FINAL

MARTHA MCLEAN ANZA NARROWS PARK AND JURUPA AVENUE TRAILHEAD MASTER PLANS, RIVERSIDE GATEWAY PARKS
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

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Acronyms and Abbreviations

°C	degree Celsius
AB	Assembly Bill
AMSL	above mean sea level
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
Basin	South Coast Air Basin
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH_4	methane
CHRIS	California Historical Resources Information System
City	City of Riverside
CNEL	Community Noise Equivalent Level
CO_2	carbon dioxide
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Ranking
dB	decibel
dBA	A-weighted decibels
DPR	Department of Recreation
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EMFAC2021	California Air Resources Board's Emission Factor model
EO	Executive Order
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
g	gravitational acceleration

GHG	greenhouse gas
GP 2025	Riverside General Plan 2025
HCP	habitat conservation plan
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
L_{50}	noise level exceeded for 50 percent of the time
L_{eq}	equivalent continuous sound level
LID	low-impact development
L_{max}	maximum noise level
LST	localized significance threshold
mg/L	milligrams per liter
MRZ	mineral resource zone
MSHCP	Multiple Species Habitat Conservation Plan
$MTCO_2e$	metric tons of carbon dioxide equivalent
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PPV	peak particle velocity
PQP	Public/Quasi-Public
PRC	Public Resources Code
PRCSD	City of Riverside Parks, Recreation, and Community Services Department
proposed project	Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead Master Plans
RFD	Riverside Fire Department
RPD	Riverside Police Department
RPU	Riverside Public Utilities
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SARCP	Santa Ana River Conservancy Program
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SRA	Source Receptor Area

State CEQA Guidelines	Guidelines for Implementation of the California Environmental Quality Act
SWPPP	Stormwater Pollution Prevention Plan
TCR	tribal cultural resource
VMT	vehicle miles traveled

Chapter 1
Introduction

1.1 Introduction

Document Purpose and Scope

The City of Riverside (City) Parks, Recreation, and Community Services Department (PRCSD), Planning and Design Division is preparing several Park Master Plans for sites along the Santa Ana River Trail in Riverside, California under the Riverside Gateway Parks Program. This suite of projects includes the Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead Master Plans (proposed project), which are the subjects of this environmental document. The City, in its capacity as the lead agency for the proposed project, has determined the need for preparation of an Initial Study (IS) pursuant to provisions of the California Environmental Quality Act (CEQA) of 1970 and the Guidelines for Implementation of CEQA (State CEQA Guidelines), as amended. CEQA formally calls this document an Initial Study, and it is a critical component of the environmental review process. The IS provides decision-makers, other public agencies, private groups, and/or individuals with an objective assessment of whether significant environmental impacts may result from implementing the proposed project.

The proposed project's scope includes the analysis of both the Jurupa Avenue Trailhead and Martha McLean Anza Narrows Park due to their close proximity to one another, their relationship under the Riverside Gateway Parks and Tributaries Restoration Project and Mitigation Reserve Program, and construction for both occurring at approximately the same time.

1.1 Statutory Authority and Relationship to Other Documents

This IS has been prepared in accordance with the requirements of CEQA and the State CEQA Guidelines, codified in the California Code of Regulations (CCR), Title 14, Chapter 3, §15000 et seq., for the purpose of analyzing the direct, indirect, and cumulative environmental effects associated with the proposed project.

The State CEQA Guidelines in §15063(a) require that, "Following preliminary review, the Lead Agency shall conduct an Initial Study to determine if the project may have a significant effect on the environment." If, as a result of the IS, the lead agency finds that there is evidence that any aspect of the proposed project may cause a significant environmental effect, the lead agency shall further find that an Environmental Impact Report (EIR) is warranted to analyze environmental impacts. However, if, on the basis of the IS, the lead agency finds that the proposed project will not cause a significant effect on the environment, either as proposed or as modified to include the mitigation measures identified in the IS, a Negative Declaration or Mitigated Negative Declaration shall be prepared for that pending action.

Presented in this document are the results of the environmental analysis required under §15063 of the State CEQA Guidelines.

Statutory Requirements

Section 15063(d) of the State CEQA Guidelines identifies specific disclosure requirements for inclusion in an IS. Pursuant to those requirements, an IS includes the following:

- A description of the proposed project, including the location of the proposed project;
- An identification of the environmental setting;
- An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries. The brief explanation may be either through a narrative or a reference to another information source such as an attached map, photographs, or an earlier EIR or negative declaration. A reference to another document should include, where appropriate, a citation to the page or pages where the information is found;
- A discussion of ways to mitigate any significant effects identified, if any;
- An examination of whether the proposed project is compatible with existing zoning, plans, and other applicable land use controls; and
- The name of the person or persons who prepared or participated in the preparation of the IS.

Relationship to Other Documents

Pursuant to State CEQA Guidelines §15150, this IS incorporates by reference all or portions of other technical documents that are a matter of public record. Those documents either relate to the proposed project or provide additional information concerning the environmental setting in which the project is proposed. Where all or a portion of another document is incorporated by reference, the incorporated language shall be considered to be set forth in full as part of the text of this IS. A list of technical documents used in preparation of this IS is provided in Chapter 4, *References Cited*.

Tributaries Restoration Project and Mitigation Reserve Program

The San Bernardino Valley Municipal Water District, as the lead agency, adopted an EIR on November 19, 2019, for the Tributaries Restoration Project and Mitigation Reserve Program (ICF 2019; SCH# 2018071024). This project proposed to construct and maintain four tributary restoration sites and create a Mitigation Reserve Program along the Upper Santa Ana River in the cities of Riverside and Jurupa Valley and in Riverside County. The four project sites are Anza Creek, Old Ranch Creek, Lower Hole Creek, and Hidden Valley Creek. The proposed project would re-establish, enhance, rehabilitate, and/or preserve jurisdictional aquatic resource habitat and/or improve conditions for Santa Ana sucker. This would be accomplished by improving conditions in existing channels, excavating new channels, restoring associated floodplain surfaces and habitats, controlling nonnative invasive species, supporting the existing local community environmental education and recreational opportunities at each of the sites, and establishing a Mitigation Reserve Program that would provide opportunities for additional restoration activities on each of the sites. The EIR did not identify significant and unavoidable impacts.

The Tributaries Restoration Project and Mitigation Reserve Program would promote responsible access to and use of public recreation in designated locations along the Upper Santa Ana River. The Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead sites were included at least partially in the analysis as Anza Creek and Lower Hole Creek, respectively. As such, this IS incorporates the Tributaries Restoration Project and Mitigation Reserve Program EIR by reference.

1.2 Riverside Gateway Program

As discussed under *Document Purpose and Scope*, above, the Jurupa Avenue Trailhead and Martha McLean Anza Narrows Park constitute two of the eight park sites proposed as part of the Riverside Gateway Parks Program. Master plans for other park sites in the City are being prepared for Loring Park, Camp Evans, Carlson Park/St. Francis Falls, Tequesquite North, Tequesquite South, and Santa Ana River Greenway. The Riverside Gateway Parks Program is a forward-looking proposal to recover, re-conceive, and re-engage with the Santa Ana River to deliver ecological, recreational, cultural, social, and economic value to the City's inhabitants. The Riverside Gateway Parks Program is primarily funded by a grant provided by the State Coastal Conservancy. The Riverside Gateway Parks Program proposed by PRCSD involves a multidisciplinary effort for the planning, design, engineering, and associated community outreach and environmental compliance for CEQA review for eight identified park sites in the City.

The Santa Ana River Trail adjacent to the Santa Ana River is completed throughout its length in the City. After completing the 2018 update to the Citywide Parks System Master Plan, PRCSD proposed to complete planning and design for improvements and enhancement to existing and proposed park areas along the Santa Ana River. The master planned park and open space improvements support the goals and objectives of the Santa Ana River Parkway and Open Space Plan that was completed in 2018. Development of these park sites would comply with the City's overarching goal to "put the river back into Riverside" by providing diverse recreational and educational opportunities, access to open space, and restoration of natural habitat for people and wildlife. Additionally, the work contributes to several of the City's Strategic Plan Priorities and Goals (Coastal Conservancy 2018).

- Priority 1 – Arts, Culture and Recreation:
    - Goal 1.3: improve parks, recreational amenities, open space, and trail development, and fulfill critical lifecycle and facility maintenance needs
    - Goal 1.4: to prioritize safety at parks, trails, arts, cultural and recreational facilities
- Priority 2 – Community Wellbeing:
    - Goal 2.3: strengthen neighborhood identities and improve community health and the physical environment through amenities and programs that foster an increased sense of community and enhanced feelings of pride and belonging citywide, and
- Priority 4 – Environmental Stewardship:
    - Goal 4.5: Maintain and conserve 30% of Riverside's natural lands in green space including, but not limited to, agricultural lands and urban forests in order to protect and restore Riverside's rich biodiversity and accelerate the natural removal of carbon, furthering our community's climate resilience.
- Priority 5 – High Performing Government:

- Goal 5.3: enhance communication and collaboration with community members to improve transparency, build public trust, and encourage shared decision-making.

Chapter 2
Project Description

2.1 Project Location

The proposed project includes approximately 47 acres featuring active and passive recreation opportunities on existing, undeveloped public land in the City of Riverside within Riverside County, California (City of Riverside 2022a) (see Appendix B1, *Martha McLean Anza Narrows Park Master Plan,* and Appendix B2, *Jurupa Avenue Trailhead Master Plan*). Specific project location details regarding Martha McLean Anza Narrows Park and the Jurupa Avenue Trailhead are described below.

Martha McLean Anza Narrows Park

The approximately 39.5-acre Martha McLean Anza Narrows Park project site consists of the existing Martha McLean Anza Narrows Park, which is City-owned and managed parkland at 5759 Jurupa Avenue in the City of Riverside within Riverside County, California (see Appendix B1, *Martha McLean Anza Narrows Park Master Plan*). The regional location is shown on Figure 1, *Regional Vicinity Map*. The project site is bounded by the Santa Ana River Trail to the north and east, Jurupa Avenue to the south, and Union Pacific Railroad to the west. The local vicinity of the proposed project site is shown on Figure 2, *Local Vicinity Map*. The Assessor's Parcel Number (APN) for the site is 187-210-0008. The project site is in Ward 1 of the Grand neighborhood area.

Jurupa Avenue Trailhead

The approximately 7.7-acre Jurupa Avenue Trailhead project site consists of undeveloped City-owned and managed parkland immediately adjacent to the Santa Ana River Trail in the City of Riverside within Riverside County, California (see Appendix B2, *Jurupa Avenue Trailhead Master Plan*). The regional location is shown on Figure 1. The project site is bounded by the Santa Ana River to the north, Van Buren Boulevard to the east, Jurupa Avenue to the south, and Bradford Street to the west. The Santa Ana River Trail surrounds the project site to the east, south, and west. The local vicinity of the proposed project site is shown on Figure 2. The APN for the site is 155-060-027. The project site is in Ward 7 in the Airport neighborhood area.

2.2 Existing Conditions

Martha McLean Anza Narrows Park

The Martha McLean Anza Narrows Park project site is an existing park built in 1990 that consists of turf, trees, irrigated plants, walking paths, picnic tables, a disc golf course, and restrooms. There is adjacent land owned by Riverside County on which there is direct Santa Ana River access through a chain-link fence, where there is a mix of native and nonnative plants and trees. The path to the river is an informal and uneven mix of stones, sand and river debris. Future improvements to provide

better access to the river, including Americans with Disabilities Act–compliant access, are not analyzed in this MND and will be subject to a separate, future project-level analysis. The project site acts as a vista with views to the north of the Jurupa Valley basin, Jurupa Mountain, and Santa Ana River.

The project site is surrounded by the Santa Ana River Trail to the north, the Santa Ana River Trail and single-family homes to the east, Union Pacific Railroad and a vacant lot across Jurupa Avenue to the south, and Union Pacific Railroad to the west.

As an existing park in the City, the project site has a Riverside General Plan 2025 (GP 2025) land use designation of Public Park (P) and a zoning designation of Public Facilities (PF). The surrounding parcels have a Public Park (P) land use to the north, Public Park (P) and Low Density Residential (LDR) land uses to the east, Right-of-Way (ROW) and High Density Residential (HDR) land uses to the south, and Right-of-Way (ROW) to the west (City of Riverside 2023). The project site is in Ward 1 in the Grand neighborhood area.

Jurupa Avenue Trailhead

The Jurupa Avenue Trailhead project site is along Jurupa Avenue. It is bordered by a residential neighborhood to the west, and the north and east sides of the project run along the Hole Lake recreation area. The site is near what will soon be a car wash on the northwest corner of Van Buren Boulevard and Jurupa Avenue, and a gas station with a convenience store on the southwest corner of Van Buren Boulevard and Jurupa Avenue. It is currently undeveloped and does not provide recreational opportunities. Project site elevations range from approximately 690 to 750 feet, and, while much of the site is flat, it has steeped terraced edges along Hole Lake with slopes as steep as 60 percent within the southern portion.

The proposed project site is primarily undeveloped City-owned and -maintained park land with groundcover of dry grasses and dirt paths. Much of the site is disturbed land that is mowed annually for weed abatement. The proposed project site is sparsely vegetated, primarily with nonnative plants and ornamental trees. A vegetated drainage with a mix of native and invasive plants runs through the eastern edge of the site. The proposed project site acts as a vista with views to the north of the Jurupa Valley basin, Jurupa Mountain, and Santa Ana River.

The Jurupa Avenue Trailhead is zoned as Residential Estate (RE) and has a GP 2025 land use designation of Open Space (OS). Surrounding parcels have Open Space (OS) land uses to the north, Commercial and Public Facilities/Institutional to the east, Private Recreation and Open Space to the south, and Medium Density Residential to the west (City of Riverside 2023). The project site is in Ward 7 in the La Sierra Acres neighborhood area.

2.3 Project Objectives

The objectives for the proposed project are:

- Develop park areas to increase and improve free or low-cost, easily accessible recreational opportunities so that the community has convenient access to play, exercise, connect with nature, and gather as a community, increasing the community's physical, emotional, and social health and wellness.

- Provide a formal connection between the project sites, the Santa Ana River, and the Santa Ana River Trail.
- Plant native and other low-water-use vegetation and trees in barren and underutilized public lands to beautify them and to increase the quantity and quality of habitat.
- Create support amenities for the Santa Ana River Parkway and Trail such as drinking water, bike racks and parking, bicycle repair station, parking for cars and trailers, seating, and shaded resting areas for the community to connect with the Santa Ana River.
- Provide diverse recreational and educational opportunities, access to open space, and restoration of natural habitat for people and wildlife.

2.4 Project Characteristics

The proposed project provides master plans for two of eight sites, Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead, identified to receive funds as part of the City of Riverside Santa Ana Parkway Improvements Projects (also referred to as the Riverside Gateway Parks Project) under the Santa Ana River Conservancy Program (SARCP). The proposed project would create parks and trails with passive and active recreational features. A detailed description of the proposed changes at both project sites is detailed below.

Martha McLean Anza Narrows Park

After collaboration between PRCSD and the residents of the City, it was determined that education, river-related elements, and views were of the highest interest to the public in regard to Martha McLean Anza Narrows Park (PRCSD 2022). To fulfill these goals, the proposed project would develop additional passive and active recreational amenities on 10.63 acres of undeveloped parkland at the existing Martha McLean Anza Narrows Park such as a direct connection to the Santa Ana River with terraced steps, a decomposed granite pedestrian trail, play areas, outlooks, seating, gardens, restrooms, parking, bike racks/stops, and landscaping. Vehicular access to the project site would be along the driveway on Jurupa Avenue. Figure 3, *Martha McLean Anza Narrows Site Plan*, and the Martha McLean Anza Narrows Park Master Plan provided in Appendix B1 depict the proposed development of the site. The proposed project is designed to provide a low-use, high-security development that capitalizes on the views, existing trail, geologic features, and native landscaping options on the project site.

The anticipated buildout for the proposed project includes the following recreational features provided in the master plan (PRCSD 2022):

- An outpost overlook
- Terraced river steps
- Community meadow and gathering space
- Water play arroyo
- Nature play area
- Restrooms, outdoor showers, and storage
- Re-aligned parking (48 parking spots [currently 43 spots])

- Stormwater management bioswale
- Road rehabilitation-vehicle barrier (curb, fencing, boulders, etc.)
- Proposed parking (27 spots) with bollards or gates from entering the bike path
- Exercise stations
- Native pollinator gardens
- Band shell and community meadow
- Bike rest stop
- Vehicular barrier along pedestrian walk
- Vehicular access gate/Santa Ana River Trail safety check points
- River outlook swings
- Shaded seating area and crosswalk to river access
- Terraced hillside steps
- Overlook seating area
- Ridge trail
- Native pollinator planting: seasonally seeded
- Outdoor classroom

The construction schedule is not known as of July 2023, as this project is still in the Master Plan phase. Once project design is completed and construction funding is identified, the construction schedule will be finalized. For the purposes of this document, conservative estimates were utilized for air quality analysis as provided by the California Emissions Estimator Model (CalEEMod) and the preparers of the analysis assumed that the construction period starts on January 1, 2024, and ends on March 29, 2025. Construction would comply with the City of Riverside Municipal Code and construction activities are not anticipated to take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or at any time on Sunday or a federal holiday. Construction of the proposed project would result in approximately 135 cubic yards of soil export during the grading phase. The removal of this debris is estimated to require a maximum of one haul truck trip per day during the grading phase, with other phases experiencing four daily haul truck trips. Aside from haul truck trips, daily work/vendor/delivery truck trips would also occur during construction of the proposed project. Maintenance activities during project operations may involve vehicles traveling to the site and use of small equipment that may be needed to remove weeds and trash from the site, similar to current operations at the existing park.

An existing storm drain pipe outlets and drains into the Camp Evans area. The proposed recreational development will not impact the storm drain, but the outlet area and channel downstream will need to be cleaned of sediment build-up periodically to ensure positive drainage. The impacts of this on-going maintenance work is included in this document

Jurupa Avenue Trailhead

The proposed project would develop a public park and trailhead to provide a variety of passive recreational opportunities including paths and trails, native planting and pollinator gardens, seating,

shade structures, educational signage, and overlooks. Active park elements include bike paths and music and nature play areas.

Figure 4, *Jurupa Avenue Trailhead Site Plan*, and the Jurupa Avenue Trailhead Master Plan provided in Appendix B2 depict the proposed development of the site. The proposed project is designed to provide a low-use, high-security development that capitalizes on the views, existing trail, geologic features, and native landscaping options on the project site. Pedestrian and vehicular access would both be available on Jurupa Avenue. The portion of the Santa Ana River Trail that runs through the project site would be overlaid with decomposed granite in order to function as a pedestrian path, and a new bike path would connect to Jurupa Avenue and run adjacent to the trail. The eastern portion of the site, which includes ornamental trees and native and nonnative vegetation, comprises the biological avoidance zone and would not be developed as part of the project. Vehicular parking would be provided on site along Jurupa Avenue.

To enhance the natural site characteristics and restore habitat at the proposed project site, the project design would utilize natural materials, including decomposed granite for paths and landing, as well as gravel, cobblestones, and landscaping boulders along walkways. Shade trees, such as elderberry, desert willow, and oak trees, would be incorporated into the landscape design along with native shrubs, flowers, and succulents. Reused concrete would be used for walls, and concrete would be used for walls, benches, and stairs. Additional shade features and wildlife screens would be constructed from steel.

The anticipated buildout for the proposed project includes the following recreational features provided in the master plan (PRCSD 2022):

- Vehicular access gate/safety check point
- Entry monument sign
- Park gateway monument
- Pedestrian connection to crosswalk to Rutland Park
- Sidewalk with planted buffer
- New bike path alignment
- Decomposed granite pedestrian path
- New vegetation buffer
- Bike hub with restrooms
- Demonstration garden
- Nature play area
- Large shade structures
- Arroyo Plaza play area
- Music play area with trees
- Great lawn
- Native plant seeded area
- Boulders as vehicular barrier

- Native planting seeded area
- Outlook with benches

The construction schedule is not known as of July 2023, as this project is still in the Master Plan phase. Once project design is completed and construction funding is identified, the construction schedule will be finalized. For the purposes of this document, conservative estimates were utilized for air quality analysis as provided by CalEEMod and the preparers of the analysis assumed that the construction period started on January 1, 2024, and ended on March 29, 2025 but is contingent upon when construction funding is obtained. Construction would comply with the City of Riverside Municipal Code and construction activities are not anticipated to take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or at any time on Sunday or a federal holiday. Construction of the proposed project would result in approximately 985 cubic yards of soil export during the grading phase. The removal of this debris is estimated to require a maximum of seven haul truck trips per day during the grading phase, with other phases experiencing zero daily haul truck trips. Aside from haul truck trips, daily work/vendor/delivery truck trips would also occur during construction of the proposed project. Maintenance activities during project operations may involve vehicles traveling to the site and use of small equipment that may be needed to remove weeds and trash from the site.

2.5 Discretionary Actions Requested and Permits Required

The proposed project would require the following regulatory approvals from the City as the lead agency:

- Certificate of Appropriateness
- Building Permit

Chapter 3
Environmental Checklist

1.	**Project Title:**	Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead Master Plans, Riverside Gateway Parks Project
2.	**Lead Agency Name and Address:**	City of Riverside, 6927 Magnolia Avenue, Riverside, CA 92506
3.	**Contact Person and Phone Number:**	Alisa Sramala, (951) 826-2021
4.	**Project Location:**	Martha McLean Anza Narrows Park (5759 Jurupa Avenue and APN 187-210-0008) and Jurupa Avenue Trailhead (APN 155-060-027), Riverside, CA
5.	**Project Sponsor's Name and Address:**	City of Riverside, 6927 Magnolia Avenue, Riverside, CA 92506
6.	**General Plan Designation:**	Martha McLean Anza Narrows Park: Public Park (P) Jurupa Avenue Trailhead: Open Space (OS)
7.	**Zoning:**	Martha McLean Anza Narrows Park: Public Facilities (PF) Jurupa Avenue Trailhead: Residential Estate (RE)

8. Description of Project:

The proposed project would develop a new park with recreational amenities at the Jurupa Avenue Trailhead site and install additional active and passive recreational amenities at the existing Martha McLean Anza Narrows Park site. A detailed list of project components can be found in Section 2.4, *Project Characteristics*.

An existing storm drain pipe outlets and drains into the Camp Evans area. The proposed recreational development will not impact the storm drain, but the outlet area and channel downstream will need to be cleaned of sediment build-up periodically to ensure positive drainage. The impacts of this on-going maintenance work is included in this document

9. Surrounding Land Uses and Setting:

Martha McLean Anza Narrows Park

The project site is surrounded by the Santa Ana River Trail to the north, the Santa Ana River Trail and single-family homes to the east, Union Pacific Railroad and a vacant lot across Jurupa Avenue to the south, and Union Pacific Railroad to the west.

As an existing park in the City, the project site has a General Plan land use designation of Public Park (P) and a zoning designation of Public Facilities (PF). The surrounding parcels have a Public Park (P) land use to the north, Public Park (P) and Low Density Residential (LDR) land uses to the east, Right-of-Way (ROW) and High Density Residential (HDR) land uses to the south, and Right-of-Way (ROW) to the west (City of Riverside 2023).

Jurupa Avenue Trailhead

The Jurupa Avenue Trailhead project site is surrounded by a residential neighborhood to the west, and the north and east sides of the project run along the Hole Lake recreation area.

The Jurupa Avenue Trailhead is zoned as Residential Estate (RE) and has a GP 2025 land use designation of Open Space (OS). Surrounding parcels have Open Space (OS) land uses to the north, Commercial and Public Facilities/Institutional to the east, Private Recreation and Open Space to the south, and Medium Density Residential to the west (City of Riverside 2023).

10. Other Public Agencies Whose Approval is Required:

None

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

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

The City sent out Assembly Bill 52 consultation notices to tribes to initiate consultation on September 22, 2022. The following California Native American tribes were notified pursuant to Public Resources Code Section 21080.3.1:

- Gabrieleño Band of Mission Indians–Kizh Nation
- Soboba Band of Luiseño Indians (responded with request for project consultation)
- Cahuilla Band of Indians
- Pechanga Cultural Resources Department
- Rincon Band of Luiseño Indians
- San Manuel Band of Mission Indians (Yuhaaviatam of San Manuel Nation responded with request for more information and possible project consultation)
- Morongo Band of Mission Indians (responded with request for project consultation)
- Agua Caliente Band of Cahuilla Indians
- San Gabriel Band of Mission Indians

Coordination with the tribes is ongoing.

3.1 Environmental Factors Potentially Affected

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

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

3.2 Determination

On the basis of this initial evaluation:

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

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

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

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

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

Signature _____ Date _____

On the basis of this initial evaluation:

Printed Name | For

3.3 Evaluation of Environmental Impacts

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

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
   a. the significance criteria or threshold, if any, used to evaluate each question; and
   b. the mitigation measure identified, if any, to reduce the impact to a less-than-significant level.

3.4 Specific Evaluation of Environmental Impacts for the Proposed Project

As mentioned in Section 1.1, *Introduction*, the proposed project consists of the evaluation of environmental impacts for both the Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead sites due to their close proximity to one another, their relationship under the Riverside Gateway Parks Program, and that construction of both occurring at approximately at the same time. Therefore, the analysis in the following sections determine the individual impacts of each site as well as an overall impact analysis that accounts for the cumulative impacts of both sites. If both sites can be covered under the same analysis, it is covered under one analysis.

I Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	☐	☐	☒	☐
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

Affected Environment

Although the majority of Riverside is urbanized, the hills and ridgelines that surround the City provide scenic vistas to residents of Riverside where they can experience long-distance views of natural terrain. Vista points can be found throughout the City, both as viewed from urban areas toward the hills and from wilderness areas toward Riverside. The most notable scenic vistas in the City include the La Sierra/Norco Hills, Sycamore Canyon Wilderness Park, and Box Springs Mountain Regional Park. The peaks of Box Springs Mountain, Mount Rubidoux, Arlington Mountain, Alessandro Heights, and the La Sierra/Norco Hills provide scenic views of the City and the region (City of Riverside 2007).

The Santa Ana River watercourse and riverbed is another prominent scenic resource that extends from the City's northern edge. The Santa Ana River is a place of natural beauty and of important natural habitat for many species of birds and other animals as well as being a prominent visual landmark for visitors and residents. Both project sites act as vistas with views to the north of the Jurupa Valley basin, Jurupa Mountain, and the Santa Ana River.

Martha McLean Anza Narrows Park

The Martha McLean Anza Narrows Park project site currently consists of turf, trees, irrigated plants, walking paths, picnic tables, a disc golf course, and restrooms. The area of the park site to be improved includes undeveloped City-owned and -managed parkland. The site has direct Santa Ana

River access through a chain-link fence, where there is a mix of native and nonnative plants and trees. The path to the river is an informal and uneven mix of stones, sand, and river debris. The project site is surrounded by the Santa Ana River Trail to the north, the Santa Ana River Trail and single-family homes to the east, Union Pacific Railroad and a vacant lot across Jurupa Avenue to the south, and Union Pacific Railroad to the west.

Jurupa Avenue Trailhead

The Jurupa Avenue Trailhead project site is primarily undeveloped City-owned and -managed park land. The surrounding land uses include a residential neighborhood to the west, recreation areas to the east, and the Santa Ana River to the north. Project site elevations range from approximately 690 to 750 feet, and, while much of the site is flat, it has steeped terraced edges along Hole Lake with slopes as steep as 60 percent within the southern portion. The project site is sparsely vegetated, primarily with nonnative plants and ornamental trees.

Discussion

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

Martha McLean Anza Narrows Park

Less-than-Significant Impact. The Martha McLean Anza Narrows Park project site currently consists of undeveloped parkland and recreational facilities including turf, trees, irrigated plants, walking paths, picnic tables, a disc golf course, and restrooms. The proposed project site acts as a vista with views to the north of the Jurupa Valley basin, Jurupa Mountain, and Santa Ana River. Implementation of the proposed project would include new scenic overlooks and terraced river steps that provide improved public access to scenic vistas at the project site. The proposed project would also include a new decomposed granite trail, planting of native vegetation and trees, and other recreational components that would beautify the project site compared to existing conditions. Additionally, the project would not develop any large-scale buildings that would block views of scenic vistas. Therefore, the proposed project would not be expected to have a substantial adverse effect on a scenic vista, and the impact from construction and operation of the proposed project would be less than significant.

Jurupa Avenue Trailhead

Less-than-Significant Impact. The Jurupa Avenue Trailhead project site is primarily undeveloped City-owned and -maintained park land with groundcover of dry grasses and dirt paths. The proposed project site is sparsely vegetated, primarily with nonnative plants and ornamental trees. The proposed project site acts as a vista with views to the north of the Jurupa Valley basin, Jurupa Mountain, and Santa Ana River. Implementation of the proposed project would include new scenic overlooks with benches and provide improved public access to scenic vistas at the proposed project site. The proposed project would also include planting native vegetation and trees to beautify the currently barren and underutilized public land. Therefore, the proposed project would not be expected to have a substantial adverse effect on a scenic vista, and the impact from construction and operation of the proposed project would be less than significant.

Overall Impact

Less-than-Significant Impact. The proposed project would beautify both project sites with new recreational amenities and landscaping, would provide seating and outlooks to improve access/ views to scenic vistas, and would not develop any structures that would block views of scenic vistas surrounding the project sites. Therefore, the project would have a less-than-significant impact regarding scenic vistas.

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

Martha McLean Anza Narrows Park

No Impact. The Martha McLean Anza Narrows Park project site is not along or adjacent to an officially designated scenic highway under the California State Scenic Highway Mapping System. The closest officially designated scenic highway to the project site, a portion of State Route 91, is approximately 20 miles southwest of the project site (Caltrans 2023). Due to the large distance between the project site and the closest officially designated scenic highway, the proposed project would have no impact.

The City has designated several scenic and special boulevards within the City that meet local criteria for designation as scenic routes as shown on Figure 5.1-1, Scenic and Special Boulevards and Parkways, of the GP 2025 Programmatic EIR. The project site is not along or adjacent to any designated scenic and special boulevards. The closest scenic and special boulevard, Arlington Avenue, is approximately 1.1 miles south of the project site (City of Riverside 2007). Due to the large distance between the project site and the closest designated scenic and special boulevard, the proposed project would have no impact.

Jurupa Avenue Trailhead

Less-than-Significant Impact. The Jurupa Avenue Trailhead project site is sparsely vegetated with trees. The eastern portion of the site, which includes ornamental trees and native and nonnative vegetation, comprises the biological avoidance zone and would not be developed as part of the project. There are no rock outcroppings in the portion of the project site that would be developed. The proposed project site is not within a California State Scenic Highway as designated on the California Scenic Highway Mapping System (Caltrans 2023). According to Figure 5.1-1, Scenic and Special Boulevards, of the GP 2025 Programmatic EIR, Van Buren Boulevard, which runs along the eastern border of the proposed project site, is a locally designated scenic boulevard (City of Riverside 2007). Implementation of the proposed project would not result in the construction of any structures or features that would extend into the right-of-way or obstruct the view. Therefore, the proposed project would not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway, and the impact would be less than significant.

Overall Impact

Less-than-Significant Impact. Only the Jurupa Avenue Trailhead project site lies along a scenic boulevard. However, the proposed project would not extend and develop into the right-of-way. Therefore, the proposed project would not substantially damage scenic resources, including but not

limited to trees, rock outcroppings, and historic buildings within a state scenic highway, and project impacts would be less than significant.

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

Martha McLean Anza Narrows Park

Less-than-Significant Impact. The Martha McLean Anza Narrows Park project site is within an urbanized portion of the City. Therefore, the analysis discusses if the project would conflict with applicable zoning and other regulations governing scenic quality.

The project site has a General Plan land use designation of Public Park (P) and a zoning designation of Public Facilities (PF). The proposed project would incorporate park improvements such as formal access to the river, a new trail, an outdoor classroom, playgrounds, scenic overlooks, a community meadow, landscaping, seating, restrooms, and parking lots that are allowed under the zoning designation and are considered beneficial for the community. Additionally, the proposed project would further the Riverside Gateway Program's goals of providing diverse recreational and educational opportunities, access to open space, and restoration of natural habitat for people and wildlife. Therefore, the proposed project would not degrade the existing visual character or quality of the site or its surroundings, but instead would enhance these features of the site. Therefore, the proposed project impact would be considered less than significant.

Jurupa Avenue Trailhead

Less-than-Significant Impact. The Jurupa Avenue Trailhead project site is adjacent to land zoned as Open Space, Private Recreation, Medium Density Residential, and Commercial and Public Facilities/Institutional. The proposed project includes the development of a public park and trailhead; additional park space is generally considered a beneficial impact on a community. The proposed project includes publicly accessible pathways and trails, pollinator gardens, trees and other shade structures, seating, scenic overlooks, and music and nature play areas. These amenities would improve the currently undeveloped space to create a park capitalizing on the area's views and natural features. A vegetation buffer would be planted along the western border of the project site, which would create visual separation from the residential neighborhood. Therefore, the proposed project would not degrade the existing visual character or quality of the site or its surroundings but instead would enhance these features of the site. Therefore, the proposed project impact would be considered less than significant.

Overall Impact

Less-than-Significant Impact. The project sites would not conflict with applicable zoning regulations or degrade the existing visual character of the site or surrounding areas. Therefore, the proposed project would have a less-than-significant impact.

d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. The proposed project would include safety lighting along accessible trail routes and potentially other lighting at recreational features, Americans with Disabilities Act–compliant parking, and walkways. The new lighting would be required to comply with Lighting Zone One guidelines as outlined in Section 19.556.080, Design and Development Standards, in the City of Riverside Municipal Code. The new lighting would be required to be hooded and directed downward and designed to avoid offsite spillage. In addition, the proposed project's lighting plans, to be prepared along with building plans, would undergo an internal review by the Building Division of the Community Development Department. Therefore, the proposed project would not be expected to create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area, and the proposed project impact would be considered less than significant.

II Agricultural and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Affected Environment

Agriculture has historically been an important part of Riverside's economy. According to the 2021 Agricultural Production Report issued by the Riverside County Agricultural Commissioner's Office, in 2021 the county's total gross agricultural valuation was roughly $1.5 billion ($1,405,910,000). This was a decrease of $12 million (1 percent) from the 2020 total (County of Riverside 2021).

Martha McLean Anza Narrows Park

The Martha McLean Anza Narrows Park project site consists of approximately 39.5 acres of City-owned and -maintained parkland with improvements proposed on 10.63 acres of the existing park site. According to the California Department of Conservation's Farmland Mapping and Monitoring Program, the proposed project site is classified as Urban and Built-Up Land (CDOC 2022). Surrounding areas are classified as Urban and Built-Up Land and Other Land. Particularly within City limits, areas identified as important farmland are in fact largely developed or planned for other uses. The proposed project is not within areas designated as forestland.

Jurupa Avenue Trailhead

The Jurupa Avenue Trailhead project site consists of approximately 7.7 acres of primarily undeveloped City-owned and -maintained parkland. The site is sparsely vegetated, generally by nonnative plants and ornamental trees. According to the California Department of Conservation's Farmland Mapping and Monitoring Program, the proposed project site is classified as Other Land (CDOC 2022). Surrounding areas are classified as Urban and Built-Up Land and Farmland of Local Importance. According to GP 2025, areas classified as Farmland of Local Importance are non-irrigated properties that are either currently producing crops or had the capacity of production (City of Riverside 2012). Particularly within City limits, areas identified as important farmland are in fact largely developed or planned for other uses. The proposed project is not within areas designated as forestland.

Discussion

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. Both project sites are not on land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance and are classified as Urban and Built-Up Land and/or Other Land (CDOC 2022). As such, construction and operation of the proposed project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Therefore, no impact would occur.

b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act.

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. According to Figure OS-3, Williamson Act Preserves, of the GP 2025 Open Space and Conservation Element, both project sites are not within an area that is affected by a Williamson Act Preserve or under a Williamson Act Contract (City of Riverside 2012). Furthermore, both project sites are not zoned for agricultural use; therefore, no impact would occur.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. According to Figure OS-5, Habitat Areas and Vegetation Communities, of the GP 2025 Open Space and Conservation Element, the project sites do not contain any forestland or timberland. The Martha McLean Anza Narrows Park site is zoned Public Facilities (PF) and consists of an existing park. The Jurupa Avenue Trailhead project site is zoned as Residential Estate (RE) and is sparsely vegetated, generally by nonnative plants and ornamental trees. Therefore, construction and operation of the proposed project would not conflict with existing zoning for forestland or timberland, and no impact would occur.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. As discussed in Threshold II.c., no forestland is within either project site. Construction and operation of the proposed project would not result in the loss of forestland or conversion of forestland to non-forest use. No impact would occur.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project sites do not include existing agricultural or forestland. Construction and operation of the proposed project would not result in the conversion of farmland to non-agricultural use or the conversion of forestland to non-forest use. No impact would occur.

III Air Quality

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c.	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Affected Environment

This section discusses National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) and existing air quality conditions, identifies sensitive receptors, and describes the regulatory framework for air quality management. Air quality modeling inputs, assumptions, and results are contained in Appendices C1 and C2. The study area for this resource is generally defined as the proposed project construction and operational footprint, as well as the City of Riverside and Riverside County.

Air quality management agencies of direct importance in Riverside County are the U.S. Environmental Protection Agency (EPA), California Air Resources Board (CARB), and South Coast Air Quality Management District (SCAQMD). EPA has established federal air quality standards for which CARB and SCAQMD have primary implementation responsibility. CARB and SCAQMD are also responsible for ensuring that state air quality standards are met.

Both project sites are within the South Coast Air Basin (Basin), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The Basin is bounded to west by the Pacific Ocean and to the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains. Within the Basin, ozone (O_3), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and particulate matter less than 10 microns in diameter (PM_{10}) are the pollutants of primary concern. Both federal and state standards for ozone and $PM_{2.5}$ are not met in the Basin and EPA has designated the Basin as a nonattainment area for these pollutants. In addition, state standards for PM_{10} are not met in the Basin (SCAQMD 2022).

Discussion

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. The 2022 Air Quality Management Plan (AQMP) was adopted by SCAQMD as a program to lead the Basin into compliance with criteria pollutant standards and other federal requirements for which the Basin is not in compliance. The 2022 AQMP relies on emission forecasts based on the demographic and economic growth projections provided by the Southern California Association of Governments' 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2020). The Southern California Association of Governments is required to develop demographic projections and regional transportation strategy and control measures for the AQMP, including the socioeconomic forecast (e.g., population and growth forecasts) upon which the AQMP is based (SCAQMD 2022). A project is considered to be consistent with the AQMP and to not obstruct its implementation if, in part, it is consistent with the demographic and economic growth projections used in the formulation of the AQMP. SCAQMD recommends that, when determining whether a project is consistent with the current AQMP, a lead agency must assess both:

a) Whether the project would directly obstruct implementation of the plan through an increase in the frequency or severity of existing air quality violations, or cause or contribute to, new violations, or delay timely attainment of air quality standards (Criterion No. 1)

b) Whether it is consistent with the demographic and economic assumptions (typically land use related, such as resultant employment or residential units) upon which the plan is based (Criterion No. 2) (SCAQMD 1993)

Criterion No. 1

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

As discussed below under Thresholds III.b and III.c, the proposed project would not obstruct implementation of the 2022 AQMP because emissions resulting from its construction and operation would not exceed SCAQMD's regional mass emissions thresholds and localized significance thresholds (LSTs); refer to Table III-1 through Table III-7. The proposed project's emissions would therefore not increase concentrations of criteria pollutants or their precursors in a manner that could obstruct SCAQMD's efforts to achieve timely attainment of ambient air quality standards for any criteria pollutant for which the Basin is currently not in attainment or jeopardize the current attainment status of the Basin for other criteria pollutants.

Criterion No. 2

The following sections provide a discussion of the proposed project's incorporation of emission-control measures and its consistency with demographic and economic assumptions used in development of the AQMP.

Emission-Control Measures

During the construction period, the proposed project would require contractors to adhere to the CARB on-road vehicle and off-road equipment requirements, which would limit the level of construction emissions caused by the proposed project. In addition, the proposed project would be required pursuant to state law to use contractors that are in compliance with the CARB Air Toxic Control Measure that limits heavy-duty diesel motor vehicle idling to no more than 5 minutes at any given location.[1] The project contractor(s) would also be required by state regulations to comply with the fleet on-road heavy-duty vehicle emissions standards consistent with Measure MOB-06[2] from the 2022 AQMP (SCAQMD 2022).

These control strategies are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment and are implemented by accelerating the replacement of older engines that produce higher pollutant emissions with newer engines that produce lower pollutant emissions. The proposed project would comply with regulatory requirements to minimize short-term emissions from on-road and off-road diesel vehicles and equipment and SCAQMD's rules for controlling fugitive dust, as identified in SCAQMD Rule 403.

Land Use and Demographic and Economic Projections

Martha McLean Anza Narrows Park

The proposed project would be consistent with the existing GP 2025 and zoning designations. Currently, the proposed project site consists of unimproved City-owned and -maintained parkland with turf, trees, irrigated plants, walking paths, picnic tables, a disc golf course, and restrooms on the larger park site. The proposed project site has a General Plan land use designation of Public Park (P) and a zoning designation of Public Facilities (PF). The surrounding parcels have a Public Park (P) land use to the north, Public Park (P) and Low Density Residential (LDR) land uses to the east, Right-of-Way (ROW) and High Density Residential (HDR) land uses to the south, and Right-of-Way (ROW) to the west (City of Riverside 2023). The proposed project is defined as a *community park*, which the City describes as a park intended to meet the recreational and open space needs of the larger community, as well as those of the adjacent neighborhoods (City of Riverside 2007). Furthermore, as a community park, the proposed project would not include any land uses that would promote growth within the project area. Therefore, the proposed project would be consistent with the land use assumptions used in development of the AQMP and the growth forecast from the 2022 AQMP and the active RTP/SCS at the time, the 2020–2045 RTP/SCS.

Jurupa Avenue Trailhead

The proposed project would be consistent with the existing GP 2025 land use designations and inconsistent with zoning designations. However, as discussed further below and in Section XI, *Land Use and Planning*, the proposed project would support the current use of the site. Currently, the proposed project site consists of primarily undeveloped City-owned and -maintained parkland with groundcover of dry grasses and dirt paths. The proposed project site is zoned as Residential Estate

[1] The Air Toxic Control Measure (13 CCR Section 2485) specifies measures to reduce public exposure to diesel particulate matter and other air contaminants by establishing idling restrictions, emission standards, and other requirements for heavy-duty diesel engines and alternative idle-reduction technologies to limit the idling of diesel-fueled commercial motor vehicles.

[2] MOB-06: Accelerated Retirement of Older On-Road Heavy-Duty Vehicles [NO_X, PM]

(RE) and has a GP 2025 land use designation of Open Space (OS). The City's zoning code states that parks are not permitted on land zoned Residential Estate (RE) but does not explicitly prohibit landscaping intended to preserve natural resources or protect public health and safety. However, the Santa Ana River Trail is an existing feature of the proposed project site, so the site already serves a recreational purpose. Surrounding parcels have Open Space land uses to the north, Commercial and Public Facilities/Institutional to the east, Private Recreation and Open Space to the south, and Medium Density Residential to the west. The proposed Jurupa Ave Trailhead is defined as a *neighborhood park*, which the City describes as a park that satisfies non-programmed recreation and open space needs at a location within convenient walking distance (0.5 mile) of the population it serves (City of Riverside 2007). Furthermore, as a neighborhood park, the proposed project would not include any land uses that would promote growth within the project area. Therefore, the proposed project would be consistent with the land use assumptions used in development of the AQMP and the growth forecast from the 2022 AQMP and the active RTP/SCS at the time, the 2020–2045 RTP/SCS.

Overall Impact

Less-than-Significant Impact. As discussed above, the proposed project would be consistent with Criterion No. 1 and Criterion No. 2 of the 2022 AQMP. Therefore, the proposed project would not conflict with or obstruct implementation of the 2022 AQMP and the proposed project would result in a less-than-significant impact.

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard?

Martha McLean Anza Narrows Park

Less-than-Significant Impact. SCAQMD has established air quality significance thresholds that are applicable to both construction and operational emissions generated by projects within its jurisdiction. These significance thresholds were derived using regional emissions modeling to determine maximum allowable mass quantities of pollutant emissions that could be generated by individual projects without adversely affecting air quality and creating public health concerns based on existing pollution levels. These regional pollutant emission thresholds are shown in Table III-1.

Table III-1. SCAQMD Regional Air Quality Significance Thresholds

	Mass Daily Thresholds (pounds per day)	
Pollutant	**Construction**	**Operation**
Nitrogen Oxides (NO_X)	100	55
Volatile Organic Compounds (VOC)[a]	75	55
Suspended Particulate Matter (PM_{10})	150	150
Fine Particulate Matter ($PM_{2.5}$)	55	55
Sulfur Oxides (SO_X)	150	150
Carbon Monoxide (CO)	550	550
Lead (Pb)[b]	3	3

Source: SCAQMD 2019.

[a] The terms VOC and reactive organic gases (ROG) are used interchangeably. SCAQMD uses VOC, and CalEEMod uses ROG.
[b] The proposed project would result in no lead emission sources during the construction period or operations. As such, lead emissions are not evaluated herein.

Short-term Construction Emissions

Construction associated with the project site would generate criteria pollutant emissions from the following activities: demolition, site preparation, grading, building construction, paving, architectural coating, and construction worker, vendor, and haul trips. These construction activities have the potential to temporarily create emissions of dust, fumes, equipment exhaust, and other air contaminants. The amount of emissions generated on a daily basis would vary depending on the intensity and types of construction activities occurring simultaneously. The project proposes to develop approximately 3.3 acres of programmable park amenities within the existing park (Appendix J1).

Construction of the proposed project would result in approximately 135 cubic yards of soil import during the grading phase and an estimated 300 tons of debris removal during the demolition phase. Respectively, such activities are estimated to require a maximum of one hauling truck trip per day during the grading phase and a maximum of four haul truck trips per day during the demolition phase. Other construction phases would experience zero daily haul truck trips. Aside from haul truck trips, daily work/vendor/delivery truck trips would also occur during construction of the proposed project.

The proposed project's short-term construction emissions were estimated using CalEEMod, version 2022.1 (CAPCOA 2022). The modeling was conducted based on project-specific construction data (e.g., material export) provided by the project applicant. Where project-specific information was not available, reasonable assumptions based on similar projects and default model settings were used to estimate criteria air pollutant and O_3 precursor emissions. This analysis assumed a worst-case scenario with construction starting on January 1, 2024, and ending on March 29, 2025.

The proposed project would implement the required SCAQMD Rule 403 during construction to minimize construction-related fugitive PM_{10} and $PM_{2.5}$ dust emissions. SCAQMD Rule 403 requires watering exposed ground three times a day, cleaning trucks and track-outs, and covering/watering haul truck loads (SCAQMD 2005).

The modeled peak daily emissions of criteria air pollutants and O_3 precursors associated with construction of the proposed project with SCAQMD Rule 403 incorporated are presented in Table III-2. Because SCAQMD Rule 403 is a regulatory requirement that every project within the SCAQMD must follow, it is not considered mitigation.

Table III-2. Martha McLean Anza Narrows Park Regional Criteria Pollutant Construction Emissions

	Total Regional Pollutant Emissions (pounds per day)					
Construction Year	**ROG**	**NO_X**	**CO**	**SO_X**	**Total PM_{10}**	**Total $PM_{2.5}$**
2024	3.73	36.05	34.03	0.05	6.94	4.15
2025	3.22	10.53	13.80	0.02	0.61	0.44
Maximum Daily Regional Emissions during Project Construction	3.73	36.05	34.03	0.05	6.94	4.15

	Total Regional Pollutant Emissions (pounds per day)					
Construction Year	**ROG**	**NO_X**	**CO**	**SO_X**	**Total PM_{10}**	**Total $PM_{2.5}$**
Regional Significance Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No

Source: Emissions modeling by ICF using CalEEMod methodology (Appendix C1).
Note: Totals may not add exactly due to rounding.
CO = carbon monoxide; NO_X = nitrogen oxides; ROG = reactive organic gases; SO_X = sulfur oxides

As shown in Table III-2, the maximum level of daily unmitigated construction emissions generated by the proposed project would not exceed SCAQMD's daily significance thresholds for any criteria pollutants during any of the construction phases. CalEEMod modeling inputs and results can be found in Appendix C1. Construction impacts would be less than significant.

Long-term Operational Emissions

Implementation of the proposed project would result in long-term regional emissions of criteria air pollutants and O_3 precursors associated with mobile and area sources. The proposed project does not propose any land uses that would have long-term operational air emissions besides area and mobile sources.[3]

Based on the Traffic Assessment for the project (Appendix J1), the proposed project is anticipated to generate a net increase of 70 trips per day on a typical weekday and a net increase of 63 trips per day on a typical Saturday compared to existing conditions. In addition, the proposed project is anticipated to generate 161 maintenance trips per year, including two weekly landscaping trips, one weekly trash services trip, one quarterly inspection, and one annual tree trimming. Maintenance trip rates were provided by the project applicant for park projects of similar size. These traffic volumes are very small and, as such, would generate minimal mobile source emissions.

Table III-3 presents the daily operational emissions from the proposed project. As shown, the proposed project would result in long-term regional emissions of criteria air pollutants and O_3 precursors that would be below SCAQMD's applicable thresholds and operational impacts would be less than significant.

Table III-3. Martha McLean Anza Narrows Park Regional Criteria Pollutant Operational Emissions

	Total Regional Pollutant Emissions (pounds per day)					
Proposed Project	**ROG**	**NO_X**	**CO**	**SO_X**	**Total PM_{10}**	**Total $PM_{2.5}$**
Mobile Sources	0.33	0.37	3.12	0.01	0.25	0.05
Area Sources	0.17	0.00	0.00	0.00	0.00	0.00
Total Emissions	0.50	0.37	3.12	0.01	0.25	0.05
Regional Significance Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No

Source: Emissions modeling by ICF using CalEEMod version 2022.1 (Appendix C1).
Note: Totals may not add exactly due to rounding.
CO = carbon monoxide; NO_X = nitrogen oxides; ROG = reactive organic gases; SO_X = sulfur oxides

[3] The proposed project's electrical demand would not result in direct onsite operational air emissions.

Jurupa Avenue Trailhead

Short-term Construction Emissions

Construction associated with the project site would generate criteria pollutant emissions from the following activities: site preparation, grading, building construction, paving, and construction worker, vendor, and haul trips. These construction activities have the potential to temporarily create emissions of dust, fumes, equipment exhaust, and other air contaminants. The amount of emissions generated on a daily basis would vary depending on the intensity and types of construction activities occurring simultaneously. The total construction footprint is approximately 7.7 acres.

Construction of the proposed project would result in approximately 985 cubic yards of soil export during the grading phase. The removal of this debris is estimated to require a maximum of seven haul truck trips per day during the grading phase, with other phases experiencing zero daily haul truck trips. Aside from haul truck trips, daily work/vendor/delivery truck trips would also occur during construction of the proposed project.

