “pavilion – style” Food Market.
- **Existing Mall:** This existing mall interior is intended to be updated to match the new level of development, variety, and pedestrian connections across the entire site. Various entries, exterior facades, interior bridges, common restrooms, and re-planned tenant square footage would all be part of the vision that ties the SPA together.

Figure 3-3, Conceptual Land Use Plan provides the overall vision for the Project and guide the development of the anticipated residential, hospitality, office, and commercial uses.

Specific Plan Amendment – PEN21-0168

The approval of the Specific Plan Amendment (SPA) would amend and supersede the existing Towngate Specific Plan (SP-200) for the portion of the SP-200 planning area that encompasses the Project site. The SPA proposes a comprehensive land use plan, circulation plan, streetscape plan, infrastructure service plan, grading plan, maintenance plan, design guidelines, development regulations, and implementation measures to guide the development of the Project site into the re-envisioned MoVal Mall. The SPA FAR and Density would change as set forth in the proposed SPA.

The Project proposes office, hotel, residential, public open space, retail, parking, and street land uses. As discussed earlier, Planning Area 2, within which the Project site is situated, would be modified by the SPA to comprise planning areas PA 2A and PA 2B. The proposed Project’s guidelines and standards apply to only PA 2A (information for PA 2B is provided for informational purposes only as no changes are proposed within the new PA 2B portion of the MoVal Mall).

Table 3-1: Land Use and Quantity Summary breaks down the existing and proposed land uses for PA 2A and PA 2B (see **Figure 3-3, Conceptual Land Use Plan**).

Table 3-1: Land Use and Quantity Summary

	MoVal Mall SPA PA 2				
	Existing Uses		Proposed Net Change in Uses (Proposed Changes)		PA 2 Total
	PA 2A	PA 2B	PA 2A	PA 2B	
Retail	819,308	309,394	(16,344)	---	1,128,702
Office (SF)	---	---	60,000	---	60,000
Hotel (keys)	---	---	270	---	270
Residential (DU)	---	---	1,627	---	1,627
Plaza/OS (Acres)	---	---	1.9	---	1.9

Source: City of Moreno Valley (October 2022) *Moreno Valley Mall Specific Plan Amendment; Table 1-2*

MoVal Mall is identified as a Qualified Opportunity Zones (QOZs). QOZs were created by the Tax Cuts and Jobs Act (TCJA) signed into law in December 2017. The initiative is specifically intended to grow investments and generate economic growth in lower income/blighted areas. To facilitate economic growth, municipalities may encourage development with higher densities to facilitate housing and modified standards to accommodate new development to current industry standards.

Development Flexibility – Land Use Equivalency Provisions

An important provision within the proposed SPA is to allow for flexibility as future site-specific development proposals are proposed within individual parcels in PA 2A. The SPA sets forth provisions to allow administrative approval of such parcel-specific development proposals subject to the development being consistent with the SPA and with associated traffic and infrastructure assumptions for PA 2A in this Draft SEIR.

Maximum intensities of land uses may be converted at any time by the project developer, based on the conversion factors outlined in **Table 3-2, Land Use Equivalency Conversion**. These conversion factors are based on trip generation rates as provided in the Institute of Transportation Engineers *Trip Generation Manual, 11th Edition*, which allows a conversion program while keeping traffic generation stable. Implementation of a land use conversion will be reviewed by the Director of Community Development, or designee, as part of the related application and allowed as part of a ministerial development approval subject to substantial conformance with relevant development standards. Conversions are also subject to overall density limits, parking ratios and other requirements.

Table 3-2: Land Use Equivalency Conversion

	Land Use (Unit)	Equivalency Ratios to Convert to these Land Use Types PA 2 Total			
		Residential (DU)	Retail ¹ (1,000 SF)	Office (1,000 SF)	Hotel (Rooms)
From these Land Use Types:	Residential (DU) Parcels 2 and 3 ²	---	0.1447	0.2708	---
	Office (1,000 SF) Parcel 9 ³ Maximum of 60,000 SF	3.6923	0.4235	---	2.4407

Source: City of Moreno Valley (July 2022) *Draft Moreno Valley Mall Specific Plan Amendment; Table 5-2*

Note:

1. The maximum new retail use is limited to a maximum of 40,000 SF.
2. The conversion of residential uses to retail and/or office uses is limited to Parcels 2 and 3 only. Retail space can only occur on the ground floor.
3. Office uses proposed in Parcel 9 may be converted to either one of two scenarios. Scenario 1 assumes total conversion of office uses to hotel uses. Scenario 2 assumes a three-story structure with retail uses on the ground floor and two floors of residential uses.

Circulation Plan

Vehicular circulation is comprised of two components: peripheral publicly accessible roadway and internal private drives. Transit service and stops have been incorporated, along with on-street type-three bicycle lanes and pedestrian pathways. A Class III Bike Route would be provided along Town Circle from Memorial Way to Centerpoint Drive. This would connect the existing Class II Bike Lane along Memorial Way with a future Class II Bike Lane to be built by others along Centerpoint Drive. See **Figure 3-4, Circulation Plan** and **Figure 3-5, Non-Vehicular Circulation Plan**.

- Town Circle provides one of the primary access points to the MoVal Mall. Town Circle is a private street and is a loop road, with the portion between Centerpoint Drive and Heritage Way dedicated as a public street. The balance of Town Circle is private, with public access easements. The signalized intersection of Town Circle at Centerpoint Drive shall function as a gateway into MoVal Mall.
- Street 1 is PA 2A's northeastern entry connected to Town Circle at Centerpoint Drive, having a four-way signalized intersection. Street 1 shall provide one of the primary access points to the commercial, hotel, office, and residential uses.
- Street 1 is designed as a private drive and would provide pedestrian zones that have sidewalks and landscape areas of varying widths up to the building frontages. Street 1 would provide access to parking structures and surface parking lots.
- Street 2 is PA 2A's eastern entry connected to Town Circle, and south of the Centerpoint Drive intersections. Street 2 would provide secondary and central access points to the commercial, residential, and open space/plaza uses. Street 2 is designed as a private drive and would provide pedestrian zones that have sidewalks and landscape areas of varying widths up to the building frontages. Street 2 would provide access to parking structures and surface parking lots.
- Street 3 is PA 2A's eastern entry connected to Town Circle at Heritage Way, having a four-way stop sign controlled intersection. Street 3 would provide one of the primary access points to the commercial, residential, and open space/plaza uses. Street 3 would be designed as a private drive and would provide pedestrian zones that have sidewalks and landscape areas of varying widths up to the building frontages. Street 3 would provide access to parking structures and surface parking lots.
- In its developed configuration, existing private drives would largely be retained, with modifications. Realignment or elimination of entryways to Town Circle and reconfiguration of portions of drives or existing trash and loading facilities may occur as part of the development. The internal loop road would range in width based on adjacent building height and building code requirements. As part of future development projects, perpendicular, parallel, or angled parking may be provided. In all cases, the required drive aisle width needed to meet building requirements shall be maintained.

All private streets shall intersect with Town Circle at a 90-degree angle unless an alternative design is approved by the Director of Public Works.

Water Plan

The majority of the existing water system would remain in place; however, some water infrastructure would be relocated to accommodate the proposed development program as described in the SPA. These relocations consist of the following: the existing water main and easements dedicated to Eastern Municipal Water District (EMWD) along the northeast of the property will be relocated to Town Circle; and the existing water main and easements dedicated to EMWD along the southeast of the property would be relocated to avoid conflict with proposed developments. See **Figure 4.8-1, Water Plan**.

Sewer Plan

The Project would utilize existing sewer infrastructure where feasible. However, due to increased anticipated flows and conflicts with the proposed developments, a number of sewer mains will be upsized and rerouted to follow Town Circle. Existing public easements dedicated to EMWD would need to be vacated where sewer mains are being abandoned and new easements established where sewer mains are proposed. Currently, at the time of the preparation of this Draft SEIR, off-site sewer improvements are being explored to facilitate Project implementation and would require review and approval from EMWD. The preferred alignment consists of an 15-inch sewer line running along Memorial Way from Town Circle to Eucalyptus Ave then along Eucalyptus Ave from Memorial Way to Day St. Alternate alignments are being considered, but these would have similar impacts as the preferred alignment as all alignments follow existing streets. See **Figure 4.8-2, Sewer Plan**.

Dry Utilities Plan

Electrical service would be provided to the Project by the Moreno Valley Electric Utility (MVU) for new buildings. A line extension would be provided from approximately 350-feet south of the intersection of Gateway Drive and Eucalyptus Avenue to the Project, the ultimate alignment would be established with final engineering and be subject to agency and Public Works Director approval. Public gas facilities are owned and operated by Southern California Gas. Utilities in private drives would be relocated in the new private roadway with appropriate easements. Service lines for new buildings would be extended from the existing and new public lines. Additionally, new developments would connect to the existing fiber optic cable network to ensure the Specific Plan Area develops as a full “Smart Village.”

Connections to fiber optic networks do not currently exist within the Project area. As the infrastructure needed to deliver these services is made accessible in the future, individual projects would have the opportunity to connect and make these services available. Additional conduits and infrastructure would be included with future development for future connections. Additionally, new developments will connect to the existing fiber optic cable network to ensure the Specific Plan Area develops as a full “Smart Village.”

Storm Drainage Plan

The City of Moreno Valley and Riverside County Flood Control and Water Conservation District and the City of Moreno Valley jointly maintain an extensive network of storm drain infrastructure, primarily storm drain mains and catch basins, throughout the City. Several storm drains, open channels, and retention basins have already been built and are located throughout the City, including near PA 2A. Storm drains

within PA 2A would ultimately discharge into the Santa Ana River flowing to the Pacific Ocean. See **Figure 4.8-3, Drainage Plan**.

The City's Master Plan of Drainage includes the drainage facilities within the Project area and no deficiencies are present in the system. As the Specific Plan land use program does not increase the amount of impervious area, the drainage characteristics are anticipated to remain the same as in the existing condition. Thus, no retention is required for stormwater runoff from the Specific Plan area. The proposed improvements to the storm drain system are limited to the following: re-routing of several existing storm drain lines into the private drives within the Project area from their present locations within future development sites.

Development Regulations and Design Guidelines

Upon adoption of the SPA, the development regulations, design guidelines, and procedures established within the SPA will become the governing zoning standards for any new construction, addition, or remodel within the Project area. The SPA outlines allowable uses and standards for building heights, setbacks, parking, coverage, landscape, signage, and other development standards within the Project area. Chapter 3, Development Regulations and Chapter 4, Design Guidelines of the SPA describe all development regulations and design guidelines that will be applicable to the Project area after adoption of the SPA.

Landscaping and Open Space

The primary purposes of the open space and plaza areas are to provide for low intensity, outdoor-oriented recreational activities, and facilities, and protect and preserve the public health, safety, and welfare. Open space and plaza areas are comprised of open and amenity space consistent with an urban setting. Residential or hotel projects would include private common open space amenities for their tenants and guests, such as pools/spas, courtyards, roof decks or gardens, fitness centers, and business centers. Residential uses would include a combination of private open space (patios or balconies) and common open space (fitness centers, courtyards, lounges, pool, and spa areas). Landscaped pedestrian zones would be provided on all internal streets. Publicly accessible open space would consist of landscaped building entries, pedestrian connections between the mix of uses on the site, and a planned major urban gathering space/plaza. This open central space may incorporate elements such as seating, a stage area for performance, kiosks, water features, shade structures, and shade plantings (see **Figure 3-6, Conceptual Open Space Plan**).

A landscape concept has been developed for the Specific Plan area that would reinforce patterns established by the land use plan to create an identity for the entire project. Various landscape design elements selected for the streetscapes, entries and buffers would be integrated to create a cohesive theme throughout the development.

Tentative Parcel Map – PEN22-0061

The Project Applicant has submitted a Tentative Parcel Map (TPM) for the Project. The TPM proposes the subdividing of the existing Project site parcels into 22 separate parcels as detailed in the conceptual land use plan of the SPA and as shown in **Figure 3-3, Conceptual Land Use Plan**.

3.6 Project Phasing

Construction is expected to be initiated in early 2023, with individual uses completed between mid-2023 and late 2026. Hours of operation would be specified in the Specific Plan generally anticipated to be 24/7 for the hotel and residential uses, late night for the theater and dining area (similar to current theater operations), with typical retail store hours for the interior mall and Food Market.

A Construction Management Plan shall be submitted for City review and approval prior to beginning construction. Construction of the Project would require the staging of construction material, equipment, worker vehicles, and material stockpiles. The Project proposes the use of the northern parking lot as an initial location to stage material and equipment. This would require the use of security fencing and lighting. Additionally, as each Project component is constructed, there would be temporary loss of available parking at the MoVal Mall during continued operations of existing uses. This loss of parking and staging of stockpiles would be temporary in nature and would shift around the Project site as separate Project components are constructed. However, at all times the Project would maintain minimum required parking as set forth in the SPA and access to the mall would be maintained. The SPA proposes the following parking standards for the Project (see Table 3-3 of the SPA):

- **Mixed use, Non-residential:** 4 spaces per 1,000 SF of gross leasable area.
- **Hotel:** 0.80 spaces per key
- **Residential, including Guest:** 1.00 spaces/unit

As the retail portion of the Project is currently anticipated to be operational throughout construction, the Project would maintain 3,099 spaces during construction for the 774,764 SF of renovated retail.

3.7 Discretionary Actions and Approvals

The following discretionary permits and approvals are addressed in this Draft SEIR, or would be pursued as part of future site-specific development plans on the basis of this Draft SEIR:

California Environmental Quality Act – State Clearing House No. 2022040136

This Moreno Valley Mall Project is considered a “Project” under CEQA. CEQA is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. To document the potential significant impacts, this Draft SEIR is being prepared for the Project and would be certified by the City prior to adoption of the Project or any other Project entitlements. Subsequent development within the Specific Plan boundaries deemed consistent with Specific Plan standards would not require further environmental review. The City is the lead agency responsible for certification of the Project Draft SEIR.

Specific Plan Amendment (SP 200) – PEN21-0168

Adoption of the Moreno Valley Mall SPA, which amends and supersedes the Towngate Specific Plan (SP-200). The SPA details development standards and guidelines that will apply to the Project and to any future development within the planning areas established by the SPA. Additionally, the SPA details Project objectives and guidelines for the proposed developments.

Tentative Parcel Map – PEN 22-0061

Approval of the Tentative Parcel Map that outlines the proposed delineation of the Project site into 22 parcels to allow for additional and more refined land uses within the Project area. The Tentative Parcel Map proposes making three of the existing parcels of the MoVal Mall into 22 parcels with land uses consisting of the MoVal Mall, commercial, residential, hotel, and office uses, plus common open space, and surface parking lots.

Riverside County Airport Land Use Commission – Major Land Use Action Review – ZAP1520MA22

Project compliance with the Riverside County Airport Land Use Compatibility Plan (RCALUCP) is required for any project located within the influence area of the Riverside Municipal Airport (RMA), Flabob Airport, or the March Air Reserve Base/March Inland Port (MARB/MIP). In order to ensure compliance, the Riverside County ALUC will perform a Major Land Use Action Review. As part of this process, Federal Aviation Administration (FAA) Rule 77 Approval is also required due to the proposed Specific Plan Amendment.

Additional Approvals

In addition, the Project development would require ministerial approvals, including but not limited to the following:

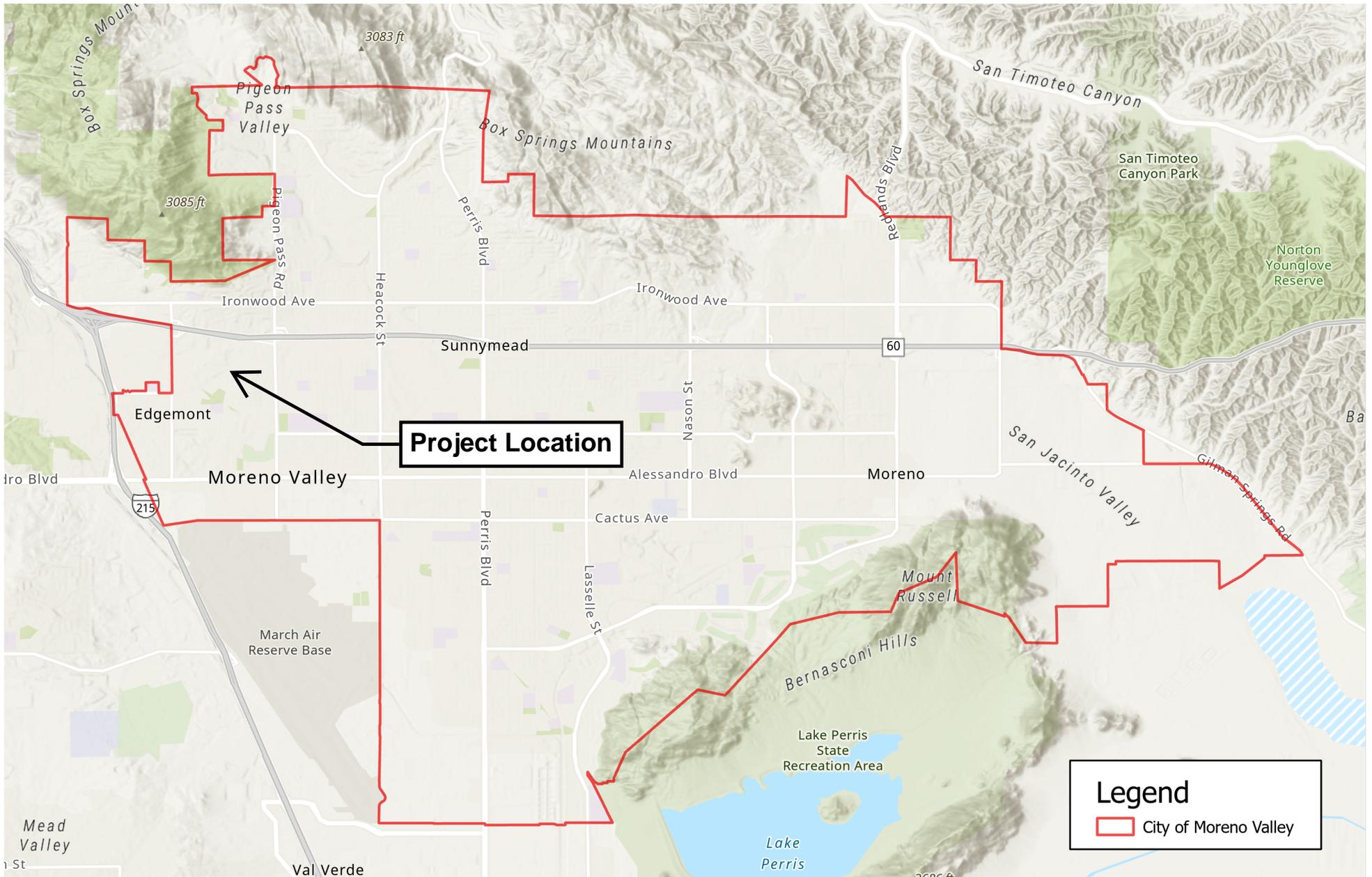
- Issuance of a demolition permit
- Issuance of construction permits, including buildings, streets, utilities, grading, roadway improvements, etc.
- Approval of development plans as they are submitted.

As part of the Moreno Valley Mall Redevelopment Project, approvals by other agencies are anticipated to include, but are not limited to the following:

- Santa Ana Regional Water Quality Control Board: National Pollution Discharge Elimination System (NPDES) permit issuance of water discharge requirements; construction stormwater runoff permit.
- City of Moreno Valley Fire Department: Plan check for building plan review and emergency access.

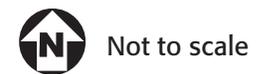
Responsible Agencies

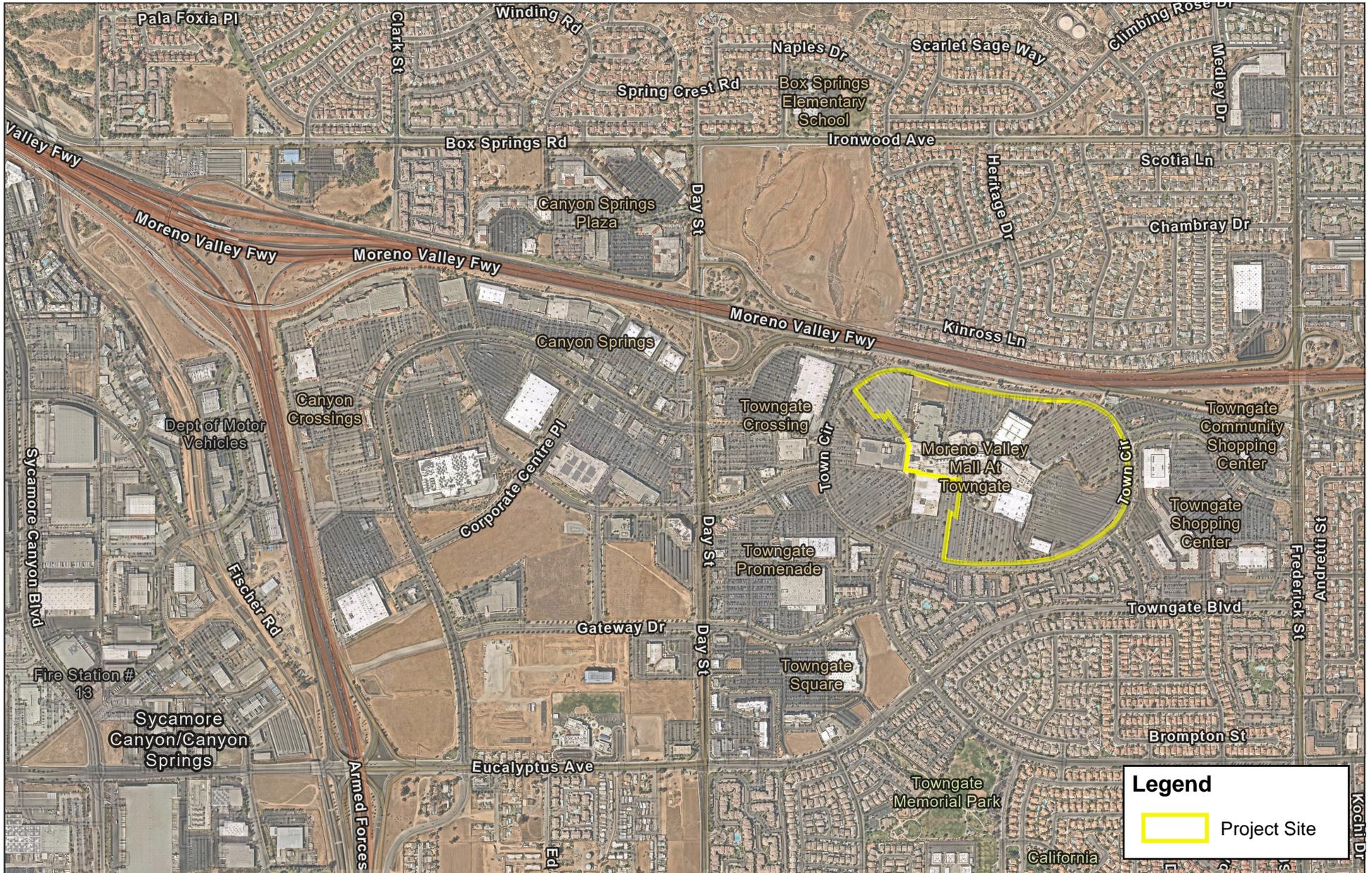
- South Coast Air Quality Management District
- Riverside Transit Agency



Source: ESRI, 2022

FIGURE 3-1: Regional Location
Moreno Valley Mall Redevelopment Project





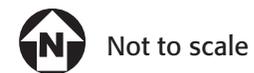
Source: Nearthmap, 9/18/2021

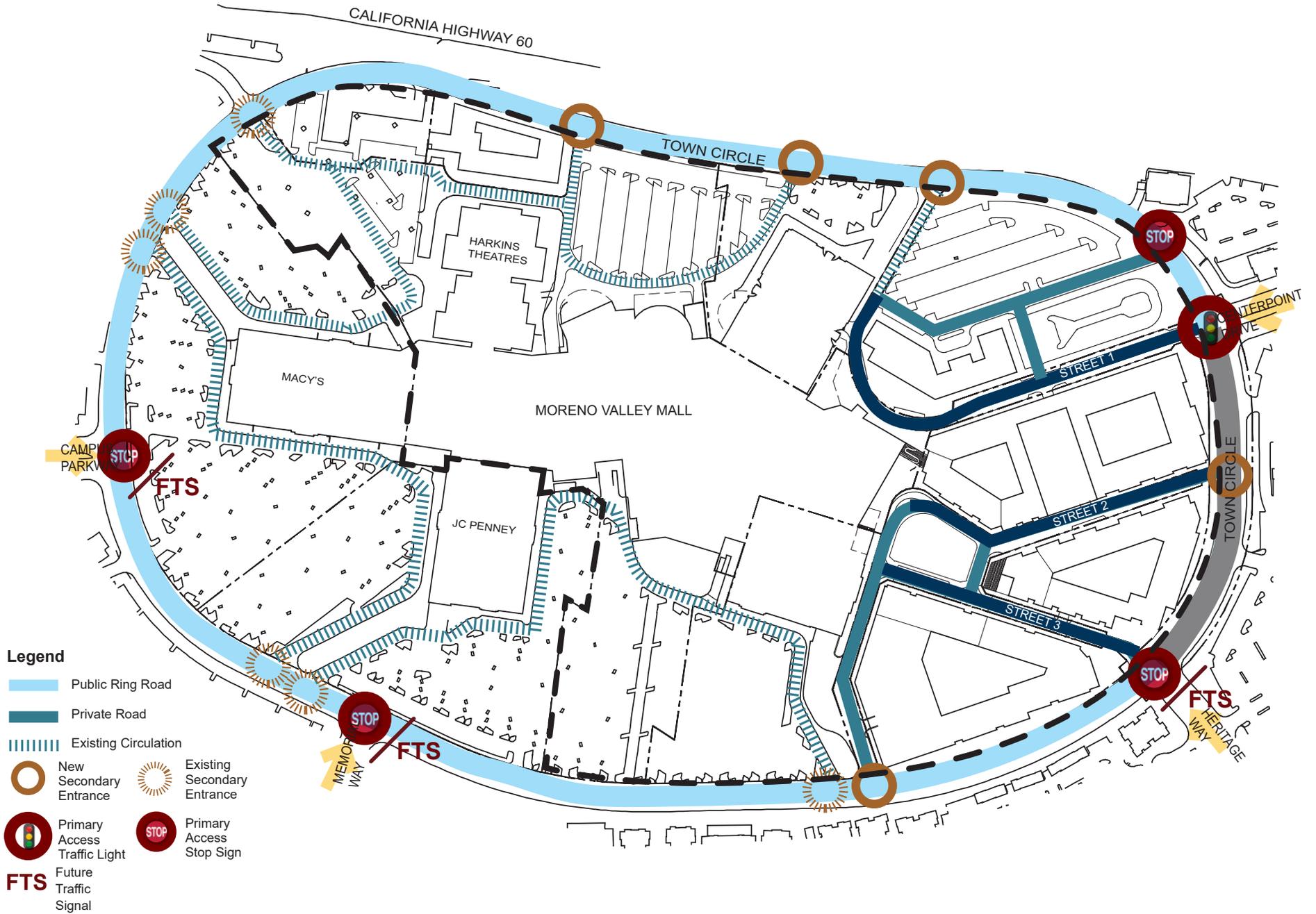
FIGURE 3-2: Project Vicinity
Moreno Valley Mall Redevelopment Project



Source: Nelson, 07/12/2022

FIGURE 3-3: Conceptual Land Use Plan
Moreno Valley Mall Redevelopment Project





Source: Nelson, 10/22/2022

FIGURE 3-4: Circulation Plan
Moreno Valley Mall Redevelopment Project



Source: Nelson, 07/12/2022

FIGURE 3-6: Conceptual Open Space Plan
Moreno Valley Mall Redevelopment Project

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.0.1 Approach to Environmental Analysis

The following subsections of the Draft Subsequent Environmental Impact Report (Draft SEIR) contain a detailed environmental analysis of the existing conditions, Project impacts, recommended mitigation measures, and unavoidable significant impacts, if any. The Draft SEIR analyzes those environmental issue areas, where potential significant impacts have the potential to occur.

Based on review of previous CEQA documentation and review of the Project development plans, no new or substantially more severe significant environmental impacts beyond those identified in the SP-200 EIR are anticipated to occur in the following environmental issue areas:

- Agriculture and Forestry Services
- Biological Resources
- Energy
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Tribal Cultural Resources
- Wildfire

Therefore, these topics are addressed in **Section 7.0, Effects Found not to be Significant**.

In accordance with CEQA Guidelines Appendix G, the following environmental issue areas were determined to have a potentially significant impact and have been included within this Draft SEIR for further analysis:

- Section 4.1, Aesthetics
- Section 4.2, Air Quality
- Section 4.3, Cultural Resources
- Section 4.4, Greenhouse Gas Emissions
- Section 4.5, Land Use and Planning
- Section 4.6, Noise
- Section 4.7, Transportation
- Section 4.8, Utilities and Services Systems

Each potentially significant environmental issue area is addressed in a separate SEIR section (**Section 4.1, Aesthetics** through **Section 4.8, Utilities and Service Systems**) and is generally organized into the following subsections:

- “**Introduction**” provides the goals of each particular section according to CEQA guidelines and gives a brief outline of the contents of the section.
- “**Environmental Setting**” provides an overview of the existing physical environmental conditions in the study area that could be affected by implementation of the Project (i.e., the “affected environment”).

- **“Regulatory Setting”** identifies the plans, policies, laws, and regulations that are relevant to each resource area and describes permits and other approvals necessary to implement the Project. The Draft SEIR needs to address possible conflicts between the Project and the requirements of federal, State, regional, or local agencies, including consistency with adopted land use plans, policies, or other regulations for the area.
- **“Impact Thresholds and Significance Criteria”** provides the criteria used in this document to define the level at which an impact would be considered significant in accordance with CEQA. Significance criteria used in this Draft SEIR are based on the checklist presented in Appendix G of the *State CEQA Guidelines*, factual or scientific information and data, and regulatory standards of federal, State, regional, and local agencies.
- **“Impacts and Mitigation Measures”** are listed numerically and sequentially throughout each section, for each Project component. A bold font impact statement precedes the discussion of each impact and provides a summary of each impact and its level of significance. The discussion that follows the impact statement includes the analysis on which a conclusion is based regarding the level of impact. Also included is a brief summary of the topical analyses, recommended mitigation measures, and conclusions from the SP-200 EIR.
- **“Cumulative Impacts”** identifies potential environmental impacts of past, present, and reasonably foreseeable future projects, in combination with the Project.
- **“Significant Unavoidable Impacts”** provides details for any identified impacts that are deemed to be significant and unmitigable below the less than significant threshold.
- **“References”** are provided that were utilized for discussion in this section. The references are listed alphabetically by author and chronologically by date of publication.

4.0.2 Existing Site Conditions

This section identifies the existing site conditions for the Project as a summary to provide a holistic view of current conditions. In the case of this EIR, each component of the environmental setting will not be analyzed in detail but are included to provide a complete understanding of the Project site. Refer to **Section 4.0.1, Approach to Environmental Analysis** of this Draft SEIR for a list of analyzed subjects.

Environmental Setting

Topography

The Project site is relatively flat with an approximate elevation ranging from 1,637 feet above mean sea level (amsl) at the north portion of the site to 1,608 feet amsl at the southern-most portion of the site, sloping – in general – to the south. There is a split elevation with about 20 feet of grade difference from upper level toward the north side. The majority of the Project site consists of urban/developed uses. Development on the Project site is characterized by the existing mall building in the central portion of the site, surrounded by parking lots and structures, and landscaping.

Biology

On-site and surrounding land uses have eliminated naturally occurring habitats from the Project site and immediately surrounding area. Much of the Project site is currently vegetated with non-native ornamental plants for landscaping purposes. A small lot, approximately 1.40 acres in area, remains vacant within the northern portion of the Project site. Vacant since the mall's establishment in 1992, the lot has the greatest potential for containing biological resources compared to the rest of the site. Grasses, low-growing flowering plants, and small shrubs have historically existed on this lot.¹ However, anthropogenic disturbances have been present, and the lot is currently used to store dumpsters and has evidence of frequent vehicular activity.

Hydrology

The Project site is located within the San Jacinto River watershed. The site is underlain by upper Pleistocene alluvial deposits in the Upper Santa Ana River Valley approximately 1.5 miles south of the Santa Ana River. The alluvium is estimated to be approximately 40 feet in depth. According to a groundwater assessment conducted at a site 0.48 mile west of the Project site, groundwater was found at a depth of approximately 23 feet below ground surface.² According to a groundwater assessment conducted at a site 0.54 mile east of the Project site, groundwater was not found at a boring depth of 50 feet below ground surface and has an estimated depth of greater than 60 feet below ground surface east of the Project site.³

Seismic Conditions

The Project site is an area that is subject to ground motions due to earthquakes as is all of southern California. The site is subject to regional faults including the Cucamonga, San Jacinto, San Andreas, and Whittier-Elsinore Faults. However, the Project is not located within a known fault zone. The nearest fault zone to the Project site is the San Jacinto Fault which is approximately 6.4 miles northeast of the site. The Project site is outside of an Alquist-Priolo Earthquake fault zone which is approximately 6.4 miles northeast of the site.⁴

Flood Zone Information

According to the Federal Emergency Management Agency's National Flood Insurance Program's Flood Insurance Rate Maps (FIRM) for the Project area (Map No. 06065C0734G and Map No. 06065C0745G for Community No. 065074 with an effective date of August 2008), the Project site is located in flood zone "X-unshaded." According to FEMA, the definition of zone "X-unshaded" is an area of minimal flooding hazard.⁵

¹ Google (2011-2022). *Streetview Image Capture, digital images*. Available at <https://maps.google.com>. Accessed February 3, 2022.

² Wayne Perry, Inc. (2004). *Site Assessment Report WPI Project No. 04.105*. Available at https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/2349952042/T0606586478.PDF. Accessed January 27, 2022.

³ Kleinfelder, Inc. (2002). *Site Assessment Report Project No. C56424805*. Available at https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/6754106521/T0606599292.PDF. Accessed January 27, 2022.

⁴ United States Geological Survey (2018). *Interactive Quaternary Fault Map*. Available at <https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf>. Accessed January 27, 2022.

⁵ Federal Emergency Management Agency (2016). *FEMA Flood Map Service Center. FIRM Map No. 06065C0734G and Map No. 06065C0745G*. Available at <https://msc.fema.gov/portal/advanceSearch#searchresultsanchor>. Accessed January 27, 2022.

Utilities and Public Services

Water Supply

Water for the Project site is provided by the Mills Service Area of the Eastern Municipal Water District (EMWD), with water sourced from northern California through the State Water Project. Water is treated by the Mills Filtration Plant before being routed to the Specific Plan Area.

Currently, EMWD owns and operates main water lines around and throughout the Project site. Water lines are encompassed by easements of various widths which are dedicated to EMWD for sewer and water utility purposes. The existing mall is served by laterals that tie into the EMWD water main within the dedicated easements. Fire service connections stub directly off the water mainline that is routed throughout the site.

According to the MoVal Mall construction plans from 1991, there is an existing 16-inch Ductile Iron Pipe (DIP) CL50 water main along Centerpoint Drive and a 12-inch DIP CL50 water main along Heritage Way that serve the Project site. On-site, there is a 24-inch DIP CL50 water main along the northern and western sides of Town Circle and various lengths of 12-inch DIP CL50 water main serving the Project site along parking lots and the building footprint. There are 8-inch and 4-inch DIP service connections into the existing mall. The majority of the existing water system would remain in place; however, some water infrastructure would be relocated to accommodate the proposed development

Recycled water

Recycled water is not available for use on the Project site.

Sanitary Sewer

The EMWD has five Regional Water Reclamation Facilities (RWRFs) which treat approximately 43 million gallons per day (MGD) of wastewater, served through 1,813 miles of sewer pipelines. The five RWRFs treat wastewater and produce tertiary effluent where the treated water is delivered to recycled water customers or discharged to either Temescal Creek or into percolation/evaporation storage ponds.

The Project site is located within EMWD's Sewer Subservice Area 2. Wastewater in this area is treated at the Moreno Valley Regional Water Reclamation Facility. EMWD has sewer mainlines throughout the Project site and along the southerly mall boundary. The sewer lines convey sewage from north to south and connects to the sewer mainlines, where it is then routed to the Moreno Valley Regional Water Reclamation Facility.

The Project area is served by a network of eight-inch EMWD gravity sewer mains which are encompassed by easements for sewer and water purposes of various width, generally ranging in width between 40 feet and 60 feet depending on the depth of the sewer main. On-site sewer lines are routed to Town Circle, where two eight-inch sewer mains confluence into one 10-inch sewer main at the intersection of Town Circle and Memorial Way (per EMWD Record Drawings D-13067 and D-13074).

Electricity

Electricity is provided to the Project site by the Moreno Valley Electric Utility (MVU). In 2001, the Moreno Valley City Council established the MVU. The utility served its first customers on February 6, 2004 in the Promontory Park subdivision at Cactus Avenue and Moreno Beach Drive. MVU serves over 6,500 customers within its service area. MVU provided customer service, meter reading, billing, emergency response, and other services to new commercial and residential developments located within MVU's service area.

Natural Gas

Natural gas is provided to the Project site by Southern California Gas (SoCal Gas). SoCal Gas' service territory encompasses approximately 20,000 square miles and more than 500 communities. There are existing natural gas pipelines along Cottonwood Avenue to the south of the Project site and along Indian Street to the east of the Project site. Gas services and smaller natural gas infrastructure branch from the pipelines to serve the Project site and surrounding areas. It is anticipated that a majority of all natural gas infrastructure exists below grade within the public right-of-way.

Fire Service

Fire protection and medical services for the City of Moreno Valley are provided by the Moreno Valley Fire Department (MVFD). The 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 as well as being responsible for fire prevention services such as public education, code enforcement, fire investigation, and plan check and inspection services. The fire station closest to the Project site is Towngate Fire Station 6 located at 22250 Eucalyptus Ave, Moreno Valley approximately 0.5 mile south of the Project site.

Police Service

Law enforcement services within the City of Moreno Valley are provided by the Moreno Valley Police Department (MVPD). Since incorporation, the City has maintained an annual contract with the Riverside County Sheriff's Department for police protection and crime prevention services. The Sheriff's Department operates under the name of Moreno Valley Police Department and all patrol vehicles display the City's seal or logo and name. MVPD 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 MVPD is located at 22850 Calle San Juan De Los Lagos, Moreno Valley approximately 1.8 miles south of the Project site.

Circulation

Regional access to the Project site is provided by I-215 and SR-60 with local access being provided by Frederick Street, Day Street, Towngate Boulevard, and Eucalyptus Avenue. These roadways are owned and maintained by the State of California (I-215 and SR-60) and the City of Moreno Valley (all others). Please note, Day Street north of Eucalyptus Avenue is within the City of Riverside's jurisdiction. For the purposes of this Draft SEIR, references to Day Street shall refer to Day Street within the jurisdiction of the

City of Moreno Valley. If, for any reason, the portion of Day Street within the jurisdiction of the City of Riverside is referenced, it will explicitly be stated in that section. Typical traffic control devices include traffic signals with detector loops.

4.0.3 Cumulative Impact Methodology

CEQA Requirements

Under the CEQA Guidelines, “a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts” (14 California Code of Regulation [CCR] §15130(a)(1)). According to CEQA, an EIR must discuss cumulative impacts if the incremental effect of a project, combined with the effects of other projects is “cumulatively considerable” (14 CCR §15130(a)). Together, these projects compose the cumulative scenario which forms the basis of the cumulative impact analysis.

A cumulative impacts analysis should highlight past actions that are closely related either in time or location to the project being considered, catalogue past projects, and discuss how they have harmed the environment and discuss past actions even if they were undertaken by another agency or another person. Both the severity of impacts and the likelihood of their occurrence are to be reflected in the discussion, “but the discussion need not provide as great detail as is provided for the effects attributable to the Project alone. The discussion should be guided by standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact” (14 CCR §15130(b)).

For purposes of this Draft SEIR, the Project would cause a cumulatively considerable and therefore significant cumulative impact if:

- The cumulative effects of other past, current, and probable future projects without the Project are not significant and the Project’s incremental impact is substantial enough, when added to the cumulative effects, to result in a significant impact.
- The cumulative effects of other past, current, and probable future projects without the Project are already significant and the Project would result in a cumulatively considerable contribution to the already significant effect. The standards used herein to determine whether the contribution is cumulatively considerable include the existing baseline environmental conditions, and whether the Project would cause a substantial increase in impacts, or otherwise exceed an established threshold of significance.

The approach and geographic scope of the cumulative impact evaluation vary depending on the environmental topic area being analyzed. The individual “Cumulative Impacts” subsections within each environmental topic present impacts and mitigation measures for the Project. Each section of the SEIR begins with a summary of the approach and the geographic area relevant to that environmental topic area. For most environmental topic areas, the list approach is used and provided under the discussion of “Cumulative Impacts.”

The cumulative analysis must be in sufficient detail to be useful to the decision-maker in deciding whether, or how, to alter the Project to lessen cumulative impacts. Significant adverse impacts of the cumulative

projects would be required to be reduced, avoided, or minimized through the application and implementation of mitigation measures. The net effect of these mitigation measures is assumed to be a general lessening of contribution to cumulative impacts. This discussion, found at the end of each impact section, provides an analysis of overall cumulative effects of the Project taken together with other past, present, and reasonably foreseeable probable future projects.

Geographic Scope

In respect to this Draft SEIR analysis, cumulative effects can generally be geographically classified as localized, site-specific resource issues, regional, watershed level resource issues and global resource issues. At the localized, site-specific resource scale, the Project's cumulative impacts have been analyzed for each resource topic.

Each of the cumulative impact categories are analyzed and regulated by different agencies and associated regulatory or policy documents, in order to best protect the resource in question. The analysis of cumulative effects considers a number of variables, including geographic (spatial) limits, time (temporal) limits, and the characteristics of the resource being evaluated. The geographic scope of each analysis is based on the topography surrounding the Project site and the natural boundaries of the resource affected, rather than jurisdictional boundaries. The geographic scope of cumulative effects will often extend beyond the scope of the direct effects, but not beyond the scope of the direct and indirect effects of the Project. The Draft SEIR addresses the Project's potentially significant impacts, recommends Project-specific mitigation measures, and then also identifies existing or recommended measures to address potential cumulative impacts.

Project Approach

There are two commonly used approaches, or methodologies, for establishing the cumulative impact setting or scenario. One approach is to use a "list of past, present, and probable future projects producing related or cumulative impacts including, if necessary, those project outside the control of the agency..." (14 CCR §15130(b)(1)(A)). The other is to use a "summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect" (14 CCR §15130(b)(1)(B)).

The MoVal 2040 General Plan and other planning documents (such as recent City of Moreno Valley CEQA documents and the Southern California Association of Governments (SCAG)'s Regional Transportation Plan Sustainable Community Strategy (RTP/SCS EIR) were used as additional reference points in establishing the cumulative scenario for the analysis. The previous CEQA documents provide further context as to cumulative impacts considered for prior projects. The intent of the cumulative impact discussions is to provide sufficient information to inform decision-makers and the public, rather than "tiering" off of prior CEQA documents for cumulative impacts.

Types of Projects Considered

The following project summaries represent past, present and probable future projects that could result in cumulative impacts when combined with the Project. Related projects and other possible development in the Project area determined as having the potential to interact with the Project to the extent that a

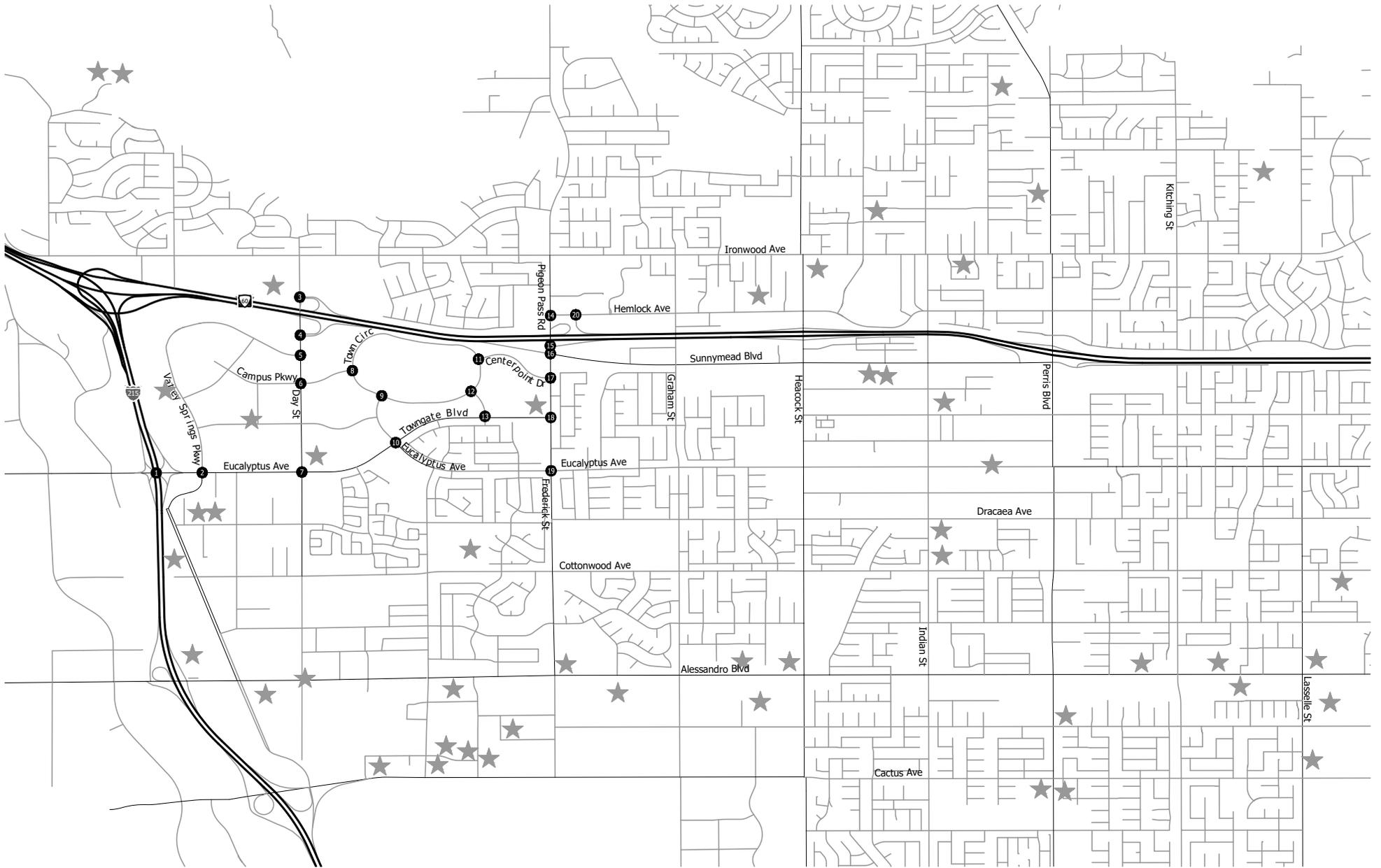
significant cumulative effect may occur are outlined in **Table 4-1, Cumulative Projects List**. **Figure 4.0-1, Cumulative Projects Map**, shows the locations of the past, present, and probable future projects. Projects were included that are either located within a mile of the site or are expected to add a significant number of trips (over 20) to any study intersection.

Table 4-1 presents the list and location of projects that have been identified in the City of Moreno Valley and adjacent communities. It should be noted that the MoVal 2040 General Plan evaluated the cumulative impacts of the build-out of the entire City based on the ultimate development of the City and surrounding areas. As such, the cumulative impacts of the MoVal 2040 GP would have considered the Project. Additionally, the SCAG RTP/SCS Final EIR included a cumulative analysis of the entire region, including the Project site.⁶ The World Logistics Center (WLC) EIR analyzed cumulative impacts for over 300 projects in the region due to the regional influence of the WLC. These cumulative analyses in these documents provide an understanding of the cumulative impacts within the City and surrounding area and form a basis for the analysis in this EIR. While these analyses would have included the Project site and the potential developments that might have occurred, the SPA is less dense than what is approved for the Project site and is less than what was considered in the cumulative impact analyses for these referenced documents.

Table 4-1: Cumulative Projects List

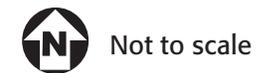
No.	Project	Location	Land Use	Quantity Units
1	Alessandro Corporate Center	Alessandro Boulevard at San Gorgonio Drive (APN: 263-060-021), City of Moreno Valley	Industrial	662,018 SF
2	Old 215 Business Park	Old 215 Frontage Road and Cottonwood Avenue, City of Moreno Valley	Business Office Park	118,580 SF
3	Dracaea Avenue Multi-Family	Dracaea Avenue and Elsworth Street, City of Moreno Valley	Residential	69 DU
4	Canyon Springs Healthcare Campus & Senior Living	Allesandro Boulevard and Old 215 Frontage Road, City of Moreno Valley	Residential	50.85 ac
5	Valley Springs Car Wash	Gateway Drive and Memorial Way, City of Moreno Valley	Commercial	3,250 SF
6	Cottonwood Avenue Multi-Family	Cottonwood Avenue and Indian Street, City of Moreno Valley	Residential	197 DU
7	Centerpoint Industrial Area Approved Projects	Cactus Avenue and Elsworth Street, City of Moreno Valley	Industrial	328,278 SF
Source: Kittelson & Associates (2022). <i>Moreno Valley Mall Redevelopment Traffic Impact Analysis</i> , Table 16. Cumulative Projects Trip Generation. City of Moreno Valley (2021). <i>MoVal 2040 General Plan</i>				

⁶ Southern California Association of Governments (2019). *Connect SoCal Program Environmental Impact Report, SCH #2019011061*. Available at <https://scag.ca.gov/peir>. Accessed January 2022.



Source: Kittelson and Associates, 03/29/2022

FIGURE 4.0-1: Cumulative Projects Map
Moreno Valley Mall Redevelopment Project



4.1 AESTHETICS

4.1.1 Introduction

The purpose of this section is to describe the existing regulatory and environmental conditions related to aesthetics and other visual resources. This section also identifies potential impacts that could result from Project implementation, and as necessary, recommends mitigation measures to avoid/reduce the significance of impacts. Aesthetic and other visual resources include both natural and built-up environments. Impacts could result from substantial adverse effects on a scenic vista, substantial damage to scenic resources (e.g., trees, rock outcroppings, or historic buildings) within a state scenic highway, and/or substantial degradation of the site and surrounding visual character. Impacts could also result from the creation of a new source of substantial light or glare.

The data presented in this section was obtained from available public resources including the MoVal 2040 General Plan Update (MoVal 2040 GP), the City of Moreno Valley Municipal Code (Moreno Valley MC), and from applicable Project site plans and documents.

Visual Resource Terminology and Concepts

When viewing the same landscape, people may have different responses to that landscape and any proposed visual changes, based upon their values, familiarity, concern, or expectations for that landscape and its scenic quality. Because each person's attachment to and value for a landscape is unique, visual changes to that landscape inherently affect viewers differently. However, generalizations can be made about viewer sensitivity to scenic quality and visual changes. Recreational users (e.g., hikers, equestrians, tourists, and people driving for pleasure) are expected to have high concern for scenery and landscape character. People commuting daily through the same landscape generally have a moderate concern for scenery, while people working at industrial sites generally have a lower concern for scenic quality or changes to existing landscape character. The visual sensitivity of a landscape is also affected by the travel speed at which a person is viewing the landscape (high speeds on a highway, low speeds on a hiking trail, or stationary at a residence).

The visual sensitivity of a landscape is affected by the viewing distances at which it is seen. The same project feature can be perceived differently by people depending on the distance between the observer and the viewed object. When a viewer is closer to a viewed object in the landscape, greater detail is visible, and there is greater potential influence of the object on visual quality because of its form or scale (the object's relative size in relation to the viewer). When the same object is viewed at background distances, details may be imperceptible but overall forms of terrain and vegetation are evident, and the horizon and skyline are dominant. In the middle ground, some detail is evident (e.g., the foreground), and landscape elements are seen in context with landforms and vegetation patterns (e.g., the background).

The following terms and concepts are used in the discussion below to describe and assess the aesthetic setting and Project impacts.

Scenic Vista

An area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a federal, state, or local agency.

Scenic Highway

Any stretch of public roadway that is designated as a scenic corridor by a federal, state, or local agency.

Sensitive Receptors

Viewer responses to visual settings are inferred from a variety of factors, including distance and viewing angle, types of viewers, number of viewers, duration of view, and viewer activities. The viewer type and associated viewer sensitivity are distinguished among project viewers in recreational, residential, commercial, military, and industrial areas. Viewer activities can range from a circumstance that encourages a viewer to observe the surroundings more closely (such as recreational activities) to one that discourages close observation (such as commuting in heavy traffic). Viewers in recreational areas are considered to have high sensitivity to visual resources. Residential viewers generally have moderate sensitivity but extended viewing periods. Viewers in commercial, military, and industrial areas are considered to have low sensitivity.

Viewshed

A project's viewshed is defined as the surrounding geographic area from which the project is likely to be seen, based on topography, atmospheric conditions, land use patterns, and roadway orientations. "Project viewshed" is used to describe the area surrounding a project site where a person standing on the ground or driving a vehicle can view the Project site.

Visual character

Visual character typically consists of landforms, vegetation, water features, and cultural modifications that impart an overall visual impression of an area's landscape. Scenic areas typically include open space, landscaped corridors, and viewsheds. Visual character is influenced by many different landscape attributes including color contrasts, landform prominence, repetition of geometric forms, and uniqueness of textures among other characteristics.

4.1.2 Environmental Setting

Natural Setting

The Project site comprises four developed parcels. The Project site consists of the existing Moreno Valley Mall, surface parking, and parking structures. The Project site has been entirely disturbed and developed. The Project site is bounded on the north, east, and south sides by Town Circle and the west by existing retail. On-site elevations range from approximately 1,637 feet above mean sea level (amsl) in the northeastern portion of the property to approximately 1,608 feet amsl on the southern portion of the Project site. See **Figure 4.1-1, Existing MoVal Mall Aerial Photo** and **Figure 4.1-2, MoVal Mall Site Photos** for aerial and ground level photographs of the Project site representing existing conditions on-site.

Scenic Vistas

The Moreno Valley GP identifies that the City's natural setting offers view and vistas of features that have both scenic and ecological value. The City of Moreno Valley lies on a relatively flat valley floor surrounded by rugged hills and mountains. The Project site is located south of the Box Springs Mountains and northwest of the Bernasconi Hills. Scenic views that can be observed from the Project site are the Box Springs Mountains located near the Interstate 215 (I-215) and State Road 60 (SR-60) interchange to the northwest and distant views of the San Bernardino Mountains to the northeast.

Scenic Highways

No state scenic highways traverse the Project site or are located in its vicinity. The nearest state-eligible highways are SR-38 (from I-10 in Redlands to SR-18 near Fawnskin), approximately 9.8 miles to the northeast and SR-74 (from I-5 in San Juan Capistrano to SR-111 in Palm Desert), approximately 11 miles to the south, as designated by the California Department of Transportation (Caltrans).¹ The nearest officially designated highway is SR-243 (from SR-74 to the Banning City limit) approximately 23 miles to the east of the Project site. There are no officially designated state scenic highways within a 20-mile radius of the Project site.

Light and Glare

Light and glare in the Project area are typical of that found in urban environments. Sources of light and glare include adjacent retail, residential, and transportation corridor land uses. Stationary source light in the Project area is generated from building interiors and exterior sources (i.e., residential and retail illumination, landscape lighting, and parking/street lighting) associated with uses adjacent to the Project site. The Project area is also influenced by light and glare from vehicle headlights, streetlights, and other sources that are present throughout the City.

4.1.3 Regulatory Setting

Federal

No Federal laws, regulations, or executive orders apply to scenic resources in the Project sites.

State

California Department of Transportation

The California Scenic Highway Program was created in 1963 to preserve and protect highway corridors in areas of outstanding natural beauty from changes that would diminish the aesthetic value of the adjacent lands. Caltrans designates highways based on how much of the landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which views are compromised by development.

Caltrans manages the California Scenic Highway Program (CSHP), which is intended to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent

¹ California Department of Transportation (2022). *California State Scenic Highway System Map*. Available at <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacc>. Accessed February 4, 2022.

to highways. State laws governing State Scenic Highways are found in Streets and Highways Code (SHC) §§260 to 263. A highway may be designated as scenic based on certain criteria, including how much of the natural landscape can be seen by travelers, the landscape's scenic quality and the extent to which development intrudes on the traveler's enjoyment of the view. The CSHP's *Scenic Highway System List* identifies scenic highways that are either eligible for designation or have already been designated as such. Section 261 requires local government agencies to take the following actions to protect the scenic appearance of a scenic corridor:

- Regulate land use and density of development
- Provide detailed land and site planning
- Prohibit off-site outdoor advertising and control on-site outdoor advertising
- Pay careful attention to and control of earthmoving and landscaping
- Scrutinize the design and appearance of structures and equipment

Official designation requires a local jurisdiction to enact a scenic corridor protection program that protects and enhances scenic resources.

Local

Moreno Valley 2040 General Plan

The MoVal 2040: General Plan Update is the City's blueprint for how and where Moreno Valley will grow over the next 20 years. This update to the general plan expanded upon and enhanced the 2006 General Plan for the City. Generally, the MoVal 2040 GP increased the allowable density of commercial uses within the City. Despite this, the Project currently proposes a less intense and dense use than envisioned in the 2006 General Plan. The MoVal 2040 GP Land Use and Community Character Element and Open Space and Resource Considerations Element each identify goals, objectives, policies, and programs that will preserve the City's character and scenic resources while improving overall community design.

Land Use and Community Character Element

Goal LCC-2: *Foster vibrant gathering places for Moreno Valley residents and visitors.*

Policy LCC.2-22: Encourage new mixed-use and commercial development to incorporate visual quality and interest in architectural design on all visible sides of buildings through the following approaches:

- Utilizing varied massing and roof types, floor plans, detailed planting design, or color and materials.
- Maintaining overall harmony while providing smaller-scale variety.
- Articulating building facades with distinctive features like awnings, windows, doors, and other such elements.

- Policy LCC.2-29:** Design of public spaces should ensure they are:
- Lined with active uses at-grade and located near building entrances, windows, outdoor seating, patios, or balconies that overlook park spaces, and other areas with strong pedestrian activity.
 - Be completely visible from at least one street frontage and as feasible, be at least 50 percent visible from a secondary street frontage.
 - Primarily defined by adjacent buildings, which will contribute to the unity and environmental quality of the space.
 - Be located at the same grade level as the public sidewalks when possible. Where changes in grade are an important element of the overall design and programming, clear and direct access from the public sidewalk should be accommodated, and universal accessibility provided.
 - Reflect the design and placemaking elements of the surrounding area through the use of architectural styles, signage, colors, textures, materials and other elements.
 - Be constructed with low impact and permeable paving materials to efficiently manage the stormwater and minimize the area’s heat island effect.
 - Connect to bike and pedestrian facilities and be a part of an interconnected pathway or parkway system where feasible.

Moreno Valley Municipal Code

On September 11, 2012, the City Council adopted Ordinance No. 851, which amended various sections of the Moreno Valley MC, including §9.08.100 Lighting to address citywide night lighting standards. Among other things, it requires non-residential lighting to be fully shielded and directed away from surrounding residential uses. It also restricts non-residential lighting to not exceed 0.25 foot-candle of light measured from within five feet of any property line.²

For multi-family residential uses:

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.

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

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.

² City of Moreno Valley (2021). *City of Moreno Valley Municipal Code – §9.08.100 Lighting*. Available at https://library.qcode.us/lib/moreno_valley_ca/pub/municipal_code. Accessed December 17, 2021.

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

For nonresidential uses:

All outdoor lighting associated with nonresidential uses shall be fully shielded and directed away from surrounding residential uses. 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.

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

The maximum wattage for nonresidential uses shall be two hundred fifty (250) watts or equivalent light intensity of high intensity discharge (HID) lighting.

Approved Towngate Specific Plan 200

The Towngate Specific Plan 200 (SP-200) was adopted in 1987 and consists of the proposed development of Towngate Crossing, Towngate Promenade, Towngate Square, and Towngate Center/Plaza. The Project lies within Planning Area (PA) 2 of the SP-200. Relevant SP-200 design guidelines and development standards for PA 2 as they relate to aesthetic resources are:

- There are no height limits in this zone.
- There are no yard requirements for buildings which do not exceed 35 feet in height. Any portion of a building which exceeds 35 feet in height shall be set back from the front, rear, and side lot lines not less than two feet for each foot by which the height exceeds 35 feet. The front setback shall be measured from the proposed street line as shown in the Moreno Valley Mixed Use Specific Plan (now Towngate Specific Plan 200). The rear setback shall be measured from the existing rear lot line if the rear line adjoins a street, the rear setback requirements shall be the same as required for a front setback. Each side setback shall be measured from the side lot line, or from an existing adjacent street.
- All roof-mounted mechanical equipment shall be screened from surrounding ground elevation views in accordance with the Moreno Valley MC. Those uses located adjacent to SR-60 shall also screen roof-mounted mechanical equipment so as not to be visible from the freeway.
- Fencing, walls, signage, lighting, and refuse disposal areas shall be designed and governed by the applicable standards and guidelines set forth in the Moreno Valley MC.

4.1.4 Impact Thresholds and Significance Criteria

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning aesthetics. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Have a substantial adverse effect on a scenic vista (See Impact 4.1-1);

- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (See Impact 4.1-2);
- 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 (See Impact 4.1-3); or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (see Impact 4.1-4).

Project Design Features

In addition to applying existing standard conditions and regulatory requirements, the Project has incorporated the following Project Design Features into the SPA and TPM:

- The Project proposes a substantial “redevelopment” of the existing Moreno Valley Mall, which will improve overall site aesthetics by renovating parking and landscape areas, introducing new modern architecture for the residential, hotel and office buildings; and
- The proposed SPA includes Development Regulations and Design Guidelines (Chapters 3 and 4 of the SPA, respectively).

The following design regulations are provided in Section 3.9 of the SPA:

- a. Walkway lighting must have cut-off fixtures mounted at a uniform height no more than eight (8) feet above the walkway.
- b. Site lighting should not exceed more than 5 foot-candles of illumination within 50 feet of a property used as residential.
- c. All outdoor lighting associated with non-residential uses shall be fully shielded and directed away from surrounding residential uses. 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.
- d. All parking lots or structures providing more than five spaces for use by the general public and their pedestrian links shall be provided with a minimum coverage of one foot-candle of light with a maximum of eight foot-candles on the parking or walkway surface, unless otherwise approved, for visibility and security. 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. All wiring shall be underground.
- e. For driveways, lighting poles remain at a twenty-five (25) feet maximum. For parking areas, lighting poles remain at twenty (20) feet maximum.
- f. Nonresidential Areas. Outdoor on-site lighting on commercial properties, except for street lighting, shall be mounted on a post and fully shielded not to exceed a maximum height of thirty (30) feet, except as otherwise approved by the Director of Planning.
- g. Parking lot light fixtures and screening shall comply with Moreno Valley Municipal Code Title 9 Planning & Zoning, Chapter 9.08 General Development Standards.

- h. Lighting must meet all requirements of the City of Moreno Valley.
- i. All luminaires shall be metal halide or L.E.D.
- j. Lighting should be designed to avoid light spillover into adjacent properties. The use of shielded light fixtures will be necessary on parcels that adjoin residential neighborhoods.
- k. Pole bases may be round or square. Pole bases in planting areas may be no higher than 6 inches above grade.

Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria/thresholds, as the basis for determining the impact's level of significance concerning aesthetics. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impact. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the Project's potentially significant environmental impacts.

Approach to Analysis

This analysis of impacts on aesthetic resources examines the Project's temporary (i.e., construction) and permanent (i.e., operational) effects based on significance criteria/threshold's application outlined above. For each criterion, the analyses are generally divided into two main categories: (1) temporary impacts and (2) permanent impacts. Each criterion is discussed in the context of Project components that share similar characteristics/geography. The impact conclusions consider the potential for changes in environmental conditions, as well as compliance with the regulatory framework enacted to protect the environment.

The baseline conditions and impact analyses are based on review of Project maps and drawings; analysis of aerial and ground-level photographs; and review of various data available in public records, including local planning documents. A site visit of the Project site was conducted by Kimley-Horn and Associates on January 12, 2022. The determination that a Project component would or would not result in "substantial" adverse effects on scenic resources or visual character considers the site's aesthetic resource value and the severity of the Project component's visual impact (e.g., the nature and duration of the impact).

Visual sensitivity can be described as viewer awareness of visual changes in the environment and is based on the viewers' perspective while engaging in activities from public areas near a project site. The Project site is visible to various users. The sensitivity of those users to changes within a project site varies with the type of use, length of time that the viewer would be within a project site's zone of visual influence (ZVI)³, and the viewer's distance from a project site. Viewers of a project site include nearby residents, and recreational users, travelers, and commuters within a project's ZVI.

³ ZVI is defined as the area from which a development or other structure is theoretically visible. ZVIs are used to identify the parts of a landscape that would be affected by a development.

4.1.5 Impacts and Mitigation Measures

Summary of Previous Environmental Analysis

The SP-200 EIR analyzed potential aesthetic impacts (i.e., impacts to scenic views/vistas and the degradation of character/quality) associated with the proposed Moreno Valley Mixed Use Development. The SP-200 EIR concluded that Project implementation would permanently alter the nature and appearance of the site which, at the time, was predominately occupied by the Riverside International Raceway. However, due to the unsightly nature of the deteriorating raceway, it was anticipated that the Moreno Valley Mixed Use Development would enhance the visual appearance of the site because the proposed uses would be more visually appealing as well as visually compatible with the existing surrounding land uses. While implementation of the project would alter what remains of the natural landform, the existing use of the project site resulted in significant levels of disturbance to the original landscape. The SP-200 EIR required the preparation of a “Design Guidelines Manual” to address these impacts and achieve a consistent overall community theme. The SP-200 EIR determined that while the SP-200 would permanently alter the land, the implementation of the SP-200 was not anticipated to cause an unavoidable significant impact. No mitigation measures were identified in the SP-200 EIR for this resource area.

Impact 4.1-1 Would the Project have a substantial adverse effect on a scenic vista?

Level of Significance: Less than Significant Impact

Within the Open Space and Resource Conservation Element of the City’s GP, the City identifies major aesthetic resources within the GP study area to include views of the mountains and southerly views of the valley. Major scenic resources identified include the Box Springs Mountains, Mount Russell foothills, Moreno Peak, Moreno Valley, Badlands, San Jacinto Valley, Mystic Lake, San Bernardino Mountains, and San Gabriel Mountains. The City concludes in the Conservation Element that scenic resources contribute to the overall desirability of a community and that the distinctive physical setting of Moreno Valley creates much of the City’s appeal as a place in which to live and do business.

Construction

Construction of the Project would include demolition of existing infrastructure, mass grading, and associated construction of the multi-family residences, hotels, parking structures, transit hub, other utilities, and renovations to existing structures. Trenching and installation of water and wastewater pipelines and/or connections, the construction of major drainage facilities, and the paving of roadways would also occur. Project construction would require the short-term use of heavy machinery and vehicles on-site that would be visible on- and off-site. Project construction may temporarily alter views of scenic vistas but would not substantially obstruct any views of scenic vistas because construction activities are temporary in nature. The associated visual impacts from construction activities are expected to occur throughout the duration of the construction phases and shall cease upon completion of the Project construction, resulting in a less than significant impact.

However, these obstructions would be limited to the short-term duration of construction which is temporary in nature. As such, impacts to scenic resources from short-term construction operations would be less than significant and no mitigation is necessary.

Operation

Views of a scenic vista can be affected by the development of buildings and structures which may block visibility at different angles. Upon completion of construction on the Project structures, the structures would be a new permanent visual element in the environment. However, per the development standards of the SP-200, PA 2 has no height limits for any structures.

The multi-family residential buildings would be built to a maximum height of 84 feet 6 inches. The hotels would be built to a maximum height of 76 feet 8 inches. The parking structure would be built to a maximum height of 75 feet 5 inches.⁴ See **Figure 4.1-3, Conceptual Building Elevations** for conceptual building elevations (it should be noted that the building elevations available are conceptual and subject to change and do not indicate final design). Additionally, conceptual 3-dimension renderings have been prepared for the Project to illustrate the Project in its built-out condition, refer to **Figure 4.1-4, Project Renderings**. As previously discussed, scenic resources visible from across the Project site include the Box Springs Mountains to the north, the Bernasconi Hills to the southeast, and very distant views of the San Bernardino Mountains to the northeast. There is a potential for Project buildings to obscure views of scenic resources to the north and northeast including the Box Springs Mountains and the very distant views of the San Bernardino Mountains. The Project may also obscure views of the Bernasconi Hills to the south; however, SR-60 currently blocks sightlines of these hills for residences located north of SR-60 and motorists are unlikely to turn their heads enough to look at the hills when they would likely be paying attention to operating their vehicles.

Views north from Town Circle and Heritage Way would be partially obstructed; however, the Project would be sited and designed such that there would be sightlines between proposed buildings. New structures are primarily located within the eastern portion of the site, and in the northwest portion of the site adjacent to SR-60. These multi-family residential buildings and hotels would be subject to the proposed SPA Design Guidelines and Development Standards, as well as the City of Moreno Valley MC in regard to setbacks and walls/fencing. However, as previously discussed, the previously approved SP-200 did not include building height restrictions within PA 2, so the Project would be compliant with the Specific Plan and its development standards. The Project is seeking review and approval of a maximum building height of 80 ft from the Federal Aviation Administration (FAA) through the Riverside County Airport Land Use Commission (RCALUC). Due to the planned sightlines throughout the Project, and due to compliance with design guidelines and development standards of the SPA, impacts would be less than significant.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures were identified in the SP-200 EIR as there were no significant impacts anticipated with implementation of the SP-200.

Moreno Valley Mall Specific Plan Design Guidelines: The following Design Guidelines of the Moreno Valley Mall Specific Plan are applicable:

⁴ Nelson (July 28, 2021). *Moreno Valley Mall Redevelopment Concept Design and Entitlement Package*

- DG-72 Varied building heights are encouraged to provide visual interest.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.1-2 *Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

Level of Significance: No Impact

Construction and Operations

Currently, the site is fully developed and does not contain any structures which have a formal historic designation. See **Section 7.0, Effects Found Not to be Significant** of this SEIR for additional information. Trees that exist on the Project site are present as a result of landscaping of the existing development. These trees are ornamental in nature any loss of ornamental trees through redevelopment of the Project site would be offset by landscaping currently envisioned in the SPA (see Section 2.5, Landscape Concept of the SPA) and consistent with the Moreno Valley MC requirements for tree replacement (Moreno Valley MC §9.17.030). The Project site does not contain any rock outcroppings.

There are no state scenic highways that traverse the Project site or are located in its vicinity. The nearest state-eligible highways are SR-38 (from I-10 in Redlands to SR-18 near Fawnskin), approximately 9.8 miles to the northeast in Redlands and SR-74 (from I-5 in San Juan Capistrano to SR-111 in Palm Desert) approximately 11 miles to the south in Perris. The nearest officially designated highway is SR-243 (from SR-74 to the Banning City limit) approximately 23 miles to the east of the Project site. Due to distance and topography, the Project is not visible from these highways. Therefore, the Project would not damage scenic resources (i.e., trees, rock outcroppings, or historic buildings) within a State Scenic Highway.⁵

In addition, upon the approval of the proposed Specific Plan Amendment (SPA) and Tentative Parcel Map, future development would be appropriately scaled and designed to complement the surrounding environment by ensuring development would not incorporate excessive height, bulk, signage, or architectural projections. Impacts on scenic resources within a State Scenic Highway would not occur.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures were identified in the SP-200 EIR as there were no significant impacts anticipated with implementation of the SP-200.

Moreno Valley Mall Specific Plan Design Guidelines: The following design guidelines from the Moreno Valley Mall Specific Plan are applicable:

- DG-35** Easements for underground utilities that preclude the planting of trees may not be located where the design guidelines require the planting of trees.
- DG-60** New development should respect the nature of the surrounding historic architectural styles within Moreno Valley while pursuing contemporary and modernized creative identities in line with current or aspirational trends. Historic architectural styles and features have been inspired by the hot, arid climate and strong sun, the rugged

⁵ California Department of Transportation (2021) *California State Scenic Highway System Map*. Available at <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>. Accessed December 20, 2021.

mountain and chaparral landscape, Native American and Spanish Colonial cultural influences, and the automobile.

DG-143 Landscaping, including large dense trees when feasible, should be used to visually screen parking structures when adjacent to roadways and pedestrian walkways.

DG-243 Consideration should be given to the final size of trees within private open space areas to ensure that they match the scale of the surrounding area.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.1-3 ***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?***

Level of Significance: Less than Significant Impact

It should be noted that the Project is located in the City of Moreno Valley, which as of the April 1, 2020 Census, has a population of 208,634.⁶ Therefore, the Project is in an “urbanized area” pursuant to the definition of CEQA Statutes §21071, which defines an urbanized area as an incorporated city that has a population of at least 100,000 persons. It should be noted that the land uses proposed as part of the Project are consistent with the previously approved SP-200, the previous 2006 Moreno Valley General Plan, and the current MoVal 2040 GP.

Construction and Operations

During construction, there will be short-term disturbances to the visual character of the Project site and surrounding area due to the presence of construction machines and activity. During construction soil stockpiles may be present on the northern parking lot of the Project site. This stockpile will be generated as borrow pits are created during grading and setting of building pad elevations. The borrow pit and soil stockpile will have a security fence and security lighting for safety. The presence of a soil stockpile may be viewed as unsightly by individuals within or adjacent to the Project site. However, this impact will be temporary in nature and will only occur during that portion of the grading plan. As such, a less than significant impact is anticipated.

The Project consists of applications for an SPA and Tentative Parcel Map. The SPA proposes the allowance of a mix of retail, residential, and hospitality land uses on select parcels. This would include the proposal for the maximum residential density of 30 dwelling units per acre (du/ac) to be changed to a maximum of 23 du/ac for the multi-family residential portion of the Project. Currently, the Project site is zoned for Center Mixed Use (CEMU) according to Moreno Valley MC §9.07.010.

This CEMU designation provides for the redevelopment of existing commercial centers and adjacent uses to complement existing development at prominent entry points into the community. These centers are envisioned as integrated, pedestrian-oriented places with a mix of uses including retail, dining,

⁶ United States Census Bureau (April 1, 2020). *QuickFacts*. Available at <https://www.census.gov/quickfacts/fact/table/morenovalleycitycalifornia/POP010220>. Accessed December 20, 2021.

entertainment, offices, lodging, recreational and cultural facilities that cater to both motorists passing through and residents of surrounding neighborhoods. This CEMU zone is located entirely within the existing extent of adopted Specific Plans within the City, including SP-200. The permitted uses of SP-200 still apply with the exception that multi-family residential uses (20 to 35 du/ac) are additionally permitted within the Moreno Valley Mall PA of SP-200. However, a SPA is still required to be completed for any mixed-use project within the zone.