The proposed project's short-term construction emissions were estimated using CalEEMod, version 2022.1 (CAPCOA 2022). The modeling was conducted based on project-specific construction data (e.g., schedule, equipment, material export) provided by the project applicant. Where project-specific information was not available, reasonable assumptions based on similar projects and default model settings were used to estimate criteria air pollutant and O_3 precursor emissions. This analysis assumed a worst-case scenario with construction starting on June 3, 2024, and ending on December 14, 2024.

The proposed project would implement the required SCAQMD Rule 403 during construction to minimize construction-related fugitive PM_{10} and $PM_{2.5}$ dust emissions. SCAQMD Rule 403 requires watering exposed ground three times a day, cleaning trucks and track-outs, and covering/watering haul truck loads (SCAQMD 2005).

The modeled peak daily emissions of criteria air pollutants and O_3 precursors associated with construction of the proposed project with SCAQMD Rule 403 incorporated are presented in Table III-4. Because SCAQMD Rule 403 is a regulatory requirement that every project within the SCAQMD must follow, it is not considered mitigation.

Table III-4. Jurupa Avenue Trailhead Regional Criteria Pollutant Construction Emissions

	Total Regional Pollutant Emissions (pounds per day)					
Construction Year	ROG	NO_X	CO	SO_X	Total PM_{10}	Total $PM_{2.5}$
2024	1.85	17.6	18.1	0.03	2.91	1.69
Maximum Daily Regional Emissions during Project Construction	1.85	17.6	18.1	0.03	2.91	1.69
Regional Significance Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No

Source: Emissions modeling by ICF using CalEEMod methodology (Appendix C2).
Note: Totals may not add exactly due to rounding.
CO = carbon monoxide; NO_X = nitrogen oxides; ROG = reactive organic gases; SO_X = sulfur oxides

As shown in Table III-4, the maximum level of daily unmitigated construction emissions generated by the proposed project would not exceed SCAQMD's daily significance thresholds for any criteria pollutants during any of the construction phases. CalEEMod modeling inputs and results can be found in Appendix C2. Construction impacts would be less than significant.

Long-term Operational Emissions

Implementation of the proposed project would result in long-term regional emissions of criteria air pollutants and O_3 precursors associated with mobile and area sources. The proposed project does not propose any land uses that would have long-term operational air emissions besides area and mobile sources.[4]

Based on the traffic assessment for the project (Appendix J2), the proposed project is anticipated to generate a net increase of 93 trips per day on a typical weekday and a net increase of 90 trips per day on a typical Saturday compared to existing conditions. In addition, the proposed project is anticipated to generate 161 maintenance trips per year, including two weekly landscaping trips, one weekly trash services trip, one quarterly inspection, and one annual tree trimming. These traffic volumes are very small and, as such, would generate minimal mobile source emissions.

Table III-5 presents the daily operational emissions from the proposed project. As shown, the proposed project would result in long-term regional emissions of criteria air pollutants and O_3 precursors that would be below SCAQMD's applicable thresholds and operational impacts would be less than significant.

Table III-5. Jurupa Avenue Trailhead Regional Criteria Pollutant Operational Emissions

	Total Regional Pollutant Emissions (pounds per day)					
Proposed Project	ROG	NO_X	CO	SO_X	Total PM_{10}	Total $PM_{2.5}$
Mobile Sources	0.45	0.49	4.56	0.01	0.39	0.08
Area Sources	0.08	0.00	0.00	0.00	0.00	0.00
Total Emissions	0.53	0.49	4.56	0.01	0.39	0.08
Regional Significance Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No

Source: Emissions modeling by ICF using CalEEMod version 2022.1 (Appendix C2).
Note: Totals may not add exactly due to rounding.
CO = carbon monoxide; NO_X = nitrogen oxides; ROG = reactive organic gases; SO_X = sulfur oxides

Overall and Cumulative Impacts

SCAQMD's cumulative air quality impact methodology indicates that if an individual project results in air emissions of criteria pollutants that exceed SCAQMD's recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants for which the project region is in nonattainment under an applicable NAAQS or CAAQS. Individually, each project site's construction and operational pollutant emissions would not exceed the applicable SCAQMD regional significance threshold. Additionally, as shown in Table III-6 and Table III-7, when adding both project sites' construction and operational emissions, the proposed project would still not exceed the applicable SCAQMD regional significance thresholds.

[4] The proposed project's electrical demand would not result in direct onsite operational air emissions.

Therefore, the proposed project's emissions would not be cumulatively considerable. Additionally, recognizing that SCAQMD's regional significance thresholds were established to achieve attainment of the NAAQS and CAAQS, which in turn define the maximum amount of an air pollutant that can be present in ambient air without harming public health, the proposed project's contribution of pollutant emissions is not expected to result in measurable human health impacts on a regional scale. Therefore, impacts would be less than significant.

Table III-6. Cumulative Regional Criteria Pollutant Construction Emissions

	Total Regional Pollutant Emissions (pounds per day)					
Construction Year	**ROG**	**NO_X**	**CO**	**SO_X**	**Total PM_{10}**	**Total $PM_{2.5}$**
2024	5.58	53.65	52.13	0.08	9.85	5.84
2025	3.22	10.53	13.80	0.02	0.61	0.44
Maximum Daily Regional Emissions during Project Construction	8.8	64.18	65.93	0.10	10.46	6.28
Regional Significance Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No

Source: Emissions modeling by ICF using CalEEMod methodology (Appendices C1 and C2).
Note: Totals may not add exactly due to rounding.
CO = carbon monoxide; NO_X = nitrogen oxides; ROG = reactive organic gases; SO_X = sulfur oxides

Table III-7. Cumulative Regional Criteria Pollutant Operational Emissions

	Total Regional Pollutant Emissions (pounds per day)					
Proposed Project	**ROG**	**NO_X**	**CO**	**SO_X**	**Total PM_{10}**	**Total $PM_{2.5}$**
Mobile Sources	0.78	0.86	7.68	0.02	0.64	0.13
Area Sources	0.25	0.00	0.00	0.00	0.00	0.00
Total Emissions	1.03	0.86	7.68	0.02	0.64	0.13
Regional Significance Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No

Source: Emissions modeling by ICF using CalEEMod version 2022.1 (Appendices C1 and C2).
Note: Totals may not add exactly due to rounding.
CO = carbon monoxide; NO_X = nitrogen oxides; ROG = reactive organic gases; SO_X = sulfur oxides

c. Expose sensitive receptors to substantial pollutant concentrations?

Less-than-Significant Impact. The term sensitive receptors refers to uses associated with people considered to be more sensitive than others to air pollutants. The reasons for greater-than-average sensitivity include pre-existing health problems, proximity to emission sources, or duration of exposure to air pollutants. Schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because children, elderly people, and the infirm are more susceptible to respiratory distress and other air quality-related health problems on average than the general public. Residential areas are considered sensitive to poor air quality because people usually stay home for extended periods of time, with associated greater exposure to ambient air quality. Recreational uses are also considered sensitive due to the greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human

respiratory system. The nearest sensitive receptors to the proposed project site are adjacent to and east of the site.

Martha McLean Anza Narrows Park

Localized Pollutant Emissions

In addition to regional air quality impacts, projects in the Basin are required to analyze local air quality impacts. SCAQMD has developed LSTs that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable NAAQS or CAAQS, and thus would not cause or contribute to localized air quality impacts. LSTs were developed based on the ambient concentrations of that pollutant for each of the 38 Source Receptor Areas (SRAs) in the Basin. The proposed project is in SRA 23, Metropolitan Riverside County.

The localized thresholds, which are found in the mass rate lookup tables in SCAQMD's Final Localized Significance Threshold Methodology document, were developed for the analysis of projects that are less than or equal to 5 acres in size and applicable only to the following criteria pollutants: nitrogen oxides, carbon monoxide, PM_{10}, and $PM_{2.5}$ (SCAQMD 2008). The analysis of localized air quality impacts focuses only on the onsite activities of a project. The mass rate lookup tables developed by SCAQMD present LST values in the form of allowable emissions (in pounds per day) as a function of receptor distance from a project's site boundary. These LST values were developed by SCAQMD for 1-acre, 2-acre, and 5-acre sites. The LSTs established for each of the aforementioned site acreages represent the level of pollutant emissions that would not exceed the most stringent applicable NAAQS or CAAQS.

Construction

To assess the potential localized air quality impacts resulting from the proposed project on nearby sensitive receptors during construction, the daily onsite construction emissions generated at the proposed project site were evaluated against SCAQMD's applicable construction LSTs. As modeled in CalEEMod, the proposed project would have a total of 15 acres graded during the 10-day-long site preparation phase and 20 acres graded during the 20-day-long grading phase.[5] As such, the maximum amount of grading per day would be 1.5 acres during the site preparation phase. SCAQMD provides construction LSTs for projects that grade a maximum of 1, 2, and 5 acres, and the grading area is directly related to the stringency of the LSTs. Therefore, to be most conservative, the 1-acre LST values were applied.

Because the mass rate lookup tables provided by SCAQMD provide LSTs only at receptor distances of 25, 50, 100, 200, and 500 meters (82, 164, 328, 656, and 1,640 feet), the LSTs for a receptor distance of 328 feet were used to evaluate the potential localized air quality impacts associated with the proposed project's peak-day construction emissions. As stated previously, sensitive receptors are adjacent to the project site to the east; however, with the exception of the project amenities proposed to be constructed near the southeastern boundary of the site (proposed 26-space parking lot, river overlook swings, new restroom, and landscaping), the remaining project construction activities would be at least 328 feet from nearby sensitive receptors. Therefore, the SCAQMD LSTs for 328 feet were used to evaluate the localized air quality impacts from the project's total peak-day

[5] The 3.3-acre proposed project site would be graded numerous times for a total of 15 acres graded during the site preparation phase and 20 acres graded during the grading phase, based on CalEEMod methodology.

construction emissions. The proposed construction activities near the southeastern boundary of the project site were included in the emissions modeling for the project's total peak-day construction emissions; however, these construction activities were also modeled separately in CalEEMod, and the peak-day construction emissions were compared against the SCAQMD LSTs for 82 feet. As stated previously, sensitive receptors are adjacent to and east of the project site; however, SCAQMD guidance recommends that projects with boundaries closer than 25 meters (82 feet) to the nearest receptor should use the LSTs for receptors at 25 meters (SCAQMD 2008). These distances most closely correspond to the distances from the proposed project construction areas to nearby sensitive receptors in the SCAQMD LST lookup tables (SCAQMD 2009).

As discussed previously, the proposed project would implement the required SCAQMD Rule 403 during construction to minimize construction-related fugitive dust emissions ($PM_{2.5}$ and PM_{10}). The localized onsite emissions estimated to occur during peak construction days for each year of the proposed project's construction schedule with SCAQMD Rule 403 implemented are presented in Table III-8. As shown in Table III-8, daily emissions generated on site by construction of the proposed project would not exceed any of the applicable SCAQMD LSTs for a 1-acre site in SRA 23 over the course of the entire construction schedule.

Table III-8. Martha McLean Anza Narrows Park Localized Criteria Pollutant Construction Emissions

	Estimated Maximum Daily Onsite Emissions (pounds per day)[b]			
Construction Year	NO_X	CO	PM_{10}	$PM_{2.5}$
2024	35.95	32.93	6.71	4.10
2025	10.44	13.04	0.43	0.40
Maximum Daily Localized Emissions during Project Construction	35.95	32.93	6.71	4.10
Applicable LSTs[a]	*212*	*1,746*	*30*	*8*
Threshold Exceeded?	No	No	No	No

Source: Emissions modeling by ICF using CalEEMod version 2022.1 (Appendix C1).
[a] The LSTs for a 1-acre site in SRA 23 were taken from the corresponding LSTs for a 1-, 2-, and 5-acre site in SRA 23 (obtained from Appendix C [Localized Significance Threshold Screening Tables] of SCAQMD's *Final Localized Significance Threshold Methodology* document). The nearest sensitive receptor is more than 328 feet from the selected construction activities, so the LSTs for the closest receptor of 328 feet (100 meters) were selected.
CO = carbon monoxide; NO_X = nitrogen oxides

As discussed previously, the proposed construction activities near the southeastern boundary of the project site were evaluated separately in CalEEMod, using the SCAQMD LSTs for 82 feet compared against the peak-day construction emissions.[6] The construction activities proposed near the southeastern boundary of the site include the construction of a 26-space parking lot, restroom, river overlook swings, and landscaping areas. As modeled in CalEEMod, the proposed project construction activities near the southeastern boundary of the site would have a total of 0.5 acre graded during the 1-day-long site preparation phase and 1.5 acres graded during the 2-day-long grading phase. As such, the maximum amount of grading per day would be 0.75 acre during the grading phase. Therefore, 1-acre SCAQMD LST values were applied. As shown in Table III-9, daily emissions generated on site by construction of the proposed project features near the southeastern

[6] According to SCAQMD's LST methodology, it is recommended that projects with boundaries closer than 82 feet (25 meters) from the nearest receptor use the LSTs for receptors at 82 feet.

boundary of the site would not exceed any of the applicable SCAQMD LSTs for a 1-acre site in SRA 23 over the course of the construction schedule.

Table III-9. Martha McLean Anza Narrows Park Localized Criteria Pollutant Construction Emissions of Southeastern Area

	Estimated Maximum Daily Onsite Emissions (pounds per day)[b]			
Construction Year	NO_X	CO	PM_{10}	$PM_{2.5}$
2024	11.39	10.72	1.92	1.16
Maximum Daily Localized Emissions during Project Construction	11.39	10.72	1.92	1.16
Applicable LSTs[a]	*118*	*602*	*4*	*3*
Threshold Exceeded?	No	No	No	No

Source: Emissions modeling by ICF using CalEEMod version 2022.1 (Appendix C1).
[a] The LSTs for a 1-acre site in SRA 23 were taken from the corresponding LSTs for a 1-, 2-, and 5-acre site in SRA 23 (obtained from Appendix C [Localized Significance Threshold Screening Tables] of SCAQMD's *Final Localized Significance Threshold Methodology* document). The nearest sensitive receptor is adjacent, so the LSTs for the closest receptor of 82 feet (25 meters) were selected.
CO = carbon monoxide; NO_X = nitrogen oxides

Operations

Maintenance activities would not introduce any new substantial stationary or mobile sources of onsite emissions. During short-term maintenance activities, there may be some onsite emissions from vehicles traveling to the site and use of small equipment that may be needed to remove weeds and trash from the site. According to the Traffic Assessment for the proposed project (Appendix J1) the proposed project is anticipated to generate a net increase of 70 trips per day on a typical weekday and a net increase of 63 trips per day on a typical Saturday compared to existing conditions. Therefore, minimal onsite mobile source emissions would be generated from recreational vehicle trips to the project site during operations. The minor amount of onsite emissions generated during maintenance activities and recreational visitor trips would not be substantial.

According to the LST methodology, operational LSTs would apply to the proposed project's stationary sources and onsite mobile trips. Projects that attract mobile sources that spend long periods queuing and idling at the site, for example transfer facilities or warehouse buildings, would possibly exceed the operational LSTs. The proposed project, zoned Public Facilities (PF) by the City of Riverside with a GP 2025 land use designation of Public Park (P), would not attract these types of mobile sources. Therefore, as the proposed project would not have any stationary sources and would generate minimal onsite emissions from vehicle trips, the proposed project would not be a source of operational air emissions that has the likelihood of causing an LST impact at the nearest sensitive receptors. Operational and maintenance impacts would be less than significant.

Jurupa Avenue Trailhead

Less-than-Significant Impact. The nearest sensitive receptors to the proposed project site are adjacent to and west of the site.

Localized Pollutant Emissions

The proposed project is in SRA 23, Metropolitan Riverside County.

Construction

To assess the potential localized air quality impacts resulting from the proposed project on nearby sensitive receptors during construction, the daily onsite construction emissions generated at the proposed project site were evaluated against SCAQMD's applicable construction LSTs. As modeled in CalEEMod, the proposed project would have a total of 15 acres graded during the 10-day-long site preparation phase and 20 acres graded during the 20-day-long grading phase.[7] As such, the maximum amount of grading per day would be 1.5 acres during the site preparation phase. SCAQMD provides construction LSTs for projects that grade a maximum of 1, 2, and 5 acres, and the grading area is directly related to the stringency of the LSTs. Therefore, to be most conservative, the 1-acre LST values were applied.

Because the mass rate lookup tables provided by SCAQMD provide LSTs only at receptor distances of 25, 50, 100, 200, and 500 meters (82, 164, 328, 656, and 1,640 feet), the LSTs for a receptor distance of 82 feet were used to evaluate the potential localized air quality impacts associated with the proposed project's peak-day construction emissions.[8] This distance most closely corresponds to the distance from the proposed project site to nearby sensitive receptors in the SCAQMD LST lookup tables (SCAQMD 2009).

As discussed previously, the proposed project would implement the required SCAQMD Rule 403 during construction to minimize construction-related fugitive dust emissions ($PM_{2.5}$ and PM_{10}). The localized onsite emissions estimated to occur during peak construction days for each year of the proposed project's construction schedule with SCAQMD Rule 403 implemented are presented in Table III-10. As shown in Table III-10, daily emissions generated on site by construction of the proposed project would not exceed any of the applicable SCAQMD LSTs for a 1-acre site in SRA 23 over the course of the entire construction schedule.

Table III-10. Localized Criteria Pollutant Construction Emissions

	Estimated Maximum Daily Onsite Emissions (pounds per day)[b]			
Construction Year	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
2024	17.6	18.1	2.91	1.69
Applicable LSTs[a]	*118*	*602*	*4*	*3*
Threshold Exceeded?	No	No	No	No

Source: Emissions modeling by ICF using CalEEMod version 2022.1 (Appendix C2).
[a] The LSTs for a 1-acre site in SRA 23 were taken from the corresponding LSTs for a 1-, 2-, and 5-acre site in SRA 23 (obtained from Appendix C [Localized Significance Threshold Screening Tables] of SCAQMD's *Final Localized Significance Threshold Methodology* document). The nearest sensitive receptor is adjacent, so the LSTs for the closest receptor of 82 feet (25 meters) were selected.
CO = carbon monoxide; NO_X = nitrogen oxides

[7] The 7.7-acre proposed project site would be graded numerous times for a total of 15 acres graded during the site preparation phase and 20 acres graded during the grading phase, based on CalEEMod methodology.

[8] According to SCAQMD's LST methodology, it is recommended that projects with boundaries closer than 82 feet (25 meters) from the nearest receptor use the LSTs for receptors at 82 feet.

Operations

Maintenance activities would not introduce any new substantial stationary or mobile sources of onsite emissions. During short-term maintenance activities, there may be some onsite emissions from vehicles traveling to the site and use of small equipment that may be needed to remove weeds and trash from the site. According to the Traffic Assessment for the proposed project (Appendix J2), the proposed project is anticipated to generate a net increase of 93 trips per day on a typical weekday and a net increase of 90 trips per day on a typical Saturday compared to existing conditions. Therefore, minimal onsite mobile source emissions would be generated from recreational vehicle trips to the project site during operations. The minor amount of onsite emissions generated during maintenance activities and recreational visitor trips would not be substantial.

According to the LST methodology, operational LSTs would apply to the proposed project's stationary sources and onsite mobile trips. Projects that attract mobile sources that spend long periods queuing and idling at the site, for example transfer facilities or warehouse buildings, would possibly exceed the operational LSTs. The proposed project, zoned Residential Estate (RE) by the City of Riverside with a GP 2025 land use designation of Open Space (OS), would not attract these types of mobile sources. Therefore, as the proposed project would not have any stationary sources and would generate minimal onsite emissions from vehicle trips, the proposed project would not be a source of operational air emissions that has the likelihood of causing an LST impact at the nearest sensitive receptors. Operational and maintenance impacts would be less than significant.

Overall Impact

The SCAQMD LSTs apply to localized emissions for receptor distances up to and beyond 500 meters from the site boundary. Therefore, as the sensitive receptors nearest to each project are greater than 3,000 meters from the other project, the localized emissions from one project would not substantially affect sensitive receptors near the other project. Consequently, the potential impacts of localized emissions from each project are evaluated separately, and impacts would be less than significant.

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

Martha McLean Anza Arrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. According to the SCAQMD 1993 CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment facilities, food processing plants, chemical plants, composting areas, refineries, landfills, dairies, and fiberglass molding facilities. The proposed project, which includes city park recreational uses, would not include any of the typical uses with odor complaints.

As discussed in Chapters 1, *Introduction*, and 2, *Project Description*, the proposed project would develop public parks that would provide a variety of passive and active recreational opportunities for community use. For the Martha McLean Anza Narrows Park site, the proposed project would provide a variety of passive recreational opportunities including paths and trails, native planting and pollinator gardens, seating, shade structures, educational signage, music areas, and overlooks. Active park elements include bike paths, playgrounds, river overlook swings, exercise stations, and

water and nature play areas. For the Jurupa Avenue Trailhead site, the proposed project would provide a variety of passive recreational opportunities including paths and trails, native planting and pollinator gardens, seating, shade structures, educational signage, and overlooks. Active park elements include bike paths and music and nature play areas. The proposed project's uses are not anticipated to be a source of odors that would cause odor complaints.

During construction of the proposed project, exhaust from equipment, activities associated with the application of architectural coatings, and paving activities may produce discernible odors typical of most construction sites. Such odors would be, at worst, a temporary source of nuisance to the nearest sensitive receptors, if at all, and would not affect a substantial number of people. The proposed project would use architectural coatings compliant with SCAQMD Rule 1113, which would limit the odors associated with off-gassing from those coatings. Odors associated with concrete paving would only occur for a limited time and the locations of paving activities would be distributed at the proposed project site. Additionally, material deliveries and heavy-duty haul truck trips could occasionally produce odors from diesel exhaust. These odors would not affect a substantial number of people because construction would be temporary and construction-generated emissions dissipate rapidly with increasing distance from the source. Operational and maintenance activities may result in minor, equipment-based odors, but these would occur infrequently throughout the year and would dissipate rapidly. Overall, odors associated with project construction and operation would be temporary and intermittent in nature and would not create a significant level of objectionable odors affecting a substantial number of people.

IV Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☒
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☒
f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☒

Affected Environment

Martha McLean Anza Narrows Park

The Martha McLean Anza Narrows Park project site consists of approximately 39.5 acres of City-owned and -maintained parkland adjacent to the Santa Ana River to the north. The proposed project occurs within the Jurupa Area Plan of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The Martha McLean Anza Narrows Park project site is within Criteria Cell 621. The project site is adjacent to MSHCP Public/Quasi-Public (PQP) Conserved Lands, which

comprise a subset of the MSHCP Conservation Area identified for open space value and contribute to the conservation of Covered Species. PQP conserved lands border the park to the north and east. The proposed project does include PQP Conserved Lands and would not affect PQP Conserved Lands within Criteria Cell 621. Criteria Cell 621 does not include survey area requirements for any criteria area species, invertebrates, amphibians, burrowing owl, or mammals.

Vegetation Communities/Habitats

A field-based vegetation mapping survey was conducted at the proposed project site following the categorizations using the plant community definitions provided by *Preliminary Descriptions of Terrestrial Natural Communities of California* (Holland 1986) as revised by Oberbauer et al. (2008). The vegetation communities and land cover types identified within the proposed project limits were nonnative grassland, nonnative riparian (Mexican fan palm dominated), prickly pear (*Opuntia*) stand, Riversidean sage scrub (planted), southern riparian forest (disturbed), disturbed habitat, and developed (Table IV-1 and Figure 5).

Table IV-1. Vegetation Communities in the Martha McLean Anza Narrows Park Limits

Vegetation Community	Area (acres)
Nonnative grassland	3.13
Nonnative riparian (Mexican fan palm dominated)	0.40
Prickly pear (*Opuntia*) stand	0.04
Riversidean sage scrub (planted)	0.15
Southern riparian forest (disturbed)	2.40
Disturbed habitat	2.94
Developed	29.47
Total[a]	39.76

[a] Sum of rows may not equal total because of rounding.

Development of the proposed project site would result in alteration of up to 3.73 acres, including 0.16 acres of nonnative grassland, 0.16 acre of nonnative woodland, 0.14 acre of Riversidean sage scrub native garden, 1.26 acres of disturbed habitat, and 1.22 acres of developed (Table IV-2). The proposed project area is entirely within Criteria Cell 621 and would not affect any PQP Conserved Lands.

Table IV-2. Vegetation Community Impacts at Martha McLean Anza Narrows Park Site

	Proposed Project Area
Vegetation Community	Permanent
Nonnative grassland	0.94
Nonnative woodland	0.16
Riversidean sage scrub (planted)[a]	0.14
Disturbed habitat	1.26
Developed	1.22
Total[b]	3.73

[a] Riversidean sage scrub is within project area but will not be affected.
[b] Sum of rows may not equal total because of rounding.

Riversidean sage scrub is an open, xeric expression of sage scrub typically dominated by California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), and brittlebush (*Encelia farinosa*). Within the proposed project site, the patch of Riversidean sage scrub has been planted on a slope adjacent to the existing Santa Ana River Trail. It is dominated by species such as California buckwheat and white sage (*Salvia apiana*).

Nonnative woodland consists of exotic trees, usually intentionally planted, which are not maintained or artificially planted. Within the project area, it includes exotic trees on the northeast side of the Santa Ana River Trail.

Nonnative grassland is an annual community dominated or co-dominated by any of several nonnative wild oat (*Avena* spp.) and/or annual brome (*Bromus* spp.) grass species and typically forms a continuous herbaceous cover that may reach heights of 1 meter. Within the project area, this community is present in the shoulder areas adjacent to the existing Santa Ana River Trail.

Areas mapped as disturbed habitat are mostly devoid of vegetation and have evidence of frequent human disturbance, such as waste areas, as well as dirt roads and areas of ground disturbance. These areas may have very sparse vegetation, typically composed of exotic ruderal forbs or grassland species, but the cover is much reduced compared to areas mapped as nonnative grassland. Within the project area, this community is present on the non-landscaped northwestern edge of the park, adjacent to the Union Pacific Railroad.

Developed areas have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Within the project area, the developed areas are characterized by lawns, ornamental vegetation, parking lots, and recreational features associated with the existing park.

Wetlands

The proposed project is adjacent to the Santa Ana River, which contains resources jurisdictional to the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife (CDFW). No potentially jurisdictional drainage or wetland features are present within the proposed project site, so no jurisdictional delineation was conducted for this project component. The proposed project would have no effect on state or federal wetlands.

Riparian forest communities within the Martha McLean Anza Narrows property limits are potentially CDFW jurisdictional riparian habitat. The limits of the riparian vegetation community were mapped during vegetation mapping and are presented on Figure 5. The proposed project would have no direct impacts on CDFW riparian habitat.

Special-status Species

The proposed project is within MSHCP Criteria Cell 621, which does not include survey area requirements for any criteria area species, rare plants, invertebrates, amphibians, burrowing owl, or mammals.

The Martha McLean Anza Narrows Park project site consists primarily of ornamental landscape and development and was determined to have no suitable habitat to support rare plant species known from the region. In addition, the site is not within an MSHCP rare plant survey area. Therefore, focus surveys were not conducted.

Milkweed (*Asclepias* spp.) is the obligate host plant for reproduction of the federally proposed threatened (89 FR 100662) monarch butterfly (*Danaus plexippus*; USFWS 2024). No milkweed were detected on the proposed project site; therefore the site does not support suitable habitat for monarch breeding. Migratory monarchs in the western population primarily overwinter in protected groves along the coast of California and Baja California, typically close to the coast (USFWS 2024). The proposed project site is over 30 miles from the coast and is subject to winter frosts. Therefore, the site does not support frost-free areas that could support overwintering monarchs. No proposed critical habitat for this species is present in Riverside County; therefore, no critical habitat is located in the proposed project area. The proposed project site consists primarily of ornamental landscape and development, and any redevelopment of the landscaping would not significantly alter the availability of nectar forage resources for any monarchs migrating through the area.

Crotch's bumble bee (*Bombus crotchii*) was reinstated as a candidate species under the California Environmental Species Act on September 30, 2022; it receives protection of a state threatened species. Crotch's bumble bee is nearly endemic to California, including historically occupied grasslands and shrublands in southern to central California and occasional occurrences in the northern portion of the state (CDFW 2019). This species is often found in scrub or open grassland habitats that support a variety of pollen and nectar sources. The Crotch's bumble bee has a short tongue and is best suited for foraging on open flowers with short corollas (CDFW 2019). While the project site consists primarily of ornamental landscape and development, with low suitability for foraging for Crotch's bumble bee, this species can nest in a variety of mammal burrows within these landcover types.

Potentially suitable habitat for southwestern willow flycatcher (*Empidonax traillii extimus*) and least Bell's vireo (*Vireo bellii pusillus*) is present in the adjacent Santa Ana River. No suitable habitat is present in the proposed project area. A substantial area in the vicinity of the proposed project is annually surveyed by the Santa Ana Watershed Association (SAWA 2021) for southwestern willow flycatcher and least Bell's vireo. Based on a review of the Santa Ana Watershed Association data and existing conditions within the project limits, the riparian habitat within and adjacent to the Martha McLean Anza Narrows Park proposed project site was determined to be adequately surveyed for least Bell's vireo and least Bell's vireo is determined to be a summer breeder within suitable riparian habitat within the adjacent Santa Ana River.

No suitable habitat for southwestern willow flycatcher is present within the proposed project area, so no surveys were conducted for this species.

Suitable Riversidean sage scrub habitat for coastal California gnatcatcher (*Polioptila californica californica*) occurs within the proposed project site. The MSHCP does not require surveys for California gnatcatcher, as it is an adequately conserved Covered Species.

No critical habitat for any federally listed species has been designated over the proposed project site.

The proposed project contains naturalized, native, and nonnative vegetation that could serve as nesting habitat for avian species protected under California Fish and Game Code Section 3503 et seq. and the federal Migratory Bird Treaty Act.

Jurupa Avenue Trailhead

The Jurupa Avenue Trailhead project site consists of approximately 8.33 acres of primarily undeveloped City-owned and -maintained parkland. The project site is sparsely vegetated, generally by nonnative plants and ornamental trees. The proposed project occurs within the Jurupa Area Plan of the Western Riverside County MSHCP. Approximately 0.03 acre of the northern side of the project area is within Criteria Cell 617 (Figure 6). The northern boundary of the proposed project site is adjacent to MSHCP PQP Conserved Lands, which comprise a subset of the MSHCP Conservation Area identified for open space value and contribute to the conservation of Covered Species. The proposed project does not occur within PQP Conserved Lands and would not affect PQP Conserved Lands within Criteria Cell 617. The proposed project area overlaps with MSHCP Narrow Endemic Plant Species Survey Area for rare plants, and rare plant surveys were conducted as described below. Criteria Cell 617 also includes survey requirements for burrowing owl. Criteria Cell 617 does not include survey area requirements for any criteria area species, invertebrates, amphibians, or mammals.

No critical habitat for any federally listed species has been designated over the proposed project site.

Vegetation Communities/Habitats

A field-based vegetation mapping survey was conducted at the proposed project site following the categorizations using the plant community definitions provided by *Preliminary Descriptions of Terrestrial Natural Communities of California* (Holland 1986) as revised by Oberbauer et al. (2008). The vegetation communities and land cover types identified within the proposed project limits were mule fat scrub, nonnative riparian (Arundo dominated), open water, southern riparian forest (disturbed), tamarisk scrub, nonnative grassland, Riversidean sage scrub, disturbed habitat (ruderal upland mustard and forbs), disturbed habitat (bare ground), and developed (Table IV-3 and Figure 7). The riparian communities are only found within the biological avoidance area and would not be directly affected.

Table IV-3. Vegetation Communities in the Jurupa Avenue Trailhead Project Limits (Including Biological Avoidance Area)

Vegetation Community	Area (acres)
Mule Fat Scrub	0.20
Nonnative Riparian	0.01
Open Water	0.16
Southern Riparian Forest (Disturbed)	1.25
Tamarisk Scrub	0.04
Riversidean Sage Scrub	0.33
Nonnative grassland	2.75
Disturbed habitat (Ruderal Upland Mustard and Forbs)	2.09
Disturbed habitat (Bare Ground)	1.24
Developed	0.25
Total[a]	8.33

[a] sum of rows may not equal total because of rounding.

Development of the proposed project site would result in alteration of up to 3.74 acres, including 1.62 acres of nonnative grassland, 0.12 acre of Riversidean sage scrub, 0.23 acre of disturbed habitat (bare ground), 1.64 acres of disturbed habitat (ruderal upland mustard and forbs), and 0.12 acre of developed (Table IV-4). No sensitive vegetation communities would be affected within Criteria Cell 617 (Figure 7 and Table IV-4).

Table IV-4. Vegetation Community Impacts in the Jurupa Avenue Trailhead Project Site (including subset within MSHCP Criteria Cell 617)

Vegetation Community	Proposed Project Site (acres)	Within Criteria Cell 617 (acres)
Riversidean Sage Scrub	0.12	0.00
Nonnative grassland	1.63	<0.00
Disturbed habitat (Ruderal Upland Mustard and Forbs)	1.64	0.02
Disturbed habitat (Bare Ground)	0.23	<0.00
Developed	0.12	0.00
Total	3.74	0.03

Within the proposed project site, Riversidean Sage Scrub was dominated by California buckwheat with a closed to intermittent canopy that reached heights of up to 1.25 meters.

Nonnative grassland is an annual community dominated or co-dominated by any of several exotic wild oat and/or annual brome grass species and typically forms a continuous herbaceous cover that may reach heights of 1 meter. Within the project area, shrubs, such as California buckwheat and broom baccharis (*Baccharis sarothroides*), and native forbs, such as fiddleneck (*Amsinckia* spp.) and common phacelia (*Phacelia cicutaria*), are present at very low cover.

Areas mapped as disturbed habitat (bare ground) are mostly devoid of vegetation and have evidence of frequent human disturbance, such as waste areas, as well as dirt roads and areas of ground disturbance. These areas may have very sparse vegetation, typically composed of exotic ruderal forbs or grassland species, but the cover is much reduced compared to areas mapped as ruderal or nonnative grassland.

Disturbed habitat (ruderal upland mustards and forbs) was typically dominated by small-podded mustard (*Hirschfeldia incana*), which forms a continuous herbaceous cover that reaches heights of 1 meter. Native forbs, such as fiddleneck and *Phacelia* spp., and shrubs, such as broom baccharis, mulefat, and California buckwheat, are present within this community, but at very low cover.

Wetlands

December 2 and 3, 2021, ICF conducted a routine-level delineation of jurisdictional waters and wetlands of the proposed project. The Aquatic Resources Delineation Report is included as Appendix D. Non-wetland waters of the U.S. and CDFW state streambed occur within the canyon within the biological avoidance area. Jurisdictional delineation results are depicted on Figure 8. No federally protected wetlands are present within the project limits. State wetlands (CDFW riparian) are present outside of the proposed project area. No state or federally protected wetlands are present within the proposed project site.

Special-status Species

The proposed project site had potentially suitable habitat for rare plant species, primarily in areas now designated as biological avoidance areas. Plant species considered special-status include federally and state-listed endangered, California Rare Plant Ranking (CRPR) list 1 and 2, and MSHCP Narrow Endemic plants. Focused surveys for rare plants were conducted for the proposed project in April 2022. The full methods and results are documented in Appendix E. No rare plants were detected during focused surveys. Surveys were conducted during appropriate conditions and, after surveys were conducted, no other rare plants were determined to have a moderate or higher potential to occur in the proposed project site.

No milkweed plants were detected in the proposed project site during rare plant surveys. Without larval host plants, the proposed project site does not support suitable habitat for monarch breeding. The proposed project site does not contain either suitable overwintering habitat or proposed critical habitat.

While the areas of the proposed project site outside of avoidance areas consist primarily of ornamental landscape and development, with low suitability for foraging for Crotch's bumble bee, this species can nest in a variety of mammal burrows within these landcover types.

The proposed project site was assessed to be potentially suitable habitat for western burrowing owl (*Athene cunicularia hypugaea*), a California Species of Special Concern, because of the presence of open areas, bare ground, or low-growing vegetation and numerous potentially suitable burrowing features such as California ground squirrel (*Otospermophilus beecheyi*) burrows, debris piles, and piles of boulders associated with erosion-control riprap. The proposed project site is within an MSHCP Burrowing Owl Survey Area. Focused surveys for western burrowing owl were conducted for the proposed project in 2022 and the full methods and results are documented in Appendix F. The burrowing owl survey area included all portions of the proposed project limits that fall within the MSHCP burrowing owl survey area, plus an additional 500 feet where the MSHCP burrowing owl survey area extends beyond the proposed project area, for a total survey area of 492 acres. Surveys for burrowing owl followed the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (County of Riverside Environmental Programs Department 2006). Under the MSHCP, the focused survey protocol was split into two parts: (a) Focused Burrow Survey; and (b) Focused Burrowing Owl Survey. The work was conducted during the breeding season as defined under the MSHCP (March 1 to August 31). The findings of the Part A focused burrow survey revealed the proposed project's burrowing owl survey areas provide suitable conditions for burrowing owl (Appendix E). The results of the Part B focused burrowing owl survey yielded no burrowing owls or potential burrowing owl sign (e.g., white-wash, feathers, pellets, or tracks) within the proposed project's burrowing owl survey areas (Appendix F).

Potentially suitable habitat for southwestern willow flycatcher and least Bell's vireo is present in the biological avoidance area within the project limits. No suitable habitat is present in the proposed project area. A substantial area within and adjacent to the project limits is annually surveyed by the Santa Ana Watershed Association (SAWA 2021) for southwestern willow flycatcher and least Bell's vireo. Based on a review of the based on a review of the Santa Ana Watershed Association data and existing conditions within the project limits, the riparian habitat within and adjacent to the Jurupa Avenue Trailhead proposed project site was determined to be adequately surveyed for least Bell's vireo, but not for southwestern willow flycatcher. Surveys for southwestern willow flycatcher were conducted in spring 2022; full methods and results are presented in the survey report included as

Appendix G. No southwestern willow flycatchers were observed during focused surveys in 2022; therefore, the species is determined to be absent from potentially suitable habitat in the biological avoidance area.

Least Bell's vireos are known from the project limits (SAWA 2021) and were incidentally observed during focused surveys for southwestern willow flycatcher. Locations of least Bell's vireo are depicted on Figure 9. Least Bell's vireos were observed within mule fat scrub and southwestern riparian forest in the biological avoidance area, outside of the proposed project site. No occupied least Bell's vireo habitat would be affected by the proposed project. Least Bell's vireo is an MSHCP Covered Species. The MSHCP requires a Determination of Biologically Equivalent or Superior Preservation for impacts on least Bell's vireo unless the portions of a property with positive survey results have at least 90 percent conservation of the property that provides for the Long-Term Conservation Value. The project would have no impacts on least Bell's vireo; therefore, a Determination of Biologically Equivalent or Superior Preservation is not required for impacts on least Bell's vireo. The proposed project sites are approximately 40 feet higher than the riparian habitat in the canyon and the majority of the proposed development (the parking lot) is set back from the rim of the canyon, providing sound attenuation. The proposed project is not expected to increase the levels of noise on occupied habitat above the high baseline that exists from nearby Van Buren Avenue.

Suitable Riversidean sage scrub habitat for coastal California gnatcatcher (*Polioptila californica californica*) occurs within the proposed project site. The MSHCP does not require surveys for California gnatcatcher, as it is an adequately conserved Covered Species.

The proposed project contains naturalized, native, and nonnative vegetation that could serve as nesting habitat for avian species protected under California Fish and Game Code Section 3503 et seq. and the federal Migratory Bird Treaty Act.

Discussion

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

Martha McLean Anza Narrows Park

Less than Significant with Mitigation Incorporated. If development of the proposed project sites occurs during the bird breeding season, the proposed project could directly affect nesting birds within the proposed project sites. Impacts that could affect active nests, eggs, or nestlings would be a violation of state and federal nesting bird and Endangered Species Act protections. The proposed project includes mitigation measure MM-BIO-1 to ensure project compliance with the MSHCP and these state and federal laws to prevent a significant impact on nesting avian species.

Least Bell's vireos are known to breed in the Santa Ana River during the summer. The proposed project would have no direct effects on potential riparian nesting habitat. The elevation differential between the proposed project and the occupied habitat in the Santa Ana River would reduce the potential for indirect noise effects on least Bell's vireo, if construction occurs during the breeding season. The proposed project would have no impact on least Bell's vireo.

Inventory surveys conducted annually by Santa Ana Watershed Association (SAWA 2021) for the last two decades have not found nesting southwestern willow flycatcher within the Santa Ana River outside of Prado basin. Because this species does not breed near the project site, the proposed project would not have indirect effects on southwestern willow flycatcher. The proposed project would have no impacts on suitable nesting habitat for southwestern willow flycatcher.

An isolated, 0.14-acre patch of planted Riversidean sage scrub is present on the north side of the project area; this patch is marginally suitable habitat for coastal California gnatcatcher. This patch is within the limits of the project area but will not be removed. California gnatcatcher is an MSHCP Covered Species and is considered adequately conserved by the MSHCP. The MSHCP does not require focused surveys to determine presence/absence of this species in suitable habitat, as habitat is considered adequately conserved. The MSHCP does not allow for take of any nesting birds, so any vegetation removal or work conducted immediately adjacent to potential habitat must be consistent with MM-BIO-1 to avoid take of nesting birds. With implementation of MM-BIO-1, the proposed project would have a less-than-significant impact with mitigation incorporated for California gnatcatcher.

No breeding or overwintering habitat is present in the proposed project area for Monarch butterfly. The proposed project site consists primarily of ornamental landscape and development, and any redevelopment of the landscaping would have an insignificant effect on the availability of nectar forage resources for any monarchs migrating through the area. Any potential effect on the availability of forage for migrating monarchs would be less than significant.

Although the proposed project site does not have high potential to support nesting or foraging Crotch's bumble bee, impacts on a Crotch's bumble bee nest would be potentially significant if the species is present underground during ground disturbance. Direct impacts on Crotch's bumble bee would be avoided through implementation of MM-BIO-2.

The MSHCP does not require surveys for rare plants, invertebrates, amphibians, mammals, or other bird species (such as burrowing owl) within Criteria Cell 621, because of the lack of potential for these species and because the MSHCP has adequately conserved habitat for these species. No other non-MSHCP covered listed plant or animal species have potential to occur within the proposed project area. The proposed project would have no effect on other special-status plant or animal species.

Jurupa Avenue Trailhead

Less than Significant with Mitigation Incorporated. If development of the proposed project site occurs during the bird breeding season, the proposed project could directly affect nesting birds within the proposed project site. Impacts that could affect active nests, eggs, or nestlings would be a violation of state and federal nesting bird, and potentially Endangered Species Act, protections. The proposed project includes mitigation measure MM-BIO-1 to ensure project compliance with the MSHCP and these state and federal laws to prevent a significant impact on sensitive avian species.

Wetlands are present in proposed project limits in the biological avoidance area. No wetlands are present in the proposed area of disturbance for the proposed project; therefore, no state or federal wetlands would be affected by the proposed project. The proposed project would have no effect on state or federal wetlands.

Focused surveys conducted for rare plants, burrowing owl, and southwestern willow flycatcher determined these species to be absent from the project limits. Therefore, the proposed project would have no impact on these species.

Least Bell's vireo is present as a summer nesting species within the riparian area in the canyon in the biological avoidance area. No habitat for least Bell's vireo would be affected by the project. The elevation differential between the proposed project site and the occupied habitat would reduce the potential for indirect noise effects on least Bell's vireo, if construction occurred during the breeding season. The proposed project would have no impact on least Bell's vireo.

The proposed project could affect up to 0.12 acre of isolated Riversidean sage scrub, which is marginally suitable habitat for coastal California gnatcatcher. California gnatcatcher is an MSHCP Covered Species and is considered adequately conserved by the MSHCP. The MSHCP does not require focused surveys to determine presence/absence of this species in suitable habitat, as habitat is considered adequately conserved. Potentially significant impacts on habitat for coastal California gnatcatcher were considered by the FEIR for the MSHCP to be mitigated by the implementation of the MSHCP, and any incidental take from habitat loss was permitted by the biological opinion and Implementing Agreement for the MSHCP. The MSHCP does not allow for take of any nesting birds, so any vegetation removal must be consistent with MM-BIO-1 to avoid take of nesting birds, including coastal California gnatcatcher. With implementation of MM-BIO-1, the proposed project would have a less-than-significant impact with mitigation incorporated for California gnatcatcher.

Although the proposed project site does not have high potential with respect to supporting nesting or foraging Crotch's bumble bee, impacts on a Crotch's bumble bee nest would be potentially significant if the species is present underground during ground disturbance. Direct impacts on Crotch's bumble bee would be avoided through implementation of MM-BIO-2.

No breeding or overwintering habitat is present in the proposed project area for Monarch butterfly. The proposed project site consists primarily of ornamental landscape and development, and any redevelopment of the landscaping would have an insignificant effect on the availability of nectar forage resources for any monarchs migrating through the area. Any potential effect on the availability of forage for migrating monarchs would be less than significant.

Overall Impact

If development of the proposed project site occurs during the bird breeding season, the proposed project could directly affect nesting birds within the proposed project site. With implementation of MM-BIO-1, the proposed project would have a less-than-significant impact with mitigation incorporated for sensitive avian species. The proposed project would have no effect on other species or state or federal wetlands.

Mitigation Measures

MM-BIO-1: Protection of Raptors, Special-Status Bird Species, and Other Nesting Birds

To avoid potential effects on fully protected raptors, special-status bird species, and other nesting birds protected by the Migratory Bird Treaty Act and the California Fish and Game Code, the following measures shall be implemented:

- If feasible, project construction and vegetation removal shall be completed outside of bird breeding season (defined as March 1 to June 30 [MSHCP Volume I, Section 7.5.3]).

- In the event that vegetation removal cannot be conducted outside the bird breeding season, focused surveys shall be conducted by a qualified biologist 3 days prior to vegetation-removal activities. Should nesting birds be found, an exclusionary buffer shall be established by a qualified biologist and documented in a Nesting Bird Monitoring Plan. The buffer may be up to 300 feet in diameter depending on the species of nesting bird found and how it is addressed in the Nesting Bird Monitoring Plan. This buffer shall be clearly marked in the field by construction personnel under guidance of the qualified biologist, and construction or clearing shall not be conducted within this zone until the qualified biologist determines that the young have fledged or the nest is no longer active.
- Nesting bird habitat within the proposed project sites shall be resurveyed during bird breeding season if there is a lapse in construction activities longer than 7 days.

MM-BIO-2. Crotch's Bumble Bee Pre-Construction Surveys

Pre-construction surveys for Crotch's bumble bees should be conducted no more than 30 days prior to any ground disturbance that would occur between March and September (the flight season). If pre-construction surveys identify occupied Crotch's bumble bee habitat within the project area, the project biologist should notify the CDFW and establish, monitor, and maintain no-work buffers around active nest colonies and any associated floral resources identified. The size and configuration of the no-work buffer should be based on best professional judgment of the project biologist in consultation with the CDFW. At a minimum, the buffer should provide at least 50 feet of clearance from construction activities around any nest entrances and maintain disturbance-free airspace between the nest and nearby floral resources. Construction activities should not occur within the no-work buffers until the colony is no longer active (i.e., no bees are seen flying in or out of the nest for 3 consecutive days, indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony).

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

Martha McLean Anza Narrows Park

Less than Significant with Mitigation Incorporated. The vegetation communities and land cover types identified within the proposed project were Riversidean sage scrub, nonnative grassland, nonnative woodland, disturbed, and developed (Table IV-2). None of these communities are considered riparian habitat. Riversidean sage scrub and nonnative grassland are considered sensitive habitats by the MSHCP. The Riversidean sage scrub and nonnative grassland are outside of PQP Conserved Lands. The Final EIR for the Western Riverside County MSHCP (County of Riverside 2003) determined that because of features incorporated into the MSHCP, impacts on sensitive vegetation communities are reduced to less-than-significant levels, with the exception of impacts on native grasslands, which would remain a significant and unavoidable impact. The proposed project would not affect native grasslands. Because the proposed project is consistent with the MSHCP, impacts on sensitive vegetation communities are considered to be mitigated to below a level of significance.

Jurupa Avenue Trailhead

Less than Significant with Mitigation Incorporated. The vegetation communities and land cover types identified within the proposed project were Riversidean sage scrub, nonnative grassland, disturbed habitat (bare ground), disturbed habitat (ruderal upland mustard and forbs), and developed (Table IV-4). None of these communities are considered riparian habitat. Riversidean sage scrub and nonnative grassland are considered sensitive habitats by the MSHCP. The Riversidean sage scrub and nonnative grassland are outside of MSHCP criteria areas and PQP Conserved Lands and therefore impacts on these communities are considered mitigated through implementation of the MSHCP and its preserve system. The Final EIR for the Western Riverside County MSHCP (County of Riverside 2003) determined that because of features incorporated into the MSHCP, impacts on sensitive vegetation communities are reduced to less-than-significant levels, with the exception of impacts on native grasslands, which would remain a significant and unavoidable impact. The proposed project would not affect native grasslands. Because the project is consistent with the MSHCP, impacts on sensitive vegetation communities are considered to be mitigated to below a level of significance.

Overall Impact

None of the vegetation communities are considered riparian habitat. Riversidean sage scrub and nonnative grassland are considered sensitive habitats by the MSHCP. The Riversidean sage scrub and nonnative grassland are outside of MSHCP criteria areas and PQP Conserved Lands; therefore, impacts on these communities are considered mitigated through implementation of the MSHCP and its preserve system. Because the project is consistent with the MSHCP, impacts on sensitive vegetation communities are considered to be mitigated to below a level of significance.

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

Martha McLean Anza Narrows Park

No Impact. No potential state- and federally protected wetlands or CDFW riparian habitat are within the proposed project. Because there are no state or federal jurisdictional wetlands within the proposed project site, there would be no adverse effect on wetlands.

Jurupa Avenue Trailhead

No Impact. State- and federally protected wetlands within the project limits are present within the biological avoidance area. No state or federal wetlands would be affected by the proposed project. Because there are no state or federal jurisdictional wetlands within the proposed project site, there would be no impact on wetlands.

Overall Impact

No state or federal jurisdictional wetlands are within the proposed project sites, and there would be no adverse effect on wetlands.

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

Martha McLean Anza Narrows Park

No Impact. The proposed project would not substantially interfere with wildlife movement or corridors, or impede the use of wildlife nursery sites. The adjacent Santa Ana River is considered a wildlife movement corridor. Development of the proposed project is situated in existing developed park areas and would not directly affect adjacent riparian habitat in the Santa Ana River. The proposed project would not indirectly affect wildlife movement in the adjacent river corridor, as the proposed project would not introduce nighttime lighting or noise. The proposed project would have no impact on wildlife movement.

Jurupa Avenue Trailhead

No Impact. The proposed project would not substantially interfere with wildlife movement or corridors, or impede the use of wildlife nursery sites. The riparian corridor within the biological avoidance area could serve as a conduit for local movement of wildlife but would not be developed by the proposed project and would not be significantly constrained by development within the proposed project site. The proposed project site does not support any wildlife nursery sites or roost trees. The proposed project would have no impact on wildlife movement.