The maximum permitted floor area ratio (FAR) in the CEMU designation is 1.25 with a residential range of 20 to 35 du/ac. The underlying standards of SP-200 would otherwise still apply. Other relevant site development criteria for the Project site and as detailed in SP-200 are as follows:

- There are no height limits in this zone.

There are no yard requirements for buildings which do not exceed 35 feet in height. Any portion of a building which exceeds 35 feet in height shall be set back from the front, rear, and side lot lines not less than two feet for each foot by which the height exceeds 35 feet. The front setback shall be measured from the proposed street line as shown in the Moreno Valley Mixed Use Specific Plan (now Towngate Specific Plan 200). The rear setback shall be measured from the existing rear lot line. If the rear line adjoins a street, the rear setback requirements shall be the same as required for a front setback. Each side setback shall be measured from the side lot line, or from an existing adjacent street.

- All roof-mounted mechanical equipment shall be screened from surrounding ground elevation views in accordance with the Moreno Valley MC. Those uses located adjacent to SR-60 shall also screen roof-mounted mechanical equipment so as not to be visible from the freeway.
- Fencing, walls, signage, lighting, and refuse disposal areas shall be designed and governed by the applicable standards and guidelines set forth in the Moreno Valley MC.

Other policies including parking stall (MC §9.11.040 Off-street parking requirements), screening (MC §9.08.150 Screening requirements), and landscaping (MC §9.17.090 Commercial, industrial, public and quasi-public development) requirements have been incorporated into the Project design. Further information regarding Project design, necessary permits, and land use regulations are provided in **Section 3.0, Project Description** and **Section 4.5, Land Use and Planning** of this SEIR.

All lighting within the boundaries of PA 2A shall conform Specific Plan Amendment as described in Section 3.9 of the SPA. A consistency in design elements would be reflected in all project components, including lighting. Individual parcel developers may select their own light fixtures but are encouraged to use those recommended in the design regulations as provided in Section 3.9 of the SPA (refer to *Project Design Features*, above).

Developments within the SPA area would comply with all lighting development regulations within the SPA. Where the SPA does not provide specificity, the City of Moreno Valley's Municipal Code would govern. Additional lighting standards relevant to the Project are provided below.

For nonresidential areas, the City requires that outdoor on-site lighting on commercial and industrial properties, except for street lighting, shall be mounted on a post and fully shielded not to exceed a maximum height of 30 feet, except within 100 feet of a residential use, where the post shall not exceed a

maximum height of 20 feet. In addition, the Project would comply with general lighting standards with Moreno Valley MC §9.16.280. Per §9.16.280, lighting shall serve both safety and aesthetic uses, while reducing light pollution and maintaining dark skies.

For residential areas, the City requires that outdoor on-site lighting within all other residential areas, except for street lighting, shall be on poles or other supports not exceeding 12 feet in height and fully shielded. Such lighting shall be designed to project downward and shall not create glare on adjacent properties. Lighting attached to all residential structures shall not exceed the height of the roof eave. Light trespass and lighting curfew requirements presented in the City's development code (both in MC §9.18.100) would also apply to the Project, furthering the Project's compliance with regulations.

In addition to the Project being consistent with zoning requirements and regulation guidelines that apply to aesthetic and visual resources, the new development and renovations of existing structures would be completed with modern architecture and aesthetically pleasing ornamentation of building facades. The purpose of the Project, as described in **Section 3.0, Project Description**, is to revitalize a major entry point to the City and to encourage patronage of the Moreno Valley Mall by attracting passers-by and residents. To this end, modern architecture, landscaping, artwork and sculptures, and community open space would be employed to create a welcoming and pleasing environment to exist in and spend time for anyone in the public, see **Figure 4.1-3**. Design Guidelines in the SPA that are applicable to this topical area are provided below. This development would greatly increase the scenic quality of the urban area at this major center of the City and be an overall benefit to the City and immediate surrounding of the Project site.

With the area's design standards being incorporated to ensure full compliance with the City's development code, the minimization of any negative impacts due to aesthetics or light and glare policies, and the employment of modern aesthetically pleasing architecture, the Project would comply with any applicable regulation regarding scenic quality and a less than significant impact is expected.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures were identified in the SP-200 EIR as there were no significant impacts anticipated with implementation of the SP-200.

Moreno Valley Mall Specific Plan Design Guidelines: The following design guidelines of the Moreno Valley Mall Specific Plan are applicable:

- DG-61** Buildings should emphasize a clear architectural identity, appropriately articulated, and detailed for that style. Mixtures of styles and details are considered acceptable but should convey a clear idea of purpose.
- DG-62** Additions or modifications to existing structures should complement and enhance the architectural style of the existing building. This may be a reinforcing or even contradictory approach.
- DG-63** Architectural elements should serve to blend buildings into on-site open space components to create a cohesive space in consideration of a guest's journey through the site.

- DG-67** Upper floors should include variations in the facade plane to increase building aesthetic interest and allow for balcony or other outdoor amenities.
- DG-72** Boxy and monotonous facades and large expanses of flat wall planes are strongly discouraged.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.1-4 ***Would the Project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?***

Level of Significance: Less than Significant Impact with Mitigation Incorporated

Implementation of residential, hospitality, and commercial development would create new sources of light and glare. Lighting effects are associated with the use of artificial light during the evening and nighttime hours. There are two primary sources of light: light emanating from building interiors passing through windows and light from exterior sources (i.e., street lighting, building illumination, security lighting, parking lot lighting, and landscape lighting). Light introduction can be a nuisance to adjacent residential areas, diminish the clear night sky's view and, if uncontrolled, can cause disturbances. Land uses such as residential uses are considered light sensitive, because occupants have expectations of privacy during evening and nighttime hours and may be subject to disturbance by bright light sources. The Project is analyzed below for its potential to generate obtrusive light infusing spill light, glare, and sky glow. With respect to obtrusive lighting, the degree of impact may vary widely depending on the amount of light generated, light sources, presence of barriers/obstructions, type/design of light source, and weather conditions.

Construction

Construction would result in the temporary increase of spill light and glare from construction equipment, staging areas, lighting poles, and security lighting. In accordance with Moreno Valley MC §8.14.040, construction activities are permitted between the hours of 7 a.m. and 7 p.m. Monday through Friday, excluding holidays and from 8 a.m. to 4 p.m. on Saturday, unless written approval is obtained from the City building official or City engineer. Such activities are not permitted on Sundays or federal holidays. Therefore, impacts by construction lighting on nearby residences south of the Project site would be minimized **MM AES-1** would be implemented which would require contractors to develop a Construction Lighting and Screening Plan to further minimize light and glare impacts during construction. Construction shall adhere to Moreno Valley MC §8.14.040 which limits the hours and days of construction. Security screening at night for the construction area would have directional lighting limited to that necessary for safety and security, as required by **MM AES-1**. In addition, construction lighting is temporary and shall cease upon Project completion. Therefore, in consideration of Project design features, **MM AES-1**, and adherence to applicable municipal codes, temporary construction impacts would be mitigated to less than significant levels.

Operations

Buildout of the retail, residential, and hospitality portions of the Project would increase nighttime lighting in this portion of the City. While existing uses include the Moreno Valley Mall and parking lot lighting, the

addition of new buildings which themselves emanate light may cause a marginal increase in lighting. Sources of lighting include interior and exterior lighting, streetlights, signage, and on-building and freestanding security lighting. The Project would be required to adhere to Moreno Valley MC §9.08.100 Lighting and §9.16.280 General requirements which set standards for light and glare for developments. To minimize effects pertaining to lighting, night lighting shall be directed away from sensitive receptors using selective light placing and wall shielding.

Glare is typically related to the use of highly reflective surfaces including mirrored and tinted glass materials, and broad, flat surfaces that are painted with highly reflective colors. Building and site plans for future development projects within the Project area would be subject to City review to determine the potential for light and glare. All new development projects would be required to meet the standards contained in the City's Lighting Regulations. With adherence to the provisions of the Moreno Valley GP, Moreno Valley MC, and the City's outdoor lighting regulation, lighting and glare impacts and potential spillover of the Project would not occur on surrounding land uses or roadways. Operational impacts resulting from new sources of light or glare would be less than significant.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures were identified in the SP-200 EIR as there were no significant impacts anticipated with implementation of the SP-200.

Moreno Valley Mall Specific Plan Design Guidelines: The following design guidelines of the Moreno Valley Mall Specific Plan are applicable.

- DG-170** Open space should be well lit during the evenings and planned so that light sources do not become hindered as time passes.
- DG-206** Building signs may be backlit or lighted to increase visibility at night. Projected signs that are only visible at night should also be considered for daytime and temporary uses.
- DG-218** Programmable electronic signs shall utilize automatic dimming technology to allow the brightness of the light to adjust to ambient lighting. Where the signs depict movement or color change, they should not be placed so they are visible directly from residential uses.
- DG-294** Lighting of private roadways and bikeways shall comply with relevant standards published by the Illuminating Engineering Society (I.E.S.).
- DG-296** Ensure that all lighting is "dark skies" compliant and does not negatively impact the surrounding environment and adjacent uses. The type and location shall minimize direct glare onto adjoining properties.
- DG-302** Lighting shall not be continuously flashing or animated in a pattern that is distracting to users of the site.
- DG-303** Lighting fixtures with exposed bulbs shall not be used with the exception of decorative "Edison bulb" fixtures on dimmer, decorative "string" lighting (Tivoli lighting) when used to illuminate outdoor patios, walkways and plazas, decorative holiday trees, and landscape lighting.

- DG-304** Security lighting shall be designed as part of a comprehensive lighting plan.
- DG-308** Ensure that all lighting fixtures do not shine directly into pedestrian line of site through the use of cover plates and downlighting.
- DG-310** Lighting in parking areas shall be arranged to prevent direct glare into adjacent dwelling units and onto neighboring uses/properties.

Additional Mitigation Measures:

- MM AES-1** Prior to the start of construction, the Project Applicant shall prepare a Construction Lighting and Screening Plan. The Construction Lighting and Screening Plan should indicate aesthetic and lighting treatments for all construction work areas (i.e., maximum brightness values not to be exceeded by artificial bulbs, screening around Project site to limit light and glare, use of non-reflective glass, etc.). The Plan shall identify methods used to ensure construction lighting is directional (aimed toward work areas, and not toward nearby sensitive receptors), and limited to sufficient wattage for safety and security. Construction areas visible to sensitive receptors shall be screened via curtains from public view. Construction screening materials shall be of sufficient height and appropriate color to minimize viewshed impacts, as determined appropriate by the applicable jurisdiction(s).

4.1.6 Cumulative Impacts

For purposes of aesthetic resource impact analysis, cumulative impacts are considered for cumulative development according to the related projects; see **Table 4.0-1, Cumulative Projects List** (found in **Section 4.0, Environmental Impact Analysis**).

Several factors must be considered when evaluating cumulative aesthetic impacts. The cumulative study area is the viewshed that includes the Project area and surrounding area in western Moreno Valley. The context in which a project is being viewed will also influence the aesthetic impact's significance. The contrast that a project has with its surrounding environment may be reduced by other existing cumulative projects. If most of an area is or is becoming more urbanized, the contrast of a project with the natural surrounding may be less since it would be consistent with similar uses. For a cumulative aesthetic impact to occur, the proposed cumulative project's elements need to be seen together or in proximity to each other. If the projects are not near each other, the viewer would not perceive them in the same scene.

The geographical area of aesthetics cumulative analysis would be the City of Moreno Valley. The Project site is developed with the Moreno Valley Mall and surface parking and located within the City of Moreno Valley. Only a small portion of the Project site is covered with vegetation that is regularly landscaped. Refer to **Section 4.1.2, Environmental Setting** above for discussion.

Cumulative Construction Impacts

The Project's construction activities would be temporary regarding aesthetic resources, specifically as listed in Impact 4.1-2 and 4.1-3.

Cumulative Operational Impacts

No cumulative impacts are expected to occur to scenic resources or state scenic highways. The nearest officially designated highway is SR-243, from SR-74 to the Banning city limit. Due to distance and topography, the Project and surrounding projects are not visible from this highway. Therefore, the Project would not damage scenic resources (i.e., trees, rock outcroppings, or historic buildings) within a State Scenic Highway. A cumulative impact on scenic resources within a State Scenic Highway would not occur.

A less than significant cumulative impact would occur as a result of the Project in regard to the substantially degradation of the existing visual character or quality of public views of the site and its surroundings. The Project would adhere to all previously discussed development standards to ensure congruity of visual character within the City. Additionally, all projects would undergo discretionary review to ensure that all design features comply with the provisions set in the Specific Plan and Moreno Valley MC. Furthermore, the Project allows for the revitalization and modernization of an aged facility. This would attract patronage and benefit the community with an alluring location for gathering, creating a net positive effect on the community and its urban visual character. With the compliance of development standards and benefit to the community, the Project would not contribute to a significant cumulative impact.

A less than significant impact with mitigation incorporated would occur as a result of the Project with regard to light and glare adversely affecting day and nighttime views due to adherence with the provisions of the Towngate Specific Plan, Moreno Valley MC, and the City's outdoor lighting regulation including implementation with **MM AES-1**. Operational impacts resulting from new sources of light or glare would be less than cumulatively considerable.

4.1.7 Significant Unavoidable Impacts

No significant unavoidable impacts concerning aesthetic resources have been identified.

4.1.8 References

California Department of Transportation (2021). *California State Scenic Highway System Map*. Available at

<https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>. Accessed December 20, 2021.

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Source: Nearmap, 9/18/2021

FIGURE 4.1-1: Existing MoVal Mall Aerial Photo
Moreno Valley Mall Redevelopment Project

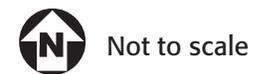




FIGURE 4.1-2: MoVal Mall Site Photos
Moreno Valley Mall Redevelopment Project



Food Court
Elevation: 56'-3"



Example of Multifamily Residential
Elevation: 84'-6"

Note: Elevations are conceptual and are not indicative of final design.

Source: Nelson Worldwide, Moreno Valley Mall Redevelopment Project Concept Design



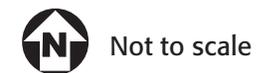
Existing View
State Route 60 Eastbound



Proposed View
State Route 60 Eastbound

Source: Nelson, 08/25/2022

FIGURE 4.1-4a: Project Renderings
Moreno Valley Mall Redevelopment Project



4.2 AIR QUALITY

4.2.1 Introduction

The section identifies existing conditions in the Moreno Valley Mall Redevelopment Project (Project) area and evaluates the Project's potential to conflict with an air quality plan; violate applicable air quality standards; result in a cumulative increase of a criteria pollutant; expose sensitive receptors to pollutants; and create objectionable odors. Mitigation measures have been identified to reduce/avoid impacts where necessary.

This section describes the existing air quality setting and evaluates potential impacts on air quality as they relate to the Project. Information given in this section is based on:

- Kimley-Horn and Associates, Inc. April 2022. *Air Quality Assessment: Moreno Valley Mall Redevelopment Project*, City of Moreno Valley, California
- Kimley-Horn and Associates, Inc. April 2022. *Health Risk Assessment: Moreno Valley Mall Redevelopment Project*, City of Moreno Valley, California

The air quality and health risk assessments and associated calculations are provided in **Appendix B** and **Appendix C**, respectively.

4.2.2 Environmental Setting

Climate and Meteorology

The California Air Resources Board (CARB) divides the State into 15 air basins that share similar meteorological and topographical features. The Project is located within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, as well as all of Orange County. SCAB is on a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean on the southwest and high mountains forming the remainder of the perimeter. Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. These factors along with applicable regulations are discussed below.

SCAB is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is mild and tempered by cool sea breezes. This usually mild weather pattern is occasionally interrupted by periods of extreme heat, winter storms, and Santa Ana winds. The annual average temperature throughout the 6,645-square-mile SCAB ranges from low 60 to high 80 degrees Fahrenheit with little variance. With more oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas.

Contrasting the steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rainfall occurs between the months of November and April. Summer rainfall is reduced to widely scattered thundershowers near the coast, with slightly heavier activity in the east and over the mountains.

Although SCAB has a semiarid climate, the air closer to the Earth's surface is typically moist because of the presence of a shallow marine layer. Except for occasional periods when dry, continental air is brought into SCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog are frequent and low clouds known as high fog are characteristic climatic features, especially along the coast. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of SCAB.

Wind patterns across SCAB are characterized by westerly or southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Wind speed is typically higher during the dry summer months than during the rainy winter. Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During winter and fall, surface high-pressure systems over SCAB, combined with other meteorological conditions, result in very strong, downslope Santa Ana winds. These winds normally continue for a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in SCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

In addition to the characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two distinct types of temperature inversions control the vertical depth through which air pollutants are mixed. These inversions are the marine inversion and the radiation inversion. The height of the base of the inversion at any given time is called the "mixing height." The combination of winds and inversions is a critical determinant leading to highly degraded air quality for SCAB in the summer and generally good air quality in the winter.

Air Pollutants of Concern

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by state and federal laws. These regulated air pollutants are known as "criteria air pollutants" and are categorized into primary and secondary pollutants.

Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NO_x), sulfur dioxide (SO₂), coarse particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), and lead are primary air pollutants. Of these, CO, NO_x, SO₂, PM₁₀, and PM_{2.5} are criteria pollutants. ROG and NO_x are criteria pollutant precursors and form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant ozone (O₃) is formed by a chemical reaction between ROG and NO_x in the presence of sunlight. O₃ and nitrogen dioxide (NO₂) are the principal secondary pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in **Table 4.2-1, Air Contaminants and Associated Public Health Concerns**.

Table 4.2-1: Air Contaminants and Associated Public Health Concerns

Pollutant	Major Man-Made Sources	Human Health Effects
Particulate Matter (PM ₁₀ and PM _{2.5})	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; asthma; chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility.
Ozone (O ₃)	Formed by a chemical reaction between reactive organic gases/volatile organic compounds (ROG or VOC) ¹ and nitrogen oxides (NO _x) in the presence of sunlight. Motor vehicle exhaust industrial emissions, gasoline storage and transport, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
Sulfur Dioxide (SO ₂)	A colorless gas formed when fuel containing sulfur is burned and when gasoline is extracted from oil. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO ₂)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to O ₃ . Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead (Pb)	Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Due to the phase out of leaded gasoline, metals processing is the major source of lead emissions to the air today. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.	Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ.
<p>¹ Volatile Organic Compounds (VOCs or Reactive Organic Gases [ROG]) are hydrocarbons/organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including ROGs and VOCs. Both ROGs and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. The major sources of hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation).</p> <p>Source: California Air Pollution Control Officers Association. <i>Health Effects</i>. http://www.capcoa.org/health-effects/. Accessed April 13, 2022.</p>		

Toxic Air Contaminants

Toxic air contaminants (TACs) are airborne substances that can cause short-term (acute) or long-term (i.e., chronic, carcinogenic or cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting

operations. The current California list of TACs includes more than 200 compounds, including particulate emissions from diesel-fueled engines.

CARB identified diesel particulate matter (DPM) as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

Ambient Air Quality

CARB monitors ambient air quality at approximately 250 air monitoring stations across the state. These stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. Existing levels of ambient air quality, historical trends, and projections near the Project are documented by measurements made by the South Coast Air Quality Management District (SCAQMD), the air pollution regulatory agency in SCAB that maintains air quality monitoring stations which process ambient air quality measurements.

Pollutants of concern in SCAB include O₃, PM₁₀, and PM_{2.5}. The closest air monitoring station to the Project that monitors ambient concentrations of these pollutants is the Moreno Valley-Arrow Monitoring Station (located approximately 3 miles to the southwest). Local air quality data from 2018 to 2020 are provided in **Table 4.2-2, Ambient Air Quality Data**, which lists the monitored maximum concentrations and number of exceedances of state or federal air quality standards for each year.

Table 4.2-2: Ambient Air Quality Data

Criteria Pollutant	2018	2019	2020
Ozone (O₃)¹			
1-hour Maximum Concentration (ppm)	0.123	0.123	0.143
8-hour Maximum Concentration (ppm)	0.101	0.096	0.115
<i>Number of Days Standard Exceeded</i>			
CAAQS 1-hour (>0.09 ppm)	22	24	46
NAAQS 8-hour (>0.070 ppm)	53	59	82
Carbon Monoxide (CO)¹			
1-hour Maximum Concentration (ppm)	2.21	1.51	1.85
<i>Number of Days Standard Exceeded</i>			
NAAQS 1-hour (>35 ppm)	0	0	0
CAAQS 1-hour (>20 ppm)	0	0	0
Nitrogen Dioxide (NO₂)¹			
1-hour Maximum Concentration (ppm)	0.055	0.056	0.062
<i>Number of Days Standard Exceeded</i>			
NAAQS 1-hour (>.100 ppm)	0	0	0
CAAQS 1-hour (>0.18 ppm)	0	0	0

Criteria Pollutant	2018	2019	2020
Particulate Matter Less Than 10 Microns (PM₁₀)¹			
National 24-hour Maximum Concentration	86.5	132.5	142.1
State 24-hour Maximum Concentration	126.0	182.4	137.7
State Annual Average Concentration (CAAQS=20 µg/m ³)	—	—	—
<i>Number of Days Standard Exceeded</i>			
NAAQS 24-hour (>150 µg/m ³)	0	0	0
CAAQS 24-hour (>50 µg/m ³)	127	110	115
Particulate Matter Less Than 2.5 Microns (PM_{2.5})¹			
National 24-hour Maximum Concentration	66.3	55.7	59.6
State 24-hour Maximum Concentration	68.3	57.6	61.9
<i>Number of Days Standard Exceeded</i>			
NAAQS 24-hour (>35 µg/m ³)	3	5	12
NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; ppm = parts per million; µg/m ³ = micrograms per cubic meter; — = not measured			
¹ Measurements taken at the Riverside-Rubidoux Monitoring Station at 5888 Mission Boulevard, Riverside, California 92509 (CARB# 33144)			
Source: All pollutant measurements are from the CARB Aerometric Data Analysis and Management system database (https://www.arb.ca.gov/adam) except for CO, which were retrieved from the CARB Air Quality and Meteorological Information System (https://www.arb.ca.gov/aqmis2/aqdselect.php)			

Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than is the general population. Sensitive receptors that are in proximity to localized sources of toxics are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The Project site is mainly surrounded by commercial land uses to the west and commercial/residential to the east, residential south, and State Route 60 (SR-60) and residential uses to the north. Towngate Memorial Park is located to the south. Sensitive land uses nearest to the Project are shown in **Table 4.2-3, Sensitive Receptors**.

Table 4.2-3: Sensitive Receptors

Receptor Description	Distance and Direction from the Project
Multi-family Residences	110 feet to the south
Single-family Residences	300 feet to the north
Towngate Memorial Park	1,500 feet to the south
Single-family Residences	1,600 feet to the east
Source: Google Earth	

4.2.3 Regulatory Setting

Air quality within the Project area is regulated by several jurisdictions including the U.S. Environmental Protection Agency (EPA), CARB, and the SCAQMD. Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation. Although U.S. EPA regulations may not be superseded, both state and local regulations may be more stringent.

Federal

Federal Clean Air Act

Air quality is federally protected by the Federal Clean Air Act (FCAA) and its amendments. Under the FCAA, the U.S. EPA developed the primary and secondary National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants including O₃, NO₂, CO, SO₂, PM₁₀, PM_{2.5}, and lead. Proposed projects in or near

nonattainment areas could be subject to more stringent air-permitting requirements. The FCAA requires each state to prepare a State Implementation Plan (SIP) to demonstrate how it will attain the NAAQS within the federally imposed deadlines.

The U.S. EPA can withhold certain transportation funds from states that fail to comply with the planning requirements of the FCAA. If a state fails to correct these planning deficiencies within two years of Federal notification, the U.S. EPA is required to develop a Federal implementation plan for the identified nonattainment area or areas. The provisions of 40 Code of Federal Regulations (CFR) Parts 51 and 93 apply in all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan. The U.S. EPA has designated enforcement of air pollution control regulations to the individual states. Applicable federal standards are summarized in **Table 4.2-4, State and Federal Ambient Air Quality Standards**.

The FCAA was amended in 1990 to address the numerous air pollutants that are known to cause or may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects. 188 specific pollutants and chemical groups were initially identified as hazardous air pollutants (HAPs), and the list has been modified over time. The FCAA Amendments included new regulatory programs to control acid deposition and for the issuance of stationary source operating permits.

In 2001, the U.S. EPA issued its first Mobile Source Air Toxics Rule, which identified 21 mobile source air toxic (MSAT) compounds as being HAPs that required regulation. A subset of six of these MSAT compounds were identified as having the greatest influence on health and included benzene, 1,3-butadiene, formaldehyde, acrolein, acetaldehyde, and DPM. More recently, the U.S. EPA issued a second MSAT Rule in February 2007, which generally supported the findings in the first rule and provided additional recommendations of compounds having the greatest impact on health. The rule also identified several engine emission certification standards that must be implemented. Unlike the criteria pollutants, toxics do not have NAAQS making evaluation of their impacts more subjective.

National Emissions Standards for Hazardous Air Pollutants (NESHAPs) were incorporated into a greatly expanded program for controlling toxic air pollutants. The provisions for attainment and maintenance of the NAAQS were substantially modified and expanded. Other revisions included provisions regarding stratospheric O₃ protection, increased enforcement authority, and expanded research programs.

Section 112 of the FCAA Amendments governs the federal control program for HAPs. NESHAPs are issued to limit the release of specified HAPs from specific industrial sectors. These standards are technology-based, meaning that they represent the best available control technology an industrial sector could afford. The level of emissions controls required by NESHAPs are not based on health risk considerations because allowable releases and resulting concentrations have not been determined to be safe for the general public. The FCAA does not establish air quality standards for HAPs that define legally acceptable concentrations of these pollutants in ambient air.

Emission Standards for Off-Road Diesel Engines

To reduce emissions from off-road diesel equipment, the U.S. EPA established a series of cleaner emission standards for new off-road diesel engines. Tier 1 standards were phased in from 1996 to 2000 (year of

manufacture), depending on the engine horsepower category. Tier 2 standards were phased in from 2001 to 2006. Tier 3 standards were phased in from 2006 to 2008. Tier 4 standards, which generally require add-on emission control equipment to attain them, are being phased in from 2008 to 2015.

Federal Emissions Standards for On-Road Trucks

To reduce emissions from on-road, heavy-duty diesel trucks, the U.S. EPA established a series of increasingly strict emission standards for new engines, starting in 1988. The U.S. EPA promulgated the final and cleanest standards with the 2007 Heavy-Duty Highway Rule.¹ The PM emission standard of 0.01 gram per horsepower-hour (g/hp-hr) is required for new vehicles beginning with model year 2007. Also, the NOX and nonmethane hydrocarbon (NMHC) standards of 0.20 g/hp-hr and 0.14 g/hp-hr, respectively, were phased in together between 2007 and 2010 on a percent of sales basis: 50 percent from 2007 to 2009 and 100 percent in 2010.

State

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) consists of the California Air Resources Board (CARB), the Department of Pesticide Regulation (DPR), the Department of Resources Recycling and Recovery (CalRecycle), the Department of Toxic Substances Control (DTSC), the Office of Environmental Health Hazard Assessment (OEHHA), and the State Water Resources Control Board (SWRCB).

CARB administers the air quality policy in California. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in **Table 4.2-4**, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates.

The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the SIP for meeting federal clean air standards for the State of California. Like the U.S. EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events such as wildfires, volcanoes, etc. are not considered violations of a state standard, and are not used as a basis for designating areas as nonattainment. The applicable State standards are summarized in **Table 4.2-4**.

CARB's statewide comprehensive air toxics program was established in 1983 with Assembly Bill (AB) 1807 the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created

¹ U.S. Environmental Protection Agency (2001). *Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements, Final Rule*. 40 Code of Federal Regulations, Parts 69, 80, and 86. Available at <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-control-air-pollution-new-motor-vehicles-heavy>.

California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology (T-BACT) to minimize emissions. CARB also administers the state's mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the AB 2588 was amended by Senate Bill (SB) 1731 which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

Table 4.2-4: State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	State Standards ¹	Federal Standards ²
Ozone (O ₃) ^{2,5,7}	8 Hour	0.070 ppm (137 µg/m ³)	0.070 ppm
	1 Hour	0.09 ppm (180 µg/m ³)	NA
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)
	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)
Nitrogen Dioxide (NO ₂)	1 Hour	0.18 ppm (339 µg/m ³)	0.10 ppm ¹¹
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)
Sulfur Dioxide (SO ₂) ⁸	24 Hour	0.04 ppm (105 µg/m ³)	0.14 ppm (365 µg/m ³)
	1 Hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)
	Annual Arithmetic Mean	NA	0.03 ppm (80 µg/m ³)
Particulate Matter (PM ₁₀) ^{1,3,6}	24-Hour	50 µg/m ³	150 µg/m ³
	Annual Arithmetic Mean	20 µg/m ³	NA
Fine Particulate Matter (PM _{2.5}) ^{3,4,6,9}	24-Hour	NA	35 µg/m ³
	Annual Arithmetic Mean	12 µg/m ³	12 µg/m ³
Sulfates (SO ₄₋₂)	24 Hour	25 µg/m ³	NA
Lead (Pb) ^{10,11}	30-Day Average	1.5 µg/m ³	NA
	Calendar Quarter	NA	1.5 µg/m ³
	Rolling 3-Month Average	NA	0.15 µg/m ³
Hydrogen Sulfide (H ₂ S)	1 Hour	0.03 ppm (0.42 µg/m ³)	NA
Vinyl Chloride (C ₂ H ₃ Cl) ¹⁰	24 Hour	0.01 ppm (26 µg/m ³)	NA

Notes:

ppm = parts per million; µg/m³ = micrograms per cubic meter; mg/m³ = milligrams per cubic meter; – = no information available.

¹ California standards for O₃, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM₁₀, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM₁₀ annual standard), then some measurements may be excluded. Measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe carbon monoxide standard is 6.0 ppm, a level one-half the national standard and two-thirds the State standard.

² National standards shown are the "primary standards" designed to protect public health. National standards other than for O₃, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour O₃ standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour O₃ standard is attained when the 3-year average of the 4th highest daily concentrations is 0.070 ppm or less. The 24-hour PM₁₀ standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m³. The 24-hour PM_{2.5} standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m³.

³ Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM₁₀ is met if the 3-year average falls below the standard at every site. The annual PM_{2.5} standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard. NAAQS are set by the EPA at levels determined to be protective of public health with an adequate margin of safety.

⁴ On October 1, 2015, the national 8-hour O₃ primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour O₃ concentration per year, averaged over three years, is equal to or less than

Pollutant	Averaging Time	State Standards ¹	Federal Standards ²
0.070 ppm. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the O ₃ level in the area.			
⁵ The national 1-hour O ₃ standard was revoked by the EPA on June 15, 2005.			
⁶ In June 2002, CARB established new annual standards for PM _{2.5} and PM ₁₀ .			
⁷ The 8-hour California O ₃ standard was approved by the CARB on April 28, 2005 and became effective on May 17, 2006.			
⁸ On June 2, 2010, the EPA established a new 1-hour SO ₂ standard, effective August 23, 2010, which is based on the 3-year average of the annual 99 th percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO ₂ NAAQS however must continue to be used until one year following EPA initial designations of the new 1-hour SO ₂ NAAQS.			
⁹ In December 2012, EPA strengthened the annual PM _{2.5} NAAQS from 15.0 to 12.0 µg/m ³ . In December 2014, the EPA issued final area designations for the 2012 primary annual PM _{2.5} NAAQS. Areas designated “unclassifiable/attainment” must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is April 15, 2015.			
¹⁰ CARB has identified lead and vinyl chloride as ‘toxic air contaminants’ with no threshold level of exposure below which there are no adverse health effects determined.			
¹¹ National lead standard, rolling 3-month average: final rule signed October 15, 2008. Final designations effective December 31, 2011.			
Source: South Coast Air Quality Management District, <i>Air Quality Management Plan</i> , 2016; California Air Resources Board, <i>Ambient Air Quality Standards</i> , May 6, 2016.			

SB 535, Disadvantaged Communities, was updated June 2017 which specifically targeted disadvantaged communities in California for investment of proceeds from the State’s cap-and-trade program to improve public health, quality of life, and economic opportunity in California’s most burdened communities, while also reducing pollution. SB 535 directed that 25 percent of the proceeds from the Greenhouse Gas Reduction Fund go to projects that provide a benefit to disadvantaged communities. The legislation gave CalEPA responsibility for identifying those communities. In 2016, the Legislature passed AB 1550, which now requires that a minimum 25 percent of proceeds from the fund be spent on projects located in disadvantaged communities. CalEPA has prepared a list of disadvantaged communities for the purpose of SB 535 and CalEnviroScreen is a general mapping tool developed by OEHHA to help identify California communities that are most affected by sources of pollution.

Diesel Risk Reduction Plan

The identification of DPM as a TAC in 1998 led CARB to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (DRRP) in October 2000. The DRRP's goals include an 85 percent reduction in DPM by 2020 from the 2000 baseline.² CARB estimates that emissions of DPM in 2035 will be less than half those in 2010, further reducing statewide cancer risk and non-cancer health effects.³ The DRRP includes regulations to establish cleaner new diesel engines, cleaner in-use diesel engines (retrofits), and cleaner diesel fuel.

Truck and Bus Regulation Reducing Emissions from Existing Diesel Vehicles

On December 12, 2008, CARB approved the Truck and Bus Regulation to significantly reduce particulate matter (PM) and oxides of nitrogen (NO_x) emissions from existing diesel vehicles operating in California. The regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Heavier trucks must be retrofitted with PM filters beginning January 1, 2012, and older trucks

² California Air Resources Board (2000). *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. Available at <https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/rrpfinal.pdf>.

³ California Air Resources Board (2021). *Overview: Diesel Exhaust & Health*. Available at <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>.

must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses would need to have 2010 model year engines or equivalent.

The regulation applies to most privately and federally owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. Small fleets with three or fewer diesel trucks can delay compliance for heavier trucks and there are several extensions for low-mileage construction trucks, early PM filter retrofits, adding cleaner vehicles, and other situations. Privately and publicly owned school buses have different requirements.

Heavy-Duty Vehicle Idling Emission Reduction Program

The purpose of the CARB ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling is to reduce public exposure to DPM and criteria pollutants by limiting the idling of diesel-fueled commercial vehicles. The driver of any vehicle subject to this ATCM is prohibited from idling the vehicle's primary diesel engine for greater than five minutes at any location and is prohibited from idling a diesel-fueled auxiliary power system (APS) for more than five minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (homes and schools).

CARB Final Regulation Order, Requirements to Reduce Idling Emissions from New and In-Use Trucks, beginning in 2008, would require that new 2008 and subsequent model-year heavy-duty diesel engines be equipped with an engine shutdown system that automatically shuts down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged.

CARB 2017 Technical Advisory (Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways)

CARB published a Technical Advisory in 2017 to provide planners and other stakeholders involved in land use planning and decision-making with information on scientifically based strategies to reduce exposure to traffic emissions near high-volume roadways. Near-roadway development is a result of a variety of factors, including economic growth, demand for built environment uses, and the scarcity of developable land in some areas. The Technical Advisory notes that research has demonstrated the public health, climate, financial, and other benefits of compact, infill development along transportation corridors, and demonstrates that planners, developers, and local governments can pursue infill development while simultaneously reducing exposure to traffic-related pollution. On-site strategies to remove air pollution identified in the Technical Advisory include the use of particle filtration systems (i.e., high-efficiency filtration in mechanical ventilation systems), solid barriers, and vegetation.

California Energy Commission - Title 24 Building Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in California Code of Regulations (CCR) Title 24 Part 6, were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are conceptually divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards the energy budgets - that vary by climate zone (of which there are 16 in California)

and building type; thus, the Standards are tailored to local conditions, and provide flexibility in how energy efficiency in buildings can be achieved. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that provide a recipe or a checklist compliance approach.

The 2019 Energy Standards include requirements for mandatory mechanical ventilation intended to improve indoor air quality in homes, and requirements for Minimum Efficiency Reporting Value (MERV) 13 air filtration on space conditioning systems, and ventilation systems that provide outside air to a dwelling's occupiable space. The Residential Compliance Manual for the 2019 Building Energy Efficiency Standards notes that air filter efficiencies of at least MERV 13 protect occupants from exposure to the smaller airborne particles (i.e., PM_{2.5}) that are known to adversely affect respiratory health. CCR Title 24 Part 6 requires a particle size efficiency rating equal to or greater than 85 percent in the 1.0 to 0.3 µg range.

These standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. On August 11, 2021, the California Energy Commission (CEC) adopted the 2022 Energy Code which 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. Thus the 2019 are applicable to this Project

CalEnviroScreen

The California Office of Environmental Health Hazard Assessment (OEHHA) has developed CalEnviroScreen 4.0, which is a mapping tool that helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects. CalEnviroScreen uses environmental, health, and socioeconomic information to produce scores for every census tract in the State. The scores are mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores.

According to CalEnviroScreen, the Project site and the surrounding residences are located within Census Tract 6065042506, which is within the 71th percentile⁴. It should be noted that the CalEnviroScreen scores are not an expression of health risk, and do not provide quantitative information on increases in cumulative impacts for specific sites or projects. Further, as a comparative screening tool, the results do not provide a basis for determining when differences between scores are significant in relation to public health or the environment.

Regional

South Coast Air Quality Management District

The SCAQMD is the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties. The agency's primary responsibility is ensuring that state and

⁴ California Office of Health Hazard Assessment, *CalEnviroScreen 4.0*. Available at <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>. Accessed April 2022.

federal ambient air quality standards are attained and maintained in SCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, and many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

The CCAA provides the SCAQMD with the authority to manage transportation activities at indirect sources and regulate stationary source emissions. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. An example of this would be the motor vehicles at an intersection, a mall, and on highways. As a State agency, CARB regulates motor vehicles and fuels for their emissions.

The SCAQMD is also the lead agency in charge of developing the AQMP, with input from the Southern California Association of Governments (SCAG) and CARB. The AQMP is a comprehensive plan that includes control strategies for stationary and area sources, as well as for on-road and off-road mobile sources. SCAG has the primary responsibility for providing future growth projections and the development and implementation of transportation control measures. CARB, in coordination with federal agencies, provides the control element for mobile sources.

The 2016 AQMP was adopted by the SCAQMD Governing Board on March 3, 2017. The purpose of the AQMP is to set forth a comprehensive and integrated program that would lead SCAB into compliance with the federal 24-hour $PM_{2.5}$ air quality standard, and to provide an update to the SCAQMD's commitments towards meeting the federal 8-hour O_3 standards. The AQMP incorporates the latest scientific and technological information and planning assumptions, including the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and updated emission inventory methodologies for various source categories.

The SCAQMD has published the CEQA Air Quality Handbook (approved by the SCAQMD Governing Board in 1993 and augmented with guidance for Local Significance Thresholds [LST] in 2008). The SCAQMD guidance helps local government agencies and consultants to develop environmental documents required by California Environmental Quality Act (CEQA) and provides identification of suggested thresholds of significance for criteria pollutants for both construction and operation (see discussion of thresholds below). With the help of the CEQA Air Quality Handbook and associated guidance, local land use planners and consultants are able to analyze and document how proposed and existing projects affect air quality in order to meet the requirements of the CEQA review process. The SCAQMD periodically provides supplemental guidance and updates to the handbook on their website.

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. Under federal law, SCAG is designated as a Metropolitan Planning Organization and under State law as a Regional Transportation Planning Agency and a Council of Governments.

The state and federal attainment status designations for SCAB are summarized in **Table 4.2-5, South Coast Air Basin Attainment Status**. SCAB is currently designated as a nonattainment area with respect to the State O₃, PM₁₀, and PM_{2.5} standards, as well as the national 8-hour O₃ and PM_{2.5} standards. SCAB is designated as the following is a list of SCAQMD rules that are required of construction activities associated with the Project:

Rule 402 (Nuisance) – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals. attainment or unclassified for the remaining state and federal standards.

Table 4.2-5: South Coast Air Basin Attainment Status

Pollutant	State	Federal
Ozone (O ₃) (1 Hour Standard)	Non-Attainment	Non-Attainment (Extreme)
Ozone (O ₃) (8 Hour Standard)	Non-Attainment	Non-Attainment (Extreme)
Particulate Matter (PM _{2.5}) (24 Hour Standard)	–	Non-Attainment (Serious)
Particulate Matter (PM _{2.5}) (Annual Standard)	Non-Attainment	Non-Attainment (Moderate)
Particulate Matter (PM ₁₀) (24 Hour Standard)	Non-Attainment	Attainment (Maintenance)
Particulate Matter (PM ₁₀) (Annual Standard)	Non-Attainment	–
Carbon Monoxide (CO) (1 Hour Standard)	Attainment	Attainment (Maintenance)
Carbon Monoxide (CO) (8 Hour Standard)	Attainment	Attainment (Maintenance)
Nitrogen Dioxide (NO ₂) (1 Hour Standard)	Attainment	Unclassifiable/Attainment
Nitrogen Dioxide (NO ₂) (Annual Standard)	Attainment	Attainment (Maintenance)
Sulfur Dioxide (SO ₂) (1 Hour Standard)	Attainment	Unclassifiable/Attainment
Sulfur Dioxide (SO ₂) (24 Hour Standard)	Attainment	–
Lead (Pb) (30 Day Standard)	–	Unclassifiable/Attainment
Lead (Pb) (3 Month Standard)	Attainment	–
Sulfates (SO ₄₋₂) (24 Hour Standard)	Attainment	–
Hydrogen Sulfide (H ₂ S) (1 Hour Standard)	Unclassified	–

Source: SCAQMD. 2016. *Air Quality Management Plan*; U.S. EPA. 2021. *Nonattainment Areas for Criteria Pollutants (Green Book)*. <https://www.epa.gov/green-book>.

- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from

crossing any property line. This rule is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM₁₀ suppression techniques are summarized below.

- a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
 - b) All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
 - c) All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
 - d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
 - e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.
- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

Air Toxics Control Plan

The Air Toxics Control Plan (March 2000, revised March 26, 2004) is a planning document designed to examine the overall direction of the SCAQMD's air toxics control program. It includes development and implementation of strategic initiatives to monitor and control air toxics emissions. Control strategies that are deemed viable and are within the SCAQMD's jurisdiction will each be brought to the SCAQMD Board for further consideration through the normal public review process. Strategies that are to be implemented by other agencies will be developed in a cooperative effort, and the progress will be reported back to the Board periodically.

Multiple Air Toxics Exposure Study

The SCAQMD conducted an in-depth analysis of the TACs and their resulting health risks for all of southern California. The Multiple Air Toxics Exposure Study in SCAB (MATES V) (August 2021) shows that carcinogenic risk from air toxics in SCAB, based on the average concentrations at the 10 monitoring sites, is approximately 40 percent lower than the monitored average in MATES IV and 84 percent lower than the average in MATES II.

MATES V is the most comprehensive dataset documenting the ambient air toxic levels and health risks associated with SCAB emissions. Therefore, MATES V study represents the baseline health risk for a cumulative analysis. MATES V estimates the average excess cancer risk level from exposure to TACs is 424 in one million basin wide. In comparison, the MATES IV basin average risk was 897 per million. These model estimates were based on monitoring data collected at ten fixed sites within SCAB. None of the fixed monitoring sites are near the Project site. However, MATES V has extrapolated the excess cancer risk

levels throughout SCAB by modeling the specific grids. MATES V modeling predicted an excess cancer risk of 352 in one million for the Project area⁵. DPM is included in this cancer risk along with all other TAC sources. DPM accounts for 71 percent of the total risk shown in MATES V in this area.

Local

City of Moreno Valley General Plan

The City of Moreno Valley's General Plan outlines the concerns of the community and the means of addressing those concerns. Chapter 8, the Environmental Justice Element of the 2040 General Plan identifies goals and policies that will reduce exposure to pollution; provide safe and sanitary housing; provide access to healthy food; and promote active engagement in civic life. Goals and policies that relate to air quality impacts include the following:

Goal EJ-1: *Reduce pollution Exposure and improve community health.*

Policy EJ 1-1: Coordinate air quality planning efforts with other local, regional, and State agencies.

Policy EJ 1-2: Cooperate with SCAQMD and WRCOG in efforts to promote public awareness about air pollution and control measures.

Policy EJ 1-3: Require new development that would locate sensitive uses adjacent to sources of toxic air contaminants (TAC) to be designed to minimize any potential health risks, consistent with State law.

Policy EJ 1-4: Require new development that would locate sensitive uses adjacent to sources of toxic air contaminants (TAC) to be designed to minimize any potential health risks, consistent with State law.

Policy EJ 1-5: Continue purchase or lease of fuel-efficient and low emissions vehicles for City fleet vehicles.

Policy EJ 1-6: Ensure that construction and grading activities minimize short-term impacts to air quality by employing appropriate mitigation measures and best practices.

Policy EJ 1-7: Require new large commercial or light industrial projects to develop and implement a plan to minimize truck idling in order to reduce diesel particulate emissions.

Policy EJ 1-8: Support the incorporation of new technologies and design and construction techniques in new development that minimize pollution and its impacts.

Policy EJ 1-9: Designate truck routes that avoid sensitive land uses, where feasible.

Moreno Valley Municipal Code

The Moreno Valley Municipal Code establishes the following air quality provisions relative to the Project.

⁵ South Coast Air Quality Management District (ND). *MATES V Estimated Risk*. Available at https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/Main-Page/?data_id=dataSource_105-a5ba9580e3aa43508a793fac819a5a4d%3A391&views=Cancer-Risk%2CNavigate-the-map.

Section 9.10.050 – Air Quality.

No operation or activity otherwise permitted under this title shall cause the emission of any smoke, fly ash, dust, fumes, vapors, gases or other forms of air pollution which exceeds the requirements of the South Coast Air Quality Management District or the requirements of any air quality plan or general plan air quality element adopted by the city.

Section 9.10.150 – Odors.

No operation or activity shall be permitted which emits odorous gases or other odorous matter in such quantities as to be dangerous, injurious, noxious, or otherwise objectionable to a level that is detectable with or without the aid of instruments at or beyond the lot line of the property containing said operation or activity.

4.2.4 Impact Thresholds and Significance Criteria

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a project normally would have a significant effect on the environment if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable state or federal ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations;
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people; or
- Exceed SCAQMD Thresholds.

SCAQMD Thresholds

The significance criteria established by SCAQMD may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if the Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality during construction and operational activities of land use development projects, as shown in **Table 4.2-6, South Coast Air Quality Management District Emissions Thresholds**. In addition, SCAQMD also established thresholds for cumulative construction and operational activities, which is further discussed in **Section 4.2.5** below.

Table 4.2-6: South Coast Air Quality Management District Emissions Thresholds

Criteria Air Pollutants and Precursors	Maximum Pounds Per Day	
	Construction-Related	Operational-Related
Reactive Organic Gases (ROG)	75	55
Carbon Monoxide (CO)	550	550
Nitrogen Oxides (NO _x)	100	55
Sulfur Oxides (SO _x)	150	150
Coarse Particulates (PM ₁₀)	150	150
Fine Particulates (PM _{2.5})	55	55

Source: Southern California Air Quality Management District (2019). *South Coast AQMD Air Quality Significance Thresholds*. Available at <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

Localized Carbon Monoxide

In addition to the daily thresholds listed above, development associated with the Project would also be subject to the ambient air quality standards. These are addressed through an analysis of localized CO impacts. The significance of localized impacts depends on whether ambient CO levels near the Project site are above state and federal CO standards (the more stringent California standards are 20 parts per million [ppm] for 1-hour and 9 ppm for 8-hour). SCAB has been designated as attainment under the 1-hour and 8-hour standards.

Localized Significance Thresholds

In addition to the CO hotspot analysis, the SCAQMD developed LSTs for emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at new development sites (off-site mobile source emissions are not included in the LST analysis). LSTs represent the maximum emissions that can be generated at a project without expecting to cause or substantially contribute to an exceedance of the most stringent state or federal ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the Project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb five acres or less on a single day. The City of Moreno Valley is located within SCAQMD SRA 24. **Table 4.2-7, Local Significance Thresholds for Construction/Operations** (shows the LSTs for a 1-acre, 2-acre, and 5-acre project within 33 meters of the Project.

Table 4.2-7: Local Significance Thresholds for Construction/Operations (Maximum Pounds Per Day)

Project Size	Maximum Pounds Per Day			
	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Coarse Particulates (PM ₁₀)	Fine Particulates (PM _{2.5})
1 Acre	128/128	693/693	7/2	3/1
2 Acres	180/180	1,004/1,004	11/3	5/1
5 Acres	280/280	1,769/1,769	22/6	9/2

Note: thresholds interpolated based on a distance of 33 meters
 Source: South Coast Air Quality Management District, *Localized Significance Threshold Methodology*, July 2008.

LSTs associated with all acreage categories are provided in **Table 4.2-7** for informational purposes. **Table 4.2-7** shows that the LSTs increase as acreages increase. It should be noted that LSTs are screening thresholds and are therefore conservative. The construction LST acreage is determined based daily acreage disturbed. The operational LST acreage is based on the total area of the Project site. Although the Project site is greater than five acres, the 5-acre operational LSTs are conservatively used to evaluate the Project.

Project Design Features

In addition to applying existing standard conditions and regulatory requirements, the Project has incorporated the following Project Design Features into the SPA and TPM:

- The Project consists of redeveloping an existing developed regional mall site, which will reduce grading and construction-related emissions that would otherwise be associated with developing new regional commercial uses at an alternate site;

- The concept grading plan proposes relatively minor offsite soil import/export (less than 5,000 cubic yards) and use of an onsite borrow pit, which minimizes air emissions associated with offsite truck traffic during construction; and
- The Project incorporates enhancements to the existing transit stop, which will increase transit opportunities to and from the mall, reducing traffic, air quality, GHG and noise impacts.

Methodology and Assumptions

This air quality impact analysis considers construction and operational impacts associated with the Project. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod). CalEEMod is a Statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Air quality impacts were assessed according to methodologies recommended by CARB and the SCAQMD.

Construction

Construction equipment, trucks, worker vehicles, and ground-disturbing activities associated with Project construction would generate emissions of criteria air pollutants and precursors. Daily regional construction emissions are estimated by assuming construction occurs at the earliest feasible date (i.e., a conservative estimate of construction activities) and applying off-road, fugitive dust, and on-road emissions factors in CalEEMod.

For the purposes of analyzing construction emissions, the construction activities for the Project were modeled in three overlapping sequences. Construction was modeled according to the following timeline:

- Sequence 1 - Demolition and Site Preparation: January 1, 2023 to April 1, 2023.
- Sequence 1 - Building Construction and Mall Remodel: February 1, 2023 to December 30, 2024.
- Sequence 1 - Grading: March 1, 2023 to June 1, 2023.
- Sequence 1 - Architectural Coating: October 1, 2023 to November 1, 2024.
- Sequence 1 - Paving: November 1, 2023 to September 2, 2023.
- Sequence 2 - Demolition and Site Preparation: July 1, 2023 to August 15, 2023.
- Sequence 2 - Building Construction: September 1, 2023 to April 16, 2024.
- Sequence 2 - Paving: December 1, 2023 to January 30, 2024.
- Sequence 2 - Architectural Coating: February 1, 2024 to April 1, 2024.
- Sequence 3 - Demolition and Site Preparation: March 30, 2024 to May 4, 2024.
- Sequence 3 - Grading: April 15, 2024 to June 15, 2024.
- Sequence 3 - Building Construction: June 12, 2024 to September 1, 2026.
- Sequence 3 - Architectural Coating: June 1, 2025 to March 1, 2026.
- Sequence 3 - Paving: October 29, 2025 to April 14, 2026.

Operations

Project operations would result in emissions of area sources (consumer products), energy sources (natural gas usage), and mobile sources (motor vehicles from Project generated vehicle trips). Emissions from each of these categories are discussed below.

- **Area Sources.** Area source emissions would be generated due to consumer products, on-site equipment, architectural coating, and landscaping that were previously not present on the site. Consumer products are various solvents used in non-industrial applications, which emit VOCs during product use. These typically include cleaning supplies, kitchen aerosols, cosmetics, and toiletries. It should be noted that the default area source VOC emission factor developed for CalEEMod is based on a statewide factor and is not applicable to the project. The CalEEMod default emissions rates were used.
- **Energy Sources.** Energy source emissions would be generated due to electricity and natural gas usage associated with the Project. Primary uses of electricity and natural gas by the Project would be from space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. Energy source emissions were calculated in CalEEMod. No changes were made to the default energy usage consumption rates or emissions factors.
- **Mobile Sources.** Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_x, PM₁₀, and PM_{2.5} are all pollutants of regional concern. NO_x and ROG react with sunlight to form O₃, known as photochemical smog. Additionally, wind currents readily transport PM₁₀ and PM_{2.5}. However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated vehicle emissions are based on the trip generation within the Project Traffic Impact Study and incorporated into CalEEMod as recommended by the SCAQMD. The Project's generated traffic was obtained from the Project's Moreno Valley Mall Redevelopment Traffic Impact Analysis prepared by Kittelson and Associates (March 2022). Project trip generation from the traffic study is based on the following Institute of Transportation Engineers (ITE) land use categories:

- ITE Land Use 310: Hotel (270 rooms, 2,158 total daily vehicle trips).
- ITE Land Use 221: Residential (1,627 dwelling units, 7,390 total daily vehicle trips).
- ITE Land Use 820: Retail (24 thousand square feet, 876 daily vehicle trips).
- ITE Land Use 710: Office (60 thousand square feet, 652 total daily vehicle trips).

The total Project would generate 11,076 daily trips. Mobile source emission rates in CalEEMod used the CARB SAFE Rule adjustment factors.

As discussed above, the SCAQMD provides significance thresholds for emissions associated with proposed Project construction and operations. The proposed Project's construction and operational emissions are compared to the daily criteria pollutant emissions significance thresholds in order to determine the significance of a Project's impact on regional air quality.

The localized effects from the Project's on-site emissions were evaluated in accordance with the SCAQMD's LST methodology, which uses on-site mass emissions rate look-up tables and Project-specific modeling. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

4.2.5 Impacts and Mitigation Measures

Summary of Previous Environmental Analysis

The SP-200 EIR analyzed potential air quality impacts associated with the proposed Moreno Valley Mixed Use Development. The SP-200 EIR concluded that the SP-200 would result in significant impacts during construction and operation. During construction, the Project is anticipated to generate 100 lbs/acre/day of particulate matter (PM₁₀) during construction. During operations, the SP-200 would generate approximately 12,300 lbs/day of Carbon Monoxide, 2,100 lbs/day of Nitrogen Oxide, 330 lbs/day of Sulfur Dioxide, 440 lbs/day of Particulates, and 1,230 lbs/day of total hydrocarbons as a result of increased vehicle traffic and energy consumption. The SP-200 EIR determined that operational air quality impacts from the Moreno Valley Mixed Use Development Project would result in significant and unavoidable impacts. The SP-200 EIR determined that most of the SP-200 related air pollution emissions are generated by automobiles and there is very limited potential for any effective mitigation on the part of any single developer. The SP-200 EIR relied on the SP-200's mix of land uses to satisfy the commercial needs of residents and others and thereby reduce driving distances and emissions. The SP-200 EIR included the following identified mitigation measures (as a note, text in these SP-200 mitigation measures that has ~~strikethrough~~ has been deleted as it is not relevant to the Project.)

~~**SP-200 MM AQ-1** The quantity of particulate matter emitted during the grading and construction phase of the proposed project may be reduced through watering graded surfaces and planting groundcover as dust palliatives. (This mitigation measure is not applicable to the Project because it does not include performance standards. In addition, the intent of this mitigation measure is achieved through the adherence of SCAQMD Rules 402 and 403 [refer to SC AQ-1 below])~~

SP-200 MM AQ-2 The Project will be integrated into the City-wide transit district plans and will provide bus stops, turn-outs, etc., as needed.

Impact 4.2-1 *Would the Project conflict with or obstruct implementation of the applicable air quality plan?*

Level of Significance: Significant and Unavoidable Impact. No additional feasible mitigation measures are available that can reduce impacts to Less than Significant

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan that demonstrates the means to attain the federal standards. The State Implementation Plan must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under State law, the CCAA requires an

air quality attainment plan to be prepared for areas designated as nonattainment regarding the state and federal ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The Project is located within SCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the FCAA, to reduce emissions of criteria pollutants for which SCAB is in nonattainment. To reduce such emissions, the SCAQMD drafted the 2016 AQMP. The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, the CARB, the SCAG, and the EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's growth projections and RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The Project is subject to the SCAQMD's AQMP.

Criteria for determining consistency with the AQMP are defined by the following indicators:

- **Consistency Criterion No. 1:** The Project will not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2:** The Project will not exceed the assumptions in the AQMP or increments based on the years of the Project build-out phase.

According to the SCAQMD's *CEQA Air Quality Handbook*, the purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus if it would interfere with the region's ability to comply with CAAQS and NAAQS.

The violations to which Consistency Criterion No. 1 refers are any exceedances of CAAQS and NAAQS standards. As shown in **Table 4.2-8, Construction Related Emissions**, even with the application of **MM AQ-1**, the Project would exceed the construction NO_x emission standards. In addition, operational emissions would exceed the operational standard for ROG despite the implementation of all feasible mitigation measures. As shown in **Table 4.2-9, Operational Emissions**, **MM AQ-2** through **MM AQ-6** are included to reduce operational emissions to the greatest amount feasible. However, even with mitigation, emissions would remain above SCAQMD thresholds. Therefore, the Project would potentially contribute to an existing air quality violation. Thus, the Project is not consistent with the first criterion.

Concerning Consistency Criterion No. 2, the AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The Project site has a General Plan land use designation of Commercial and is zoned as mixed-use community overlay which allows for the Project components including hotels, public parks and recreational facilities, multi-family residential, restaurants, and retail. The Project is consistent with the City's General Plan Land Use Designations and the Zoning Designations and would not require a General Plan Amendment (GPA) and a Zone Change. As such, the Project is consistent with SCAG's latest growth forecasts. Therefore, the Project is consistent with the second criterion.

As noted above (and discussed further in Impact 4.2-2, below), Project implementation would result in air pollutant emissions that exceed SCAQMD's operational emission thresholds. Although mitigation would reduce emissions by the greatest feasible amount, Project emissions levels would remain significant and would contribute to the nonattainment designations in SCAB. Therefore, the Project would be inconsistent with the AQMP, resulting in a significant and unavoidable impact despite the implementation of mitigation.

Applicable SP-200 EIR Mitigation Measures: The following mitigation measure from the SP-200 EIR is applicable to the Project: **SP-200 MM AQ-2**.

SP-200 MM AQ-2 The Project will be integrated into the City-wide transit district plans and will provide bus stops, turn-outs, etc., as needed.

Project Design Features: No Project Design Features are applicable to this topical area.

Additional Mitigation Measures: Mitigation Measures **MM AQ-1** through **MM AQ-6** (refer to Impact 4.2-2, below).

Impact 4.2-2 ***Would the proposed project, 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?***

Level of Significance: Significant and Unavoidable Impact. No additional feasible mitigation measures are available that can reduce impacts to Less than Significant

Construction Emissions

Construction associated with the Project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area include O₃-precursor pollutants (i.e., ROG and NO_x) and PM₁₀ and PM_{2.5}. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Construction results in the temporary generation of emissions resulting from site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water.

The duration of construction activities associated with the Project is estimated to last approximately three years and eight months. Construction-generated emissions associated with the Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See **Appendix B, Air Quality Assessment** for more information regarding the construction assumptions used in this analysis. Predicted maximum daily construction-generated emissions for the Project are summarized in **Table 4.2-8, Construction-Related Emissions**.

Table 4.2-8: Construction-Related Emissions

Construction Year	Maximum Pounds Per Day					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Unmitigated Emissions¹						
2023	44.52	123.02	246.73	0.75	57.13	17.45
2024	50.07	193.64	294.97	0.99	79.49	27.45
2025	64.24	46.12	119.54	0.38	30.45	9.06
2026	63.75	45.49	114.43	0.37	30.44	9.05
<i>SCAQMD Threshold</i>	75	100	550	150	150	55
Exceed SCAQMD Threshold?	No	Yes	No	No	No	No
Mitigated Emissions^{1,2}						
2023	40.36	56.60	254.60	0.75	54.80	15.28
2024	41.64	102.49	309.89	0.99	75.12	23.41
2025	62.43	27.51	123.66	0.38	29.53	8.21
2026	61.93	26.87	118.55	0.37	29.53	8.21
<i>SCAQMD Threshold</i>	75	100	550	150	150	55
Exceed SCAQMD Threshold?	No	Yes	No	No	No	No
Notes:						
1 SCAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Refer to Appendix A for Model Data Outputs.						
2 Mitigation includes the incorporation of MM AQ-1 requires off-road equipment 50 horsepower or greater to meet CARB Tier 4 Final standards.						
Source: CalEEMod version 2020.4.0. Refer to Appendix A for model outputs.						

Fugitive dust emissions may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the Project vicinity. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. SCAQMD Rules 402 and 403 (prohibition of nuisances, watering of inactive and perimeter areas, track out requirements, etc.), are applicable to the Project and were applied in CalEEMod to minimize fugitive dust emissions. Standard Condition (SC) AQ-1 requires the implementation of Rule 402 and 403 dust control techniques to minimize PM₁₀ and PM_{2.5} concentrations. While impacts would be considered less than significant, Project would be subject to SCAQMD Rules for reducing fugitive dust, described in the Regulatory Framework subsection cover above and identified in **Standard Conditions SC AQ-1**.

Table 4.2-8 shows that unmitigated construction emissions would exceed the SCAQMD threshold for the ozone precursor NO_x. The majority of NO_x emissions occur from construction equipment exhaust. **MM AQ-1** requires the off-road construction equipment greater than 50 horsepower to meet CARB Tier 4 Final emissions standards in order to reduce diesel construction emissions. However, even with the implementation of **MM AQ-1**, NO_x construction emissions would remain above SCAQMD’s thresholds, therefore impacts would remain significant. with mitigation.

Operational Emissions

The Project’s operational emissions would be associated with area sources (e.g., landscape maintenance equipment, architectural coatings, consumer products, etc.), energy sources, mobile sources (i.e., motor

vehicle use), and off-road equipment. Primary sources of operational criteria pollutants are from motor vehicle use. Long-term operational emissions attributable to the Project are summarized in **Table 4.2-9, Operational Emissions**. The operational emissions sources are described below.

- **Area Source Emissions.** Area source emissions would be generated due to consumer products (e.g., fertilizers/pesticides, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints, etc.), architectural coating, and gasoline-powered landscaping equipment that were previously not present on the site.
- **Energy Source Emissions.** Energy source emissions would be generated due to electricity and natural gas usage associated with the Project. Primary uses of electricity and natural gas by the Project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics.
- **Mobile Source.** Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NOX, PM10, and PM2.5 are all pollutants of regional concern. NOX and ROG react with sunlight to form O3, known as photochemical smog. Additionally, wind currents readily transport PM10 and PM2.5. However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated vehicle emissions are based on the trip generation within the Project Traffic Impact Analysis and incorporated into CalEEMod as recommended by the SCAQMD. Per the Project Traffic Impact Analysis, the Project would generate 11,076 daily vehicle trips.

- **Emergency Backup Generators.** The Project includes hotel uses and it is unknown whether emergency backup generators would be used. Backup generator would only be used in the event of a power failure and would not be part of the Project's normal daily operations. Nonetheless, emissions associated with this equipment were included to be conservative. Emissions from an emergency backup generator for the Project hotels were calculated separately from CalEEMod; refer to Appendix A. However, CalEEMod default emissions rates were used. If backup generators are required, the end user would be required to obtain a permit from the SCAQMD prior to installation. Emergency backup generators must meet SCAQMD's Best Available Control Technology (BACT) requirements and comply with SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines), which would minimize emissions.

Table 4.2-9: Operational Emissions

Source	Maximum Pounds Per Day					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Unmitigated Emissions						
Area Source Emissions	55.04	1.55	134.25	<0.01	0.74	0.74
Energy Emissions	1.39	12.24	7.83	0.08	0.96	0.96
Mobile Emissions	31.59	16.43	223.27	0.38	37.71	9.53
Backup Generator	1.69	4.71	4.30	0.01	0.25	0.25
Total Emissions	89.71	34.92	369.64	0.48	39.66	11.48
<i>SCAQMD Threshold</i>	55	55	550	150	150	55
Exceeds Threshold?	Yes	No	No	No	No	No
Mitigated Emissions¹						
Area Source Emissions	52.54	1.23	102.00	<0.01	0.56	0.56
Energy Emissions	1.18	10.39	6.56	0.06	0.81	0.81
Mobile Emissions	30.71	13.57	195.77	0.32	31.31	7.91
Backup Generator	1.69	4.71	4.30	0.01	0.25	0.25
Total Emissions	86.12	29.9	308.63	0.40	32.93	9.53
<i>SCAQMD Threshold</i>	55	55	550	150	150	55
Exceeds Threshold?	Yes	No	No	No	No	No
Notes:						
1 Mitigation includes the incorporation of MM AQ-2 through MM AQ-6 .						
Source: CalEEMod version 2020.4.0. Refer to Appendix A for model outputs.						

As shown in **Table 4.2-9**, unmitigated operational emissions would exceed the SCAQMD criteria pollutant thresholds for ROG. The majority of ROG emissions are from area and mobile sources. Mitigation measures would be required to reduce emissions to the maximum extent feasible; however, emissions of motor vehicles are controlled by State and Federal Standards and the Project has no control over these standards.

MM AQ-2 through **MM AQ-6** have been identified to reduce operational emissions. **MM AQ-2** requires the use of low VOC paints for interior and exterior building applications as well as paint stripping for parking lots. For the purposes of state air pollution regulations, ROG can be considered equivalent to VOCs. **MM AQ-3** requires the implementation of a Transportation Demand Management (TDM) program to reduce single occupant vehicle trips and encourage transit. **MM AQ-4** prohibits the use of any kind of fireplaces, wood-burning or natural gas. **MM AQ-5** requires all landscaping equipment used onsite shall be 100 percent electrically powered and **MM AQ-6** requires that all cleaning products used in public spaces be Safer Choice certified.

Furthermore, Standard Conditions (SC) AQ-1 through SC AQ-3 would further reduce the emission of particulate matter, ROG, NO_x, and CO. **Table 4.2-9** shows that despite the implementation of **MM AQ-2** through **MM AQ-6**, operational emissions would remain above the SCAQMD's thresholds, therefore impacts would be significant and unavoidable.

Standard Conditions of Approval:

Standard Conditions are existing requirements and standard conditions that are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. Typical standard conditions and requirements include compliance with the provisions of the Building Code, SCAQMD Rules, etc. The City may impose additional conditions during the approval process, as appropriate. Because Standard Conditions are neither Project specific nor a result of development of the Project, they are not considered to be either Project Design Features or Mitigation Measures.

SCAQ-1 Prior to the issuance of grading permits, the City Engineer shall confirm that the Grading Plan, Building Plans and Specifications require all construction contractors to comply with South Coast Air Quality Management District's (SCAQMD's) Rules 402 and 403 to minimize construction emissions of dust and particulates. The measures include, but are not limited to, the following:

- Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
- All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
- All material transported off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
- Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

SCAQ-2 Pursuant to SCAQMD Rule 1113, the Project Applicant shall require by contract specifications that the interior and exterior architectural coatings products used would have a volatile organic compound rating of 50 grams per liter or less.

SCAQ-3 Require diesel powered construction equipment to turn off when not in use per Title 13 of the California Code of Regulations, §2449.

SCAQ-4 Pursuant to SCAQMD Rule 445, the installation of any open or enclosed permanently installed wood burning device is prohibited.

SCAQ-5 The Project shall be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (§110.10) require buildings to be designed to have 15 percent of the roof area "solar ready" that will structurally accommodate later installation of rooftop solar panels. If future building operators

pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.

SCAQ-6

The Project shall be designed in accordance with the applicable California Green Building Standards (CALGreen) Code (24 CCR, Part 11). The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. These requirements include, but are not limited to:

- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with §4.303 (residential) and §5.303 (nonresidential) of the California Green Building Standards Code Part 11.
- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with §4.408.1 (residential) and §5.408.1 (nonresidential) of the California Green Building Standards Code Part 11.
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with §4.410 (residential) and §5.410 (nonresidential) of the California Green Building Standards Code Part 11.
- Provide designated parking for any combination of low-emitting, fuel efficient and carpool/vanpool vehicles. At least eight percent of the total parking spaces are required to be designated in accordance §5.106.5.2 (nonresidential), Designated Parking for Clean Air Vehicles, of the California Green Building Standards Code Part 11.
- To facilitate future installation of electric vehicle supply equipment (EVSE), residential construction shall comply with §4.106.4 (residential electric vehicle charging) of the California Green Building Standards Code Part 11 and nonresidential construction shall comply with §5.106.5.3 (nonresidential electric vehicle charging) of the California Green Building Standards Code Part 11.

Applicable SP-200 EIR Mitigation Measures: The following mitigation measure from the SP-200 EIR is applicable to the Project: **SP-200 MM AQ-2**.

SP-200 MM AQ-2 The Project will be integrated into the City-wide transit district plans and will provide bus stops, turn-outs, etc., as needed.

Moreno Valley Mall Specific Plan Design Guidelines: No design guidelines of the Moreno Valley Mall Specific Plan are applicable to this topical area.

Additional Mitigation Measures:

MM AQ-1

Prior to issuance of grading permits, the applicant shall prepare and submit documentation to the City of Moreno Valley that demonstrate the following:

- All off-road diesel-powered construction equipment greater than 50 horsepower meets California Air Resources Board Tier 4 Final off-road emissions standards or incorporate CARB Level 3 Verified Diesel Emission Control Strategy (VDECS).

Requirements for Tier 4 Final equipment shall be included in applicable bid documents and successful contractor(s) must demonstrate the ability to supply such equipment. A copy of each unit's Best Available Control Technology (BACT) documentation (certified tier specification or model year specification), and CARB or SCAQMD operating permit (if applicable) shall be provided to the City at the time of mobilization of each applicable unit of equipment.

- All on-road heavy-duty haul trucks shall be model year 2010 or newer if diesel fueled.
- Construction equipment shall be properly maintained according to manufacturer specifications. All equipment maintenance records and data sheets, including design specifications and emission control tier classifications shall be kept onsite and furnished to the lead agency or other regulators upon request.
- All construction equipment and delivery vehicles shall be turned off when not in use, or limit on-site idling for no more than 5 minutes in any 1 hour.
- On-site electrical hookups to a power grid shall be provided for electric construction tools including saws, drills, and compressors, where feasible, to reduce the need for diesel powered electric generators. Construction contracts shall require all off-road equipment with a power rating below 19 kilowatts (25 horsepower) (e.g., plate compactors, pressure washers, etc.) used during project construction to be battery powered.
- Prepare a construction traffic control plan detailing the locations of equipment staging areas, material stockpiles, proposed road closures, and hours of construction operations, and designing the plan to minimize impacts to roads frequented by passenger cars, pedestrians, bicyclists, and other non-truck traffic.
- Provide information on transit and ridesharing programs and services to construction employees.

MM AQ-2

Low VOC Paint. The Project Applicant shall require by contract specifications commercial development to use interior and exterior architectural coatings (paint and primer including parking lot paint) products that have a volatile organic compound rating of 50 grams per liter or less. Contract specifications shall be reviewed and approved by the City of Moreno Valley prior to the issuance of occupancy permits. This measure shall be made a condition of approval for continued upkeep of the property.

MM AQ-3

Vehicle Trip Reduction. Develop a qualifying Commute Trip Reduction (CTR)/Transportation Demand Management (TDM) plan to reduce mobile GHG emissions for all uses. The TDM plan shall be approved by the City of Moreno Valley prior to the issuance of building permits and incorporated into the Project's Codes Covenants and Restrictions (CC&Rs). The TDM plan shall discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. The following measures shall be incorporated into the TDM plan.

TDM Requirements for Non-Residential Uses:

The Project Applicant shall consult with the local transit service provider on the need to provide infrastructure to connect the Project with transit services. Evidence of compliance with this requirement may include correspondence from the local transit provider(s) regarding the potential need for installing bus turnouts, shelters, or bus stops at the site.

The portion of the TDM plan for non-residential uses shall include, but not be limited to the following potential measures: ride-matching assistance, preferential carpool parking, flexible work schedules for carpools, half-time transportation coordinators, providing a website or message board for coordinating rides, designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles, and including bicycle end of trip facilities. This list may be updated as new methods become available. Verification of this measure shall occur prior to building permit issuance for the commercial uses.

TDM Requirements for Residential Units:

Rental Units. Upon a residential dwelling being rented or offered for rent, the Project Applicant shall notify and offer to the tenant or prospective tenant, materials describing public transit, ridesharing, and nonmotorized commuting opportunities in the vicinity of the development. The materials shall be approved by the City of Moreno Valley. The materials shall be provided no later than the time the rental agreement is executed. This information shall be submitted to the City of Moreno Valley Planning Division for review and approval, prior to the issuance of the first certificate of occupancy.

MM AQ-4 **Prohibition of Fireplaces.** The installation of wood-burning and natural gas devices shall be prohibited. The purpose of this measure is to limit emissions of ROG, NO_x, particulate matter and visible emissions from wood-burning and natural gas devices used for primary heat, supplemental heat, or ambiance. This prohibition shall be noted on the deed and/or lease agreements for future property owners/tenants to obey.

MM AQ-5 **Electric Landscape Equipment.** Prior to the issuance of occupancy permits, the Planning Division shall confirm that the Project's Codes Covenants and Restrictions (CC&Rs) and/or tenant lease agreements include contractual language that all landscaping equipment used onsite shall be 100 percent electrically powered. All residential and non-residential properties shall be equipped with exterior electrical outlets to accommodate this requirement. This requirement shall be included in the third-party vendor agreements for landscape services for the building owner and tenants, as applicable.

MM AQ-6 **Low VOC Cleaning Supplies.** Prior to the issuance of occupancy permits, the Planning Division shall confirm that the Project's Codes CC&Rs and/or tenant lease agreements include contractual language that all cleaning products used in public spaces will be

EPA Safer Choice certified.⁶ This requirement shall be included in the third-party vendor agreements for the building owner and tenants, as applicable.

Impact 4.2-3 *Would the proposed project, expose sensitive receptors to substantial pollutant concentrations?*

Level of Significance: Less than Significant with Mitigation Incorporated

Localized Construction Significance Analysis

The nearest sensitive receptors are the multi-family residences located 110 feet (33 meters) to the south of the Project on the opposite side of Town Circle. To identify impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific emissions.

Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, **Table 4.2-10, Equipment-Specific Disturbance Rates**, is used to determine the maximum daily disturbed acreage for comparison to LSTs. The appropriate SRA for the localized significance thresholds is the Perris Valley (SRA 24) since this area includes the Project. LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. The SCAQMD produced look-up tables for projects that disturb areas less than or equal to 5 acres in size. Project construction is anticipated to disturb a maximum of 4.0 acres in a single day.

Table 4.2-10: Equipment-Specific Disturbance Rates

Construction Phase	Equipment Type	Equipment Quantity	Acres Disturbed per 8-Hour Day	Operating Hours per Day	Acres Graded per Day
Grading	Tractors	2	0.5	8	1.0
	Graders	1	0.5	8	0.5
	Dozers	1	0.5	8	0.5
	Scrapers	2	1.0	8	2.0
Total Acres Graded per Day					4.0
Source: SCAQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. CalEEMod version 2020.4.0. Refer to Appendix A for model outputs.					

The SCAQMD’s methodology states that “off-site mobile emissions from the Project should not be included in the emissions compared to LSTs.” Therefore, only emissions included in the CalEEMod “on-site” emissions outputs were considered. The nearest sensitive receptors are the multi-family residences located 110 feet (33 meters) south of the Project. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, LSTs for receptors have been conservatively interpolated for a distance of 33 meters and utilized in this analysis. **Table 4.2-11, Localized Significance of Construction Emissions**, presents the results of localized emissions during construction.

⁶ EPA manages the Safer Choice Program which certifies products that contain safer ingredients for human health and the environment. <https://www.epa.gov/saferchoice/products>

Table 4.2-11: Localized Significance of Construction Emissions

Construction Activity	Maximum Pounds Per Day			
	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Demolition - Sequence 1	2.00	23.28	0.31	0.10
Site Preparation - Sequence 1	2.02	20.87	7.73	4.00
Building Construction - Sequence 1	2.23	17.46	0.04	0.04
Grading - Sequence 1	18.25	31.60	4.30	2.08
Overlapping Activity Emissions	24.50	93.21	12.38	6.22
Building Construction - Sequence 1	2.23	17.46	0.04	0.04
Demolition - Sequence 2	2.00	23.28	1.20	0.23
Site Preparation - Sequence 2	2.02	20.87	7.73	4.00
Overlapping Activity Emissions	6.25	61.61	8.97	4.27
Building Construction - Sequence 1	2.23	17.46	0.04	0.04
Building Construction - Sequence 2	2.23	17.46	0.04	0.04
Architectural Coating - Sequence 1	0.13	1.83	0.004	0.004
Paving - Sequence 1	1.22	17.30	0.04	0.04
Paving - Sequence 2	1.22	17.30	0.04	0.04
Overlapping Activity Emissions	7.03	71.35	0.16	0.16
Building Construction - Sequence 1	2.23	17.46	0.04	0.04
Building Construction - Sequence 2	2.23	17.46	0.04	0.04
Architectural Coating - Sequence 1	0.13	1.83	0.004	0.004
Paving - Sequence 1	1.22	17.30	0.04	0.04
Demolition - Sequence 3	2.00	23.28	3.42	0.57
Site Preparation - Sequence 3	2.02	20.87	7.73	4.00
Grading - Sequence 3	17.08	31.26	4.33	2.05
Overlapping Activity Emissions	26.91	129.46	15.60	6.74
Building Construction - Sequence 1	2.23	17.46	0.04	0.04
Architectural Coating - Sequence 1	0.13	0.13	1.83	0.004
Paving - Sequence 1	1.22	17.30	0.04	0.04
Grading - Sequence 3	17.08	31.26	4.33	2.05
Construction - Sequence 3	2.23	17.46	0.04	0.04
Overlapping Activity Emissions	22.89	68.38	6.28	2.17
Building Construction - Sequence 1	2.23	2.23	17.46	0.04
Building Construction - Sequence 3	2.23	17.46	0.04	0.04
Architectural Coating - Sequence 2	0.13	1.83	0.04	0.04
Overlapping Activity Emissions	4.59	21.52	17.54	0.12
Building Construction - Sequence 3	2.23	17.46	0.04	0.04
Architectural Coating - Sequence 3	0.13	1.81	0.05	0.05
Paving - Sequence 3	1.22	17.30	0.04	0.04
Overlapping Activity Emissions	3.58	36.57	0.13	0.13
<i>SCAQMD Localized Screening Threshold (4 acres at 33 meters)</i>	249	1,556	20	7
Exceed SCAQMD Threshold?	No	No	No	No

Source: CalEEMod version 2020.4.0. Refer to Appendix A for model outputs.

Table 4.2-11 shows the emissions of these pollutants on the peak days of Project construction. Based on the construction schedule, certain activities are anticipated to overlap, therefore these emissions have been conservatively combined. Daily emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, the Project would result in a less than significant impact concerning LSTs during construction activities.

Localized Operational Significance Analysis

According to the SCAQMD LST methodology, LSTs would apply to the operational phase of a project only if it includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Project includes multi-family residential, hotels, office space, and commercial retail. These uses would not generate long periods of vehicle idling and queuing, therefore an operational LST analysis is not warranted.

Criteria Pollutant Health Impacts

On December 24, 2018, the California Supreme Court issued an opinion identifying the need to provide sufficient information connecting a project's air emissions to health impacts or explain why such information could not be ascertained (*Sierra Club v. County of Fresno* [Friant Ranch, L.P.] [2018] Cal.5th, Case No. S219783). The SCAQMD has set its CEQA significance thresholds based on the FCAA, which defines a major stationary source (in extreme ozone nonattainment areas such as the South Coast Air Basin) as emitting 10 tons per year. The thresholds correlate with the trigger levels for the federal New Source Review (NSR) Program and SCAQMD Rule 1303 for new or modified sources. The NSR Program⁷ was created by the FCAA to ensure that stationary sources of air pollution are constructed or modified in a manner that is consistent with attainment of health-based federal ambient air quality standards. The federal ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Therefore, projects that do not exceed the SCAQMD's LSTs and mass emissions thresholds would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and no criteria pollutant health impacts.

NO_x and ROG are precursor emissions that form O₃ in the atmosphere in the presence of sunlight where the pollutants undergo complex chemical reactions. It takes time and the influence of meteorological conditions for these reactions to occur, so O₃ may be formed at a distance downwind from the sources. Breathing ground-level O₃ can result in health effects that include reduced lung function, inflammation of airways, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, chest tightness, wheezing, or shortness of breath. In addition to these effects, evidence from observational studies strongly indicates that higher daily O₃ concentrations are associated with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects upon asthmatics suggests that O₃ can make asthma symptoms worse and can increase sensitivity to asthma triggers.

⁷ Code of Federal Regulation (CFR) [i.e., PSD (40 CFR 52.21, 40 CFR 51.166, 40 CFR 51.165 (b)), Non-attainment NSR (40 CFR 52.24, 40 CFR 51.165, 40 CFR part 51, Appendix S)]

According to the SCAQMD's 2016 AQMP, ozone, NO_x, and ROG have been decreasing in the Basin since 1975 and are projected to continue to decrease in the future. Although vehicle miles traveled in the Basin continue to increase, NO_x and ROG levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_x emissions from electric utilities have also decreased due to the use of cleaner fuels and renewable energy. The 2016 AQMP demonstrates how the SCAQMD's control strategy to meet the 8-hour ozone standard in 2023 would lead to sufficient NO_x emission reductions to attain the 1-hour ozone standard by 2022. In addition, since NO_x emissions also lead to the formation of PM_{2.5}, the NO_x reductions needed to meet the ozone standards will likewise lead to improvement of PM_{2.5} levels and attainment of PM_{2.5} standards.

The SCAQMD's air quality modeling demonstrates that NO_x reductions prove to be much more effective in reducing ozone levels and will also lead to significant improvement in PM_{2.5} concentrations. NO_x-emitting stationary sources regulated by the SCAQMD include Regional Clean Air Incentives Market (RECLAIM) facilities (e.g., refineries, power plants, etc.), natural gas combustion equipment (e.g., boilers, heaters, engines, burners, flares) and other combustion sources that burn wood or propane. The 2016 AQMP identifies robust NO_x reductions from new regulations on RECLAIM facilities, non-refinery flares, commercial cooking, and residential and commercial appliances. Such combustion sources are already heavily regulated with the lowest NO_x emissions levels achievable but there are opportunities to require and accelerate replacement with cleaner zero-emission alternatives, such as residential and commercial furnaces, pool heaters, and backup power equipment. The AQMD plans to achieve such replacements through a combination of regulations and incentives. Technology-forcing regulations can drive development and commercialization of clean technologies, with future year requirements for new or existing equipment. Incentives can then accelerate deployment and enhance public acceptability of new technologies.

The 2016 AQMP also emphasizes that beginning in 2012, continued implementation of previously adopted regulations will lead to NO_x emission reductions of 68 percent by 2023 and 80 percent by 2031. With the addition of 2016 AQMP proposed regulatory measures, a 30 percent reduction of NO_x from stationary sources is expected in the 15-year period between 2008 and 2023. This is in addition to significant NO_x reductions from stationary sources achieved in the decades prior to 2008.

As discussed above, the mass emissions thresholds developed by SCAQMD and used by CEQA lead agencies throughout southern California to determine potential significance of project-related regional changes in the environment are not directly indicative of exceedances of applicable ambient air standards. Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of O₃ or PM. The effects on ground-level ambient concentrations of pollutants that may be breathed by people are also influenced by the spatial and temporal patterns of the emission sources. In other words, the effect on O₃ and PM concentrations from a given mass of pollutants emitted in one location may vary from the effect if that same mass of pollutants was emitted in an entirely different location in SCAB. The same effect may be observed when the daily and seasonal variation of emissions is taken into account. Regional-scale photochemical modeling, typically performed only for NAAQS attainment demonstration and rule promulgation, account for these changes in the spatial, temporal, and chemical nature of regional emissions.

Emissions from the construction and operation of the proposed Project would vary by time of day, month, and season, and the majority of Project-related emissions, being generated by mobile sources driving to and from the site, would be emitted throughout a wide area defined by the origins and destinations of people traveling to and from the proposed Project. As SCAQMD has stated, “it takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels over an entire region.”⁸

Specifically, for extremely large regional projects, the SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources – as part of their rulemaking activity, specifically 6,620 pounds per day of NO_x and 89,180 pounds per day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to O₃. Based on its recent experiences applying regional scale models to relatively small increase in emissions, SCAQMD stated in its Amicus Brief in the Sierra Club v. County of Fresno case: “[A] project emitting only 10 tons per year of NO_x or VOC is small enough that its regional impact on ambient ozone levels may not be detected in the regional air quality models that are currently used to determine ozone levels.”⁹ The Brief makes it clear that SCAQMD does not believe that there must be a quantification of a project's health risks in CEQA documents prepared for individual projects. Any attempt to quantify the proposed Project's health risks would be considered unreliable and misleading. Also, the Project does not generate anywhere near 6,620 pounds per day of NO_x or 89,190 pounds per day of ROG (VOC) emissions, which SCAQMD stated was a large enough emission to quantify O₃-related health impacts. Therefore, the Project's emissions are not sufficiently high enough to use regional modeling program to correlate health effects on a basin-wide level.

As previously discussed, localized effects of on-site Project emissions on nearby receptors for the Project would be less than significant (refer to **Table 4.2-11**). The LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable state or federal ambient air quality standard. The LSTs were developed by the SCAQMD based on the ambient concentrations of that pollutant for each SRA and distance to the nearest sensitive receptor. The ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect public health, including protecting the health of sensitive populations. However, as discussed above, neither the SCAQMD nor any other air district currently have methodologies that would provide Lead Agencies and CEQA practitioners with a consistent, reliable, and meaningful analysis to correlate specific health impacts that may result from a proposed project's mass emissions. Information on health impacts related to exposure to ozone and particulate matter emissions published by the U.S. EPA and CARB have been summarized above and discussed in the Regulatory Framework section. Health studies are used by these agencies to set the NAAQS and CAAQS.

The NAAQS and CAAQS were developed to protect the most susceptible population groups from adverse health effects and were established in terms of parts per million or micrograms per cubic meter for the applicable emissions. As stated earlier, the mass emission thresholds were established primarily in conjunction with federal permitting “major source” thresholds. If emissions were below these

⁸ South Coast Air Quality Management District, Amicus Brief in Support of Neither Party, Sierra Club v. County of Fresno, 2015.

⁹ South Coast Air Quality Management District, Amicus Brief in Support of Neither Party, Sierra Club v. County of Fresno, 2015.

“de minimis” emission rates, then the proposed Project is presumed to conform with the NAAQS.¹⁰ While based on the status of an air basin level of attainment of the health-based NAAQS, emissions in excess of the mass emission thresholds from one project does not mean the air basin would experience measurably higher ground level concentrations, or more frequent occurrences of ground level concentrations in exceedance of standards, or delay timely attainment of a particular NAAQS.

Ozone concentrations are dependent upon a variety of complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground-level ozone concentrations in relation to the NAAQS and CAAQS, none of the health-related information can be directly correlated to the pounds/day or tons/year of emissions estimated from a single, proposed project. It should also be noted that this analysis identifies health concerns related to particulate matter, CO, O₃, and NO₂.

Table 4.2-1 includes a list of criteria pollutants and summarizes common sources and effects. Thus, this analysis is reasonable and intended to foster informed decision making. Due to the uncertainty in the relationship between project-level mass emissions and regional O₃ formation as well as limitations with currently available technical tools, the resulting health effects associated with the Project cannot be identified.

Although it may be misleading and unreliable to attempt to specifically and numerically quantify the Project’s health risks, this analysis provides extensive information concerning the Project’s potential health risks. Furthermore, although the Project is expected to exceed the SCAQMD’s numeric regional mass daily thresholds for ROG this does not in itself constitute a significant health impact to the population adjacent to the Project and within SCAB. The reason for this is that the mass daily thresholds are in pounds per day emitted into the air whereas health effects are determined based on the concentration of emissions in the air at a particular receptor (e.g., parts per million by volume of air, or micrograms per cubic meter of air).

Given this is speculative, no meaningful conclusion can be drawn with respect to potential health effects from the criteria pollutant emissions of the proposed Project.

Carbon Monoxide Hotspots

An analysis of CO “hot spots” is needed to determine whether the change in the level of service of an intersection resulting from the Project would have the potential to result in exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities,

¹⁰ US Environmental Protection Agency. Frequent Questions about General Conformity. Available: <https://www.epa.gov/general-conformity/frequent-questions-about-general-conformity>. Accessed July 2019.

CO concentrations have steadily declined. Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard.

SCAB was re-designated as attainment in 2007 and is no longer addressed in the SCAQMD's AQMP. The 2003 AQMP is the most recent version that addresses CO concentrations. As part of the SCAQMD *CO Hotspot Analysis*, the Wilshire Boulevard and Veteran Avenue intersection, one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day, was modeled for CO concentrations. This modeling effort identified a CO concentration high of 4.6 ppm, which is well below the 35-ppm Federal standard. The Project considered herein would not produce the volume of traffic required to generate a CO hot spot in the context of SCAQMD's *CO Hotspot Analysis*. As the CO hotspots were not experienced at the Wilshire Boulevard and Veteran Avenue intersection even as it accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at any vicinity intersections resulting from 11,076 additional vehicle trips attributable to the Project and distributed throughout the roadway network. Therefore, impacts would be less than significant.

Construction-Related Diesel Particulate Matter

Construction of the Project would result in the generation of DPM emissions from the use of required off-road diesel equipment. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short and exhaust from construction equipment dissipates rapidly. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. The California Office of Environmental Health Hazard Assessment (OEHHA) has not identified short-term health effects from DPM. Construction is temporary and would be transient throughout the site (i.e., move from location to location) and would not generate emissions in a fixed location for extended periods of time which would limit the exposure of any proximate individual sensitive receptor to TACs.

Additionally, construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, §2485 and 2449), which reduce diesel PM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Given the temporary and intermittent nature of construction activities likely to occur within specific locations in the Project site (i.e., construction is not likely to occur in any one location for an extended time), the dose of DPM of any one receptor is exposed to would be limited. Therefore, considering the relatively short duration of DPM-emitting construction activity at any one location, and the highly dispersive properties of DPM, sensitive receptors would not be exposed to substantial concentrations of construction-related TAC emissions.

Operational Diesel Particulate Matter

A Health Risk Assessment (HRA) (*Health Risk Assessment: Moreno Valley Mall Redevelopment Project*, prepared by Kimley-Horn, 2022) was conducted based on the SCAQMD's Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Emissions associated with the SR-60 freeway to future potential receptors located on the project site. Air dispersion modeling was performed using the United States Environmental Protection Agency (U.S. EPA) AERMOD dispersion model. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources. AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Uniform Cartesian receptors were used to evaluate the locations of the maximally exposed sensitive receptors. Surface and upper air meteorological data from the Perris Monitoring Station provided by the SCAQMD was selected as being the most representative meteorology. In addition, National Elevation Dataset (NED) terrain data was imported into AERMOD for the Project. The modeling and analysis were prepared in accordance with the SCAQMD Modeling Guidance for AERMOD.¹¹

Pursuant to California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, Case No. S213478, agencies are not required to analyze the CEQA impact of existing environmental conditions on a project's future users or residents, unless the proposed project risks exacerbate those environmental hazards or conditions that already exist. Nevertheless, the following mobile source health risk analysis has been prepared as an information item for land use decision making but is not a CEQA required analysis condition.

A health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 30-year exposure scenario for residents and a 25-year exposure scenario for workers using CARB's Risk Assessment Stand Alone Tool (RAST). Health risks were analyzed at the point of maximum impact and are a conservative estimate. The pollutant concentrations are then used to estimate the long-term cancer health risk to an individual as well as the non-cancer chronic health index. SCAQMD's threshold for cancer risk is ten in-one-million and the acute or chronic noncancer hazard index is one. Projects that do not exceed these thresholds would not result in a significant impact.

The cancer and chronic health risks are based on the annual average concentration of PM₁₀ (used as a proxy for DPM). As DPM does not have short-term toxicity values, acute risks were conservatively evaluated using hourly PM₁₀ concentrations and the REL for acrolein. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the U.S. EPA *Human Health Evaluation Manual* (1991) and the OEHHA Guidance Manual (2015).

Based on the AERMOD outputs, the highest expected annual average diesel PM₁₀ emission concentrations from diesel truck traffic at the closest residential receptor on the project site would be 0.06 µg/m³ during opening year. The Project's MERV 13 air filtration systems have an average particle size removal efficiency of approximately 75 percent for 0.3 to 1.0 µg/m³ (DPM) and 90 percent for 1.0 to 10 µg/m³ (PM₁₀ and PM_{2.5}) based on ASHRAE Standard 52.2. The filters would be installed in residential units prior to

¹¹ South Coast Air Quality Management District (2006). *SCAQMD Modeling Guidance for AERMOD*. Available at <http://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance>. Accessed March 2022.

occupancy, and maintenance with filters of the same value would be included in the Project’s operation and maintenance manual. The Project’s MERV 13 air filtration systems would reduce the highest expected annual average diesel PM₁₀ emission concentrations conservatively by 80 percent to 0.019 µg/m³ during opening year. The highest expected hourly TOG emission concentrations from automobile traffic at the Project site would be 0.67 µg/m³ (no reduction was applied to TOG concentrations).

Table 4.2-12, On-Site Risk Assessment Results shows the calculated carcinogenic risk at the Project site from DPM and TOG due to freeway emissions is 9.36 in one million for proposed on-site residents and 2.63 in one million for workers. Therefore, the carcinogenic risk associated with the Project would be less than significant. It should be noted that Project operations would not generate TACs. Therefore, there would be no impact to off-site receptors.

Table 4.2-12: On-Site Risk Assessment Results

Exposure Scenario	Maximum Cancer Risk (Risk per Million) ¹	Significance Threshold (Risk per Million)	Exceeds Significance Threshold?
On-Site Resident Exposure ²	9.36	10	No
On-Site Worker Exposure ³	2.63	10	No

1. Refer to **Appendix C: Health Risk Assessment**.

2. The maximum cancer for on-site residents would be experienced at Parcels 2 and 3 on the northwestern area of the Project site, approximately 170 feet south of SR-60, based on worst-case exposure durations for the Project, 95th percentile breathing rates, and 30-year averaging time.

3. The maximum cancer for on-site workers would be experienced at Parcel 9 on the northeastern area of the Project site, based on worst-case exposure durations for the Project, 95th percentile breathing rates, and 25-year averaging time.

Acute and chronic impacts are shown in **Table 4.2-13, Chronic and Acute Hazards**. An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. The highest maximum chronic and acute hazard index associated with both DPM and TOG emissions at the Project site would be 0.07 and 0.004, respectively. Therefore, non-carcinogenic hazards are within acceptable limits and less than significant.

Table 4.2-13: Chronic and Acute Hazards Assessment Results

Scenario	Chronic Hazard	Acute Hazard
Residents	0.07	0.004
Workers	0.05	0.002
SCAQMD Threshold	1.0	1.0
Threshold Exceeded?	No	No

Refer to **Appendix C: Health Risk Assessment**.

As described above, impacts related to cancer risk would be less than significant. Additionally, non-carcinogenic hazards are calculated to be within acceptable limits. It should be noted that the impacts assess the Project’s incremental contribution to health risk impacts, consistent with the SCAQMD guidance and methodology. The SCAQMD has not established separate cumulative thresholds and does not require combining impacts from cumulative projects. The SCAQMD considers projects that do not

exceed the project-specific thresholds to generally not be cumulatively significant.¹² Therefore, impacts related to health risk from the Project would be less than significant.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures in the SP-200 EIR are applicable to this topical area as specific health risks to sensitive receptors were not analyzed at the time the SP-200 EIR was prepared.

Moreno Valley Mall Specific Plan Design Guidelines: No design guidelines of the Moreno Valley Mall Specific Plan are applicable to this topical area.

Additional Mitigation Measures: Mitigation Measure MM AQ-1 (refer to Impact 4.2-2, above).

Impact 4.2-4 *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Level of Significance: Less than Significant Impact

Construction

Odors that could be generated by construction activities are required to follow SCAQMD Rule 402 to prevent odor nuisances on sensitive land uses. SCAQMD Rule 402, Nuisance, states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

During construction, emissions from construction equipment, such as diesel exhaust, and volatile organic compounds from architectural coatings and paving activities may generate odors. However, these odors would be temporary, are not expected to affect a substantial number of people and would disperse rapidly. Therefore, impacts related to odors associated with the Project's construction-related activities would be less than significant.

Operations

The SCAQMD *CEQA Air Quality Handbook* identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Project would not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, the Project would not create objectionable odors.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures identified in the SP-200 EIR are applicable to this topical area as odors were not analyzed in the SP-200 EIR.

¹² South Coast Air Quality Management District (August 2003). *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*.

Moreno Valley Mall Specific Plan Design Guidelines: No design guidelines of the Moreno Valley Mall Specific Plan are applicable to this topical area.

Additional Mitigation Measures: No additional mitigation measures are necessary.

4.2.6 Cumulative Impacts

Regional

In accordance with SCAQMD's methodology, any project that produces a significant project-level regional air quality impact in an area that is in nonattainment contributes to the cumulative impact. Cumulative projects in the local area include new development and general growth in the project area. The greatest source of emissions in SCAB is mobile sources. Due to the extent of the area potentially impacted from cumulative project emissions (i.e., SCAB), SCAQMD considers a project cumulatively significant when project-related emissions exceed the SCAQMD regional emissions thresholds.

Construction

SCAB is designated nonattainment for O₃, PM₁₀, and PM_{2.5} for State standards and nonattainment for O₃ and PM_{2.5} for Federal standards. Appendix D of the SCAQMD White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (2003) notes that projects that result in emissions that do not exceed the project specific SCAQMD regional thresholds of significance should result in a less than significant impact on a cumulative basis unless there is other pertinent information to the contrary. Therefore, if a cumulative project is estimated to result in emissions that do not exceed the thresholds, the project's contribution to the cumulative impact on air quality in SCAB would not be cumulatively considerable. As discussed in Impact 4.2-2 above, the Project's construction-related emissions would not exceed the SCAQMD significance thresholds, and the construction impacts would be less than significant levels with implementation of **MM AQ-1**. Therefore, the Project would not generate a cumulatively considerable contribution to air pollutant emissions during construction.

Operations

The SCAQMD has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, individual project emissions contribute to existing cumulatively significant adverse air quality impacts. The SCAQMD developed the operational thresholds of significance based on the level above which individual project emissions would result in a cumulatively considerable contribution to SCAB's existing air quality conditions. Therefore, a project that exceeds the SCAQMD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.

As shown in **Tables 4.2-9** the Project operational emissions (primarily area source emissions and mobile source emissions) would exceed the SCAQMD threshold for ROG despite the implementation of mitigation. As a result, operational emissions associated with the Project would result in a cumulatively considerable contribution to significant cumulative air quality impacts. Emissions of motor vehicles are controlled by State and Federal standards and the Project has no control over these standards. Standard

Conditions and the implementation of **MM AQ-2** through **MM AQ-6** would reduce emissions by requiring the use of low VOC paint, reducing vehicles trips, prohibition of fireplaces, electric landscape equipment, and the use of low VOC cleaning supplies. While the Project has some control over mobile source efficiencies, the majority of the mobile source emissions are beyond the Project's control and there is insufficient data regarding ROG reductions from low VOC products. Therefore, no additional feasible mitigation measures are available to further reduce emissions, and impacts would remain significant.

4.2.7 Significant Unavoidable Impacts

Even with implementation of regulatory requirements, standard conditions of approval and implementation of reasonable and feasible mitigation measures, the Project would result in unavoidable significant impacts with respect to air quality plan consistency (Impact 4.2-1) and from construction and operational emissions (Impact 4.2-2).

4.2.8 References

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4.3 CULTURAL RESOURCES

4.3.1 Introduction

The purpose of this section is to describe the existing regulatory and environmental conditions related to cultural resources, identify potential impacts that could result from Moreno Valley Mall Redevelopment Project (Project) implementation, and as necessary, recommend mitigation to avoid or reduce the significance of impacts.

Information in this section is based primarily on the following sources that are contained in **Appendix D, Preliminary Cultural Resources Review**:

- BCR Consulting LLC. April 18, 2022. *Preliminary Cultural Resources Review for the MoVal Mall Redevelopment Project in the City of Moreno Valley, Riverside County, California* (BCR Consulting Project No. KIM2203).

Additional resource information was obtained from available public resources including the Moreno Valley General Plan Update (MoVal 2040 GP), the MoVal 2040 Final Environmental Impact Report (MoVal 2040 Final EIR), Specific Plan No. 200 – Towngate Specific Plan (SP-200) and EIR, the City of Moreno Valley Municipal Code (City MC), and from applicable Project site plans and documents. Additionally, the Native American Heritage Commission (NAHC) letter in response to the Project's Notice of Preparation is provided in **Appendix A4** and provides guidance on Assembly Bill (AB) 52 and Senate Bill (SB) 18 compliance.

Cultural Resources Terminology and Concepts

Key terms and concepts used in this section to describe and assess the potential cultural resource impacts are defined below:

Archeological Site. A site is defined by the National Register of Historic Places (NRHP) as the place or places where the remnants of a past culture survive in a physical context that allows for the interpretation of these remains. Archeological remains usually take the form of artifacts (e.g., fragments of tools, vestiges of utilitarian or non-utilitarian objects), features (e.g., remnants of walls, cooking hearths, or midden deposits), and ecological evidence (e.g., pollen remaining from plants that were in the area when the activities occurred). Prehistoric archaeological sites generally represent the material remains of Native American groups and their activities dating to the period before European contact. In some cases, prehistoric sites may contain evidence of trade contact with Europeans. Ethnohistoric archaeological sites are defined as Native American settlements occupied after the arrival of European settlers in California. Historic archaeological sites reflect the activities of non-native populations during the Historic period.

Artifact. An object that has been made, modified, or used by a human being.

Cultural Resource. A cultural resource is a location of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. Cultural resources include archaeological resources and built environment resources (sometimes known as historic architectural resources), and may include sites, structures, buildings, objects, artifacts, works of art, architecture, and

natural features that were important in past human events. They may consist of physical remains or areas where significant human events occurred, even though evidence of the events no longer remains. Cultural resources also include places that are of traditional, cultural, or religious importance to social or cultural groups.

Historic Period. The period that begins with the arrival of the first non-native population and thus varies by area.

Historical Resource. This term is used for the purposes of California Environmental Quality Act (CEQA) and is defined in the State CEQA Guidelines (14 California Code of Regulations [CCR] §15064.5) as: (1) a resource listed in, or determined to be eligible for listing in the California Register of Historical Resources (CRHR); (2) a resource included in a local register of historical resources, as defined in Public Resources Code (PRC) §5020.1(k) or identified as significant in a historical resource survey meeting the requirements which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Historical resources may also include tribal cultural resources including sites, features, places, cultural landscapes, sacred places, objects, and/or archeological resources with value to a California Native American Tribe per PRC §21074.

Prehistoric Period. The era prior to 1772. The later part of the prehistoric period (post-1542) is also referring to as the protohistoric period in some areas, which marks a transitional period during which native populations began to be influenced by European presence resulting in gradual changes to their lifeways.

Tribal Cultural Resource. This term refers to a site, feature, place, cultural landscape, sacred place, object, or archaeological resource with cultural value to a California Native American tribe that is listed or eligible for listing in national, California, or local registers. A lead agency also has the discretion to determine that a resource is a tribal cultural resource if the determination is supported by substantial evidence. Tribal cultural resources are addressed in ***Section 7.0, Effects Found not to be Significant.***

4.3.2 Environmental Setting

Native American Indians were the first inhabitants of the Moreno Valley area. They hunted game, gathered seeds, and left evidence in rocks that they used to grind seeds. Early settlers traveled through the area from northern Mexico to various California Mission settlements along a trail charted by Juan Bautista de Anza in 1774. The trail passed through the San Jacinto Valley, the Perris Valley, and southwest Moreno Valley. Moreno Valley and the rest of California became part of the United States in 1850. The Moreno Valley area began to develop in the late 1880s, with the establishment of the Alessandro and Moreno settlements. The community of Moreno was built around the intersection of Redlands Boulevard and Alessandro Boulevard. The community of Alessandro was located within the limits of present-day March Air Force Base (MARB).

Urban development began after the establishment of the MARB in 1927, and the unincorporated communities of Sunnymead, Moreno, and Edgemont grew up around the base. From 1957 to 1989, the present-day Moreno Valley Mall was the site of the Riverside International Raceway, a motorsports racetrack and road course considered one of the finest in the country in its day.

The area experienced a period of rapid population growth between 1970 and 1992, fueled by the construction of new homes and businesses. During that period, the population went from approximately 19,000 residents to over 118,000. In 1984, the communities of Edgemont, Sunnymead, and Moreno came together to form the city of Moreno Valley and the first General Plan was adopted in 1986 to guide future growth and development.

Historical Setting¹

The Spanish Period in California (1769–1821) represents a time of European exploration and settlement. Military and religious contingents established the San Diego Presidio and the San Diego Mission in 1769, San Carlos Borromeo (Carmel) in 1770, and San Gabriel Arcangel in 1771. Mission San Gabriel Arcangel claimed the areas around Riverside, Jurupa, San Jacinto, and the San Gorgonio Pass. The opening of the mission system created the need to link Alta California with Sonora. Juan Bautista de Anza of Tubac was commissioned to open a road across the Colorado Desert to San Gabriel and on to Monterey. The first de Anza Expedition took place between 1774 and 1775. Anza stopped in the vicinity of present-day Riverside at an Indian Village along the Santa Ana River southwest of Mount Rubidoux.

Most scholars suggest that the Spanish mission system usually, but not always, used forced Native American labor to produce goods and provide services needed for European. The mission system also introduced horses, cattle, sheep, and agricultural goods and implements, and provided new construction methods and architectural styles. As stated above, the vicinity of Riverside was part of the San Gabriel Mission. Many Native American lands were taken over by the Spanish for cattle grazing. Also, with the arrival of the Spanish came devastating epidemics and very high death rates.

The Mexican Period (1821–1848) retained many of the Spanish institutions and laws. Cattle ranching still dominated the economy and the development of the hide and tallow trade with New England merchant ships increased during the early part of the Mexican Period. The Spanish mission system was secularized by the Mexican government, and these lands allowed for the dramatic expansion of the rancho system. Although a total of 16 land grants were established in what became Riverside County, none included the City of Moreno Valley. The Spanish mission system was secularized by the Mexican government, and the redistribution of these lands allowed for the dramatic expansion of the rancho system. The City is located between Jurupa (Rubidoux) and Rancho San Jacinto Nuevo y Potrero. Following the 1848 Treaty of Guadalupe Hidalgo, Rancho San Jacinto Nuevo y Potrero was filed with the Public Land Commission in 1852, and the grant was patented to T. W. Sutherland, guardian of the minor children of Miguel Pedorena in 1883.

¹ City of Moreno Valley (2021). *Final Environmental Impact Report for the MOVAL 2040*, page 4.5-4 to 4.5-6. Available at http://www.moval.org/cdd/documents/general-plan-update/final-docs/Moval%202040_Final%20EIR_with%20RTCs.pdf. Accessed January 13, 2022.

In the 1830s and 1840s, an increasing number of Americans were settling in California and the Southwest, and in 1836, Texas declared its independence from Mexico. In February 1846, Texas was annexed by the United States, triggering the Mexican–American War. Americans in northern California revolted and declared an independent California Republic, which ceased to exist three weeks later, when U.S. naval forces took Monterey on July 7, 1846. The California part of the war ended in Los Angeles on January 13, 1848, and the Treaty of Guadalupe Hidalgo was signed on February 2, 1848. California became a state in 1850.

The Moreno Valley area began to develop in the late 1880s with the establishment of the Alessandro and Moreno settlements. The community of Moreno was built around the intersection of Redlands Boulevard and Alessandro Boulevard and named in honor of Frank Brown (Moreno in Spanish), a civil engineer, who had visions of a successful agricultural community like he had established in Redlands to the north of the Valley. The community of Alessandro was located within the limits of present-day MARB. In 1893, Brown formed the Bear Valley Land and Water Company and built a dam at Bear Valley in the San Bernardino Mountains to provide water to the communities of Redlands at first and ultimately the communities of Moreno and Alessandro.

The increased demands for water from Bear Valley resulted in litigation with the City of Redlands which claimed priority rights. In 1891, the Perris & Alessandro Irrigation District was formed by order of the San Bernardino County Board of Supervisors to solve the litigation between Redlands and the Moreno Valley region over water use from the Bear Valley Dam. Redlands won the litigation in 1899. The majority of the Valley was abandoned that year after the loss of water rights and due to a drought.

The Alessandro Aviation Field was established in 1918 and then renamed to March Field. March Field closed in 1922 after World War I (WWI), and re-opened in 1927 as a flight training school (military museum, 2021). The name was changed to March Air Force Base in 1948. The unincorporated community of Sunnymead was established in 1922 and was followed by the unincorporated community of Edgemont in 1940. The development of MARB post-WWII aided in the continued growth of Edgemont and Sunnymead. The Eastern Municipal Water District began to supply water to the Valley in 1954. The dam at Lake Perris was completed in 1970. In 1984, the communities of Edgemont, Sunnymead, and Moreno came together to form the City of Moreno Valley and the first general plan was adopted in 1986 to guide future growth and development.

Project Cultural Resources Inventory

BCR Consulting reviewed a records search completed by its staff in 2014, which consulted records from all previously recorded historic and prehistoric archaeological sites, as well as built environment resources (including historic districts) in the immediate vicinity of the Project site to form the current preliminary study. The research revealed that one study has occurred within the Project site boundaries. The study was entitled *Cultural Resources Survey of the Proposed Riverside Mixed-Use Development Project* (1984 by Scientific Resource Surveys, Inc.), and resulted in no cultural resources identified within the Project site boundaries. A review of topographic maps and aerial photographs shows that the Project site is currently occupied by the Moreno Valley Mall. According to Riverside County assessor records, the Moreno Valley Mall was built in 1991. It replaced the Riverside Raceway that occupied the Project site since prior to 1967.

Prior to the development of the Moreno Valley Mall, an initial records search was conducted for the SP-200 EIR that revealed no previously recorded sites on the property. In addition, an intensive surface survey of the SP-200 project area was conducted, resulting in the identification of one archaeological site located in the eastern portion of the SP-200 project area, not within the boundaries of the current Moreno Valley Mall. Furthermore, the SP-200 EIR determined that implementation of SP-200 would have no significant impacts on historic and prehistoric resources due to this site's ineligibility for the National Register of Historic Resources and its irrelevance to Native American tribes.

An updated literature and records search was requested by BCR Consulting, which is reflected in **Appendix D**. The updated literature/records search indicates that there are two cultural resources recorded within one half-mile of the Project site. One resource was a prehistoric bedrock milling site located approximately one quarter mile southeast of the Project site, and the other resource was a historic-period road located approximately one half-mile to the east. No cultural resources of any kind have been identified within the boundaries of the Project site.

4.3.3 Regulatory Setting

Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) was passed in 1966 and is codified in Title 16, §470 et seq. of the U.S. Code (USC). The goal of the Act is to ensure federal agencies act as responsible stewards of our nation's resources when their actions affect historic properties. Among the regulations of the NHPA, §106 requires federal agencies to consider the effects of their undertakings on historic properties and afford the Advisory Council on Historic Properties (ACHP) a reasonable opportunity to comment. The historic preservation review process mandated by §106 is outlined in regulations issued by ACHP. See Title 36 Code of Federal Regulations (CFR) Part 800, "Protection of Historic Properties."

Section 106 applies when two thresholds are met: 1) there is a federal or federally licensed action, including grants, licenses and permits, and 2) that action has the potential to affect properties listed in or eligible for listing in the NRHP. Section 106 requires each federal agency to identify and assess the effects of its actions on historic resources. The responsible federal agency must consult with appropriate state and local officials, Indian Tribes, applicants for federal assistance and members of the public, and consider their views and concerns about historic preservation issues when making final project decisions. The agency should also plan to involve the public and identify any other potential consulting parties. If the agency determines that it has no undertaking or that its undertaking is a type of activity that has no potential to affect historic properties, the agency has no further §106 obligations.

Pursuant to §106, impacts to a cultural site or artifact must be declared "significant," "potentially significant" or "not significant." Under NHPA regulations, impacts to "significant" archeological sites must be mitigated for, while "not significant" archeological remains need not. A "potentially significant" determination is utilized when there is not enough information to make a conclusive ruling. NHPA mitigation would not be necessary for archeological sites avoided during development.

National Register of Historic Places

Developed in 1981, pursuant to Title 36 CFR §60, the NRHP provides an authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment. It should be noted that the listing of a private property on the NRHP does not prohibit any actions which may otherwise be taken by the property owner with respect to the property. The listing of sites in California to the NRHP is initiated through an application submitted to the State Office of Historical Preservation (OHP). Applications deemed suitable for potential consideration are handled by the State Historic Preservation Officer (SHPO). All NRHP listings for sites in California are also automatically added to the CRHR by the State of California. The listing of a site on the NRHP does not generally result in any specific physical protection. Among other things, however, it does create an additional level of CEQA (and NEPA [National Environmental Protection Act]) review to be satisfied prior to the approval of any discretionary action occurring that might adversely affect the resource.

State

California Register of Historical Resources

The State's OHP manages and oversees the CRHR, which is intended to serve as "an authoritative guide to the state's significant historical and archeological resources." As outlined in PRC §5020 et seq., resources listed must meet one of four "significance criteria" related to events, people, construction/artistic value, or information. Sites must also retain sufficient integrity to convey their significance. The CRHR includes a number of type resources, including: all properties listed in or determined formally eligible for listing in the NRHP; all California Historical Landmarks from #770 onward; specific California Historical Landmarks issued prior to #770 and certain California Points of Historical Interest, as deemed appropriate for listing by the California Historic Resources Commission; and any properties nominated per OHP regulations. California Historical Landmarks are intended to recognize resources of statewide significance. Points of Historical Interest recognize resources of local or countywide significance. Lastly, as mentioned above, all NRHP listings within California are automatically added to the CRHR. The listing of a site on a California State register does not generally result in any specific physical protection. Among other things, however, it does create an additional level of CEQA review to be satisfied prior to any discretionary action occurring that might adversely affect the resource.

California Code of Regulations

CCR Title 14 §1427 recognizes that "California's archaeological resources are endangered by urban development and population growth and by natural forces." Accordingly, the State Legislature finds that "these resources need to be preserved in order to illuminate and increase public knowledge concerning the historic and prehistoric past of California." Lastly, it states that any person "not the owner thereof, who willfully injures, disfigures, defaces or destroys any object or thing of archaeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor."

California Health and Safety Code (§§7050.05, 7051, and 7054)

California Health and Safety Code (HSC) §§7050.5, 7051, and 7054 collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the PRC), as well as the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, treatment of the remains prior to, during and after evaluation, and reburial procedures.

California Environmental Quality Act

The Project is subject to compliance with CEQA, as amended. Compliance with CEQA statutes and guidelines requires both public and private projects with financing or approval from a public agency to assess the project's impact on cultural resources (PRC §§21082, 21083.2 and 21084 and CCR §10564.5). The first step in the process is to identify cultural resources that may be impacted by the project and then determine whether the resources are "historically significant" resources.

CEQA defines historically significant resources as "resources listed or eligible for listing in the California Register of Historical Resources (CRHR)" (PRC §5024.1). A cultural resource may be considered historically significant if the resource is 45 years old or older, possesses integrity of location, design, setting, materials, workmanship, feeling, and association, and meets any of the following criteria for listing on the CRHR:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,
4. Has yielded, or may be likely to yield, information important in prehistory or history (PRC §5024.1).

Cultural resources are buildings, sites, humanly modified landscapes, traditional cultural properties, structures, or objects that may have historical, architectural, cultural, or scientific importance. CEQA states that if a project will have a significant impact on important cultural resources, deemed "historically significant," then project alternatives and mitigation measures must be considered.

Senate Bill 18

Senate Bill (SB) 18 essentially requires local governments to consult with Native American tribes when amendment or adoption of a general or specific plan, or designation of open space occurs. Furthermore, SB 18 encourages local governments to consider the cultural aspects of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places early in the land use planning process. In compliance with SB 18, the City contacted the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File (SLF).

The NAHC responded with a contact list of several tribal groups or individuals who may have knowledge of cultural resources within the Project area. The City mailed 10 letters to these contacts on March 7, 2022, requesting any information they may have regarding Native American cultural resources within the Project area. SB 18 consultation and correspondence (including the aforementioned NAHC response letter) is included as **Appendix D, Preliminary Cultural**.

Similarly, the City initiated Native American consultation consistent with Assembly Bill (AB) 52. The City received requests for consultations from the Morongo Band of Mission Indians, the Pechanga Band of Indians, and the Rincon Band of Luiseno Indians. The City has conducted consultation on a continuous basis with these tribes. As part of these consultations, measures prescribed by a consulting tribe have been provided and incorporated within the mitigation measures in this section. At the time of the publishing of this Draft SEIR, SB 18 consultation with the Morongo Band of Mission Indians and the Pechanga Band of Indians is ongoing and consultation with these Tribes will remain open until such a time that the Project is approved by the City Council, pursuant to SB 18. Throughout this process, the Morongo Band of Mission Indians and Pechanga Band of Indians will be provided the opportunity to consult and comment on the Project.

Local

City of Moreno Valley General Plan

The MoVal 2040 GP – Open Space and Resource Conservation (OSRC) Element provides measures to protect and enhance open space, natural habitat, and biological and cultural resources. The goals, objectives, and policies in the MoVal 2040 GP provide actions and plans for the City and are not necessarily to be achieved by private development, such as the Project. However, the Project would support the City in reaching the goals, as feasible.

The following goals and policies from the MoVal 2040 GP are pertinent to the Project:

Open Space and Resource Conservation Element

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.2-8 Require cultural resource assessments prior to the approval of development proposals on properties located in archaeologically sensitive areas.

Approved Towngate Specific Plan SP-200

This specific plan was prepared by a developer and adopted in 1987. The planning area is approximately 500 acres located on the western portion of the City bounded by State Route 60 (SR-60) to the north, Cottonwood Avenue to the south, and Frederick Street to the east, and Day Street to the west. The planning area includes the Moreno Valley Mall, the City’s major shopping center. More recent commercial developments in this planning area include Towngate Crossing, Towngate Promenade, Towngate Square, and Towngate Center/Plaza. New commercial/retail developments continue to this day.

At the time of its adoption, SP-200 involved the redevelopment of an unincorporated part of Riverside County that was home to the Riverside International Raceway. The plan envisioned a mixed-use town center that housed residential, commercial, and office uses. Foreseeable project impacts to land use were associated with the permanent alteration of the blighted raceway site to the urban development that exists today.

4.3.4 Impact Thresholds and Significance Criteria

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning cultural resources. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5; or
- Disturb any human remains, including those interred outside of formal cemeteries.

Project Design Features

In addition to applying existing standard conditions and regulatory requirements, the Project has incorporated the following Project Design Features into the SPA and TPM:

- The Project consists of redeveloping an existing developed regional mall site, which will reduce grading and associated risk to cultural resources that would otherwise be associated with developing new regional commercial uses at an alternate site.

Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria/thresholds as the basis for determining the impact's level of significance concerning cultural resources. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impacts. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the potentially significant environmental impacts.

Approach to Analysis

This analysis of impacts on cultural resources examines the Project's temporary (i.e., construction) and permanent (i.e., operational) effects based on application of the significance criteria/thresholds outlined above. Each criterion is discussed in the context of the Project site and the surrounding characteristics/geography. The impact conclusions consider the potential for changes in environmental conditions, as well as compliance with the regulatory framework enacted to protect the environment.

The baseline conditions and impact analyses are based on review of Project maps and drawings; analysis of aerial and ground-level photographs; and review of various data available in public records, including

local planning documents. The determination that any components of the Project may result in “substantial” adverse effects on historical and archaeological resources and human remains considers the existing site’s historical resource value and the severity of the Project implementation on resources that may be considered historical.

4.3.5 Impacts and Mitigation Measures

Summary of Previous Environmental Analysis

The SP-200 EIR analyzed potential impacts to historic and prehistoric resources associated with the proposed Moreno Valley Mixed Use Development. After an initial records search and intensive surface survey of the planning area, the SP-200 EIR concluded that Project implementation would result in direct and/or indirect impacts to the single identified archaeological site, located in the eastern portion of the planning area, southeast of the Project site. The site, consisting of a single small grinding slick, was not considered significant because it possesses no qualities warranting its eligibility for the National Register of Historic Resources and required no action under regulations governing Native American concerns. As a result, no further investigation or management of resources was warranted. In addition, the SP-200 EIR did not identify significant unavoidable impacts associated with original SP-200 approval. As a result, there were no mitigation measures identified in the SP-200 EIR for this resource area.

Impact 4.3-1 *Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

Level of Significance: No Impact

According to the MoVal 2040 GP, the Project site lies within a General Plan Concept Area that would avoid the majority of the known historical or potentially historic resources within the Planning Area. The Project site and its neighbors are not listed by the State Historical Resources Commission in the CRHR pursuant to §15064.5. Additionally, the Project site does not contain historic structures listed on the Moreno Valley Historic Resource Inventory nor does it contain any recommended eligible NRHP sites, historical points of interest, or other significant historical resources – according to the MoVal 2040 Final EIR.² The Project is not eligible for listing in the CRHR, nor is there a possibility of it being determined as a historical resource. The Moreno Valley Mall, itself, was developed in 1992 and is less than 50 years old, making it significantly younger than the 50-year historic-age designation. The Project would, therefore, not have an effect that may cause a substantial adverse change in the significance of an historical resource, and there is no impact.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures were identified in the SP-200 EIR as there were no significant impacts anticipated with implementation of the SP-200.

² City of Moreno Valley (2021). *Final Environmental Impact Report for the MOVAL 2040; Figure 4.5-1*. Available at http://www.moval.org/cdd/documents/general-plan-update/final-docs/Moval%202040_Final%20EIR_with%20RTCs.pdf. Accessed January 13, 2022.

Moreno Valley Mall Specific Plan Design Guidelines: Certain design features would support a development vision that puts emphasis on Moreno Valley’s cultural identity. The following Design Guidelines of the Moreno Valley Mall Specific Plan are applicable:

- DG-60** New development should respect the nature of the surrounding historic architectural styles within Moreno Valley while pursuing contemporary and modernized creative identities in line with current or aspirational trends. Historic architectural styles and features have been inspired by the hot, arid climate and strong sun, the rugged mountain and chaparral landscape, Native American and Spanish Colonial cultural influences, and the automobile.
- DG-197** Public/private art should reinforce local or regional cultural themes.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.3-2 *Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

Level of Significance: Less than Significant Impact with Mitigation Incorporated

According to the MoVal 2040 Final EIR, the General Plan Concept Areas, which includes include the Project site, would avoid the majority of the known archaeological resources within the planning area. Additionally, the Project site is located outside of any archaeological sensitive areas that are delineated within the City of Moreno Valley.³ The updated literature/records search obtained by BCR Consulting (**Appendix D**), indicates that there are no known archaeological resources within the Project site. In the event that archaeological resources are exposed during construction of the Project, ground-disturbing activities would be halted, and qualified archaeologists would be consulted to determine significance or tribal association. As it is, the Project would not cause a substantial adverse change in the significance of a known archaeological resource and is not likely to reveal unknown archaeological resources due to the site being currently developed and being outside of archaeologically sensitive areas.

However, while unlikely, the potential for the discovery of significant archaeological materials during Project-related ground disturbing activities remains present. In the unlikely event that archaeological materials are encountered during Project-related ground-disturbing activities, the City requires that all work should be halted in the manner described in **Mitigation Measures (MM) CUL-1**. With incorporation of **MM CUL-1** and **MM CUL-2**, impacts to potential archaeological resources are anticipated to be less than significant impact.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures were identified in the SP-200 EIR as there were no significant impacts anticipated with implementation of the SP-200.

Moreno Valley Mall Specific Plan Design Guidelines: No Design Guidelines of the Moreno Valley Mall Specific Plan are applicable.

³ Final Environmental Impact Report for the MOVAL 2040; Figure 4.5-2.

Additional Mitigation Measures:

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

MM CUL-2 **Native American Monitoring.** Prior to the issuance of a grading permit, the Developer shall secure agreements with the consulting Tribe(s) that request tribal monitoring for tribal monitoring. The City 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 CUL-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:

- a. Project description and location
- b. Project grading and development scheduling;
- c. Roles and responsibilities of individuals on the Project;
- d. The pre-grading meeting and Cultural Resources Worker Sensitivity Training details;
- e. The protocols and stipulations that the contractor, City, Consulting Tribe (s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.

- f. The type of recordation needed for inadvertent finds and the stipulations of recordation of sacred items.
- g. Contact information of relevant individuals for the Project;

MM CUL-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-1. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments as defined in 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 CUL-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 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 CUL-6

Inadvertent Finds. If potential historic or cultural resources are uncovered during excavation or construction activities at the project site that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to Project approval, all ground disturbing activities in the affected area within 100 feet of the uncovered resource must cease immediately and a qualified person meeting the Secretary of the Interior's standards (36 CFR 61), Tribal Representatives, and all site monitors per the Mitigation Measures, shall be consulted by the City to evaluate the find, and as appropriate recommend alternative measures to avoid, minimize or mitigate negative effects on the historic, or prehistoric resource. Further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. Work shall be allowed to

continue outside of the buffer area and will be monitored by additional archeologist and Tribal Monitors, if needed. Determinations and recommendations by the consultant shall be immediately submitted to the Planning Division for consideration, and implemented as deemed appropriate by the Community Development Director, in consultation with the State Historic Preservation Officer (SHPO) and any and all Consulting Native American Tribes as defined in CR-2 before any further work commences in the affected area. If the find is determined to be significant and avoidance of the site has not been achieved, a Phase III data recovery plan shall be prepared by the Project Archeologist, in consultation with the Tribe, and shall be submitted to the City for their review and approval prior to implementation of the said plan.

MM CUL-7 **Human Remains.** If human remains are discovered, no further disturbance shall occur in the affected area until the County Coroner has made necessary findings as to origin. If the County Coroner determines that the remains are potentially Native American, the California Native American Heritage Commission shall be notified within 24 hours of the published finding to be given a reasonable opportunity to identify the “most likely descendant.” The “most likely descendant” shall then make recommendations, and engage in consultations concerning the treatment of the remains (California Public Resources Code 5097.98). (GP Objective 23.3, CEQA).

MM CUL-8 **Non-Disclosure of Reburial Locations.** It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code 6254 (r), parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).

MM CUL-9 **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).

Impact 4.3-3 *Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?*

Level of Significance: Less than Significant Impact

The MoVal2040 FEIR confirms, via a citywide EIC record search, that there are no formal cemeteries or other resources that are known to possess human remains throughout the City.⁴ This conclusion was further affirmed in the literature search update obtained by Brunzell (**Appendix D**). Even so, the MoVal 2040 Final EIR recognizes the potential for ground-disturbing activities within vacant land to unearth unknown human remains, especially due to the historical presence of various Native American tribes throughout Moreno Valley. In this event, State Health and Safety Code §7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC §5097.98. Because the Project site is fully developed, it is unlikely to disturb any unknown human remains. However, the potential for the accidental discovery of human remains is possible. If human remains are unintentionally disturbed during construction activities, implementation of the procedures set forth in PRC §5097.98 and California State HSC §7050.5 would be implemented in consultation with the Most Likely Descendent (MLD) as identified by the NAHC. California State HSC §7050.5 dictates that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC §5097.98. If the remains are determined by the County Coroner to be Native American, the NAHC shall be notified within 24 hours. The NAHC shall identify the MLD with whom consultation shall occur to determine in the treatment and disposition of the remains. With compliance to California State HSC §7050.5, as stated above, impacts associated with the potential disturbance of human remains would be less than significant.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures were identified in the SP-200 EIR as there were no significant impacts anticipated with implementation of the SP-200.

Moreno Valley Mall Specific Plan Design Guidelines: No Design Guidelines of the Moreno Valley Mall Specific Plan are applicable.

Additional Mitigation Measures: No additional mitigation measures are necessary.

4.3.6 Cumulative Impacts

For purposes of cumulative impact analysis to cultural resources, the geographic context for cumulative analysis of the Project is regional and considers both direct and indirect impacts over a wide area. However, the discussion is focused on the proposed Project's potential for resulting in site-specific impact but that could contribute to a cumulative loss. Accordingly, impacts are site-specific and not generally subject to cumulative impacts unless multiple projects impact a common resource, or an affected resource extends off-site, such as a historic townsite or district. With this consideration, the cumulative analyses for historical and archaeological resources considers whether the Project, in combination with

⁴ Final Environmental Impact Report for the MOVAL 2040, page 4.5-34.

the past, present, and reasonably foreseeable projects, could cumulatively affect any common cultural resources.

The proposed Project could result in potential site-specific impacts to as-yet unidentified archaeological resources discovered during grading and trenching activities during construction. Other projects within the cumulative study area also have the potential to result in damage and/or loss to these resources. The combination of the proposed Project as well as past, present, and reasonably foreseeable projects in the City of Moreno Valley and the County of Riverside would be required to comply with all applicable State, federal, County, and local regulations concerning preservation, salvage, or handling of cultural resources, including compliance with required mitigation. Similar to the proposed Project, these projects also would be required to implement and conform to mitigation measures, which would be likely to reduce impacts to less than significant. The potential to find unknown resources results in the Project's potential impact on archaeological resources to be cumulatively considerable. In addition, compliance with City and State requirements regarding the accidental discovery of cultural and archaeological resources, and human remains would reduce the Project's contribution to cumulative impacts to a less than significant level. Therefore, the Project's contribution to cumulative impacts would be less than significant.

4.3.7 Significant Unavoidable Impacts

No significant unavoidable cultural resources impacts have been identified.

4.3.8 References

BCR Consulting LLC (2022). *Preliminary Cultural Resources Review for the MoVal Mall Redevelopment Project in the City of Moreno Valley, Riverside County, California.*

City of Moreno Valley (2021). *Final Environmental Impact Report for the MOVAL 2040; Pages 4.5-4 to 4.5-6.* Available at [http://www.moval.org/cdd/documents/general-plan-update/final-docs/Moval%202040 Final%20EIR with%20RTCs.pdf](http://www.moval.org/cdd/documents/general-plan-update/final-docs/Moval%202040%20Final%20EIR%20with%20RTCs.pdf). Accessed January 13, 2022

----- *Final Environmental Impact Report for the MOVAL 2040, Figure 4.5-1.*

----- *Final Environmental Impact Report for the MOVAL 2040, Figure 4.5-2.*

4.4 GREENHOUSE GAS EMISSIONS

4.4.1 Introduction

The purpose of this analysis is to evaluate potential short- and long-term greenhouse gas (GHG) emissions impacts resulting from implementation of the Moreno Valley Mall Redevelopment Project (Project) in the City of Moreno Valley. Information given in this section is based on the *Greenhouse Gas Assessment Moreno Valley Mall Redevelopment Project, City of Moreno Valley, California* prepared by Kimley-Horn and Associates, Inc. in March 2022. The GHG emissions assessment and associated calculations are provided in **Appendix E**.

4.4.2 Environmental Setting

Greenhouse Gases and Climate Change

Certain gases in the earth's atmosphere classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the Earth's climate, known as global climate change or global warming.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of a GHG molecule is dependent on multiple variables and cannot be pinpointed, more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO₂ emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO₂ emissions remains stored

in the atmosphere.¹ **Table 4.4-1, Description of Greenhouse Gases** describes the primary GHGs attributed to global climate change, including their physical properties.

Table 4.4-1: Description of Greenhouse Gases

Greenhouse Gas	Description
Carbon Dioxide (CO ₂)	CO ₂ is a colorless, odorless gas that is emitted naturally and through human activities. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. The atmospheric lifetime of CO ₂ is variable because it is readily exchanged in the atmosphere. CO ₂ is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.
Nitrous Oxide (N ₂ O)	N ₂ O is largely attributable to agricultural practices and soil management. Primary human-related sources of N ₂ O include agricultural soil management, sewage treatment, combustion of fossil fuels, and adipic and nitric acid production. N ₂ O is produced from biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N ₂ O is approximately 120 years. The Global Warming Potential of N ₂ O is 298.
Methane (CH ₄)	CH ₄ , a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Methane is the major component of natural gas, about 87 percent by volume. Human-related sources include fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management. Natural sources of CH ₄ include wetlands, gas hydrates, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. The atmospheric lifetime of CH ₄ is about 12 years and the Global Warming Potential is 25.
Hydrofluorocarbons (HFCs)	HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is increasing, as the continued phase out of CFCs and HCFCs gains momentum. The 100-year Global Warming Potential of HFCs range from 124 for HFC-152 to 14,800 for HFC-23.
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Global Warming Potentials range from 6,500 to 9,200.
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987. Global Warming Potentials for CFCs range from 3,800 to 14,400.
Sulfur Hexafluoride (SF ₆)	SF ₆ is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas. The Global Warming Potential of SF ₆ is 23,900.

¹ Intergovernmental Panel on Climate Change (2013). *Carbon and Other Biogeochemical Cycles in Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Available at https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_all_final.pdf. Accessed March 2022.

Greenhouse Gas	Description
Hydrochlorofluorocarbons (HCFCs)	HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, HCFCs are subject to a consumption cap and gradual phase out. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year Global Warming Potentials of HCFCs range from 90 for HCFC-123 to 1,800 for HCFC-142b.
Nitrogen Trifluoride (NF ₃)	NF ₃ was added to Health and Safety Code §38505(g)(7) as a GHG of concern. This gas is used in electronics manufacture for semiconductors and liquid crystal displays. It has a high global warming potential of 17,200.
Source: Compiled from U.S. EPA. <i>Overview of Greenhouse Gases</i> . https://www.epa.gov/ghgemissions/overview-greenhouse-gases ; U.S. EPA. 2018. <i>Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016</i> . https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2016 ; IPCC. 2007. <i>Climate Change 2007: The Physical Science Basis</i> . https://www.ipcc.ch/site/assets/uploads/2018/05/ar4_wg1_full_report-1.pdf ; National Research Council. 2010. <i>Advancing the Science of Climate Change</i> . https://www.nap.edu/download/12782# ; U.S. EPA. 2010. <i>Methane and Nitrous Oxide Emission from Natural Sources</i> . https://nepis.epa.gov/Exec/QueryPDF.cgi/P100717T.PDF?Dockey=P100717T.PDF .	

4.4.3 Regulatory Setting

Federal

To date, national standards have not been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Federal Clean Air Act (FCAA) and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court’s ruling, the U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) constitute a threat to public health

and welfare. Thus, it is the Supreme Court's interpretation of the existing FCAA and the U.S. EPA's assessment of the scientific evidence that form the basis for the U.S. EPA's regulatory actions.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, Executive Order 13432 was issued in 2007 directing the U.S. EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the U.S. EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, an Executive Memorandum was issued directing the Department of Transportation, Department of Energy, U.S. EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the U.S. EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking. On January 12, 2017, the U.S. EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks. It should be noted that the U.S. EPA is currently proposing to freeze the vehicle fuel efficiency standards at their planned 2020 level (37 miles per gallon [mpg]), canceling any future strengthening (currently 54.5 mpg by 2026).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the U.S. EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the U.S. EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by six to 23 percent over the 2010 baselines.

In August 2016, the U.S. EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.

In 2018, the President and the U.S. EPA stated their intent to halt various federal regulatory activities to reduce GHG emission, including the phase two program. California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. On September 27, 2019, the U.S. EPA and the NHTSA published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program." (84 Fed. Reg. 51,310 (Sept. 27, 2019)). The Part One Rule

revokes California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the U.S. EPA and NHTSA finalized rulemaking for SAFE Part Two sets CO₂ emissions standards and corporate average fuel economy (CAFE) standards for passenger vehicles and light duty trucks, covering model years 2021-2026. The current U.S. EPA administration has repealed SAFE Rule Part One, effective January 28, 2022 and is reconsidering Part Two.

Presidential Executive Orders 13990 and 14008

On January 20, 2021, President Biden issued Executive Order 13990, "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis." Executive Order 13990 directs Federal agencies to immediately review and take action to address the promulgation of Federal regulations and other actions that conflict with these important national objectives and to immediately commence work to confront the climate crisis. Executive Order 13990 directs the Council on Environmental Quality (CEQ) to review CEQ's 2020 regulations implementing the procedural requirements of the National Environmental Policy Act (NEPA) and identify necessary changes or actions to meet the objectives of Executive Order 13990.

On January 27, 2021, President Biden signed Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," to declare the Administration's policy to move quickly to build resilience, both at home and abroad, against the impacts of climate change that are already manifest and will continue to intensify according to current trajectories. In line with these Executive Order directives, CEQ is reviewing the 2020 NEPA regulations and plans to publish a notice of proposed rulemaking (NPRM) to identify necessary revisions in order to comply with the law; meet the environmental, climate change, and environmental justice objectives of Executive Orders 13990 and 14008; ensure full and fair public involvement in the NEPA process; provide regulatory certainty to stakeholders; and promote better decision making consistent with NEPA's statutory requirements. This phase 1 rulemaking will propose a narrow set of changes to the 2020 NEPA regulations to address these goals.

State

California Air Resources Board

The California Air Resources Board (CARB) is responsible for the coordination and oversight of State and local air pollution control programs in California. Various statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of CO₂ equivalents (CO₂e) in the world and produced 459 million gross metric tons of CO₂e in 2013. In the State, the transportation sector is the largest emitter of GHGs, followed by industrial operations such as manufacturing and oil and gas extraction.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark Assembly Bill (AB) 32, *California Global Warming Solutions Act of 2006*, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

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

AB 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 also directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

CARB Scoping Plan

CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business-as-usual").² The Scoping Plan evaluates opportunities for sector-specific reductions, integrates early actions and additional GHG reduction measures by both CARB and the State's Climate Action Team, identifies additional measures to be pursued as regulations, and outlines the adopted role of a cap-and-trade program.³ Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions (adopted in 2011).
- Establishing targets for transportation related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets (several sustainable community strategies have been adopted).
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard (amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on gasses with high global warming potential, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated in light of current economic forecasts that accounted for the

² CARB defines business-as-usual (BAU) in its Scoping Plan as emissions levels that would occur if California continued to grow and add new GHG emissions but did not adopt any measures to reduce emissions. Projections for each emission-generating sector were compiled and used to estimate emissions for 2020 based on 2002–2004 emissions intensities. Under CARB's definition of BAU, new growth is assumed to have the same carbon intensities as was typical from 2002 through 2004.

³ The Climate Action Team, led by the secretary of the California Environmental Protection Agency, is a group of State agency secretaries and heads of agencies, boards, and departments. Team members work to coordinate statewide efforts to implement global warming emissions reduction programs and the State's Climate Adaptation Strategy.

economic downturn since 2008, reduction measures already approved and put in place relating to future fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 million metric tons of CO₂e (MMTCO₂e) to 545 MMTCO₂e. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated State-led GHG emissions reduction measures already in place. When this lower forecast is considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16 percent.

CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG emissions reductions necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32.

In 2016, the Legislature passed Senate Bill (SB) 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017 CARB adopted a second update to the Scoping Plan.⁴ The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support other Federal actions.

Senate Bill 32 (California Global Warming Solutions Act of 2006: Emissions Limit)

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

SB 375 (The Sustainable Communities and Climate Protection Act of 2008)

Signed into law on September 30, 2008, SB 375 provides a process to coordinate land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction goals established by AB 32. SB 375 requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies.

AB 1493 (Pavley Regulations and Fuel Efficiency Standards)

AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of

⁴ California Air Resources Board (2017). *California's 2017 Climate Change Scoping Plan*. Available at https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed March 12, 2020.

Columbia in 2011. The regulations establish one set of emission standards for model years 2009–2016 and a second set of emissions standards for model years 2017 to 2025. By 2025, when all rules will be fully implemented, new automobiles will emit 34 percent fewer CO₂e emissions and 75 percent fewer smog-forming emissions.

SB 1368 (Emission Performance Standards)

SB 1368 is the companion bill of AB 32, which directs the California Public Utilities Commission (CPUC) to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 limits carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. The new law effectively prevents California’s utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The CPUC adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, for 1,100 pounds of CO₂ per megawatt-hour.

SB 1078 and SBX1-2 (Renewable Electricity Standards)

SB 1078 requires California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, the Governor signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the State’s load serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23. SBX1-2, which codified the 33 percent by 2020 goal.

SB 350 (Clean Energy and Pollution Reduction Act of 2015)

Signed into law on October 7, 2015, SB 350 implements the goals of Executive Order B-30-15. The objectives of SB 350 are to increase the procurement of electricity from renewable sources from 33 percent to 50 percent (with interim targets of 40 percent by 2024, and 25 percent by 2027) and to double the energy efficiency savings in electricity and natural gas end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

AB 398 (Market-Based Compliance Mechanisms)

Signed on July 25, 2017, AB 398 extended the duration of the Cap-and-Trade program from 2020 to 2030. AB 398 required CARB to update the Scoping Plan and for all GHG rules and regulations adopted by the State. It also designated CARB as the statewide regulatory body responsible for ensuring that California meets its statewide carbon pollution reduction targets, while retaining local air districts’ responsibility and authority to curb toxic air contaminants and criteria pollutants from local sources that severely impact public health. AB 398 also decreased free carbon allowances over 40 percent by 2030 and prioritized

Cap-and-Trade spending to various programs including reducing diesel emissions in impacted communities.

SB 150 (Regional Transportation Plans)

Signed on October 10, 2017, SB 150 aligns local and regional GHG reduction targets with State targets (i.e., 40 percent below their 1990 levels by 2030). SB 150 creates a process to include communities in discussions on how to monitor their regions' progress on meeting these goals. The bill also requires the CARB to regularly report on that progress, as well as on the successes and the challenges regions experience associated with achieving their targets. SB 150 provides for accounting of climate change efforts and GHG reductions and identify effective reduction strategies.

SB 100 (California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases)

Signed into Law in September 2018, SB 100 increased California's renewable electricity portfolio from 50 to 60 percent by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs using executive orders. Although not regulatory, they set the tone for the State and guide the actions of state agencies.

Executive Order S-3-05. Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions 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 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07. Issued on January 18, 2007, Executive Order S 01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. CARB adopted the LCFS on April 23, 2009.

Executive Order S-13-08. Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order S-14-08. Issued on November 17, 2008, Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the Renewable Electricity Standard on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

Executive Order S-21-09. Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California's RPS to 33 percent by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006), which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

Executive Order B-30-15. Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO₂e (MMTCO₂e). The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by Executive Order S-3-05. The executive order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. With the enactment of SB 32 in 2016, the Legislature codified the goal of reducing GHG emissions by 2030 to 40 percent below 1990 levels.

Executive Order B-55-18. Issued on September 10, 2018, Executive Order B-55-18 establishes a goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing GHG emissions. The executive order requires CARB to work with relevant state agencies to develop a framework for implementing this goal. It also requires CARB to update the Scoping Plan to identify and recommend measures to achieve carbon neutrality. The executive order also requires state agencies to develop sequestration targets in the Natural and Working Lands Climate Change Implementation Plan.

Executive Order N-79-20. Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045 where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new zero emission vehicles (ZEVs) "towards the target of 100 percent." The executive order directs the California Environmental Protection Agency, the California Geologic Energy Management Division (CalGEM), and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Regulations. The appliance efficiency regulations (California Code of Regulations [CCR] Title 20, §1601-1608) include standards for new appliances. Twenty-three categories of appliances are included in the scope of these regulations. These standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

Title 24 Building Energy Efficiency Standards. California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6), was first adopted 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 efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2016 Building Energy Efficiency Standards approved on January 19, 2016 went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards were adopted on May 9, 2018 and went into effect on January 1, 2020. Under the 2019 standards, homes will use about 53 percent less energy and nonresidential buildings will use about 30 percent less energy than buildings under the 2016 standards. The CEC adopted the 2022 Energy Code on August 11, 2021, which was subsequently approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code 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.

Title 24 California Green Building Standards Code. The California Green Building Standards Code (CCR Title 24, Part 11 code) commonly referred to as 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. The most recent update to the CALGreen Code went into effect January 1, 2020. The 2019 CALGreen standards improve upon the previous standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The CEC adopted the 2022 CALGreen Code, which will go into effect on January 1, 2023.

Regional

South Coast Air Quality Management District Thresholds

The South Coast Air Quality Management District (SCAQMD) formed a GHG California Environmental Quality Act (CEQA) Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. This working group was formed to assist SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research, CARB, the Attorney General's Office, a variety of city and county planning departments in SCAB, various utilities such as sanitation and power companies throughout SCAB, industry groups, and environmental and professional organizations. The Working Group has proposed to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency, wherein projects are evaluated sequentially through a series of "tiers" to determine whether the project is likely to result in a potentially significant impact due to GHG emissions.

With the tiered approach, the Project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. The SCAQMD has adopted a threshold of 10,000 metric tons of CO₂e (MTCO₂e) per year for industrial projects and a 3,000 MTCO₂e threshold was proposed for non-industrial projects but has not been adopted. The SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Tier 4 consists of three decision tree options. Under the Tier 4 first option, SCAQMD initially outlined that a project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual emissions. However, the Working Group did not provide a recommendation for this approach. The Working Group folded the Tier 4 second option into the third option. Under the Tier 4 option, a project would be excluded if it was below an efficiency-based threshold of 4.8 MTCO₂e per service population per year. Tier 5 would exclude projects that implement off-site mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

Tier 3 Screening Thresholds

When the tiered approach is applied to a proposed project, and the project is found not to comply with Tier 1 or Tier 2, the project's emissions are compared against a screening threshold, as described above, for Tier 3. The screening threshold formally adopted by SCAQMD is an "interim" screening threshold for stationary source industrial projects where the SCAQMD is the lead agency under CEQA. The threshold was termed "interim" because, at the time, SCAQMD anticipated that CARB would be adopting a statewide significance threshold that would inform and provide guidance to SCAQMD in its adoption of a final threshold. However, no statewide threshold was ever adopted, and the interim threshold remains in effect.

For projects for which SCAQMD is not a lead agency, no screening thresholds have been formally adopted. However, the SCAQMD Working Group has recommended a threshold of 10,000 MTCO₂e/year for industrial projects and 3,000 MTCO₂e/year for residential and commercial projects. SCAQMD determined that these thresholds would “capture” 90 percent of GHG emissions from these sectors, “capture” meaning that 90 percent of total emissions from all new projects would be subject to some type of CEQA analysis (i.e., found potentially significant).⁵

Southern California Association of Governments

On September 3, 2020, SCAG’s Regional Council adopted *Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy [2020 RTP/SCS])*. The RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The strategy was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The RTP/SCS is a long-range vision plan that balances future mobility and housing needs with economic, environmental, and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions.

Local

City of Moreno Valley General Plan

The City of Moreno Valley’s General Plan outlines the concerns of the community and the means of addressing those concerns. Chapter 6, Safety focuses on potential for natural hazards that pose risk to human health and property, including earthquakes, landslides, flooding, wildfire, and wind-related hazards. These risks are compounded by the warming of the climate, which is projected to bring hotter average daily temperatures, increased rainfall intensity, and more extreme weather events. General Plan policies that relate to greenhouse gas impacts include the following:

Goal S-3: ***Build community resilience to climate change.***

Policy S.3-1: Continue to collaborate in regional climate action planning initiatives.

Policy S.3-6: Encourage the use of landscaping, building materials, and site design techniques that provide passive cooling and reduce energy demand. In particular, promote the use of voluntary measures identified in the California Green Building Code (Title 24, Part 11 of the California Code of Regulations) to minimize heat island effects, including hardscape and roof materials with beneficial solar reflectance and thermal emittance values and measures for exterior wall shading.

Policy S.3-7: Require new development to provide and maintain shade trees suitable to local climatic conditions. A climate-appropriate strategy may involve planting mostly drought-tolerant

⁵ SCAQMD, “Staff Report: Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans,” December 5, 2008, Attachment E: “Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold,” October 2008, p. 3-2.

native trees that may have less foliage, interspersed with leafier trees at points where people gather.

Policy S.3-8: Assess the feasibility of implementing urban heat island mitigation technologies in public gathering places, including UV-reflective materials and coatings, porous pavement, evaporative cooling towers, or other technologies that can reduce surface and air temperature and mitigate for the effects of extreme heat.

City of Moreno Valley Climate Action Plan

The City of Moreno Valley published a Climate Action Plan (CAP) Draft on March 30, 2021. The Moreno Valley CAP is designed to reinforce the City's commitment to reducing greenhouse emissions and demonstrate how the City will comply with California's GHG emission reduction standards. Transportation Measures Transportation was found to be the largest contributor to GHG emissions. The following transportation measures are applicable to the Project:

TR-5: Employment-Based Trip Reductions. Require a Transportation Demand Management (TDM) program for new development to reduce automobile travel by encouraging ride-sharing, carpooling, and alternative modes of transportation.

TR-9: Consider requiring new multi-family residential and mixed-use development to reduce the need for external trips by providing useful services/facilities on-site such as an ATM, vehicle refueling, electric vehicle infrastructure, and shopping. Residential Measures Moreno Valley seeks to provide a range of new housing suited to people of all ages and income levels with an emphasis on increasing the diversity of housing types in the community and promoting construction of multi-family and mixed-use residential development in infill areas near employment and shopping and well-served by transit and public facilities. The following strategies identified in the CAP represent opportunities to reduce residential emissions through energy-efficient improvements, energy audits, and citywide programs:

R-1: Provide incentives such as streamlined permitting or bonus density for new multi-family buildings and re-roofing projects to install "cool" roofs consistent with the current California Green Building Code (CALGreen) standards for commercial and industrial buildings.

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

R-3: Develop and implement program to incentivize single-family residential efficiency retrofits and participation in Moreno Valley Utility direct install program with the goal of a 50 percent energy reduction compared to baseline in 30 percent of the total single-family homes citywide by 2040.

R-7: Develop and implement program to incentivize multi-family residential efficiency audits and participation in Moreno Valley Utility direct install program with the goal of a 50 percent energy reduction in 30 percent of the projected amount of multi-family homes citywide by 2035.