Overall Impact

The proposed project would not substantially interfere with wildlife movement or corridors, or impede the use of wildlife nursery sites. The proposed project would have no impact on wildlife movement.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. GP 2025 includes the following policies to protect biological resources:

- Open Space Element, Policies OS-1.1 through OS-1.5, OS-1.8 through OS-1.15, OS-2.2, OS-2.4, OS-4.2, OS-4.3, OS-5.1 through OS-5.4, OS-6.1 through OS-6.4, and OS-7.3
- Air Quality Element, Policy AQ-1.9
- Land Use Element, Policies LU-2.2, LU-3.1, LU-3.2, LU-4.1 through LU-4.5, LU-5.1 through LU-5.6, LU-7.1 through LU-7.4, and LU-13.2
- Circulation and Community Mobility Element, Policies CCM-4.1 through CCM-4.4

The proposed project would not conflict with these local policies. The City of Riverside does not have tree preservation policies that would be applicable to the proposed project. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources and would have no impact.

f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project is within the limits of the MSHCP. The MSHCP serves as a habitat conservation plan (HCP) pursuant to Section 10(a)(1)(b) of the Endangered Species Act, as well as a natural community conservation plan under the Natural Community Conservation Planning Act of 2001 (Fish and Game Code Chapter 10 Section 2800 et seq.). The City is a California municipal corporation within western Riverside County and is a signatory party to the MSHCP. The City of Riverside implements this adopted plan. The Jurupa Avenue Trailhead proposed project site is within the Jurupa Area Plan and is subject to the MSHCP. The proposed project includes up to 0.03 acre of development within Criteria Cell 617, but would not affect any sensitive habitat within Criteria Cell 617. The majority of the remainder of Criteria Cell 617 is designated as PQP Conserved Lands associated with the Santa Ana River. The Martha McLean Anza Narrows Park proposed project site is within Criteria Cell 621; the proposed project complies with the MSHCP and the requirements of Criteria Cell 621. The proposed project would not conflict with any provisions of the MSHCP and is consistent with the MSHCP.

The proposed project sites are within the plan area for the Upper Santa Ana River HCP, which is currently in development. The proposed project sites are not within the HCP Preserve System of the Upper Santa Ana River HCP and do not contain any sensitive natural habitats protected by the plan. The proposed project would not conflict with provisions of the Upper Santa Ana River HCP.

The proposed project would not conflict with adopted HCPs/natural community conservation plans and would therefore have no impact.

V Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Affected Environment

Environmental Setting

Natural Setting

The proposed project site is in the South Coast subregion of the southwestern California region and within the California Floristic Province (Baldwin et al. 2012). The natural vegetation of the subregion consists primarily of chaparral, sage scrub, annual grasslands, woodland, and riparian scrub and forest. Much of the natural vegetation occurs in preserved open space or fragmented patches in areas that are not developed. The project area is within valley and foothills between the Santa Ana, San Bernardino, and San Jacinto Mountains. Major topographic features in the vicinity of the study area include the Estelle Mountains to the south, Santa Ana Mountains to the west, Box Spring Mountains to the immediate east, San Bernardino Mountains to the northeast, and San Jacinto Mountains to the southeast. Human activities and land use in the City included Native American settlement and land use for thousands of years and have historically involved ranching, farming, and mining.

The Martha McLean Anza Narrows Park site is bounded on the south by Jurupa Avenue, to the north and east by the Santa Ana River, and to the west by the Union Pacific Railroad. The park site ranges in elevation from 750 feet above mean sea level (AMSL) in the central portion to 778 feet AMSL on the southeastern end. The park site sits on an elevated terrace on the south side of the Santa Ana River, and it consists of approximately 39.5 acres of City-owned and maintained parkland. Vegetation on the park site consists mostly of nonnative grassland, nonnative riparian, Prickly pear stand, Riversidean sage scrub, southern riparian forest, and nonnative trees. Soils consist of a combination of the Arlington, Greenfield, Ramona, and Handford types. Soils are generally well drained sandy loams. Martha McLean Anza Narrows is named for activist Martha McLean, and it is a purported location of one of Juan Bautista de Anza's campsites and a crossing point of the Santa Ana River. The park was created in 1990.

The Jurupa Avenue Trailhead site is bounded to the north by Pedley Landfill and the Santa Ana River, to the south by Jurupa Avenue, to the east by Van Buren Boulevard, and to the west by a former canal, steep hillslope, and subdivisions. Elevations at the site range from 671 feet AMSL where Hole Creek empties into the Santa Ana River channel to 740 feet AMSL on the plateau above the upper portion of Hole Creek upstream of Jurupa Avenue. The entire present-day Hole Creek channel upstream of Jurupa Avenue was a part of Hole Lake in 1931. Jurupa Avenue crosses Hole Creek at the same location as the former lake's spillway. The dam that created Hole Lake was constructed in 1915 by Willits J. Hole, with the objective of providing irrigation water for his alfalfa and barley fields in the area now known as La Sierra and Arlanza. The Pedley Landfill—which is currently on a 13.5-acre parcel along the lowermost 1,200 feet of Hole Creek's east bank and extends over to Van Buren Boulevard—did not exist in 1931. The historic floodplain had been eliminated by Pedley Landfill, and the alignment of Van Buren Boulevard now traverses farther south and closer to the creek than it did in 1931. Hole Creek upstream of Jurupa Avenue is a densely vegetated channel with bed elevations inset 25 to 30 feet below the top of the terrace slopes. Hole Creek is located in terrace escarpment soils for nearly its entire length on the site. The terrace escarpment soils are generally shallow, poorly developed, and rocky in nature. The Jurupa Avenue Trailhead site currently supports disturbed Southern Riparian Forest, which comprises a mixture of native and nonnative vegetation. A large population of unhoused people are currently living on the escarpment and in lower portions of this project site.

Archaeological Setting

Two formative regional chronologies are widely cited in the archaeological literature for the pre-contact history of the coastal and inland regions of Southern California (Wallace 1955, 1978; Warren 1968). These chronologies are generalized temporal schemes, based on the presence or absence of certain artifact types. Koerper and Drover (1983) provided a more recent chronological synthesis for coastal Southern California. Moratto (1984) provided a robust synthesis of various local models of cultural development. In this synthesis, Moratto described the work of Wallace as descriptive and classificatory, and Warren's later overview as synthetic and viewing cultural traditions considering cultural ecology. Moratto's synthesis built on Warren's work identifying cultural traditions rather than Wallace's horizons. Sutton (2008) has proposed the most recent cultural sequence for Southern California, in which he provides detailed date ranges and proposes the Del Rey Tradition as a Late Holocene designation. The following discussion is divided into five major temporal intervals, which occurred over the following timespans: Pleistocene (>12600 before present [B.P.]), the Terminal Pleistocene/Early Holocene (12600–8500 B.P.), the Middle Holocene (8500–3500 B.P.), and the Late Holocene (3500 B.P.–A.D. 1769). This sequence is a revision of the chronology Wallace (1955) initially proposed using updated discussions by Byrd and Raab (2007), Erlandson et al. (2007), Sutton (2008), and Sutton and Gardner (2006). Additionally, the sequence is partially derived from Erlandson and Colten's (1991:1–2) division of the Holocene into Early, Middle, and Late subdivisions. Within these time periods, cultural traditions are discussed. These periods are analytical constructs and do not necessarily reflect Native American views.

Pleistocene (> 12600 B.P.)

The discussion of the peopling of the "New World" has had a long history in the study of archaeology. Discussions of Pleistocene occupation of the Americas have revolved around either an "ice-free corridor" model or a "coastal migration theory" model of how the first people arrived in this region of the world (Braje et al. 2019). A few archaeological sites have been purported to be of

great antiquity and offer evidence of human occupation in Southern California during the Pleistocene. Under more recent scientific scrutiny, much of this data has been proven to be erroneous (Erlandson et al. 2007:54). These cultures have traditionally been designated, depending on geography, as Paleoindian or Paleocoastal Traditions (Byrd and Raab 2007; Sutton 2008:2). Generally, these sites are centered in the Mojave and Colorado Deserts or along the coast of Southern California. Human femora from the Arlington Spring Site on Santa Rosa Island have been dated to approximately 13000 ± 200 years B.P.; midden from the Daisy Cave Site on San Miguel Island dates to approximately 11500 ± 200 years B.P. (Erlandson et al. 2011). One of the most widely publicized of these sites is the long-debated Calico Early Man Site in the desert of San Bernardino County (Erlandson et al. 2007; Schuiling 1979). Difficulties in conducting research on ancient, submerged shorelines has limited the archaeological investigation of potential Pleistocene sites along the Pacific Coast. However, continued research and new investigative methods are opening avenues for research in this arena, and new discoveries are pushing the timeline for a model of a Pacific Coast route back significantly (Braje et al. 2019). Multiple migrations along both land and sea are both being investigated and corroborated by archaeological evidence, and timelines and routes of migration will continue to change as new discoveries are made and hypotheses tested (Erlandson et al. 2007).

Terminal Pleistocene/Early Holocene (12600 B.P. to 8500 B.P.)

Warren's earliest interval for Southern California prehistory (Warren 1967, 1968; Warren et al. 1980) is the San Dieguito Tradition, beginning about 10000 B.P. and best defined in the coastal San Diego area (True 1958). Wallace (1978) calls this interval Period I: Hunting, which he believes began about 12000 B.P. In Sutton's more recently proposed cultural sequence for Southern California, this interval includes both terminal Paleocoastal and, later, San Dieguito "phases" of an undefined tradition (Sutton 2008).

The Terminal Pleistocene/Early Holocene interval is characterized by a lengthy period of human adaptation to environmental changes brought about by the transition from the late Pleistocene to the early Holocene geologic epochs. Between 13000 and 10000 B.P., climatic conditions became warmer and more arid, and Pleistocene megafauna gradually disappeared. The early occupants of Southern California initially were believed to have been nomadic large-game hunters who avoided the Los Angeles Basin. Tool assemblages included percussion-flaked scrapers and knives; large, well-made stemmed, fluted, or leaf-shaped projectile points (e.g., Lake Mojave, Silver Lake); crescentics; heavy core/cobble tools; hammerstones; bifacial cores; and choppers and scraper planes. However, more recent research and discoveries of paleo-coastal sites and archaeological sites on the Channel Islands suggest a more diversified economic strategy that included marine resources and a maritime tradition (Erlandson et al. 2007)

Middle Holocene (8500 B.P. to 3500 B.P.)

The Middle Holocene has been traditionally seen as a time of transition. The prevailing thought was that during this period, cultural practices from the Early Holocene began to shift to adaptations commonly identified archaeologically during the Late Holocene period (Byrd and Raab 2007). So-called Millingstone cultures are thought to appear during this time and flourish throughout the Southern California region. The cultural pattern recognized during this interval is thought to represent a higher reliance on foraging and seed processing than hunting, especially of large game. The interval between the Terminal Pleistocene/Early Holocene and the Middle Holocene has been

described as the Encinitas Tradition (Warren 1968) or the Millingstone Horizon (Wallace 1955), which spans from 8500 to 2600 B.P. (Warren 1968). Researchers have identified regional variations and technological differences and have named them differently (Sutton and Gardner 2006). Sutton and Gardner identify three phases of the Topanga pattern within the Encinitas Tradition: I, II, and III, of which phases I and II fall within the Middle Holocene time period. Its initial phase, Topanga I, dates to no earlier than 8500 B.P. and lasts until approximately 5000 B.P. (Sutton 2008). Assemblages of this phase typically include abundant manos and metates, many core tools and scraper planes, charmstones, cogged stones, and early discoidals, but few large points or faunal remains (Sutton and Gardner 2006). Secondary inhumation under cairns was a common mortuary practice (Johnson 1966:19), but extended southerly inhumations were also practiced.

Traditionally, the overall settlement/subsistence patterns of the Middle Holocene were thought to be exemplified by a greater emphasis on seed gathering. Adaptation to various ecological niches, further population growth, and an increase in sedentism typify the subsequent periods of cultural history in Southern California.

In general, during the Middle to Late Holocene, cultural patterns remained similar in character to those of the preceding horizon with some minor changes. Sutton (2008) identified the time period covering 5000 to 3500 B.P. as the Topanga II phase of the Encinitas Tradition. Changes in both mortuary practices and technology are identified in Topanga II assemblages. Typical Topanga II sites are said to contain higher numbers of mortars and pestles in relation to manos and metates, and higher numbers of projectile points. Mortuary patterns reflect higher numbers of flexed inhumations versus extended inhumations seen at Topanga I sites. Additionally, inhumations are often capped with large milling stones (Sutton and Gardner 2006).

A significant characteristic of the Middle Holocene is the identification of an apparent long-range interaction sphere termed the Western Nexus (Erlandson et al. 2007; Sutton and Gardner 2006). This interaction sphere is said to link cultures in the Southern California region with those in the northwestern Great Basin through trade. A key element identifying this interaction sphere is the presence of the relatively rare Olivella Grooved Rectangle bead on some sites containing Topanga II phase components (Erlandson et al. 2007; Raab and Howard 2002; Sutton and Gardner 2006; Sutton and Koerper 2005). Interestingly, the vast trade network seems to exclude the northern Channel Islands and skirts the Santa Barbara subregion. Some have hypothesized that this interaction sphere is representative of migration patterns of Uto-Aztecan speakers from the Great Basin into Southern California (Byrd and Raab 2007). This “Shoshonean Wedge” marks the end of the Middle Period and transition into the Topanga Phase III (Sutton 2008); however, Byrd and Raab (2007) place this transition in the Middle Holocene.

Late Holocene (3500 B.P. to A.D. 1769)

The Late Holocene subsumes two pre-contact periods often identified regionally as the Intermediate and Late Prehistoric Periods. Sutton (2008) has identified this time as both the end of the Encinitas Tradition (Topanga III – ca. 3500 to 2600 B.P.) and the beginning of what he terms as the Del Rey Tradition (Angeles II – VI ca. 2600 to 150 B.P.). It has been hypothesized that speakers of Uto-Aztecan languages migrated from the Great Basin across Southern California, eventually colonizing the Channel Islands. The period for this movement has been debated but is now generally understood as happening at approximately 3500 to 3000 B.P. (Sutton 2008). The movement of these people across Southern California is thought to have displaced resident groups, creating a distinctive Shoshonean “wedge” of speakers of Uto-Aztecan languages across Southern California (Kroeber

1925). Sutton (2005) argues that a "proto-Takic" group migrated south and into the Los Angeles Basin and Orange County by about 3500 B.P. and eventually became the people known as the Gabrielino.

Sutton notes that the Intermediate Period has been attributed to differing time periods regionally, and "rather uncritically as a temporal period" (Sutton 2008:5). In the Orange and Los Angeles County areas, the Intermediate was understood to signal cultural changes including distinct types of artifacts and settlement and subsistence practices with approximate date ranges of 3000 to 1350 B.P. Sutton suggests that a "general consensus" has formed with various researchers that the Shoshonean Wedge or Takic migration into the Southern California region happened during the end of the Encinitas Tradition (Topanga III/Angeles I, II, and II) and the beginning of the Intermediate period or what Sutton calls The Del Rey Tradition. Distinct biological, linguistic, settlement patterning, and subsistence practices are the hallmarks of this tradition. Biological markers including physical (cephalic) and ancient DNA have been used to identify the intrusive population (Byrd and Raab 2007). Material culture reflects an increase in hunting, as evidenced by higher numbers of projectile points, large-scale trade in both steatite and shell beads, and an increase in fishing, as evidenced through the identification of shell fishhooks that are not compound. Settlement patterns represent higher populations and fewer, but larger village sites. Mortuary practices vary slightly but appear to shift from inhumations to cremations towards the end of the period (Sutton 2008).

What has been termed the Late Period by most researchers, and a continuation of the Del Rey Tradition (Angeles Phase III) by Sutton, marks what is understood as an increase in cultural complexity in terms of social organization, interaction spheres, settlement patterning, subsistence practices, etc. (Sutton 2008). Traditional models have identified this time as one of great ecological stability and resource abundance; however, more recent research has shown this time to be less stable ecologically, with an increased emphasis on high-ranking food items such as shellfish, leading to overexploitation. The hunting of smaller sized species of shellfish, sea mammals, and terrestrial mammals has been said to indicate a decrease in foraging efficiency during this time (Byrd and Raab (2007). An important material culture component of the Late Period is the emergence of the bow and arrow, as reflected by the presence of small projectile points in larger proportions circa 1,600 B.P. (Sutton 2008).

The Medieval Climactic Anomaly represented an interval of increased climatic instability starting at approximately 1200 B.P. Long-term droughts associated with this anomaly are said to correspond with rapid social upheaval, as evidenced in the form of violence, settlement patterning changes, increased social complexity (including the development of chiefdoms), and subsistence changes related to increased population intensity (Byrd and Raab 2007; Sutton 2008).

Varying models of settlement patterning have been identified regionally during this time period. Settlement patterning is usually recognized as a system of relatively large, semi-permanent base camps surrounded by resource procurement or ephemeral sites related to resource procurement or specialized activities (Byrd and Raab 2007).

Research and analysis of archaeological data has begun to upend the traditional modeling of Late Holocene cultural patterns and behaviors (Gamble and Russell 2002; Koerper et al. 2002; Sutton 2008). Early modeling of behavior and settlement patterning in the region posited that this period was an analog for the settlement patterns, cultural practices, and ethnohistoric makeup of the groups that were observed by early Euro-American explorers (Byrd and Raab 2007). More recent

research has revealed that this period has more complexity than was previously thought, with dynamic regional and local patterns of change. For example, cultural change may have been rapid rather than gradual, and periods of cultural stress were not limited to post-contact times but occurred periodically during the pre-contact era as well (Byrd and Raab 2007).

Obvious cultural changes include population loss due to Hispanic-introduced diseases, political upheaval, the integration of European/Hispanic material culture items, the disruption of trade networks and interactions spheres, and the formation of new alliances and relationships as a result of the Spanish Mission system and an influx of nonnative colonists as well as other Native American groups such as the Cahuilla, Luiseño, and Serrano (Dietler et al. 2018; McCawley 1996; Sutton 2008).

Ethnohistoric Setting

The proposed project sites are near an ethnographic transition zone between multiple Native American groups including the Gabrielino/Tongva/Kizh, the Serrano, the Luiseno, and the Cahuilla. Refer to Section XVIII, *Tribal Cultural Resources*, for a detailed discussion of these Native American groups.

Historic Setting

History for the state of California is generally divided into three periods: the Spanish Period (1769–1822), Mexican Period (1822–1848), and American Period (1848–present). Some researchers subdivide the American Period in various phases, such as 19th century (1848–1900), Early 20th century (1900–1950), and Modern Period (1950–present).

Spanish Period

In the 18th century, the Spanish colonized present-day California, establishing a tripartite system consisting of missions, presidios, and pueblos (Bean and Rawls 1968). History records the Spaniard Pedro Fages as the first white person to pass through the San Bernardino Valley in 1772. Four years later, Fr. Francisco Hermenegildo Garcés, "the famous and revered Franciscan missionary-explorer-martyr," entered the valley, seeking to plot a road that would connect Monterey with Sonora (Beattie and Beattie 1939:3). It would be another 30 years before the Spanish returned to the region.

As the chain of missions prospered, their livestock holdings increased and became vulnerable to theft. The Spaniards responded by planning inland missions that could provide additional security and establish a presence beyond the coast. Efforts to colonize and evangelize were continued by Mission San Gabriel Arcángel, which established an estancia (rancho) at Puente at least by 1816 and further expanded its scope of operations by establishing the San Bernardino estancia at a site 1.5 miles east of Guachama in 1819. Other estancias in San Bernardino County soon followed at Agua Caliente and at the ranchos of Jucumba and Yucaipa (Beattie and Beattie 1939:12). The estancia at Guachama was intended to serve several purposes, one of which was to develop farming and teach the Cahuilla Indians about European agricultural methods. By 1821, mail was being carried between Sonora and California on the Cocomaricopa Trail, which passed through the San Bernardino Valley.

Mexican Period

Mexico proclaimed its independence from Spain in 1821 and became a federal republic in 1824, with both Baja and Alta California classified as territories (Starr 2005). The Mexican Republic began

to grant private land to citizens to encourage immigration to California. Huge land grant ranchos took up large sections of land in California. Between 1835 and 1846, more than 600 land grants were made in California by the Mexican government. The dons dominated the economy and defined the society of Mexican California (Robinson 1948; Starr 2005). These men, often referred to as "Californios," practiced an agricultural pattern that included mixed stock raising and commercial agriculture on their vast landholdings (Jelinek 1999; Starr 2005).

In 1833, Mexico adopted the Secularization Act of 1833, by which the Mexican government privatized most of the Franciscans' landholdings, including their California missions. By 1836, this sweeping process effectively reduced the California missions to parish churches and released their vast properties. Although earlier secularization plans had called for redistribution of lands to the Native American neophytes, who were responsible for construction of the mission empire, the mission lands and livestock holdings were instead redistributed by the Mexican government through land grants to Mexican ranchers (Langum 1987:15–18).

American Period

In 1848, at the end of the war between Mexico and the United States, the Treaty of Guadalupe Hidalgo was signed, giving control of California to the United States. The acquisition of California by the United States and the discovery of gold in 1849 drew many Euro-Americans into California (Robinson 1948). In 1850 California became a state and was subsequently divided into 27 counties. However, the great population influx was limited primarily to Central California, San Francisco, and the Gold Rush region of the Sierra Nevada. Southern California grew slowly during this time.

Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the Southern California economy through the 1850s. Cattle were no longer desired mainly for their hides, but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from Southern to Northern California to feed that region's burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains where available. The cattle boom ended for Southern California as neighbor states and territories drove herds to Northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Cleland 1941:102–103).

Riverside County

In 1859, the first U.S. Post Office in what would become Riverside County was established at John Magee's store on Temecula Rancho (Gunther 1984:526). The first major population boom in Southern California followed completion of the Southern Pacific Railroad connection from Sacramento and the transcontinental Central Pacific Railroad route south to Los Angeles in 1874 (Lech 2007). The railroad brought land speculators, developers, and agriculturalists into the region, including Riverside and surrounding areas that seemed most fit for agricultural development.

In 1870, Judge John Wesley North and a group of associates founded the City of Riverside on part of Rancho Jurupa. Orange trees were first planted in Riverside County in 1871. By 1882, there were more than half a million citrus trees in California, almost half of which were in Riverside County. With the agricultural boom that the navel orange provided, the City of Riverside grew rapidly during the 1880s. On May 9, 1893, Riverside County was officially formed from portions of San Bernardino County and San Diego County (Patterson 1971). The citrus boom created a number of fortunes in

Riverside and, according to the Bradstreet Index, in 1895 the City became the wealthiest jurisdiction per capita in the United States (Patterson 1971).

During World War I, the federal government established a military presence in Riverside County. The U.S. Army constructed March Field, now March Air Reserve Base, to train aviators. The base increased in size during World War II, adding Camp Haan and a third facility, Camp Anza, now occupied by the National Veteran's Cemetery. Over the decades, new residents populated new towns such as Murrieta, Wildomar, and Lake Elsinore. Eastvale, Norco, and unincorporated areas within the county south of Corona zoned lots with enough acreage for "ranchettes" and permitted horse keeping. Civic activities with equestrian themes became a feature of towns and neighborhoods within the county area and towns south of the City of Riverside (County of Riverside 2010; March Air Reserve Base n.d.). The bulk of the county remained agricultural into the 1960s and 1970s, when real estate development activity began to occur (ICF 2012).

Discussion

A California Historical Resources Information System (CHRIS) cultural resources records search encompassing the proposed Riverside Gateway Parks Program project sites plus a 0.5-mile radius was requested at the Eastern Information Center at the University of California, Riverside on January 25, 2021, and results were provided on February 15, 2022. The records search included a review of all recorded historic and pre-contact archaeological sites, as well as recorded built environment resources within 0.5 mile of the project sites.

As a result of the records search, a total of 59 cultural resources studies were identified within the 0.5-mile radius of the project site boundaries. Thirty-one of the cultural resources studies overlap with the overall Riverside Gateway Parks Program project site boundaries. A total of 401 previously recorded resources were identified within a 0.5-mile radius of the overall proposed project. Eleven of these previously recorded resources are within the Martha McLean Anza Narrows Park (eight) and Jurupa Avenue Trailhead (three) project sites. Of the 11 previously recorded resources, eight are archaeological and three are built-environment resources, as discussed below.

Archaeological and built-environment pedestrian and windshield surveys were conducted to identify any new archaeological or built-environment resources and to update previously recorded resources. Three newly identified built-environment resources were identified at Martha McLean Anza Narrows Park and were analyzed as part of this study. No new archaeological resources were identified as a result of the pedestrian survey.

a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Martha McLean Anza Narrows Park

No Impact. The study area for built-environment cultural resources consists of the Martha McLean Anza Narrows Park site and adjacent parcels containing buildings and structures 50 years old or older, with the exception of parcels at the southeast border of the site, which contain Union Pacific Railroad. Originally the Atchison, Topeka and Santa Fe Railway, the railroad line dates to the late nineteenth century and would not be physically altered by the proposed project in any way. Historic aerial photographs show that in the vicinity of the existing park, the setting of the railroad has been thoroughly altered by development and landscape alterations since World War II (NETR 2023). By

implementing recreational construction and introducing new low-rise structures within an existing park that would remain a park, the master plan would have no potential to affect the railroad line were it to qualify as a historical resource. Therefore, the railroad parcels are not included in the study area. Martha McLean Anza Narrows Park contains built-environment resources over 50 years old created when the park consisted mainly of open space. However, as an existing park consisting of grass lawns, planted trees, and other landscaping, as well as shelter structures and hardscape features such as paved walkways and parking areas, Martha McLean Anza Narrows Park is less than 50 years old (NETR 2023).

Qualified architectural historians surveyed the study area and identified a total of five built environment resources 50 years or older within it. These consist of three residences, a road, and a trail marker. The three residences have not previously been recorded or evaluated and the two other resources were previously recorded and evaluated. A qualified architectural historian evaluated the five resources applying California Register of Historical Resources (CRHR) significance criteria and historic integrity considerations. The results of the evaluations are as follows.