4.4.4 Impact Thresholds and Significance Criteria

Thresholds and Significance Criteria

Addressing GHG emissions generation impacts requires an agency to determine what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine whether a project's GHG emissions will have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions.⁶

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a project normally would have a significant effect on the environment if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

South Coast Air Quality Management District Thresholds

On September 28, 2010, the SCAQMD recommended an interim screening level numeric "bright-line" threshold of 3,000 metric tons per year of CO₂e for non-industrial land uses. These efficiency-based thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. This working group was formed to assist SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research, CARB, the Attorney General's Office, a variety of city and county planning departments in SCAB, various utilities such as sanitation and power companies throughout SCAB, industry groups, and environmental and professional organizations. The numeric "bright line" was developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provides guidance to CEQA practitioners in determining whether GHG emissions from a proposed project are significant.

The City has not adopted project-specific significance thresholds. For the proposed project, the SCAQMD's proposed 3,000 MTCO₂e/year non-industrial screening threshold is used as the significance threshold in addition to the qualitative thresholds of significance set forth below from CEQA Guidelines Appendix G, Section VII. The 3,000 MTCO₂e/year screening threshold represents a 90 percent capture rate (i.e., this threshold captures projects that represent approximately 90 percent of GHG emissions from new sources). The 3,000 MTCO₂e/year value is typically used in defining small projects that are considered less than significant.⁷

⁶ 14 California Code of Regulations, §15064.4a

⁷ On page 3-2 and 3-3 of the SCAQMD's *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* (October 2008) the SCAQMD notes that a GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term GHG impacts. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic

Project Design Features

In addition to applying existing standard conditions and regulatory requirements, the Project has incorporated the following Project Design Features into the SPA and TPM:

- The Project consists of redeveloping an existing developed regional mall site, which would reduce grading and construction-related emissions that would otherwise be associated with constructing a new mall at the current site or developing new regional commercial uses at an alternate site;
- The concept grading plan proposes relatively minor off-site soil import/export (less than 5,000 cubic yards) and use of an on-site borrow pit, which minimizes air emissions associated with off-site truck traffic during construction;
- The Project incorporates enhancements to the existing transit stop, which would increase transit opportunities to and from the mall, reducing traffic, air quality, GHG and noise impacts; and
- The Project incorporates pedestrian-friendly walkways and open space into a mixed-use commercial retail environment, which would encourage non-vehicular transportation with corresponding reductions in traffic-related air quality, GHG and noise impacts.

Methodology and Assumptions

Global climate change is, by definition, a cumulative impact of GHG emissions. Therefore, there is no project-level analysis. The baseline against which to compare potential impacts of the Project includes the natural and anthropogenic drivers of global climate change, including world-wide GHG emissions from human activities which almost doubled between 1970 and 2010 from approximately 27 gigatonnes (Gt) of CO₂/year to nearly 49 GtCO₂/year.⁸ As such, the geographic extent of climate change and GHG emissions' cumulative impact discussion is worldwide.

The Project's construction and operational emissions were calculated using the California Emissions Estimator Model version 2020.4.0 (CalEEMod). Details of the modeling assumptions and emission factors are provided in **Appendix E, Greenhouse Gas Emissions Data**. The Project's construction-related GHG emissions would be generated from off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. For construction, CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted based on the proposed construction schedule and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod.

The Project's operational GHG emissions would be generated by vehicular traffic, area sources (e.g., landscaping maintenance, consumer products), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste. These emissions categories are discussed below.

growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that the SCAQMD estimates that these GHG emissions would account for less than one percent of future 2050 statewide GHG emissions target (85 MMTCO₂e/year). In addition, these small projects would be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory.

⁸ Intergovernmental Panel on Climate Change (2014). *Climate Change 2014 Mitigation of Climate Change Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Available at https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_full.pdf. Accessed March 2022.

- **Area Sources.** Area source emissions occur from hearths, architectural coatings, landscaping equipment, and consumer products. Additionally, the primary emissions from architectural coatings are volatile organic compounds, which are relatively insignificant as direct GHG emissions.
- **Energy Consumption.** Energy consumption consists of emissions from project consumption of electricity and natural gas. Primary uses of electricity and natural gas by the Project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. Energy emissions are calculated based on consumption rates and emissions factors in CalEEMod. No changes were made to the default energy usage consumption rates or emissions factors.
- **Solid Waste.** Solid waste releases GHG emissions in the form of methane when these materials decompose. Solid waste emissions are calculated based on generation rates and emissions factors in CalEEMod.
- **Water and Wastewater.** Project GHG emissions would be generated from energy consumption associated with water and wastewater conveyance and treatment. Water and wastewater emissions are calculated based on the estimated consumption and emissions factors in CalEEMod.
- **Mobile Sources.** Mobile sources are emissions from motor vehicles. The Project's generated traffic was obtained from the Project's Moreno Valley Mall Redevelopment Traffic Impact Analysis prepared by Kittelson and Associates (March 2022). Project trip generation from the traffic study is based on the following Institute of Transportation Engineers (ITE) land use categories:
 - ITE Land Use 310: Hotel (270 rooms, 2,158 total daily vehicle trips).
 - ITE Land Use 221: Residential (1,627 dwelling units, 7,390 total daily vehicle trips).
 - ITE Land Use 820: Retail (24 thousand square feet, 876 daily vehicle trips).
 - ITE Land Use 710: Office (60 thousand square feet, 652 total daily vehicle trips).

The total Project would generate 11,076 daily trips. Mobile source emission rates in CalEEMod used the CARB SAFE Rule adjustment factors.

Emissions reductions attributable mitigation measures were applied in CalEEMod, are derived from methodologies compiled in the CAPCOA report Quantifying GHG Measures. Each measure was assessed to determine its consistency with CAPCOA criteria for the use of the measure.

The following mitigation measure were applied in CalEEMod include:

- Transportation Demand Management Measures: TRT-1 (Implement Trip Reduction Program), TRT-3 (Provide Ride Sharing Program), and TRT-11 (Employee Vanpool/Shuttle). **MM AQ-1** requires a TDM Program.
- A-1 - Electric Landscape Equipment. **MM AQ-3** requires electric landscape equipment.
- Energy Efficiency Measures: BE-1 (Exceed Title 24) and BE-4 (Energy Efficient Appliances). **MM GHG-1** requires the Project to comply with CALGreen Tier 2 and the mitigation requires a 20 percent improvement. **MM GHG-2** requires energy efficient appliances.
- SW-1 (75 Percent Reduction in Solid Waste Disposal). This measure is required by **MM GHG-3**.

4.4.5 Impacts and Mitigation Measures

Summary of Previous Environmental Analysis

GHG emissions for the original project were not quantified in the SP-200 EIR because GHG and climate change was not a required component of CEQA until 2019.

Impact 4.4-1 *Would the Project generate GHG emissions, either directly or indirectly, that could have a significant impact on the environment?*

Level of Significance: Significant and Unavoidable

Short-Term Construction Greenhouse Gas Emissions

The Project would result in direct emissions of CO₂, N₂O, and CH₄ from construction equipment and the transport of materials and construction workers to and from the Project site. The GHG emissions only occur during temporary construction activities and would be cease once construction is complete. The total GHG emissions (in CO₂e) generated during construction are shown in **Table 4.4-2, Construction-Related Greenhouse Gas Emissions**.

Table 4.4-2: Construction-Related Greenhouse Gas Emissions

Category	MTCO ₂ e
2023 Construction	5,557
2024 Construction	8,229
2025 Construction	4,040
2026 Construction	2,545
<i>Total Construction Emissions</i>	20,371
30-Year Amortized Construction	679
Source: CalEEMod version 2020.4.0. Refer to Appendix E for model outputs.	

As shown, the Project would result in the generation of approximately 20,371 MTCO₂e over the course of construction. Construction GHG emissions are typically summed and amortized over a 30-year period, then added to the operational emissions.⁹ The amortized Project construction emissions would be 679 MTCO₂e per year. Once construction is complete, the generation of these GHG emissions would cease.

Long-Term Operational Greenhouse Gas Emissions

Operational or long-term emissions occur over the life of the Project. GHG emissions would result from direct emissions such as Project generated vehicular traffic, on-site combustion of natural gas, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, the energy required to convey water to, and wastewater from the Project, the emissions associated with solid waste generated from the Project, and any fugitive refrigerants from air conditioning or refrigerators.

⁹ The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, August 26, 2009).

Prior to issuance of a building permit, the City of Moreno Valley would review and verify that the Project plans demonstrate compliance with the current version of the Building and Energy Efficiency Standards. The Project would also be required to adhere to the provisions of CALGreen, which establishes planning and design standards for sustainable site development, and energy efficiency. Construction activities would be required to monitor air quality emissions using applicable regulatory guidance such as the SCAQMD Rules.

GHG emissions associated with the Project are summarized in **Table 4.4-3, Operational Greenhouse Gas Emissions**. As shown in **Table 4.4-3**, the Project's unmitigated emissions would be approximately 12,619 MTCO₂e annually from both construction and operations. Project-related GHG emissions would exceed the 3,000 MTCO₂e per year threshold. The majority of the GHG emissions are associated with non-construction related mobile sources. Emissions of motor vehicles are controlled by State and Federal standards, and the Project has no control over these standards.

Additionally, **MM AQ-3** through **MM AQ-5** have been identified in the Project's Air Quality Assessment to reduce operational emissions. **MM AQ-3** requires the implementation of a Transportation Demand Management (TDM) program to reduce single occupant vehicle trips and encourage transit. **MM AQ-4** prohibits the use of any kind of fireplaces, and **MM AQ-5** requires all landscaping equipment used on-site shall be 100 percent electrically powered.

Standard Conditions (SC) GHG-1 through SC GHG-4, as required by local, state, or federal regulations or laws. **MM GHG-1** requires the Project to meet or exceed CALGreen Tier 2 standards to further improve energy efficiency. **MM GHG-2** requires the residential projects to have energy efficient appliances. and **MM GHG-3** requires the Project to divert 75 percent of waste from landfills.

As shown in **Table 4.4-3**, implementation of these mitigation measures and standard conditions would reduce GHG emissions to 10,615 MTCO₂e per year and the Project's emissions would still exceed the 3,000 MTCO₂e per year threshold. Additional mitigation to further reduce these emissions is not feasible. The TDM program required by **MM AQ-3** will reduce GHG emissions from commuting however additional mitigation to reduce the Project's mobile emissions is not feasible due to the limited ability of the City of Moreno Valley to address emissions resulting from mobile sources and/or emissions generated by cars and trucks outside of the City's limits. As with all land use projects, the Project's mobile and transportation related GHG emissions are a function of two parameters: emissions control technology and vehicle miles traveled (VMT).

Table 4.4-3: Operational Greenhouse Gas Emissions

Emissions Source	MTCO ₂ e per Year	
	Unmitigated	Mitigated
Construction Amortized Over 30 Years	679	679
Area Source ¹	28	20
Energy ²	5,448	4,363
Mobile ³	6,139	4,927
Solid Waste ⁴	492	123
Water and Wastewater	512	512
TOTAL	13,298	10,624
<i>Threshold</i>	<i>3,000</i>	<i>3,000</i>
Exceeds Threshold?	Yes	Yes
Note: 1. Mitigation Measure AQ-4 and AQ-5 (refer to the Projects Air Quality Assessment) prohibit fireplaces of any type and requires electric landscaping equipment, which would reduce area source emissions. 2. Mitigation Measures GHG-1 and GHG-2 require building energy efficiency and energy efficient appliances. 3. Mitigation Measure AQ-3 (refer to the Projects Air Quality Assessment) requires implementation of a TDM program. 4. Mitigation Measure GHG-3 requires a minimum of 75 percent solid waste diversion. Source: CalEEMod version 2020.4.0. Refer to Appendix E for model outputs.		

CARB is directly responsible for regulating mobile and transportation source emissions in the State. Regarding the first parameter, California addresses emissions control technology through a variety of legislation and regulatory schemes, including the state’s Low Carbon Fuel Standard (Executive Order S-01-07) (LCFS), a regulatory program designed to encourage the use of cleaner low-carbon transportation fuels in California, encourage the production of those fuels, and therefore, reduce GHG emissions and decrease petroleum dependence in the transportation sector. The regulatory standards are expressed in terms of the “carbon intensity” of gasoline and diesel fuel and their substitutes. Different types of fuels are evaluated to determine their “life cycle emissions” which include the emissions associated with producing, transporting, and using the fuels. Each fuel is then given a carbon intensity score and compared against a declining carbon intensity benchmark for each year. Providers of transportation fuels must demonstrate that the mix of fuels they supply for use in California meets these declining benchmarks for each annual compliance period. In 2018, CARB approved amendments to the LCFS, which strengthened the carbon intensity benchmarks through 2030 to ensure they are in-line with California’s 2030 GHG emission reduction target enacted through SB 32. This ensures that the transportation sector is meeting its obligations to achieve California’s GHG reduction targets. The state is also implementing legislation and regulations to address the second parameter affecting transportation related GHG emissions by controlling for VMT. Examples of this include SB 375, which links land use and transportation funding and provides one incentive for regions to achieve reductions in VMT, and SB 743, which discourages VMT increases for passenger car trips above a region-specific benchmark. However, the state has determined that VMT regulations are not applicable to heavy trucks, such as those that will utilize the proposed Project and generate the majority of the Project’s GHG emissions.

As such, the City of Moreno Valley has no regulatory control over emissions control technology and therefore limited ability to control or mitigate emissions associated with mobile source emissions associated with this Project.

Additional mitigation to further reduce the Project's non-mobile emissions is also not feasible. The Project's mitigation measures and standard conditions address non-mobile emissions to extent possible, by designing buildings to provide environmental design features, incorporate energy and water conservation measures, and provide electrical, heating, ventilation, lighting, and power systems that meet CALGreen Standards (**MM GHG-1** requires the Project to meet or exceed CALGreen Tier 2 standards, which exceeds code requirements) and generate or purchase 20 percent of the Project's energy demand from renewable sources. The Project would also require all major appliances installed in the multi-family units and hotels be Energy Star certified or equivalent energy efficiency (**MM GHG-2**). Further, the project would divert 75 percent of solid waste from landfills (**MM GHG-3**) and require landscape equipment to be 100 percent electric (**MM AQ-5**).

The reliance on carbon offsets to reduce either the Project's mobile or non-mobile emissions is also not feasible, as no local programs are available that would meet CEQA's criteria for a valid mitigation measure. To reduce emissions, purchased offset credits must be genuine, quantifiable, additional, and verifiable. Even offset credits purchased from CARB-approved offset project registries have been determined to not adequately assure that purchased offset credits accurately and reliably represent actual emissions reductions or cannot guarantee that such reductions are additional to any reduction that would occur under business-as-usual operations and reductions required by law. Such offsets have been determined to not comply with CEQA's definition of a valid mitigation measure. See *Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal.App.5th 467.

The City of Moreno Valley, the lead agency for the Project and the entity responsible for enforcing any mitigation measures incorporated into the Project and relied upon to reduce impacts to a less than significant level, has no enforcement authority over offset credits that fund carbon reduction projects outside of the City. Many offset credits "sell" reductions in emissions generated outside of California, which may not be genuine or verifiable. International offsets are even more difficult to verify, guarantee and enforce. Even CARB does not have enforcement authority over such reductions, let alone the City of Moreno Valley. Thus, the purchase of offset credits is not a feasible mitigation measure to reduce the emissions impact of the proposed Project.

Therefore, despite the incorporation of all feasible mitigation measures, GHG emissions remain significant and unavoidable.

SCAQMD Standard Conditions

Standard Conditions are existing requirements and standard conditions that are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. Typical standard conditions and requirements include compliance with the provisions of the Building Code, SCAQMD Rules, etc. The City may impose additional conditions during the approval process, as appropriate. Because Standard Conditions are neither Project specific nor a result of development of the Project, they are not considered to be either Project Design Features or Mitigation Measures.

- SC GHG-1** Require diesel powered construction equipment to turn off when not in use per Title 13 of the California Code of Regulations, §2449.
- SC GHG-2** Install water-efficient irrigation systems and devices, such as bubblers, drip systems, low volume sprays and smart irrigation controls for landscaping according to the City’s Landscape and Irrigation Design Standards (Chapter 9.17.030 of the City’s Municipal Code).
- SC GHG-3** The Project shall be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (§110.10) require buildings to be designed to have 15 percent of the roof area “solar ready” that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.
- SC GHG-4** The Project shall be designed in accordance with the applicable California Green Building Standards (CALGreen) Code (24 CCR, Part 11). The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. These requirements include, but are not limited to:
- Design buildings to be water efficient. Install water-efficient fixtures in accordance with §4.303 (residential) and §5.303 (nonresidential) of the California Green Building Standards Code Part 11.
 - Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with §4.408.1 (residential) and §5.408.1 (nonresidential) of the California Green Building Standards Code Part 11.
 - Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with §4.410 (residential) and §5.410 (nonresidential) of the California Green Building Standards Code Part 11.
 - Provide designated parking for any combination of low-emitting, fuel efficient and carpool/van pool vehicles. At least eight percent of the total parking spaces are required to be designated in accordance §5.106.5.2 (nonresidential), Designated Parking for Clean Air Vehicles, of the California Green Building Standards Code Part 11.
 - To facilitate future installation of electric vehicle supply equipment (EVSE), residential construction shall comply with §4.106.4 (residential electric vehicle charging) of the California Green Building Standards Code Part 11 and nonresidential construction shall comply with §5.106.5.3 (nonresidential electric vehicle charging) of the California Green Building Standards Code Part 11.

Applicable SP-200 EIR Mitigation Measures: No SP-200 EIR Mitigation Measures were identified for this topical area in the SP-200 EIR, as the SP-200 EIR did not address this issue.

Moreno Valley Mall Specific Plan Design Guidelines: The following design guidelines from the Moreno Valley Mall Specific Plan are applicable:

- DG – 100** Materials and technologies that minimize environmental impacts, reduce energy and resource consumption, and promote long-lasting development are encouraged.
- DG – 102** Window technologies such as tinting or insulated daylighting panels, should be utilized to decrease the energy costs associated with cooling buildings during most of the year where maximum transparency is not required.
- DG – 275** Use best available irrigation technology to maximize efficient use of water, including moisture sensors, multi-program electronic timers, rain shutoff devices, remote control valves, drip systems, backflow preventers, pressure reducing valves and precipitation-rated sprinkler heads. The irrigation system shall be designed to utilize low volume, high efficiency bubblers, MP rotators and low volume spray heads to reduce overall water consumption and increase efficiency.
- DG – 284** ET based ‘Smart’ controllers will be utilized to maximize water savings and comply with state and local water efficient landscape requirements.
- DG – 285** Plant selections shall be predominantly native and drought tolerant which have a low water use designation according to the WUCOLS rating for the particular site.
- DG – 311** Design buildings to accommodate renewable energy systems where feasible.
- DG – 313** Use water resources responsibly with a constant effort, to minimize the use of potable water.
- DG – 315** Low flow faucets and fixtures.
- DG – 324** Use of renewable materials where feasible
- DG – 325** The use of building materials with recycled content where feasible

Additional Mitigation Measures: Refer to **MM AQ-3** through **MM AQ-5** in **Section 4.2, Air Quality**. The following additional mitigation are also required.

- MM GHG-1** Prior to the issuance of a building permit, the Project Applicant shall provide documentation to the City of Moreno Valley demonstrating that the new development portions of the Project, excluding existing retail spaces, (upon buildout) will meet or exceed 2019 CALGreen Tier 2 standards in order to exceed 2019 Title 24 energy efficiency standards by a minimum of 20 percent. In addition, the Project shall demonstrate additional measures to reduce overall on-site energy consumption by 20 percent, such as: 1) install solar photovoltaic (PV) panels or other source of renewable energy generation on-site; or 2) otherwise acquire energy from the local utility that has been generated by renewable sources (for example, Southern California Edison Green Rate).

MM GHG-2 For residential projects, all major appliances (e.g., dishwashers, refrigerators, clothes washers and dryers, and water heaters) provided/installed shall be Energy Star certified or of equivalent energy efficiency where applicable. These appliances must be included on the building plans and specifications and verified by the City’s Building and Safety Division during plan check and prior to the issuance of the Certificate of Occupancy.

MM GHG-3 The development shall divert a minimum of 75 percent of landfill waste. Prior to issuance of certificate of occupancy, a recyclables collection and load area shall be constructed in compliance with City standards for recyclable collection and loading areas.

Impact 4.4-2 *Would the Project conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions?*

Level of Significance: Significant and Unavoidable

SCAG RTP/SCS Consistency

On September 3, 2020, SCAG’s Regional Council adopted Connect SoCal (2020 – 2045 Regional Transportation Plan/Sustainable Communities Strategy [2020 RTP/SCS]). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region’s future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG’s RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the Project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15.

The RTP/SCS contains over 4,000 transportation projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region’s network, and expand mobility choices for everyone. The RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding.

The plan accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. The RTP/SCS is also supported by a combination of transportation and land use strategies that help the region achieve state GHG emissions reduction goals and Federal Clean Air Act (CAA) requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to the RTP/SCS is an appropriate indicator of whether the Project would inhibit the post-2020 GHG reduction goals promulgated by the state. The Project’s consistency with the RTP/SCS goals is analyzed in detail in **Table 4.4-4, Regional Transportation Plan/Sustainable Communities Strategy Consistency**.

Table 4.4-4: Regional Transportation Plan/Sustainable Communities Strategy Consistency

SCAG Goals		Compliance	
GOAL 1:	Encourage regional economic prosperity and global competitiveness.	N/A:	This is not a project-specific policy and is therefore not applicable. However, the Project will revitalize the Moreno Valley Mall and would contribute to regional economic prosperity.
GOAL 2:	Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent:	Although this Project is not a transportation improvement project, the Project is located near existing transit routes on I-215 and SR-60.
GOAL 3:	Enhance the preservation, security, and resilience of the regional transportation system.	N/A:	This is not a transportation improvement project and is therefore not applicable.
GOAL 4:	Increase person and goods movement and travel choices within the transportation system.	N/A:	This is not a transportation improvement project and is therefore not applicable.
GOAL 5:	Reduce greenhouse gas emissions and improve air quality.	Consistent:	The Project is located within an urban area in proximity to existing transportation routes and freeways. Location of the project within a developed area would reduce trip lengths, which would reduce GHG and air quality emissions.
GOAL 6:	Support healthy and equitable communities	Consistent:	Although the Project exceeds regional thresholds for criteria pollutants, the Project does not exceed localized thresholds. Based on the Friant Ranch decision, projects that do not exceed the SCAQMD's LSTs would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and result in no criteria pollutant health impacts.
GOAL 7:	Adapt to a changing climate and support an integrated regional development pattern and transportation network.	N/A:	This is not a project-specific policy and is therefore not applicable.
GOAL 8:	Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	N/A:	This is not a project-specific policy and is therefore not applicable.
GOAL 9:	Encourage development of diverse housing types in areas that are supported by multiple transportation options.	Consistent:	The Project involves development of a mix of uses (commercial and residential) that would provide diverse housing options that would be served by Riverside Transit Authority (RTA).
GOAL 10:	Promote conservation of natural and agricultural lands and restoration of habitats.	N/A:	This Project is located within an urban area and is not located on agricultural lands.
Source: Southern California Association of Governments, <i>Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy, 2020.</i>			

Compliance with applicable State standards would ensure consistency with State and regional GHG reduction planning efforts. The goals stated in the RTP/SCS were used to determine consistency with the planning efforts previously stated. As shown in **Table 4.4-4**, the proposed Project would be consistent with the stated goals of the RTP/SCS. Therefore, the proposed Project would not result in any significant impacts or interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets.

Consistency with the CARB Scoping Plan

The California State Legislature adopted Assembly Bill (AB) 32 in 2006. AB 32 focuses on reducing GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, CARB adopted the *Climate Change Scoping Plan* (Scoping Plan) in 2008, which outlines actions recommended to obtain that goal. The Scoping Plan provides a range of GHG reduction actions that include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as the cap-and-trade program, and an AB 32 implementation fee to fund the program.

The 2017 Scoping Plan Update identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan in 2013. Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. As shown in **Table 4.4-5, Project Consistency with Applicable CARB Scoping Plan Measures**, the Project is consistent with most of the strategies, while others are not applicable to the Project. As such, impacts related to consistency with the Scoping Plan would be less than significant.

Table 4.4-5: Project Consistency with Applicable CARB Scoping Plan Measures

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
Transportation	California Cap-and-Trade Program Linked to Western Climate Initiative	Regulation for the California Cap on GHG Emissions and Market-Based Compliance Mechanism October 20, 2015 (CCR 95800)	Consistent. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers. However, the regulation indirectly affects people who use the products and services produced by these industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period.
	California Light-Duty Vehicle GHG Standards	Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles	Consistent. This measure applies to all new vehicles starting with model year 2012. The Project would not conflict with its implementation as it would apply to all new passenger vehicles purchased in California. Passenger vehicles, model year 2012 and later, associated with construction and operation of the Project would benefit from implementation of the Pavley emissions standards.
		2012 LEV III California GHG and Criteria Pollutant Exhaust and Evaporative Emission Standards	Consistent. The LEV III amendments provide reductions from new vehicles sold in California between 2017 and 2025. Passenger vehicles associated with the site would comply with LEV III standards.

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
	Low Carbon Fuel Standard	2009 readopted in 2015. Regulations to Achieve GHG Emission Reductions Subarticle 7. Low Carbon Fuel Standard CCR 95480	Consistent. This measure applies to transportation fuels utilized by vehicles in California. The Project would not conflict with implementation of this measure. Motor vehicles associated with construction and operation of the Project would utilize low carbon transportation fuels as required under this measure.
	Regional Transportation-Related GHG Targets.	SB 375. Cal. Public Resources Code §§21155, 21155.1, 21155.2, 21159.28	Consistent. The Project would provide development in the region that is consistent with the growth projections in the RTP/SCS.
	Goods Movement	Goods Movement Action Plan January 2007	Not applicable. The Project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.
	Medium/Heavy-Duty Vehicle	2010 Amendments to the Truck and Bus Regulation, the Drayage Truck Regulation and the Tractor-Trailer GHG Regulation	Consistent. This measure applies to medium and heavy-duty vehicles that operate in the state. The Project would not conflict with implementation of this measure.
	High Speed Rail	Funded under SB 862	Not applicable. This is a statewide measure that cannot be implemented by a project applicant or Lead Agency.
Electricity and Natural Gas	Energy Efficiency	Title 20 Appliance Efficiency Regulation	Consistent. The Project would not conflict with implementation of this measure. The Project would comply with the latest energy efficiency standards.
		Title 24 Part 6 Energy Efficiency Standards for Residential and Non-Residential Building	
		Title 24 Part 11 California Green Building Code Standards	
	Renewable Portfolio Standard/Renewable Electricity Standard.	2010 Regulation to Implement the Renewable Electricity Standard (33% 2020)	Consistent. The Project would obtain electricity from the electric utility, Southern California Edison (SCE). SCE obtained 30.9 percent of its power supply from renewable sources in 2020 and include 50 percent and 100 percent renewable Green Rate options. Therefore, the utility would provide power when needed on site that is composed of a greater percentage of renewable sources.
	Million Solar Roofs Program	SB 350 Clean Energy and Pollution Reduction Act of 2015 (50% 2030)	
	Million Solar Roofs Program	Tax Incentive Program	
Water	Water	Title 24 Part 11 California Green Building Code Standards	Consistent. The Project would comply with the CalGreen standards, which requires a 20 percent reduction in indoor water use. The Project would also comply with the City's Water-Efficient Landscaping Regulations (Chapter 9.17.030 of the Moreno Valley Municipal Code).
		SBX 7-7—The Water Conservation Act of 2009	
		Model Water Efficient Landscape Ordinance	
Green Buildings	Green Building Strategy	Title 24 Part 11 California Green Building Code Standards	Consistent. The State is to increase the use of green building practices. The Project would implement required green building strategies through existing regulation that requires the Project to comply with various CALGreen requirements.

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
Industry	Industrial Emissions	2010 CARB Mandatory Reporting Regulation	Not applicable. The Mandatory Reporting Regulation requires facilities and entities with more than 10,000 MTCO _{2e} of combustion and process emissions, all facilities belonging to certain industries, and all electric power entities to submit an annual GHG emissions data report directly to CARB. As shown above, although total Project GHG emissions would exceed 10,000 MTCO _{2e} , the project is not considered a “facility” and the majority of these emissions are from mobile sources. Therefore, this regulation would not apply.
Recycling and Waste Management	Recycling and Waste	Title 24 Part 11 California Green Building Code Standards	Consistent. The Project would not conflict with implementation of these measures. The Project is required to achieve the recycling mandates via compliance with the CALGreen code.
		AB 341 Statewide 75 Percent Diversion Goal	
Forests	Sustainable Forests	Cap and Trade Offset Projects	Not applicable. The Project is not located in a forested area.
High Global Warming Potential	High Global Warming Potential Gases	CARB Refrigerant Management Program CCR 95380	Not applicable. The regulations are applicable to refrigerants used by large air conditioning systems and large commercial and industrial refrigerators and cold storage system. The Project would not conflict with the refrigerant management regulations adopted by CARB.
Agriculture	Agriculture	Cap and Trade Offset Projects for Livestock and Rice Cultivation	Not applicable. The Project is located in an urban area. No grazing, feedlot, or other agricultural activities that generate manure occur currently exist on-site or are proposed to be implemented by the Project.
Source: California Air Resources Board, <i>California’s 2017 Climate Change Scoping Plan</i> , November 2017 and CARB, <i>Climate Change Scoping Plan</i> , December 2008.			

As seen in **Table 4.4-4** and **Table 4.4-5**, the Project would be consistent with all applicable plan goals. The proposed Project would be subject to compliance with all building codes in effect at the time of construction, which include energy conservation measures mandated by California Building Standards Code Title 24 – Energy Efficiency Standards. Because Title 24 standards require energy conservation features in new construction (e.g., high-efficiency lighting, high-efficiency heating, ventilating, and air-conditioning (HVAC) systems, thermal insulation, double-glazed windows, water conserving plumbing fixtures), they indirectly regulate and reduce GHG emissions. California's Building Energy Efficiency Standards are updated on an approximately three-year cycle.

As noted above, the largest portion of the Project’s emissions are from mobile sources. It is noted that the City has no control over vehicle emissions. Project emissions would be further reduced by implementation of the 2017 Scoping Plan measures. These emissions would decline in the future due to statewide measures including the reduction in fuels’ carbon content, CARB’s advanced clean car program, CARB’s mobile source strategy, fuel efficiency standards, cleaner technology, and fleet turnover. SCAG’s 2020 RTP/SCS is also expected to help California reach its GHG reduction goals, with reductions in per

capita transportation emissions of 19 percent by 2035.¹⁰ The Project includes a mix of residential and commercial land uses that would potentially reducing the need to travel long distances for some residents and reducing associated GHG emissions.¹¹

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the proposed Project would benefit from the implementation of current and potential future regulations (e.g., improvements in vehicle emissions, SB 100/renewable electricity portfolio improvements, etc.) enacted to meet an 80 percent reduction below 1990 levels by 2050.

The majority of the GHG reductions from the Scoping Plan would result from continuation of the Cap-and-Trade regulation. Assembly Bill 398 (2017) extends the state's Cap-and-Trade program through 2030 and the Scoping Plan provide a comprehensive plan for the state to achieve its GHG targets through a variety of regulations enacted at the state level. Additional reductions are achieved from electricity sector standards (i.e., utility providers to supply 60 percent renewable electricity by 2030 and 100 percent renewable by 2045), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the Mobile Source Strategy and Sustainable Freight Action Plan.

In conclusion, the Project does not conflict with the applicable plans that are discussed above and therefore with respect to this particular threshold, the Project does not have a significant impact. However, despite plan consistency, the Project's long-term operational GHG emissions would exceed the City's significance threshold of 3,000 MTCO₂e per year despite the implementation of **MM AQ-3** through **MM AQ-5** in the Air Quality Assessment and **MM GHG-1** through **MM GHG-3**, thus the Project could impede California's statewide GHG reduction goals for 2030 and 2050. A potentially significant impact would therefore occur as a result of the proposed Project.

SCAQMD Standard Conditions: Refer to **SC GHG-1** through **SC GHG-4** under **Impact 4.4-1** above.

Applicable SP-200 EIR Mitigation Measures: No SP-200 EIR Mitigation Measures were identified for this topical area in the SP-200 EIR, as the SP-200 EIR did not address this issue.

Moreno Valley Mall Specific Plan Design Features: Refer to Project Design Guidelines listed under **Impact 4.4-1** above.

Additional Mitigation Measures: Refer to **MM AQ-3** through **MM AQ-5** in **Section 4.2, Air Quality** and **MM GHG-1** through **MM GHG-3**, above.

¹⁰ California Air Resources Board (ND). *SB 375 Regional Plan Climate Targets*. Available at <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets>. Accessed March 2022.

¹¹ The California Air Pollution Control Officers Association, *Quantifying Greenhouse Gas Mitigation Measures* (August 2010) identifies that infill developments, such as the proposed Project reduce vehicle miles traveled which reduces fuel consumption. Infill projects such as the proposed Project would have an improved location efficiency.

4.4.6 Cumulative Impacts

Cumulative Setting

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have much longer atmospheric lifetimes of one year to several thousand years that allow them to be dispersed around the globe.

Cumulative Impacts

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of Project-related GHGs would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. As discussed above, the Project-related GHG emissions would exceed the City's 3,000 MTCO₂e threshold of significance despite implementation of **MM AQ-3** through **MM AQ-5** from **Section 4.2, Air Quality** and **MM GHG-1** through **MM GHG-3** and could impede statewide 2030 and 2050 GHG emission reduction targets. As such, the Project would result in a potentially significant cumulative GHG impact.

4.4.7 Significant Unavoidable Impacts

Even with implementation of regulatory requirements, standard conditions of approval, and reasonable and feasible mitigation, the Project would result in significant and unavoidable impacts with respect to consistency with GHG plans and GHG emissions, on an individual and cumulative basis.

4.4.8 References

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South Coast Air Quality Management District (2009). *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*. Available at [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-13/ghg-meeting-13-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-13/ghg-meeting-13-minutes.pdf). Accessed March 2022.

U.S. Environmental Protection Agency (2018). *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016*. Available at https://www.epa.gov/sites/default/files/2018-01/documents/2018_complete_report.pdf. Accessed March 2022.

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4.5 LAND USE AND PLANNING

4.5.1 Introduction

This section of the Draft Subsequent Environmental Impact Report (Draft SEIR) assesses the potential land use impacts contributed to by the implementation of the Project. The Project's potential to result in land use impacts is based on existing land uses of the Project site and surrounding area in the context of applicable federal, state, and local regulations. In the event where a potentially significant environmental impact is identified, mitigation measures would be proposed in order to reduce the impacts to less than significant levels.

The data presented in this section was obtained from available public resources including the Moreno Valley General Plan Update (MoVal 2040 GP), the MoVal 2040 Final Environmental Impact Report (MoVal 2040 Final EIR), Specific Plan No. 200 – Towngate Specific Plan (SP-200) and EIR, the City of Moreno Valley Municipal Code (Moreno Valley MC), and from applicable Project site plans and documents.

4.5.2 Environmental Setting

The Project site involves the redevelopment of approximately 58.6 acres of developed land in the northwestern portion of the City of Moreno Valley. The redevelopment would take place on the 92.9-acre site that currently accommodates the existing Moreno Valley Mall, and the existing JCPenney and Macy's parcels (excluded from the Project). In addition, the Project includes a Specific Plan Amendment (SPA) to supersede SP-200, to allow a mix of retail and residential land uses within the SP-200 planning area, consistent with the MoVal 2040 GP.

The Project site currently has a General Plan Land Use Designation of mixed-use community overlay.¹ Additionally, the Project site is a component of the Moreno Valley Mall Concept Area that is one of the 'Centers' delineated by the MoVal 2040 GP. These centers are intended to be focal points of the community and dynamic destinations characterized by vibrant mixed-uses that draw in residents and visitors of Moreno Valley.² The MoVal 2040 GP makes note of the Project site as an opportunity site for the redevelopment of this variety.

Land uses surrounding the Project site include commercial uses to the east and west, a residential apartment community to the south, and the Moreno Valley Freeway (State Route 60 [SR-60]) bordering the Project site to the north. Commercial uses to the east and west are characterized by large retail establishments, high-capacity parking lots, a variety of eateries, and hotels. A single-family residential community is located to the north of the Project site, on the opposite side of the SR-60.

¹ City of Moreno Valley (2021). *City of Moreno Valley Zoning Map*. Available at <http://www.moreno-valley.ca.us/cdd/pdfs/ZoningMap.pdf>. Accessed January 17, 2022.

² City of Moreno Valley (2021). *MoVal 2040 General Plan: Chapter 2 Land Use and Community Character*. Available at www.moval.org/cdd/documents/general-plan-documents-draft-general-plan.html. Accessed January 17, 2022.

4.5.3 Regulatory Setting

State

California Planning and Zoning Law

The legal framework in which California cities and counties exercise local planning and land use functions is set forth in the California Planning and Zoning Law, §§65000 to 66499.58. Under state planning law, each city and county must adopt a comprehensive, long-term general plan. State law gives cities and counties wide latitude in how a jurisdiction may create a general plan, but there are fundamental requirements that must be met. These requirements include the inclusion of seven mandatory elements described in the Government Code, including a section on land use. Each of the elements must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and mitigation measures.

California Codes

The California Codes are 29 legal codes enacted by the California State Legislature, which together form the general statutory law of California. Unlike the U.S. Code or other U.S. state legal codes, they have never been consolidated into a single unified code. The official Codes are maintained by the California Legislative Counsel for the Legislature. California Government Code §539091(d) states “Building ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water, wastewater, or electrical energy by a local agency.”

Furthermore, §539091(e) states “Zoning ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water, or for the production or generation of electrical energy, facilities that are subject to §12808.5 of the Public Utilities Code, or electrical substations in an electrical transmission system that receives electricity at less than 100,000 volts. Zoning ordinances of a county or city shall apply to the location or construction of facilities for the storage or transmission of electrical energy by a local agency, if the zoning ordinances make provision for those facilities.”

Regional

Southern California Association of Governments

Southern California Association of Governments (SCAG) is a council of governments representing Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial counties. SCAG is the Federally recognized Metropolitan Planning Organization (MPO) for this region. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the southern California region’s MPO, SCAG cooperates with the South Coast Air Quality Management District, the California Department of Transportation, and other agencies in preparing regional planning

documents. SCAG has developed the Regional Comprehensive Plan, the Regional Housing Needs Assessment, and the Regional Transportation Plan /Sustainability Communities Strategy (RTP/SCS).

2020-2045 Regional Transportation Plan/Sustainable Communities Strategies

SCAG's Connect SoCal 2020-2045 RTP/SCS provides the long-range vision of the SCAG region. The RTP/SCS expands land use and transportation strategies established from previous cycles to increase mobility options and achieve a more sustainable growth pattern.³ The RTP/SCS contains plans and projections for the region's future, from 2020 through the horizon year of 2045. Like other RTP/SCS publications, the Connect SoCal RTP/SCS provides a policy framework for preparing local plans and handling issues of regional significance, such as land use and housing, open space and biological habitats, water, energy, air quality, solid waste, transportation, security and emergency preparedness, economy, and education. Specifically, the plan also strives to achieve broader regional objectives, such as the preservation of natural lands, improvement of public health, increased roadway safety, support for the region's vital goods movement industries and more efficient use of resources.

The RTP/SCS advances regional planning by incorporating an integrated approach between SCAG, State and local governments, transportation commissions, resources agencies and conservation groups, the private sector, and the general public.

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a long-term regional conservation plan established to protect sensitive species and habitats in western Riverside County. The MSHCP Plan Area provides a regional vision for balanced growth by complying with federal and state endangered species laws.⁴

City of Moreno Valley 2040 General Plan

The Moreno Valley 2040 General Plan (MoVal 2040 GP) is the City's blueprint for how and where Moreno Valley will grow over the next 20 years. The City initiated the process of updating the General Plan in late 2019. This update to the general plan expanded upon and enhanced the 2006 General Plan for the City. Generally, the MoVal 2040 GP increase the allowable density of commercial uses within the City. Despite this, the Project currently proposes a less intense and dense use than envisioned in the 2006 General Plan. On June 15, 2021, the City Council approved the update of the City's General Plan.

The MoVal 2040 GP – Land Use and Community Character (LCC) Element delineates existing and proposed land uses as well as development criteria for development intensity within the City of Moreno Valley. The goals, objectives, and policies in the MoVal 2040 GP provide actions and plans for the City and are not

³ Southern California Association of Governments (2021). *Connect SoCal 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*. Available at <https://scag.ca.gov/read-plan-adopted-final-plan>. Accessed January 2022.

⁴ County of Riverside Transportation and Land Management Agency (2003). *Final Multiple Species Habitat Conservation Plan: Volume I*. Available at https://www.wrc-rca.org/Permit_Docs/MSHCP/MSHCP-Volume%20I.pdf. Accessed January 2022.

necessarily to be achieved by private development, such as the Project. However, the Project would support the City in reaching the goals, as feasible.⁵

The Land Use and Community Character Element provides a vision for future growth that achieves an orderly balance between different land uses and utilizes opportunities to mix different land uses. Within these mixed-use areas, the MoVal 2040 GP envisions focal points of activities and amenities that draw in people and contribute to a sense of place. The Project itself lies within the Moreno Valley Mall Concept Area, which puts forth conceptual considerations that emphasize mixed-use spaces and pedestrian-oriented community hubs. The Moreno Valley Mall Concept Area is additionally designated as Center Mixed Use (CEMU) – a designation that provides for the redevelopment of existing commercial centers to mixed-use and may also incorporate higher-density housing on-site. According to the MoVal 2040 GP, the maximum permitted Floor-area Ratio (FAR) in the CEMU designation is 1.25, with a residential density range of 20 to 35 dwelling units per acre.

The following goals and policies from the MoVal 2040 GP are pertinent to the Project:

Land Use and Community Character Element

Goal LCC-1: *Establish an identifiable city structure and a flexible land use framework that accommodates growth and development over the planning horizon.*

Policy LCC.1-A: Use development agreements, impact fees, benefit districts and other mechanisms to ensure the provision of adequate infrastructure to serve new development.

Policy LCC.1-11: Require that new development be compatible with the standards for land uses, density and intensity specified in the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (March ALUC Plan).

Goal LCC-2: *Foster vibrant gathering places for Moreno Valley residents and visitors.*

Land Use and Community Character: Moreno Valley Mall and Towngate Center

Policy LCC.2-12: Introduce medium to high density housing to the site and provide townhomes, apartments, and condominiums that cater to the needs of residents of all ages and stages of life.

Policy LCC.2-13: Allow the maximum permitted FAR to be calculated across multiple parcels in a single proposed development at the Moreno Valley Mall in order to incentivize signature development that makes a positive contribution to community character at this prominent gateway site.

Policy LCC.2-14: Focus on attracting essential services to the site, such as medical clinics, a grocery store, banks, and dry cleaners to the site to provide for the needs of area residents and ensure the vitality of the site over time.

⁵ City of Moreno Valley (2021). *City of Moreno Valley General Plan 2040 Draft: Land Use and Community Character*. Available at www.moval.org/cdd/documents/general-plan-documents-draft-general-plan.html. Accessed January 17, 2022.

- Policy LCC.2-15:** Encourage mixed use development and the co-location of residential and commercial uses within sight distance of one another on the site to promote day and evening vitality.
- Policy LCC.2-16:** Design residential buildings adjacent to the freeway with adequate ventilation and sound proofing to minimize air and noise impacts.
- Policy LCC.2-17:** Provide restaurants, cafes and bars with terraces, as well as public plazas, parks, public art, and family-friendly amenities that activate public spaces and build sense of place.
- Policy LCC.2-18:** Design and build new internal roadways with narrower widths, ample sidewalks, and street parking to help create a more intimate walkable feel in the areas.
- Policy LCC.2-19:** Provide a network of interconnected streets, paseos, pathways, and bicycle routes on-site that facilitates travel through the site for pedestrians, cyclists and other non-motorized modes of transportation.
- Action LCC.2-C:** Work with property owners at the Moreno Valley Mall and Towngate Center to facilitate redevelopment of underutilized parcels.

City of Moreno Valley Municipal Code

The Moreno Valley MC Title 9: Planning and Zoning addresses standards for orderly land use and resource planning to achieve sustainable growth.⁶ This document furthermore outlines the City’s guidelines and requirements for developments for each zoning type. Development standards ensure that new uses and development will contribute to and be harmonious with existing and potential development in the surrounding area, as well as further the goals, objectives, policies, and implementation programs of the MoVal 2040 GP (Moreno Valley MC §9.08.010).

Approved Towngate Specific Plan SP-200

The Moreno Valley Mall makes up Planning Area 2 (PA2) within the Towngate Specific Plan 200 (SP-200), which was originally approved by the City Council on October 27, 1987, and subsequently amended. Amendment 3, approved in 1991, re-targeted PA2 land use to more commercial retail uses. The SP-200 envisioned another mall anchor in addition to the existing Moreno Valley Mall which is allowable under SP-200 on the 92.9-acre mall site.

The overall Specific Plan area is approximately 500 acres located on the western portion of the City bounded by SR-60 to the north, Cottonwood Avenue to the south, and Frederick Street to the east, and Day Street to the west. The PA2 planning area includes the Moreno Valley Mall, the City’s major shopping center. More recent commercial developments in this planning area include Towngate Crossing, Towngate Promenade, Towngate Square, and Towngate Center/Plaza. New commercial/retail developments continue to this day.

⁶ City of Moreno Valley (2021). *Moreno Valley Municipal Code, Title 9: Planning and Zoning*. Available at https://library.qcode.us/lib/moreno_valley_ca/pub/municipal_code. Accessed January 17, 2022.

At the time of its adoption, SP-200 involved the redevelopment of an unincorporated part of Riverside County that was home to the Riverside International Raceway. The plan envisioned a mixed-use town center that housed residential, commercial, and office uses. Foreseeable project impacts to land use were associated with the permanent alteration of the blighted raceway site to the urban development that exists today.

4.5.4 Impact Thresholds and Significance Criteria

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning land use and planning. The questions presented in the Environmental Checklist Form have been utilized as significant criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Physically divide an established community (See Impact 4.5-1).
- 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 (See Impact 4.5-2).

Project Design Features

In addition to applying existing standard conditions and regulatory requirements, the Project has incorporated the following Project Design Features into the SPA and TPM:

- The Project proposes a substantial “redevelopment” of the existing Moreno Valley Mall, which will improve overall site characteristics by renovating parking and landscape areas, and introducing new modern architecture for the residential, hotel, and office buildings; and
- The proposed SPA includes Development Regulations and Design Guidelines (Chapters 3 and 4 of the SPA, respectively) to ensure compatibility of land uses both within the SPA and with adjacent land uses.

Methodology and Assumptions

The Project and associated Project Design Features (PDFs) are evaluated against the aforementioned significance criteria/thresholds, as the basis for determining the impact’s level of significance concerning land use and planning. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impact. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the Project’s potentially significant environmental impacts.

Approach to Analysis

This analysis of impacts on land use and planning examines the Project’s temporary (i.e., construction) and permanent (i.e., operational) effects, when relevant, based on application of the significance criteria/thresholds outlined above. Each criterion is discussed in the context of the Project site and the surrounding characteristics/geography. The impact conclusions consider the potential for changes in

environmental conditions, as well as compliance with the regulatory framework enacted to protect the environment.

The baseline conditions and impact analyses are based on review of Project maps and drawings; analysis of aerial and ground-level photographs; and review of various data available in public records, including local planning documents. A site visit of the Project site was conducted by Kimley-Horn and Associates on January 12, 2022. The determination that a Project component would or would not result in “significant” adverse effects on land use and planning considers the available policies and regulations established by local and regional agencies and the amount of deviation from these policies in the Project’s components.

4.5.5 Impacts and Mitigation Measures

Summary of Previous Environmental Analysis

The SP-200 EIR analyzed potential land use impacts (i.e., impacts to on-site and adjacent land uses) associated with the proposed Moreno Valley Mixed Use Development. The SP-200 EIR concluded that potential land use impacts would be reduced to a less than significant level with compliance to the proposed mitigation measures. In addition, the SP-200 EIR did not identify significant unavoidable impacts to land use associated with SP-200 approval. The following mitigation measures related to land use were identified (as a note, for text in these SP-200 mitigation measures that has ~~struck through~~ has been deleted as it is not relevant to the Project. Text that has underline has been added to the mitigation measure to clarify or make more relevant to the Project):

MM LU-1 ~~Development of the site through a coordinated Specific Plan rather than on an incremental (smaller parcel) basis is considered advantageous and is intended to mitigate potential land use impacts. The complementary uses proposed for the property will provide a variety of services and recreational amenities to future project residents. (This mitigation measure was required for the original SP-200 approval and has since been completed by the completion of the Specific Plan).~~

MM LU 2 ~~Following project approval, a Design Handbook will be prepared, setting standards related to edge treatment, landscaping, architecture, etc. It will also detail the proposed buffering techniques to separate the proposed commercial uses from existing adjacent neighborhoods. (This mitigation measure was required for the original SP-200 approval and has since been completed).~~

MM LU 3 ~~The application for reorganization (annexation) submitted to LAFCO will be accompanied by a plan for services which will outline the level and costs of services to be provided to the project. (This mitigation measure was required for the original SP-200 approval and has since been completed).~~

Impact 4.5-1 *Would the Project physically divide an established community?*

Level of Significance: No Impact

The Project would have a significant environmental impact if it were sufficiently large or otherwise configured in such a way that it creates a physical barrier to or within an established community, such as the creation of a highway through an existing community that would restrict travel. The Project proposes

to redevelop an existing commercial community hub – revitalizing the existing mall, entertainment, and dining centers and improving the quality of pedestrian spaces. In doing so, the Project would not remove existing roadway connections to the Project site and its surrounding residential and commercial uses. Conversely, the Project would include the addition of pedestrian connections within the Project site – replacing portions of the current parking lot – and improve the quality of pedestrian walkways along existing roadways. Because there is a design-focus on pedestrian access and cohesion between uses within and adjacent to the Project site, the Project would not adversely impact community cohesiveness and existing connections.

The Project would not result in the physical division of an established community because the existing Moreno Valley Mall does not constitute a ‘community.’ The proposed SPA is consistent with the overall development vision of the MoVal 2040 GP, and the Project maintains some of the existing commercial uses and would improve cohesion with the neighboring commercial uses. The Project does not propose the construction or alteration of roads or pathways that would disrupt the southerly adjacent residential uses. Because implementation of the Project would not physically divide an established community, there would be no impact and no mitigation is necessary.

Applicable SP-200 EIR Mitigation Measures: The following SP-200 EIR Mitigation Measures are applicable to this topical area:

MM LU-1 Development of the site through a coordinated Specific Plan rather than on an incremental (smaller parcel) basis is considered advantageous and is intended to mitigate potential land use impacts. The complementary uses proposed for the property will provide a variety of services and recreational amenities to future project residents.

Moreno Valley Mall Specific Plan Design Guidelines: The following Design Guidelines of the Moreno Valley Mall Specific Plan are applicable to this topical area:

DG-1 Buildings should be located to define, connect, and activate engagement between public and private open spaces and usable plazas, parks, and gathering spaces.

DG-13 Commercial, residential, and hospitality uses should be planned in consideration of each other with the Master Plan and overall site connectivity a priority. Uses shall not be completely isolated.

DG-14 Commercial, residential, and hospitality structures may be placed adjacent to one another, provided they meet the required minimum setback, in a horizontal mixed-use setting or stacked with residential on top of commercial or office uses to promote an urban environment.

DG-15 When residential and commercial uses are located in the same structure in a mixed-use setting, development should provide separate entrances for each use.

DG-16 Residential uses should not front onto commercial or office loading areas or back-of-house facilities.

DG-17 Large multi-family residential projects should be defined and delineated in groups of Units. Clusters of multi-family structures should work together as one development.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.5-2 *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?*

Level of Significance: Less than Significant Impact

The Project is consistent with the overall intent of the SP-200, is consistent with the prior MoVal GP, and is consistent with the expanded policy and goals of the MoVal 2040 GP. The Specific Plan has been prepared in conformance with the goals and policies of the City’s General Plan, in providing a mixed-use development within a designated Center Mixed Use, adding to the variety of residential uses, encouraging the development of commercial recreational uses, creating new employment opportunities, and providing regulations that supports the continued regional and neighborhood success of a major commercial area of the City.

The Project fulfills the MoVal 2040 GP’s vision of fostering a mix of complementary land uses to generate vibrant, mixed-use districts that provide a range of options for living, working, and leisure activities in close proximity. The Project site is included in the Moreno Valley Mall Redevelopment/Concept area – an area specifically designated by the MoVal 2040 GP for revitalization in the way of mixed-use development. The Project site is compatible with neighboring commercial uses and would provide existing residential uses with community amenities. In addition, the Project proposes less density than allowed by both the MoVal 2040 GP and SP-200.

SCAG 2020-2045 RTP/SCS Strategies

The Project, as designed would be compatible with the strategies proposed by SCAG in their 2020-2045 RTP/SCS. These strategies were a collaborative effort between SCAG and local agencies with the intention of not only managing regional growth, but also maximizing ecological health.

The Project’s compliance with the RTP/SCS would promote the sustainable and beneficial growth of the region. **Table 4.5-1, Project Compatibility with SCAG 2020-2024 RTP/SCS** summarizes the Project’s compliance with the RTP/SCS.

Table 4.5-1: SCAG 2020 2045 RTP/SCS Connect SoCal Goals

RTP/SCS Strategies	Project Consistency
1. Encourage regional economic prosperity and global competitiveness.	Consistent: The proposed Project includes development of commercial, residential, and office facilities. The proposed Project would add to economic development of the region by adding new employment opportunities and creating a regional commercial hub. This would provide both temporary and permanent employment opportunities and add to the tax base and generate revenue for the City.
2. Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent: The Project consists of commercial development and transit facilities which will contribute to local or regional accessibility. At the local level, the proposed Project includes street improvements adjacent to the Project site which would provide increased connectivity to regional circulation elements including the I-215 freeway and SR-60 highway. The

RTP/SCS Strategies	Project Consistency
	Project also provides adequate ingress and egress to ensure circulation on Town Circle and Centerpoint Drive functions efficiently. In addition, the proposed Project is located in an area that is planned to serve as a regional anchor for commercial uses.
3. Enhance the preservation, security, and resilience of the regional transportation system.	Consistent: The Project would result in construction of mixed-use commercial, office, and residential development which entails employment opportunities and does include transportation improvements that would result in broad improvements to safety. As discussed above, the proposed Project includes a design that would ensure the safe and efficient movement of people and vehicles into and through the Project area, addressing light trucks and passenger vehicles, heavy trucks, public transit, and non-vehicular circulation (pedestrians and bicycles). The proposed Project would improve the local and regional reliability of public transit and non-vehicular modes.
4. Increase person and goods movement and travel choices within the transportation system.	Consistent: The proposed Project includes local vehicular, non-vehicular, and public transportation improvements that supports the continued regional and neighborhood success of a major commercial area of the City.
5. Reduce greenhouse gas emissions and improve air quality.	Consistent: The proposed Project would include interior circulation elements and adjacent roadways that would improve the circulation system. The proposed Project consists of a mixed-use community that situates multi-family residential units close to essential services, retail, employment options, and local and regional transit. This mixture of uses is intended to reduce vehicle miles traveled through internal capture of trips. Additionally, the proposed Project would comply with development standards for both construction and operation that would reduce air emissions.
6. Support healthy and equitable communities.	Consistent: As discussed above, the proposed Project includes a design that would ensure the safe and efficient movement of people and vehicles into and through the Project area, creating a circulation system response to the needs of vehicular, bicycle, and pedestrian travel. The proposed Project would improve the local and regional reliability of public transportation.
7. Adapt to a changing climate and support an integrated regional development pattern and transportation network.	Consistent: The Project would be required to comply with Title 24 Building Energy Efficiency Standards, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the Title 24 standards significantly reduces energy usage which would reduce greenhouse gas emissions. Additionally, at the local level, the proposed Project includes street improvements adjacent to the Project site which would provide increased connectivity to regional circulation elements including the I-215 freeway. The Project also provides adequate ingress and egress to ensure circulation on Town Circle and Centerpoint Drive functions efficiently.
8. Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	Consistent: The Project area is surrounded predominantly by heavily developed land uses that includes commercial, residential, and hospitality uses as well as on-site transit facilities. As such, there are plentiful opportunities for the Project to facilitate transit and active transportation in the site vicinity. The Project would improve surrounding roadways which

RTP/SCS Strategies	Project Consistency
	then will improve the transportation network within the City. These roadways provide connectivity the I-215 and SR-60 allowing local traffic to access regional transportation facilities
9. Encourage development of diverse housing types in areas that are supported by multiple transportation options.	Consistent: The Project proposes to develop mixed-use multi-family residences in an area already supported by various transportation options. The Project additionally proposes to improve multi-modal transportation options such as public transit, bicycling, and walking.
10. Promote conservation of natural and agricultural lands and restoration of habitats.	Consistent: The Project site is located within an existing urban area designated for mixed-use commercial development. There are no designated agricultural lands or farmlands in the area or habitat restoration areas.
Source: SCAG (2020). Connect SoCal. Retrieved from https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan_0.pdf?1606001176 Accessed January 2022.	

City of Moreno Valley General Plan Update

The City’s General Plan, adopted in 2021, contains goals and policies meant to guide growth and development within the City. Goals and policies from the various resources sections relevant to the Project are analyzed for consistency in **Table 4.5-2, City of Moreno Valley 2040 General Plan Consistency.**

The Project would require a SPA that contains Design Guidelines. Upon approval of the SPA, the Project would be consistent with the land use designations and zoning classifications set by the MoVal 2040 GP and MC.

Table 4.5-2: City of Moreno Valley 2040 General Plan Consistency

General Plan Policies	Project Consistency
Land Use and Community Character Element	
Goal LLC-2: Foster Vibrant gathering place for Moreno Valley residents and visitors.	
Policy LCC.2-12: Introduce medium to high density housing to the site and provide townhomes, apartments, and condominiums that cater to the needs of residents of all ages and stages of life.	Consistent: The Project would redevelop an existing commercial parcel with medium to high density, multi-family housing.
Policy LCC.2-13: Allow the maximum permitted FAR to be calculated across multiple parcels in a single proposed development at the Moreno Valley Mall in order to incentivize signature development that makes a positive contribution to community character at this prominent gateway site.	Consistent: The proposed SPA would divide the existing Moreno Valley Mall site into 22 parcels that would include a mix of retail, dining, entertainment, hospitality, office, residential, open space and plazas, and other community uses with a maximum FAR of 0.90.
Policy LCC.2-14: Focus on attracting essential services to the site, such as medical clinics, a grocery store, banks, and dry cleaners to the site to provide for the needs of area residents and ensure the vitality of the site over time.	Consistent: The Project consists of various new retail opportunities, including street-front retail, that may attract essential services to the site. Improved local/regional public transit and internal site circulation would contribute to the viability of certain essential commercial needs. A grocery/retail space is proposed.
Policy LCC.2-15: Encourage mixed use development and the co-location of residential and commercial uses within sight distance of one another on the site to promote day and evening vitality.	Consistent: The Project proposed mixed-use development that would bring residential and commercial uses together (DG-13), within close walking distance, and joined by pedestrian-oriented streetscapes

General Plan Policies	Project Consistency
	to promote day and evening vitality (DG-146, DG-150, and DG-151).
<p>Policy LCC.2-16: Design residential buildings adjacent to the freeway with adequate ventilation and sound proofing to minimize air and noise impacts.</p>	<p>Consistent: Residential portions of the project shall comply with the City’s Noise Ordinance, which may include design to limit the interior noise caused by the commercial and parking portions of the project or freeway adjacency, to a maximum of forty-five (45) db in any habitable room with windows closed, to meet City noise standards. Proper design may include, but shall not be limited to, building orientation, sound-rated windows, wall and ceiling insulation, and orientation and insulation of vents. Where it is necessary that windows be closed in order to achieve the required level, means shall be provided for ventilation/cooling to provide a habitable environment.</p>
<p>Policy LCC.2-17: Provide restaurants, cafes and bars with terraces, as well as public plazas, parks, public art, and family-friendly amenities that activate public spaces and build sense of place.</p>	<p>Consistent: The Project would provide new opportunities for restaurants, cafes, and bars in the form of an expanded inside/outside food hall and entertainment district. Additionally, the Project proposes public plazas and age-inclusive open space interconnected with the new commercial and residential uses, and the existing Moreno Valley mall (DG-178 and DG-181). Refer to Figure 4.5-1, Placemaking and Urban Design Strategy.</p>
<p>Policy LCC.2-18: Design and build new internal roadways with narrower widths, ample sidewalks, and street parking to help create a more intimate walkable feel in the areas.</p>	<p>Consistent: The Project proposes an internal circulation system responsive to the needs of vehicular, bicycle, and pedestrian travel. The private urban streets within the plan are designed for comfortable, safe, and convenient pedestrian movement rather than being vehicular-focused. Small urban plazas, sidewalk seating, and rest zones create refuge nodes for visitors, and contribute to a more intimate walkable feel (DG-58, DG-121, DG-146, DG-158 and DG-223).</p>
<p>Policy LCC.2-19: Provide a network of interconnected streets, paseos, pathways, and bicycle routes on-site that facilitates travel through the site for pedestrians, cyclists and other non-motorized modes of transportation.</p>	<p>Consistent: The Project proposes a non-vehicular circulation plan that consists of interconnected pedestrian zones, a mall interior pedestrian path, and Class II Bike Lanes, throughout that would facilitate travel through the site for pedestrians, cyclists and other non-motorized modes of transportation (DG-44).</p>
<p>Policy LCC.2-22: Encourage new mixed-use and commercial development to incorporate visual quality and interest in architectural design on all visible sides of buildings through the following approaches:</p> <ul style="list-style-type: none"> • Utilizing varied massing and roof types, floor plans, detailed planting design, or color and materials. • Maintaining overall harmony while providing smaller-scale variety. 	<p>Consistent: The Project proposes new mixed-use and commercial development that would improve the aesthetic quality of the area by enhancing existing features found both on-site and off-site. The development would complement surrounding architectural styles and emphasize a clear architectural identity guided by the Design Guidelines (DG-59 through DG-64).</p>

General Plan Policies	Project Consistency
<ul style="list-style-type: none"> Articulating building facades with distinctive features like awnings, windows, doors, and other such elements. 	
<p>Policy LCC.2-29: Design of public spaces should ensure they are:</p> <ul style="list-style-type: none"> Lined with active uses at-grade and located near building entrances, windows, outdoor seating, patios, or balconies that overlook park spaces, and other areas with strong pedestrian activity. Be completely visible from at least one street frontage and as feasible, be at least 50 percent visible from a secondary street frontage. Primarily defined by adjacent buildings, which will contribute to the unity and environmental quality of the space. Be located at the same grade level as the public sidewalks when possible. Where changes in grade are an important element of the overall design and programming, clear and direct access from the public sidewalk should be accommodated, and universal accessibility provided. Reflect the design and placemaking elements of the surrounding area through the use of architectural styles, signage, colors, textures, materials and other elements. Be constructed with low impact and permeable paving materials to efficiently manage the stormwater and minimize the area’s heat island effect. Connect to bike and pedestrian facilities and be a part of an interconnected pathway or parkway system where feasible. 	<p>Consistent: The Project proposes publicly accessible open space consisting of landscaped building entries, pedestrian connections between the mix of uses on the site, and a planned major urban gathering space/plaza (DG-1). The space would incorporate elements such as seating, kiosks, shade structures, and shade plantings (DG-43 and DG-178). The SPA outlines design guidelines to enhance the public space experience and outlines guidelines related to amenities in public spaces, business signage, artwork, bike racks, design, and lighting and visibility. Compliance with the SPA would ensure compliance with this policy.</p>
<p>Action LCC.2-C: Work with property owners at the Moreno Valley Mall and Towngate Center to facilitate redevelopment of underutilized parcels.</p>	<p>Consistent: The Moreno Valley Mall parcel was identified by the City of Moreno Valley General Plan as a desirable site for redevelopment. This Project proposes redevelopment in a way that is consistent with the General Plan’s vision for a vibrant, mixed-use town center.</p>
Circulation Element	
Goal C-1: Strengthen connections to the regional transportation network.	
<p>Policy C.1-1: Support regional infrastructure investments for all modes to relieve congestion and support healthy communities in the City of Moreno Valley.</p>	<p>Consistent: The Project proposes the relocation of and improvements to an existing on-site transit center that has the potential to strengthen connections to the regional transportation network.</p>
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.	
<p>Policy C.2-1: Design, plan, maintain, and operate streets using complete streets principles for all types</p>	<p>Consistent: The Project proposes new pedestrian connections where there was none prior, including a new</p>

General Plan Policies	Project Consistency
<p>of transportation projects including design, planning, construction, maintenance, and operations of new and existing streets and facilities. Encourage street connectivity that aims to create a comprehensive, integrated, connected network for all modes.</p>	<p>sidewalk on the inner edge of Town Circle. The internal circulation network would also establish a hierarchy of pedestrian-oriented streetscape conditions. Landscaped pedestrian zones would be provided on all internal streets. The pedestrian zone will consist of a varied width, from 10- to 12-foot zone comprised of a walkway and planting zone that would be provided along building frontage.</p>
<p>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.</p>	<p>Consistent: The SPA proposes new points of access into the Moreno Valley Mall. These access points will consist of improved existing access points and new points to be improved with traffic control devices to allow for the safe passage of traffic. Additionally, these access points will be spaced at minimum of 250 feet from controlled intersections.</p>
<p>Policy C.2-7: Plan access and circulation of each development project to accommodate vehicles (including emergency vehicles and trash trucks), pedestrians, and bicycles.</p>	<p>Consistent: Site circulation would allow for and facilitate emergency access to the site and all buildings.</p>
<p>Policy C.2-8: For developments fronting both sides of a street, require that streets be constructed to full width. Where new developments front only one side of a street, require that streets be constructed to half width plus an additional 12-foot lane for opposing traffic, whenever possible. Additional width may be needed for medians or left and/or right turn lanes.</p>	<p>Consistent: The Project proposes the construction of new roadways, some of which are to be dedicated to the public right-of-way. These roadways will be built to full width. Other roadways that the Project fronts are constructed to full width and do not require additional improvements. Nevertheless, the Project would improve intersections and roadways as needed to fully implement the Project.</p>
<p>Policy C.2-9: Require connectivity and accessibility to a mix of land uses that meets residents’ daily needs within walking distance. Typically, this means creating walkable neighborhoods with block lengths between 330 feet and 660 feet in length, based on divisions of the square mile grid on which the city is laid out.</p>	<p>Consistent: The Project proposes a mixed-use development to complement a revitalized Moreno Valley Mall. An internal circulation system – that accounts for both vehicular and non-vehicular modes such as bicycling or walking – would interconnect the proposed uses (DG-44). Furthermore, pedestrian circulation would be clearly delineated and separate from automobile circulation (DG-121).</p>
<p>Action C.2-H: Evaluate opportunities to implement roundabouts as traffic control as new development projects are proposed, considering safety, traffic calming, cost, maintenance and greenhouse gas reduction related to idling.</p>	<p>Consistent: Consistent with recommendations from the project-specific Traffic Impact Analysis, the Project would monitor the need for a traffic signal or roundabout along Town Circle, the existing public street most adjacent to the Project site.</p>
<p>Goal C-3: Manage the City’s transportation system to minimize congestion, improve flow and improve air quality.</p>	
<p>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.</p>	<p>Consistent: The Moreno Valley Mall Redevelopment Traffic Impact Analysis (TIA) was prepared by Kittelson and Associates on August 2022 and conducted both a CEQA VMT impact analysis and a Non-CEQA operational analysis as appropriate.</p>

General Plan Policies	Project Consistency
<p>Policy C.3-6: Require new developments to participate in Transportation Uniform Mitigation Fee Program (TUMF), the Development Impact Fee Program (DIF) and any other applicable transportation fee programs and benefit assessment districts.</p>	<p>Consistent: As required, the Project would participate in applicable transportation fee programs and benefit assessment districts.</p>
<p>Policy C.3-8: Ensure that new development pays a fair share of costs to provide local and regional transportation improvements and to mitigate cumulative traffic deficiencies and impacts.</p>	<p>Consistent: The Project would contribute to improvements identified in the TIA, intelligent transport system improvements, as well as monitoring the need for traffic signals or roundabouts along Town Circle.</p>
<p>Goal C-4: Provide convenient and safe connections between neighborhoods and destinations within Moreno Valley.</p>	
<p>Policy C.4-2: Collaborate with major employers and other stakeholders to improve access and connectivity to key destination such as the Downtown Center, the Moreno Valley Mall, the hospital complexes, Moreno Valley College, and the Lake Perris State Recreation Area.</p>	<p>Consistent: The Moreno Valley Mall is the subject of the Project and is currently exploring options with RTA to increase ridership and use of the transit hub currently located at the Project site. Additionally, the Project will allow new employment opportunities through the expansion of retail space, hotels, and residential.</p>
<p>Policy C.4-4: All new developments shall provide sidewalks in conformance with the City’s streets cross-section standards, and applicable policies for designated urban and rural areas.</p>	<p>Consistent: The Project will comply with applicable City standards regarding sidewalks, streets, and cross-sections for designated urban and rural areas.</p>
<p>Goal C-5: Enhance the range of transportation in Moreno Valley and reduce vehicle miles traveled (VMT).</p>	
<p>Policy C.5-1: Work to reduce VMT through land use planning, enhanced transit access, localized attractions, and access to non-automotive modes.</p>	<p>Consistent: The Project would provide a mixture of uses that reduces vehicle miles traveled through internal capture of trips and an improved transit center.</p>
<p>Policy C.5-4: Particularly in corridors and centers, work with transit service providers to provide first-rate amenities to support pedestrian, bicycle, and transit usage, such as bus shelters and benches, bike racks on buses, high-visibility crossings, and modern bike storage.</p>	<p>Consistent: Riverside Transit Agency (RTA) has one bus line along Towngate Boulevard and Day Street, including local routes along Eucalyptus Avenue. Existing public transit stops are present on Day Street to Towngate Boulevard on the project frontage that will continue to serve the Specific Plan area. The Project includes a relocation of the existing RTA stop to better serve the mall property.</p>
<p style="text-align: center;">Parks and Public Services Element</p>	
<p>Goal PPS-4: Provide for utilities and infrastructure to deliver safe, reliable services for current and future residents and businesses.</p>	
<p>Policy PPS.4-2: Coordinate development activity with the provision of public infrastructure and services to eliminate possible gaps in service provision.</p>	<p>Consistent: While utility connections are already in place for much of the Project site, existing utilities would be extended and upgraded as needed during Project construction in order to accommodate operation of the proposed land uses at the time that they are needed.</p>
<p>Policy PPS.4-4: Whenever possible, project proponents should ensure that public water, sewer, drainage, and other backbone facilities needed for a project phase are constructed prior to or concurrent with initial development within that phase. It shall be the ultimate responsibility of the sponsor of a development project to assure that all necessary</p>	<p>Consistent: The Project proposes the concurrent development of utility infrastructure such as public water, sewer, drainage, and other backbone facilities (such as gas and electric) with the initial development. The availability of all necessary infrastructure improvements are assured through the SPA</p>

General Plan Policies	Project Consistency
<p>infrastructure improvements (including system wide improvements) needed to support project development are available at the time that they are needed.</p>	<p>accompanying water, sewer, and drainage plans (<i>Figures 4.8-1 through 4.8-3</i>).</p>
<p>Policy PPS.4-6: Maintain a “dig once” policy to streamline the installation of infrastructure, minimize disruption from construction activities, and optimize coordination among responsible agencies and developers.</p>	<p>Consistent: The Project will include the expansion and improvements of underground utilities as part of Project implementation. Water plans, sewer plans, drainage plans, and utility plans have been designed to coordinate underground utilities and construction phasing to limit the amount of disturbance. Additionally, many of the utilities already exist and the Project proposes the targeted improvements as needed.</p>
<p>Safety Element</p>	
<p>Goal S-3: Build community resilience to climate change.</p>	
<p>Policy S.3-1: Continue to collaborate in regional climate action planning initiatives.</p>	<p>Consistent: The Project has provided commitments to reduce greenhouse gas emissions to the maximum extent possible through the incorporation of mitigation measures as identified in <i>Section 4.4, Greenhouse Gas Emissions</i>. The implementation of these mitigation measures show the Project’s willingness and collaboration with the City to achieve all goals set forth in the Climate Action Plan.</p>
<p>Policy S.3-6: Encourage the use of landscaping, building materials, and site design techniques that provide passive cooling and reduce energy demand. In particular, promote the use of voluntary measures identified in the California Green Building Code (Title 24, Part 11 of the California Code of Regulations) to minimize heat island effects, including hardscape and roof materials with beneficial solar reflectance and thermal emittance values and measures for exterior wall shading.</p>	<p>Consistent: The Project would implement the design guidelines set forth in the SPA that identify the use of shade trees, project siting, and building design to enhance and encourage the use of passive heating and cooling. For example, DG-173 stipulated that open spaces within the Project area shall be designed to promote these features.</p>
<p>Policy S.3-7: Require new development to provide and maintain shade trees suitable to local climatic conditions. A climate-appropriate strategy may involve planting mostly drought-tolerant native trees that may have less foliage, interspersed with leafier trees at points where people gather</p>	<p>Consistent: The Project would implement drought resistant plants as shown in the landscaping plan of the SPA (DG-257). Additionally, shade trees would be implemented strategically around the Project site to maximize passive heating and cooling as previously mentioned (DG-109 and DG-283).</p>
<p>Policy S.3-8: Assess the feasibility of implementing urban heat island mitigation technologies in public gathering places, including UV-reflective materials and coatings, porous pavement, evaporative cooling towers, or other technologies that can reduce surface and air temperature and mitigate for the effects of extreme heat.</p>	<p>Consistent: The Project shall implement building design and siting techniques to minimize mechanically heated and cooled environments throughout the year. Additionally, as previously mentioned, shade trees will be utilized to reduce the impacts on urban heat island effect. Furthermore, with the implementation of DG-89, non-reflective materials and colors would be implemented to reduce albedo.</p>

General Plan Policies	Project Consistency
Noise Element	
Goal N-1: Design for a pleasant, health sound environment conducive to living and working.	
<p>Policy N.1-1: Protect occupants of existing and new buildings from exposure to excessive noise, particularly adjacent to freeways, major roadways, the railroad, and within areas of aircraft overflight.</p>	<p>Consistent: Project occupants of existing and new buildings would be sheltered from the noise and traffic of adjacent streets or other incompatible uses by the surrounding buildings and internal network of open space and landscaping.</p>
<p>Policy N.1-3: Apply the community noise compatibility standards (Table N-1) to all new development and major redevelopment projects outside the noise and safety compatibility zones established in the March Air Reserve Base/Inland Port Airport Land Use Compatibility (ALUC) Plan in order to protect against the adverse effects of noise exposure. Projects within the noise and safety compatibility zones are subject to the standards contained in the ALUC Plan.</p>	<p>Consistent: The Project would comply with the City's Noise Ordinance as shown in the SPA.</p>
<p>Policy N.1-4: Require a noise study and/or mitigation measures if applicable for all projects that would expose people to noise levels greater than the "normally acceptable" standard and for any other projects that are likely to generate noise in excess of these standards.</p>	<p>Consistent: In March 2022, Kimley-Horn and Associates completed an Acoustical Assessment to evaluate the potential construction and operational noise and vibration levels associated with the Project and determine the level of impact the Project would have on the environment.</p>
<p>Policy N.1-5: Noise impacts should be controlled at the noise source where feasible, as opposed to at receptor end with measures to buffer, dampen, or actively cancel noise sources. Site design, building orientation, building design, hours of operation, and other techniques, for new developments deemed to be noise generators shall be used to control noise sources.</p>	<p>Consistent: Substantial noise impacts would result from construction activities which would be temporary and periodic in nature and be restricted to limited hours to reduce noise impacts consistent with the City Municipal Code.</p>
<p>Policy N.1-7: Developers shall reduce the noise impacts on new development through appropriate means (e.g., double-paned or soundproof windows, setbacks, berming, and screening). Noise attenuation methods should avoid the use of visible sound walls where possible.</p>	<p>Consistent: The Project would implement noise reduction methods, such as earthen berms, non-porous walls, or other acceptable methods shall be required in residential areas which are within the 65 CNEL zone due to traffic noise.</p>
Goal N-2: Ensure that noise does not have a substantial, adverse effect on the quality of life in the community.	
<p>Policy N.2-1: Use the development review process to proactively identify and address potential noise compatibility issues.</p>	<p>Consistent: An acoustical assessment has been prepared for the Project to aid in the development review process and address potential noise issues.</p>
<p>Policy N.2-2: Continue to work with community members and business owners to address noise complaints and ensure voluntary resolution of issues through the enforcement of Municipal Code provisions.</p>	<p>Consistent: The Project would comply with the Municipal Code as it relates to noise in order to continually work with community members and business owners to address potential future noise complaints.</p>
<p>Policy N.2-3: Limit the potential noise impacts of construction activities on surrounding land uses through noise regulations in the Municipal Code that</p>	<p>Consistent: The Project would comply with the City Noise Ordinance as it related to construction scheduling.</p>

General Plan Policies	Project Consistency
address allowed days and hours of construction, types of work, construction equipment, and sound attenuation devices.	
Environmental Justice Element	
Goal EJ-1: Reduce pollution exposure and improve community health.	
Policy EJ 1-1: Coordinate air quality planning efforts with other local, regional, and State agencies.	Consistent: The project would comply and be consistent with the RTP/SCS, SCAQMD plans, policies, and regulations, as well as City of Moreno Valley planning efforts. See Section 4.2, Air Quality for more information regarding these plans.
Policy EJ 1-2: Cooperate with SCAQMD and WRCOG in efforts to promote public awareness about air pollution and control measures.	Consistent: The Project has held a public scoping meeting with the Public to field comments and questions regarding the Project. This includes air quality pollution and measures to control emissions. Additionally, the Project would hold community meetings to inform the community on the Project and potential impacts.
Policy EJ 1-3: Require new development that would locate sensitive uses adjacent to sources of toxic air contaminants (TAC) to be designed to minimize any potential health risks, consistent with State law.	Consistent: According to the Health Risk Assessment prepared for the Project, MERV 13 filtration systems would be installed in residential land uses that are part of the Project. These would reduce impacts to sensitive receptors.
Policy EJ 1-4: Require new development that would locate sensitive uses adjacent to sources of toxic air contaminants (TAC) to be designed to minimize any potential health risks, consistent with State law.	Consistent: According to the Health Risk Assessment prepared for the Project, MERV 13 filtration systems would be installed in residential land uses that are part of the Project. These would reduce impacts to sensitive receptors.
Policy EJ 1-5: Continue purchase or lease of fuel-efficient and low emissions vehicles for City fleet vehicles.	Consistent: The Project would implement measures during construction as identified in MM AQ-1 to increase fuel-efficiencies and reduce emissions. Additionally, the Project does not propose uses for City function and City fleet vehicles are not anticipated to be required during Project implementation.
Policy EJ 1-6: Ensure that construction and grading activities minimize short-term impacts to air quality by employing appropriate mitigation measures and best practices.	Consistent: The Project would implement MM AQ-1 and other dust control measures to limit the impacts to air quality during construction.
Policy EJ 1-7: Require new large commercial or light industrial projects to develop and implement a plan to minimize truck idling in order to reduce diesel particulate emissions.	Consistent: The Project would implement MM AQ-1 which would require construction equipment and delivery vehicles to turn off their engines when not in use and limits on-site idling for no more than 5 minutes in any one hour.
Policy EJ 1-8: Support the incorporation of new technologies and design and construction techniques in new development that minimize pollution and its impacts.	Consistent: The Project would implement design guidelines identified in the SPA such as DG-99 and DG-100 to implement materials and technologies that minimize environmental impacts, reduce energy, and resource consumption as well as incorporate life cycle planning as part of the Project design.