Table V-1. Martha McLean Anza Narrows Park Built-Environment Survey and Evaluation Results

Resource	Year Built	Eligibility	Status Code
5281 Jurupa Avenue	1960	Not CRHR eligible	6Z[a]
5979 Tucson Court	1960	Not CRHR eligible	6Z
5965 Tucson Court	1960	Not CRHR eligible	6Z
De Anza Trail Marker (P-33-16851)	1942	Not CRHR eligible	6Z
Santa Ana River Trail Road (P-33-022304)	Circa 1940	Not CRHR eligible	6Z

[a] Found ineligible for National Register of Historic Places, CRHR, or local designation through survey evaluation

California Department of Recreation (DPR) 523-series forms documenting the resource evaluations are available for reference in Appendix H. These include updates for the trail marker and the road. None of the five built environment resources is eligible for the CRHR. Therefore, none of them qualify as historical resources under CEQA. Because there are no built-environment resources within the study area that qualify as historical resources under CEQA, implementation of the master plan would have no impact on historical resources.

Jurupa Avenue Trailhead

No Impact. The study area for built-environment cultural resources consists of the Jurupa Avenue Trailhead site and adjacent parcels containing buildings and structures 50 years old or older. Qualified architectural historians surveyed the study area and identified one previously recorded built-environment resource (P-33-009651) within it. A qualified architectural historian evaluated the resource applying CRHR significance criteria and historic integrity considerations. The result of the evaluation is as follows.

Table V-2. Jurupa Avenue Trailhead Built-Environment Survey and Evaluation Results

Resource	Year Built	Eligibility	Status Code
Eastern Spillway of the Hole Lake Complex (P-33-009651)	1915–circa 2011	Not CRHR eligible	6Z[a]

[a] Found ineligible for National Register of Historic Places, CRHR, or local designation through survey evaluation

DPR 523-series forms previously evaluating the resource and updating the record for this analysis are available for reference in Appendix H. Constructed circa 1915 and formed of a dam, spillways, pipelines, a channel, and a pumphouse, the Hole Lake Complex was recorded and found eligible for local designation in the 1990s and 2000s. The complex's original Eastern Spillway was within the study area. However, the Hole Lake Complex was largely demolished and reconstructed circa 2011. Most of the current Eastern Spillway structure within the study area is of recent construction. Consequently, the spillway does not retain integrity to any historic period and is not eligible for local designation or the CRHR. It does not, therefore, qualify as a historical resource for the purposes of CEQA. Implementation of the Jurupa Avenue Trailhead Master Plan would have no impact on a historical resource.

Overall Impact

Because there are no built-environment resources within the project sites that qualify as historical resources under CEQA, implementation of the proposed project would have no impact on historical resources.

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

The CHRIS records search conducted for the proposed project identified two previously recorded archaeological resources (P-33-003357 and -009652) within the boundaries of the Jurupa Avenue Trailhead site and six previously recorded archaeological resources (P-33-000127, -016848, -017330, -017331, -017332, and -022303) within the Martha McLean Anza Narrows Park site.

ICF archaeologists Peter Pham, BA and Shannon Smith, BA conducted an archaeological pedestrian survey on March 16 and 17, 2022. Additional fieldwork was conducted on May 31 and June 1, 2022, to fully record and update archaeological resources at the project sites. The field survey methods consisted of both a systematic intensive pedestrian survey and a reconnaissance survey. The intensive pedestrian survey method consisted of teams of two walking 10-meter transects in areas where slope, vegetation, and/or terrain allowed transects to be maintained. Density of vegetation varied across the project sites and, in some cases, was very thick and hindered visibility and access. Although the ground surface was visible in some reconnaissance areas, transect coverage was precluded by dense and/or toxic vegetation such as poison oak. The reconnaissance survey method consisted of surveying visible areas where they were present and/or accessible, especially in areas of heavy vegetation.

No new archaeological sites were identified at either project site as a result of pedestrian surveys.

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact with Mitigation Incorporated. Studies conducted for the proposed project included a CHRIS records search, an intensive pedestrian survey, and research with archival sources. As a result of the records search, six previously recorded archaeological resources (P-33-000127, -016848, -017330, -017331, -017332, and -022303) were identified within Martha McLean Anza Narrows Park. Four of the resources are archaeological sites (three historical period; one pre-contact) and one is a pre-contact isolate. Each of these resources was evaluated as part of the Cultural Resources Technical Report for their potential inclusion on the CRHR. Table V-3 presents information about the resources and the recommended CRHR status. A brief description and

evaluation of each site are provided below. More detailed descriptions and evaluation discussion are provided in the Cultural Resources Technical Report (Appendix H). No new archaeological resources were identified as a result of the pedestrian survey conducted for the proposed project.

Table V-3. Archaeological Resources within the Martha McLean Anza Narrows Park Site

Primary	Trinomial	Age	Description	Recommended CRHR Status	CRHR Status Code
P-33-000127	CA-RIV-127	Pre-contact	Bedrock milling site	Recommended eligible for the purposes of the project	3CS[a]
P-33-016848	N/A	Historical period	Sewer line	Not eligible for CRHR	6Z[b]
P-33-017330	N/A (isolate)	Pre-contact	Isolated ground stone	Not eligible for CRHR	6Z
P-33-017331	CA-RIV-9014	Historical period	Refuse pit	Not eligible for CRHR	6Z
P-33-017332	N/A (isolate)	Pre-contact	Isolated ground stone	Not eligible for CRHR	6Z
P-33-022303	CA-RIV-11393	Historical period	Refuse scatter	Not eligible for CRHR	6Z

[a] Appears eligible for CRHR as an individual property through survey evaluation.
[b] Found ineligible for National Register of Historic Places, CRHR, or local designation through survey evaluation.

P-33-00127 (CA-RIV-127) is a bedrock milling site consisting of milling slicks and bedrock mortars on several granitic outcrops and is immediately adjacent to the proposed "Outpost Overlook" and associated trail as part of the Martha McLean Anza Narrows Park Master Plan. The site was originally recorded in 1951 and has been updated numerous times (Droessler and Vargas 2018; Haenszel 1971; Kirkish 1972; Hall 1975; McCarthy 1987; McLean and Bouscaren 2007; Ruzicka and Akyüz 2013). This site has been described as the location where de Anza's party camped and crossed the Santa Ana River in 1774 and 1776, although no evidence of his camp site has been identified. A few isolated ground stone artifacts have been identified in the area surrounding the site; however, no indications of a subsurface component or midden directly associated with the site have been recorded by any of the previous studies.

A 2018 survey by ICF archaeologists found the resource to be as previously recorded in 2013 by Ruzicka and Akyüz. A 2022 survey of portions of the site adjacent to the Martha McLean Anza Narrows Park project site conducted by ICF for this project confirmed the conditions of the site identified in 2018. No artifacts were identified on the ground surface surrounding the bedrock outcrops and they are still covered in layers of graffiti and cover-up paint; midden or other cultural materials would be present on the northern, lower edges of the site.

P-33-000127 has been recommended as eligible for the CRHR (Ruzicka and Akyüz 2013), although it is unknown if there has been concurrence on this recommendation. The site could be eligible under CRHR Criteria 1 and 2, because of its purported associated with the de Anza party; however, no evidence other than conjecture about the location from de Anza's diary has been presented to date. No physical evidence of the de Anza party camp or a Native American settlement at this location has been identified at the current time; however, there has been no subsurface test investigations on the site or in the surrounding area. Two isolates (P-33-017330 and P-33-017332) were identified

during monitoring of nearby excavations for road infrastructure. Both isolates consisted of Native American ground stone artifacts thought to be pre-contact. Both finds were identified as being buried, one as much as 1 meter below the ground surface. No other materials, midden, or other cultural strata were identified during the monitoring (CRM TECH 2010). The discovery of buried Native American resources in relatively close proximity to this site points to the possibility that buried resources may exist or have existed at this site. Subsurface testing could yield temporally or behaviorally diagnostic archaeological information that could clarify any association with de Anza's party or a particular pre-contact period and provide contextual data about the site (Criterion 4).

Without additional studies that might provide such contextual information, however, the site is not likely to yield any additional information important in prehistory, as the surface components and features at the site have been thoroughly documented. Because it is unknown whether a subsurface component exists at this site, it is not possible to make a recommendation for the site's potential eligibility for inclusion on the CRHR. The overall site boundaries are still somewhat ambiguous and it is unknown if a subsurface component exists at this site. Additional studies such as subsurface testing could cause unnecessary damage to the site and are beyond the scope of the current study. If possible, avoidance of this resource would be the preferred method of treatment. For these reasons, the site is recommended eligible for the purposes of the project only, and as such is considered a historical resource.

P-33-016848 (no trinomial) is identified as the Santa Ana River Trunk Sewer Line/Santa Ana River Outfall and it traverses both project sites. This site was originally recorded in December 2007 as two sewer lines along the south bank of the Santa Ana River. The lines were described to have been constructed in 1941 and 1957 and consisted of both 24-inch-diameter vitrified clay and 45-inch-diameter reinforced concrete pipelines and concrete-covered brick manholes with cast-iron manhole covers (Beedle 2008). The site was updated in December 2008 and several manhole features were added (Ballester 2008). In 2012 the site was again updated, and at this time it was noted that the site had been destroyed as part of the construction of its replacement. In 2018, ICF archaeologists revisited the recorded site area and observed that portions of the clay sewer line had been mostly removed as a result of the Santa Ana River Trunk Sewer Replacement Project in 2012. ICF archaeologists revisited this site while conducting pedestrian surveys in 2022 for this project. Manhole covers were identified and matched the descriptions given in previous recordings of the site. The site boundaries will be expanded to the north as a result of the survey for the proposed project.

In 2012, Loren-Webb and Ruzicka recommended this resource as ineligible for inclusion on the CRHR, as it did not have an important association with people or events (Criteria 1 and 2), it was not distinctive of a certain time, place, or construction method (Criterion 3), and would not yield additional information with further research (Criterion 4). Loren-Webb and Ruzicka concluded that the integrity of the site had been permanently altered and it could not be considered for inclusion in either the CRHR or National Register of Historic Places (NRHP). The site extends beyond the previous project boundaries and was also identified by the ICF team in the 5200 Tequesquite and Tequesquite North project sites. While the site boundaries will be extended, the condition and elements for consideration of the site's eligibility have not changed. Considering the lack of integrity of the site within the project areas of potential effects, the lack of ability for the site features to inform on research issues, and the lack of context to associate the site with important events or people, ICF concurs with the previous recommendation of "not eligible" for inclusion on the CRHR. As such, the site is not considered a historic resource per CEQA.

P-33-017330 (isolate; no trinomial) is a pre-contact isolate that consists of fragments of two metates. The isolate was originally recorded by Robert Porter of CRM Tech in 2007 during monitoring of excavations conducted to create an artificial bank near the edge of the adjacent Union Pacific Railroad tracks. It is assumed that the metates were whole, as the recorder described them as being "broken by the equipment." The fragments were dragged by the equipment several feet from their original location, and Porter estimated that the metates were originally at a depth of 50 centimeters below the "grading surface" (Porter 2007:1). It was noted that this find was in relatively close proximity to P-33-017332 (an isolated pre-contact mano [see below for discussion]) and that there is potential for additional subsurface archaeological materials in this area. ICF archaeologists surveyed the area where the isolated artifacts were recorded but did not identify any additional archaeological materials.

In 2010, CRM TECH evaluated this resource and noted that, as an isolate, P-33-017330 "by definition" was not considered a potential historic property (NRHP) or historic resource (CRHR). Additionally, it was recommended that P-33-017330 did not yield or have the potential to yield any information important to "advancing the field of archaeology" (CRM TECH 2010:59). Because the isolated artifacts were not found in association with other materials, midden, or features, there is no contextual information to associate with these artifacts. It is unclear whether these artifacts are components of a larger archaeological site. Without such contextual information and considering the ubiquity of such isolated artifacts in the region, this isolate does not appear to meet CRHR Criteria 1, 2, 3, or 4. As it is an archaeological isolate, ICF concurs with the previous recommendation by CRM TECH that the isolate does not meet the criteria for inclusion in the CRHR and is, therefore, not considered a historic resource.

P-33-017331 (CA-RIV-9014) is a historical-period refuse pit first recorded by Robert Porter in 2007 during monitoring of trenching activities. The site consisted of thousands of historical-period artifacts including numerous whole glass bottles, ceramics, farming tools, batteries, building materials, and other domestic refuse thought to be associated "with a farm or ranch" (Porter 2007:1). CRM TECH (2010) concluded that the refuse had been dumped into a gully that was later filled with sediment likely related to the widening of Jurupa Avenue in the 1950s. The deposit lacked internal stratigraphy and was identified at a depth of 6 feet below the ground surface and extending to 12 feet below the ground surface at the time. CRM TECH could not find any direct association with a particular residence, individual, or group "despite extensive research" (CRM TECH 2010:59).

In 2022, ICF surveyed the area where the deposit was recorded but did not identify any archaeological materials. Considering that the deposit was identified well below the existing ground surface, it was not likely that anything would have been visible during the survey for the proposed project.

After extensive analysis and research with archival sources, CRM TECH (2010) concluded that the site was not eligible for either the CRHR or NRHP. The DPR form notes that most of the site has been removed and that a small remaining portion was likely disturbed when the trench was backfilled. This disturbance, coupled with the fact that most of the site was previously excavated, means that the site's integrity appears to be severely altered. ICF concurs with the CRM TECH recommendation that the site does not meet any eligibility criteria of the CRHR; furthermore, the analysis conducted by CRM TECH has exhausted its research potential. As such, ICF concurs with CRM TECH and recommends that the site is not eligible for the CRHR and should not be considered a historic resource per CEQA.

P-33-017332 (isolate; no trinomial) is an isolated pre-contact ground stone artifact (mano) identified and recovered during archaeological monitoring. The isolated, whole mano was documented by CRM TECH (2010) approximately 1 meter below the ground surface. No other artifacts or signs of midden or an archaeological site were identified in proximity to the isolated artifact. CRM TECH also noted that "additional archaeological remains are likely buried in close proximity to this isolate and P-33-017330 discussed above" CRM TECH (2010). In 2022, ICF surveyed the area surrounding the location where this isolated artifact was originally recovered but did not identify any other archaeological materials.

In 2010, CRM TECH evaluated this resource and noted that, as an isolate, P-33-017332 "by definition" was not considered a potential historic property (NRHP) or historic resource (CRHR). Additionally, it was recommended that P-33-017332 did not yield or have the potential to yield any information important to "advancing the field of archaeology" (CRM TECH 2010:59). Because the isolated artifact was not found in association with other materials, midden, or features, there is no contextual information to associate with the artifact. It is unclear whether this artifact is a component of a larger archaeological site. Without such contextual information and considering the ubiquity of similar isolated artifacts in the region, this isolate does not appear to meet CRHR Criteria 1, 2, 3, or 4. ICF concurs with the previous recommendation by CRM TECH that the isolate does not meet the criteria for inclusion in the CRHR and is not considered a historic resource.

P-33-022303 (CA-RIV-11393) is a large, diffuse historical-period refuse deposit that was first recorded by Barbara Loren-Webb in 2011. The site was discovered during monitoring of mechanical excavations along a terrace edge on the south side of the Santa Ana River for the Santa Ana River Trunk Sewer Replacement Project. The site is described as a "large, extremely sparse and diffuse" deposit of refuse dating from the 1880s to the 1940s. Analysis of the depositional context of the materials as well as diagnostic elements of the artifacts led to the conclusion that the deposit is the result of multiple episodes of refuse disposal over a number of years (Akyüz and Ruzicka 2014). In 2022, ICF archaeologists surveyed the area of P-33-022303. A few artifacts including several bricks and brick fragments and one whiteware ceramic shard were identified within the site boundaries. Overall, the site appears to be in the same condition as when it was first identified; however, the original depositional context of the materials has likely been substantially altered due to the excavation of the large trench and placement of the sewer line in this area.

The site was evaluated by Akyüz and Ruzicka in 2014 and recommended ineligible for the CRHR due to a lack of contextual information to tie artifacts to and the "multi-episodic nature of the scatter" (Akyüz and Ruzicka 2014:49). The authors of the previous evaluation state that the lack of context makes it impossible to ascribe a distinct age or association with a particular event or person important to California or local history (CRHR Criteria 1 and 2). Additionally, it is noted that the site does not appear to hold any further research potential and, with the previous analysis of collected artifacts, its potential has likely been exhausted (CRHR Criterion 4). ICF concurs with the recommendations of Akyüz and Ruzicka and does not recommend the site eligible for inclusion in the CRHR. As such, P-33-022303 is not considered a historical resource for the purposes of the proposed project.

Summary

Four previously recorded archaeological sites and two previously recorded isolates were identified with the records search and updated during the pedestrian survey for the Martha McLean Anza Narrows Park site. The two isolates were not updated because the artifacts were collected in the

past; however, the areas surrounding the location of the isolates were surveyed and no additional materials were identified. All six of the archaeological resources were previously evaluated for their potential to be included in the CRHR. One of the resources (P-33-000127) was previously recommended as eligible for inclusion in the CRHR (Ruzicka and Akyüz 2013). Given our current understanding of the site, it is not possible to determine the site's eligibility until subsurface testing is conducted to confirm the presence of such a deposit. Because the vertical and horizontal boundaries of site P-33-000127 are not determined conclusively and it is possible that a subsurface component exists for the site, it is recommended that the site be considered eligible for the CRHR for the purposes of the proposed project only. Because the site will be assumed eligible and would be a historical resource per CEQA and because subsurface disturbances associated with construction activities would affect the site's boundaries, implementation of MM-CUL-1 through MM-CUL-5 would reduce impacts on the site to less-than-significant levels.

The remaining five resources have all been evaluated as not eligible for listing in the CRHR, and ICF concurs with these recommendations. As such, the remaining five resources (P-33-016848, -017330, -017331, -017332, and -022303) are not considered historic resources per CEQA and do not require additional consideration.

Because of the Martha McLean Anza Narrows Park site's proximity to previously recorded archaeological resources, including Native American archaeological sites, the proposed Martha McLean Anza Narrows Park site is considered to be archaeologically sensitive and to have potential for containing as-yet unidentified archaeological resources. The proposed project would include subsurface disturbance associated with construction activities adjacent to known resources. Implementation of MM-CUL-1 through MM-CUL-5 would reduce any significant impacts on unanticipated archaeological discoveries to less-than-significant levels.

Jurupa Avenue Trailhead

Less-than-Significant Impact with Mitigation Incorporated. Studies conducted for the proposed project included a CHRIS records search, an intensive pedestrian survey, and research with archival sources. As a result of the records search, two previously recorded archaeological resources (P-33-003357 and P-33-009652) were identified within the Jurupa Avenue Trailhead site. One site (P-33-003357) is a historical-period site and one (P-33-009652) is pre-contact in age. Each of these resources was evaluated as part of the Cultural Resources Technical Report for their potential inclusion on the CRHR. Table V-4 presents information about the resources and their recommended CRHR status. A brief description and evaluation of each site are provided below. More detailed descriptions and evaluation discussion are provided in the Cultural Resources Technical Report (Appendix H).

Table V-4. Archaeological Resources within the Jurupa Avenue Trailhead Site

Primary	Trinomial	Age	Description	Recommended CRHR Status	CRHR Status Code
P-33-003357	CA-RIV-3357H	Historical period	Water conveyance system	Not eligible for CRHR	6Z[a]
P-33-009652	CA-RIV-6452	Pre-contact	Bedrock milling site	Not eligible for CRHR	6Z

[a] Found ineligible for NRHP, CRHR, or local designation through survey evaluation.

P-33-0003357 (CA-RIV-3357H) is known as the Riverside Power Company Canal and was originally recorded as two different sites (CA-RIV-3357H and CA-RIV-5806H). The site was first recorded in 1987 by Romani et al. and updated in 1997 by Love and Tang; at that time, it was determined that the site was larger than originally recorded. Love and Tang decided that sites CA-RIV-3357H and CA-RIV-5806H should be combined, as they were part of the same hydroelectric system. Love and Tang did not evaluate the site or provide any indication of the site's condition. ICF updated the site again in 2019 and found it to be in poor condition. ICF described the site as having portions removed, destroyed, and/or deteriorated. ICF recommended the site as ineligible for the CRHR and NRHP based on a lack of integrity (ICF 2019). The site was revisited by ICF archaeologists on June 1, 2022, who found that much of what had been visible of the channel has since been filled in by sediment and modern refuse. Additionally, large numbers of unhoused people are using the area, apparently in a much higher density than was documented by ICF in 2019. The site has been heavily affected by this modern use, with large amounts of refuse and camping debris strewn along the route of the channel.

The present survey of the site confirmed the findings of earlier researchers and concurs with the recommendation of ICF 2019 that the site is not eligible for the CRHR. The site is in fact in worse condition than when it was updated by ICF in 2019. P-33-003357 does not appear to meet any of the criteria for inclusion in the CRHR and, as such, the site is not recommended as eligible for inclusion in the CRHR. The site is not identified as a historical resource for the purposes of the proposed project.

P-33-009652 (CA-RIV-6452) was originally recorded in 2000 by Collett as a large, isolated bedrock milling feature. Collett identified three grinding elements on the outcrop including one basin, one slick, and one "rub." Collett did not identify any other artifacts or midden constituents at the site. The site was updated by McKenna in 2011, and it was noted that the grinding elements were still visible; however, the outcrop had been vandalized with graffiti. The site was visited by ICF in 2018 and it was noted that construction of a new sewer outfall after the site was originally recorded had affected the site. Much of the boulder was obscured with sediment and vegetation and the rock is covered in graffiti and paint. A survey of the site as part of the proposed project was conducted by ICF in 2022. At that time, the boulder and surrounding area were obscured by the deposition of silt from the nearby hillslope, occupation of the area by unhoused people, large amounts of modern refuse, and heavy growths of brush. The site appeared to be in the same condition as when visited by ICF in 2018.

The milling feature lacks integrity because it has been altered by modern graffiti and painting, construction activities, disturbance from large populations of unhoused people, erosion of surrounding soils, and incorporation into the design of a modern sewage outfall feature. Milling sites such as this are ubiquitous in the region and, without an associated subsurface component, such sites are typically recommended as ineligible for inclusion on the CRHR for their lack of potential to yield information important to history or prehistory. No temporally diagnostic artifacts or dateable materials were recovered or identified at the site and, as such, the milling features cannot be associated with a particular time period or population. Individually, the site has not yielded and is not likely to yield information important to prehistory or history, and previous documentation has likely exhausted any further potential of the site to do so. P-33-009652 does not appear to meet any of the criteria for inclusion in the CRHR and, as such, the site is not recommended as eligible for inclusion in the CRHR under any of the criteria necessary for listing. The site is not identified as a historical resource for the purposes of the proposed project.

Summary

While two archaeological sites were identified within the Jurupa Avenue Trailhead site, neither of them is recommended as eligible and, therefore, neither is considered a historic resource per CEQA. As such, the Jurupa Avenue Trailhead site would not affect any known historical resources. However, the presence of pre-contact archaeological resources within the project site boundaries indicates the possibility for unidentified buried archaeological resources. Because of the overall project site's proximity to previously recorded archaeological resources, including Native American archaeological sites, the Jurupa Avenue Trailhead site is considered to have potential for containing as-yet unidentified archaeological resources. The proposed project would include subsurface disturbance associated with construction activities. Implementation of MM-CUL-1 through MM-CUL-4 would reduce any significant impacts on unanticipated archaeological discoveries to less-than-significant levels.

Overall Impact

A total of eight archaeological resources were identified in the Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead project sites. Of the eight archaeological resources, one (P-33-000127) is recommended eligible for the CRHR for the purposes of the proposed project only and considered a historical resource. The remaining seven (P-33-003357, -009652, -016848, -017330, -017331, -017332, and -022303) are recommended ineligible for listing in the CRHR and are not considered historical resources per CEQA. While there is only one historical resource that has been identified and may be affected within the two project sites, both project sites are considered sensitive for archaeological resources due to their proximity to known pre-contact archaeological resources. Therefore, ground-disturbing activities could result in the discovery of previously unidentified archaeological resources and the destruction of known archaeological resources, which would be a potentially significant impact. MM-CUL-1 through MM-CUL-5 should be implemented to reduce impacts on known and as-yet undiscovered archaeological resources to less-than-significant levels.

c. Disturb any human remains, including those interred outside of dedicated cemeteries?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact with Mitigation Incorporated. No pre-contact sites or cemeteries have been identified in the study area or within a 0.5-mile radius of the study area. Based on the results of the cultural resource records search, background research, and Native American consultation process, there is no evidence of any human remains, including those interred outside of dedicated cemeteries, within the study area that would be affected by the proposed project. However, because the proposed project would involve ground-disturbing activities, it is possible that such activities could unearth, expose, or disturb previously unknown human remains. Implementation of MM-CUL-5 would reduce potential impacts on unknown human remains to less-than-significant levels.

Mitigation Measures

The potential impacts of the project described in this section would be reduced to less-than-significant levels with implementation of the following mitigation measures.