General Plan Policies	Project Consistency
Policy EJ 1-9: Designate truck routes that avoid sensitive land uses, where feasible.	Consistent: The Project would comply with the existing City of Moreno Valley roadway classifications and does not propose and alterations to the existing traffic control devices off-site. As the Project is an existing mall that receives truck deliveries on a regular basis, these truck routes would not be altered and would remain in place.
Open Space and Resource Conservation Element	
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.2-8: Require cultural resource assessments prior to the approval of development proposals on properties located in archaeologically sensitive areas.	Consistent: A Cultural Resources Review for the MoVal Mall Redevelopment Project was conducted in April 2022 by BCR Consulting LLC. Furthermore, the Project site is not located within an archaeologically sensitive area. ⁷
Source: City of Moreno Valley (2021). General Plan 2040. Retrieved from https://www.moval.org/city_hall/general-plan2040/MV-GeneralPlan-complete.pdf . Accessed April 2022.	

This SEIR has been predicated on consistency with the MoVal 2040 GP. However, at the time of the preparation of this SEIR, the Moreno Valley 2040 General Plan is the subject of pending litigation. The ongoing litigation could potentially result in the invalidation of the MoVal 2040 GP and/or the MoVal 2040 GP Final EIR. For this reason, the SPA refers to both General Plan Land Use and Zoning designations. In addition, consistency with the policies and goals of the 2006 General Plan is demonstrated in **Table 4.5-3, City of Moreno Valley 2006 General Plan Consistency** (should the MoVal 2040 GP or Final EIR be set aside).

Table 4.5-3: City of Moreno Valley 2006 General Plan Consistency

General Plan Policies	Project Consistency
Community Development Element	
Objective 2.2: Provide a wide range of residential opportunities and dwelling types to meet the demands of present and future residents of all socioeconomic groups.	
Policy 2.2.1: In determining allowable density for residential parcels an “adjusted net acreage” shall be used. Adjusted net acres shall mean the land area that would remain after dedication of ultimate rights-of-ways for arterial streets, freeways and park dedications.	Consistent: The SPA proposes a maximum density of 18 du/ac, which is less than the maximum density of 30 du/ac in the 2006 General Plan Amendment.
Policy 2.2.16: Affordable housing developments should be compatible in visual design with surrounding development.	Consistent: Affordable housing within the proposed residential buildings would be subject to the same Design Guidelines and development standards of the SPA which emphasizes architectural quality, compatibility, and cohesion within the Project and with surrounding development (DG-59 through DG-64).
Objective 2.3: Promote a sense of community and pride within residential areas through increased neighborhood interaction and enhanced project design.	
Policy 2.3.4: Design large-scale small lot single family and multiple family residential projects to group	Consistent: The proposed residential developments would provide for private open space, and be sited

⁷ City of Moreno Valley (2021). *MoVal 2040 Final Environmental Impact Report, Figure 4.5-2 Archaeological Sensitive Areas*. Available https://www.moval.org/city_hall/general-plan2040/Environmental/MV2040_FinalEIR_W-CommentResponse.pdf. Accessed April 7, 2022.

General Plan Policies	Project Consistency
<p>dwellings around individual open space and/or recreational features.</p>	<p>adjacent to publicly accessible open space, and other recreational features (DG-1, DG 182 through DG-186).</p>
<p>Policy 2.3.5: Ensure that all multiple family housing is well-designed, attractive and livable by:</p> <ul style="list-style-type: none"> a. Ensuring all structures are architecturally compatible and include decorative architectural features and articulation in walls and roofs; b. Providing adequate parking, walkways, lighting, landscaping, amenities and open space areas; c. Providing private open space areas such as patios and balconies. 	<p>Consistent: The proposed SPA includes Design Guidelines and development standards which establish policies to achieve a high-quality architectural character that complements the surrounding architectural styles. These guidelines include policies for materials and colors used for architectural features such as walls and roofs.</p> <p>The Design Guidelines provide policies to achieve adequate walkways, lighting, landscaping, amenities and open space areas (DG-154, DG-156, and DG-187).</p> <p>Residential buildings would contain private common open space amenities for their users, such as pools/spas, courtyards, and roof decks or gardens.</p>
<p>Objective 2.4: Provide commercial areas within the City that are conveniently located, efficient, attractive, and have safe and easy pedestrian and vehicular circulation in order to serve the retail and service commercial needs of Moreno Valley residents and businesses.</p>	
<p>Policy 2.4.8: Orient commercial development toward pedestrian use. Buildings should be designed and sited so as to present a human-scale environment, including convenient and comfortable pedestrian access, seating areas, courtyards, landscaping and convenient pedestrian access to the public sidewalk.</p>	<p>Consistent: The Placemaking and Urban Design Strategy for the SPA area plans for successful pedestrian-oriented places that are attractive, enjoyable, and memorable (refer to Figure 4.5-1, Placemaking and Urban Design Strategy). Pedestrians would be met with pedestrian plazas, landscaped seating areas along pedestrian-oriented internal streets, and 10- to 12- foot minimum planted pedestrian zones adjacent to each street.</p>
<p>Policy 2.4.10: Design internal roadways so that direct access is available to all structures visible from a particular parking area entrance in order to eliminate unnecessary vehicle travel, and to improve emergency response.</p>	<p>Consistent: According to the Design Guidelines of the SPA, internal streets would efficiently facilitate movement of vehicles from external streets to parking lots and structures (DG-25).</p>
<p>Objective 2.10: Ensure that all development within the City of Moreno Valley is of high quality, yields a pleasant living and working environment for existing and future residents, and attracts business as the result of consistent exemplary design.</p>	
<p>Policy 2.10.1: Encourage a design theme for each new development that is compatible with surrounding existing and planned developments.</p>	<p>Consistent: The Design Guidelines of the SPA proposes policies that encourage a design theme that is compatible with surrounding development (DG-59 through DG-64).</p>
<p>Policy 2.10.2: Screen trash storage and loading areas, ground and roof mounted mechanical equipment, and outdoor storage areas from public view as appropriate.</p>	<p>Consistent: Service areas, such as loading docks, utility areas, and back of house entrances would be planned to minimize visibility from primary public view corridors (DG-28). This may include screening with landscaping or vertical hardscape elements or being incorporated within the shell of the building. Some short-term and temporary retail loading may be located in more directly viewed areas.</p>

General Plan Policies	Project Consistency
<p>Policy 2.10.4: Landscaping and open spaces should be provided as an integral part of project design to enhance building design, public views, and interior spaces; provide buffers and transitions as needed; and facilitate energy and resource conservation.</p>	<p>Consistent: Building entrances, publicly accessible open space, and pedestrian zones along all internal streets would be landscaped to enhance building design, provide physical buffers and delineate pedestrian circulation, and contribute to the overall aesthetic (DG-121, DG-123, DG-124, DG-134, and DG-141).</p>
<p>Policy 2.10.6: Buildings should be designed with a plan for adequate signage. Signs should be highly compatible with the building and site design relative to size, color, material, and placement.</p>	<p>Consistent: Bold and definitive signage and overhead structures would create a sense of place for pedestrians visiting the site. The proposed Design Guidelines of the SPA provide policy on signage and wayfinding to allow visitors of the site, particularly pedestrians, to navigate the Project area (DG-200 through DG-222). Clear, concise, and inclusive signage and wayfinding elements are ingrained in the pedestrian circulation plan (DG-222). Additionally, all signage would comply Section 3.8 of the SPA and with all applicable standards from the City Municipal Code where the SPA does not provide specifics (DG-201).</p>
<p>Policy 2.10.7: On-site lighting should not cause nuisance levels of light or glare on adjacent properties.</p>	<p>Consistent: On-site lighting would be compliant with applicable City Municipal Code which requires non-residential lighting to be fully shielded and directed away from surrounding residential uses. All lighting installations shall be designed and installed with full cutoff and be fully shielded to reduce glare and light trespass (DG-293).</p>
<p>Policy 2.10.8: Lighting should improve the visual identification of structures. Within commercial areas, lighting should also help create a festive atmosphere by outlining buildings and encouraging nighttime use of areas by pedestrians.</p>	<p>Consistent: Accent lighting would be utilized on landscaping to improve the visual identification of these features (DG-234 and DG-296). Additional accent lighting is encouraged to highlight hardscape and softscape materials as focal points of an area.</p>
<p>Policy 2.10.9: Fences and walls should incorporate landscape elements and changes in materials or texture to deter graffiti and add visual interest.</p>	<p>Consistent: Landscaping – including vines – would be used in combination with walls – to visually soften blank surfaces and deter graffiti (DG-164). Additionally, colors, materials, and overall appearance of walls and fences would be compatible with the surrounding development and would be kept at a minimum height while performing their functional purpose (DG-165 and DG-167).</p>
<p>Policy 2.10.12: Screen parking areas from streets to the extent consistent with surveillance needs (e.g., mounding, landscaping, low profile walls, and/or grade separations).</p>	<p>Consistent: Free-standing buildings, where possible, would be sited along street frontages to help screen parking areas and establish a more urban street concept (DG-4). Landscaping, including large dense trees when feasible, would be used to visually screen parking structures when adjacent to roadways and pedestrian walkways (DG-141).</p>
<p>Policy 2.10.13: Provide landscaping in automobile parking areas to reduce solar heat and glare.</p>	<p>Consistent: Landscaping – primarily in the form of shade trees - would be provided within parking areas, wherever feasible (DG-109). In this regard, the Project would</p>

General Plan Policies	Project Consistency
	comply with the City’s Commercial Area Landscape Standards.
Policy 2.10.14: Preserve or relocate existing mature trees and vegetation where practical. Mature trees shall be replaced when they cannot be preserved or relocated.	Consistent: Trees and shrubs would be selected based on their mature size and root characteristics (DG-247). However, the SPA does not identify measures to preserve or relocate existing mature vegetation, as such, the Project would, consistent with the City Municipal Code, mature trees that cannot be feasibly preserved or relocated would be replaced at a three to one ratio. Consistent with the Project-Specific WQMP, existing native trees would be preserved to the maximum extent possible.
Objective 2.13: Coordinate development activity with the provision of public infrastructure and services to eliminate possible gaps in service provision.	
Policy 2.13.3: It shall be the ultimate responsibility of the sponsor of a development project to assure that all necessary infrastructure improvements (including system wide improvements) needed to support project development are available at the time that they are needed.	Consistent: While utility connections are already in place for much of the Project site, existing utilities would be extended and upgraded as needed during Project construction in order to accommodate operation of the proposed land uses at the time that they are needed.
Circulation Element	
Objective 5.1: Create a safe, efficient and neighborhood-friendly street system.	
Policy 5.1.1: Plan access and circulation of each development project to accommodate vehicles (including emergency vehicles and trash trucks), pedestrians, and bicycles.	Consistent: Site circulation would allow for and facilitate emergency access to the site and all buildings. Trash / Loading areas would be organized in a way to allow for easy operations (DG-55).
Policy 5.1.2: Plan the circulation system to reduce conflicts between vehicular, pedestrian and bicycle traffic.	Consistent: The Project is accompanied by a circulation plan that encompasses pedestrian, bicycle, and automobile circulation and utilizes the revitalized mall as an inner circulation element. Pedestrian circulation would be clearly delineated by landscaping, walkways, and decorative hardscape and would be separate and buffered from automobile circulation (DG-121 and DG-139).
Policy 5.1.3: Require adequate off-street parking for all developments.	Consistent: The Project proposes an adequate amount of parking in the form of parking structures and surface lots.
Policy 5.1.4: Driveway placement shall be designed for safety and to enhance circulation wherever possible.	Consistent: The SPA proposes new points of access into the Moreno Valley Mall. These access points with consist of improved existing access points and new points to be improved with traffic control devices to allow for the safe passage of traffic. Additionally, these access points will be spaced at minimum of 250 feet from controlled intersections.
Policy 5.1.5: Incorporate American Disability Act (ADA) and Title 24 requirements in roadway improvements as appropriate.	Consistent: The Project would be designed to comply with Title 24 and ADA requirements regarding walkways, building entries, and roadway improvements.

General Plan Policies	Project Consistency
Objective 5.2: Implement access management policies.	
Policy 5.2.1: Locate residential units with access from local streets. Minimize direct residential access from collectors. Prohibit direct single-family driveway access on arterials and higher classification roadways.	Consistent: Proposed residential land uses within the Project site would be accessible from Town Circle.
Objective 5.5: Maximize efficiency of the local circulation system by using appropriate policies and standards to design, locate and size roadways.	
Policy 5.5.8: Whenever possible, require private and public land developments to provide on-site and off-site improvements necessary to mitigate any development-generated circulation impacts. A review of each proposed land development project shall be undertaken to identify project impacts to the circulation system. The City may require developers to provide traffic impact studies prepared by qualified professional to identify the impacts of a development.	Consistent: The Project would contribute to a variety of off-site improvements discussed further in Section 4.7, Transportation . These improvements include: contributions to improvements identified in the Canyon Springs Traffic Impact Analysis, contributions to intelligent transport system improvements – such as fiber optic interconnect, CCTV, or traffic signal controller improvements to improve operations. This Section is based on a Traffic Impact Analysis prepared on behalf of the Project by Kittelson & Associates on April 19, 2022.
Policy 5.5.11: Implement National Pollutant Discharge Elimination System Best Management Practices relating to construction of roadways to control runoff contamination from affecting water resources.	Consistent: The Best Management Practices (BMPs) included in the WQMP would minimize degradation of surface or groundwater quality and ensure compliance with water quality standards and waste discharge requirements set by the Riverside County Code of Ordinances (Chapter 13.12) Stormwater Drainage System Protection Requirements and the National Pollutant Discharge Elimination System (NPDES).
Objective 5.8: Encourage development of an efficient public transportation system for the entire community.	
Policy 5.8.4: Ensure that all new developments make adequate provision for bus stops and turnout areas for both public transit and school bus service.	Consistent: Multiple transit stations are proposed to be dispersed and relocated to the North perimeter of the property to serve and connect various user destinations.
Objective 5.9: Support and encourage development of safe, efficient and aesthetic pedestrian facilities.	
Policy 5.9.1: Encourage walking as an alternative to single occupancy vehicle travel and help ensure the safety of the pedestrian as follows: (a) All new development shall provide sidewalks in conformance with the City’s streets cross-section standards, and applicable policies for designated urban and rural areas.	Consistent: Pedestrian circulation within the Project site would be facilitated by clearly delineated pedestrian zones – pedestrian walkways and a planting zone at a minimum of 10- to 15- feet wide.
Policy 5.9.2: Walkways shall be designed to minimize conflicts between vehicles and pedestrians.	Consistent: Buildings and on-site circulation would be oriented in such a way to minimize areas of conflict between pedestrians and vehicles. The private urban streets are designed to prioritize pedestrian movement, and strategic landscaping and wide walkways would promote a sense of safety and reduce conflict between vehicles and pedestrians (DG-7, DG-8, DG-30, DG-106, DG-121, DG-123, DG-124, and DG-139).

General Plan Policies	Project Consistency
<p>Policy 5.9.3: Where appropriate, provide amenities such as, but not limited to, enhanced paving, seating, and landscaping to enhance the pedestrian experience.</p>	<p>Consistent: Safe, comfortable, and convenient pedestrian circulation would be facilitated by small urban plazas, sidewalk seating, landscaping, and rest spaces that enhance the pedestrian experience and achieve a separation between pedestrians and automobile circulation (DG-43, DG-58, DG-158, and DG-161).</p>
<p>Objective 5.11: Eliminate obstructions that impede safe movement of vehicles, bicyclists, and pedestrians.</p>	
<p>Policy 5.11.1: Landscaping adjacent to City streets, sidewalks and bikeways shall be designed, installed and maintained so as not to physically or visually impede public use of these facilities.</p> <p>(a) The removal or relocation of mature trees, street trees and landscaping may be necessary to construct safe pedestrian, bicycle and street facilities.</p> <p>(b) New landscaping, especially street trees shall be planted in such a manner to avoid overhang into streets, obstruction of traffic control devices or sight distances, or creation of other safety hazards.</p>	<p>Consistent: Landscaping adjacent to City streets would not obstruct views of traffic control devices or sight distances or, alternatively, views into the development from the right-of-way, especially views to dwelling entries and publicly accessible open space areas (DG-289).</p>
<p>Policy 5.11.2: Driveways shall be designed to avoid conflicts with pedestrian and bicycle travel.</p>	<p>Consistent: Driveways are Pedestrian crossings at driveways and major circulation aisles would be accentuated by extending pedestrian sidewalks into the parking aisle/lane (DG-122).</p>
<p style="text-align: center;">Safety Element</p>	
<p>Objective 6.2: Minimize the potential for loss of life and protect residents, workers, and visitors to the City from physical injury and property damage, and to minimize nuisances due to flooding.</p>	
<p>Policy 6.2.3: Maximize pervious areas in order to reduce increases in downstream runoff resulting from new development.</p>	<p>Consistent: Redevelopment of the Project site would increase landscaping and pervious surfaces in certain areas, particular redevelopment surface parking areas, compared to the existing state of the Project site.</p>
<p>Objective 6.3: Provide noise compatible land use relationships by establishing noise standards utilized for design and siting purposes.</p>	
<p>Policy 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:</p> <p>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.</p>	<p>Consistent: The Project would implement noise reduction methods, such as earthen berms, non-porous walls, or other acceptable methods shall be required in residential areas which are within the 65 CNEL zone due to traffic noise.</p>

General Plan Policies	Project Consistency
<p>Policy 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.</p>	<p>Not applicable: The project site is located outside the airport’s 60 dBA CNEL noise contour. Therefore, the Project would not expose people residing or working in the Project area to excessive airport- or airstrip-related noise levels.</p>
<p>Policy 6.3.5: Enforce the California Administrative Code, Title 24 noise insulation standards for new multi-family housing developments, motels and hotels.</p>	<p>Consistent: The Project would comply with Title 24 noise insulation standards for the proposed multi-family housing and hotel developments.</p>
<p>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.</p>	
<p>Policy 6.4.1: Site, landscape and architectural design features shall be encouraged to mitigate noise impacts for new developments, with a preference for noise barriers that avoid freeway sound barrier walls.</p>	<p>Consistent: Buildings would be strategically oriented to shelter outdoor areas from noise, particularly noise from traffic originating from adjacent streets, SR-60, or other incompatible uses.</p>
<p>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.</p>	
<p>Policy 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.</p>	<p>Consistent: An acoustical assessment was prepared on behalf of the Project that evaluates potential noise and vibration levels associated with Project construction and operation, including that for its proposed commercial uses.</p>
<p>Policy 6.5.2: Construction activities shall be operated in a manner that limits noise impacts on surrounding uses.</p>	<p>Consistent: The Project would comply with City Municipal Code regulations regarding noise.</p>
<p>Objective 6.9: Reduce the risk and fear of crime through physical planning strategies that maximize surveillance opportunities and minimize opportunities for crime found in the present and future built environment and by creating and maintaining a high level of community awareness and support of crime prevention.</p>	
<p>Policy 6.9.2: Require well-lighted entrances, walkways and parking lots, street lighting in all commercial, industrial areas and multiple-family residential areas to facilitate nighttime surveillance and discourage crime.</p>	<p>Consistent: Design standards of the proposed SPA calls for well-lit entry-areas, pedestrian walkways, and parking lots with a sufficient level of light to provide safety and security (DG-292). Additionally, lighting of private roadways and bikeways shall comply with relevant standards published by the Illuminating Engineering Society (IES) (DG-291).</p>
<p>Policy 6.9.3: Incorporate “defensible space” concepts into the design of dwellings and nonresidential structures, including, but not limited to configuration of lots, buildings, fences, walls and other features that facilitate surveillance and reinforce a strong sense of territorial control.</p>	<p>Consistent: Project design utilizes the concept of natural surveillance, or “eyes on the street,” by promoting features that maximize the visibility of people, parking, and building entrances (DG-18).</p>
<p style="text-align: center;">Conservation Element</p>	
<p>Objective 7.1: Minimize erosion problems resulting from development activities.</p>	
<p>Policy 7.1.1: Require that grading plans include appropriate and feasible measures to minimize</p>	<p>Consistent: The Project would comply with all requirements set forth in the NPDES permit for</p>

General Plan Policies	Project Consistency
erosion, sedimentation, wind erosion and fugitive dust.	construction activities including BMPs through preparation of a Stormwater Pollution Prevention Plan (SWPPP) which would provide feasible measures to minimize erosion, sedimentation, wind erosion and fugitive dust.
Objective 7.3: Minimize the consumption of water through a combination of water conservation and reuse.	
Policy 7.3.1: Require water conserving landscape and irrigation systems through development review. Minimize the use of lawn within private developments, and within parkway areas. The use of mulch and native and drought tolerant landscaping shall be encouraged.	Consistent: Water conservation and maximizing water efficiency are accounted for in project and landscape design (DG-312 through DG-315).
Policy 7.3.2: Encourage the use of reclaimed wastewater, store rainwater, or other legally acceptable non-potable water supply for irrigation.	Consistent: Reclaimed water systems would be uses if available and practical, particularly for irrigation for landscaping (DG-271).
Objective 7.5: Encourage efficient use of energy resources.	
Policy 7.5.1: Encourage buildings, site design, and landscaping techniques that provide passive heating and cooling to reduce energy demand.	Consistent: The Project would comply with DG-10 which provides for appropriately placed windows and the siting of specific landscaping to provide shade and cooling. Building design and orientation would take advantage of sun angles and exposure in order to minimize mechanically heated or cooled environments.
Policy 7.5.2: Encourage energy efficient modes of transportation and fixed facilities, including transit, bicycle, equestrian, and pedestrian transportation. Emphasize fuel efficiency in the acquisition and use of City-owned vehicles.	Consistent: The Project proposes a circulation plan that emphasizes alternative modes of transportation including public transit, bicycle, and pedestrian. Measures to enhance safety and enjoyment for pedestrians are provided throughout the development standards and design guidelines of the SPA.
Policy 7.5.5: Encourage the use of solar power and other renewable energy systems.	Consistent: The Project would comply with Title 24 as it relates to solar readiness. In addition, all major appliances would be Energy Star certified (or energy efficiency equivalent) where applicable (MM GHG-2).
Objective 7.7: Where practical, preserve significant visual features significant views and vistas.	
Policy 7.7.2: Require new electrical and communication lines to be placed underground.	Consistent: All utilities would be installed underground unless otherwise specified or approved by the Planning Department.
Policy 7.7.4: Gilman Springs Road, Moreno Beach Drive, and State Route 60 shall be designated as local scenic roads.	Consistent: Consistency with the proposed Design Guidelines of the SPA would ensure attractive development that is visible from SR-60 as well as implementation of policies that reduce visual impacts.
Policy 7.7.5: Require development along scenic roadways to be visually attractive and to allow for scenic views of the surrounding mountains and Mystic Lake.	Consistent: Under the 2006 General Plan, SR-60 is regarded as a scenic roadway (Policy 7.7.4). Design guidelines would ensure that new structures have attractive frontage and decorative accents that reduce visual impacts (DG-68 and DG-83).
Source: City of Moreno Valley (2006). 2006 General Plan. Retrieved from http://www.moreno-valley.ca.us/city_hall/general_plan.shtml . Accessed July 2022.	

The Project site is currently zoned as mixed-use community overlay which allows for the Project components including hotels, public parks and recreational facilities, multi-family residential, restaurants, and retail.⁸ Therefore, the Project would not result in a change in, or conflict with zoning policy that would result in potentially significant impacts.

Applicable SP-200 EIR Mitigation Measures: The SP-200 EIR identified mitigation measures for this resource area, however the mitigations are not applicable as no SP-200 Mitigation Measures address consistency with an applicable plan or policy.

Moreno Valley Mall Specific Plan Design Guidelines: The proposed SPA supersedes the SP-200 design guidelines and development standards for the Project site (PA 2A).

Additional Mitigation Measures: No additional mitigation measures are necessary.

4.5.6 Cumulative Impacts

For purposes of land use and planning impact analysis, cumulative impacts are considered for cumulative development according to the related projects; see ***Table 4-1, Cumulative Projects List.***

Cumulative impacts would occur if development within the Project site, together with other cumulative projects, would physically divide an existing community or conflict with an applicable land use plan, policy, or regulation, with adjacent land uses or with an adopted conservation plan.

Potential land use impacts are site-specific and require evaluation on a case-by-case basis. This is true with regard to land use compatibility impacts, which are generally a function of the relationship between the interactive effects of a specific development site and those of its immediate environment. Existing as well as future cumulative development within the surrounding area is anticipated to occur in accordance with the City's General Plan and Municipal Code and be evaluated as such the same as the proposed Project. Therefore, the proposed Project, in conjunction with these other projects, is not anticipated to introduce incompatible uses and substantially conflict with the operation of surrounding land uses.

The proposed Project would not physically divide an established community because it does not block access to any existing neighborhoods or existing uses in the vicinity of the Project site. Additionally, the proposed Project is consistent with the MoVal 2040 GP. The Project would provide increased connectivity within the area with improvements to Town Circle and Centerpoint Drive that would improve connection to regional freeways such as I-215 and SR-60. Therefore, the proposed Project would not make a cumulative contribution to impacts associated with conflicts with land use planning documents or related policies and regulations. These impacts are less than cumulatively considerable and less than significant.

No significant cumulative impacts associated with existing plans and policies are anticipated. In addition, the contribution of the Project to any such cumulative impacts would be less than significant because

⁸ City of Moreno Valley (2021). *City of Moreno Valley Municipal Code - Section 9.02.020 Permitted Uses*. Available at https://library.qcode.us/lib/moreno_valley_ca/pub/municipal_code/item/title_9-chapter_9_02-9_02_020. Accessed January 17, 2022.

present and probable future projects are consistent with applicable plans, policies, and regulations. The Project would not contribute to any cumulative impacts associated with plan or policy inconsistency.

4.5.7 Significant Unavoidable Impacts

No significant unavoidable impacts concerning land use and planning resources have been identified.

4.5.8 References

City of Moreno Valley (2006). *City of Moreno Valley General Plan 2006*. Available at http://www.moreno-valley.ca.us/city_hall/general_plan.shtml.

City of Moreno Valley (2021). *City of Moreno Valley General Plan 2040 Draft: Land Use and Community Character*. Available at www.moval.org/cdd/documents/general-plan-documents-draft-general-plan.html. Accessed January 17, 2022.

City of Moreno Valley (2021). Moreno Valley Municipal Code, Title 9: Planning and Zoning. Available at https://library.qcode.us/lib/moreno_valley_ca/pub/municipal_code. Accessed January 17, 2022.

City of Moreno Valley (2021). *City of Moreno Valley Municipal Code - Section 9.02.020 Permitted Uses*. Available at https://library.qcode.us/lib/moreno_valley_ca/pub/municipal_code/item/title_9-chapter_9_02-9_02_020. Accessed January 17, 2022.

City of Moreno Valley (2021). *City of Moreno Valley Zoning Map*. Available at <http://www.moreno-valley.ca.us/cdd/pdfs/ZoningMap.pdf>. Accessed January 17, 2022.

Southern California Association of Governments (2020). *Connect SoCal*. Available at https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan_0.pdf?1606001176. Accessed January 2022.

Legend

-  Major vehicle entry point
-  Minor vehicle/ pedestrian entry point
-  Major enhanced streetscape
-  Minor enhanced streetscape
-  Exterior Connector
-  Interior Connector
-  Central Plaza
-  Entry Plaza



Site Placemaking Connections
Layered together elements of placemaking with design connect to create the overall experience.

Source: Kimley-Horn, 07/12/2022

FIGURE 4.5-1: Placemaking and Urban Design Strategy
Moreno Valley Mall Redevelopment Project

4.6 NOISE

4.6.1 Introduction

The purpose of this section is to describe the existing regulatory and environmental conditions related to noise, identify potential impacts that could result from Moreno Valley Mall Redevelopment Project (Project) implementation, and as necessary, recommend mitigation to avoid or reduce the significance of impacts.

Information in this section is based primarily on the following sources that are contained in **Appendix F, Acoustical Assessment**:

- Kimley-Horn and Associates, Inc. March 2022. *Acoustical Assessment Moreno Valley Mall Redevelopment Project, City of Moreno Valley, California*

The purpose of this Acoustical Assessment is to evaluate the potential construction and operational noise and vibration levels associated with the Project and determine the level of impact the Project would have on the environment.

4.6.2 Acoustic Fundamentals

Sound and Environmental Noise

Acoustics is the science of sound. Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a medium (e.g., air) to a human (or animal) ear. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second, or hertz (Hz).

Noise is defined as loud, unexpected, or annoying sound. In acoustics, the fundamental model consists of a noise source, a receptor, and the propagation path between the two. The loudness of the noise source, obstructions, or atmospheric factors affecting the propagation path, determine the perceived sound level and noise characteristics at the receptor. Acoustics deal primarily with the propagation and control of sound. A typical noise environment consists of a base of steady background noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These sources can vary from an occasional aircraft or train passing by to continuous noise from traffic on a major highway. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a large range of numbers. To avoid this, the decibel (dB) scale was devised. The dB scale uses the hearing threshold of 20 micropascals (μPa) as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The dB scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels correspond closely to human perception of relative loudness. **Table 4.6-1, Typical Noise Levels** provides typical noise levels.

Table 4.6-1: Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	- 110 -	Rock Band
Jet fly-over at 1,000 feet	- 100 -	
Gas lawnmower at 3 feet	- 90 -	
Diesel truck at 50 feet at 50 miles per hour	- 80 -	Food blender at 3 feet Garbage disposal at 3 feet
Noisy urban area, daytime	- 70 -	Vacuum cleaner at 10 feet Normal Speech at 3 feet
Gas lawnmower, 100 feet	- 60 -	
Commercial area	- 50 -	Large business office Dishwasher in next room
Heavy traffic at 300 feet	- 40 -	Theater, large conference room (background)
Quiet urban daytime	- 30 -	Library
Quiet urban nighttime	- 20 -	Bedroom at night, concert hall (background)
Quiet suburban nighttime	- 10 -	Broadcast/recording studio
Quiet rural nighttime	- 0 -	Lowest threshold of human hearing
Lowest threshold of human hearing		

Source: California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.

Noise Descriptors

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The equivalent noise level (L_{eq}) represents the continuous sound pressure level over the measurement period, while the day-night noise level (L_{dn}) and Community Equivalent Noise Level (CNEL) are measures of energy average during a 24-hour period, with dB weighted sound levels from 7:00 p.m. to 7:00 a.m. Most commonly, environmental sounds are described in terms of L_{eq} that has the same acoustical energy as the summation of all the time-varying events. Each is applicable to this analysis and defined in **Table 4.6-2, Definitions of Acoustical Terms**.

Table 4.6-2: Definitions of Acoustical Terms

Term	Definitions
Decibel (dB)	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in μPa (or 20 micronewtons per square meter), where 1 pascal is the pressure resulting from a force of 1 newton exerted over an area of 1 square meter. The sound pressure level is expressed in dB as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 μPa). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and ultrasonic sounds are above 20,000 Hz.

Term	Definitions
A-Weighted Sound Level (dBA)	The sound pressure level in dB as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level (L_{eq})	The average acoustic energy content of noise for a stated period of time. 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. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
Maximum Noise Level (L_{max}) Minimum Noise Level (L_{min})	The maximum and minimum dBA during the measurement period.
Exceeded Noise Levels (L_{01} , L_{10} , L_{50} , L_{90})	The dBA values that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day-Night Noise Level (L_{dn})	A 24-hour average L_{eq} with a 10 dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity at nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn} .
Community Noise Equivalent Level (CNEL)	A 24-hour average L_{eq} with a 5 dBA weighting during the hours of 7:00 a.m. to 10:00 a.m. and a 10 dBA weighting 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, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.7 dBA CNEL.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

The A-weighted decibel (dBA) sound level scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends on the distance between the receptor and the noise source.

A-Weighted Decibels

The perceived loudness of sounds is dependent on many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by dBA values. There is a strong correlation between dBA and the way the human ear perceives sound. For this reason, the dBA has become the standard tool of an environmental noise assessment. All noise levels reported in this document are in terms of dBA, but are expressed as dB, unless otherwise noted.

Addition of Decibels

The dB scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. Two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic dB is A-weighted, an increase of 10 dBA is generally perceived as a doubling in

loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound and twice as loud as a 60-dBA sound. When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than one source under the same conditions. Under the dB scale, three sources of equal loudness together would produce an increase of 5 dBA.

Sound Propagation and Attenuation

Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics. No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. For line sources, an overall attenuation rate of 3 dB per doubling of distance is assumed.

Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The way older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units is generally 30 dBA or more.

Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted:

- Except in carefully controlled laboratory experiments, a 1-dBA change cannot be perceived by humans.
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference.

- A minimum 5-dBA change is required before any noticeable change in community response would be expected. A 5-dBA increase is typically considered substantial.
- A 10-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Effects of Noise on People

Hearing Loss. While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to chronic exposure to excessive noise but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise. The Occupational Safety and Health Administration has a noise exposure standard that is set at the noise threshold where hearing loss may occur from long-term exposures. The maximum allowable level is 90 dBA averaged over 8 hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter.

Annoyance. Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The Ldn as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. A noise level of about 55 dBA Ldn is the threshold at which a substantial percentage of people begin to report annoyance.¹

Groundborne Vibration

Sources of groundborne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions). Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

Table 4.6-3, Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibrations, displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibrations, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration

¹ Federal Interagency Committee on Noise, Federal Agency Review of Selected Airport Noise Analysis Issues, August 1992.

complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise-causing induced vibration in exterior doors and windows.

Table 4.6-3: Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibrations

Maximum PPV (in/sec)	Vibration Annoyance Potential Criteria	Vibration Damage Potential Threshold Criteria	FTA Vibration Damage Criteria
0.008	--	Extremely fragile historic buildings, ruins, ancient monuments	--
0.01	Barely Perceptible	--	--
0.04	Distinctly Perceptible	--	--
0.1	Strongly Perceptible	Fragile buildings	--
0.12	--	--	Buildings extremely susceptible to vibration damage
0.2	--	--	Non-engineered timber and masonry buildings
0.25	--	Historic and some old buildings	--
0.3	--	Older residential structures	Engineered concrete and masonry (no plaster)
0.4	Severe	--	--
0.5	--	New residential structures, Modern industrial/commercial buildings	Reinforced-concrete, steel or timber (no plaster)

PPV = peak particle velocity; in/sec = inches per second; FTA = Federal Transit Administration
 Source: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, 2020 and Federal Transit Administration, *Transit Noise and Vibration Assessment Manual*, 2018.

Ground vibration can be a concern in instances where buildings shake, and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. Common sources for groundborne vibration are planes, trains, and construction activities such as earthmoving which requires the use of heavy-duty earth moving equipment. For the purposes of this analysis, a PPV descriptor with units of inches per second (in/sec) is used to evaluate construction-generated vibration for building damage and human complaints.

4.6.3 Environmental Setting

Existing Noise Sources

Moreno Valley is subject to typical urban noises such as noise generated by cars on local roadways, noise from intermittent construction activities, and day-to-day outdoor activities. There are also several transportation-related noise sources that operate at the periphery of the city, including Interstate 215 (I-215), the March Air Reserve Base, and State Route 60 (SR-60), which passes through the northern part of the city.

Mobile Sources

Existing roadway noise levels were calculated for the roadway segments in the Project vicinity. This task was accomplished using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) and existing traffic volumes from the Moreno Valley Mall Redevelopment Traffic Impact Analysis, prepared by Kittelson and Associates (March 2022) (Traffic Impact Analysis; **Appendix G**). The noise prediction model calculates the average noise level at specific locations based on

traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (also referred to as energy rates) used in the FHWA model have been modified to reflect average vehicle noise rates identified for California by the California Department of Transportation (Caltrans). The Caltrans data indicates that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The average daily noise levels along roadway segments in proximity to the Project site are included in **Table 4.6-4, Existing Traffic Noise Levels**. As shown in **Table 4.6-4**, existing traffic noise levels in the Project vicinity range between 62.9 dBA CNEL and 72.0 dBA CNEL.

Table 4.6-4: Existing Traffic Noise Levels

Roadway Segment	ADT	dBA CNEL ¹
Day Street		
SR-60 WB Ramp to SR-60 EB Ramp	35,968	70.5
SR-60 EB Ramp to Canyon Springs Parkway	45,986	72.0
Canyon Springs Pkwy to Campus Parkway	31,649	70.4
Campus Pkwy to Gateway Drive	29,621	70.0
Gateway Drive to Eucalyptus Avenue	23,103	68.9
Eucalyptus Avenue		
I-215 Ramps to Day Street	17,931	66.6
Day Street to Towngate Boulevard	15,902	66.1
Town Circle		
Campus Pkwy to Centerpoint Drive	7,426	62.9
Centerpoint Drive		
Town Circle and Frederick Street	17,765	65.9
Towngate Boulevard		
Eucalyptus Avenue and Frederick Street	10,941	65.4
Pigeon Pass Road		
Hemlock Avenue to Sunnymead Boulevard	38,384	71.7
Frederick Street		
Sunnymead Blvd to Centerpoint Drive	37,458	70.8
Centerpoint Drive to Towngate Boulevard	27,528	69.4
Towngate Blvd to Eucalyptus Avenue	26,319	69.3
ADT = average daily trips; dBA = A-weighted decibels; CNEL= Community Equivalent Noise Level		
1. Traffic noise levels are at 100 feet from the roadway centerline.		
Source: Based on traffic data provided by Kittelson and Associates, Inc., March 2022. Refer to Appendix G for traffic noise modeling results.		

Stationary Sources

The primary sources of stationary noise in the Project vicinity are those associated with Moreno Valley Mall, commercial properties to the east and west, and multi-family residential properties to the south of the Project. The noise associated with these sources may represent a single-event noise occurrence or short-term noise. Other noises include mechanical equipment (e.g., heating ventilation and air conditioning [HVAC] equipment), dogs barking, idling vehicles, and customers or residents talking.

Noise Measurements

The Project site is the current location of the Moreno Valley Mall. To quantify existing ambient noise levels in the Project area, Kimley-Horn conducted six short-term noise measurements on March 30, 2022. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the Project site. The 10-minute measurements were taken between 12:17 p.m. and 1:44 p.m. Measurements of L_{eq} are considered representative of the noise levels throughout the day. The average noise levels and sources of noise measured at each location are listed in **Table 4.6-5, Existing Noise Measurements** and shown on **Exhibit 4.6-1, Noise Measurement Locations**.

Table 4.6-5: Existing Noise Measurements

Site	Location	Measurement Period	Duration	Daytime Average L_{eq} (dBA)
ST-1	Southeast of Town Circle and Heritage Way intersection	12:17 – 12:27 p.m.	10 Minutes	59.6
ST-2	Parking lot, north of Town Circle and south of JCPenney	12:33 – 12:43 p.m.	10 Minutes	61.6
ST-3	Parking area, east of Town Circle and northwest of Macy’s	12:47 – 12:57 p.m.	10 Minutes	63.7
ST-4	Vacant field, south of Town Circle and north of Harkins Theater	1:04 – 1:14 p.m.	10 Minutes	62.9
ST-5	Parking lot, south of Town Circle and north of bus bay	1:20 – 1:30 p.m.	10 Minutes	63.6
ST-6	Parking lot, west of Moreno Valley Mall’s eastern entrance	1:34 – 1:44 p.m.	10 Minutes	55.4

Source: Noise measurements taken by Kimley-Horn, March 30, 2022. See Appendix F for noise measurement results.

Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive receptors that are in proximity to localized sources of toxins are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The Project site is mainly surrounded by commercial land uses to the west and commercial/residential to the east, residential south, and State Route 60 (SR-60) and residential uses to the north. Towngate Memorial Park is located to the south. Sensitive land uses nearest to the Project are shown in **Table 4.6-6, Sensitive Receptors**.

Table 4.6-6: Sensitive Receptors

Receptor Description	Distance and Direction from the Project
Multi-family Residences	110 feet to the south
Single-family Residences	300 feet to the north
Towngate Memorial Park	1,500 feet to the south
Single-family Residences	1,600 feet to the east

Source: Google Earth

4.6.4 Regulatory Setting

State

California Government Code

California Government Code §65302(f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of “normally acceptable,” “conditionally acceptable,” “normally

unacceptable,” and “clearly unacceptable” noise levels for various land use types. Single-family homes are “normally acceptable” in exterior noise environments up to 60 CNEL and “conditionally acceptable” up to 70 CNEL. Multiple-family residential uses are “normally acceptable” up to 65 CNEL and “conditionally acceptable” up to 70 CNEL. Schools, libraries, and churches are “normally acceptable” up to 70 CNEL, as are office buildings and business, commercial, and professional uses.

Title 24 – Building Code

The State’s noise insulation standards are codified in the California Code of Regulations, Title 24: Part 1, Building Standards Administrative Code, and Part 2, California Building Code. These noise standards are applied to new construction in California for interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new multi-family residential buildings, the acceptable interior noise limit for new construction is 45 dBA CNEL.



Source: ESRI World Imagery

FIGURE 4.6-1: Noise Measurement Locations
Moreno Valley Mall Redevelopment Project

Local

City of Moreno Valley General Plan

The City of Moreno Valley 2040 General Plan was adopted on June 15, 2021. Chapter 7, Noise contains goals and policies that seek to proactively address sources of noise in Moreno Valley, protect against excessive noise, and support the social and economic vitality of the community. Goals and policies that relate to noise impacts include the following:

- Goal N-1:** *Design for a pleasant, healthy sound environment conducive to living and working.*
- Policy N.1-1:** Protect occupants of existing and new buildings from exposure to excessive noise, particularly adjacent to freeways, major roadways, the railroad, and within areas of aircraft overflight.
- Policy N.1-3:** Apply the community noise compatibility standards (Table N-1) to all new development and major redevelopment projects outside the noise and safety compatibility zones established in the March Air Reserve Base/Inland Port Airport Land Use Compatibility (ALUC) Plan in order to protect against the adverse effects of noise exposure. Projects within the noise and safety compatibility zones are subject to the standards contained in the ALUC Plan.
- Policy N.1-4:** Require a noise study and/or mitigation measures if applicable for all projects that would expose people to noise levels greater than the “normally acceptable” standard and for any other projects that are likely to generate noise in excess of these standards.
- Policy N.1-5:** Noise impacts should be controlled at the noise source where feasible, as opposed to at receptor end with measures to buffer, dampen, or actively cancel noise sources. Site design, building orientation, building design, hours of operation, and other techniques, for new developments deemed to be noise generators shall be used to control noise sources.
- Policy N.1-7:** Developers shall reduce the noise impacts on new development through appropriate means (e.g., double-paned or soundproof windows, setbacks, berming, and screening). Noise attenuation methods should avoid the use of visible sound walls where possible.
- Goal N-2:** *Ensure that noise does not have a substantial, adverse effect on the quality of life in the community.*
- Policy N.2-1:** Use the development review process to proactively identify and address potential noise compatibility issues.
- Policy N.2-2:** Continue to work with community members and business owners to address noise complaints and ensure voluntary resolution of issues through the enforcement of Municipal Code provisions.
- Policy N.2-3:** Limit the potential noise impacts of construction activities on surrounding land uses through noise regulations in the Municipal Code that address allowed days and hours of construction, types of work, construction equipment, and sound attenuation devices.

City of Moreno Valley Municipal Code

The Moreno Valley Municipal Code establishes the following noise provisions relative to the Project:

Section 11.80.030 - Prohibited Acts

- C. Nonimpulsive Sound Decibel Limits. No person shall maintain, create, operate or cause to be operated on private property any source of sound in such a manner as to create any non-impulsive sound which exceeds the limits set forth for the source land use category (as defined in §11.80.020) in Table 11.80.030-2 (refer to Table 4: Maximum Sound Levels (in dBA) for Source Land Uses) when measured at a distance of two hundred (200) feet or more from the real property line of the source of the sound, if the sound occurs on privately owned property, or from the source of the sound, if the sound occurs on public right-of-way, public space or other publicly owned property. Any source of sound in violation of this subsection shall be deemed prima facie to be a noise disturbance.

Table 4.6-7: Maximum Sound Levels (in dBA) for Source Land Uses

Residential		Commercial	
Daytime	Nighttime	Daytime	Nighttime
60	55	65	60

Source: Moreno Valley Municipal Code Table 11.80.030-2

- D. Specific Prohibitions. In addition to the general prohibitions set out in subsection A of this section, and unless otherwise exempted by this chapter, the following specific acts, or the causing or permitting thereof, are regulated as follows:
 - 7. Construction and Demolition. No person shall operate or cause the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of eight p.m. and seven a.m. the following day such that the sound therefrom creates a noise disturbance, except for emergency work by public service utilities or for other work approved by the city manager or designee. This section shall not apply to the use of power tools as provided in subsection (D)(9) of this section.
 - 9. Power Tools. No person shall operate or permit the operation of any mechanically, electrically or gasoline motor-driven tool during nighttime hours so as to cause a noise disturbance across a residential real property boundary.²

Section 9.10.170 Performance Standards - Vibration

No vibration shall be permitted which can be felt at or beyond the property line.

4.6.5 Impact Thresholds and Significance Criteria

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning noise. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Generate 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;
- Generate excessive groundborne vibration or groundborne noise levels; and
- 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, expose people residing or working in the Project area to excessive noise levels.

Project Design Features

In addition to applying existing standard conditions and regulatory requirements, the Project has incorporated the following Project Design Features into the SPA and TPM:

- The Project consists of redeveloping an existing developed regional mall site, which will reduce grading and construction-related noise that would otherwise be associated with constructing a new mall at the current site or developing new regional commercial uses at an alternate site;
- The concept grading plan proposes relatively minor off-site soil import/export (less than 5,000 cubic yards) and use of an on-site borrow pit, which minimizes noise impacts associated with off-site truck traffic during construction;
- The Project incorporates enhancements to the existing transit stop, which will increase transit opportunities to and from the mall, reducing traffic, air quality, GHG and noise impacts; and
- The Project incorporates pedestrian-friendly walkways and open space into a mixed-use commercial retail environment, which will encourage non-vehicular transportation with corresponding reductions in traffic-related air quality, GHG and noise impacts.

Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria/thresholds as the basis for determining the impact's level of significance concerning noise. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impacts. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the potentially significant environmental impacts.

Approach to Analysis

This analysis of noise impacts examines the Project's temporary (i.e., construction) and permanent (i.e., operational) effects based on application of the significance criteria/thresholds outlined above. Each criterion is discussed in the context of the Project site and the surrounding characteristics/geography. The impact conclusions consider the potential for changes in environmental conditions, as well as compliance with the regulatory framework enacted to protect the environment.

Noise Levels Standards

Consistency with local noise standards are determined by comparing the applicable noise level standard to published equipment noise levels. In some cases, this requires calculating noise levels at various

distances (i.e., to a property line or sensitive receptor) using widely published noise propagation equations in order to assess whether a potential conflict could occur.

Groundborne Vibration during Construction

The Project would result in significant impacts if it were to generate vibration levels substantial enough to damage nearby structures or buildings or result in vibration levels that are commonly accepted as an annoyance to sensitive land uses. Caltrans characterizes the annoyance potential of vibration as follows: 0.01 in/sec PPV is “barely perceptible,” 0.04 in/sec PPV is “distinctly perceptible,” 0.1 in/sec PPV is “strongly perceptible, and 0.4 in/sec PPV is “severe.”²

4.6.6 Impacts and Mitigation Measures

Summary of Previous Environmental Analysis

The SP-200 EIR analyzed potential noise impacts associated with the proposed Moreno Valley Mixed Use Development. As analyzed in the SP-200 EIR, project implementation would involve the complete removal of the pre-existing Riverside International Raceway, removing it as a noise generator (which has since occurred). Short-term noise from construction activities may temporarily impact areas on and in close proximity to the site, and operational noise would increase both on- and off-site due to an increase in trips generated. The SP-200 EIR concluded that mitigation measures would be required for the residential uses located within the Airport Compatibility Land Use Zone (ACLUZ). It was recommended that the developer submit an acoustical study with each tract (parcel) showing compliance with noise requirements. The following mitigation measures were identified by the SP-200:

~~**MM N 1** — On-site residential uses within the AICUZ 65–70 and 70–75 L(dn) noise contour levels will require mitigation to the 45 CNEL standard for interior noise. (This mitigation measure is not applicable to the Project as the Project specific Noise Study identified no significant impacts due to noise, and no mitigations are required.)~~

~~**MM N 2** — In residential areas which lie within the 65 CNEL noise zone due to traffic noise, noise barriers will be required. It is recommended that the developer submit an acoustical study with each tract showing compliance with noise requirements. (This mitigation measure is not applicable to the Project as the Project specific Noise Study identified no significant impacts due to noise, and no mitigations are required.)~~

Impact 4.6-1 ***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?***

Level of Significance: Less than Significant Impact

Construction

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). Noise impacts associated with construction

² California Department of Transportation, Transportation and Construction Vibration Guidance Manual, 2020 and Federal Transit Administration, Transit Noise and Vibration Assessment Manual, 2018.

activity are a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Each phase of construction involves different types of equipment and has distinct noise characteristics. Noise levels from construction activities are typically dominated by the loudest several pieces of equipment.

The noise produced at each construction phase is determined by combining the L_{eq} contributions from the top three loudest pieces of equipment used at a given time, while accounting for the ongoing time-variations of noise emissions (commonly referred to as the usage factor). Heavy equipment, such as a dozer or a loader, can have maximum, short-duration noise levels of up to 85 dBA at 50 feet. However, overall noise emissions vary considerably, depending on what specific activity is being performed at any given moment.

Noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction phase would result in different noise levels from construction activities at a given receptor. Since noise from construction equipment is intermittent and diminishes at a rate of at least 6 dBA per doubling of distance (conservatively ignoring other attenuation effects from air absorption, ground effects, and shielding effects), the average noise levels at noise-sensitive receptors could vary considerably, because mobile construction equipment would move around the site (site of each development phase) with different loads and power requirements.

The City's Municipal Code does not establish quantitative exterior construction noise standards; however, §11.80.030(D)7 states that construction activities are prohibited from taking place between 8:00 p.m. and 7:00 a.m., therefore this analysis conservatively uses the FTA's threshold of 80 dBA (8-hour L_{eq}) for residential uses and 90 dBA (8-hour L_{eq}) for non-residential uses to evaluate construction noise impacts.³ Standard construction provides 25 dBA of exterior-to-interior noise attenuation with windows closed and 15 dBA with windows open.⁴ Therefore, it can be assumed that exterior noise levels of 80 dBA would equal 55 dBA when measured from the interior with windows closed.

Noise levels from project-related construction activities were calculated from the top three loudest construction equipment at spatially averaged distances (i.e., from the acoustical center) to the property line of the nearest receptors. Although construction may occur across the Project Area, the distance from the center of the nearest Project construction area to sensitive receptors, best represents the potential average construction-related noise levels.

The nearest sensitive receptors are multi-family residences located to the south of the Project site. Distances were measured from the center of the nearest Project construction site to the property line. The center of the site is used because the L_{eq} metric is an average. Construction equipment would move around the site, and the distance from the center of the Project represents an average for the entire site. As shown in **Table 4.6-8, Project Construction Noise Levels at Nearest Sensitive Receptor**, construction activities would not exceed the 80 dBA L_{eq} residential threshold for sensitive receptors. Therefore, construction related noise impacts would be less than significant.

³ Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, Table 7-2, Page 179, September 2018.

⁴ United States Environmental Protection Agency, Protective Noise Levels (EPA 550/9-79-100), 1979.

Table 4.6-8: Project Construction Noise Levels at Nearest Sensitive Receptor

Construction Phase	Modeled Exterior Construction Noise Level (dBA) L_{eq}	Noise Threshold (dBA) L_{eq}	Exceed Threshold?
Demolition	69.9	80	No
Site Preparation	68.7	80	No
Grading	69.6	80	No
Building Construction	68.8	80	No
Paving	63.6	80	No
Architectural Coating	59.0	80	No
Combined Overlapping Phases ¹	70.3	80	No

1. Overlapping phases combine building construction, architectural coating, and paving.
 Source: Federal Highway Administration, Roadway Construction Noise Model, 2006. Refer to Appendix F for noise modeling results.

Compliance with the Municipal Code would minimize impacts from construction noise, as construction would be limited to the permitted times. By following Municipal Code standards, Project construction activities would result in a less than significant noise impact.

Operations

The Project site is an existing shopping mall that the Project will be redeveloped to include new multi-family residential, two hotels, new parking structures, outdoor dining. As the Moreno Valley Mall is currently operating, this analysis only focuses on new sources of noise associated with Project improvements and does not analyze the mall as a whole. Implementation of the proposed Project would create new sources of noise in the project vicinity. The major noise sources associated with the Project that would potentially impact existing nearby residences would include stationary noise equipment (i.e., trash compactors, air conditioners, etc.); new parking areas (i.e., car door slamming, car radios, engine start-up, and car pass-by); and off-site traffic noise.

Mechanical Equipment. The nearest sensitive receptors to the Project site are the residences 110 feet south of the Project site. Potential stationary noise sources related to long-term operation of the Project would include mechanical equipment. Mechanical equipment (e.g., heating ventilation and air conditioning [HVAC] equipment) typically generates noise levels of approximately 52 dBA at 50 feet.⁵ Based on Project site plans, the nearest potential location for a HVAC unit would be located approximately 200 feet from the nearest residential property and HVAC noise levels would attenuate by the distance to approximately 38.0 dBA, which is well below the City’s 60 dBA daytime and 55 dBA nighttime noise standard for residential uses. Operation of mechanical equipment would not increase ambient noise levels beyond the acceptable compatible land use noise levels. Therefore, the proposed project would result in a less than significant impact related to stationary noise levels.

Parking Noise. The Project would provide podium parking structures for the new multi-family residential buildings. Traffic associated with parking lots is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale. The instantaneous

⁵ Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, Noise Navigator Sound Level Database with Over 1700 Measurement Values, 2015.

maximum sound levels generated by a car door slamming, engine starting up, and car pass-bys range from 53 to 61 dBA.⁶ Conversations in parking areas may also be an annoyance to adjacent sensitive receptors. Sound levels of speech typically range from 33 dBA at 50 feet for normal speech to 50 dBA at 50 feet for very loud speech.⁷ It should be noted that parking lot noises are instantaneous noise levels compared to noise standards in the hourly L_{eq} metric, which are averaged over the entire duration of a time period. As a result, actual noise levels over time resulting from parking lot activities would be far lower than the reference levels identified above.

For the purpose of providing a conservative, quantitative estimate of the noise levels that would be generated from the vehicles entering and exiting the parking lot, the methodology recommended by FTA for the general assessment of stationary transit noise sources is used. Using the methodology, the Project's peak hourly noise level that would be generated by the on-site parking levels was estimated using the following FTA equation for a parking lot:

$$L_{eq(h)} = SEL_{ref} + 10 \log (NA/1,000) - 35.6$$

Where:

$L_{eq(h)}$ = hourly L_{eq} noise level at 50 feet

SEL_{ref} = reference noise level for stationary noise source represented in sound exposure level (SEL) at 50 feet

NA = number of automobiles per hour

35.6 is a constant in the formula, calculated as 10 times the logarithm of the number of seconds in an hour

Based on the peak hour trip generation rates in the Traffic Study, approximately 634 trips during peak hours would be made to the Project site each day. Using the FTA's reference noise level of 92 dBA SEL at 50 feet from the noise source, the Project's highest peak hour vehicle trips would generate noise levels of approximately 54.4 dBA L_{eq} at 50 feet from the parking lot.⁸ The nearest sensitive receptor is 200 feet from a parking area. Conservatively assuming that all residential vehicles would access the same structure located nearest to sensitive receptors rather than dispersed throughout all available parking structures and based strictly on distance attenuation, parking lot noise at the nearest receptor would be 42.4 dBA which is below the City's residential noise standard. Therefore, noise impacts from parking lots would be less than significant.

Off-Site Traffic Noise. Implementation of the Project would generate increased traffic volumes along nearby roadway segments. According to the Traffic Impact Study, the proposed Project would generate 11,076 daily trips which would result in noise increases on Project area roadways. In general, a traffic noise increase of less than 3 dBA is barely perceptible to people, while a 5-dBA increase is readily noticeable.⁹ Generally, traffic volumes on Project area roadways would have to approximately double for

⁶ Kariel, H. G., Noise in Rural Recreational Environments, Canadian Acoustics 19(5), 3-10, 1991.

⁷ Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden. Noise Navigator Sound Level Database with Over 1700 Measurement Values, July 6, 2010.

⁸ Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

⁹ Federal Highway Administration, Highway Traffic Noise Analysis and Abatement Policy and Guidance, Noise Fundamentals, https://www.fhwa.dot.gov/Environment/noise/regulations_and_guidance/polguide/polguide02.cfm, accessed April 13, 2022.

the resulting traffic noise levels to increase by 3 dBA. Therefore, permanent increases in ambient noise levels of less than 3 dBA are considered to be less than significant.

Traffic noise levels for roadways primarily affected by the Project were calculated using the FHWA’s Highway Noise Prediction Model (FHWA-RD-77-108). Traffic noise modeling was conducted for conditions with and without the Project, based on traffic volumes from the Traffic Impact Analysis. As indicated in **Table 4.6-9, Opening Year and Opening Year Plus Project Traffic Noise Levels**, Opening Year Plus Project traffic-generated noise levels on Project area roadways would range between 65.8 dBA CNEL and 73.2 dBA CNEL at 100 feet from the centerline, and the Project would result in a maximum increase of 2.6 dBA CNEL along Town Circle. Noise impacts from off-site traffic would be less than significant.

Table 4.6-9: Opening Year and Opening Year Plus Project Traffic Noise Levels

Roadway Segment	Opening Year		Opening Year Plus Project		Project Change from No Build Conditions	Noise Threshold	Significant Impact?
	ADT	dBA CNEL ¹	ADT	dBA CNEL ¹			
Day Street							
SR-60 WB Ramp to SR-60 EB Ramp	41,732	71.2	42,588	71.3	0.1	3.0	No
SR-60 EB Ramp to Canyon Springs Parkway	55,258	72.8	60,436	73.2	0.4	3.0	No
Canyon Springs Pkwy to Campus Parkway	39,617	71.4	44,430	71.9	0.5	3.0	No
Campus Pkwy to Gateway Drive	37,321	71.0	40,300	71.3	0.3	3.0	No
Gateway Drive to Eucalyptus Avenue	27,819	69.7	27,059	69.5	-0.2	3.0	No
Eucalyptus Avenue							
Day Street to Towngate Boulevard	22,235	67.6	23,761	67.8	0.2	3.0	No
Campus Pkwy to Centerpoint Drive	18,854	66.8	19,669	67.0	0.2	3.0	No
Town Circle							
Campus Pkwy to Centerpoint Drive	7,984	63.2	14,664	65.8	2.6	3.0	No
Centerpoint Drive							
Town Circle and Frederick Street	19,098	66.2	28,095	67.9	1.7	3.0	No
Towngate Boulevard							
Eucalyptus Avenue and Frederick Street	12,379	65.9	14,899	66.8	0.9	3.0	No
Pigeon Pass Road							
Hemlock Avenue to Sunnymead Boulevard	42,095	72.1	43,663	72.2	0.1	3.0	No
Frederick Street							
Sunnymead Blvd to Centerpoint Drive	41,279	71.3	48,177	71.9	0.6	3.0	No
Centerpoint Drive to Towngate Boulevard	30,604	69.9	27,829	69.5	-0.4	3.0	No
Towngate Boulevard to Eucalyptus Avenue	28,687	69.6	28,437	69.6	0.0	3.0	No
ADT = average daily trips; dBA = A-weighted decibels; CNEL= Community Equivalent Noise Level 1. Traffic noise levels are at 100 feet from the roadway centerline. Source: Based on traffic data provided by Kittelson and Associates, Inc., March 2022. Refer to Appendix G for traffic noise modeling results.							

Applicable SP-200 EIR Mitigation Measures: No mitigation measures identified in the SP-200 EIR are applicable to this topical area due to Project specific noise modeling determining less than significant impacts as a result of Project implementation.

Moreno Valley Mall Specific Plan Design Guidelines: The following design guidelines from the Moreno Valley Mall Specific Plan are applicable:

DG-174 Open space should be sheltered from the noise and traffic of adjacent streets or other incompatible uses.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.6-2 Generation of excessive groundborne vibration or groundborne noise levels?

Level of Significance: Less than Significant Impact

Increases in groundborne vibration levels attributable to the proposed Project would be primarily associated with short-term construction-related activities. The Federal Transit Administration (FTA) has published standard vibration velocities for construction equipment operations in their 2018 *Transit Noise and Vibration Impact Assessment Manual*. The types of construction vibration impacts include human annoyance and building damage.

The Federal Transit Administration (FTA) has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.2 in/sec) appears to be conservative. The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. For example, for a building that is constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.20 in/sec is considered safe and would not result in any construction vibration damage.

Table 4.6-10, Typical Construction Equipment Vibration Levels, lists vibration levels at 25 feet for typical construction equipment. Vibration levels at 110 feet, the distance from the Project boundary to the nearest existing structure is also included in ***Table 4.6-10***. Ground-borne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. As indicated in ***Table 4.6-10***, based on FTA data, vibration velocities from typical heavy construction equipment operations that would be used during Project construction range from 0.0003 to 0.0096 in/sec PPV at 110 feet from the source of activity.

Table 4.6-10: Typical Construction Equipment Vibration Levels

Equipment	Peak Particle Velocity at 25 Feet (in/sec)	Peak Particle Velocity at 110 Feet (in/sec) ¹
Large Bulldozer	0.089	0.0096
Caisson Drilling	0.089	0.0096
Loaded Trucks	0.076	0.0082
Jackhammer	0.035	0.0038
Small Bulldozer/Tractors	0.003	0.0003
¹ Calculated using the following formula: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$, where: PPV_{equip} = the peak particle velocity in in/sec of the equipment adjusted for the distance; PPV_{ref} = the reference vibration level in in/sec from Table 7-4 of the Federal Transit Administration, <i>Transit Noise and Vibration Impact Assessment Manual</i> , 2018; D = the distance from the equipment to the receiver.		
Source: Federal Transit Administration, <i>Transit Noise and Vibration Impact Assessment Manual</i> , 2018.		

The nearest structure to the Project construction site is approximately 110 feet away. **Table 4.6-10** shows that at 110 feet the vibration velocities from construction equipment would not exceed 0.0096 in/sec PPV, which is below the FTA’s 0.20 in/sec PPV threshold for building damage. It is also acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to the nearest structure. Therefore, vibration impacts associated with Project construction would be less than significant.

Once operational, the Project would not be a significant source of groundborne vibration. Groundborne vibration surrounding the Project currently result from heavy-duty vehicular travel (e.g., refuse trucks, heavy duty trucks, delivery trucks, and transit buses) on the nearby local roadways. Due to the rapid drop-off rate of ground-borne vibration and the short duration of the associated events, vehicular traffic-induced ground-borne vibration is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity. Impacts would be less than significant in this regard.

Applicable SP-200 EIR Mitigation Measures: The SP-200 EIR identified mitigation measures for this resource area, however the mitigation are not applicable to groundborne noise.

Moreno Valley Mall Specific Plan Design Guidelines: No design guidelines of the Moreno Valley Mall Specific Plan are applicable.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.6-3 *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?*

Level of Significance: Less than Significant Impact

The nearest airport to the Project site is the March Air Force Reserve Base located approximately 2.4 miles to the south. According to the noise compatibility contours figure for the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (Riverside County Airport Land Use Commission 2014), the project site is located outside the airport’s 60 dBA CNEL noise contour. Therefore, the Project would not

expose people residing or working in the Project area to excessive airport- or airstrip-related noise levels and no mitigation is required.

Applicable SP-200 EIR Mitigation Measures: The SP-200 EIR identified mitigation measures for this resource area, however, the mitigation is not applicable because the Project site is not located within the vicinity of an airstrip or airport land use plan.

Moreno Valley Mall Specific Plan Design Guidelines: No design guidelines of the Moreno Valley Mall Specific Plan are applicable.

Additional Mitigation Measures: No additional mitigation measures are necessary.

4.6.7 Cumulative Impacts

Cumulative Construction Noise

The Project's construction activities would not result in a substantial temporary increase in ambient noise levels. Construction noise would be periodic and temporary noise impacts that would cease upon completion of construction activities. The Project would contribute to other proximate construction project noise impacts if construction activities were conducted concurrently. However, based on the noise analysis above, the Project's construction-related noise impacts would be less than significant following the City of Moreno Valley Municipal Code.

Construction activities at other planned and approved projects near the Project site would be required to comply with applicable City rules related to noise and would take place during daytime hours permitted by the applicable Municipal Code, and projects requiring discretionary City approvals would be required to evaluate construction noise impacts, comply with applicable City standard conditions of approval implemented at the time of Project approval, and implement mitigation, if necessary, to minimize noise impacts. Construction noise impacts are by nature localized. Based on the fact that noise dissipates as it travels away from its source, noise impacts would be limited to the Project site and vicinity. Therefore, Project construction would not result in a cumulatively considerable contribution to significant cumulative impacts, assuming such a cumulative impact existed, and impacts in this regard are not cumulatively considerable.

Cumulative Operational Noise

Cumulative Off-Site Traffic Noise

Cumulative noise impacts describe how much noise levels are projected to increase over existing conditions with the development of the proposed Project and other foreseeable projects. Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to buildout of the proposed Project and other projects in the vicinity. Cumulative increases in traffic noise levels were estimated by comparing the Existing and Opening Year Without Project scenarios to the Opening Year Plus Project scenario. The traffic analysis considers cumulative traffic from future growth assumed in the transportation model, as well as cumulative projects.

A project’s contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds the perception level (i.e., auditory level increase) threshold. The following criteria is used to evaluate the combined and incremental effects of the cumulative noise increase.

- **Combined Effect.** The cumulative Project noise level (“Horizon Year With Project”) would cause a significant cumulative impact if a 3.0 dB increase over “Existing” conditions occurs and the resulting noise level exceeds the applicable exterior standard at a sensitive use. Although there may be a significant noise increase due to the proposed Project in combination with other related projects (combined effects), it must also be demonstrated that the Project has an incremental effect. In other words, a significant portion of the noise increase must be due to the proposed Project.
- **Incremental Effects.** The “Horizon Year With Project” causes a 1.0 dBA increase in noise over the “Horizon Year Without Project” noise level.

A significant impact would result only if both the combined and incremental effects criteria have been exceeded. Noise by definition is a localized phenomenon and reduces as the distance from the source increases. Consequently, only the proposed Project and growth due to occur in the general area would contribute to cumulative noise impacts.

Table 4.6-11, Cumulative Traffic Noise Levels identifies the traffic noise effects along roadway segments in the Project vicinity for “Existing,” “Horizon Year Without Project,” and “Horizon Year With Project,” conditions, including incremental and net cumulative impacts. **Table 4.6-11** shows the increase for combined effects and incremental effects and none of the segments meet the criteria for cumulative noise increase. The proposed Project would not result in long-term mobile noise impacts based on project-generated traffic as well as cumulative and incremental noise levels. Therefore, the proposed Project, in combination with cumulative background traffic noise levels, would result in a less than significant cumulative impact. The proposed Project’s contribution would not be cumulatively considerable.

Table 4.6-11: Cumulative Traffic Noise Levels

Roadway Segment	Existing (dBA CNEL)	Horizon Year Without Project (dBA CNEL)	Horizon Year With Project (dBA CNEL)	Combined Effects	Incremental Effects	Cumulatively Significant Impact?
				Difference In dBA Between Existing and Horizon Year With Project	Difference In dBA Between Horizon Year Without Project and Horizon Year With Project	
Day Street						
SR-60 WB Ramp to SR-60 EB Ramp	70.5	72.2	72.3	1.8	0.1	No
SR-60 EB Ramp to Canyon Springs Parkway	72.0	73.9	73.9	1.9	0.0	No
Canyon Springs Pkwy to Campus Parkway	70.4	73.0	73.1	2.7	0.1	No
Campus Pkwy to Gateway Drive	70.0	72.8	72.8	2.8	0.0	No
Gateway Drive to Eucalyptus Avenue	68.9	72.2	72.2	3.3	0.0	No
Eucalyptus Avenue						
I-215 Ramps to Day Street	66.6	69.2	69.4	2.8	0.2	No
Day Street to Towngate Boulevard	66.1	68.4	68.6	2.5	0.2	No

Roadway Segment	Existing (dBA CNEL)	Horizon Year Without Project (dBA CNEL)	Horizon Year With Project (dBA CNEL)	Combined Effects	Incremental Effects	Cumulatively Significant Impact?
				Difference In dBA Between Existing and Horizon Year With Project	Difference In dBA Between Horizon Year Without Project and Horizon Year With Project	
Town Circle						
Campus Parkway to Centerpoint Drive	62.9	63.3	65.2	2.3	1.9	No
Centerpoint Drive						
Town Circle to Frederick Street	65.9	66.4	67.4	1.5	1.0	No
Towngate Boulevard						
Eucalyptus Avenue to Frederick Street	65.4	67.7	68.1	2.7	0.4	No
Pigeon Pass Road						
Hemlock Avenue to Sunnymead Boulevard	71.7	72.6	72.8	1.1	0.2	No
Frederick Street						
Sunnymead Boulevard to Centerpoint Drive	70.8	71.8	72.2	1.4	0.4	No
Centerpoint Drive to Towngate Boulevard	69.4	70.5	70.6	1.2	0.1	No
Towngate Boulevard to Eucalyptus Avenue	69.3	70.3	70.5	1.2	0.2	No
ADT = average daily trips; dBA = A-weighted decibels; CNEL= Community Equivalent Noise Level Source: Based on traffic data provided by Kittelson and Associates, Inc., March 2022. Refer to Appendix G for traffic noise modeling results.						

Cumulative Stationary Noise

Stationary noise sources of the proposed Project would result in an incremental increase in non-transportation noise sources in the Project vicinity. However, as discussed above, operational noise caused by the proposed Project would be less than significant. Similar to the proposed Project, other planned and approved projects would be required to mitigate for stationary noise impacts at nearby sensitive receptors, if necessary. As stationary noise sources are generally localized, there is a limited potential for other projects to contribute to cumulative noise impacts.

No known past, present, or reasonably foreseeable projects would combine with the operational noise levels generated by the Project to increase noise levels above acceptable standards because each project must comply with applicable City regulations that limit operational noise. Therefore, the Project, together with other projects, would not create a significant cumulative impact, and even if there was such a significant cumulative impact, the Project would not make a cumulatively considerable contribution to significant cumulative operational noises.

Given that noise dissipates as it travels away from its source, operational noise impacts from on-site activities and other stationary sources would be limited to the Project site and vicinity. Thus, cumulative operational noise impacts from related projects, in conjunction with Project specific noise impacts, would not be cumulatively significant.

4.6.8 Significant Unavoidable Impacts

No significant unavoidable noise impacts have been identified.

4.6.9 References

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- United States Environmental Protection Agency (1979). *Protective Noise Levels (EPA 550/9-79-100)*.

4.7 TRANSPORTATION

4.7.1 Introduction

The purpose of this section is to describe the potential transportation impacts that may result from construction and operation of the Project. The following discussion addresses the existing transportation conditions in the Project area, identifies applicable regulations, evaluates the Project's consistency with applicable goals and policies, identifies and analyzes potential environmental impacts, and recommends measures to reduce or avoid adverse impacts anticipated from implementation of the Project. The information and analysis herein rely on the *Moreno Valley Mall Redevelopment Traffic Impact Analysis* (TIA) prepared by Kittelson & Associates on August 2022 (**Appendix G**).

4.7.2 Environmental Setting

Existing Transportation Network

Existing Roadway Network

Access to the Project site is generally provided by roadways with the following functional classifications (see Figures 3 and 4 of the TIA in **Appendix G**):

Freeways

Regional vehicular access to the Project site is currently provided by Interstate (I-) 215 and California State Route (SR-) 60. I-215 and SR-60 are classified as freeways in the Circulation Element of the MoVal2040 General Plan. I-215 is a north-south freeway that provides three travel lanes in each direction and is located approximately 5,000 feet west of the western boundary of the Project site. Access to I-215 from the Project site is provided via on- and off-ramps at Eastridge Avenue and Eucalyptus Avenue. SR-60 is an east-west freeway that provides three travel lanes in each direction and is located approximately 200 feet north of the northern boundary of the Project. Access to SR-60 from the Project site is provided by on- and off-ramps at Day Street and at Pigeon Pass and Frederick Street.

Divided Major Arterials

Divided major arterial roadways generally consist of 134-foot-wide rights-of-way, two or three travel lanes in each direction, and two-way left-turn lanes or a raised median. Divided Major Arterial roadways in the vicinity of the Project include Day Street from SR-60 to Eucalyptus Avenue, Eucalyptus Avenue, Towngate Boulevard, and Frederick Street from SR-60 and Towngate Boulevard.

Divided Arterials

Divided arterials roadways generally consist of 110-foot-wide rights-of-way, two travel lanes in each direction, and can include a two-way left-turn lane. Divided Arterial roadways in the vicinity of the Project include Pigeon Pass Road from Ironwood Avenue and SR-60, Day Street from Eucalyptus Avenue to Cottonwood Avenue, and Old 215 Frontage Road south from Eucalyptus Avenue.

Arterials

Arterial roadways generally consist of 100-foot-wide rights-of-way, with one or two travel lanes in each direction, and can include a two-way left-turn lane. Arterial roadways in the vicinity of the Project include Eucalyptus Avenue from Towngate Boulevard to Elsworth Street, and Frederick Street south of Eucalyptus Avenue.

Minor Arterials

Minor arterial roadways generally consist of 88-foot-wide rights-of-way, with one or two travel lanes in each direction, and can include a two-way left-turn lane. Minor arterial roadways within the vicinity of the Project include Day Street north of SR-60, Elsworth Street south of Eucalyptus Avenue, and Eucalyptus Avenue east of Elsworth Street.

Neighborhood Collectors

Collectors are residential streets that prioritize low vehicle speeds and low-stress bicycle and pedestrian use on parallel route to arterials. Within the vicinity of the Project, Dracaea Street east of Elsworth Street is a neighborhood collector with one travel lane in each direction without a raised median or two-way left-turn lane.

Existing Transit Service

Bus Routes and Regional Rail

The transit system in the study area consists of local bus and regional rail service.¹ The Riverside Transit Agency (RTA) provides bus services in the area. Bus routes that serve the Project area include routes 11, 16, 18, 19, and 31. Each route currently has a stop at the existing Moreno Valley Mall, which is a transit point. Amenities at the bus stop at the Moreno Valley Mall include trash cans, benches, and shelters. Additionally, the Moreno Valley/March Field Station is located approximately two miles southwest of the Project site. The station serves RTA Bus Route 20 as well as the Metrolink 91/Perris Valley Line, which runs between the City of Perris and Union Station in the City of Los Angeles.

Park and Ride

Park and Ride lots are locations to transfer to other forms of ridership services, whether public transportation, rideshare programs, or carpool and vanpool services. Park and Ride lots are typically free for use for daily commuters and are not intended for retail or commercial uses. Some park and ride lots may also offer biker lockers or access to public transportation. The nearest park and ride lots to the Project site are the Moreno Valley Mall and the Pigeon Pass Park and Ride located northwest of the intersection of Pigeon Pass Road and SR-60.²

¹ City of Moreno Valley (June 15, 2021). *General Plan 2040; Map C-3: Transit Lines and Facilities*.

² California Department of Transportation (2021). *Park and Ride Inventory – Updated August 2021*. Available at <https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/managed-lanes/park-ride-inventory-external-aug21-a11y.pdf>. Accessed June 2022.

Existing Pedestrian and Bicycle Facilities

Pedestrian Facilities

There are several types of facilities and amenities that support pedestrian usage. Sidewalks, crosswalks, and buffers existing on-site and in the vicinity of the Project. Sidewalks exist on-site on both sides of Town Circle on the north side of the Project site as well on the south side of Town Circle on the southern side of the Project site. Crosswalks are typically provided at signalized intersections with some having been upgraded to high-visibility continental crosswalks.

Bicycle Facilities

Bicycle facilities are categorized into four types and generally exist outside of the Project boundaries.³

- **Class I Bikeway (Bike Path):** Also known as a shared path or multi-use path, a bike path is a paved right-of-way for bicycle travel that is completely separated from any street or highway.
- **Class II Bikeway (Bike Lane):** A striped and stenciled lane for one-way bicycle travel on a street or highway. This facility could include a buffered space between the bike lane and vehicle lane and the bike lane could be adjacent to on-street parking.
- **Class III Bikeway (Bike Route):** A signed route along a street where the bicyclist shares the right-of-way with motor vehicles. This facility can also be designated using a shared-lane marking (sharrow).
- **Class IV Bikeway (Separated Bike Lane):** A bikeway for the exclusive use of bicycles including a separation required between the separated bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

Existing bicycle facilities in the Project vicinity consist of the following:

- Bike route along Day Street north of Towngate Boulevard
- Buffered bike lanes along Eucalyptus Avenue between Day Street and Towngate Boulevard and along Towngate Boulevard between Eucalyptus Avenue and Frederick Street
- Bike route along Eucalyptus Avenue between Day Street and I-215
- Bike lanes along Gateway Drive between Day Street and Memorial Way
- Bike lanes along Memorial Way and along Eucalyptus Avenue between Towngate Boulevard and Frederick Street
- Parking-adjacent bike lanes along Elsworth Street
- Multi-use path from Eucalyptus Avenue southeast to Graham Street, via Towngate Memorial Park
- Bike boulevard with greenback sharrow along Dracaea Avenue

³ Ibid.; Map C-2: Existing and Planned Bicycle and Pedestrian Network.

- Southbound bike route with greenback sharrows and northbound bike lane with green conflict zone paint treatments along Pigeon Pass Road between Sunnymead Boulevard and Ironwood Avenue
- Bike lanes along Fredrick Street south of Sunnymead Boulevard, with bugger south of Brabham Street and green conflict zone paint treatments between Sunnymead Boulevard and Towngate Boulevard
- Bike lanes along Sunnymead Boulevard
- Bike route along Box Springs Road
- Bike lanes along Ironwood Avenue

Existing Vehicle Miles Traveled

Senate Bill 743 was signed into law in September 2013. Senate Bill 743 requires changes to CEQA Guidelines regarding the analysis of transportation impacts and identified vehicle miles traveled (VMT) as the most appropriate metric to evaluate a project's significant transportation impacts. Senate Bill 743 is described in further detail in **Section 4.7.3, Regulatory Setting**. VMT provides an indication of the amount of travel in the roadway system by multiplying the number of trips by the distance traveled. For example, 10 vehicles each taking a 10-mile trip would result in a total of 100 VMT. VMT can also be analyzed through efficiency metrics (e.g., per VMT generated per capita or per employee).

The existing VMT for the Project site was evaluated as part of the TIA prepared for the Project. The VMT of the entirety of the Moreno Valley Mall, including the JCPenney and Macy's parcels, was analyzed and the VMT of this area was determined to be 143,722 VMT. Refer to **Appendix G** of this DEIR for the TIA for further information regarding the City of Moreno Valley's screening criteria for VMT.

4.7.3 Regulatory Setting

State

Assembly Bill 1358 – Complete Streets

In 2008, the state passed the California Complete Streets Act (Assembly Bill [AB] 1358), requiring circulation elements to include a "Complete Streets" approach that balances the needs of all users of the street. Complete Streets are streets designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. The precise definition of a Complete Street can vary depending on the context and primary roadway users, but there are some common elements found in successful Complete Streets policies. These policies consider the needs of all users of the street in the planning, design, construction, operation, and maintenance of transportation networks. This framework allows policymakers to shift the goals, priorities, and vision of local transportation planning efforts by emphasizing a diversity of modes and users.

Assembly Bill 32 – Global Warming Solutions Act

The California Global Warming Solutions Act of 2006 (AB 32) was signed into law in September 2006 after considerable study and expert testimony before the legislature. The law instructs the California Air

Resources Board (CARB) to develop and enforce regulations for the reporting and verifying of statewide greenhouse gas (GHG) emissions. The Act directed CARB to set a GHG emission limit based on 1990 levels to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner (AB 32). In December 2008, CARB adopted a Scoping Plan to achieve the goals of AB 32. AB 32 was followed by Senate Bill (SB) 32 in 2016, which expanded this goal for statewide GHG emissions to be 40 percent below 1990 levels by 2030 (SB 32).

The scoping plan has a range of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms (e.g., cap-and-trade system), and an AB 32 program implementation regulation to fund the program. CARB recognizes cities as “essential partners” in reducing GHGs. As such, CARB has developed a Local Government Toolkit with guidance for GHG reduction strategies, such as improving transit, developing bicycle/pedestrian infrastructure, and increasing city fleet vehicle efficiency, among other strategies.

CARB’s 2017 Scoping Plan builds upon the successful framework established by the Scoping Plan, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The 2017 Scoping Plan includes goals and measures that specifically reduce GHG emissions from the transportation sector. These goals and measures focus on using VMT as the metric for determining transportation impacts on the environment; encouraging development practices that reduce VMT; enhancing mass transit systems, shared-use mobility, and bicycle and pedestrian networks; and reducing fossil fuels for transportation use, in favor of fuels and energy technology that emits less GHG emissions.

Senate Bill 375 – Sustainable Communities and Climate Protection Act

The Sustainable Communities and Climate Protection Act, or SB 375, provides incentives for cities and developers to bring housing and jobs closer together and to improve public transit. The goal is to reduce the number and length of automobile commuting trips, helping to meet the statewide targets for reducing GHG emissions set by AB 32.

SB 375 requires each Metropolitan Planning Organization to add a broader vision for growth to its transportation plan through development of a Sustainable Communities Strategy (SCS). The SCS must lay out a plan to meet the region’s transportation, housing, economic, and environmental needs in a way that enables the area to lower GHG emissions. The SCS should integrate transportation, land use, and housing policies to plan for achievement of the emissions target for each region. The Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) were adopted in September 2020.

Senate Bill 743 – Amending CEQA with Respect to Evaluating Transportation Impacts

SB 743 was signed into law on September 27, 2013, and seeks to balance the needs of congestion management, infill development, public health, GHG reductions, and other goals. The Office of Planning

and Research released the *Technical Advisory on Evaluating Transportation Impacts in CEQA* in December 2018. Western Riverside Council of Governments (WRCOG) released the *WRCOG SB 743 Implementation Pathway* in March 2019, a guiding document for VMT analysis methodology, thresholds, and mitigation strategies for transportation impact evaluation for WRCOG agencies such as Moreno Valley. Furthermore, for the California Environmental Quality Act (CEQA) process, this bill eliminates measures such as auto delay, level of service (LOS), and other vehicle-based measures of capacity in many parts of California. Instead, other measurements such as VMT are to be utilized to measure impacts.

Technical Advisory on Evaluating Transportation Impacts in CEQA

The Governor’s Office of Planning and Research (OPR) released the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory) in December 2018. The Technical Advisory aids in the transition from LOS to VMT methodology for transportation impact analysis under CEQA. The advisory contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures.

California Department of Transportation

Caltrans owns and operates the State Highway System, which includes the freeways and State routes within California. In the City of Moreno Valley, Caltrans maintains I-215 and SR-60. While VMT is now used for the basis of transportation impacts under CEQA, Caltrans recognizes that VMT may not apply to all projects on the State Highway System; however, VMT does apply to the proposed Project. Caltrans also recognizes that VMT is the most appropriate primary measure of transportation impacts for capacity increasing transportation projects on the State Highway System.

The *Transportation Impact Study Guide* prepared by Caltrans on May 20, 2020 provides guidance on the evaluation of traffic impacts to local land use projects. The document outlines when a project is presumed to have a less than significant impact and may be “screened” out of requiring a VMT analysis. Otherwise a VMT analysis would be required and compared against thresholds of significance adopted by the lead agency.

Regional

Regional Western Riverside Council of Governments Transportation Uniform Mitigation Fee

WRCOG’s Transportation Uniform Mitigation Fee (TUMF) Program is a regional fee program designed to provide transportation and transit infrastructure that mitigates the impact of new growth in western Riverside County. WRCOG administers the program in partnership with its member agencies. Each member agency elects to participate in the TUMF Program through adoption of an ordinance and membership in WRCOG. In an effort to create additional efficiencies in the TUMF Program, WRCOG pursued a revision in the TUMF process to give member agencies the option to shift responsibility of calculation and collection of TUMF from the member agency to WRCOG.

Southern California Association of Governments Regional Transportation Plan and Sustainable Communities Strategy (Connect SoCal)

On September 3, 2020, SCAG adopted the 2020-2045 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) (Connect SoCal), which places a greater emphasis than ever on sustainability and integrated planning. The 2020-2045 RTP/SCS vision encompasses a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2020-2045 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the National Ambient Air Quality Standards. This long-range plan, required by the state of California and the federal government, is updated by SCAG every four years as demographic, economic, and policy circumstances change. The 2020-2045 RTP/SCS is a living, evolving blueprint for the region's future. Goals of Connect SoCal are detailed below. The Project's consistency with these RTP/SCS goals are discussed in further detail in ***Section 4.5, Land Use and Planning***.

- Goal 1:** Encourage regional economic prosperity and global competitiveness.
- Goal 2:** Improve mobility, accessibility, reliability, and travel safety for people and goods.
- Goal 3:** Enhance the preservation, security, and resilience of the regional transportation system.
- Goal 4:** Increase person and goods movement and travel choices within the transportation system.
- Goal 5:** Reduce greenhouse gas emissions and improve air quality.
- Goal 6:** Support healthy and equitable communities.
- Goal 7:** Adapt to a changing climate and support an integrated regional development pattern and transportation network.
- Goal 8:** Leverage new transportation technologies and data-driven solutions that result in more efficient travel.
- Goal 9:** Encourage development of diverse housing types in areas that are supported by multiple transportation options.
- Goal 10:** Promote conservation of natural and agricultural lands and restoration of critical habitats.

Local

Moreno Valley 2040 General Plan

The MoVal 2040: General Plan Update is the City's blueprint for how and where Moreno Valley will grow over the next 20 years. This update to the general plan expanded upon and enhanced the 2006 General Plan for the City. Generally, the MoVal 2040 GP increased the allowable density of commercial uses within the City. Despite this, the Project currently proposes a less intense and dense use than envisioned in the 2006 General Plan. The MoVal 2040 General Plan Circulation Element identifies goals, objectives, policies, and programs that will help the City maintain and enhance a complete transportation network, including

automobile travel, transit, non-motorized transportation, and goods movement. It should be noted that the goals and policies listed below may not explicitly be Project goals and policies but are goals and policies of the City of Moreno Valley that the Project assists in achieving.

Circulation Element

Goal C-1: *Strengthen connections to the regional transportation network.*

Policy C.1-1: Support regional infrastructure investments for all modes to relieve congestion and support healthy communities in the City of Moreno Valley.

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.2-1: Design, plan, maintain, and operate streets using complete streets principles for all types of transportation projects including design, planning, construction, maintenance, and operations of new and existing streets and facilities. Encourage street connectivity that aims to create a comprehensive, integrated, connected network for 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.

Policy C.2-7: Plan access and circulation of each development project to accommodate vehicles (including emergency vehicles and trash trucks), pedestrians, and bicycles.

Policy C.2-8: For developments fronting both sides of a street, require that streets be constructed to full width. Where new developments front only one side of a street, require that streets be constructed to half width plus an additional 12-foot lane for opposing traffic, whenever possible. Additional width may be needed for medians or left and/or right turn lanes.

Policy C.2-9: Require connectivity and accessibility to a mix of land uses that meets residents' daily needs within walking distance. Typically, this means creating walkable neighborhoods with block lengths between 330 feet and 660 feet in length, based on divisions of the square mile grid on which the city is laid out.

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.

Policy C.3-6: Require new developments to participate in Transportation Uniform Mitigation Fee Program (TUMF), the Development Impact Fee Program (DIF) and any other applicable transportation fee programs and benefit assessment districts.

Policy C.3-8: Ensure that new development pays a fair share of costs to provide local and regional transportation improvements and to mitigate cumulative traffic deficiencies and impacts.

Goal C-4: *Provide convenient and safe connections between neighborhoods and destinations within Moreno Valley.*

Policy C.4-2: Collaborate with major employers and other stakeholders to improve access and connectivity to key destination such as the Downtown Center, the Moreno Valley Mall, the hospital complexes, Moreno Valley College, and the Lake Perris State Recreation Area.

Policy C.4-4: All new developments shall provide sidewalks in conformance with the City's streets cross-section standards, and applicable policies for designated urban and rural areas.

Goal C-5: *Enhance the range of transportation in Moreno Valley and reduce vehicle miles traveled (VMT)*

Policy C.5-1: Work to reduce VMT through land use planning, enhanced transit access, localized attractions, and access to non-automotive modes.

Policy C.5-4: Particularly in corridors and centers, work with transit service providers to provide first-rate amenities to support pedestrian, bicycle, and transit usage, such as bus shelters and benches, bike racks on buses, high-visibility crossings, and modern bike storage.

Approved Towngate Specific Plan 200

The Towngate Specific Plan 200 (SP-200) was adopted in 1987 and consists of the proposed development of Towngate Crossing, Towngate Promenade, Towngate Square, and Towngate Center/Plaza. The Project lies within Planning Area (PA) 2 of the SP-200. The SP-200 outlined entry and roadway hierarchies to articulate the entire specific plan as well as any individual develop areas.

The SP-200 planned for the regional mall, PA 2, to be served by a network of high-capacity streets with a primary focus to provide sufficient access to the MoVal Mall. SP-200 identified master circulation plan and typical roadways sections to achieve this (Figures IV-10, IV-11, and IV-12 of SP-200, pages 216 - 217). General roadway characteristics include:

- Roadway rights-of-way ranging in widths from 66 feet to 124 feet
- Approximately 12-foot travel lane widths
- Approximately eight-foot shoulder or parking lane widths
- Raised median or striped median widths ranging from 14 feet to 26 feet
- Curb and gutter along outside edge of pavement and along inside edge of pavement if a raised median is utilized
- Six-foot sidewalks extending from top of curb
- Crowned slopes of 1.5 percent

City of Moreno Valley Bicycle Master Plan

The City's Bicycle Master Plan was created and adopted in November 2014 and provides guidance for design and implementation of infrastructure and programs and policies for cyclists within the City. The master plan updated the City's Bicycle Transportation Plan to conform to WRCOG's *Non-motorized*

Transportation Plan, as well as other regional plans. The plan recognizes cycling as a fundamental component of transportation planning, and should address bicycle facilities on and off streets, as well as modal integration at transit centers and parking facilities. The three primary purposes in updating the City's Bicycle Transportation Plan through the implementation of the Bicycle Master Plan are as follows:

- Bring Moreno Valley's plan into conformance with WRCOG's *Non-motorized Transportation Plan* and other regional plans. The WRCOG plan is a component of the region's efforts to assist the Southern California Association of Governments (SCAG) in addressing regional greenhouse gas reductions as required by SB-375. Other regional plans include the *Compass Blueprint Plan* for the Alessandro Boulevard corridor, as well as adjacent jurisdiction plans.
- Bring Moreno Valley's bicycle planning up to date with current state of the practice to take advantage of the latest innovations, such as buffered bicycle lanes, bicycle boulevards, enhanced traffic signal detection, bicycle boxes and other ongoing research. This plan identifies the best strategies to integrate cycling with other transportation modes, such as Metrolink, and Amtrak California and RTA bus service.
- Identify deficiencies within the existing network. Identifying missing links, extensions to residential areas, schools/parks and employment centers/retail centers and required connectivity to regional/adjacent jurisdictions will enable Moreno Valley to improve internal and regional mobility.

4.7.4 Impact Thresholds and Significance Criteria

Appendix G of the State CEQA Guidelines contains the Environmental Checklist Form, which includes questions related to transportation. The issues presented in the Environmental Checklist Form have been utilized as Thresholds of Significance in this section. Accordingly, a project may create a significant environmental impact if one or more of the following occurs:

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

Project Design Features

In addition to applying existing standard conditions and regulatory requirements, the Project has incorporated the following Project Design Features into the SPA and TPM:

- The Project consists of redeveloping an existing developed regional mall site, which will reduce grading and construction-related traffic that would otherwise be associated with constructing a new mall at the current site or developing new regional commercial uses at an alternate site;
- The concept grading plan proposes relatively minor off-site soil import/export (less than 5,000 cubic yards) and use of an on-site borrow pit, which minimizes off-site truck traffic during construction;

- The Project incorporates enhancements to the existing transit stop, which will increase transit opportunities to and from the mall, encouraging non-vehicular transportation and thereby reducing traffic impacts; and
- The Project incorporates pedestrian-friendly walkways and open space into a mixed-use commercial retail environment, which will encourage non-vehicular transportation with corresponding reductions in traffic-related air quality, GHG and noise impacts.

Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria, as the basis for determining the level of impacts related to transportation. In addition, this analysis considers existing regulations, laws, and standards that serve to avoid or reduce potential environmental impacts. Where significant impacts remain, feasible mitigation measures are recommended, where warranted, to avoid or lessen the Project's significant adverse impacts.

Based on subsection (b) of §15064.3, Determining the Significance of Transportation Impacts, CEQA provides guidance on how VMT from various types of projects can be evaluated. These four categories or projects and explanation of methodology is provided below under subheading (b) to correspond with the CEQA guidelines section.

b) Criteria for Analyzing Transportation Impacts.

1. **Land Use Projects.** VMT exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease VMT in the project area compared to existing conditions should be considered to have a less than significant transportation impact.
2. **Transportation Projects.** Transportation projects that reduce, or have no impact on, VMT should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in §15152.
3. **Qualitative Analysis.** If existing models or methods are not available to estimate the VMT for the particular project being considered, a lead agency may analyze a project's VMT qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
4. **Methodology.** A lead agency has discretion to choose the most appropriate methodology to evaluate a project's VMT, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's VMT and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate VMT and any revisions to model outputs should be

documented and explained in the environmental document prepared for the project. The standard of adequacy in §15151 shall apply to the analysis described in this section.

The analysis for VMT prepared by Kittelson & Associates for the Project was completed in August 2022 and is included as **Appendix G** of this SEIR. The analysis below utilizes the VMT significance criteria to determine the significance of Project-generated trip impacts and whether mitigation is required.

City VMT Thresholds

The City of Moreno Valley *Traffic Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment*, dated June 2020, identifies the following thresholds of significance for VMT within the City:

- A project would have a significant VMT impact if, in the Existing Plus Project scenario, its net VMT per capita (for residential projects) or per employee (for office and industrial projects) exceeds the per capita VMT for Moreno Valley. For all other uses, a net increase in VMT would be considered a significant impact.
- If a project is consistent with the regional RTP/SCS, then the cumulative impacts shall be considered less than significant subject to consideration of other substantial evidence. If it is not consistent with the RTP/SCS, then it would have a significant VMT impact if:
 - For residential projects its net VMT per capita exceeds the average VMT per capita for Moreno Valley in the RTP/SCS horizon-year.
 - For office and industrial projects its net VMT per employee exceeds the average VMT per employee for Moreno Valley in the RTP/SCS horizon year.
 - For all other land development project types, a net increase in VMT in the RTP/SCS horizon-year would be considered a significant impact

4.7.5 Impacts and Mitigation Measures

Summary of Previous Environmental Analysis

The SP-200 EIR analyzed the impacts of specific plan implementation on circulation and transportation systems. A traffic analysis was prepared by Kunzman Associates in November 1985 and was the basis of discussions and analysis within the SP-200 EIR. The SP-200 EIR determined that implementation of the SP-200 would have an unavoidable and significant impact to the region. It was estimated that SP-200 (the entire Towngate Specific Plan area) would produce an estimated 140,500 daily vehicle trips, 12,450 of which would occur during the evening peak hour. Planning Area 2 (PA 2) was divided into two separate traffic study zones which included portions of the adjacent land uses; the SP-200 Traffic Analysis labeled these Zones 1 and 4. The combined total daily trips for these two zones was estimated at 79,600 daily trips with 2,570 in the AM peak hour and 7,080 in the PM peak hour.

The MoVal 2040 General Plan EIR also included the Moreno Valley Mall in its cumulative traffic analysis. As noted in the TIA (**Appendix G**), the PA 2A site's current land use designation in the MoVal 2040 General Plan's Center Mixed Use designation would allow up to 3.34-million square feet of mixed uses, inclusive

of 2,150 residential uses, based on the maximum FAR of 1.25 and maximum of 30 units per acre over 61.4-acres of PA2.

While the cumulative impact of all projects within SP-200 resulted in a substantial increase that necessitated the expansion and improvement of the then-existing roadway network, the Master Plan of Arterial Highways included programming of major roads in the area for incremental widening and/or extension to serve the expected traffic growth over time. As such, roadway improvements were completed according to City and/or County standards over the duration of SP-200 implementation and that all SP-200 project proponents would participate in the Traffic Signal Mitigation Program along with the following identified mitigation measures (as a note, for text in these SP-200 mitigation measures that has ~~strikethrough~~ has been deleted as it is not relevant to the Project. Text that has underline has been added to the mitigation measure to clarify or make more relevant to the Project):

MM TRA-1 Construct all streets internal to the project to full ultimate cross-sections as adjacent Project development occurs and according to all applicable state and City of Moreno Valley Standards. Construction of new driveways shall be reviewed and approved by the City of Moreno Valley's Public Works prior to construction.

~~**MM TRA 2** Construct all streets bordering the project to ultimate half-sections widths in conjunction with development. In the case of Day Street, the Canyon Springs project is responsible, pursuant to their Specific Plan approval conditions, for construction the other half section and for constructing the westbound on-ramp on Day Street at Route 60. It should be noted that Canyon Springs is also responsible for widening Eucalyptus to six lanes from I-215 to Valley Springs Parkway, that project's major southern entry, and for widening Eucalyptus to four lanes from Valley Springs Parkway to Day Street. Canyon Springs is also responsible for constructing the I-215 Eucalyptus interchange, including grade separation. If only the subject project (Moreno Valley Mixed Use Development) were implemented, there would not be a need for I-215 to be grade separated. (This mitigation measures is not applicable to this Project as the Project is located wholly within the SP-200 limits and does not propose development outside of the SP-200 limits.)~~

~~**MM TRA 3** It is recommended that a comprehensive traffic phasing analysis be conducted within the next two years to determine when specific roadway improvements are needed, based on expected future land use absorptions for both the Canyon Springs and Moreno Valley Mixed Use Development projects. (This mitigation measure is not applicable to this Project as the mitigation measure is time sensitive to the approval and adoption of the SP-200 in 1987. This Project is outside of the time frame stipulated in the mitigation measure.)~~

~~**MM TRA 4** For future traffic conditions, intersection geometrics recommended in the Traffic Study (found as Section VII.C, Technical Appendices of the Towngate Specific Plan 200) should be implemented. (This mitigation measure is not applicable to the Project as the Traffic Impact Analysis associated with the Project provides recommended improvements that may be implemented.)~~

~~**MM TRA 5** Traffic signals should be installed when warranted at up to 13 intersections in addition to the three signals to be installed by Canyon Springs. These signals are warranted~~

~~when project and Canyon Springs traffic is combined with existing traffic. (This mitigation measure is not applicable to this Project as the intersections identified have been signalized since the approval and adoption of the SP-200.)~~

~~**MM-TRA-6** Traffic signals in the vicinity of the site should be implemented as warranted based on the signal warrant volumes as shown in the Traffic Analysis (found as Section VII.C, Technical Appendices of the Towngate Specific Plan 200). (This mitigation measure is not applicable to the Project as the Traffic Impact Analysis associated with the Project provides recommended improvements that may be implemented.)~~

~~**MM-TRA-7** Because of the high volumes on Day Street, it is recommended it be reclassified from a Major to an Arterial. Additionally, it is recommended that Day Street be constructed to approximately 130 feet right of way from 300 feet south of A Street Campus Parkway northward to the Route 60 Freeway so as to allow double left turn pockets into both the Canyon Springs and the subject property. (This mitigation measure is not applicable to the Project as the improvements recommended for Day Street have been implemented since the approval and adoption of the SP-200.)~~

~~**MM-TRA-8** Install a STOP sign on site egress roadways to adjacent arterials until signals become warranted. (This mitigation measure is not applicable to the Project as proposed traffic control devices will be constructed and operational when the Project is fully operational.)~~

~~**MM-TRA-9** Maintain a high level of service along arterials by restricting parking and controlling roadway access. (This mitigation measure is not applicable to Project as the Project does not propose the construction of arterials or promotion of roadway classifications to arterials such that parking should be restricted. Additionally, parking restrictions are already implemented and enforced in the vicinity of the Project.)~~

~~**MM-TRA-10** Landscape plantings and signs should be limited to 36 inches height within 25 feet of project driveways to assure good visibility. (This mitigation measure is no longer applicable to the Project as design guidelines (DG – 118) of the proposed Specific Plan Amendment provide guidance on intersection sightlines which will be required to be followed.)~~

The developer is responsible for the construction of roadways to be paid through an Assessment District. The City of Moreno Valley is responsible for assessments as applied to Commercial areas. Any shortfalls, due to higher construction costs over Assessment District income, would be added to the tax assessment. The assessment would ultimately be bought out by the Redevelopment Agency.

Impact 4.7-1: *Would the Project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Level of Significance: Less than Significant Impact with Mitigation Incorporated

The Project does not propose elements or aspects that would conflict with a program, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. On a long-term basis, the Project may result in increased demand for public transportation as increased employment opportunities, hotel, and residential components of the Project become available on-site; however,

transit agencies routinely review and adjust ridership schedules to accommodate public demand. Additionally, the Project proposes the relocation and expansion of the existing transit facilities on-site to provide additional coverage and encourage use of public transit facilities. Bus routes currently include routes 11, 16, 18, 19, and 31. These routes would continue to operate at the proposed transit hub on-site. The transit center would be relocated along the north side of the property and contain two bus stops, each servicing two buses, and a transfer station serving four buses. Coordination with RTA would be required during Project phasing and build out to ensure proper coverage and service is retained during construction and operations of the Project. Moreno Valley Mall is presently negotiating an agreement with the RTA regarding the location of bus loading areas at the mall. The agreement will not provide the RTA with permanent rights for bus loading areas. In addition, the bus service will change over time and therefore the locations of such areas will change from time to time. As such, specific bus loading areas have not been identified as part of the Project. Existing bus service will be maintained during construction and adequate loading areas will be maintained during Project operations throughout maintained negotiation and communication with the RTA. As such, there is no potential conflict with the local public transit service.

Moreno Valley Mall Specific Plan

During construction, the vacant lot in the northern portion of the Project site is currently proposed as the located of a borrow pit. The borrow pit would be surrounded with security fencing and lighting to ensure safety for workers and members of the public. Access to parking in the immediate vicinity of the borrow pit would occasionally be restricted as excavation and hauling equipment and trucks navigate this area. Additionally, as Project components would be constructed, there would be temporarily restricted available parking at the Project site. These disruptions would be temporary in nature and would only occur during Project construction.

The SPA proposes the following parking standards for the Project (see Table 3-3 of the SPA):

- **Mixed use, Non-residential:** 4 spaces per 1,000 SF of gross leasable area
- **Hotel:** 0.80 spaces per key
- **Residential, including Guest:** 1.00 spaces/unit

As the retail portion of the Project is currently anticipated to be operational throughout construction, the Project would maintain 3,099 spaces during construction for the 774,764 SF of renovated retail. As Project components would be implemented, additional parking would be added and overall availability to parking would increase. As such, impacts program plans, policies, and ordinances as they relate to parking would be temporary during construction, and impacts would be less than significant.

MoVal 2040 General Plan

The MoVal 2040 General Plan identifies general functional classifications for roadways and provides a general circulation plan throughout the City. Additionally, the SP-200 identifies functional classifications for roadways in the SP-200 area. The Project does not propose any roadway improvements that would alter the function of a roadway such that the roadway would not operate as planned in the MoVal 2040 General Plan. Any roadways that require disruption in the short-term as a result of construction would be

replaced in kind at a minimum. Furthermore, the Project has been designed and would be constructed to be responsive to the goals and policies of the Circulation Element of the MoVal 2040 General Plan. Consistency with the policies set forth in the MoVal 2040 General Plan is further described and evaluated in **Table 4.5-2, City of Moreno Valley 2040 General Plan Consistency in Section 4.5, Land Use and Planning**.

Caltrans' policy is to evaluate transportation impacts using VMT, a VMT analysis was conducted for this Project and is provided in **Appendix G** and discussed in **Impact 4.7-2**. In an effort to minimize any potential conflicts with approved plans or policies and operational impacts, in addition to all access driveways being designed in accordance with all applicable state and City standards, recommended improvements were identified in the TIA to be discussed with the applicable agencies responsible, see **Appendix G, Table 2**. These recommended operational improvements are described further in the TIA for the Project (**Appendix G, Table 2**). It is important to note that these improvements are only for operational enhancements and are not required to mitigate significant impacts under CEQA due to SB743. Additionally, the Project would be required to pay a fair share development impact fee that is proportional to the Project's impact on the City's circulation network. Furthermore, the Project would be required to adhere to mitigation measure **(MM) TRA-1** (*although operational level of service is no longer a significant impact under CEQA per SB743*). As such, the Project would be consistent with all applicable transportation and policies with the implementation of applicable previous SP-200 EIR measure, and impacts would be less than significant.

Bicycle and Pedestrian Facilities

Development of the Project site would provide a pedestrian-friendly environment, with strong connectivity to adjacent commercial and office areas. The Project's pedestrian circulation components would be designed and installed with all safety and accessibility requirements in mind, including Title 24 of the California Code of Regulations, and in a manner that would avoid conflicts with vehicles. These pedestrian connections to the surrounding area and the public street system shorten the walking distance to nearby destinations, including the nearest bus stops; and enhance the opportunity to walk or take transit, rather than drive. Walkways between buildings create a pedestrian-oriented environment by breaking up large blocks and providing more convenient connectivity throughout the Project site. The MoVal 2040 General Plan identifies several goals and policies, such as **Policy C.2-9**, which identifies that neighborhoods and communities should be connected and accessible to a mix of land uses that meet daily needs within walking distance. The Project proposes a mix of uses within the Project boundaries including residential, office, hotel, retail, and transit all to be interconnected with pedestrian facilities that include sidewalks and protected crosswalks. According to the MoVal 2040 General Plan, there are no existing or planned bicycle paths within the Project boundaries. The Project would provide a Class III Bicycle Route along Town Circle from Memorial Way to Centerpoint Drive. This would connect the existing Class II Bike Path along Memorial Way to the future Class II Bike Path along Centerpoint Drive that is to be developed by others. Additionally, the Project would provide amenities such as bike racks and bike corrals. These amenities would help improve the City's goal to increase access to facilities accommodating for cyclists and would further the policies and goals of the Bicycle Master Plan. As such, the Project would not conflict with any existing plans, ordinances, or policies as they relate to pedestrian and bicycle networks, and impacts would be less than significant.

Applicable SP-200 EIR Mitigation Measures: The following mitigation measure from the SP-200 EIR are applicable to the Project: **MM TRA-1**. Other mitigation measures identified in the SP-200 EIR are not applicable to this topical area as previously described (see the **Summary of Previous Environmental Analysis** of this section [**Section 4.7.5**]).

MM TRA-1 Construct all streets internal to the project to full ultimate cross-sections as ~~adjacent~~ Project development occurs and according to all applicable state and City of Moreno Valley Standards. Construction of new driveways shall be reviewed and approved by the City of Moreno Valley's Public Works prior to construction.

Moreno Valley Mall Specific Plan Design Guidelines: The following design guidelines from the Moreno Valley Specific Plan are applicable:

DG - 111 Parking areas for motorcycles and bicycles are to be designed for orderly, uncluttered parking. Bicycle parking areas are to be provided with racks and locking capabilities per the Moreno Valley MC.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.7-2: Would the Project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?

Level of Significance: Less than Significant Impact

As discussed above, comprehensive updates to CEQA and the State CEQA Guidelines through SB 743 require projects to use VMT to determine Project impacts. The VMT impact analysis for the Project is presented below.

Project Screening

As part of the City of Moreno Valley's VMT Guidelines, the City has adopted screening criteria, which can be used to quickly identify when a project or a portion of a mixed-use project should be expected to cause a less than significant impact related to VMT and would not require a detailed VMT analysis.⁴ Three screening criteria exist to determine if a project would have a less than significant impact.

Transit Priority Area

Transit Priority Areas (TPAs) is an area that is within one-half mile around an existing major transit stop⁵ or an existing stop along a high-quality transit corridor.⁶ Projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary. This presumption may not be appropriate if the project:

- Has a Floor Area Ratio (FAR) of less than 0.75

⁴ City of Moreno Valley (June 2020). *Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment*; Page 22.

⁵ Public Resources Code, §21064.3 – "Major transit stop" means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

⁶ Public Resources Code, §21155 - For purposes of this section, a 'high-quality transit corridor' means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking)
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization)
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units

The Project site is not located within a TPA and therefore cannot be screened out of a detailed VMT analysis using the TPA screening.⁷

Low VMT Area

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. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area. The Project is not located in a low residential VMT area nor a low employee VMT area. Therefore, the Project's residential and office components cannot be screened out using the low VMT area screening.⁸

Project Type

The following uses can also be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature:

- Local-serving retail (less than 50,000 square feet)
- Local-serving K-12 schools
- Local parks
- Day care centers
- Local-serving gas stations
- Local-serving banks
- Local-serving hotels (e.g., non-destination hotels)
- Student housing projects
- Local serving community colleges that are consistent with the assumptions noted in the RTP/SCS
- Projects generating less than 400 daily vehicle trips

According to these guidelines, the following uses that are a part of the Project may be screened out, absent substantial evidence to the contrary as their uses are local serving in nature:

- Local-serving retail (less than 50,000 square feet)
- Local-serving hotels (e.g., non-destination hotels)

⁷ Kittelson & Associates (August 2022). *Moreno Valley Mall Redevelopment Traffic Impact Analysis; Page 130* (Appendix G).

⁸ Ibid.

The Project proposes new construction retail uses that would be located on the first floor of the residential buildings. The portions of these proposed developments that would be dedicated to retail use is less than 50,000 SF. Additionally, the residential units in these buildings would support the added retail uses, and the retail would generally be local serving as a result. As such, the retail portion of the Project can be screened out of a VMT analysis using the Project Type screening.

The Project's hotel portion is intended to be local serving, as opposed to serving as a destination hotel. Therefore, the Project's hotel portion can be screened out using the Project Type screening.

VMT Screening Determination

Based on a review of the City's VMT screening criteria, this mixed-use project's retail and hotel portions can be screened out of a VMT analysis under the City's project type screening. The retail portion is less than 50,000 square feet and would primarily serve local residential uses; the hotels are intended to be local serving (non-destination) hotels. The remaining components of this mixed-use project (residential and office) would not be screened out and would require a VMT analysis using their respective impact thresholds of significance.

Project VMT

Potential Project VMT impacts were assessed using the RIVTAM model, which is a subarea model based on the SCAG regional travel demand model with a greater level of land use and transportation system detail in Riverside County. The model consists of two versions: a base year 2012 model and a 2040 horizon year model reflecting the Regional Transportation Plan & Sustainable Communities Strategy (RTP/SCS) horizon year. To represent the Project, separate traffic analysis zones were coded into the model to add socioeconomic data (SED) consisting of residents, households, and employment for the Project's residential, office, retail, and hotel components. The base year and horizon year models were then both run with and without the Project's SED to derive "no Project" and "with Project" VMT data. Citywide VMT averages were obtained by interpolating between the "no Project" versions of the 2012 and 2040 model runs to estimate the 2022 citywide VMT averages. Project VMT was obtained by interpolating between the "plus Project" versions of the 2012 and 2040 model runs. Additionally, in an effort to achieve the Project objective of reducing VMT through mixed land uses, the Project will encourage the use of transit and bicycles as a way to reduce VMT through design guidelines (**DG - 6**, **DG - 145**, and **DG - 171** listed below.

Project Residential Component

According to the RIVTAM model's interpolated data, the existing average Citywide VMT per capita is 13.57 VMT per capita. The Project's expected generation is 9.79 VMT per capita. Given that the VMT per capita for the Project's residential component does not exceed the Citywide VMT per capita, then the residential component is expected to result in a less than significant impact.

Project Office Component

According to the RIVTAM model's interpolated data, the existing average Citywide VMT per employee is 5.48 VMT per employee. The Project's estimated VMT generation per employee is 3.50. The estimated VMT for the office component is lower than and does not exceed the Citywide VMT per employee. As such, the Project's office component is expected to have a less than significant impact.

As the retail and hotel components of the Project have been screened out of a detailed VMT analysis and expected to cause a less than significant impact, and the residential and office component VMT generation are below the Citywide VMT in each category, the Project is expected to have a less than significant impact with regard to VMT.

Applicable SP-200 EIR Mitigation Measures: No SP-200 EIR Mitigation Measures are applicable to this topical area. As previously stated, VMT was not used as a basis of transportation impacts under CEQA when the SP-200 EIR was approved. As such, no mitigation measures of the SP-200 EIR would be applicable to this topical area.

Moreno Valley Mall Specific Plan Design Guidelines: The following design guidelines of the Moreno Valley Specific Plan are applicable:

- DG - 6** Buildings should be arranged to facilitate convenient access to transit stops.
- DG - 147** Bike racks, transit shelters, and other transit supportive uses should be easily accessible and deter riders from using pedestrian walkways as riding lanes.
- DG - 173** Common open space should provide site amenities that encourage linger time. Benches, seating areas, bike racks, art, water features and other appropriate amenities are strongly encouraged.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.7-3: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Level of Significance: Less than Significant Impact with Mitigation Incorporated

The Project would not create a significant traffic-related safety hazard. The Project roadways, ingress and egress, and interior circulation elements have been designed and would be constructed consistent with the City's Department of Public Works Department standard drawings. There are no incompatible land uses proposed or in the vicinity of the Project Site, such as those utilizing farm equipment, that would result in a potential significant traffic safety hazard. Although construction would involve the use of large heavy-duty equipment such as rollers, graders, and dump trucks, all staging and construction areas would have appropriate signage and standard safety protocols as implemented by the Project Applicant through standard construction practices. Additionally, the Project would be required to comply City Engineering Standards on intersection sightlines, as well as design guideline **DG – 118** of the SPA, which identifies

visual obstructions within 15 feet of drives shall be prohibited. This would increase visibility for drivers along the roadways in and around the Project site to allow for safe travel. As such, potential impacts associated with design hazards would be less than significant.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures from the SP-200 EIR are applicable to this topical area as Project design guidelines no longer require the use of mitigation measures of the SP-200 EIR that pertained to sightlines and geometric design of roadways.

Moreno Valley Mall Specific Plan Design Guidelines: The following design guidelines from the Moreno Valley Mall Specific Plan are applicable:

DG - 119 To ensure visibility for vehicles entering and exiting the site, unobstructed site lines at corners and mid-block should be provided. Visual obstructions at entrances and exits are prohibited within a 15 ft. diagonal cut-off (triangular area). The location of utilities within these areas should be avoided.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.7-4: Would the Project result in inadequate emergency access?

Level of Significance: Less than Significant Impact

Construction

The Project is not anticipated to result in any significant emergency access impacts during construction. In case of an emergency, the construction manager will have assigned staff to flag emergency response vehicles and direct them to the emergency location. Vehicles and equipment throughout the Project site would not be parked or placed in a manner that would impede access for emergency response vehicles. Site conditions, during and after the workday, would be either maintained or left in a condition that adheres to Division of Occupational Safety and Health (OSHA) safety standards to prevent any hazardous condition that may affect construction staff and emergency responders. Additionally, pursuant to MoVal 2040 GP Policy PPS.3-7, Project design will be reviewed by the City Police and Fire Departments to ensure that the Project is designed and operated in a manner that minimizes the potential for criminal activity and fire hazards and maximizes the potential for responsive police and fire services.

Operations

The Project would be required to have design plans reviewed by the City of Moreno Valley and associated agencies to ensure that adequate access to-and-from the Project site for emergency vehicles would be provided. Additionally, the City and associated agencies would determine whether or not Project implementation would impact or interfere with the circulation of emergency vehicles along public streets that abut the Project site. Based on the proposed Project design and with required adherence to City requirements for emergency vehicle access, impacts would be less than significant.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures were identified in the SP-200 EIR that are applicable to this topical area because the SP-200 required adequate emergency access through design regulations and development standards.

Moreno Valley Mall Specific Plan Design Guidelines: The following design guidelines of the Moreno Valley Mall Specific Plan are applicable:

- DG - 28** Site circulation should allow for and facilitate emergency access to the site and all buildings.
- DG - 228** Landscaping should be spaced so it does not adversely impact on-site lighting, restrict access to emergency facilities, or interfere with installation and maintenance of overhead or underground utilities.

Additional Mitigation Measures: No additional mitigation measures are necessary.

4.7.6 Cumulative Impacts

Development within the City's planning area would not conflict with a program plan, ordinance, or policy addressing the circulation system, conflict with CEQA Guidelines §15064.3, subdivision (b), increase hazards due to a geometric design feature, or result in inadequate emergency access. Additionally, the Project is not anticipated to have any unavoidable significant impacts to transportation and as such is not anticipated to represent a cumulatively considerable contribution to significant transportation impacts.

Potential transportation impacts associated with the individual developments would be specific to each site. As with the Project, cumulative development would undergo environmental and design review on a project-by-project basis pursuant to CEQA to evaluate potential transportation impacts. All development would be subject to compliance with the existing federal, state, and local regulatory framework. As such, cumulative transportation impacts would be mitigated on a project-by-project basis, and in accordance with the established regulatory framework.

The TIA's analysis of 2040 conditions with Project identified eight (8) intersections that would fail to meet operational standards under year 2040 total traffic conditions. Fourteen (14) intersection have at least one movement outside the 95th percentile for queue lengths. The TIA recommended improvements to these intersections to minimize these changes to intersection LOS. It is important to note that these improvements are only for operation enhancements and are not required to mitigate significant impacts under CEQA due to SB743.

A cumulative impact consists of an impact which is created as a result of the combination of the project with other projects causing related impacts. A project has cumulatively considerable environmental effects (i.e., is significant) when the incremental effects of the project are significant when viewed in connection with the effects of other projects, including probable future projects. Additionally, per the City's Traffic Impact Preparation Guide, a project would have a cumulatively significant impact should the project not be consistent with the regional RTP/SCS. Nearby Projects were identified in the Project's TIA and are provided in **Section 4.0, Environmental Impact Analysis** of this SEIR. Potential cumulative VMT

impacts were assessed under horizon year 2040 conditions per the City's guidelines. As previously discussed in Impact 4.7-2, the Project would be consistent with the regional RTP/SCS and is below the Citywide VMT thresholds. Furthermore, the MoVal 2040 GP EIR, Section 4.16 analyzed cumulative impacts to transportation as a result of final build-out of the City and determined that there would be cumulative impacts. As a result of these cumulative impacts, the City identified roadway and circulation improvements including improvements to bicycle, pedestrian, public transit, and intersection sensors to improve the circulation network. Likewise, the county and state have identified plans and policies previously mentioned that reduce and minimize impacts to VMT and cumulative impacts. Therefore, the Project would result in less than significant cumulative VMT impacts.

Given that the project's retail and hotel components were screened out of a VMT analysis and the residential and office components resulted in less-than-significant VMT impacts and less than significant cumulative VMT impacts, no mitigation measures are needed.

4.7.7 Significant Unavoidable Impacts

No significant unavoidable transportation impacts have been identified.

4.7.8 References

California Department of Transportation (2021). *Park and Ride Inventory* – Updated August 2021.

Available at <https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/managed-lanes/park-ride-inventory-external-aug21-a11y.pdf>. Accessed June 2022.

City of Moreno Valley (June 15, 2021). *General Plan 2040*. Available at

https://www.moval.org/city_hall/general-plan2040/MV-GeneralPlan-complete.pdf. Accessed January 19, 2022.

City of Moreno Valley (June 2020). *Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment*. Available at

http://www.moval.org/city_hall/departments/pub-works/transportation/TIA-Guidelines.pdf. Accessed April 4, 2022.

Kittelson & Associates (August 2022). *Moreno Valley Mall Redevelopment Traffic Impact Analysis*.

4.8 UTILITIES AND SERVICE SYSTEMS

4.8.1 Introduction

This section of the Draft Subsequent Environmental Impact Report (SEIR) evaluates the potential utilities and service systems impacts associated with the development of the Moreno Valley Mall Redevelopment Project (Project) within the City of Moreno Valley (City). This section discusses the Project's environmental setting, applicable federal, state, and local policies and regulation, and mitigation measures that would minimize potential impacts, if any are identified. Baseline conditions were established by comparing the Project site's current condition with any available public resources. As discussed in **Section 3.0, Project Description**, the Project proposes the development of multi-family residential, a hospitality district, the renovation of the existing Moreno Valley Mall, office spaces, and open space.

Analysis and information in this section is provided by resources available to the public and:

- Eastern Municipal Water District. June 2022. *Water Supply Assessment Report: Moreno Valley Mall Redevelopment*. Provided in **Appendix H**.
- Eastern Municipal Water District. July 2021. *2020 Urban Water Management Plan*.
- Kimley-Horn and Associates, Inc. March 2022. *Moreno Valley Mall Redevelopment Water System Analysis Memorandum*. Provided in **Appendix I**.
- Kimley-Horn and Associates, Inc. March 2022. *Moreno Valley Mall Redevelopment Sewer Study*. Provided in **Appendix J**.

4.8.2 Environmental Setting

Water Resources

Water service to the Project site would be provided by the Eastern Municipal Water District (EMWD). EMWD supplies the majority of the water in Moreno Valley, serving a geographic area that extends from Moreno Valley to Temecula and from Mead Valley to San Jacinto and Valle Vista. Within the Project area, EMWD provides water to homes and businesses in an area that extends north of the City limits and includes most of the sphere of influence. Water supplied by EMWD is imported by the Metropolitan Water District of Southern California (MWD) and comes principally from two sources -- Colorado River water sourced via the Colorado River Aqueduct, and water sourced from northern California via the State Water Project (SWP). Prior to distribution as potable water, imported water received from MWD is treated at two treatment plants: Henry J. Mills (Mills) in Riverside and Robert A. Skinner (Skinner) in Winchester. EMWD is also increasing the use of recycled water for landscaping and other non-potable uses through expansion and maximization of the four regional water reclamation facilities.

In 2020, the total calculated potable water demand within the EMWD service area was 84,673 acre-feet (AF) of water. This overall water demand is further categorized by the EMWD 2020 Urban Water Management Plan (UWMP) by land use type. **Table 4.8-1, Water Demand by Land Use** describes the water used by land use type for EMWD in the year 2020.

Table 4.8-1: Water Demand by Land Use

Land Use	Level of Treatment	2020 Volume (AF)
Single Family	DW	52,162
Multi-Family	DW	6,535
Commercial	DW	4,267
Industrial	DW	571
Institutional/Government	DW	1,629
Landscaping	DW	8,155
Agricultural Irrigation	DW	1,114
Agricultural Irrigation	RW	446
Other	DW	1,287
Non-Revenue	DW	8,507
Total		84,673
Note: DW = Drinking Water; RW = Raw Water		
Source: Eastern Municipal Water District (2021). <i>2020 Urban Water Management Plan; Table 4-1.</i>		

Water demands for the EMWD service area are anticipated to continue increasing through the year 2045. **Table 4.8-2, Water Demand Projections by Land Use** details the anticipated water demands in five-year intervals from 2025 to 2045.

Table 4.8-2: Water Demand Projections by Land Use

Land Use	Projected Water Use (AF)				
	2025	2030	2035	2040	2045
Single Family	66,900	71,700	76,700	80,500	84,000
Multi-Family	8,500	9,100	9,700	10,200	10,600
Commercial	6,100	6,500	7,000	7,300	7,600
Industrial	600	600	700	700	700
Institutional/Government	2,700	2,900	3,100	3,200	3,400
Landscaping	8,400	7,600	6,800	6,200	5,500
Agricultural Irrigation	1,500	1,500	1,500	1,500	1,500
Agricultural Irrigation	500	500	500	500	500
Other	0	0	0	0	0
Non-Revenue ¹	7,400	7,900	8,400	8,800	9,200
Total	102,600	108,300	114,400	118,900	123,000
¹ Non-revenue uses include system losses and unbilled, authorized consumption.					
Source: Eastern Municipal Water District (2021). <i>2020 Urban Water Management Plan; Table 4-3.</i>					

Within the Project site, the water mainline predominately runs within Town Circle with mainline connections extending into the property from Centerpoint Drive and Campus Parkway. The proposed Project would relocate two water laterals and a portion of the water mainline to accommodate future development of which location shall be determined as part of the plot plan development.

Currently, EMWD owns and operates main water lines around and throughout the Project site. Water lines are encompassed by easements of various widths which are dedicated to EMWD for sewer and water utility purposes. The existing mall is served by laterals that tie into the EMWD water main within the

dedicated easements. Fire service connections stub directly off the water mainline that is routed throughout the site.

According to the MoVal Mall construction plans from 1991, there is an existing 16-inch Ductile Iron Pipe (DIP) CL50 water main along Centerpoint Drive and a 12-inch DIP CL50 water main along Heritage Way that serve the Project site. On-site, there is a 24-inch DIP CL50 water main along the northern and western sides of Town Circle and various lengths of 12-inch DIP CL50 water main serving the Project site along parking lots and the building footprint. There are eight-inch and four-inch DIP service connections into the existing mall. The majority of the existing water system would remain in place; however, some water infrastructure would be relocated to accommodate the proposed development. As it is possible that various improvements or abandonments have been made since 1991, existing utility alignments and capacities would be confirmed through on-site utility location processes for the purposes of Project implementation.

Groundwater

EMWD produces potable groundwater from two management plan areas within the San Jacinto Groundwater Basin. Both management plan areas are part of the San Jacinto Groundwater Basin. The areas are the West San Jacinto Groundwater Sustainability Agency Plan Area (West San Jacinto Basin) and the Hemet/San Jacinto (HSJ) Water Management Plan area (Hemet/San Jacinto Basin). EMWD also owns and operates two desalination plants that convert brackish groundwater from the West San Jacinto Basin into potable water. These plants not only provide a reliable source of potable water, but they also protect potable sources of groundwater and support EMWD's groundwater salinity management program.

The West San Jacinto Basin and the Hemet/San Jacinto Basin are both located within the San Jacinto Groundwater Basin. Groundwater management zones within the San Jacinto Groundwater Basin were delineated based on areas of lower groundwater flow, groundwater divides, and changes in groundwater quality. The West San Jacinto Basin covers the Perris North, Perris South, San Jacinto Lower Pressure, and Menifee Groundwater Management Zones, and the Lakeview portion of the Lakeview/Hemet North Groundwater Management Zone. The Hemet/San Jacinto Basin is comprised of the Hemet South, Canyon, and San Jacinto Upper Pressure Groundwater Management Zones, as well as the Hemet North portion of the Lakeview/Hemet North Groundwater Management Zone.

EMWD produces water for potable use or blending in four of the groundwater management zones: Perris North, Hemet South, San Jacinto Upper Pressure, and Canyon. Desalter production wells are located in the Perris South and Lakeview/Hemet North Groundwater Management Zones. In 2020, EMWD pumped 23,975 AF of groundwater from the Hemet/San Jacinto Basin and the West San Jacinto Basin. This includes brackish groundwater from the West San Jacinto Basin that was treated in desalination facilities.¹

¹ Eastern Municipal Water District (2021). *2020 Urban Water Management Plan; Table 6-2.*

Surface Water

EMWD holds a right to divert up to 5,760 AF per year (AFY) of San Jacinto River flows for recharge and subsequent use from September 1st through June 30th each year. EMWD's diversion and recharge of San Jacinto River surface water to the Canyon Management Zone takes place at EMWD's Grant Avenue Ponds in the Valle Vista area. EMWD's diverted water is recharged into the groundwater aquifer of the Canyon Groundwater Management Zone and is not used for direct use or sale. The San Jacinto River is an ephemeral river and, consequently, river flows may be insufficient for any diversion at all in some years. Water that is recharged helps the regional water balance and contributes to the safe yield of the basin.²

Imported Water

EMWD receives imported water supplies from the SWP through MWD. Imported water from MWD is delivered to EMWD either as potable water treated by MWD or as raw water that EMWD treats at one of its two local filtration plants, or MWD delivers raw water for non-potable uses. In 2020, EMWD imported a total of 47,351 AF of potable water and 18,226 AF of raw water. Using the information provided in **Table 4.8-1**, imported water from MWD constitutes approximately 56 percent of all water used within EMWD's service area.

Wastewater and Recycled Water

EMWD is responsible for all wastewater collection and treatment in its service area. EMWD has five Regional Water Reclamation Facilities (RWRFs) which treat approximately 43 million gallons per day (MGD) of wastewater, served through 1,813 miles of sewer pipelines. The five RWRFs treat wastewater and produce tertiary effluent where the treated water is delivered to recycled water customers or discharged to either Temescal Creek or into percolation/evaporation storage ponds. Inter-connections between the local collection systems serving each treatment plant allow for operational flexibility, improved reliability, and expanded deliveries of recycled water. All of EMWD's RWRFs produce tertiary effluent, suitable for all permitted uses, including irrigation of food crops and full-body contact. In 2020, EMWD treated 48,200 AF (43 MGD) of wastewater, discharged 7,273 AF (6.5 MGD) to the Temescal Creek, and recycled 40,927 AF (36.5 MGD) within the EMWD service area.³

The Project site and the Specific Plan Area (Planning Area [PA] 2A) is served by a network of eight-inch EMWD gravity sewer mains which are encompassed by easements for sewer and water purposes of various width, generally ranging in width between 40 feet and 60 feet depending on the depth of the sewer main. On-site sewer lines are routed to Town Circle, where two eight-inch sewer mains confluence into one 10-inch sewer main at the intersection of Town Circle and Memorial Way (per EMWD Record Drawings D-13067 and D-13074).

Solid Waste

The City provides trash, recycling, and special waste handling services to residents and businesses through a contract with Waste Management. No other haulers are authorized to operate within the City. The majority of solid waste generated within the City is disposed of at Badlands Sanitary Landfill, located north

² Ibid.; Page 6-11.

³ Eastern Municipal Water District (2021). *2020 Urban Water Management Plan; Table 6-5.*

of State Route 60 (SR-60) and west of Interstate 10 (I-10) off Ironwood Avenue, approximately 8.4 miles to the east of the Project site. Two other landfills within the County of Riverside, El Sobrante Landfill and Lamb Canyon Landfill, have the capacity to serve the City. Current remaining capacity of the Badlands landfill is estimated at 15,748,799 cubic yards, the max permitted capacity of the landfill is 34,400,000 cubic yards. The landfill is approximately 46 percent full.⁴

Energy

The City of Moreno Valley Electric Utility (MVU) would provide electrical service and Southern California Gas Company (SoCal Gas) provides natural gas to the Project site. Existing conditions and impacts to energy will be discussed in **Section 7.0, Effects Found not to be Significant** of this SEIR.

4.8.3 Regulatory Setting

Federal

Clean Water Act

Pursuant to §404 of the Clean Water Act (33 U.S. Code [USC] §1251 et seq.; CWA), the U.S. Army Corps of Engineers (USACE) is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which include those waters listed in 33 Code of Federal Regulations (CFR) 328.3 (as amended at 80 Federal Register (FR) 37104, June 29, 2015). The USACE, with oversight from the U.S. Environmental Protection Agency (U.S. EPA), has the principal authority to issue CWA §404 permits. The USACE would require a Standard Individual Permit for more than minimal impacts to waters of the U.S. as determined by the USACE. Projects with minimal individual and cumulative adverse effects on the environment may meet the conditions of an existing Nationwide Permit.

A water quality certification or waiver pursuant to CWA §401 is required for all CWA §404 permitted actions. The Regional Water Quality Control Board (RWQCB), a division of the State Water Resources Control Board (SWRCB), provides oversight of the CWA §401 certification process in California. The RWQCB is required to provide “certification that there is reasonable assurance that an activity that may result in the discharge to waters of the U.S. will not violate water quality standards.” Water Quality Certification must be based on the finding that proposed discharge will comply with applicable water quality standards.

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under CWA §402.

Safe Drinking Water Act (Federal)

The Safe Drinking Water Act (SDWA) (42 USC §300f et seq.) is intended to protect public health by regulating the nation’s public drinking water supply. The Federal SDWA authorizes the U.S. EPA to set

⁴ California Department of Resources Recycling and Recovery (2019). *Solid Waste Information System*. Available at <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2245?siteID=2367>. Accessed on January 20, 2022.

national standards for drinking water to protect against both naturally occurring and man-made contaminants.

State

Safe Drinking Water Act (State)

California enacted its own Safe Drinking Water Act (SDWA, Health and Safety Code [HSC] §§116350–116405) with the California Department of Health Services (DHS) granted primary enforcement responsibility. Title 22 of the California Code of Regulations (CCR) (Division 4, Chapter 15, “Domestic Water Quality and Monitoring Regulations”) established DHS authority and provides drinking water quality and monitoring requirements, which are equal to or more stringent than Federal standards.

Recycled Water Regulations

Regulation of recycled water is vested by state law in the SWRCB and the California Department of Public Health Services (DPH). DPH is responsible for the regulations concerning the use of recycled water. Title 17 (California Water Code [CWC] §§13500–13556) regulates the protection of the potable water supply through the control of cross-connections with potential contaminants, including recycled water. The established water quality standards and treatment reliability criteria for recycled water are codified in CWC Title 22. The requirements of Title 22, as revised in 1978, 1990 and 2001, establish the quality and/or treatment processes required for a recycled effluent to be used for a non-potable application. In addition to recycled water uses and treatment requirements, Title 22 addresses sampling and analysis requirements at the treatment plant, preparation of an engineering report prior to production or use of recycled water, general treatment design requirements, reliability requirements, and alternative methods of treatment.

Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMP Act) (CWC, Division 6, Part 2.6, §10610 et. seq.) was enacted in 1983. The UWMP Act applies to municipal water suppliers, such as the EMWD, because it provides water service directly to more than 3,000 connections. The UWMP Act requires these suppliers to update their UWMP every five years to demonstrate an appropriate level of reliability in supplying anticipated short-term and long-term water demands during normal, dry, and multiple dry years.

State Water Resources Control Board

The SWRCB is the state agency focused on providing and ensuring clean sustainable water for all state residents. This state agency works alongside other federal programs like the CWA to regulate water sources and uses. The SWRCB regulates water consumption for irrigation and drinking, as well as water discharges from construction, municipal uses, stormwater, and other sources.

California Water Code

CWC Division 6, Part 2.6, §10631 requires every urban water supplier to identify as part of its UWMP, the existing and planned sources of water available to the supplier in five-year increments to 20 years. Existing law prohibits an urban water supplier that fails to prepare or submit its UWMP to the Department of

Water Resources (DWR) from receiving financial or drought assistance from the state until the plan is submitted.

CWC Division 6, Part 2.10, §§10910-10915 requires a Water Supply Assessment (WSA) to provide a description of all water supply projects and programs that may be undertaken to meet total projected water use over the next 20 years to be included with the project. The CWC requires a city or county which determines a project is subject to California Environmental Quality Act (CEQA) Guidelines to identify any public water system which may supply water for proposed developments and to request those public water systems to prepare a specific WSA, including projects with proposed residential projects with an equivalence of 500 or more dwelling units. If the water demands have been accounted for in a recently adopted UWMP, the water supplier may incorporate information contained in that plan to satisfy certain requirements of a WSA. The CWC requires the assessment to include, along with other information, an identification of existing water supply entitlements, water rights, or water service contracts, relevant to the identified water supply for the Project and the quantities of water received in prior years pursuant to those entitlements, rights, and contracts.

The CWC also requires the public water system, or the city or county, as applicable, to submit its plans for acquiring additional water supplies if that entity concludes water supplies are, or will be, insufficient.

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act (CWC §13000 et seq.) is the basic water quality control law for California. Under this act, the SWRCB has primary responsibility for coordination and control of water quality. In California, the U.S. EPA has delegated authority to issue NPDES permits to the SWRCB. The state is divided into nine regions related to water quality and quantity characteristics. The SWRCB, through its nine RWQCBs, carries out the regulation, protection, and administration of water quality in each region. Each RWQCB is required to adopt a WQMP or Basin Plan that recognizes and reflects the regional differences in existing water quality, the beneficial uses of the region's ground and surface water, and local water quality conditions and problems.

Title 24 Energy Efficiency Standards

California's Energy Efficiency Standards for Residential and Non-residential Buildings was established in 1978, in response to a mandate to reduce the state's energy consumption. These standards are promulgated under CCR Title 24 Part 6 and are commonly referred to as "Title 24." The Title 24 standards are periodically updated to reflect new or improved energy efficiency technologies and methods. The most recent Title 24 standards were updated effective October 2005, with subsequent revisions and amendments. A new development project is required to incorporate the most recent Title 24 standards in effect at the time the building permit application is submitted.

Assembly Bill 1668 and Senate Bill 606 – May 31, 2018

AB 1668 and Senate Bill (SB) 606 build on former Governor Brown's ongoing efforts to make water conservation a way of life in California and create a new foundation for long-term improvements in water conservation and drought planning. SB 606 and AB 1668 establish guidelines for efficient water use and a framework for the implementation and oversight of the new standards, which must be in place by 2022.

The two bills strengthen the state's water resiliency in the face of future droughts with provisions that include:

- Establishing water use objectives and long-term standards for efficient water use that apply to urban retail water suppliers; comprised of indoor residential water use, outdoor residential water use, commercial, industrial, and institutional (CII) irrigation with dedicated meters, water loss, and other unique local uses.
- Providing incentives for water suppliers to recycle water.
- Identifying small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability and provide recommendations for drought planning.
- Requiring both urban and agricultural water suppliers to set annual water budgets and prepare for drought.⁵

Assembly Bill 341

AB 341, approved in October 2011, is intended to reduce greenhouse gas (GHG) emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in the state. It is the policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020. This law requires California commercial businesses and public entities, that generate four or more cubic yards of commercial solid waste per week or a multi-family residential dwelling with five or more units, to arrange for recycling services.

Each local jurisdiction is required to inform businesses about the recycling requirement and to keep track of the level of recycling within the business community. In addition, each jurisdiction is required to report to CalRecycle, the state agency that oversees recycling and solid waste, on progress in the business community.⁶

Senate Bill 610

Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in CWC §10912 [a]) subject to the State CEQA Guidelines.

Assembly Bill 939 – California Integrated Waste Management Act

AB 939, known as the California Integrated Waste Management Act of 1989, required all California cities and counties to divert 50 percent of the waste generated within their boundaries by the year 2000. The act requires each California city and county to prepare, adopt, and submit to the California Department of Resources Recycling and Recovery (CalRecycle), a Source Reduction and Recycling Element (SRRE) that demonstrates how the jurisdiction will meet the California Integrated Waste Management Act's

⁵ State Water Resources Control Board (May 22, 2020). *California Statutes Making Conservation a California Way of Life*. Retrieved from https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/california_statutes.html. Accessed January 19, 2022.

⁶ California Legislative Information (2011). *Assembly Bill 341*. Retrieved from https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201120120AB341.
https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201120120AB341 Accessed January 19, 2022.

mandated diversion goals. Each jurisdiction's SRRE must include specific components, as defined in California Public Resources Code (PRC) §§41003 and 41303. Additionally, the SRRE must include a program for the management of solid waste generated in the jurisdiction consistent with the following hierarchy: (1) source reduction, (2) recycling and composting, (3) environmentally safe transformation; and (4) land disposal.

Assembly Bill 1826

AB 1826 (2014) requires businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate on a weekly basis. Additionally, AB 1826 requires that, after January 1, 2016, all local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses, including multi-family residential dwellings with five or more units. Organic waste includes food waste, green waste, landscape and pruning waste, non-hazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time.

Because the minimum threshold of organic waste generation by businesses will be decreased over time (e.g., in 2016, affected businesses were those generating eight cubic yards or more of organic waste per week; in 2019, affected businesses will be those generating four or more cubic yards of organic waste per week), an increasing proportion of the commercial sector will be required to comply. AB 1826 is part of California's efforts intended to achieve its recycling and GHG emissions reduction goals. Reducing the amount of organic materials sent to landfills and increasing the production of compost and mulch are part of the AB 32 Scoping Plan.

Senate Bill 1383

SB 1383 (2016) requires a 50 percent reduction in disposal of organic waste from the 2014 level by 2020, and a 75 percent reduction by 2025. The law grants the California Department of Resources Recycling and Recovery (CalRecycle) the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025. Food waste alone accounts for approximately 17 percent to 18 percent of total landfill disposal. Increasing food waste prevention, encouraging edible food rescue, and expanding the composting and in-vessel digestion of organic waste throughout the state will help reduce methane emissions from organic waste disposed in California's landfills. Additionally, compost has numerous benefits including water conservation, improved soil health, and carbon sequestration.

Local

City of Moreno Valley 2040 General Plan

The Moreno Valley 2040 General Plan (MoVal 2040 GP) is the City's blueprint for how and where Moreno Valley will grow over the next 20 years. The City initiated the process of updating the General Plan in late 2019. This update to the general plan expanded upon and enhanced the 2006 General Plan for the City. Generally, the MoVal 2040 GP increased the allowable density of commercial uses within the City. Despite this, the Project currently proposes a less intense and dense use than envisioned in the 2006 General Plan. On June 15, 2021, the City Council approved the update of the City's General Plan. The goals, objectives,

and policies in the General Plan provide actions and plans for the City and are not necessarily to be achieved by private development, such as the Project. However, the Project would support the City in reaching these goals.

The following goals and policies from the Moreno Valley 2040 General Plan are pertinent to the Project:

Parks and Public Services Element

Goal PPS-4: *Provide for utilities and infrastructure to deliver safe, reliable services for current and future residents and businesses.*

Policy PPS.4-2: Coordinate development activity with the provision of public infrastructure and services to eliminate possible gaps in service provision.

Policy PPS.4-4: Whenever possible, project proponents should ensure that public water, sewer, drainage, and other backbone facilities needed for a project phase are constructed prior to or concurrent with initial development within that phase. It shall be the ultimate responsibility of the sponsor of a development project to assure that all necessary infrastructure improvements (including system wide improvements) needed to support project development are available at the time that they are needed.

Policy PPS.4-6: Maintain a “dig once” policy to streamline the installation of infrastructure, minimize disruption from construction activities, and optimize coordination among responsible agencies and developers.

Open Space and Resource Conservation Element

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

Policy OSRC.3-6: Encourage new development to incorporate as many water-wise practices as feasible in their design and construction.

Policy OSRC.3-7: Conserve water through the provision of water-efficient infrastructure, drought tolerant plantings, and greywater usage to support public parks and landscaped areas.

Policy OSRC.3-8: Conserve water through the planting and maintenance of trees, which will provide for the capture of precipitation and runoff to recharge groundwater, in addition to providing shading for other landscaping to reduce irrigation requirements. Ensure that any “community greening” projects utilize water-efficient landscape.

Goal OSRC-4: *Optimize the use of available resources by encouraging residents, businesses, and visitors to reuse and recycle.*

Policy OSRC.4-1: Reduce the amount of solid waste disposed in landfills by promoting source reduction and recycling throughout Moreno Valley and by expanding the range of programs and information available to local residents and businesses, consistent with State requirements.

Policy OSRC.4-2: Strive to reduce at source, recycle, or compost 75 percent of solid waste generated in the community from the year 2021 forward, consistent with State targets.

Eastern Municipal Water District Urban Water Management Plan

EMWD's 2020 UWMP (July 2021), was prepared pursuant to CWC Division 6, Part 2.55, §10608 (Sustainable Water Use and Demand Reduction) and CWC Division 6, Part 2.6, §§10610-10657 (Urban Water Management Planning). The UWMP describes future water demands and future availability of the water supply sources used by EMWD.

Municipal Separate Storm Sewer Systems (MS4) Permit/NPDES Permit

The Federal Water Pollution Control Act prohibits the discharge of any pollutant to navigable waters (waters of the U.S.) from a point source unless the discharge is authorized by a NPDES permit. In 2002, the Santa Ana RWQCB issued an NPDES Storm Water Permit and Waste Discharge Requirements under the CWA and the Porter-Cologne Act for discharges of stormwater runoff, snowmelt runoff, surface runoff and drainage within the Santa Ana River watershed in San Bernardino and Riverside counties.

The City of Moreno Valley is within the jurisdiction of the Santa Ana RWQCB and is subject to the waste discharge requirements of the Municipal Separate Storm Sewer System (MS4) Permit for San Bernardino and Riverside counties and the proposed permit for Riverside County. The County and cities within the County are co-permittees under the MS4 permit and have legal authority to enforce the terms of the permit in their jurisdictions.

Moreno Valley Municipal Code

The City's Municipal Code Ordinance 6.02.050 provides standards for the provision of solid waste (refuse) and recyclable material storage areas in compliance with state law (California Solid Waste Reuse and Recycling Access Act, PRC §§42900 through 42911). Additionally, the City's Building Code requires development projects to complete and submit a Waste Management and Recycling Plan for approval prior to issuance of building permits. The Waste Management and Recycling Plan would identify the project type and estimate the amount of materials to be recycled during construction. The project would also be required to complete a Diversion Report for review by the City's Building Department to demonstrate that the project recycled a minimum of 50 percent of its construction waste.

Approved Towngate Specific Plan 200

Towngate Specific Plan 200 (SP-200), formerly known as the Moreno Valley Mixed Use Development, detailed development standards for PA 2, in which the Project site is located. The SP-200 stipulated design standards that would be followed by the SP-200 developers and all subsequent projects within the specific plan area pending an amendment to the SP-200. Development within SP-200 must also follow City Municipal Code and City Building Codes. The SP-200 EIR identified that EMWD would have sufficient facilities and water supply to provide water service to the entirety of the specific plan area, including the Moreno Valley Mall.

4.8.4 Impact Thresholds and Significance Criteria

State CEQA Guidelines, Appendix G contains the Environmental Checklist Form, which includes questions concerning utilities and service systems. The questions presented in the Environmental Checklist Form

have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- 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 effect.
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
- Result in a determination by the wastewater treatment provided which serves or may serve the project that it has adequate capacity to serve the project's project demand in addition to the provider's existing commitments.
- 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.
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Project Design Features

In addition to applying existing standard conditions and regulatory requirements, the Project has incorporated the following Project Design Features into the SPA and TPM:

- The Project consists of redeveloping an existing developed regional mall site, which will reduce the need for new or modified infrastructure that would otherwise be associated with constructing a new mall at the current site or developing new regional commercial uses at an alternate site.