MM-CUL-1: Retain a Qualified Archaeologist and Develop Worker Environmental Awareness Program Training to Be Delivered to Construction Crews

Prior to the start of any ground-disturbing activities, the City should retain a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (36 Code of Federal Regulations, Part 61) to carry out the following cultural resources measures. Prior to the start of ground-disturbing activities, the qualified archaeologist will prepare a cultural resources sensitivity training module to be used as part of the construction operations Worker Environmental Awareness Program training. Prior to the commencement of construction activities, at the project kickoff, the selected qualified archaeologist will provide a briefing to construction personnel to provide information on regulatory requirements for the protection of cultural resources. All construction personnel will receive sensitivity training prior to beginning work on site. Construction personnel will be informed about the types of archaeological resources that may be encountered and the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. Workers will be provided contact information and protocols to follow if unanticipated discoveries are made. The City and the lead construction firm (contractor) will ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

MM-CUL-2: Avoid Archaeological Sites through Establishment of Environmentally Sensitive Areas

If archaeological resources are identified either through an archaeological study or as unanticipated discoveries during construction, implementation of MM-CUL-2 would be required. Avoidance is always the preferred method of treatment for archaeological sites. Additionally, should sacred objects or objects of religious importance to Native American tribes be identified, preservation in place avoids conflicts with traditional values of tribes who ascribe meaning to these resources and their locations. Impacts on cultural resources can be avoided through establishing fencing around cultural resources with a buffer and delineating these locations as environmentally sensitive areas. The appropriate buffer size shall be delineated upon consultation with Native American tribes and the City (for pre-contact resources). The City and the consultant archaeologist for individual development projects shall determine appropriate buffers for historical-period (non-Native American) archaeological resources on a case-by-case basis based on the known extent of archaeological sites and the relationship to proposed ground disturbance.

MM-CUL-3: Provide Archaeological and Native American Monitoring

If avoidance is not feasible and project-related ground disturbance is anticipated to occur at previously identified archaeological sites or areas identified as archaeologically sensitive, it is recommended that an archaeologist be present to monitor the activity. If ground-disturbing activities are to proceed at known pre-contact archaeological sites or areas identified as sensitive for Native American or tribal cultural resources (TCRs), it is recommended a Native American monitor be retained in addition to an archaeological monitor.

The archaeologist, in consultation with consulting tribes, the applicant, and the City, shall develop an Archaeological Monitoring Plan to address the details, timing, and responsibility of

all archaeological and cultural activities that occur on a development site. Details in the plan shall include:

1. Project grading and development scheduling:
    a. The development of a rotating or simultaneous schedule in coordination with the applicant and the project archaeologist for designated Native American tribal monitors (if resources are pre-contact in age) from the consulting tribes during grading, excavation, and ground-disturbing activities on the site, including the scheduling, safety requirements, duties, scope of work, and Native American tribal monitors' authority to stop and redirect grading activities in coordination with all project archaeologists
    b. The protocols and stipulations that the applicant, tribes, and project archaeologist for the individual development project shall follow in the event of inadvertent cultural resource discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation
    c. Treatment and final disposition of any cultural resources, sacred sites, and human remains if discovered on a development site
    d. The scheduling and timing of the Cultural Sensitivity Training

The Native American monitor should be affiliated with a local Native American tribe. If project-related ground-disturbing activities in archaeologically sensitive areas are performed simultaneously in more than one location and these activities are performed at a distance greater than 300 feet apart, an archaeological monitor should be present at each location. At a minimum, the archaeological monitor will meet the Society for California Archaeology professional qualification standards for an archaeological crew leader and will work under the direction of an individual that meets the Secretary of the Interior's Standards and Guidelines for Archaeology and the Society for California Archaeology professional qualification standards for a Principal Investigator.

The archaeological monitor will have the authority to temporarily pause excavations, as needed, to examine potential archaeological discoveries. In the event of an unanticipated discovery of archaeological resources or human remains, the archaeological monitor will follow the unanticipated discovery protocols described below.

MM-CUL-4: Unanticipated Discoveries Protocol

If buried cultural resources are discovered inadvertently during ground-disturbing activities, work should be temporarily halted in the area and within 50 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the lead agency. If the find is pre-contact or Native American in origin, consultation with local Native American tribes who have expressed interest and concern regarding the proposed project should be undertaken.

If the discovery is determined to be not significant in consultation with the lead agency, work will be permitted to continue in the area. If, in consultation with the lead agency, a discovery is determined to be significant, a mitigation plan should be prepared and carried out in accordance with state guidelines. If the resource cannot be avoided, a data recovery plan should be developed to ensure collection of sufficient information to address archaeological and historical research questions, with results presented in a technical report describing field methods, materials collected, and conclusions. The qualified archaeologist shall treat recovered items in

accordance with current professional standards by properly determining provenance, cleaning, analyzing, researching, reporting, and curating them in a collection facility meeting the Secretary of the Interior's Standards as promulgated in 36 Code of Federal Regulations 79.

MM-CUL-5: Human Remains and Associated or Unassociated Funerary Objects

The discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately and all work within 100 feet of the find shall be halted until the remains have been evaluated by the county coroner. If the human remains are determined to be pre-contact, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant. The City will ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices, and that further activities take into account the possibility of multiple burials. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

VI Energy

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Affected Environment

The study area for electricity resources is within the Riverside Public Utilities (RPU) network, which extends throughout the City. For petroleum fuels, the resource study area is Riverside County. This section describes the energy demand in the study area and the impacts on energy demand that could result from construction and operation of the proposed project. The energy resources evaluated in this section include electricity and petroleum fuels, which include gasoline and diesel. Energy modeling inputs, assumptions, and results are contained in Appendices C1 and C2. Natural gas resources are not anticipated to be used during construction or operation of the proposed project.

Discussion

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. The short-term construction and long-term operation of the proposed project would require the consumption of energy resources in several forms at the proposed project sites and within the project area. Construction and operational energy consumption are evaluated in detail below.

Electricity

Construction

Temporary electric power for potential as-necessary lighting and electronic equipment such as computers inside temporary construction trailers would be provided by RPU or other providers within Riverside County. The electricity used for such activities would be temporary and have a negligible contribution to the proposed project's overall energy consumption.

Operations

Project operation would require electricity for water supply and distribution as well as safety lighting. The estimation of operational electricity demand for this system was calculated by CalEEMod version 2022.1 and would be as high as 37,936 kilowatt-hours per year (21,292 kilowatt-hours per year for the Martha McLean Anza Narrows Park site and 16,644 kilowatt-hours per year for the Jurupa Avenue Trailhead site). The comparison of the operational electrical use to Riverside County's non-residential electrical use can be found within Appendices C1 and C2.

For comparison, non-residential electricity demand for Riverside County in 2021 was 8,256.71 gigawatt-hours per year (CEC 2022a). The proposed project's operational energy use of 0.0379 gigawatt-hour per year (0.0213 gigawatt-hour per year for the Martha Mclean Anza Narrows Park site and 0.0166 gigawatt-hour per year for the Jurupa Avenue Trailhead site) would result in a minimal increase in electricity consumption compared to the total demand in Riverside County (0.0005 percent). Therefore, impacts related to operational electricity use would be less than significant and no mitigation is required.

Natural Gas

Construction and Operations

Natural gas is not anticipated to be required during construction of the proposed project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the *Petroleum Fuel* subsection. Fuels used during operation would also primarily consist of diesel and gasoline. Therefore, impacts related to construction and operational natural gas use would be less than significant.

Petroleum Fuel

Construction

The proposed project would require the use of nonrenewable energy resources in the form of fossil fuels used to operate equipment and to fuel vehicle trips during construction and operation. Diesel and gasoline fuels would be consumed during the proposed project's construction activities. Energy expenditures during construction would be temporary, lasting for approximately 15 months for the Martha McLean Anza Narrows Park project site and 6 months for the Jurupa Avenue Trailhead site. Construction would not result in wasteful or inefficient use of energy. Table VI-1 and Table VI-2 show energy fuel consumption during construction for both sites. Construction fuel consumption represents total fuel use over the 15-month construction period for the Martha McLean Anza Narrows Park project site and a 6-month construction period for the Jurupa Avenue Trailhead site. Table VI-3 displays the total cumulative construction fuel consumption for both sites.

Table VI-1. Martha McLean Anza Narrows Park Project Construction: Annual Petroleum Consumption

Source	Diesel (gallons)	Gasoline (gallons)
Off-road Equipment	36,343	–
Haul Trucks	326	–
Vendor Trucks	327	–

Source	Diesel (gallons)	Gasoline (gallons)
Workers	–	2,848
Total Fuel Consumption	36,996	2,848

Source: Energy calculations are provided in Appendix C1.

Table VI-2. Jurupa Avenue Trailhead Project Construction: Annual Petroleum Consumption

Source	Diesel (gallons)	Gasoline (gallons)
Off-road Equipment	12,996	–
Haul Trucks	416	–
Vendor Trucks	223	–
Workers	–	1,040
Total Fuel Consumption	13,635	1,040

Source: Energy calculations are provided in Appendix C2.

Table VI-3. Cumulative Construction: Annual Petroleum Consumption

Source	Diesel (gallons)	Gasoline (gallons)
Off-road Equipment	49,339	–
Haul Trucks	742	–
Vendor Trucks	550	–
Workers	–	3,888
Total Fuel Consumption	50,631	3,888

Source: Energy calculations are provided in Appendices C1 and C2.

During the proposed project's construction period, diesel and gasoline would be used to fuel onsite construction equipment, offsite hauling vehicles, and workers' automobiles. As shown in Table VI-3, construction of the proposed project would consume an estimated 50,631 gallons of diesel and 3,888 gallons of gasoline (see Appendices C1 and C2). In Riverside County, approximately 290,000,000 gallons of diesel and approximately 981,000,000 gallons of gasoline were consumed in 2021 (CEC 2022b). The proposed project's diesel consumption would represent 0.017 percent of Riverside County use, and gasoline consumption would represent 0.0004 percent of Riverside County use. Therefore, energy consumed during project construction would be minimal and impacts would be less than significant.

Operations

Fuel consumption resulting from the proposed project's operational phase would be attributable to occasional maintenance trips and recreational trips to the proposed project site. In total, the proposed project is estimated to have approximately 323 maintenance-related trips per year (161 trips for each project site) and 59,641 recreational trips per year (24,827 trips for the Martha McLean Anza Narrows Park site and 34,814 trips for the Jurupa Avenue Trailhead site). Petroleum fuel consumption associated with motor vehicles traveling to and from the proposed project site during operation is a function of vehicle miles traveled (VMT) and the vehicle fleet mix. The proposed project's total VMT was calculated using data from the Traffic Assessments for the proposed project (Appendices J1 and J2) in addition to maintenance trips provided by the project applicant. The proposed project's operational fuel usage was calculated using CARB's Emission Factor model (EMFAC2021) for the SCAQMD region in addition to the default fleet mix from

CalEEMod for the project land use type of City Park. Using the annual maintenance operations and the CalEEMod default trip lengths, the proposed project's total yearly VMT would be approximately 796,793 miles (307,838 miles for the Martha McLean Anza Narrows Park site and 488,955 miles for the Jurupa Avenue Trailhead site). The estimated fuel use from vehicles traveling to and from the proposed project sites during operation is shown in Table VI-4 to Table VI-6.

Table VI-4. Martha McLean Anza Narrows Park Project Operations: Annual Petroleum Consumption

Fuel	Gallons
Gasoline Consumption	11,854
Diesel Consumption	2,224

Source: Energy calculations provided in Appendix C1.

Table VI-5. Jurupa Avenue Trailhead Project Operations: Annual Petroleum Consumption

Fuel	Gallons
Gasoline Consumption	18,828
Diesel Consumption	3,533

Source: Energy calculations provided in Appendix C2.

Table VI-6. Cumulative Project Operations: Annual Petroleum Consumption

Fuel	Gallons
Gasoline Consumption	30,682
Diesel Consumption	5,757

Source: Energy calculations provided in Appendices C1 and C2.

As such, during project operations, the proposed project would consume an estimated 5,757 gallons of diesel and 30,682 gallons of gasoline. In Riverside County, approximately 290,000,000 gallons of diesel and approximately 981,000,000 gallons of gasoline are consumed annually, based on Riverside County's consumption rates in 2021 (CEC 2022b). The proposed project's diesel consumption would represent approximately 0.002 percent of Riverside County use, and gasoline consumption would represent approximately 0.0031 percent of Riverside County use. Therefore, energy consumed during project operations would be minimal and impacts would be less than significant.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. The City of Riverside and the County of Riverside, which have jurisdiction at the proposed project site, have not implemented local plans to specifically address renewable energy or energy efficiency. However, in 2019, the County of Riverside updated its Climate Action Plan (CAP), which aims to improve energy efficiency and mitigate greenhouse gas (GHG) emissions in Riverside County. As the proposed project is consistent with the criteria outlined by the 2019 CAP for a passive park and an active park, which best identify the proposed project, the proposed project is also consistent with the goals of the 2019 CAP for the passive park and active

park land use types. Furthermore, in 2016, the City of Riverside adopted its CAP, which provides local GHG-reduction measures to support the City's GHG-reduction goals. The proposed project is consistent with the GHG-reduction measures outlined by the 2016 CAP that are relevant to the proposed project. Therefore, the proposed project is consistent with the 2016 CAP. The proposed project would also be built to the 2022 California Green Building Standards Code (CalGreen) and Title 24 standards, which would exceed the 2017 Title 24 and CalGreen requirement listed in the 2019 CAP. In addition, equipment and vehicles associated with construction and operation of the proposed project would be subject to fuel standards at the state and federal levels. Therefore, the proposed project would not conflict with or obstruct a state or local plan adopted for the purpose of increasing the amount of renewable energy or energy efficiency. Consequently, direct, indirect, or cumulative project impacts would be less than significant, and no mitigation measures are required.

VII Geology, Soils, and Paleontological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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.	☐	☐	☒	☐
2. Strong seismic ground shaking?	☐	☐	☒	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
4. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Affected Environment

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Both project sites are within the City of Riverside, which lies within the northern end of the Peninsular Ranges, approximately 12 miles south of the intersection with the Transverse Range. The Santa Ana Mountains are approximately 15 miles south and southwest of the City, while the San Jacinto Mountains are approximately 10 miles east and northeast of the City. The San Bernardino Mountains are about 20 miles north of the City. A series of hills and small mountains surround the project site. These hills and mountains are between the two dominant San Jacinto and Santa Ana Mountain ranges. They include La Sierra/Norco Hills, Mount Rubidoux, Box Springs Mountains, Sycamore Canyon, and the many smaller ranges south of the City. Within the City, surface elevations range from about 700 feet AMSL near the Santa Ana River to over 1,400 feet AMSL west of La Sierra. The highest point in the southern portion of the City's Sphere of Influence as defined by GP 2025 is Arlington Mountain, standing at 1,853 feet AMSL approximately 1.5 miles northwest of Lake Mathews. Additionally, portions of Box Springs Mountain Reserve in the northern portion of the City's Sphere of Influence area extend as high as 2,000 feet.

Both project sites and the hills in the project vicinity are made up of granite and adamellite, Mesozoic granitic rock, granodiorite, Mesozoic basic intrusive rocks, and alluvium (located around the Santa Ana River). Most date from the Mesozoic period, except for the alluvium, which dates from the Quaternary.

No Fault-Rupture Hazard Zone exists within both project sites (City of Riverside 2007). There are no known seismic faults within Riverside, and the City is not within a mapped Alquist-Priolo Earthquake Fault Zone (City of Riverside 2007). However, the City is in a region with several active fault lines including the San Jacinto and Elsinore faults. The San Andreas fault lies in San Bernardino County northeast of the proposed project sites (City of Riverside 2007). Additionally, Riverside County has an extensive record of fossil life starting in the Jurassic period, 150 million years ago.

Discussion

a.1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: 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.

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. No Fault-Rupture Hazard Zones exist within the proposed project area. There are no known seismic faults within the City of Riverside, and the City is not within a mapped Alquist-Priolo Earthquake Fault Zone (City of Riverside 2007). Compared to other portions of Southern California, localized seismic hazard potential is considered relatively slight, and there are no known seismic faults within the proposed project area. Therefore, the potential for surface fault rupture is considered to be low, and impacts would be less than significant.

a.2. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Strong seismic ground shaking?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. As with most Southern California regions, both project sites would be subject to strong ground shaking in the event of a major earthquake. Three major fault zones and some subordinate fault zones are found in the Peninsular Ranges Geomorphic Province where the proposed project is located. Both project sites have a potential for strong seismic ground shaking according to the State of California Seismic Safety Commission map *Earthquake Shaking Potential for the Los Angeles Metropolitan Region, Counties, Summer, 2003* (California Seismic Safety Commission 2003). This map shows the relative intensity of ground shaking and damage in the greater Los Angeles metropolitan region from anticipated future earthquakes. As a result, the proposed project could be subject to future seismic shaking and strong ground motion resulting from seismic activity, and damage could occur.

Due to the nature of the proposed project as a neighborhood-service recreational resource, it is not expected to draw a substantial amount of people during project construction or permanently. No structures intended for human occupation would be built, and the potential risk to people as a result of strong seismic ground shaking would be extremely limited, while potential impacts on property would not occur. As a result, the proposed project would not expose people or structures to potential substantial adverse effects involving strong seismic ground shaking. Therefore, the potential for impacts due to strong seismic ground shaking would be less than significant.

a.3. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. Liquefaction occurs when saturated, low-density, loose materials (e.g., sand or silty sand) are weakened and transformed from a solid to a near-liquid state as a result of increased pore water pressure. The increase in pressure is caused by strong ground motion from an earthquake. Liquefaction more often occurs in areas underlain by silts and fine sands and where shallow groundwater exists. According to the GP 2025 EIR, the Martha McLean Anza Narrows Park project site has a very high, high, and moderate potential for liquefaction, and the Jurupa Avenue Trailhead project site has a high potential for liquefaction.

Implementation of the proposed project would not expose people or structures to substantial adverse effects from seismic-related ground failure, including liquefaction. As a neighborhood-service recreational resource, the proposed project is not expected to draw a substantial amount of people during project construction or permanently. Furthermore, no structures intended for human occupation or residence would be built and the potential risk to people as a result of ground failure or liquefaction would be extremely limited, while potential impacts on property would not occur. As a result, impacts would be less than significant.

a.4. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. According to the GP 2025 EIR (City of Riverside 2007), seismically induced landslides and rockfalls would be expected in the Santa Ana River floodplain in the event of a major earthquake or substantial ground disturbance caused by human activity. Strong ground motions can also worsen existing unstable slope conditions, particularly if coupled with saturated ground conditions. Factors contributing to the stability of slopes include slope height and steepness, engineering characteristics of the earth materials composing the slope, and intensity of ground shaking. A ground acceleration of at least 0.10 gravitational acceleration (g) in steep terrain is necessary to induce earthquake-related rockfalls, although exceeding this value does not guarantee that rockfalls would occur. Because there are several faults capable of generating peak ground accelerations of over 0.10 g in Riverside County, there is a potential for seismically induced rockfalls and landslides to occur. Construction crews and other onsite personnel could be exposed to landslide risk during project construction and maintenance. However, much of the proposed project sites are flat and as a neighborhood-service recreational resource, the proposed project is not expected to draw a substantial amount of people during project construction or permanently. These impacts would be temporary and would be less than significant.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. There is potential for soil erosion or the loss of topsoil from grading during construction. Maintenance activities during project operations involving vehicles traveling to the site and use of small equipment to remove weeds from the site may also result in potential erosion and siltation impact. A Stormwater Pollution Prevention Plan (SWPPP) would be prepared in compliance with National Pollutant Discharge Elimination System (NPDES) Construction General Permit requirements. The SWPPP would specify both construction best management practices (BMPs) and permanent operational measures for erosion control. Therefore, impacts resulting in substantial soil erosion or loss of topsoil would be less than significant.

c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. Liquefaction and landslides are discussed above under Thresholds a.3 and a.4. As mentioned previously, the proposed project sites and the hills in the project vicinity are made up of granite and adamellite, Mesozoic granitic rock, granodiorite, Mesozoic basic intrusive rocks, and alluvium (located around the Santa Ana River). Most date from the Mesozoic period, except for the alluvium, which dates from the Quaternary. The Martha McLean Anza Narrows Park site ranges in elevation from 750 feet AMSL in the central portion to 778 feet AMSL on the southeastern end. Elevations at the Jurupa Avenue Trailhead site range from 671 feet AMSL where Hole Creek empties into the Santa Ana River channel to 740 feet AMSL on the plateau above the

upper portion of Hole Creek upstream of Jurupa Avenue. According to the grading plan, proposed retaining walls would provide stability where there are elevation changes. The proposed project is a recreational resource and it is not expected to result in instability for people or structures during project construction or permanently. Therefore, the potential for project implementation and operation to result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse would be less than significant.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. Implementation of the proposed project would not create substantial risks to life or property as a result of expansive soils. Expansive soils are fine-grained soils (generally high-plasticity clays) that can undergo a substantial increase in volume with an increase in water content as well as a substantial decrease in volume with a decrease in water content. Changes in the water content of highly expansive soils can result in severe distress for structures constructed on or against the soils. However, due to the nature of the proposed project as a neighborhood-service recreational resource, it is not expected to draw a substantial amount of people during project construction or permanently. Furthermore, no structures intended for human occupation would be built; therefore, potential risk to people would be extremely limited, while potential impacts on property would not occur. As a result, impacts would be less than significant.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project would not include any installation or use of septic tanks or alternative wastewater disposal systems. No impact would occur.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less than Significant with Mitigation Incorporated. According to the "Prehistoric Cultural Resources Sensitivity" map included in Chapter 5.5, *Cultural Resources*, of the GP 2025 EIR, the project area is in an area with unknown sensitivity for prehistoric cultural resources. Ground disturbance associated with construction, such as excavating, grading, and resurfacing, in a geologic unit that may contain significant fossils could affect paleontological resources that may be present at the proposed project site. The proposed project would create a potentially significant impact on a paleontological resource or site or unique geologic feature.

The potential impacts of the proposed project described in this section would be reduced to less-than-significant levels with implementation of the following mitigation measure.

MM-PAL-1: Conduct Paleontological Monitoring

Paleontological monitoring shall be implemented and shall include the following implementation steps:

- The City shall retain a qualified paleontologist, who shall attend the preconstruction meeting(s) to consult with the grading and excavation contractors or subcontractors concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual who (1) has an MS or PhD in paleontology or geology and/or a publication record in peer-reviewed journals; (2) also has demonstrated familiarity with paleontological procedures and techniques; (3) is knowledgeable in the geology and paleontology of the county; (4) has proficiency in recognizing fossils in the field, determining their significance, and collecting vertebrate fossils in the field; and (5) has worked as a paleontological mitigation project supervisor in the county for at least 1 year.
- A paleontological monitor or a qualified paleontologist shall be on site on a full-time basis to inspect exposures for contained fossils during excavation and ground-disturbing activities that occur in any undisturbed deposits below ground surface. The paleontological monitor shall work under the direction of the project's qualified paleontologist. A paleontological monitor is defined as an individual selected by the qualified paleontologist who has experience in the collection and salvage of fossil materials. If fossils that have significance for the scientific record are discovered on a development site, the qualified paleontologist shall recover them and temporarily direct, divert, or halt grading to allow recovery of fossil remains.
- The qualified paleontologist shall be responsible for the cleaning, repairing, sorting, and cataloguing of fossil remains collected during the monitoring and salvage portion of the mitigation program.
- Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall be deposited (as a donation) at a scientific institution with permanent paleontological collections, such as the Los Angeles County Natural History Museum.
- Within 30 days after the completion of excavation and ground-disturbing activities, the qualified paleontologist shall prepare and submit to PRCSD a paleontological resource recovery report that documents the results of the mitigation program. This report shall include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils.

VIII Greenhouse Gas Emissions

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

Affected Environment

This section describes GHG emissions in the study area and impacts on GHG emissions that could result from construction and operation of the proposed project. GHG modeling inputs, assumptions, and results are contained in Appendices C1 and C2. The study area for this resource is generally defined as Riverside County and the state of California, although GHG emissions and climate change are a global issue.

The phenomenon known as the greenhouse effect keeps the atmosphere near Earth's surface warm enough for the successful habitation of humans and other life forms. The greenhouse effect is created by sunlight that passes through the atmosphere. Some of the sunlight striking Earth is absorbed and converted to heat, which warms the surface. The surface emits a portion of this heat as infrared radiation, some of which is re-emitted toward the surface by GHGs. Human activities that generate GHGs increase the amount of infrared radiation absorbed by the atmosphere, thus enhancing the greenhouse effect and amplifying the warming of Earth.

Increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHGs in the atmosphere since the Industrial Revolution. Rising atmospheric concentrations of GHGs in excess of natural levels result in increasing global surface temperatures—a phenomenon commonly referred to as *global warming*. Higher global surface temperatures, in turn, result in changes to Earth's climate system, including increased ocean temperature and acidity, reduced sea ice, variable precipitation, and increased frequency and intensity of extreme weather events. Large-scale changes to Earth's system are collectively referred to as *climate change* (IPCC 2007).

The Intergovernmental Panel on Climate Change (IPCC) was established by the World Meteorological Organization and United Nations Environment Programme to assess scientific, technical, and socioeconomic information relevant to the understanding of climate change, its potential impacts, and options for adaptation and mitigation. IPCC estimates that human-induced warming reached approximately 1 degree Celsius (°C) above pre-industrial levels in 2017, increasing at 0.2°C per decade. Under the current nationally determined contributions of mitigation from each country until 2030, global warming is expected to rise 3°C by 2100, with warming to continue afterward. Large increases in global temperatures could have substantial adverse effects on the natural and human environments worldwide and in California (IPCC 2018).

The primary GHGs of concern associated with the proposed project are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Principal characteristics of these pollutants are discussed below.

Carbon dioxide enters the atmosphere through fossil fuels (oil, natural gas, and coal) combustion, solid waste decomposition, plant and animal respiration, and chemical reactions (e.g., manufacture of cement). CO_2 is also removed from the atmosphere (or sequestered) when it is absorbed by plants as part of the biological carbon cycle.

Methane is emitted during the production and transport of coal, natural gas, and oil. CH_4 emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal solid waste landfills.

Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.

Table VIII-1 lists the global warming potential of CO_2, CH_4, and N_2O and their lifetimes in the atmosphere.