Additionally, development regulations have been stipulated within the SPA and provide requirements for developers within the Project area. The following development regulation is pertinent to the Project:

- All utilities are to be installed underground unless otherwise specified in Section 4, Design Guidelines (*of the SPA*), or approved by the Planning official or his/her designee.

Methodology and Assumptions

This analysis considers construction and operational impacts associated with the Project based upon review of the proposed SPA and TPM, and associated technical memos referenced in each discussion below. In addition, the water resource related thresholds are based in part on the Final Water Supply Assessment prepared by EMWD (**Appendix H**). Finally, this section includes a comparative analysis of assumptions for the MoVal Mall site as contained in the MoVal 2040 General Plan Final EIR.

4.8.5 Impacts and Mitigation Measures

Summary of Previous Environmental Analysis

The SP-200 EIR analyzed the impacts of specific plan implementation on a number of utility service systems. The SP-200 EIR specifically analyzed the impacts to water and sewer systems and services and solid waste disposal. The SP-200 EIR determined that implementation of the SP-200 would incrementally increase the demand for public utilities and service systems, including water, sewer, and solid waste, as

well as telecommunications. The increase demand was determined at the time to be growth inducing to the existing systems and contributed to the need to expand the then existing systems.

As a result of SP-200 implementation, the Sunnymead Regional Water Reclamation Facility was expanded to support a capacity of 20 MGD, which could service a population of 200,000 to 250,000. The cost of the expansion of water and sanitary sewer systems was covered by implementing service fee charges on a per unit basis and was applied to all units built within the SP-200 area. Additionally, water conservation techniques were recommended but not required.

Development within the SP-200 area would also increase the demand on solid waste facilities and likely shorten the lifespan of the County of Riverside Badlands dumpsite and other dumpsites or landfills within the region. It was determined that additional landfill sites may need to be identified to alleviate impacts upon the then existing solid waste facilities. The SP-200 EIR identified that the project applicant should study the possibility of installing recycling bins for resident's use and convenience. No mitigation measures were identified in the SP-200 EIR for this resource area.

The SP-200 stated that the implementation of the Specific Plan and annexation into the City of Moreno Valley would require the expansion of public utilities and service systems. These demands would be incrementally increase over the life of the SP-200 and the cost of expanding these services would be covered by development impact fees and service charges. These impacts were seen as unavoidable and adverse. There were no mitigation measures identified in the SP-200 EIR for this resource area.

Impact 4.8-1 ***Would the Project 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?***

Level of Significance: Less than Significant Impact

Construction and Operation

The Project consists of the redevelopment of the existing Moreno Valley Mall (excluding the JCPenney and Macy's parcels). Utility connections are already in place for a majority of the Project site. Existing utilities would be extended and upgraded as needed during construction of the Project to serve the anticipated demands and to accommodate operation of the residential, hospitality, office, and commercial structures. Services provided by each utility is discussed in additional detail below. It should be noted that all utility infrastructure improvements that are currently identified under the Project will be constructed within the existing or to be dedicated public right-of-way.

Water

Water to the Project site would be provided by EMWD. As described in **Section 4.13.2: Environmental Setting**, EMWD provides water to its service area via groundwater, surface water, and imported water sources. Although EMWD currently has a surplus water supply it has projected additional water resource allocations through the year 2045. The Project would include the development of two hotel operations within a single building, multi-family residential buildings, parking facilities, and the relocation of the

existing bus stops on the Project site to be located along the northern perimeter of the Town Circle ring road. While this development would increase water demand of the existing Moreno Valley Mall, the intensity of the development is less intense than what was envisioned in the approved SP-200 and the MoVal 2040 General Plan, see **Section 3.0, Project Description**. The MoVal 2040 General Plan Draft EIR has identified that water infrastructure will need to be constructed and upgraded to serve the City through 2040. However, EMWD has the capability and capacity to supply water through their own projections to 2045. Additionally, according to EMWD's Final WSA, the cumulative demand from the Project and all other new or planned developments being tracked by EMWD would be within the level of demand account for in the 2020 UWMP.⁷ Furthermore, the Project would improve and upgrade existing infrastructure on the Project site to serve buildout of the Project. See **Figure 4.8-1, Water Plan** for the current proposed water plan as part of the Project which includes the rerouting of existing 12- and 24- inch DIP water main and installation of new 12-inch DIP water main.

Per **Figure 4.8-1**, the proposed Project would relocate two water laterals and a portion of the water mainline to accommodate future development of which location shall be determined as part of the plot plan development. The majority of the existing water system would remain in place; however, some water infrastructure would be relocated to accommodate the proposed development program: The existing water main and easements dedicated to EMWD along the northeast of the property would be relocated to Town Circle, and the existing water main and easements dedicated to EMWD along the southeast of the property would be relocated to avoid conflict with proposed developments.

Wastewater

EMWD provides wastewater treatment services through four RWRFs. These facilities are able to treat a total of 77 MGD with a current remaining capacity of 34 MGD. The MoVal 2040 General Plan Draft EIR identified that increased demand within the City would likely only require the upsizing of existing sewer collection lines. The MoVal 2040 General Plan has already identified potential sewers to be expanded or upgraded prior to and during construction of the Project, including new 8-inch and 12-inch sewer lines and a new 21-inch trunk sewer.⁸ The MoVal 2040 General Plan identified the Project area as a location within the City that would require the expansion and improvement of wastewater conveyance infrastructure should the area be developed. As these sewer utilities are already identified for potential improvements in the MoVal 2040 General Plan and EIR, the upsizing and improvements of downstream utilities as a result of Project implementation would not cause a significant impact. Nonetheless, this EIR provides an analysis of proposed sewer line improvements.

See **Figure 4.8-2, Sewer Plan** for the currently proposed on-site infrastructure improvements for the Project. The proposed development program would utilize existing sewer infrastructure where feasible. However, due to increased anticipated flows and conflicts with the proposed developments, a number of sewer mains would be upsized and rerouted to follow Town Circle, including a portion to be rerouted underneath the publicly dedicated portion of Town Circle. Existing public easements dedicated to EMWD

⁷ Eastern Municipal Water District (June 2022). *Water Supply Assessment Report Moreno Valley Mall Redevelopment*, **Appendix H**

⁸ City of Moreno Valley (2021). *MoVal2040 General Plan*; Page 5-17

would be required to be vacated where sewer mains are being abandoned and new easements established where sewer mains are proposed.

Through consultation with EMWD, it has been determined that off-site downstream wastewater conveyance infrastructure would require upsizing and/or improvements. Currently, four different design options are being explored by EMWD and the Project. These four design options include the Original Design, Alternate 1, Alternate 2, and Alternate 3. A summary of each design option follows:

Original Design

The original design would route all wastewater flows off-site to the existing sewer main within Memorial Way. The sanitary sewer along Memorial Way from Town Circle to Eucalyptus Ave and along Eucalyptus Ave from Memorial Way to Day St would require upsizing from the existing 10-inch sewer to a 15-inch sewer. This would consist of approximately 3,500 linear feet (LFT) of improvements. A private sewer lift station would be required.

Alternate 1

Alternate 1 would separate the existing on-site sanitary flows into three distinct areas that would each convey wastewater flows to the west, south, and east. Sewer would be reconstructed for gravity flow to eliminate the need for a private sewer lift station. This alternate would require approximately 1,600 LFT of new 8-inch sewer pipe, the construction of approximately 1,700 LFT of 10-inch pipe, and the upsizing of approximately 1,000 LFT of 8-inch pipe to 10-inch pipe and 3,500 LFT of 10-inch pipe to 15-inch pipe.

Alternate 2

This alternate would direct a higher proportion of Project sewer flows to the west, as compared to Alternate 1. This option is no longer being explored as it would put additional stress on the lift station at the intersection of Day St and Cottonwood Ave and would require nearly identical off-site improvements as Alternate 1.

Alternate 3

This Alternate 3 is currently being explored with EMWD. This alternate would direct flows from the residential parcels on the eastern portion of the Project site to the east to eliminate the need to upsize the 10-inch sanitary sewer within Memorial Way. Other improvements required as part of this alternate 3 would include the upsizing of approximately 1,000 LFT of 8-inch sewer pipe to 10-inch sewer pipe, the rerouting of approximately 1,100 LFT of 8-inch sewer pipe on-site to the west, and the construction of approximately 500 LFT of 8-inch sanitary sewer pipe, and 1,700 LFT of 10-inch sewer pipe.

Currently, the original design is the preferred option for off-site improvements. As previously discussed, potential off-site improvements related to development or redevelopment of the Moreno Valley Mall were analyzed and considered in the MoVal 2040 General Plan and EIR. Regardless of the alternative selected, the proposed sewer improvements would not have significant environmental impacts, as these pipes would be installed within existing streets and developed areas. Pipeline construction would follow typical City construction protocols including traffic and dust control, detours where needed, and maintaining business access during construction. Furthermore, all off-site improvements would be

required to comply with the applicable mitigation measures prescribed within this Draft SEIR. Additionally, a Mitigation Monitoring and Reporting Program (MMRP) would be prepared for this Project that would detail each mitigation that the Project would be required to comply with. The MMRP would be included as a condition of approval for the Project. All off-site improvements associated with implementation of the Project would similarly be required to comply with the MMRP.

Stormwater

A majority of the stormwater facilities and infrastructure within the Project site are privately owned and maintained. Some of the infrastructure within the publicly dedicated Town Circle are owned and maintained by the Riverside County Flood Control. The Project proposes improvements to the stormwater infrastructure on-site. As the Project site is nearly entirely disturbed, nearly all stormwater on-site is conveyed via curb and gutters, shallow concentrated flow, catch basins, and other storm infrastructure. At the time the existing MoVal Mall was designed and constructed, drainage plans were reviewed by the City of Moreno Valley and associated agencies to ensure that the 100-year storm flows would be captured and routed properly throughout and off-site. Likewise, with the design and construction of the Project, the drainage plans and proposed stormwater infrastructure will be reviewed by the City of Moreno Valley and associated agencies to ensure that proposed site conditions have adequate capacity for the 100-year flows.

As the existing stormwater infrastructure adequately captures the 100-year flow and the Project will be designed to adequately capture the 100-year flows, stormwater infrastructure downstream would not require improvement or upsizing as a result of Project implementation, and a less than significant impact is anticipated. See **Figure 4.8-3, Drainage Plan** for the currently proposed stormwater infrastructure improvement plan for the Project. The City's Master Plan of Drainage includes the drainage facilities within the Project site and no deficiencies are present in the system. As the Specific Plan land use program does not increase the amount of impervious area, the drainage characteristics are anticipated to remain the same as in the existing condition. Thus, no retention is required for stormwater runoff from the Project site. Per **Figure 4.8-3**, the proposed improvements to the storm drain system are limited to the following: re-routing of several storm drain lines into the private drives within the Project site from their present locations within future development sites.

Electricity, Natural Gas and Telecommunications

The impacts of the Project on electric power and natural gas are evaluated in **Section 7.0, Effects Found not to be Significant**.

Like the other dry utilities, telecommunication services would be extended to serve the Project site. This may involve the extension of services for existing providers and the petition for additional services from additional providers not currently present on the Project site. However, the construction of substantial new telecommunication infrastructures would not be required as the Project site is already disturbed with the existing Moreno Valley Mall and telecommunication services exist and serve this area.

Connections to fiber optic networks do not currently exist within the Project site. As the infrastructure needed to deliver these services is made accessible in the future, individual projects would have the

opportunity to connect and make these services available. Additional conduits and infrastructure will be included with future development for future connections. Public gas and electric utilities in private drives would be relocated in the proposed private roadway, within the Project site, with appropriate easements. Service lines for new buildings would be extended from the existing and new public lines. Additionally, new developments will connect to the existing fiber optic cable network.

Impacts related to existing or planned utility facilities are anticipated to be less than significant without mitigation. As previously mentioned, the Project is consistent with the intensity envisioned in the SP-200 and the MoVal2040 General Plan. Additionally, all developments would be required to follow the City's standard development review process, including demonstrating adequate utilities, and the payment of all applicable development impact fees.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures were identified within the SP-200 EIR for this topical area due to EMWD's ability to serve the SP-200 area.

Moreno Valley Mall Specific Plan Design Guidelines: The following design guidelines of the Moreno Valley Mall Specific Plan are applicable:

- DG - 34** Accommodate requirements for stormwater storage and discharge and underground utility locations when locating buildings and landscaping.
- DG - 35** Easements for underground utilities that preclude the planting of trees may not be located where the design guidelines require the planting of trees.
- DG - 116** Parking lot design shall include openings in curbs to convey water runoff into landscape areas for water quality, retention, and absorption.
- DG - 151** Design should incorporate stormwater remediation and other Low Impact Development (LID) techniques into the streetscape where feasible.
- DG - 256** Develop watershed areas for the project areas in order to manage water harvesting and distribution.
- DG - 265** Grade all planting areas to control high intensity rainfall and runoff episodes. Provide riprap at downspouts; create multiple watersheds to disperse water flow. Use surface mulch and straw wattles.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.8-2 ***Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?***

Level of Significance: Less than Significant Impact

Construction and Operations

The City's main source of water supply is provided by Mills Service Area of the EMWD. Water served to the City of Moreno Valley is imported from northern California through the SWP and treated at the Henry J. Mills Filtration Plant. Excess water treated at the Henry J. Mills Filtration Plant is and blended with other EMWD water sources, including Perris Valley Wells, Perris Filtration Plant, and Menifee/Perris

Desalters, which then serve the larger Mills Service Area. As mentioned in the discussion for **Impact 4.8-1**, the majority of the existing water system will remain in place; however, some water infrastructure will be relocated to accommodate the proposed development program.

A WSA was prepared by EMWD and completed on June 15, 2022. This WSA analyzes EMWD’s capacity to serve the Project’s demands for water services. EMWD estimates the water demand for the Project to be 684.98 AFY, which represents an increase in the limits of estimated demand considered in the 2020 UWMP. However, EMWD has planned for this possibility by including a planning buffer in the 2020 UWMP and projecting future water use at lower levels of water efficiency compared to present day water use. After accounting for the cumulative demands from the Project and other developments in EMWD’s service area (including other WSAs), over 11,000 AFY of buffer remains.⁹ **Tables 4.13-3, 4.13-4, and 4.13-5** display EMWD’s projected supply and demand rates for water within its service boundaries from 2025 to 2045 for different scenarios. EMWD is able to scale supply to meet expected demand through 2045 which includes the demands associated with the Project.

Table 4.8-3: Normal Year Supply and Demand

Year	Supply Totals (AF)	Demand Totals (AF)
2025	145,930	145,930
2030	157,320	157,320
2035	168,900	168,900
2040	178,700	178,700
2045	187,100	187,100

¹ Supply and Demand Totals represent retail supply and demand.
 Source: Eastern Municipal Water District (2021). *2020 Urban Water Management Plan; Table 7-3*

Table 4.8-4: Single Dry Year Supply and Demand

Year	Supply Totals (AF)	Demand Totals (AF)
2025	151,130	151,130
2030	162,820	162,820
2035	174,700	174,700
2040	184,700	184,700
2045	193,300	193,300

¹ Supply and Demand Totals represent retail supply and demand.
 Source: Eastern Municipal Water District (2021). *2020 Urban Water Management Plan; Table 7-5*

Table 4.8-5: Multiple Dry Years Supply and Demand

Year	Supply Totals (AF)	Demand Totals (AF)
2025	145,930	145,930
2030	157,320	157,320
2035	168,900	168,900
2040	178,700	178,700
2045	187,100	187,100

¹ Supply and Demand Totals represent retail supply and demand.
 Source: Eastern Municipal Water District (2021). *2020 Urban Water Management Plan; Table 7-7*

⁹ Eastern Municipal Water District (June 2022). *Water Supply Assessment Report Moreno Valley Mall Redevelopment*.

Estimated Project Demand

As previously discussed, EMWD’s estimated Project water demand is approximately 684.98 AFY (see **Table 4.8-6**). This projected water demand represents less than 0.37 percent of EMWD’s projected year 2045 water demand. This increased demand is not anticipated to exceed the limits of the projected demand accounted for in the 2020 UWMP and the combined total demand of the Project and other new/planned developments fall below the total amount of new demand anticipated in the 2020 UWMP extending out to 2045. As such, an offset is not required as sufficient capacity remains in the UWMP supply projects and impacts are anticipated to be less than significant.

Table 4.8-6: Project Specific Demand Estimate

Land Use Category	Average Day Demand (gpd)	Annual Demand (AFY)
Very High Density Residential	550,130	616.65
Commercial Retail/Office	57,662	64.63
Open Space Recreation	3,300	3.70

Source: Eastern Municipal Water District (June 2022). *Water Supply Assessment Report Moreno Valley Mall Redevelopment; Table 11*

Applicable SP-200 EIR Mitigation Measures: No mitigation measures were identified within the SP-200 EIR for this topical area due to EMWD’s ability to serve the SP-200 area.

Moreno Valley Mall Specific Plan Design Guidelines: The following design guidelines of the Moreno Valley Mall Specific Plan are applicable:

- DG - 254** Maximize water harvesting, detention, and treatment techniques throughout the project.
- DG - 256** Develop watershed areas for the project areas in order to manage water harvesting and distribution.
- DG - 270** Require certification that the irrigation system was installed and operates as designed and conduct a post-installation audit of actual water consumption.
- DG - 275** Use best available irrigation technology to maximize efficient use of water, including moisture sensors, multi-program electronic timers, rain shutoff devices, remote control valves, drip systems, backflow preventers, pressure reducing valves and precipitation-rated sprinkler heads. The irrigation system shall be designed to utilize low volume, high efficiency bubblers, MP rotators and low volume spray heads to reduce overall water consumption and increase efficiency.
- DG - 282** Trees shall be irrigated with flush-to-grade root watering systems on dedicated valves.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.8-3 *Would the Project 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?*

Level of Significance: Less than Significant Impact

Construction and Operations

The Project would include the development of 1,627 multi-family dwelling units, two hotels, office, and the redevelopment of the existing Moreno Valley Mall, with exception of the Macy's and JCPenney parcels. As previously discussed, EMWD provides wastewater services to the Project site and currently has additional capacity totaling 34 MGD across the four RWRFs within EMWD's service area. As the MoVal Mall is an existing development, the wastewater generated by the operation of the renovated mall would still be sufficiently treated by existing EMWD RWRFs. As mentioned in the discussion for **Impact 4.8-1**, the proposed development program would utilize existing sewer infrastructure where feasible. However, due to increased anticipated flows and conflicts with the proposed developments, a number of sewer mains will be upsized and rerouted.

The SP-200 EIR did not identify any specific mitigation measures with regards to wastewater impacts, however, it did recommend several techniques to minimize water use which would minimize wastewater generation. These techniques included the consideration of low-flow showerheads and low-volume holding tanks on toilets. Additionally, the SP-200 EIR identified that the development of the specific plan would have adequate capacity at treatment facilities to support the plan. As the Project is consistent with the intensity envisioned for the site within the approved SP-200, it anticipated that the final buildout and operation of the Project would not adversely impact wastewater treatment for the Project site.

The existing mall generates approximately 65 gpm (105 AFY) of wastewater in the average dry weather flows (ADWF) condition. Kimley-Horn prepared a Sewer Study for the Project that estimated that the proposed Project would result in an estimated 269 gpm (434 AFY), or approximately 0.39 MGD (**Appendix J**).¹⁰ This represents less than 1.2 percent of the capacity of existing wastewater services. As previously noted, the Project has previously been incorporated into the MoVal 2040 General Plan, which did not note the necessity of further wastewater infrastructure due to Project implementation as future population projects within the City for the next 20 years are less than the Southern California Association of Governments' (SCAG) population forecasts and as such would not exceed wastewater demand forecast projections for EMWD.¹¹

As previously mentioned, the Project is consistent with the intensity envisioned in the SP-200 and the MoVal2040 General Plan. Additionally, all developments would be required to follow the City's standard development review process, including demonstrating adequate utilities, and the payment of all applicable development impact fees. Therefore, impacts to wastewater treatment flows would be less than significant with no mitigation required.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures were identified within the SP-200 EIR for this topical area due to EMWD's ability to serve the SP-200 area.

Moreno Valley Mall Specific Plan Design Guidelines: No design guidelines from the Moreno Valley Mall Specific Plan are applicable to this topical area.

¹⁰ Kimley-Horn and Associates (March 2022). *Moreno Valley Mall Redevelopment Sewer Study*, page 2.

¹¹ City of Moreno Valley (2021). *MoVal2040 General Plan Final Environmental Impact Report*; Page 4.17-14.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.8-4 ***Would the Project 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?***

Level of Significance: Less than Significant Impact

Construction and Operations

Solid waste produced by the Project would be collected by City through a contract with Waste Management and would likely be sent to the Badlands Sanitary Landfill. Other landfills that may serve the Project are the El Sobrante Landfill and the Lamb Canyon Landfill. As discussed in **Section 4.8.2, Environmental Setting**, the Badlands Sanitary Landfill has a remaining capacity of 15,748,799 cubic yards. The three landfills have a combined remaining capacity of 178.8 million cubic yards.¹² The Badlands Sanitary Landfill has a maximum permitted throughput of 4,800 tons/day, El Sobrante Landfill has a maximum permitted throughput of 400 tons/day, and the Lamb Canyon Landfill has a maximum permitted throughput of 5,000 tons/day, for a combined total of 10,200 tons/day.

The SP-200 EIR examined a “worst-case” assessment of waste generation: the commercial uses proposed are estimated to generate 2 lbs/day/100 square feet, office uses are estimated to generate 1 lb/day/100 square feet, and 5.01 lbs per capita per day. Applying the same waste generation rates to the current proposed residential and office uses and utilizing the commercial rate of 2 lbs/day/100 square feet for the proposed hotel uses, new Project uses are estimated to generate approximately 35,948 pounds (18 tons) of solid waste per day. This represents less than 0.38 percent of the daily solid waste capacity of the Badlands Sanitary Landfill. In addition, the MoVal 2040 General Plan analyzed solid waste generation rates within the City throughout 2040 and determined that the existing landfill and solid waste facilities would be adequate for the City through projected growth.

The redevelopment of the MoVal Mall was considered within the General Plan and therefore the expansion of uses at the MoVal Mall are consistent with the MoVal 2040 General Plan. Furthermore, the City’s Building Code requires development projects to complete and submit a Waste Management and Recycling Plan for approval prior to issuance of building permits. The Waste Management and Recycling Plan would identify the project type and estimate the amount of materials to be recycled during construction. The project would also be required to complete a Diversion Report for review by the City’s Building Department to demonstrate that the project recycled a minimum of 50 percent of its construction waste. Additionally, all developments would be required to follow the City’s standard development review process, including demonstrating adequate utilities, and the payment of all applicable development impact fees. Therefore, the Project would comply with local standards and pose a less than significant increase to the landfills’ capacities and a less than significant impact would occur.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures were identified within the SP-200 EIR for this topical area due to the County’s ability to serve the SP-200 area.

¹² City of Moreno Valley (2021). *MoVal2040 General Plan Final Environmental Impact Report; Table 4.17-1.*

Moreno Valley Mall Specific Plan Design Guidelines: No design guidelines of the Moreno Valley Mall Specific Plan are applicable to this topical area.

Additional Mitigation Measures: No additional mitigation measures are necessary.

Impact 4.8-5 *Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Level of Significance: *Less than Significant Impact*

Construction and Operation

The Project would comply with applicable local, state, and federal regulations regarding solid waste, including those of the City. All solid wastes would be deposited primarily at the Badlands Sanitary Landfill or at either El Sobrante Landfill or the Lamb Canyon Landfill, operated by the Riverside County Department of Waste Resources. The Project is anticipated to generate solid waste during the temporary, short-term construction phase, as well as the operational phase, but it is not anticipated to result in inadequate landfill capacity. MoVal 2040 General Plan **Policy OSRC.4-2** requires the City and its subsequent projects to meet or exceed the state waste diversion requirements such as those outlined in AB 341. AB 341 would require that at least 75 percent of waste generated from construction activities be diverted to recycling centers. The Project would also comply with local measures such as the City's Building Code which requires projects to recycle a minimum of 50 percent of construction waste. Through compliance with applicable regulations, the Project would create a less than significant impact with no mitigation necessary.

Applicable SP-200 EIR Mitigation Measures: No mitigation measures were identified within the SP-200 EIR for this topical area due to the SP-200's compliance with all applicable rules, regulations, and policies.

Moreno Valley Mall Specific Plan Design Guidelines: No design guidelines of the Moreno Valley Mall Specific plan are applicable to this topical area.

Additional Mitigation Measures: No additional mitigation measures are necessary.

4.8.6 Cumulative Impacts

For purposes of public utilities and service systems, cumulative impacts are considered for projects located within the City. As discussed above, all Project impacts to utilities and service systems would be less than significant in consideration of compliance with existing laws, ordinances, regulations, and standards. Although temporary impacts during construction could occur, these impacts would only occur during development of the sites and would be typical of construction. Also, these impacts are generally localized and occur at different times and would be phased with each parcel development, rather than simultaneously and would avoid significant cumulative impacts from multiple projects. Impacts related to storm water drainage facilities are addressed in **Section 7.0, Effects Found not to be Significant**.

In addition, the MoVal 2040 Final EIR incorporates the anticipated redevelopment of the existing Moreno Valley Mall site in its analysis of cumulative impacts to utilities and service systems. The MoVal 2040 Final EIR found that implementation of the MoVal 2040 GP would not contribute to a

cumulative impact related to public utilities and services systems. Because the Project is consistent with the MoVal 2040 GP, this finding is applicable. Furthermore, these future utility and service would be subject to MoVal 2040 GP goals and policies intended to protect the environment and the programmatic mitigation framework established in the MoVal 2040 Final EIR.

Therefore, impacts are not anticipated to be cumulatively considerable. Other past, present, and reasonably foreseeable projects would be anticipated to implement similar measures or implement mitigation to fully mitigates their contribution to cumulative impacts. Therefore, there are no significant cumulative impacts anticipated relative to public utility and service systems, and the Project's contribution toward potential future utility and service system impacts in the City is not cumulatively considerable.

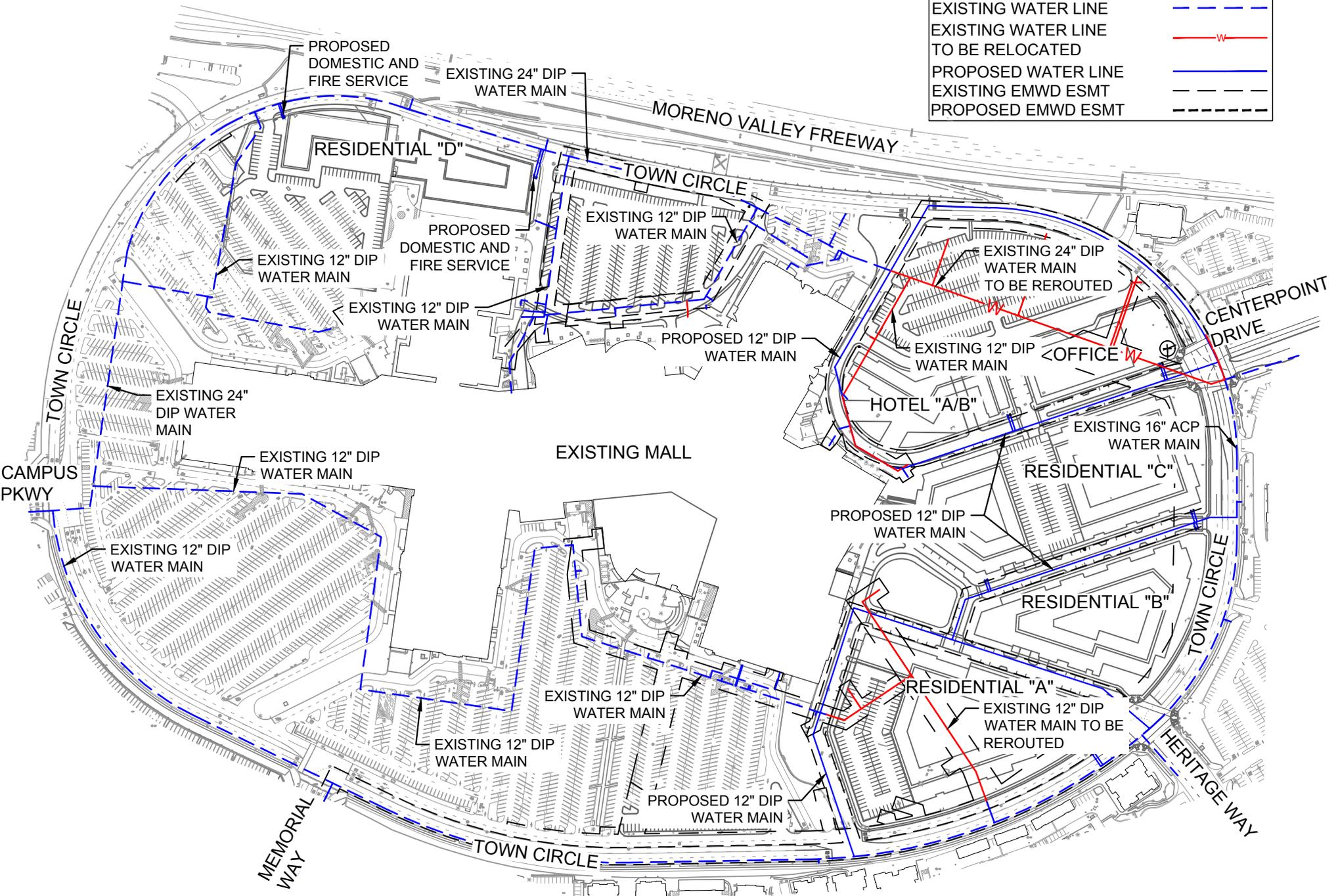
4.8.7 Significant Unavoidable Impacts

No significant unavoidable utilities and service systems impacts have been identified.

4.8.8 References

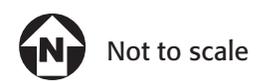
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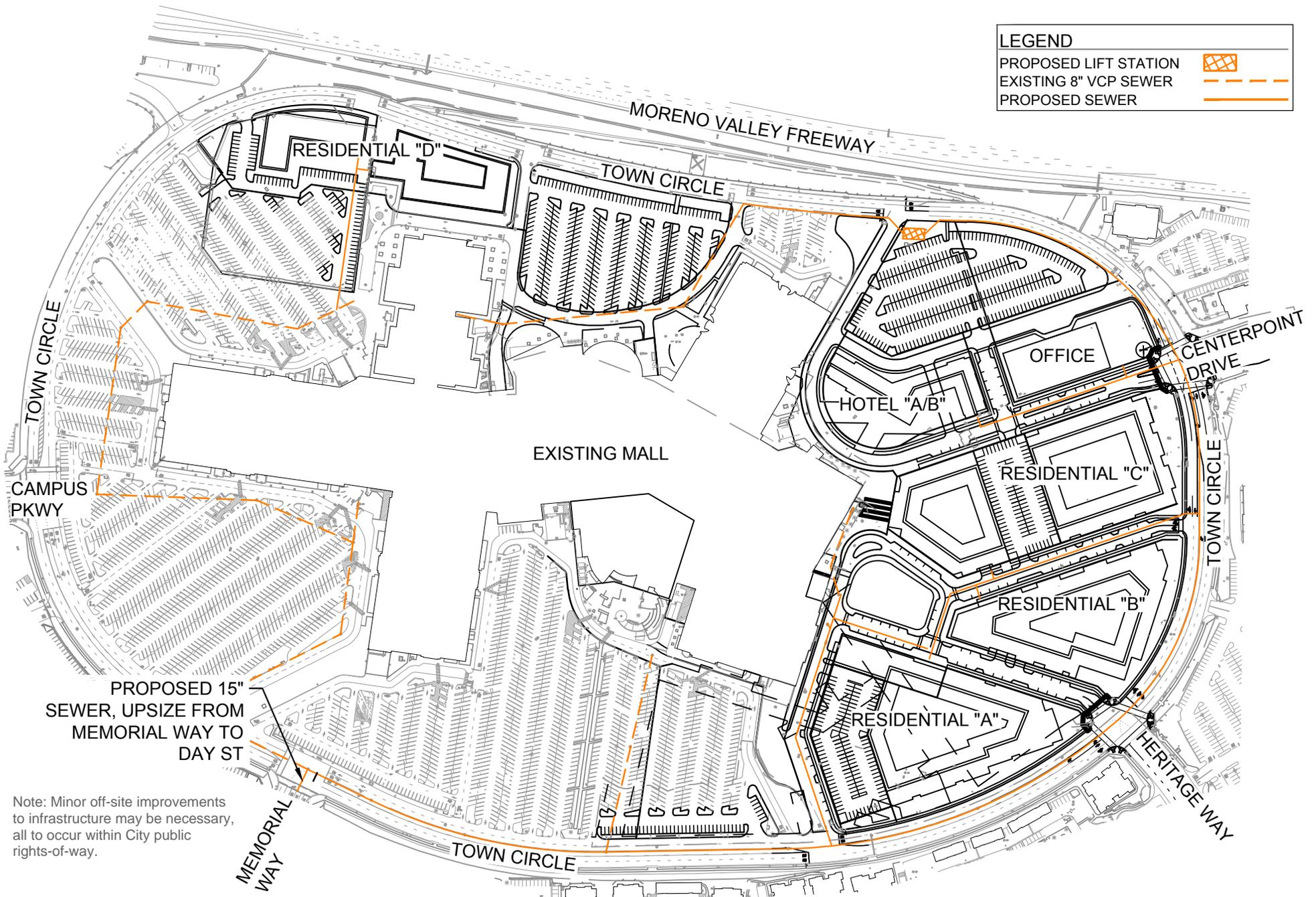
LEGEND	
EXISTING WATER LINE	
EXISTING WATER LINE TO BE RELOCATED	
PROPOSED WATER LINE	
EXISTING EMWD ESMT	
PROPOSED EMWD ESMT	



Source: Kimley-Horn, 07/11/2022

FIGURE 4.8-1: Water Plan
Moreno Valley Mall Redevelopment Project





Note: Minor off-site improvements to infrastructure may be necessary, all to occur within City public rights-of-way.

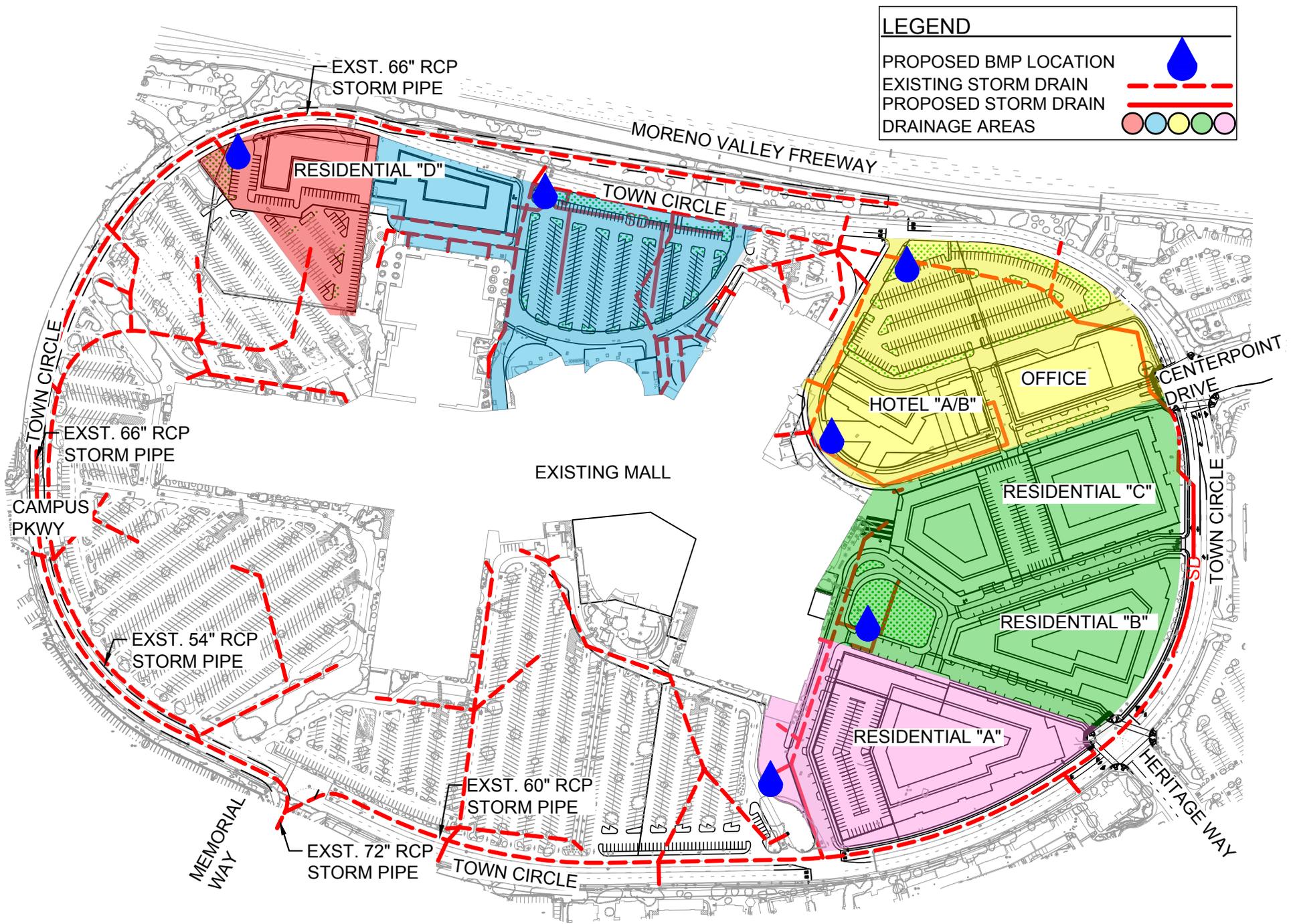
PROPOSED 15" SEWER, UPSIZE FROM MEMORIAL WAY TO DAY ST

Source: Kimley-Horn, 07/11/2022

FIGURE 4.8-2: Sewer Plan
Moreno Valley Mall Redevelopment Project



Not to scale



Source: Kimley-Horn, 07/11/2022

FIGURE 4.8-3: Drainage Plan
Moreno Valley Mall Redevelopment Project

5.0 OTHER CEQA CONSIDERATIONS

This section of the Draft Subsequent Environmental Impact Report (Draft SEIR) provides a discussion of additional CEQA impact considerations, including Significant Irreversible Environmental Changes, Growth-Inducing Impacts, and any Mandatory Findings of Significance.

5.1 CEQA Requirements

Section 15126.2 (b) of the CEQA Guidelines requires that an EIR discuss any significant impacts associated with the Project. In **Section 4.0, Environmental Impact Analysis**, of this Draft SEIR, describes the potential environmental impacts of the Project and recommends mitigation measures to reduce impacts to a less than significant level, where feasible. **Section 1.0, Executive Summary** contains **Table 1.0-1, Summary of Significant Impacts and Proposed Mitigation Measures**, which summarizes the impacts, mitigation measures, and levels of significance before and after mitigation.

5.2 Significant and Irreversible Environmental Changes

The CEQA Guidelines §15126.2(d), requires a discussion of any significant irreversible environmental changes that would be caused by a proposed project. Generally, the section states that a project would result in significant irreversible environmental changes if the following occurs:

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

The project would NOT involve a large commitment of nonrenewable resources in a way that would make their nonuse or removal unlikely.

The Project would not involve the utilization of nonrenewable resources in a manner that would make their nonuse or removal unlikely. Nonrenewable resources associated with the development of the Project site would include fossil fuels. Fossil fuels would serve as energy sources during both Project construction and operations. Fossil fuels would act as transportation energy sources for construction vehicles and heavy equipment during the construction period and by vehicles and equipment used during Project operations. Though the Project would endeavor to utilize fossil fuels efficiently, their use would be vital for construction and operations activities, making their nonuse unlikely. However, the Project would not require the continued use of fossil fuels at the end of its operational life. By nature of being a nonrenewable resource, fossil fuels, once consumed, cannot be replaced. Those fuels, once spent, may be transformed into another form of matter such as exhaust or smoke. Standard vehicles and equipment used by the Project in both construction and operational phases would likely utilize fossil fuels. Some construction and operational equipment such as forklifts may be electrified and therefore not rely on

fossil fuels. Energy-efficient equipment would be utilized according to their availability and in order to comply with energy regulations and policies for the Project as a whole as it pertains to residential, office, hospitality, and commercial uses.

The Project does not propose any fueling stations and would not likely store significant amounts of fossil fuels on the site. Fossil fuels on-site would not be stored in a manner that would make their removal unlikely. No infrastructure is proposed to store fossil fuels in large amounts or without the ability of removal. The Project would also require the commitment of land on which the Project would be developed for a mixed-use of residential, office, hospitality, and commercial uses. Similarly, land is a finite resource in that once developed and in active use it removes the ability for that land to be used for other purposes. However, development of the Project site would not eliminate the possibility of redevelopment in the future.

The primary and secondary impacts would generally commit future generations to similar uses.

Impacts associated with the Project are largely less than significant with mitigation applied. The majority of identified impacts, not adequately covered by the previous EIR, were anticipated to create a less than significant impact or no impact, with the exception of air quality and greenhouse gas emissions.

Once development of the proposed project occurs, it would not be feasible to return the developed land to its existing (pre-project) condition. In addition, the redevelopment is proposed with the intent to last a long time. However, because the project site is already developed with urban uses, redevelopment under the proposed project would not represent a substantial change in land use.

The Project's development is anticipated to produce some significant and unavoidable impacts based on analyses conducted in **Section 4.2, Air Quality** and **Section 4.4, Greenhouse Gas Emissions**. These impacts would also affect the surrounding environment.

The use of materials considered hazardous waste would be minimal; mostly used for cleaning, landscaping, and operational maintenance. Compliance with federal, state, and local regulations would ensure that the usage and storage of any hazardous materials and waste would be completed in the safest and most efficient manner. Similarly, the Project would comply with any federal, state, and local air quality and water quality regulations to further ensure the least amount of environmental impact. The mixed-use nature of the Project is unlikely to lead to impacts that would commit future generations and developments to similar uses. Therefore, the Project would not influence future development in that land area as the existing land use designations would be unchanged.

The project would NOT involve uses in which irreversible damage could result from any potential environmental accidents associated with the project.

The Project is intended to develop residential, commercial, hospitality, and office facilities and is not anticipated to release hazardous material into the environment. Construction and operation of the Project would utilize chemical substances common with typical construction, landscaping, and cleaning activities and do not generally pose a significant hazard to the public or environment. However, in the event that hazardous materials are either used or stored on the Project site, National Pollutant Discharge Elimination System (NPDES) and Occupational Safety and Health Administration (OHS) requirements would both

reduce the significance of any impacts and ensure the Project's compliance with any Federal, State, and local policy regarding hazardous materials and accidents.

The proposed consumption of resources is justified (e.g., the project does NOT involve the wasteful use of energy).

The Project would comply with any applicable federal, state, and local regulations and laws regarding the use of resources during both construction and operations. As established in **Section 4.8, Utilities and Service Systems**, development of the Project would not significantly impact water, electricity, solid waste, and telecommunications resources. It was found that the Easter Municipal Water District (EMWD), the water supplier for the City and Project site, is able to meet the Project's expanded demand. Further, development of the Project would include the use of energy-efficient design and materials in accordance with the most recent Federal, State, and local regulations. Therefore, resources used for the Project, including energy, would be done in an efficient, justifiable manner.

5.3 Growth Inducing Impacts

State CEQA Guidelines §15126.2(e) requires that EIRs include a discussion of ways in which a project could induce growth. The State CEQA Guidelines identify a project as "growth-inducing" if it fosters economic or population growth or if it encourages the construction of additional housing either directly or indirectly in the surrounding environment. New employees from commercial or industrial development and new population from residential development represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area. The proposed Project would therefore have a growth inducing impact if it would:

- Directly or indirectly foster economic or population growth, or the construction of additional housing;
- Remove obstacles to population growth;
- Require the construction of new or expanded facilities that could cause significant environmental effects; or
- Encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

A project's potential to induce growth does not automatically result in growth. Growth can only happen through capital investment in new economic opportunities by the private or public sectors. Under CEQA, the potential for growth inducement is not considered necessarily detrimental nor necessarily beneficial, and neither is it automatically considered to be of little significance to the environment. This issue is presented to provide additional information on ways in which the Project could contribute to significant changes in the environment, beyond the direct consequences of implementing the Project examined in the preceding sections of this Draft SEIR.

Direct Growth-Inducing Impacts in the Surrounding Environment

Growth inducement can be defined as the relationship between a project and growth within the surrounding area. This relationship is often difficult to establish with any degree of precision and cannot be measured on a numerical scale because there are many social, economic, and political factors

associated with the rate and location of development. Accordingly, the CEQA Guidelines instruct that an EIR should focus on the way’s growth might be induced. This relationship is sometimes looked at as either one of facilitating planned growth or inducing unplanned growth. Both types of growth, however, should be evaluated. Potential growth-inducing effects are examined through analysis of the following questions:

1. Would the project directly or indirectly foster economic or population growth, or the construction of additional housing? YES.

The Project, when implemented, would directly induce population growth in the City through the development of 1,627 new dwelling units and commercial uses. Utilizing an average of 3.86 persons per household, the Project would result in a population increase of approximately 6,329 persons in the City.¹ Compared to the previously approved SP-200, the Project is less intensive and less of a drain on resources through reducing the number of proposed dwellings by half, from 3,252 to 1,627. The Project’s residential component is inherently growth-inducing and, generally, new businesses tend to also directly translate into population growth. Therefore, as discussed further below, although the Project would directly and indirectly induce economic and population growth, this growth is consistent with local and regional planning documents and is therefore not considered a significant impact in itself. The environmental impacts of construction and operation of the Project are addressed throughout the Draft SEIR. The discussion below elaborates on this conclusion.

Southern California Association of Government’s (SCAG) regional forecast population, housing, and employment projections towards year 2045 for the City and the County are shown in **Table 5-1, SCAG Projections – City of Moreno Valley and County of Riverside**. According to SCAG’s Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS]), significant growth is anticipated to occur within the City as well as the County in the next two decades. Population in the City is forecasted to increase to 266,800 persons by 2045, an approximately 10.3 percent difference from 2016. Households within the City are forecasted to increase to 76,200 households by 2045, an approximately 44.6 percent increase from 2016. SCAG also forecasts that the number of jobs in the City will increase to 64,900 by 2045, an approximately 82.8 percentage difference.

Table 5-1: SCAG Projections – City of Moreno Valley and County of Riverside

	2016	2045	Projected Change 2016-2045	Percent Difference 2016-2045
City of Moreno Valley				
Population	205,700	266,800	61,100	10.3%
Households	52,700	76,200	23,500	44.6%
Employment	35,500	64,900	33,600	82.8%
County of Riverside				
Population	2,364,000	3,252,000	888,000	37.6%
Households	716,000	1,086,000	370,000	51.6%
Employment	743,000	1,103,000	360,000	48.5%
Source: SCAG 2020. RTP/SCS 2020-2045 – Connect SoCal, <i>Demographics and Growth Forecast</i> . Retrieved from: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579 (accessed January 2022).				

¹ Department of Finance (2020). E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020 with 2010 Census Benchmark. Retrieved from <https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/>. Accessed January 2022.

According to SCAG’s Connect SoCal (2020-2045 RTP/SCS), the City’s job-housing ratio of 0.67 is expected to increase by 0.18 from 2016 to 2045. This increase would indicate that the City is housing-rich and in need of more employment opportunities to seek a more balanced jobs-housing ratio. The Project would provide needed employment opportunities in support of creating a better jobs-housing balance within the City and region.

The construction phase of the Project would generate employment opportunities, including construction management, engineering, and labor. Construction related jobs are not considered significantly growth inducing because they are temporary in nature and are anticipated to be filled by persons within the City and the surrounding communities. **Table 5-2, City of Moreno Valley and County of Riverside Job Housing Balance** shows the City’s and County’s job housing balance in 2016 and 2045 using SCAG’s demographics data.

Table 5-2: Job Housing Balance

Jurisdiction	Year	Employment	Households	Jobs-Housing Ratio
City of Moreno Valley	2016	35,500	52,700	0.67
	2045	64,900	76,200	0.85
County of Riverside	2016	743,000	716,000	1.03
	2045	1,103,000	1,086,000	1.01

Source: SCAG (2020). *Connect SoCal, Demographics and Growth Forecast Technical Report*. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579. Accessed January 2022.

As shown in **Table 5-2**, the City’s job-housing ratio of 0.67 is expected to increase by 0.18 from 2016 to 2045. This increase would indicate that the City is housing-rich and in need of more employment opportunities to seek a more balanced jobs-housing ratio. The Project would provide needed employment opportunities in support of creating a better jobs-housing balance within the City and region.

Analysis

As discussed in **Section 3.0, Project Description**, the original Towngate Specific Plan No. SP-200 was approved by the City of Moreno Valley in 1987 which would have allowed for a maximum of 3,252 residences on approximately 92.9 acres, or a density of 35 dwelling units per acre. Compared to the currently approved SP-200, the Project proposes approximately half of the residential dwelling units at a maximum of 1,627 units, or a density of 23 dwelling units per acre. Ultimately, the overall density of the proposed Project would be less than is envisioned in both the 2006 General Plan and the current MoVal 2040 GP.

Based on the Project’s 1,627 dwelling units and the Department of Finance (DOF) 3.86 person per household ratio, the Project would add approximately 6,329 persons to the City. The anticipated population growth is equivalent to two percent of SCAG’s 266,800 estimated City population by 2045.

Not only does the introduction of new housing contribute to population growth, but generally new businesses tend to also translate into population growth. Because the Project would add population and new businesses, it is anticipated that new Project residents would fill some of the job needs. Due to the Project’s proximity to Interstate 215 (I-215), California State Route 60 (SR-60), and other cities, some jobs could be filled by neighboring residents. New commercial uses would provide a variety of job opportunities, which may induce some workers to relocate to the City and seek housing.

While the Project would, directly and indirectly, lead to increased population, housing, and employment, this growth is planned growth. Additionally, due to the reduced number of dwelling units, the Project is less impactful than the currently approved Specific Plan No. SP-200 and regional growth forecasts. Therefore, this is not considered a significant growth-inducing impact.

2. Would the project remove obstacles to population growth? YES.

The Project has been designed to primarily focus future development and redevelopment within Concept Areas that consist of vacant or underutilized land along major transit corridors. To accommodate this new growth pattern, it is anticipated that sewer line improvements would be required in these areas, including a new sewer line to collect wastewater and a new trunk sewer to convey the flows to the wastewater treatment plant.

The Project does include the extension and construction of infrastructure to support the Project. This Draft SEIR analyzes potential environmental impacts related to the proposed infrastructure including off-site sewer and drainage facilities, as well as off-site road improvements. The off-site sewer and water facilities are intended to serve the Project and are not anticipated to represent removal of an obstacle to other future development and, as such, is not considered a significant growth-inducing impact. Improvements to the Project's adjacent streets would also include monitoring the need for traffic signals or roundabouts along Town Circle as well as contributing to intelligent transport system improvements (such as fiber optic interconnect, closed-circuit television (CCTV), or traffic signal controller improvements) along Frederick Street. The environmental impacts associated with the facility improvements associated with the Project have been analyzed in **Section 4.1, Aesthetics** through **Section 4.8, Utilities and Service Systems** of this Draft SEIR. In consideration of potentially significant impacts which were not minimized by the Project design features, or previously adopted SP-200 EIR mitigation measures, additional EIR mitigation measures have been identified which, when implemented, would reduce potential impacts stemming from the Project's development to less than significant levels (with the exception of impacts associated with air quality and greenhouse gas emissions, which would remain significant and unavoidable). Further, the proposed Project would not require the expansion of utility facilities such as water treatment plants or landfills. Adequate capacity was concluded for each of those facilities.

3. Would the project require the construction of new or expanded facilities that could cause significant environmental effects? NO.

As discussed in Draft SEIR **Section 4.8, Utilities and Service Systems**, the Project site is currently disturbed and developed with commercial uses and existing utility infrastructure. Implementation of the Project would require expanded public services and utilities, the majority of which would be located on-site. Required public services and anticipated providers for Moreno Valley are listed in **Table 5-3, Public Services Providers**. **Section 4.8, Utilities and Service Systems**, describes proposed off-site sewer improvements, which would occur entirely within existing streets and developed areas. **Section 4.7, Transportation**, describes various off-site road improvements for which the Project would either construct or fund a fair share of, including contributing to improvements in the Canyon Spring Traffic Impact Analysis. These off-site road improvements, that include restriping and intelligent transport system improvements, would not result in significant environmental impacts. Other than these impacts

from off-site improvements, the Project is not anticipated to require new or expanded off-site facilities that would result in significant environmental impacts.

Table 5-3: Public Services Providers

Service	Provider
Water	Eastern Municipal water District
Wastewater	Eastern Municipal Water District
Storm Drainage	City of Moreno Valley Public Works Department
Electric Service	Southern California Edison
Gas Service	Southern California Gas Company
Fire Protection	Moreno Valley Fire Department/Riverside County Fire Department
Police Protection	Riverside County Sheriff Department
Schools	Moreno Valley Unified School District
Solid Waste Disposal	Waste Management of Inland Valley

4. Would the project encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively? NO.

Refer to **Section 4.1, Aesthetics** through **Section 4.8, Utilities and Service Systems** of this Draft SEIR, which discusses reasonably foreseeable potential impacts of the Project during construction and operation.

5.4 Mandatory Findings of Significance

CEQA requires preparation of an EIR when certain specified impacts may result from construction or implementation of a project. An SEIR has been prepared for the Project, which fully addresses all of the Mandatory Findings of Significance, as described below.

Degradation of the Environment

Section 15065(a)(1)-(4) of the CEQA Guidelines requires a finding of significance if a project “has the potential to substantially degrade the quality of the environment.” In practice, this is the same standard as a significant effect on the environment, which is defined in §15382 of the CEQA Guidelines as “a substantial or potentially adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.”

This Draft SEIR in its entirety addresses and discloses all known potential environmental effects associated with the development of the Project both on- and off-site including direct, indirect, and cumulative impacts in the following resource areas:

- Aesthetics
- Air Quality
- Cultural
- Greenhouse Gas
- Land Use and Planning
- Noise
- Transportation
- Utilities and Service Systems

A summary of all potential environmental impacts, level of significance and mitigation measures is provided in **Section 1.0, Executive Summary**.

Impacts of Habitats or Species

Section 15065(a)(1) of the CEQA Guidelines states that “A lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur: (1) substantially degrade the quality of the environment; (2) substantially reduce the habitat of a fish or wildlife species; (3) cause a fish or wildlife population to drop below self-sustaining levels; (4) threaten to eliminate a plant or animal community; (4) substantially reduce the number or restrict the range of an endangered, rare or threatened species; (5) or eliminate important examples of the major periods of California history or prehistory.” The Project would have less than significant impacts to biological resources, due to the lack of biological resources within the Project site. **Section 7.0, Effects Found not to be Significant**, of this Draft SEIR addresses impacts that might relate to the reduction of fish or wildlife habitat or populations and the reduction or restriction of the range of special status species as a result of Project implementation.

Short-Term vs. Long-Term Goals

Section 15065(a)(2) of the CEQA Guidelines states that “A lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur: the project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.” The Project involves the redevelopment of the approximately 58.6-acre Moreno Valley Mall as a mixed-use town center that includes housing. **Section 5.1, Significant Irreversible Environmental Changes**, of this document addresses the short-term and irretrievable commitment of natural resources to ensure that the consumption is justified on a long-term basis. In addition, **Section 1.0, Executive Summary**, identifies all significant and unavoidable impacts that could occur that would result in a long-term impact on the environment. Lastly, **Section 5.3, Growth-Inducing Impacts** identifies any long-term environmental impacts associated with economic and population growth that are associated with the Project.

Cumulatively Considerable Impacts

Section 15065(a)(3) of the CEQA Guidelines states that “A lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur: the project has potential environmental effects that are individually limited but cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” This Draft SEIR provides a cumulative impact analysis for each of the environmental topics listed above and are provided in **Sections 4.1 through 4.8** of this Draft SEIR.

Substantial Adverse Effects on Human Beings

As required by §15065(a)(4) of the CEQA Guidelines, “A lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur: the environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.” Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This standard relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could directly or indirectly affect human beings would be possible in all of the CEQA issue areas previously listed, those that could directly affect human beings include aesthetics, air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, land use and planning, public services and utilities, transportation/traffic, water resources, and wildfire hazards, all of which are addressed in the appropriate sections of this Draft SEIR; refer to Table of Contents for specific section numbers. The following topic areas were determined to be significant and unavoidable with respect to adverse effects on human beings:

Project-Related Operational Emissions

Unmitigated operational emissions would exceed the SCAQMD criteria pollutant thresholds for ROG. The majority of ROG emissions are from area and mobile sources. Mitigation measures would be required to reduce emissions to the maximum extent feasible; however, emissions of motor vehicles are controlled by State and Federal Standards and the Project has no control over these standards.

AQMP Consistency

Although the Project’s long-term influence will be consistent with the 2016 AQMP and SCAG’s goals and policies, the Projects exceedance of operational air pollutant thresholds will potentially result in a long-term impact on the region’s ability to meet state and federal air quality standards. Despite implementation of mitigation measures, the Project would result in air pollutant emissions that exceed SCAQMD operational emission thresholds, resulting in a significant and unavoidable impact. Although mitigation would reduce emissions by the greatest feasible amount, Project emissions levels would remain significant and would contribute to the nonattainment designations in the South Coast Air Basin. Therefore, the Project would be inconsistent with the AQMP, resulting in a significant and unavoidable impact despite the implementation of mitigation.

Cumulative Emissions

Operational activities will create a significant and unavoidable impact due to exceedances of SCAQMD thresholds for ROG. Implementation of **MM AQ-2** through **MM AQ-6** would reduce impacts; however, a significant and unavoidable impact will remain.

Project-Related GHG Emissions

Despite implementation of **MM GHG-1** through **MM GHG-3**, the Project’s GHG emissions would remain above SCAQMD thresholds, resulting in a significant and unavoidable impact.

GHG Plan Consistency

Despite implementation of **MM AQ-3** and **MM AQ-5** and **MM GHG-1** through **MM GHG-3**, the Project's GHG emissions would potentially impede California's statewide GHG reduction goals for 2030 and 2050, resulting in a significant and unavoidable impact.

Cumulative GHG Emissions

Despite implementation of **MM AQ-3** through **MM AQ-5** and **MM GHG-1** through **MM GHG-3**, Project emissions would potentially conflict with the emission reduction targets set by statewide plans for reducing GHG emissions. Therefore, the Project's contribution of GHG emissions would be cumulatively considerable.

5.5 References

Department of Finance (2020). *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020 with 2010 Census Benchmark*. Available at <https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/>. Accessed January 2022.

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6.0 ALTERNATIVES

6.1 Introduction

California Environmental Quality Act (CEQA) requires that Environmental Impact Reports (EIR) “describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project and evaluate the comparative merits of the alternatives.” (State CEQA Guidelines §15126.6). The State CEQA Guidelines require that the EIR include sufficient information about each Alternative to allow meaningful evaluation, analysis, and comparison with the Project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the Alternative must be discussed, but these effects may be discussed in less detail than the significant effects of the project as proposed (California Code of Regulations [CCR] §15126.6[d]). The EIR is not required to consider every conceivable Alternative to a project but is guided by a rule of reason. An EIR is not required to consider alternatives which are infeasible. Section 15126.6[d]) states that the EIR must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. Key provisions of the State CEQA Guidelines on alternatives (§15126.6(a) through (f)) are summarized below to explain the foundation and legal requirements for the Alternative’s analysis in the Draft EIR.

- “The discussion of alternatives shall focus on alternatives to the Project or its location which are capable of avoiding or substantially lessening any significant effects of the Project, even if these alternatives would impede to some degree the attainment of the Project objectives or would be more costly” (§15126.6(b)).
- “The specific alternative of ‘no project’ shall also be evaluated along with its impact” (§15126.6(e)(1)).
- “The no Project analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation was published, at the time the environmental analysis is commenced, as well as what would reasonably be expected to occur in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior Alternative is the ‘no Project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives” (§15126.6(e)(2)).
- “The range of alternatives required in an EIR is governed by a ‘rule of reason’ that require an EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the Project” (§15126.6(f)).
- “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can

reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)” (§15126.6(f)(1)).

- For alternative locations, “only locations that would avoid or substantially lessen any of the significant effects of the Project need be considered for inclusion in the EIR” (§15126.6(f)(2)(A)).
“An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative” (§15126.6(f)(3)).

Project Objectives

Section 15124(b) of the CEQA Guidelines indicates that an EIR should include “a statement of objectives sought by the proposed Project.” The goals for the Moreno Valley Mall Redevelopment Project and accompanying Specific Plan Amendment, also described in **Section 3.0, Project Description** of this Draft SEIR, is to provide:

- **Objective 1:** A plan that allows for the revitalization of the Planning Area, adapting to changing market conditions and providing economic benefits to the City;
- **Objective 2:** A long-term development plan that encourages and facilitates new uses of high quality and design;
- **Objective 3:** A mixed-use village that serves as a regional anchor to the area and draws upon the vibrancy of established neighborhoods, businesses, and community amenities nearby;
- **Objective 4:** Integration of the Project into an established urban fabric with established neighborhoods in the immediate vicinity;
- **Objective 5:** A mixture of uses that reduces vehicle miles traveled through internal capture of trips and carries out the intent of the City’s Climate Action Plan;
- **Objective 6:** A plan that facilitates private investment in the development;
- **Objective 7:** Flexibility in development while achieving community goals;
- **Objective 8:** Creation of new and future employment opportunities;
- **Objective 9:** A mixture of high-quality housing and ground level commercial uses;
- **Objective 10:** A circulation system responsive to the needs of vehicular, bicycle, and pedestrian travel;
- **Objective 11:** Landscaping appropriate to the level of development and sensitive to surrounding areas;
- **Objective 12:** Architecture which responds to and enhances the property with timeless architectural style;
- **Objective 13:** A visually harmonious development as viewed both internally and externally;
- **Objective 14:** A project that has an architectural language promoting the varied uses while working with the contextual and regional vernacular of southern California; and
- **Objective 15:** Provision of adequate parking including a shared parking program.

6.2 Significant Unavoidable Impacts

This Draft SEIR addresses the environmental impacts of implementation of the Project in **Sections 4.1** through **4.8**. The analyses contained in these sections identified the following significant and unavoidable environmental impacts resulting from the Project.

Air Quality

The Project would result in the following significant and unavoidable air quality impacts, despite the implementation of all feasible mitigation measures: (1) conflict with or obstruct implementation of the applicable air quality plan, due to operational ROG and NOx emissions; (2) result in a cumulatively considerable net increase in a criteria pollutant for which the region is non-attainment, due to operational ROG and NOx emissions; and (3) result in cumulative air quality impacts, as a result of operational ROG and NOx emissions.

Greenhouse Gas Emissions

The Project would result in the following significant and unavoidable greenhouse gas (GHG) emissions impacts, despite the implementation of all feasible mitigation measures: (1) generation of 10,615 MTCO_{2e} per year (mitigated) of GHG emissions that could have a significant impact on the environment; (2) conflict with an applicable plan, policy, or regulation of an agency, adopted for the purpose of reducing GHG emissions, as a result of total emissions; and (3) the Project would result in a potentially significant cumulative GHG impact.

6.3 Criteria for Selecting Alternatives

Per §15126.6(b) of the State CEQA Guidelines, the discussion of alternatives shall focus on alternatives to a project, or its location, that are capable of avoiding or substantially lessening significant impacts of a project, even if the alternatives would impede to some degree the attainment of the project objectives or would be more costly. This alternatives analysis, therefore, focuses on project alternatives that could avoid or substantially lessen environmental impacts of the Project related to the environmental categories listed in Appendix G of the State CEQA Guidelines.

Per State CEQA Guidelines §15126.6(d), additional significant effects of the alternatives are discussed in less detail than the significant effects of the project as proposed. For each Alternative, the analysis below describes each Alternative, analyzes the impacts of the Alternative as compared to the Project, identifies significant impacts of the Project that would be avoided or lessened by the Alternative, assesses the Alternative's ability to meet most of the Project objectives, and evaluates the comparative merits of the Alternative and the Project. The following sections provide a comparison of the environmental impacts associated with each of the Project alternatives, as well as an evaluation of each Project alternative to meet the Project objectives.

6.4 Alternatives Removed from Further Consideration

State CEQA Guidelines §15126.6(c) states that an EIR should identify any alternatives that were considered by the lead agency but rejected because the Alternative would be infeasible, fail to meet most of the basic project objectives, or unable to avoid significant environmental impacts. Furthermore, an EIR

may consider an alternative location for the proposed Project but is only required to do so if significant project effects would be avoided or substantially lessened by moving the Project to another site and if the Project proponent can reasonably acquire, control, or otherwise have access to the alternative site.

In developing the Project and alternatives, consideration was given to the density of development that could meet Project objectives and reduce significant impacts. The anticipated significant impacts would result from the intensity of the development proposed. In developing a reasonable range of alternatives, an alternative site alternative was considered but removed from consideration for a variety of reasons. This Alternative and the reasons are discussed briefly below:

Alternative Site Alternative

The analysis of alternatives to the proposed Project must also address “whether any of the significant effects of the Project would be avoided or substantially lessened by putting the Project in another location” (CEQA Guidelines §15126.6(f)(2)(A)). Only those locations that would avoid or substantially lessen any of the significant effects of the Project need be considered. If no feasible alternative locations exist, the agency must disclose the reasons for this conclusion (CEQA §15126.6(f)(2)(B)).

In this case, an alternative site analysis is not considered appropriate as the “Project” by definition is the redevelopment of the existing Moreno Valley Mall. Although a new mall or similar uses proposed with the Project (hotel, office, residential) could be located at one or more alternative sites, no such site has been identified, and this would not achieve the primary objective of the Project of redeveloping the existing mall.

6.5 Alternatives to the Project

Four alternatives to the Project are analyzed in additional detail in this Draft SEIR. These alternatives include the No Redevelopment Alternative, No Project/Existing Specific Plan Alternative, Reduced Density Alternative, and No Residential Alternative. Per the State CEQA Guidelines §15126.6(d), additional significant effects of the alternatives may be discussed in less detail than the significant effects of the Project as proposed. In addition, the EIR is to include sufficient information about each Alternative to allow meaningful evaluation, analysis, and comparison with the Project. For each Alternative, the analysis below describes each Alternative, analyzes the impacts of the Alternative as compared to the Project, identifies significant impacts of the Project that would be avoided or lessened by the Alternative, assesses the Alternative’s ability to meet most of the Project objectives, and evaluates the comparative merits of the Alternative and the Project. The following sections provide a comparison of the environmental impacts associated with each of the Project alternatives, as well as an evaluation of each Project alternative to meet the Project objectives.

- “No Redevelopment”
- “No Project/Existing Specific Plan”
- “Reduced Density”
- “No Residential”

6.6 Comparison of Alternatives

Alternative 1: No Redevelopment

The No Redevelopment Alternative (the “No Project/No Development” Alternative) allows decision-makers to compare the environmental impacts of approving the Project to the environmental impacts that would occur if the property were left in its existing conditions for the foreseeable future. The No Redevelopment Alternative assumes that the existing land uses and condition of the Project Site at the time environmental analysis is commenced would continue to exist without the Project. The setting of the Project site at the time environmental analysis was commenced is described as part of the existing conditions within **Section 3.0, Project Description** and throughout **Section 4.0** of the Draft SEIR. The discussion within the respective sections provides a description of the environmental conditions in regard to the individual environmental issues.

Under existing conditions, the Project site is entirely disturbed by historic land uses/activities and is mostly developed, with the exception of one 1.4-acre parcel located in the northwestern portion of the Project site. The Project site is currently occupied by the existing Moreno Valley Mall. Refer to the description of the Project site’s existing physical conditions in **Section 3.0, Project Description** of this Draft SEIR.

The No Redevelopment Alternative assumes the Project would not be implemented and proposed land use and other improvements would not be constructed as related to proposed Project. Note that this Alternative would not preclude future development concepts being pursued at the Project site at a later date.

Comparison of Project Impacts

An evaluation of the potential environmental impacts of the No Redevelopment Alternative, as compared to those of the Project, is provided below.

Aesthetics

Under the No Redevelopment Alternative, the visual character and quality of the Project site would be maintained in its existing condition. No new structures, landscaping, or lighting would be introduced on the Project site. The No Redevelopment Alternative would not have the potential to conflict with the character or quality of existing and planned development surrounding the Project site and would not create a new source of substantial light or glare that would impact nighttime views in the area. The aesthetic impact of leaving the Project site in its existing condition would be less than significant as compared to the Project’s aesthetics impact. Therefore, under this Alternative, impacts regarding aesthetics, light, and glare would be environmentally superior when compared to the Project. Note that aesthetics is a subjective issue, and some may view the Project as aesthetically superior to the existing site conditions given the substantial investment proposed in overall mall enhancements.

Air Quality

The No Redevelopment Alternative would leave the Project site in its existing condition and would retain these uses (and avoid any increase in air emissions associated with the Project’s construction-related emissions and additional vehicle traffic and operational emissions). The No Redevelopment Alternative

would avoid the Project's significant and unavoidable impact related to air quality. Therefore, under this Alternative, impacts regarding air quality would be environmentally superior when compared to the Project.

Cultural Resources

The No Redevelopment Alternative would leave the Project site in its existing condition; no grading would occur under this Alternative and there would be no potential impacts to subsurface archaeological resources. Under the No Redevelopment Alternative, impacts regarding cultural resources would be avoided when compared to the proposed Project due to the lack of ground-disturbing activities. Therefore, under this Alternative, impacts regarding cultural resources would be environmentally superior when compared to the Project.

Greenhouse Gas Emissions

Under the No Development Alternative, no additional construction or development would occur on the Project site. The Moreno Valley Mall and other commercial activities on-site would continue. Therefore, with the exception of ongoing GHG emissions primarily associated with transportation to and from the site, there would be no new sources of near-term or long-term GHG emissions under the No Redevelopment Alternative. Selection of this Alternative would avoid all of the Project's unavoidable significant impacts related to GHG emissions. Therefore, under this Alternative, impacts regarding greenhouse gas emissions would be environmentally superior when compared to the Project.

Land Use and Planning

The No Redevelopment Alternative would avoid any new or redeveloped land uses at the Project site. However, leaving the site in its current condition would conflict with the intent of the current SP-200 which anticipated further development at the site, and would also conflict with the City's vision for redeveloping the Moreno Valley Mall into a vibrant mixed-use focal point for the City (identified as an "opportunity site for development" and one of the City's key "vibrant mixed use areas that act as major focal points in the community, offering an array of choices for living, working, shopping and enjoying free time").¹ Therefore, under this Alternative, impacts regarding land use and planning would be greater than the Project.

Noise

Under the No Redevelopment Alternative, no new sources of noise would be introduced on the Project site, with the exception of noise resulting from the existing commercial uses, associated parking, and bus transit. The No Development Alternative would not produce new on-site noise. Additionally, because the Project site would not be developed and no new traffic trips would be generated, the No Redevelopment Alternative would not contribute to an incremental increase in area-wide traffic noise levels. Therefore, under this Alternative, impacts regarding noise would be environmentally superior when compared to the Project.

¹ City of Moreno Valley (2021). *MoVal 2040 General Plan*, pages 2-4 and 2-8. Available at <http://www.moval.org/cdd/documents/general-plan-adopted.html>.

Transportation

Under this Alternative, since no new construction would occur, no temporary construction-related increase in traffic would occur. In addition, this Alternative would avoid the additional Project trips associated with the proposed mall redevelopment. Although the No Redevelopment would provide favorable transportation benefits in a relocated transit center and in providing a vibrant mixed-use development, impacts regarding transportation would be environmentally superior when compared to the Project due to avoiding construction-related traffic and additional Project-related trips on the adjacent circulation system.

Utilities and Service Systems

No new domestic water, sewer, or stormwater drainage facilities would be needed for the No Redevelopment Alternative, and there would be no additional demand for domestic water or wastewater treatment services. Also, this Alternative would not generate additional solid waste collection and disposal services. Neither the Project nor the No Redevelopment Alternative would result in significant or cumulatively considerable impacts to utilities and service systems. Nonetheless, selection of this Alternative would avoid all of the Project's additional demand placed on utilities and service systems. Therefore, under this Alternative, impacts regarding utilities and service systems would be environmentally superior when compared to the Project.

Conclusion

Overall, the No Redevelopment Alternative would have reduced environmental impacts compared to the proposed Project and would avoid the two identified unavoidable significant impacts of the Project related to air quality and greenhouse gas emissions. However, this alternative would not accomplish the primary Project objective of redeveloping the Moreno Valley Mall and would not achieve MoVal 2040 GP goals for the site to create a "vibrant" "mixed-use" environment for the City. In addition, this Alternative would not preclude future development proposals for the site.

Alternative 2: No Project/Existing Specific Plan Alternative

Consistent with State CEQA Guidelines §15126.6, the No Project/Existing Specific Plan Alternative assumes development of the Project site pursuant to existing General Plan and zoning designations, which would be pursuant to the current SP-200.

The No Project/Existing Specific Plan Alternative would develop the Project site consistent with the prior approved Towngate 200 Specific Plan (SP-200) and consistent with the current MoVal 2040 GP. The No Project/Existing Specific Plan Alternative would be consistent with the Project site's General Plan Zoning designation of Mixed-Use Community Overlay District and Land Use designation of Center Mixed Use (CEMU), which allows for a maximum density of 35 dwelling units per acre (du/ac), or a maximum of 3,252 dwelling units, and maximum permitted floor area ratio (FAR) of 1.25. The current SP-200 had also assumed development of an additional mall anchor at the site, which to date has not occurred. Furthermore, the Project does not propose additional uses not anticipated in the SP-200.

The General Plan allows the Floor Area Ratio (FAR) to be calculated on a site. The General Plan's Center Mixed Use designation would allow up to 3.34-million square feet of mixed uses, inclusive of 2,150

residential uses, based on the maximum FAR of 1.25 and maximum of 30 units per acre over 61.4-acres of PA2. As proposed, the PA2 redevelopment falls within the maximum allowed in the General Plan. No General Plan Amendment is required or proposed. Therefore, for the purposes of this alternatives analysis, the No Project/Existing Specific Plan alternative is assumed to result in similar or more intense land uses than proposed for the Project.

Comparison of Project Impacts

The No Project/Existing Specific Plan Alternative discussion of impacts and incorporated mitigation is derived from the Towngate Specific Plan (SP-200) Environmental Impact Report SCH # 1985112507 (SP-200 Final EIR, certified October 27, 1987). An evaluation of the potential environmental impacts of the No Project/Existing Specific Plan Alternative, as compared to those of the Project, is provided below.

Aesthetics

The SP-200 Draft EIR found that implementation of the Specific Plan would permanently alter the nature and appearance of the planning area, which at the time was occupied by a raceway in a blighted condition. Due to compliance with design guidelines and the development standards set by the SP-200, this alternative would have a less than significant impact on scenic vistas and scenic resources. Additionally, the Project would implement visual improvements and design elements that would elevate the visual quality of the area. Redevelopment under Alternative 2 would have a similar outcome relating to aesthetics by improving the visual quality of the Project and visual compatibility with its surroundings. Therefore, impacts to aesthetics under this Alternative would be equivalent to those under the proposed Project.

Air Quality

The SP-200 Draft EIR found that the urban development proposed by SP-200 would have a significant impact on air quality, primarily due to the dependence upon the automobile as the prime means of transportation. The proposed Project would result in significant and unavoidable impacts to air quality. Compared to the proposed Project, proceeding with redevelopment consistent with the existing SP-200 would result in similar or more intensive land use and, therefore, potentially more significant impacts to air quality. Therefore, under this Alternative, impacts regarding air quality would be similar or greater when compared to the Project, and the Project's unavoidable significant air quality impacts would not be avoided.

Cultural Resources

The SP-200 Draft EIR determined that implementation of SP-200 would have no significant impacts on historical and prehistoric resource. The SP-200 EIR further determined that no further investigation or management of resources is warranted, and no project design mitigations are required. Impacts under Alternative 2 would be equivalent when compared to the proposed Project.

Greenhouse Gas Emissions

The SP-200 Draft EIR was conducted prior to the passing of Senate Bill 97 in 2007 which required GHG emissions to be analyzed as a part of the CEQA process. As such, the SP-200 Draft EIR did not evaluate

GHG emissions impacts. The proposed Project would result in significant and unavoidable impacts regarding GHG emissions. Compared to the proposed Project, proceeding with redevelopment consistent with the existing SP-200 would result in similar or more intensive land use and, therefore, potentially more significant impacts to GHG emissions. Therefore, this Alternative would likely not avoid the Project's unavoidable significant impact related to GHG.

Land Use and Planning

The SP-200 Draft EIR found that implementation of the Specific Plan would permanently alter the nature of on-site land uses in replacing the previously existing raceway operation. SP-200 was designed to complement surrounding land uses and provide a cohesive mixed-use commercial center to the surrounding community.²

The Project would not physically divide and established community, nor would it conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (e.g., general plan, specific plan, zoning, etc.) adopted for the purpose of avoiding or mitigating an environmental effect. The Project would be fulfilling the MoVal 2040 GP's vision of fostering a mix of complementary land uses in vibrant, mixed-use districts. The Project would additionally be consistent with the SP-200 objective to establish a regional, mixed-use town center on the Project site.

The No Project/Existing Specific Plan Alternative would have similar effects as the proposed Project as it would be consistent with SP-200 and the MoVal 2040 General Plan. Therefore, under this Alternative, impacts regarding land use and planning would be environmentally equivalent when compared to the Project.

Noise

The proposed Project would result in a less than significant impact as it pertains to 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. The No Project/Existing Specific Plan Alternative would have similar construction-related impacts, and similar or greater operational noise impacts associated with offsite vehicle traffic and on-site stationary noise sources. Therefore, under this Alternative, impacts regarding noise would be equivalent or greater than the Project.

Transportation

The No Project/Existing Specific Plan Alternative would be anticipated to result in similar construction-related impacts and similar or greater operational traffic impacts due to the site's allowable uses being more intense than proposed under the proposed Project. As stated above, the ultimate use for the Moreno Valley Mall site could be as great as over three million square feet of mixed uses and 2,150 dwelling units, substantially greater than proposed under the Project. Therefore, under this Alternative, impacts regarding transportation would likely be greater when compared to the Project.

² City of Moreno Valley (1986). Moreno Valley Mixed Use Development, Specific Plan/EIR (SCH#1985112507), pages 6I-J. Accessed February 2, 2022.

Utilities and Service Systems

The proposed Project would result in less than significant impacts to utilities and service systems due to compliance with applicable regulations, the City’s standard development review process, including demonstrating adequate utilities, and the payment of all applicable development impact fees. Compared to the proposed Project, proceeding with redevelopment consistent with the existing SP-200 and MoVal 2040 GP could result in similar or more intensive land use and, therefore, more significant impacts to utilities and services systems. Therefore, under this Alternative, impacts regarding utilities and service systems would be similar or greater when compared to the Project.

Conclusion

Overall, the No Project/Existing Specific Plan Alternative would have similar or greater environmental impacts compared to the proposed Project, and would not avoid the two identified unavoidable significant impacts of the Project related to air quality and greenhouse gas emissions. This alternative could accomplish the primary Project objective of redeveloping the Moreno Valley Mall and could also achieve MoVal 2040 GP goals for the site to create a “vibrant” “mixed-use” environment for the City.

Alternative 3: Reduced Density

Alternative 3 would entail the redevelopment of the existing Moreno Valley Mall and the proposed office, residential, and hotel uses, but at a smaller development density than what was proposed for the Project. For the purposes of this analysis, a 25% reduction in density was assumed. **Table 6-1, Alternative 3 Design Comparison** summarizes the similarities and differences between the Project design features and Alternative 3’s design features.

Table 6-1: Alternative 3 Design Comparison

Feature	Project	Alternative 3
Net Site Area	58.6 ac	58.6 ac
Residential	Bldg. 1: 596 DU	Bldg. 1: 447 DU
	Bldg. 2: 216 DU	Bldg. 2: 162 DU
	Bldg. 3: 565 DU	Bldg. 3: 423 DU
	Bldg. 4: 250 DU	Bldg. 4: 187 DU
	Total: 1,627 DU	Total: 1,219 DU
Hotel	270 Keys	202 Keys
	182,000 sq. ft.	136,500 sq. ft.
Office	60,000 sq. ft.	45,000 sq. ft.
Floor Area Ratio	3.3 MSF	2.48 MSF
Notes: ac = acre sq. ft. = square feet du = dwelling units		

Comparison of Project Impacts

Alternative 3 would overall reduce the environmental impacts associated with the Project, commensurate with the scale of reduced Project land uses. An evaluation of the impacts associated with the development of Alternative 3 (Reduced Density) are described below.

Aesthetics

Under this Alternative, building density would be reduced by 25 percent. This lessened building density and assumed lessened building height and/or massing would reduce impacts to views of the Box Springs Mountains to the north, the Bernasconi Hills to the southeast, and very distant views of the San Bernardino Mountains to the north. Construction-related impacts would be similar to the Project, as would light and glare impacts, although at slightly reduced intensity. When compared to the proposed Project, aesthetic impacts associated with the Reduced Density Alternative would be reduced.

Air Quality

Because the Reduced Density Alternative would result in less building floor area than the Project, this Alternative is expected to require less energy to operate than the Project and, therefore, would result in a reduction of non-mobile source air quality emissions as compared to the Project. Additionally, it would likely reduce mobile source air quality emissions from passenger vehicles due to a reduction in residents and employees on site. Construction impacts would be similar as the Project, although at slightly reduced intensity. Therefore, under this Alternative, impacts regarding air quality would be environmentally superior when compared to the Project. However, it is unlikely that this Alternative would avoid the Project's unavoidable significant air quality impacts.

Cultural Resources

Under this Alternative, the density of proposed Project uses such as residential, office, hotel, and commercial, would be reduced by 25 percent. This Alternative, as well as the Project as proposed, would involve the redevelopment of the existing Moreno Valley Mall site, which is heavily disturbed and almost entirely developed with impervious surfaces and commercial buildings. The proposed Project would result in less than significant impacts to cultural resource due to the lack of known historical and archaeological resources on-site, the historical disturbed character of the site, and negative results from previous cultural resources assessments and environmental review. A reduced density alternative is assumed to nonetheless require similar site disturbance, therefore resulting in similar cultural resource impacts as the proposed Project.

Based on the above discussion, under the Reduced Density Alternative, impacts regarding cultural resources would be equivalent when compared to the proposed Project.

Greenhouse Gas Emissions

GHG emissions originating from the proposed Project would primarily result from Project-related transportation and energy use. Reducing density under this Alternative would reduce Project-related traffic and associated GHG emissions, as well as GHG emissions associated with energy demand. Construction-related emissions would be similar, although perhaps slightly reduced in consideration of overall reduction in building square footage. Therefore, reducing density under this Alternative may slightly reduce impacts from GHG emissions compared to the proposed Project. Therefore, under this Alternative, impacts regarding GHG emissions would be environmentally superior when compared to the Project. However, this Alternative is not anticipated to avoid the Project's unavoidable significant impacts related to GHG emissions.

Land Use and Planning

A Reduced Density Alternative would have similar impacts as the proposed Project, and could also achieve basic Project objectives and consistency with the MoVal 2040 GP. However, by definition, the variety and quantity of mixed uses would be reduced under this Alternative. The reduced operational revenue (from reductions in residential density, hotel rooms and office space) would likely make Project financing of mall enhancements more difficult. Reductions in density would also produce reduced tax revenues for the City, which would then reduce infrastructure and amenities that the City provides through these revenue sources. Finally, a Reduced Density Alternative would likely not avoid the Project's identified significant unavoidable impacts related to air quality and GHG emissions.

Noise

It is anticipated that the total construction-related noise impacts would be slightly decreased under this alternative as compared to the Project in consideration of reduced building density. Under long-term operational conditions, noise impacts would be reduced relative to the Project, due to the relatively similar operational practices and decrease in the amount of traffic traveling to and from the Project site. Therefore, under this Alternative, impacts regarding noise would be environmentally superior when compared to the Project.

Transportation

Reducing density under this Alternative would reduce Project-related traffic during construction and operation. Construction-related traffic would be similar, although perhaps slightly reduced in consideration of overall reduction in building square footage. Operational traffic would be slightly reduced commensurate with reductions in density. Project-related VMT impacts are anticipated to be similar as the Project, resulting in less than significant VMT impacts (as with the Project). Therefore, reducing density under this Alternative may slightly reduce transportation impacts compared to the proposed Project. Therefore, under this Alternative, impacts regarding transportation would be environmentally superior when compared to the Project.

Based on the above discussion, the Reduced Density Alternative would have slightly reduced impacts to transportation compared to the proposed Project.

Utilities and Service Systems

Under the Reduced Density Alternative, there would be a reduced demand on utilities and service systems due to a reduction in building intensity. However, the proposed utility improvements and expansions would be similar to the proposed Project, in that improvements to existing water, wastewater and storm drain systems would likely still be required. Therefore, under this Alternative, impacts regarding utilities and service systems would be slightly reduced when compared to the Project.

Conclusion

Overall, the Reduced Density Alternative would have reduced environmental impacts compared to the proposed Project, although it would not avoid the two identified unavoidable significant impacts of the Project related to air quality and greenhouse gas emissions. This alternative could accomplish the primary

Project objective of redeveloping the Moreno Valley Mall and could achieve MoVal 2040 GP goals for the site to create a “vibrant” “mixed-use” environment for the City, albeit with a reduction in the variety and quantity of mixed-use development provided. This Alternative may represent an under-utilization of one of the City’s primary mixed-use focal points.

Alternative 4: No Residential

Alternative 4 would entail the redevelopment of the existing Moreno Valley Mall and the proposed office, commercial, and hotel uses, but without the proposed residential component. Currently, the Project proposes the development of 1,627 residential units amongst four residential buildings primarily located in the eastern portion of the Project site, with the remaining 250 units located in the northern portion of the Project site. Residential buildings would range from four to seven stories high. Three of the Project’s residential buildings would contain 40,000 square feet of plaza-level retail, that would remain with this Alternative.

Comparison of Project Impacts

Alternative 4 would overall reduce the environmental impacts associated with the Project, commensurate with the scale of reduced Project land uses. An evaluation of the impacts associated with the development of Alternative 4 (No Residential) are described below.

Aesthetics

Under this Alternative, the overall site development footprint would be reduced by eliminating the residential buildings. This lessened building density and assumed lessened building height and/or massing would reduce impacts to views of the Box Springs Mountains to the north, the Bernasconi Hills to the southeast, and very distant views of the San Bernardino Mountains to the north. Construction-related impacts would be similar to the Project, as would light and glare impacts, although at slightly reduced intensity. When compared to the proposed Project, aesthetic impacts associated with the No Residential Alternative would be reduced.

Air Quality

Because the No Residential Alternative would eliminate the residential units and associated traffic and energy demands, this Alternative is expected to require less energy to operate than the Project and, therefore, would result in a reduction of non-mobile source air quality emissions as compared to the Project. Additionally, it would likely reduce mobile source air quality emissions from passenger vehicles due to a reduction in residents on site. Construction impacts would be similar as the Project, although at slightly reduced intensity. Therefore, under this Alternative, impacts regarding air quality would be environmentally superior when compared to the Project. However, it is unlikely that this Alternative would avoid the Project’s unavoidable significant air quality impacts.

Cultural Resources

This Alternative, as well as the Project as proposed, would involve the redevelopment of the existing Moreno Valley Mall site, which is heavily disturbed and almost entirely developed with impervious

surfaces and commercial buildings. The proposed Project would result in less than significant impacts to cultural resource due to the lack of known historical and archaeological resources on-site, the historical disturbed character of the site, and negative results from previous cultural resources assessments and environmental review. A No Residential alternative is assumed to nonetheless require similar site disturbance, therefore resulting in similar cultural resource impacts as the proposed Project.

Based on the above discussion, under the No Residential Alternative, impacts regarding cultural resources would be equivalent when compared to the proposed Project.

Greenhouse Gas Emissions

GHG emissions originating from the proposed Project would primarily result from Project-related transportation and energy use. Reducing density under this Alternative would reduce Project-related traffic and associated GHG emissions, as well as GHG emissions associated with energy demand. Construction-related emissions would be similar, although perhaps slightly reduced in consideration of eliminating the residential units. Therefore, reducing density under this Alternative may slightly reduce impacts from GHG emissions compared to the proposed Project. Therefore, under this Alternative, impacts regarding GHG emissions would be environmentally superior when compared to the Project. However, this Alternative is not anticipated to avoid the Project's unavoidable significant impacts related to GHG emissions.

Land Use and Planning

A No Residential Alternative would have similar impacts as the proposed Project and could also achieve basic Project objectives and consistency with the MoVal 2040 GP. However, by definition, the variety and quantity of mixed uses would be reduced under this Alternative by eliminating the residential component, which is an important aspect of a "vibrant" mixed use focal point for the City as envisioned in the MoVal 2040 GP. The reduced operational revenue (from reductions in residential density) would likely make Project financing of mall enhancements more difficult. Reductions in density would also produce reduced tax revenues for the City, which would then reduce infrastructure and amenities that the City provides through these revenue sources. Finally, a No Residential Alternative would likely not avoid the Project's identified significant unavoidable impacts related to air quality and GHG emissions.

Noise

It is anticipated that the total construction-related noise impacts would be slightly decreased under this alternative as compared to the Project in consideration of eliminating the residential units. Under long-term operational conditions, noise impacts would be reduced relative to the Project, due to the relatively similar operational practices and decrease in the amount of traffic traveling to and from the Project site. Therefore, under this Alternative, impacts regarding noise would be environmentally superior when compared to the Project.

Transportation

Reducing density under this Alternative would reduce Project-related traffic during construction and operation. Construction-related traffic would be similar, although perhaps slightly reduced in

consideration of eliminating residential units. Operational traffic would be slightly reduced commensurate with reductions in density. Project-related VMT impacts are anticipated to be similar as the Project, resulting in less than significant VMT impacts (as with the Project). Therefore, reducing density under this Alternative may slightly reduce traffic impacts compared to the proposed Project. Therefore, under this Alternative, transportation impacts would be environmentally superior when compared to the Project. However, this Alternative is not anticipated to avoid the Project's unavoidable significant impacts related to GHG emissions and air quality.

Utilities and Service Systems

Under the No Residential Alternative, there would be a reduced demand on utilities and service systems due to eliminating the residential units. However, the proposed utility improvements and expansions would be similar to the proposed Project, in that improvements to existing water, wastewater and storm drain systems would likely still be required. Therefore, under this Alternative, impacts regarding utilities and service systems would be slightly reduced when compared to the Project.

Conclusion

Overall, the No Residential Alternative would have reduced environmental impacts compared to the proposed Project, although it would not avoid the two identified unavoidable significant impacts of the Project related to air quality and greenhouse gas emissions. This alternative could accomplish the primary Project objective of redeveloping the Moreno Valley Mall and could achieve MoVal 2040 GP goals for the site to create a "vibrant" "mixed-use" environment for the City, albeit with the elimination of residential units representing an important omission in the desired variety and quantity of mixed-use development provided. This Alternative may represent an under-utilization of one of the City's primary mixed-use focal points.

6.7 Environmentally Superior Alternative

An EIR is required to identify the environmentally superior Alternative from among the range of reasonable alternatives that are evaluated. Section 15126.6 (e)(2) of the State CEQA Guidelines requires that an environmentally superior alternative be designated and states that if the environmentally superior Alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Based on the summary of information presented in **Table 6-2, Comparison of Project Alternatives Environmental Impacts with the Project**, the Environmentally Superior Alternative is Alternative 3: Reduced Density. Because Alternative 3 would reduce the development footprint by 25 percent, this Alternative has fewer environmental impacts than the proposed Project or any of the other alternatives, particularly as it relates to impacts to air quality, GHG, noise, and transportation.

Table 6-2: Comparison of Project Alternatives Environmental Impacts with the Project

EIR Resources Section	Alternatives				
	Project – Level of Impact After Mitigation	Alternative 1: No Redevelopment	Alternative 2: No Project/Existing Specific Plan	Alternative 3: Reduced Density	Alternative 4: No Residential
Aesthetics	LTS	-	=	-	-
Air Quality	SU	-	=/+	-	-
Cultural Resources	LTS	-	=	=	=
Greenhouse Gas Emissions	SU	-	=/+	-	-
Land Use and Planning	LTS	+	=	=	=/-
Noise	LTS	-	=/+	-	-
Transportation	LTS	-	+	-	-
Utilities and Service Systems	LTS	-	=/+	-	-
Attainment of Project Objectives	Meets all of the Project Objectives	Meets none of the Project Objectives	Meets all of the Project Objectives	Meets some of the Project Objectives	Meets some of the Project Objectives
Notes: A minus (-) sign means the Project Alternative has reduced impacts from the proposed Project. A plus (+) sign means the Project Alternative has increased impacts from the proposed Project. An equal sign (=) means the Project Alternative has similar impacts to the proposed Project. LTS =less than significant; SU = significant and unavoidable					

7.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

7.1 Introduction

Section 15128 of the California Environmental Quality Act (CEQA) Guidelines states that “an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the SEIR.” This section briefly describes effects found to have no impact or a less than significant impact based on the analysis conducted during the Draft Subsequent Environmental Impact Report (Draft SEIR) preparation process.

The Project proposes a Specific Plan Amendment to the existing Towngate Specific Plan (SP-200). The SP-200 Draft EIR and Mitigation and Monitoring Report Program, and Final EIR (SP-200 EIR) are referenced herein. References to the SP-200 EIR provided within this section are provided primarily for informational purposes. Analysis of Project impacts herein are substantiated with updated information and Project specific technical studies or memoranda.

7.2 Agriculture and Forestry Services

The SP-200 EIR did not identify the need for any mitigation measures related to agriculture because no significant impacts to agriculture were anticipated. The SP-200 EIR determined that, even though the site had not been utilized for agricultural uses for almost 30 years, implementation of SP-200 would contribute to the decline of potential agricultural land in the Moreno Valley area. However, due to the high cost of irrigation water, agricultural use of the site would not have been feasible, and the site held a non-open space designation. Therefore, there were no significant impacts to agriculture, and no mitigation measures were proposed at the time.

Impact 7.2-1 *Would the Project 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?*

Impact 7.2-2 *Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

Impact 7.2-3 *Would the Project 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))?*

Impact 7.2-4 *Would the Project result in the loss of forest land or conversion of forest land to non-forest use?*

Level of Significance: No Impact

The Project site is currently developed with the Moreno Valley Mall and paved surface parking. No agricultural or forestry resources exist on or adjacent to the Project site. No Prime Farmland, Unique Farmland, or Farmland of Statewide or Local Importance are mapped in the vicinity of the Project or on the Project site. The Project site and the adjacent land use are designated as “Urban and Built-Up Land”

according to the California Department of Conservation Farmland Finder.¹ Furthermore, the Project site is not subject to the Williamson Act Contract.² The site is currently zoned as mixed-use community overlay which allows for commercial, office, and multi-family residential uses. As a result, the Project does not conflict with existing zoning of timberland as forestry resources which are not present on or adjacent to the Project site.³ There are no impacts associated with agricultural uses, Williamson Act contracts, or related to the loss of farmland. No mitigation is necessary.

7.3 Biological Resources

Previous environmental analysis – the SP-200 EIR – found that impacts to wildlife and vegetation were less than significant due to the highly disturbed conditions present on-site. Due to the absence of significant adverse impacts to biological resources at the time the SP-200 was prepared, no mitigation measures related to wildlife and vegetation were recommended.

Impact 7.3-1 *Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Level of Significance: No Impact

The Project site is fully developed and heavily disturbed, aside from a small 1.4-acre site (study area) located in the northwestern portion of the Project site. As such, it does not contain any established or historical biological resources that would provide suitable habitat for candidate, sensitive, and/or special status species.

A biological technical memorandum was prepared on February 10, 2022 by SWCA Environmental Consultants for the historically undeveloped site in the northwestern portion of the Project site (**Appendix K**). For this biological study area, a one-day reconnaissance-level flora and fauna survey was conducted on February 3, 2022. In addition, SWCA biologists reviewed previous biological reports along with other databases and literature to identify special-status biological resources previously reported on or in the immediate vicinity of the study area. According to the results of this assessment, the study area is characterized by low plant diversity, lack of shrubs and trees, and very low biological habitat value due to the adjacency of the mall development and State Route 60 (SR-60).⁴ Therefore, no further biological surveys are necessary, and the study area is not likely to be impacted as a result of the proposed Project.

While the Project site is void of natural vegetation, landscaping and ornamental trees along the Project site provide potential nesting habitat for birds that would be protected under the Migratory Bird Treaty Act (MBTA). Although, under current circumstances, any bird species that nest within the ornamental trees would be tolerant of the frequent disturbance resulting from trucking operations and vehicle traffic

¹ California Department of Conservation (2016). *California Important Farmland Finder*. Available at <https://maps.conservation.ca.gov/dlrp/ciff/>. Accessed January 12, 2022.

² California Department of Conservation (2016). *State of California Williamson Act Contract Land*. (Map). Available at [https://planning.lacity.org/eir/HollywoodCenter/Deir/ELDP/\(E\)%20Initial%20Study/Initial%20Study/Attachment%20B%20References/California%20Department%20of%20Conservation%20Williamson%20Map%202016.pdf](https://planning.lacity.org/eir/HollywoodCenter/Deir/ELDP/(E)%20Initial%20Study/Initial%20Study/Attachment%20B%20References/California%20Department%20of%20Conservation%20Williamson%20Map%202016.pdf). Accessed January 18, 2022.

³ City of Moreno Valley (2021). *Zoning Map*. Available at <https://www.morenovalleybusiness.com/wp-content/uploads/2021/06/CityZoningMap.pdf>. Accessed January 13, 2022.

⁴ SWCA (2022). *Technical Memorandum: Biological Assessment of One Parcel, pages 3-4*. (Appendix K)

throughout the Project site. Prior to the commencement of ground disturbing activities, all mandatory pre-construction surveys will be completed in accordance with all applicable federal, state, and local rules, regulations, and policies. The Project would not create a substantial adverse effect, either directly or through habitat modifications. Therefore, no impact would occur, and no mitigation is necessary.

Impact 7.3-2 *Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Level of Significance: No Impact

The Project site is currently developed with the Moreno Valley Mall and paved surface parking. Furthermore, riparian habitat is not present on the Project site nor are sensitive natural communities listed in both local and regional plans, policies, or regulations or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). No impacts to existing riparian habitat or sensitive natural communities would occur as a result of the Project, and no mitigation is necessary.

Impact 7.3-3 *Would the Project have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Level of Significance: No Impact

According to the USFWS National Wetlands Inventory Online Mapper, the Project site does not include federally protected wetlands.⁵ The disturbed nature of the site furthermore precludes it from impacting hydrological processes on-site. Therefore, the Project would not impact any jurisdictional waters, including federally protected wetlands such as marshes, vernal pools, or coastal areas. No mitigation is necessary.

Impact 7.3-4 *Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Level of Significance: No Impact

The Project site is surrounded by urban development, such as paved roads, commercial, and residential development, and the Moreno Valley Freeway (SR-60). The Project area is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) that identifies core linkages for wildlife movement. For the Project area, no existing or proposed core linkages are identified.⁶ Due to the urbanized nature of the site, no migratory corridors exist or would be affected by the Project. Therefore, there are no impacts to established native wildlife or migratory corridors.

⁵ National Wetlands Inventory (2021). *Wetlands Mapper; City of Moreno Valley*. Available at <https://www.fws.gov/wetlands/Data/Mapper.html>. Accessed January 13, 2022.

⁶ County of Riverside Transportation and Lands Management Agency (2003). *Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP); Schematic Cores and Linkages Map*. Available at https://www.wrc-rca.org/Permit_Docs/MSHCP/MSHCP-Volume%201.pdf. Accessed January 13, 2022.

Impact 7.3-5 *Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Level of Significance: No Impact

The Project site contains no historical, native plant communities. Existing vegetation is limited to landscaped non-native trees and ornamental plants that are not protected under any municipal or regional conservation policies. Furthermore, the Project site is fully developed and does not contain biological resources. As such, no impacts would occur.

Impact 7.3-6 *Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?*

Level of Significance: No Impact

The City of Moreno Valley is included in the Western Riverside County MSHCP. Under this plan, the Project site is designated as ‘developed, disturbed land’ that does not contain any vegetation communities. The Project site and its surrounding areas are not a focus for conservation under this regional plan, and therefore would not conflict with the adopted conservation areas.⁷ Therefore, no impact to local, regional, or State habitat conservation plans would occur.

7.4 Energy

The SP-200 EIR did not identify the need for any mitigation measures related to energy because all applicable state code requirements and energy conservation standards would be adhered to in design and implementation of the Project. The SP-200 EIR determined that project conformance to the building energy efficiency standards specified in Title 24 of the California Building Standards Code would adequately reduce the demand for electricity and natural gas induced by the addition of the proposed residential, commercial, and industrial elements and the need to extend natural gas and electricity services throughout the planning area.

Impact 7.4-1 *Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?*

Level of Significance: Less than Significant Impact

The Project would not result in wasteful, inefficient or unnecessary consumption of energy during Project construction or operation. The Project would comply with all applicable energy conservation requirements. Project construction and operation would be typical for an urban retail shopping center, which is financially incentivized to reduce energy demand due to associated reductions in project operating costs.

The MoVal 2040 Final EIR, in conjunction with the Climate Action Plan (CAP), addressed the potential for wasteful, inefficient, or unnecessary consumption of energy resources or to conflict with applicable plans for renewable energy and energy efficiency. The MoVal 2040 Final EIR determined that, in addition to the

⁷ County of Riverside Transportation and Lands Management Agency (2003). *Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)*. Available at https://www.wrc-rca.org/Permit_Docs/MSHCP/MSHCP-Volume%201.pdf. Accessed January 13, 2022.

energy efficiencies that would be realized from compliance with current CALGreen and Title 24 standards in new and re-developments, the MoVal 2040 GP would promote energy conservation through voluntary programs that provide energy-efficiency audits, retrofits, rebates, and other financing programs and incentives. Additionally, the CAP includes a number of GHG reduction goals related to energy use and energy conservation. Therefore, the MoVal 2040 GP would not create a land use pattern that would result in a wasteful, inefficient, or unnecessary use of building-related energy.⁸ Because the redevelopment of the Moreno Valley Mall is specifically accounted for in the MoVal 2040 GP and would meet GP goals for mixed use development and transit improvements, impacts relating to inefficient energy use as a result of the proposed redevelopment Project would be less than significant and no additional mitigation is necessary.

Impact 7.4-2 *Would the Project conflict with or obstruct a State or Local plan for renewable energy or energy efficiency?*

Level of Significance: Less than Significant Impacts

The energy conservation policies and plans relevant to the Project include the California Title 24 energy standards and the 2019 CALGreen building code. The Project would be required to comply with these existing energy standards. Compliance with state and local energy efficiency standards would ensure that the Project meets all applicable energy conservation policies and regulations. As such, the Project would not conflict with applicable plans for renewable energy or energy efficiency. Southern California Association of Government's (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal) (RTP/SCS), adopted in September 2020, integrates transportation, land use, and housing to meet greenhouse gas (GHG) reduction targets set by California Air Resources Board (CARB). The document establishes GHG emissions goals for automobiles and light-duty trucks, as well as an overall GHG target for the region consistent with both the target date of Assembly Bill (AB) 32 and the post-2020 GHG reduction goals of Senate Bill (SB) 375. The Project would not conflict with the stated goals of the RTP/SCS. Furthermore, the City's Climate Action Plan (CAP) includes additional energy efficiency requirements that would be required of future discretionary developments, and all development is required to comply with Title 24 requirements. According to the MoVal 2040 GP, by changing land use designations and focusing development in Concept Areas, the Project would reduce VMT when compared to buildout of the existing 2006 General Plan.⁹ Therefore, the Project would not conflict with or obstruct State or local plans for renewable energy or energy efficiency and potential impacts would be less than significant.

7.5 Geology and Soils

The SP-200 EIR determined that, in the implementation of SP-200, moderately high ground shaking should be anticipated during a 100-year interval – characteristic of all of Southern California. The nearest active fault in proximity to the Project site is the San Jacinto fault zone, located five miles to the northeast. In addition, the Project site did not contain any unusual seismic or geologic hazards. To mitigate impacts to

⁸ City of Moreno Valley (2021). *Final Environmental Impact Report for the MoVal 2040*; Page 4.6-9. Available at https://www.moval.org/city_hall/general-plan2040/Environmental/MV2040_FinalEIR_W-CommentResponse.pdf. Accessed March 29, 2022.

⁹ City of Moreno Valley (2021). *Final Environmental Impact Report for the MoVal 2040*; Page 4.6-10. Available at http://www.moval.org/cdd/documents/general-plan-update/final-docs/Moval%202040_Final%20EIR_with%20RTCs.pdf. Accessed March 29, 2022.

seismic safety, the SP-200 EIR anticipates that the design of buildings in conformance with Universal Building Codes (UBC) and other City and County ordinances would effectively reduce the effects of seismic ground shaking. Additionally, previous environmental analysis within the SP-200 EIR determined that impacts related to soil erosion would be minimized by the proposed mitigation measures. According to the SP-200 EIR, conducting grading in compliance with City grading policies, landscaping all cut and fill slopes, and preparation of a final grading report – including final foundation design recommendations and any other soils recommendations pertinent to construction – would adequately reduce impacts.

Impact 7.5-1 *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

Level of Significance: Less than Significant Impact

The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to identify earthquake fault zones along traces of both recently and potentially active major faults. Cities and counties that contain such zones must inform the public regarding the location of these zones, which are usually one-quarter mile or less in width. Moreno Valley is located in a seismically active region and is most affected by the San Jacinto fault zone that lies in the northeastern portion of the City and is categorized as an Alquist-Priolo Earthquake Fault Zone by the State of California.¹⁰

According to the United States Geological Survey (USGS) Quaternary Faults ArcGIS map, the Project site is not located in or adjacent to a known earthquake fault.¹¹ The San Jacinto fault zone, the latest quaternary fault, is located at least four miles to the northeast of the Moreno Valley Mall; therefore, the possibility of a significant fault rupture on the Project site is low.

Impact 7.5-2 *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- ii) Strong seismic ground shaking?*

Level of Significance: Less than Significant Impact

The City is located within a seismically active region of southern California. Regional faults, including the Cucamonga, San Jacinto, San Andreas, and Whittier-Elsinore Faults, are potential sources of ground shaking within the City. Although no active faults are known to traverse the Project site, the Project site would experience ground shaking from earthquakes generated along active faults located off-site. The intensity of ground shaking would depend upon the magnitude of the earthquake, distance to the epicenter, and the geology of the area between the epicenter and the Project site. Adherence to standard

¹⁰ City of Moreno Valley (2021). *MoVal 2040 General Plan: Safety Element*. Available at www.moval.org/cdd/documents/general-plan-documents-draft-general-plan.html. Accessed January 12, 2022.

¹¹ U.S. Geological Survey (2020). *U.S. Geologic Survey's Interactive Quaternary Faults Database*. Available at <https://www.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf> <https://www.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf>. Accessed January 12, 2022.

engineering practices and design criteria relative to seismic and geologic hazards in accordance with the California Building Code (CBC) would reduce the significance of potential impacts to less than significant. The CBC includes detailed design requirements related to structural design, soils and foundations, and grading to ensure that public safety risks due to seismic shaking are minimized to below significance.

Impact 7.5-3 *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

iii) Seismic-related ground failure, including liquefaction?

Level of Significance: Less than Significant Impacts

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions exist: shallow groundwater; low-density non-cohesive (granular) soils; and high-intensity ground motion. The majority of the City is classified as having low or moderate potential for liquefaction.¹² The Moreno Valley Mall lies within one such zone and has a low liquefaction susceptibility. The San Jacinto Fault Zone to the northeast and east of the Project site puts the region in some risk of ground shaking, which may result in seismic-related ground failure. However, the Project site's distance from the fault makes seismic-related ground failure unlikely. Since both seismic-related ground failure and generalized liquefaction would not be likely to occur, the implementation of the Project would result in a less than significant impact.

Impact 7.5-4 *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

iv) Landslides?

Level of Significance: Less than Significant Impact

Landslides occur if areas of steep slopes consisting of unstable soils are disturbed by ground shaking, precipitation, or human activities such as grading, construction, and irrigation of slopes. The majority of the City is relatively flat and has therefore been assigned by the California Geological Survey as having a landslide susceptibility class of 0, indicating that there is no risk of landslide.¹³ The Project site exhibits varying landslide susceptibility but is predominately defined by landslide susceptibility classes 0 and 5, indicating that there is generally moderate to no risk of landslide.¹⁴ Furthermore, the Project site and neighboring parcels are relatively flat with no visual indications of active landslides. The northerly adjacent freeway, which is reinforced with retaining walls, would additionally minimize the risk of landslide. Therefore, landslide risk to the Project site is unlikely and impacts are less than significant.

¹² City of Moreno Valley (2021). *MoVal 2040 General Plan: Map S-2: Liquefaction Hazards*. Available at <https://www.moval.org/cdd/documents/general-plan-update/draft-docs/GP-Elements/06.pdf>. Accessed July 19, 2022.

¹³ City of Moreno Valley (2021). *MoVal 2040 General Plan: Map S-3: Landslide Hazards*. Available at <https://www.moval.org/cdd/documents/general-plan-update/draft-docs/GP-Elements/06.pdf>. Accessed July 19, 2022.

¹⁴ City of Moreno Valley (2021). *MoVal 2040 General Plan: Chapter 6 Safety*. Available at www.moval.org/cdd/documents/general-plan-documents-draft-general-plan.html. Accessed January 12, 2022.

Impact 7.5-5 *Would the Project result in substantial soil erosion or the loss of topsoil?*

Level of Significance: Less than Significant Impact

On the Project site, topsoil exists only in those landscaped areas that make up a small proportion of the site area. Therefore, there is a low likelihood for erosion of this unpaved areas. Additionally, the Project would be required to comply with all requirements set forth in the National Pollutant Discharge Elimination System (NPDES) permit for construction activities including Best Management Practices (BMPs) through preparation of a Stormwater Pollution Prevention Plan (SWPPP). NPDES compliance would reduce potential impacts to less than significant levels.

7.6 Hazards and Hazardous Materials

The SP-200 EIR did not identify the need for any mitigation measures related to hazards and hazardous materials because the SP-200 EIR did not assess impacts from hazards or hazardous materials.

Impact 7.6-1 *Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Level of Significance: Less than Significant Impact

Impacts related to the routine transport, use, or disposal of hazardous materials on the Project site would most likely come from motor oils, gasoline, and diesel fuel used during construction, rather than the operational uses of the site. Should on-site refueling occur during construction, spill kits shall be located on-site as required by the Project-specific SWPPP. Other preventative measures and BMPs are similarly required under NPDES stormwater regulations. Furthermore, the Project site is not listed under the California Hazardous Waste and Substance Site List (Cortese List).¹⁵ Therefore, impacts associated with the transport, use, or disposal of hazardous materials would be less than significant. Prior environmental analysis within the SP-200 EIR did not address hazards or hazardous materials.

Impact 7.6-2 *Would the Project 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?*

Level of Significance: Less than Significant Impact

Accident conditions involving the release of hazardous materials into the environment could reasonably occur during the construction phase of the Project, especially due to the use of oils and fuels on-site. As previously discussed in Impact 7.6-1, the use of hazardous materials during the construction phase – such as motor oils, gasoline, and diesel fuel – would have a less than significant impact with the preventative measures and BMPs required under NPDES stormwater regulations and Project-specific SWPPP. Because no proposed land uses necessitate the use of hazardous materials, the operational phase of Project implementation does not pose a reasonably foreseeable issue regarding the release of hazardous materials. However, the Project site may be expected to use fertilizer for site landscaping. Materials and substances would all be subject to applicable health and safety requirements under the Occupational

¹⁵ California Department of Toxic Substances Control (2022). *Hazardous Waste and Substances Site List*. Available at <https://www.envirostor.dtsc.ca.gov/public/>. Accessed January 13, 2022.

Safety and Health Administration (OSHA). Thus, Project implementation would not result in the creation of a public or environmental hazard resulting in a less than significant impact.

Impact 7.6-3 *Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Level of Significance: Less than Significant Impact

There are no schools located within one-quarter mile of the Project site. The nearest school is Edgemont Elementary School located at 21790 Eucalyptus Ave, Moreno Valley, CA, approximately 0.7 mile to the southwest of the Project site. The Project is not anticipated to generate significant hazardous materials that would impact Edgemont Elementary School. In addition, any future school developed within the surrounding area would be subject to the oversight of the California Environmental Protection Agency (Cal EPA), Department of Toxic Substances Control (DTSC), as required by State law. Additionally, the Project site is not located within a hazardous materials zone and is not included on a hazardous site list, according to the DTSC Cortese List. Therefore, a less than significant impact would occur due to the implementation of the Project.

Impact 7.6-4 *Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

Level of Significance: No Impact

According to the City of Moreno Valley's Local Hazard Mitigation Plan (LHMP) and the DTSC Cortese List, the Project site is not located within a hazardous material zone and is not included on a hazardous site list compiled pursuant to California Government Code §64962.5.¹⁶ As a result, the Project would not create a significant hazard to the public or the environment, and no impact is anticipated.

Impact 7.6-5 *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?*

Level of Significance: No Impact

The Project site is not located near to a public airport or public use airport. However, the March Air Reserve Base – the nearest non-public use airport – is located approximately 2.8 miles south of the Project site. According to the March Air Reserve Base Airport Land Use Compatibility Plan (ALUCP), the Project site lies within 'Zone E,' a low-risk and low-noise zone that is within outer or occasionally used portions of flight corridors.¹⁷ This compatibility designation is not accompanied by development conditions that would be applicable to the Project. Given these considerations, the Project would not result in a safety

¹⁶ City of Moreno Valley (2017). *Local Hazard Mitigation Plan*. Available at https://www.moval.org/city_hall/departments/fire/pdfs/haz-mit-plan.pdf. Accessed January 13, 2022.

¹⁷ Riverside County Airport Land Use Commission (2014). *March Air Reserve Base / Inland Port Airport Land Use Compatibility Plan*. Available at <https://www.rcaluc.org/Portals/13/PDFGeneral/plan/2014/17%20-%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf>. Accessed January 24, 2022.

hazard or excessive noise for the new residents or employees within the Project area. Therefore, no impact would occur with the implementation of the Project.

Impact 7.6-6 *Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Level of Significance: Less than Significant Impact

The Project is not anticipated to interfere or impair an adopted emergency response or evacuation plan. The City has adopted a Local Hazard Mitigation Plan (LHMP) and Emergency Operations Plan (EOP) to guide emergency management strategies for the City. Implementation of the Project would be in compliance with the California Fire Code (CFC) with local amendments to address fire hazard concerns. Furthermore, approval of new development is conditioned on review by the Moreno Valley Fire Department (MVFD) and the Moreno Valley Department of Public Works to ensure adequate emergency access.¹⁸ In case of an emergency and/or evacuation, Towngate Fire Station 6, located approximately 0.3 mile southwest from the Project site, would be able to provide an emergency response. The implementation would not impact major access roads and access would be maintained during construction. Therefore, impacts would be less than significant, and mitigation is not necessary.

Impact 7.6-7 *Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Level of Significance: No Impact

The Project site is not located in a Very High Fire Hazard Severity Zone (VHFHSZ), nor is it neighboring a wildland urban interface, and therefore the Project would not create a risk of loss, injury or death involving wildland fires.^{19,20} Thus, no impacts are anticipated, and no mitigation is required.

7.7 Hydrology and Water Quality

The SP-200 EIR determined that implementation of SP-200 would result in the alteration of drainage patterns and the quality, velocity and composition of runoff due to large-scale grading and creation of impervious surfaces. To mitigate this impact, the SP-200 EIR anticipates that storm systems will be constructed in accordance with the Master Drainage Plans in order to reduce impacts on local drainage patterns. In addition, it is anticipated that developers will participate in established fee mitigation programs of applicable Master Drainage Plans. At the time, the SP-200 EIR did not identify the need for any mitigation measures related to hydrology, flooding, and water quality because the proposed storm drain facilities and erosion control devices would effectively minimize any increased runoff.

The SP-200 EIR notes that, prior to implementation of SP-200, the runoff from the Project site exceeded the existing storm drain capacity within the Edgemont Drainage Area. It was determined that the storm

¹⁸ City of Moreno Valley (2021). *MoVal 2040 General Plan: Safety Element*. Available at www.moval.org/cdd/documents/general-plan-documents-draft-general-plan.html. Accessed January 13, 2022.

¹⁹ City of Moreno Valley (2021). *Final Environmental Impact Report for the MoVal 2040; Figure 4.18-1 California Fire Hazard Severity Zone*. Available at http://www.moval.org/cdd/documents/general-plan-update/final-docs/Moval%202040_Final%20EIR_with%20RTCs.pdf. Accessed January 13, 2022.

²⁰ California Department of Forestry and Fire Protection (2022). *California Fire Hazard Severity Zone Viewer*. Available at <https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414>. Accessed January 12, 2022.

drain facilities and detention basin proposed with the project would mitigate any storm drain impacts to a level less than previously occurring. To mitigate this impact, the SP-200 EIR anticipates that erosion control devices, utilized during grading, would reduce the effects of increased runoff on erosion or siltation. In addition, a water quality maintenance program can be implemented to mitigate the impact of urban runoff on surface water quality over the long term.

Impact 7.7-1 Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Level of Significance: Less than Significant Impact

The Project site has been previously developed and graded with the construction of parking lots, auxiliary structures, and the Moreno Valley Mall. Existing conditions allow for the unmitigated flow of water across the Project site before interception of runoff into stormwater sewers and paved ditches.

In June 2022, Kimley-Horn and Associates prepared a Preliminary Water Quality Management Plan (WQMP) intended to comply with the requirements of City of Moreno Valley Ordinance Number 827 (***Appendix L***). As identified in ***Appendix L***, the Project is designed to include on-site non-structural source control BMPs, including but not limited to:

- education of property owners,
- tenants and occupants on stormwater BMPs, activity restrictions,
- landscape management BMPs,
- BMP maintenance,
- Title 22 CCR compliance,
- local water quality ordinances,
- spill contingency plan,
- hazardous materials disclosure compliance,
- Uniform Fire Code Implementation,
- Litter/Debris Control Program,
- Employee Training,
- Catch Basin Inspection Program,
- Vacuum Sweeping of Private Streets and Parking Lots, and
- compliance with all other applicable NPDES permits.

The BMPS included in the WQMP would minimize degradation of surface or groundwater quality and ensure compliance with water quality standards and waste discharge requirements set by the Riverside County Code of Ordinances (Chapter 13.12) Stormwater Drainage System Protection Requirements and the NPDES. The water quality of nearby surface waters and groundwater would be maintained via compliance with NPDES permit stipulations. In accordance with the requirements of the NPDES permit, the Project applicant would prepare and implement a site-specific SWPPP that meets the

requirements of the NPDES General Permit and specifies BMPs (e.g., erosion control, sediment control, non-stormwater management, and materials management) to be used during construction, should the Project disturb one or more acres of soil (MC §8.21.170).

The current grading concept includes the use of a borrow site within the northern portion of the Project site. The borrow pit and soil stockpile used during construction phases would need to be included under the SWPPP and be implemented with erosion and sediment control devices including, but not limited to, erosion blankets, temporary seeding, silt fence/filter sock perimeter, and water to minimize dust. With implementation of these BMPs, the Project would reduce or eliminate the discharge of pollutants in stormwater runoff from the construction site to the maximum extent practicable. Under the effective NPDES Industrial General Permit, the Project Applicant (or the Project's occupant(s)) would be required to prepare a WQMP for operational activities and implement a long-term water quality sampling and monitoring program or receive an exemption.

With implementation of the WQMP, compliance with the NPDES permit requirements, and implementation of BMPs, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Mandatory compliance with the SWPPP and the erosion control plan would ensure that the construction of the Project site would not violate any water quality standards or waste discharge requirements. Therefore, there would be a less than significant impact association with violation of any water quality standards or waste discharge requirements or otherwise substantial degradation of surface or groundwater quality.

Impact 7.7-2 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?

Level of Significance: Less than Significant Impact

According to the WQMP, development of the Project site would decrease impervious surface area (ISA) from the existing conditions and therefore would increase permeability of the affected area. Upon completion, per the WQMP, the percent of the Project site surface that is impervious would decrease over existing conditions. Furthermore, the Project would be designed in accordance with the WQMP prepared. The WQMP includes design measures such as low impact development (LID) and other stormwater drainage controls. The LIDs would be engineered to capture and control runoff prior to being released downstream. This would increase the duration that water is held on-site prior to being released to downstream receiving waters. This timed-release allows more water time to infiltrate the ground and facilitates recharge. In addition, LIDs that include permeable materials, enable runoff to immediately infiltrate and begin the recharge process. Therefore, considering the existing conditions which already limit the potential for recharge, and with the implementation of a WQMP, impacts would be less than significant.

Further, according to the WQMP, groundwater was not encountered past 15 feet in any of the infiltration test borings. Based on this information, it is not anticipated that the depth to groundwater would affect the long-term performance of an infiltration system. Therefore, development of the Project site would not affect groundwater recharge due to the distance between the ground surface and the groundwater

levels. The Project would not contribute to groundwater recharge within the San Jacinto Groundwater basin. Further, inclusion of drainage improvements, including the installation of below-ground infiltration facilities and permeable landscape areas, as a component of the Project would create efficient passageways for runoff water to rejoin the water system and would result in a less than significant impact to local groundwater recharge. Construction activities would not directly impact groundwater sources.

Impact 7.7-3 *Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?*

i) Result in substantial erosion or siltation on- or off-site?

Level of Significance: Less than Significant Impact

Per the Project's Drainage Report (**Appendix M**), on-site flows generated by the Project would surface flow through the site along existing drainage pathways and into the existing storm network. The Project would utilize subsurface storm drain systems that convey flows in the underground storm drain network. The Project proposes to capture and convey stormwater to modular wetland biofiltration systems. This water would be treated and conveyed into the existing reinforced concrete pipe (RCP) storm drain in Town Circle.

The NPDES, SWPPP, and WQMP created for the Project would also minimize potential impacts from erosion and siltation. Further, an erosion control plan would also be implemented to further minimize potential siltation and erosion effects. The erosion control plan is required as part of the City's grading plan requirements (MC §8.21.160). Implementation of dust control measures along with BMPs included in the NPDES, SWPPP, and WQMP would reduce potential environmental effects. Impacts would be less than significant.

Impact 7.7-4 *Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?*

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

Level of Significance: Less than Significant Impact

The current Project would include development of approximately 58.6 acres of land presently occupied by the Moreno Valley Mall and associated uses that would decrease the amount of ISA covering on the Project site compared to existing conditions. These proposed improvements may cause changes in absorption rates, drainage patterns, and the rate and amount of surface water runoff. Any runoff that may occur would not exceed the system's capacity as existing downstream and upstream facilities have adequate capacity to convey 1,135 cubic feet per second (cfs) of water. Per the Project's Drainage Report (**Appendix M**), on-site flows would be collected by a system of underground chambers and storm drain network. The Project would construct the new storm drain facilities that would connect to the existing storm drain network along Town Circle and throughout the Project site. Therefore, the Project would not significantly impact flooding condition to upstream or downstream properties.

As described earlier, according to the FEMA FIRM, the Project is within a Flood Zone Designation X, as per the FEMA FIRM Map. No. 06065C0745G dated August 8, 2008, and per the un-printed FIRMette of panel 06065C0734G dated August 28, 2008. Zone X is an area where the annual flood risk is between one percent and 0.2 percent and includes areas between limits of the base flood (100-year flood) and subject to a 500-year flood. According to the Preliminary Drainage Report (**Appendix M**), the proposed condition for the Project site results in an approximately 7.49 percent decrease in peak flows, however, the existing storm drain system is designed for a much higher peak flow. Furthermore, an existing storm drain channel running along the southern border of the Project, together with the portion of existing upstream storm drains, has enough capacity to convey the proposed flows. Therefore, based on the analysis performed, it can be safely concluded that the proposed drainage improvements would adequately convey flows off-site into the existing stormwater network with the City and provide flood protection for the 100-year storm event and the Project would not impact flooding conditions to upstream or downstream properties. Therefore, impacts related to increasing rates of runoff would be less than significant, and no mitigation is required.

The Project proposes the construction of new private roads which would be constructed with appropriate stormwater conveyance facilities such as curb and gutter. These private roads would add new shallow channelized flow paths for run-off to traverse the Project site toward the southwestern corner. Curb and gutter would be adequately designed to account for the 100-year, 24-hour storm event without flooding. Additionally, vegetated drainage swales would be utilized and set in place of underground piping or imperviously lined swales, to the maximum extent practicable and as allowed by City erosion control regulations (MC §8.21.160.E) to contain 10-year events in curb and 100-year events in right of way. As such, operation impacts as a result of Project implementation would be less than significant.

Impact 7.7-5 *Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?*

iii) Create or contribute run-off water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted run-off?

Level of Significance: Less than Significant Impact

As discussed previously, the Project site must comply with the requirements of the NPDES General Permit, which helps control water pollution by regulating point and non-point sources that discharge pollutants into receiving waters. Additionally, the Project site is already disturbed with the existing Moreno Valley Mall and associated uses. This existing development contains an existing storm drain network and conveyance patterns throughout the site consisting of curb and gutter, shallow drainage channels, and sheet flow across paved parking surfaces. The Project would include similar improvements that are designed to be consistent with the 100-year storm event.

All projects would be required to obtain a General Construction Permit. The General Construction Permit requires implementation of a SWPPP, which would include BMPs designed to protect the quality of storm water runoff. Preparation, implementation, and participation with both the NPDES General Permit and

the General Construction Permit, including the SWPPP and BMPs, would reduce the potential for storm water flows, and any potential contaminants contained within those flows, to be conveyed off-site during construction of the Project. As a result, short-term construction-related impacts associated with creating or contributing to runoff and additional sources of polluted runoff would be less than significant. Conformance with these requirements would be verified prior to any project approval and included as conditions of approval to any future project. Impacts would, therefore, be less than significant.

As mandated by the Regional Water Quality Control Board (RWQCB) and through implementation of the Stormwater Water Quality Management Plan (SWQMP), the Project site would include new storm water drainage system facilities that would be engineered, designed, and installed to satisfy all water quality requirements. These measures would include minimizing ISA as feasible and directing flows to LID areas; integrating appropriately sized LIDs to ensure post-development flows do not exceed pre-development flows; and where feasible, incorporating bio-retention in combination with site planning, and dispersion of runoff to meet LID requirements.

To ensure that the new storm water drainage improvements are planned and designed to satisfy these requirements as well as all other applicable standards and requirements, they would be verified by the City and incorporated as conditions of approval of the Project prior to the issuance of any construction permit. Compliance with these requirements would ensure impacts are less than significant and mitigation would not be necessary.

Impact 7.7-6 *Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?*

iv) Impede or redirect flood flows?

Level of Significance: Less than Significant Impact

The Project site is within FEMA Flood Zone Designation X, as per the FEMA FIRM Map. No. 06065C0745G dated August 8, 2008, and per the un-printed FIRMette of panel 06065C0734G dated August 28, 2008. Zone X is an area where the annual flood risk is between one percent and 0.2 percent and includes areas between limits of the base flood (100-year flood) and subject to a 500-year flood. Therefore, the flood hazard is inside a 500-year floodplain. According to the Preliminary Drainage Report (**Appendix M**), the rational method was used to determine peak flow rates in order to adequately size the proposed subsurface storm drains and associated inlets used to convey on-site flows to existing drainage pathways. The Preliminary Drainage Report reviewed flows from the northeast corner and ended in the southwest corner of the Project site. It was observed that on-site flows are collected by a system of storm drain inlets and network within the Project site.

Proposed drainage improvements would have no negative impacts to adjacent properties. Those drainage improvements include inlets and storm drain. In a 100-year storm event, existing drainage patterns convey 185.18 cfs at the discharge connection point in Memorial Way. Proposed conditions would reduce runoff from the site and a peak flow of 171.31 cfs would be discharged through existing infrastructure at Memorial Way.

Additionally, the Project site is already disturbed with the existing Moreno Valley Mall and associated uses. This existing development contains an existing storm drain network and conveyance patterns throughout the site consisting of curb and gutter, shallow drainage channels, and sheet flow across paved parking surfaces. The Project would include similar improvements that are designed to be consistent with the 100-year storm event. As such, the Project would not impede or redirect flood flows and impacts would be less than significant.

Impact 7.7-7 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Level of Significance: No Impact

The Pacific Ocean is located approximately 40 miles from the Project site. Due to the distance to the Pacific Ocean and the presence of the Santa Ana Mountains between the Pacific Ocean and the Project site, there is no potential for the site to be impacted by a tsunami. Additionally, surface water flow at the Project site is generally via sheet flow in a southwesterly direction. The Project site is not in any mapped dam inundation hazard zone.²¹ Furthermore, the Project site is not downstream of large bodies of water or tanks which potentially could cause flooding and inundate the Project site. The risk of seiche damage following a seismic event at the Project site is considered low. Therefore, there would be no impact from tsunami or seiche zones and no mitigation is necessary.

Impact 7.7-8 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Level of Significance: Less than Significant Impact

The Project site is located within the Santa Ana River Basin. The site's related construction and operational activities would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Plan by preparing and adhering to a SWPPP and SWQMP. The Project would be required to show conformance prior to any approval. Implementation of the Project would not conflict with or obstruct the Santa Ana River Basin Water Quality Control Plan and impacts would be less than significant. The Project site lies within the San Jacinto Groundwater Basin, under the Sustainable Groundwater Management Act (SGMA), Eastern Municipal Water District (EMWD) is the groundwater sustainability agency and is responsible for development and implementation of a groundwater sustainability plan.²² The Project would be required to comply with all applicable aspects of the Groundwater Sustainability Plan for the San Jacinto Groundwater Basin. Additionally, the Project site is already disturbed with the existing Moreno Valley Mall and associated uses. The existing mall complies with all applicable plans and it is not anticipated that the new uses proposed as part of the Project would dramatically change the intensity of uses already planned and approved. As such, the Project would not conflict with or obstruct the implementation of a water quality control plan or a sustainable groundwater management plan and impacts would be less than significant and no mitigation is necessary.

²¹ California Department of Water Resources (2022). *California Dam Breach Inundation Map Web Publisher*. Available at https://fnds.water.ca.gov/webgis/?appid=dam_prototype_v2. Accessed January 28, 2022.

²² Eastern Municipal Water District (September 2021). *Sustainable Groundwater Management Act*. Available at <https://www.emwd.org/post/sustainable-groundwater-management-act>. Accessed February 8, 2022.

7.8 Mineral Resources

The SP-200 EIR did not identify the need for any mitigation measures related to mineral resources because no significant or valuable mineral resources were determined to exist on the site.

Impact 7.8-1 *Would the Project 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?*

Impact 7.8-2 *Would the Project 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?*

Level of Significance: No Impact

The Project site, and the majority of the surrounding areas, is within a designated Mineral Resource Zone MRZ-3, which is defined as areas where the significance of mineral deposits cannot be evaluated from available data.²³ Significant impacts related to mineral resources would occur if the Project would result in the loss of availability of a known, valuable mineral resource or of a locally important mineral resource site. The Project site does not contain any local mineral resource sites and the development would not result in the loss of identified regional or local mineral resources, conversion of an identified mineral resource use, or conflict with existing mineral resource extraction activities. The Project site is currently developed, and the proposed site plans do not propose additional mining operations, the Project would not affect locally important mineral resources recovery sites. Therefore, the Project would not cause loss of mineral resources resulting in no impact with no mitigation necessary.

7.9 Population and Housing

The SP-200 EIR did not identify the need for any mitigation measures related to population and housing because development of the site through a coordinated Specific Plan rather than on an incremental basis would minimize potential impacts.

Impact 7.9-1 *Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

Level of Significance: Less than Significant Impact

The Project would include a Specific Plan Amendment to modify the approved SP-200, to allow a mix of retail, hospitality, and residential land uses within the Project area which would both directly and indirectly induce population growth.

The Project's construction phase would generate employment opportunities typical of construction activity. Construction-related jobs are not considered significantly inducing because they are temporary in nature. The City is housing-rich and has a vacancy rate of 6.1 percent. Consequently, the City is considered "Jobs-poor" with a high unemployment rate of six percent.²⁴ Therefore, the Project's

²³ City of Moreno Valley (2021). *Moreno Valley Comprehensive General Plan Update Draft EIR; Figure 4.12-1 Mineral Resource Zones*. Available at <https://www.moval.org/cdd/documents/general-plan-update/draft-docs/Moval-2040-Draft-EIR.pdf>. Accessed January 12, 2022.

²⁴ City of Moreno Valley (2021). *Final Environmental Impact Report for the MoVal 2040; Page 3-27*. Available at <https://www.moval.org/cdd/documents/general-plan-update/draft-docs/Moval-2040-Draft-EIR.pdf>. Accessed April 11, 2022.

employment opportunities for the construction phase would provide employment opportunities that would be adequately filled by the local residents and surrounding community. The Project's construction phase would not induce substantial unplanned population growth. The employment growth associated with the Project would not be significantly inducing since the increase of employment opportunities would help the City's pursuit for a more balanced jobs-housing ratio pursuant to SCAG. Additionally, the increase of employment opportunities would be consistent with the City's desire to provide local employment opportunities for City residents.

The Project would include the development of 1,627 multi-family dwelling units, including three multi-family communities in the eastern mall area (Residential A, B and C totaling 1,377 DU, and a multi-family community in the northwest mall area totaling 250 DU). The Project also includes commercial uses that include, but is not limited to, additional multi-tenant retail through mall revitalization and two new hotel operations which would increase the demand of housing in the area. Consequently, the Project would directly and indirectly induce population growth, which would have the potential to increase the demand for housing in the area. The City is considered housing-rich so the increase of employment opportunities would help in the City's pursuit of an improved jobs-housing balance. Additionally, the Project's new residential units would help the City meet its Regional Housing Needs Allocation (RHNA) housing goals by 2029. According to the MoVal 2040 GP Program EIR, the City anticipates the development of 22,052 new homes which is greater than the RHNA allocation goal of 13,627 new homes. The exceedance of the RHNA allocation would provide a buffer in all income categories to ensure the City can navigate the no net loss provisions of the state Housing Element law and have continued ability to meet the RHNA by income group through 2040.²⁵ Therefore, the Project's population growth is planned and would not result in a substantial population growth. Impacts would be less than significant, and no mitigation is necessary.

Impact 7.9-2 Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Level of Significance: No Impact

The Project site consists of the existing Moreno Valley Mall (excluding the JC Penney and Macy's parcels). Under the existing SP-200, the entirety of the existing Moreno Valley Mall area was proposed for Regional Mixed Use Commercial uses. The Regional Mixed Use Commercial land use would allow freeway-related retail, office parks, research and development parks and other office and commercial uses. This Project would include a Specific Plan Amendment that would modify and supersede SP-200 to allow the development of the Project's proposed multi-family residential uses on the existing Project site. Therefore, the Project would not displace substantial numbers of existing people or housing. No impact would occur, and no mitigation is necessary.

7.10 Public Services

The SP-200 EIR did not identify the need for any mitigation measures related to public services because it was anticipated that the payment of development fees, as well as cooperation with applicable public services agencies, would offset any impacts. Regarding police protection, the SP-200 EIR notes that

²⁵ City of Moreno Valley (2021). *Final Environmental Impact Report for the MoVal 2040*; Page 4.14-5. Available at http://www.moval.org/city_hall/general-plan2040/Environmental/MV2040_FinalEIR_W-CommentResponse.pdf. Accessed January 2022.

population increases as a result of the redevelopment of the SP-200 planning area would result in an increase in crime. To mitigate this impact, the SP-200 EIR anticipates that a private security service would alleviate an increase in crime.

Relating to impacts to schools, the SP-200 EIR estimated that implementation of the SP-200 would increase demand by 1,599 students.²⁶ The SP-200 Final EIR notes that a 20.4-acre school site that was proposed as a part of the Moreno Valley SPA would be sufficient in accommodating the K-8 students that would be generated by the SP-200, while high school-age students would attend the existing Moreno Valley High School. As a Condition of Approval, SP-200 would also contribute to new facilities through the payment of development fees to offset any negative fiscal impacts.

In consideration of impacts to other public facilities, the SP-200 EIR notes that public facilities proposed by the project would be adequate to serve the needs of Project residents and would contribute to the overall public amenities available to the citizens of Moreno Valley. The SP-200 EIR additionally stipulates that, while SP-200 project implementation would increase the demand for library services, no change in the manner of provision of library services is anticipated to result from the project.

Impact 7.10-1 Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i) FIRE PROTECTION?

Level of Significance: Less than Significant Impact

Increased demand as a result of new development or redevelopment has the potential to detrimentally affect response times and emergency response coverage. As it pertains to the Project, the demand created by new residential uses and other components of the Project may necessitate the need for future fire stations in order to maintain arrival time standards and other performance objectives. The SP-200 EIR attests that the redevelopment of the Moreno Valley Mixed Use Development area would create a need for additional fire protection services, and that mitigation would include ensuring adequate fire protection services are available to the site.

The MVFD Strategic Plan (SP) anticipates the need for new fire stations based on project population increases and the development outlook stipulated in the MoVal 2040 GP, that includes the redevelopment of the Moreno Valley Mall Concept Area. Because the MVFD SP takes into account the planned development intensity envisioned in the GP, and because the Project site is specifically regarded for mixed-use development consistent with the proposed Project, it should be assumed that impacts to fire protection services as a result of the Project are currently considered under the purview of the MoVal 2040 Final EIR impact analysis. As part of the MoVal 2040 GP's programmatic mitigation framework, new development would be required to pay a development impact fee (DIF) to contribute to future facility improvements – including new equipment, personnel, and fire stations. Impacts to public services are

²⁶ City of Moreno Valley (1986). *SP 200 Environmental Impact Report (SCH # 1985112507)*; Page N9.

further offset through the general fund revenue anticipated to be generated by the Project, both in terms of enhancing performance of the existing mall and in providing new retail sales tax generators and hotel bed tax.

While the construction of these new fire stations may result in adverse physical impacts, impacts would be addressed by separate environmental review and the City's standard development review process, applicable DIF contributions, MoVal 2040 GP goals and policies intended to protect the environment, and the programmatic mitigation framework established in the MoVal 2040 Final EIR, which would reduce impacts associated with the provision of new or physically altered fire protection facilities. Therefore, impacts to fire protection services from the Project would be less than significant.

Impact 7.10-2 *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

ii) POLICE PROTECTION?

Level of Significance: Less than Significant Impact

The MoVal 2040 GP anticipates the expansion of the Civic Center, the existing headquarters of the Moreno Valley Police Department (MVPD), as well as an increase in police personnel to accommodate future development that would include the Project. While the construction of an expanded police protection facility may result in adverse physical impacts, impacts would be addressed by separate environmental review and the City's standard development review process, applicable DIF contributions, MoVal 2040 GP goals and policies intended to protect the environment, and the programmatic mitigation framework established in the MoVal 2040 Final EIR, which would reduce impacts associated with the provision of new or physically altered police protection facilities. Therefore, impacts to police protection services from the Project would be less than significant.

Impact 7.10-3 *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

iii) SCHOOLS?

Level of Significance: Less than Significant Impact

The Moreno Valley Unified School District (MVUSD), the Val Verde Unified School District (VVUSD), and Moreno Valley College recognize the need for additional school construction to accommodate a growing population. The redevelopment of the Project site is considered in the GP as an action that could result in population growth, thereby increasing demand on schools. The Project proposes less intensive residential

uses than the SP-200, and estimates that current demand on schools would increase by 1,187 students, accounted for in student generation estimations in the MoVal2040 Final EIR.²⁷

Furthermore, developers would be required to pay the impact fees levied by each school district, set within the limits of California Senate Bill (SB) 50.²⁸ This funding program has been found by the Legislature to constitute “full and complete mitigation of the impacts” on the provision of adequate school facilities (CGC §65995[h]). SB 50 establishes three potential limits for school districts, depending on the availability of new school construction funding from the state and the particular needs of the individual school districts. The school districts serving the City qualify for Level 2 fees, which equvalate to \$4.66 per square foot for new residential projects and \$0.66 per square foot for commercial/ industrial projects.²⁹ The Project Applicant would be required to pay the District’s current developer impact fees for residential and commercial/industrial use in effect at the time of submitting the building permit application. The MVUSD uses these fees to pay for facility expansion and upgrades needed to serve new students. While the Project would not generate any new students and increase demand for school services such that new facilities would be required, payment of fees in compliance with CGC §65996 fully mitigates all impacts to school facilities. Therefore, this impact would be less than significant in this regard. Future schools would be subject to separate environmental review, MoVal 2040 GP goals and policies intended to protect the environment, and the programmatic mitigation framework established in the MoVal2040 Final EIR, which would reduce impacts associated with the provision of new or physically altered schools to a level less than significant.

Impact 7.10-3 *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

iv) OTHER PUBLIC FACILITIES?

Level of Significance: Less than Significant Impact

Any additional public facilities would be subject to separate environmental review, MoVal 2040 GP goals and policies intended to protect the environment, and the programmatic mitigation framework established in the MoVal Final EIR, which would reduce impacts associated with the provision of new or physically altered public facilities to a level less than significant.

7.11 Recreation

The SP-200 EIR did not identify the need for any mitigation measures related to recreation because the recreation facilities proposed by the project were determined to be adequate to meet the needs of project residents. Regarding recreation, the SP-200 EIR determined that, in the implementation of SP-200, the project would increase the recreational opportunities in the City of Moreno Valley with a park, open space

²⁷ Estimated number of students generated by the Project is a measure of proposed dwelling units multiplied by MVUSD Student Generation Rates, found in the MoVal2040 EIR; Page 4.15-8.

²⁸ Senate Bill 50. 2020. Retrieved from: https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201920200SB50.

²⁹ Moreno Valley Unified School District. 2021. *School Developer Impact Fees*. Retrieved from: https://www.mvusd.net/apps/pages/index.jsp?uREC_ID=786774&type=d&pREC_ID=1181763.

greenbelt, private recreation facilities, and a town center with a public pool/recreation center. The SP-200 EIR reasoned that the increase in population from buildout of the SP-200 planning area will increase the use of regional recreational facilities. The recreation facilities proposed would be adequate to meet the needs of project residents and would ultimately contribute to the recreational amenities available to City residents.

Impact 7.11-1 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?

Level of Significance: Less than Significant Impact

Increase in the demand for existing neighborhood and regional parks or other recreational facilities typically occurs due to an increase in the residential population. To this effect, the Project would include the addition of 250 units in the northwest corner of the site and approximately 1,377 multi-family units in the southeast district of the site. The Project additionally includes two on-site hotels, the temporary residents of which could utilize existing neighborhood recreational facilities.

To accommodate both on- and off-site residents, the Project proposes a number of recreational opportunities that would be accessible to the public. These recreational components include: a common greenway (public park) that would act as a public plaza and an exterior ‘pavilion’ Food Market. In addition, the Project would provide the regional community with a revitalized shopping mall, various entertainment and recreational vendors, and pedestrian-designed connections and public spaces. Due to the nature of these proposed recreational opportunities, the Project has the potential to alleviate pressure on surrounding open spaces and parks and offset direct Project impacts to existing recreational facilities. In addition, each individual site-specific development within PA 2A would need to satisfy the City’s park requirements, which may require payment of park mitigation fees. The Project would satisfy the City’s open space standards by providing a combination of public plaza open space, public accessible open space, and private common open space. Therefore, impacts from the increased use of existing neighborhood and regional parks or other recreational facilities would be less than significant.

Impact 7.11-2 Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Level of Significance: Less than Significant Impact

The Project does include the implementation of on-site recreational facilities including a public park and an outdoor dining pavilion. The Project would comply with the City’s goals and policies within its general plan, as well as the Quimby Act and City regulations through dedication of parkland and/or payment of in-lieu fees for parks and recreation purposes. Therefore, impacts to existing neighborhood and regional parks or other recreational facilities would be less than significant.

7.12 Tribal Cultural Resources

The SP-200 EIR did not identify the need for any mitigation measures related to tribal cultural resources because no significant historic and prehistoric resources were identified throughout the site, and no action under regulations governing Native American concerns were required.

Impact 7.12-1 *Would the Project be developed in an area 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)?*

Level of Significance: Less than Significant Impact

The Project site would involve the redevelopment of a site that is not listed, or eligible for listing, in the California Register of Historical Resources (CRHR), or in a local register of historical resources.³⁰ Being currently developed, the Project site does not contain any resources that are likely to have historical significance. Implementation of the Project would not have an adverse effect on resources listed in the CRHR or any local register and impacts are considered to be less than significant.

Impact 7.12-2 *Would the Project contain 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 §5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?*

Level of Significance: Less than Significant Impact

Public Resources Code §5024.1(c) specifies criteria for the eligibility of resources to be listed in the CRHR. The criteria would be met if a resource was associated with significant California cultural heritage, important historical persons, distinctive or artistic characteristics, and has the likelihood to yield important history. Prior to the 1992 establishment of the Moreno Valley Mall, the Project site contained a portion of the Riverside International Raceway from 1957 to 1989. There are no recorded uses prior to 1957 that would lend historical significance to the site. Additionally, SP-200 found that no mitigation measures related to the eligibility, or rather lack therefore, for the CRHR were required. The City conducted tribal consultation pursuant to AB-52 and SB-18, refer to **Section 4.3, Cultural Resources** of this Draft SEIR for more information. The Project would not have significant impacts on tribal cultural resources pursuant to §5024.1(c) criteria. Therefore, impacts would be less than significant.

7.13 Wildfire

The SP-200 EIR determined that, due to the absence of significant adverse impacts to biological resources and the highly disturbed condition of the site, adverse impacts related to wildfire are not significant and no mitigation measures are warranted. Due to a lack of significant impacts, previous environmental analysis within the SP-200 EIR found that no mitigation measures were warranted relating to wildlife risk.

³⁰ City of Moreno Valley (2021). *Final Environmental Impact Report for the MoVal 2040; Figure 4.5-1*. Available at http://www.moval.org/cdd/documents/general-plan-update/final-docs/Moval%202040_Final%20EIR_with%20RTCs.pdf. Accessed January 13, 2022.

Impact 7.13-1 *If located in or near SRA or lands classified as Very High FHSZ, would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?*

Impact 7.13-2 *If located in or near SRA or lands classified as Very High FHSZ, would the Project, due to slope, prevailing winds, and other factors, exacerbate wildlife risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

Impact 7.13-3 *If located in or near SRA or lands classified as Very High FHSZ, would the Project 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?*

Impact 7.13-4 *If located in or near SRA or lands classified as Very High FHSZ, would the Project 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?*

Level of Significance: No Impact

According to the California Department of Forestry and Fire Protection, the Project site is not within or in proximity to a VHFHSZ, nor is it within a State Responsibility Area (SRA).³¹ The Project site is located within a Local Responsibility Area (LRA) and currently receives fire protection services from the Moreno Valley Fire Department (MVFD). Furthermore, compliance with General Plan policies would ensure that the Project would not impair an adopted emergency response plan or emergency evacuation plan. Therefore, there is no impact.

Impact 7.13-5 *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?*

Level of Significance: Less Than Significant Impact

The current Project would include the construction of roadways, landscaping, signage, lighting, and utility improvements within the Project site. The site is not located near a wildland interface and it is not within a designated VHFHSZ. The MVFD, according to the General Plan, would review all plans for adequate fire suppression, fire access, and emergency evacuation. Furthermore, approval of new development is conditioned on review by the MVFD and the Moreno Valley Department of Public Works to ensure adequate emergency access. Therefore, adherence to City policy and California Fire Code would reduce potential impacts to a level of less than significant, and no mitigation would be required.

³¹ State of California (2022). *California Fire Hazard Severity Zone Viewer*. Available at <https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414>. Accessed January 12, 2022.

Impact 7.13-6 *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?*

Level of Significance: No Impact

The Project concerns the redevelopment of an existing development in heavily urbanized surroundings. The Project site is relatively flat and would not implement additional grading that would potentially result in a significant downslope or downstream. Therefore, the potential exposure of people or structures to flooding or landslides from post-fire slope instability would not increase due to project implementation. Additionally, adherence to City policy regarding stormwater and building runoff (Municipal Code §8.10) would manage potential changes to existing site drainage due the construction of new buildings. Therefore, there would not be any anticipated impacts and no mitigation is necessary.

7.14 References

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- Map S-2 *Liquefaction Hazards*
- Map S-3 *Landslide Hazards*.

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- Figure 4.5-1 *Historic Resources*;
- Figure 4.12-1 *Mineral Resource Zones*;
- Figure 4.18-1 *California Fire Hazard Severity Zone*.

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8.0 EIR CONSULTATION AND PREPARATION

This section is consistent with the requirements set forth in §21153 of the PRC and §15129 of the CEQA Guidelines, which states: “The EIR shall identify all federal, state, or local agencies, other organizations, and private individuals consulted in preparing the draft EIR, and the persons, firm, or agency preparing the draft EIR, by contract or other authorization.” Refer to **Section 2.2, Notice of Preparation/Early Consultation** for a summary of public notification and consultation.

The NOP and NOP comment letters are provided in **Appendix A, Notice of Preparation & Public Scoping Meeting**. The City provided multiple opportunities for public input, both as part of the CEQA process and as part of Project scoping. In addition to required public notifications under CEQA, the City has engaged in consultation with the Morongo Band of Mission Indians, the Pechanga Band of Indians, and the Rincon Band of Luiseno Indians, pursuant to AB 52 and SB 18, as discussed further in **Section 4.3, Cultural Resources** and provided in **Appendix D**.

8.1 EIR Consultation

Lead Agency

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Notice of Preparation Commenters

As noted above, the City engaged in public and agency consultation through the NOP and public scoping process. The following entities provided comments on the NOP, which have been considered as part of this EIR preparation process.

Member of the Public, Ann McKibben

Member of the Public, Christian Alamillo

Moreno Valley Unified School District, Samer Alzubaidi

Southern California Association of Governments, Frank Wen, Ph.D.

Eastern Municipal Water District, Al Javier

Southwest Regional Council of Carpenters, Mitchell Tsai

Member of the Public, Richard Holcomb

South Coast Air Quality Management District, Lijin Sun

Member of the Public, George Hague

Californians Allied for a Responsible Economy, Jeff Modrzejewski

Morongo Band of Mission Indians Tribal Historic Preservation Office, Bernadette Ann Brierty

Riverside County Flood Control and Water Conservation District, Kevin Cunningham

Native American Heritage Commission, Andrew Green

8.2 List of Preparers

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Tentative Parcel Map

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