Table VIII-1. Lifetimes and Global Warming Potentials of Key Greenhouse Gases

Greenhouse Gas	Global Warming Potential (100 years)	Lifetime (years)[a]
CO_2	1	50–200
CH_4	25	9–15
N_2O	298	121

Source: CARB 2021.
[a] Defined as the half-life of the gas.

Regulatory Background

Federal

Several federal Executive Orders (EO) have recently been signed by President Joseph R. Biden related to GHG emissions and climate resiliency. EO 13990, signed in January 2021, set a national goal to achieve a 50 to 52 percent reduction from 2005 levels in economy-wide net GHG pollution in 2030. EO 14057, signed in December 2021, requires federal agencies to develop strategic processes for achieving, among other things, carbon-free electricity by 2030 and 100 percent zero-emission vehicle acquisitions by 2035. President Biden has also signed two bills—Infrastructure Investment and Jobs Act (2021) and Inflation Reduction Act (2022)—that provide funding for infrastructure improvements that will reduce GHG emissions and bolster resilience to climate change. Despite these actions, there is currently no federal law or legislatively mandated national GHG-reduction target.

State

State Legislative Reduction Targets

Senate Bill (SB) 32 requires the state to reduce emissions to 40 percent below the 1990 level by 2030. Assembly Bill (AB) 1279 requires California to achieve net-zero GHG emissions (i.e., reach a balance between the GHGs emitted and removed from the atmosphere) no later than 2045 and to

achieve and maintain net negative GHG emissions from then on. It also mandates an 85 percent reduction in statewide anthropogenic GHG emissions (from 1990 levels) by 2045. SB 1203 requires state agencies aim to achieve net-zero GHG emissions resulting from their operations no later than 2035, or as soon as feasible thereafter.

The state's plan to reach these targets is presented in periodic Scoping Plans. CARB (2017) adopted the 2017 Climate Change Scoping Plan in November 2017 to meet the GHG-reduction requirement set forth in SB 32. It proposes continuing the major programs of the previous Scoping Plan, including Cap-and-Trade Regulation; low-carbon fuel standards; more efficient cars, trucks, and freight movement; Renewables Portfolio Standard; and reducing CH_4 emissions from agricultural and other wastes. CARB (2022a) adopted the 2022 Scoping Plan for Achieving Carbon Neutrality in November 2022 to identify a technologically feasible, cost-effective, and equity-focused path to achieve carbon neutrality by 2045, pursuant to AB 1279. The 2022 Scoping Plan extends and expands upon GHG-reduction measures of the previous Scoping Plans and includes additional measures to capture and store atmospheric carbon through the state's natural and working lands and using a variety of mechanical approaches. The plan also assesses the state's progress toward meeting the GHG emission-reduction goal called for in SB 32.

Vehicle Efficiency and Zero-Emissions Standards

AB 1493 (Pavley I) required CARB to develop and implement regulations to reduce automobile and light-truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the model year 2009. Additional strengthening of the Pavley standards (referred to previously as Pavley II and now referred to as the Advanced Clean Cars measure) was adopted for vehicle model years 2017–2025 in 2012. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon in 2025.

In August 2022, the CARB Board members voted to approve the Advanced Clean Cars II proposal, which will dramatically reduce emissions from passenger cars for model years 2026 through 2035. The requires an increasing proportion of new vehicles to be zero-emission vehicles, with the goal of 100 percent zero-emission vehicles for new vehicles sold by 2035 (CARB 2022b).

CARB also adopted the Advanced Clean Truck Regulation to accelerate a large-scale transition of zero-emission medium- and heavy-duty vehicles. The regulation requires the sale of zero-emission medium- and heavy-duty vehicles as an increasing percentage of total annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b–3 truck sales, 75 percent of Class 4–8 straight truck sales, and 40 percent of truck tractor sales. By 2045, every new medium- and heavy-duty truck sold in California will be zero-emission. Large employers including retailers, manufacturers, brokers, and others are required to report information about shipments and shuttle services to better ensure that fleets purchase available zero-emission trucks.

Low-Carbon Fuel Standard

With EO S-01-07, Governor Arnold Schwarzenegger set forth the low-carbon fuel standard for California in 2007. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 20 percent by 2030.

Legislation Associated with Electricity Generation

The state passed legislation that requires increasing use of renewables to produce electricity for consumers. Specifically, California utilities are required to generate 52 percent of their electricity from renewables by 2027 (SB 100), 60 percent by 2030 (SB 100), 95 percent by 2035 (SB 1020), 95 percent by 2040 (SB 1020), and 100 percent by 2045 (SB 100/SB 1020). SB 1020 also requires state agencies to rely on 100 percent renewable energy and zero-carbon resources to serve their own facilities by 2030.

Local

South Coast Air Quality Management District

SCAQMD has primary responsibility for development and implementation of rules and regulations to attain the NAAQS and CAAQS as well as permitting new or modified sources, developing AQMPs, and adopting and enforcing air pollution regulations within the Basin. CARB's Scoping Plans do not provide an explicit role for local air districts with respect to implementing the reduction goals of SB 32 and AB 32, but CARB does state that it will work actively with air districts in coordinating emissions reporting, encouraging and coordinating GHG reductions, and providing technical assistance in quantifying reductions. The ability of air districts to control emissions (both criteria pollutants and GHGs) is provided primarily through permitting but also through their role as a CEQA lead or commenting agency, the establishment of CEQA thresholds, and the development of analytical requirements for CEQA documents.

On December 5, 2008, the SCAQMD Governing Board considered draft GHG guidance and adopted a staff proposal for an interim GHG significance threshold of 10,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year for industrial permitting projects where SCAQMD is the lead agency. The board letter, resolution, interim GHG significance threshold, draft guidance document, and attachments can be found under Board Agenda Item 31 of the December 5, 2008, Governing Board Meeting Agenda (SCAQMD 2008). In its draft guidance document, SCAQMD included evidence and rationale for developing thresholds, specifically citing State CEQA Guidelines Section 15064.7(a) ("each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects") and Subsection (b) ("Thresholds of significance to be adopted for general use as part of the lead agency's environmental review process must be adopted by ordinance, resolution, rule or regulation, and developed through a public review process and be supported by substantial evidence"). SCAQMD developed thresholds for stationary sources as well as for land use development projects. SCAQMD's recommended GHG significance threshold underwent a public review process as part of stakeholder working group meetings that were open to the public. The draft guidance document provides the supporting analysis and methodology for developing the GHG significance thresholds for stationary sources as well as for land use development projects. After completion of the public process, the proposed interim thresholds for land use development projects were brought to SCAQMD's Governing Board but were not formally adopted, while the threshold involving industrial permitting projects where SCAQMD is lead agency was adopted.

For industrial process, SCAQMD has formally adopted a 10,000 $MTCO_2e$ threshold for industrial (permitted) facilities where SCAQMD is the lead agency. This industrial source threshold is not appropriate for use on the proposed project because it is not associated with industrial processes.

SCAQMD noted that the proposed interim GHG significance thresholds for evaluation of land use development projects was only a recommendation for lead agencies and not a mandatory requirement. The GHG significance threshold may be used at the discretion of the local lead agency. The draft GHG guidance identified a tiered approach for determining the significance of GHG emissions, one of which included the use of numerical screening thresholds. With respect to numerical GHG significance thresholds, SCAQMD proposed two different approaches to be taken by lead agencies when analyzing GHG emissions:

- Option #1 includes using separate numerical thresholds for residential projects (3,500 $MTCO_2e$ per year), commercial projects (1,400 $MTCO_2e$ per year), and mixed-use projects (3,000 $MTCO_2e$ per year).
- Option #2 uses a single numerical threshold for all non-industrial projects of 3,000 $MTCO_2e$ per year. SCAQMD's most recent recommendation per its September 2010 meeting minutes is to use option #2.

County of Riverside Climate Action Plan

The 2015 County of Riverside CAP was updated in 2019. The 2019 CAP describes the County of Riverside's commitment to mitigate the impacts of climate change and establish climate resiliency (County of Riverside 2019). The 2019 CAP aims to reduce GHG emissions by 49 percent by 2030 and 80 percent by 2050 (from 2008 levels). The 2019 CAP analyzed strategies that reduce GHG emissions by using energy more efficiently, harnessing renewable energy to power buildings, recycling waste, and enhancing access to sustainable transportation modes. The 2019 CAP also assessed existing legislation and guidance from local, regional, state, and federal entities and completed an inventory of all new and/or existing emission-reducing policies. In total, full implementation of the 2019 CAP would help the County of Riverside avoid more than 2,982,947 $MTCO_2e$ emissions annually by 2050 (County of Riverside 2019).

To reach the GHG-reduction goals outlined in the 2019 CAP, the County of Riverside must implement local GHG-reduction measures in addition to the state efforts to reduce GHG emissions within the county. Such local measures encourage energy efficiency and renewable energy, development and penetration of zero-emission vehicles, water conservation, and increased waste diversion. In additional to local government, efforts at the local business and community levels would be required to achieve the GHG-reduction targets.

The 2019 CAP defines a project-level GHG significance threshold of 3,000 $MTCO_2e$ per year as the standard to identify which projects will have a less-than-significant effect on the County of Riverside's ability to achieve the GHG-reduction goals outlined in the 2019 CAP. If a project exceeds the significance threshold of 3,000 $MTCO_2e$ per year, the 2019 CAP requires that a project-specific technical analysis be completed to quantify and mitigate project emissions. However, the 2019 CAP further requires that projects generating less than 3,000 $MTCO_2e$ per year must adhere to the following measures to have a less-than-significant GHG impact:

- Energy efficiency matching or exceeding the Title 24 requirements in effect as of January 2017, and
- Water conservation measures that match CalGreen in effect as of January 2017.

City of Riverside Economic Prosperity Plan and Climate Action Plan

The 2016 CAP was published as part of the City of Riverside Restorative Growthprint in 2016. The 2016 CAP provides a path for the City of Riverside to achieve reductions in GHG emissions through 2020 and 2035 by using energy more efficiently, harnessing renewable energy to power buildings and vehicles, improving access to sustainable transportation modes, recycling more waste, conserving water, and building local food systems. The 2016 CAP provides a 2035 GHG emissions target of 1,542,274 $MTCO_2e$, which is 49 percent below the City's 2007 baseline emissions inventory of 3,024,066 $MTCO_2e$. The 2016 CAP further provides the framework for measuring GHG emissions, tracking the success of the reduction measures, and establishes measures that will enable the City to achieve substantial progress toward meeting its 2035 GHG-reduction target.

Greenhouse Gas Threshold

While SCAQMD and the City have not promulgated a mandatory quantitative GHG emissions threshold for land use projects to adhere to, the County of Riverside followed SCAQMD's recommendation for the use of a single numerical threshold of 3,000 $MTCO_2e$ per year in the requirements set forth by the 2019 CAP. The 2019 CAP uses the GHG emissions screening threshold of 3,000 $MTCO_2e$ per year to define small projects that, when combined with the modest efficiency measures, are considered less than significant and do not need to use the screening tables or alternative GHG mitigation analysis described in the 2019 CAP. Therefore, the 3,000 $MTCO_2e$-per-year threshold has been adopted for this analysis.

A consistency analysis is provided in the impact section below to evaluate the proposed project's consistency with the County of Riverside's 2019 CAP, the City of Riverside's 2016 CAP, and CARB's 2022 Scoping Plan (CARB 2022a).

Note that GHGs and climate change are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008). Therefore, in accordance with the scientific consensus regarding the cumulative nature of GHGs, the analysis herein analyzes the cumulative contribution of proposed project-related GHG emissions.

Discussion

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

Martha McLean Anza Narrows Park

Less-than-Significant Impact. The proposed project would not be expected to generate GHGs, either directly or indirectly, that may have a significant impact on the environment, as described below.

Short-term Construction

Construction of the proposed project would result in temporary generation of GHG emissions related to off-road equipment use and on-road vehicle operations. As mentioned previously, GHG emissions are measured exclusively as cumulative impacts; therefore, the proposed project's construction emissions are considered part of the total GHG emissions of the proposed project,

which also include GHG emissions during operations. It is assumed the proposed project would have a lifetime of 30 years, consistent with SCAQMD guidance (SCAQMD 2008). Therefore, the proposed project's construction emissions are amortized over a 30-year period and the resulting annual emissions are combined with the proposed project's annual operational GHG emissions.

Table VIII-2 below shows GHG emissions related to construction of the proposed project. As shown, construction of the proposed project is estimated to generate a total of 380 $MTCO_2e$ over the construction period. When amortized over the 30-year operational period, the proposed project's construction GHG emissions would be approximately 12.7 $MTCO_2e$ per year. Because construction emission sources would cease once construction is complete, construction emissions are considered short term.

Table VIII-2. Martha McLean Anza Narrows Park Estimated Short-term Construction-related GHG Emissions

Construction Years	Estimated GHG Emissions ($MTCO_2e$)[a]
2024	337.5
2025	42.5
Total Construction Emissions	**380**
Annual Construction Emissions (Amortized over 30 years)	*12.7*

Source: Emissions modeling by ICF using CalEEMod version 2022.1 methodology (Appendix C1).
[a] Totals may not add up due to rounding.

Long-term Operation

The proposed project would be operational by 2025 for purposes of this analysis. Indirect sources of GHG emissions associated with the proposed project site would primarily result from electricity and mobile sources as well as from water and solid waste sources. GHG emissions from electricity consumed on the proposed project site would be generated off site by fossil fuel combustion at the electricity provider. Motor vehicle trips to the site would generate mobile-source emissions. The proposed project plans to plant trees that sequester carbon, including Western sycamore, Fremont cottonwood, Blue elderberry, and oak trees, which would reduce the proposed project's GHG impact. However, the amount of carbon sequestered by the trees is not analyzed or included in the analysis.

The estimated operational GHG emissions resulting from the proposed project are shown in Table VIII-3. Additionally, in accordance with SCAQMD's recommendation, the proposed project's amortized construction-related GHG emissions from Table VIII-3 are added to the operational emissions estimate to determine the proposed project's total annual GHG emissions.

Table VIII-3. Martha McLean Anza Narrows Park Estimated Annual Greenhouse Gas Emissions from Project Operation (metric tons per year)

Emission Source	Estimated Annual GHG Emissions ($MTCO_2e$ per year)[a]
Martha McLean Anza Narrows Park	
Mobile Emissions	116.8
Electricity Emissions	7.62
Water Emissions	4.88
Solid Waste Emissions	0.11

Emission Source	Estimated Annual GHG Emissions ($MTCO_2e$ per year)[a]
Area Emissions	<0.1
Amortized Construction Emissions	12.7
Annual Project Emissions	142.1
Applicable Threshold	*3,000*
Threshold Exceeded?	No

Source: Emissions modeling by ICF using CalEEMod version 2022.1 (Appendix C1).
[a] Totals may not add up due to rounding.

The proposed project would generate approximately 142.1 $MTCO_2e$ per year starting in 2026, with the majority of the emissions stemming from mobile emissions; refer to Table VIII-3. The second largest emission source would be from electricity demand. The proposed project is expected to be fully operational by 2025. Therefore, the proposed project would be substantially below the 2019 CAP's GHG emissions threshold of 3,000 $MTCO_2e$ per year, and impacts would be less than significant.

Jurupa Avenue Trailhead

Less-than-Significant Impact. The proposed project would not be expected to generate GHGs, either directly or indirectly, that may have a significant impact on the environment, as described below.

Short-term Construction

Construction of the proposed project would result in temporary generation of GHG emissions related to off-road equipment use and on-road vehicle operations. As mentioned previously, GHG emissions are measured exclusively as cumulative impacts; therefore, the proposed project's construction emissions are considered part of the total GHG emissions of the proposed project, which also include GHG emissions during operations. It is assumed the proposed project would have a lifetime of 30 years, consistent with SCAQMD guidance (SCAQMD 2008). Therefore, the proposed project's construction emissions are amortized over a 30-year period and the resulting annual emissions are combined with the proposed project's annual operational GHG emissions.

Table VIII-4 below shows GHG emissions related to construction of the proposed project. As shown, construction of the proposed project is estimated to generate a total of 143 $MTCO_2e$ over the construction period. When amortized over the 30-year operational period, the proposed project's construction GHG emissions would be approximately 5 $MTCO_2e$ per year. Because construction emission sources would cease once construction is complete, construction emissions are considered short term.

Table VIII-4. Jurupa Avenue Trailhead Estimated Short-term Construction-related GHG Emissions

Construction Years	Estimated GHG Emissions ($MTCO_2e$)[a]
2024	143
Total Construction Emissions	**143**
Annual Construction Emissions (Amortized over 30 years)	*4.8*

Source: Emissions modeling by ICF using CalEEMod version 2022.1 methodology (Appendix C2).
[a] Totals may not add up due to rounding.

Long-term Operation

The proposed project would be operational by 2025 for purposes of this analysis. Indirect sources of GHG emissions associated with the proposed project site would primarily result from electricity and mobile sources as well as from water and solid waste sources. GHG emissions from electricity consumed on the proposed project site would be generated off site by fossil fuel combustion at the electricity provider. Motor vehicle trips to the site would generate mobile-source emissions. The proposed project plans to plant trees that sequester carbon, including elderberry, desert willow, and oak trees, which would reduce the proposed project's GHG impact. However, the amount of carbon sequestered by the trees is not analyzed or included in the analysis.

The estimated operational GHG emissions resulting from the proposed project are shown in Table VIII-5. Additionally, in accordance with SCAQMD's recommendation, the proposed project's amortized construction-related GHG emissions from Table VIII-5 are added to the operational emissions estimate to determine the proposed project's total annual GHG emissions.

Table VIII-5. Jurupa Avenue Trailhead Estimated Annual Greenhouse Gas Emissions from Project Operation (metric tons per year)

Emission Source	Estimated Annual GHG Emissions ($MTCO_2e$ per year)[a]
Jurupa Avenue Trailhead	
Mobile Emissions	181
Electricity Emissions	4.54
Water Emissions	0.88
Solid Waste Emissions	0.21
Area Emissions	<0.1
Amortized Construction Emissions	4.8
Annual Project Emissions	191.4
Applicable Threshold	*3,000*
Threshold Exceeded?	No

Source: Emissions modeling by ICF using CalEEMod version 2022.1 (Appendix C2).
[a] Totals may not add up due to rounding.

The proposed project would generate approximately 191 $MTCO_2e$ per year starting in 2025, with the majority of the emissions stemming from mobile emissions; refer to Table VIII-5. The second largest emission source would be from electricity demand. The proposed project is expected to be fully operational by 2025. Therefore, the proposed project would be substantially below the 2019 CAP's GHG emissions threshold of 3,000 $MTCO_2e$ per year, and impacts would be less than significant.

Overall Impact

Less-than-Significant Impact. Construction would be temporary, and impacts would be less than significant. Cumulative construction impacts for both project sites, when amortized over 30 years, would have a total of approximately 333.5 $MTCO_2e$ per year, which would be below the 2019 CAP's GHG emissions threshold of 3,000 $MTCO_2e$ per year, and impacts would be less than significant.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. As discussed below, the proposed project would not conflict with the state's 2022 Scoping Plan, the County of Riverside's 2019 CAP, and the City's 2016 CAP. Therefore, the proposed project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs.

2022 Scoping Plan Consistency

AB 32, SB 32, and AB 1279 outline the state's GHG emission-reduction targets for 2020, 2030, and 2045, respectively. In 2008 and 2014, CARB adopted the Scoping Plan and First Update, respectively, as a framework for achieving the emission-reduction targets in AB 32. The Scoping Plan and First Update outline a series of technologically feasible and cost-effective measures to reduce statewide GHG emissions as directed by AB 32. In 2017, CARB adopted the 2017 Scoping Plan as a framework to achieve the 2030 GHG-reduction goal described in SB 32. Most recently, in November 2022, CARB adopted the 2022 Scoping Plan, which extends and expands upon these earlier plans with a target of achieving carbon neutrality by 2045 and reducing statewide GHG emissions to 85 percent below 1990 levels, as directed by AB 1279. The 2022 Scoping Plan builds upon GHG-reduction measures of the previous Scoping Plans and includes additional measures to capture and store atmospheric carbon through the state's natural and working lands and using a variety of mechanical approaches. By incorporating GHG emission-reduction and carbon-capture methods, the 2022 Scoping Plan identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 (CARB 2022a). Because the proposed project is expected to be in operation by 2025, the statewide GHG emission-reduction target for 2045 is the statutory statewide milestone target applicable to the proposed project.

Based on CARB's 2022 Scoping Plan, the 2045 milestone of reducing anthropogenic GHG emissions to 85 percent below 1990 levels requires an aggressive reduction of fossil fuels wherever they are currently used in California, building on and accelerating carbon-reduction programs that have been implemented by the previous Scoping Plans. The 2022 Scoping Plan indicates that reductions would need to come in the form of changes pertaining to transportation emissions, changes pertaining to sources of electricity and increased energy efficiency at existing facilities, and state and local plans, policies, or regulations that will lower GHG emissions relative to business-as-usual conditions. The 2022 Scoping Plan carries forward GHG-reduction measures from the 2017 Scoping Plan and the 2014 First Update as well as new potential measures to help achieve the state's 2045 target across all sectors of the California economy, including transportation, energy, and industry. Table VIII-6 shows the proposed project's consistency with key residential and mixed-use project attributes identified in the state's 2022 Scoping Plan that aim to reduce GHG emissions.

Table VIII-6. Consistency of the Proposed Project with the 2022 Scoping Plan

Priority Areas	Key Project Attribute	Project Consistency Analysis
Transportation Electrification	Provides electric vehicle charging infrastructure that, at a minimum, meets the most ambitious voluntary standard in CalGreen at the time of project approval	Not Applicable. The proposed project includes zero dwelling units or commercial building space.

Priority Areas	Key Project Attribute	Project Consistency Analysis
Vehicle Miles Traveled (VMT) Reduction	Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer)	Consistent. The proposed project is underutilized land that is presently served by existing utilities and essential public services.
	Does not result in the loss or conversion of natural and working lands	Consistent. The proposed project provides designated natural land space.
	Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or Is in proximity to existing transit stops (within a half mile), or Satisfies more detailed and stringent criteria specified in the region's Sustainable Communities Strategy (SCS)	Consistent. The proposed project is in proximity to existing transit stops.
	Reduces parking requirements by: • Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or • Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or • For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.	Not applicable. The proposed project includes zero dwelling units or commercial space.
	At least 20 percent of units included are affordable to lower-income residents	Not applicable. The proposed project includes zero dwelling units.
	Results in no net loss of existing affordable units	Consistent. The proposed project develops underutilized open space and does not result in a net loss of existing affordable units.
Building Decarbonization	Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water, or indoor cooking	Consistent. The proposed project does not include connections for natural gas, propane, or other fossil fuels.

Source: CARB 2022a.

As discussed in Table VIII-6, the proposed project would be consistent with the applicable policies from the 2022 Scoping Plan. As the proposed project would be consistent with these required measures, operation of the proposed project would not conflict with the statewide GHG target for 2030 mandated by SB 32 or the statewide GHG target for 2045 mandated by AB 1279. Impacts would be less than significant.

County of Riverside Climate Action Plan Consistency

The 2019 CAP defines a project-level GHG significance threshold of 3,000 $MTCO_2e$ per year as the standard to identify which projects will have a less-than-significant effect on the County of Riverside's ability to achieve the GHG-reduction goals outlined in the 2019 CAP. As detailed above, the project's construction and operational emissions would not exceed 3,000 $MTCO_2e$ per year. In addition, the proposed project would be consistent with the energy efficiency and water conservation measures from the 2022 Title 24 and 2022 CalGreen, which will exceed the 2017 Title 24 and 2017 CalGreen measures required by the 2019 CAP. Therefore, the proposed project would be consistent with GHG emission-reduction goals of the 2019 CAP and impacts would be less than significant.

City of Riverside Climate Action Plan Consistency

As shown in Table VIII-7, the 2016 CAP provides local GHG-reduction measures, which, if implemented, support a project's compliance with the goals of the 2016 CAP. Of the many local reduction measures proposed by the 2016 CAP, few measures are relevant to the proposed project. The relevant measures for the proposed project are E-2, T-1, T-2, T-7, T-8, and T-12. The proposed project would plant shade trees consistent with measure E-2, expand off-street bicycle infrastructure consistent with measure T-1, provide additional options for bicycle parking consistent with measure T-2, provide for a variety of development types and uses consistent with measure T-7, encourage walking by providing pedestrian-only community areas consistent with measure T-8, and accelerate the implementation of the City of Riverside's Bicycle Master Plan consistent with measure T-12 (City of Riverside 2007). As such, the proposed project is consistent with relevant GHG-reduction measures (E-2, T-1, T-2, T-7 T-8, and T-12) and is therefore consistent with the 2016 CAP. Impacts would be less than significant.

Table VIII-7. Relevant City of Riverside CAP Policies

Sector	Policy
Energy	E-2: Strategically plant trees at new residential developments to reduce the urban heat island effect.
Transportation	T-1: Expand on-street and off-street bicycle infrastructure, including bicycle lands and bicycle trails. T-2: Provide additional options for bicycle parking. T-7: Provide for a variety of development types and uses. T-8: Encourage walking by providing pedestrian-only community areas. T-12: Accelerate the implementation of all or specified components of a jurisdiction's adopted bike plan.

Source: City of Riverside 2016.

IX Hazards and Hazardous Materials

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c.	Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d.	Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e.	Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐		☒
g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☒	☐

Affected Environment

A hazardous material is any substance that, because of its quantity, concentration, or physical or chemical properties, may pose a hazard to human health or the environment. Under CCR Title 22, the term “hazardous substance” refers to both hazardous materials and hazardous wastes. Both of these are classified according to four properties: (1) toxicity, (2) ignitability, (3) corrosiveness, and (4) reactivity (CCR Title 22, Chapter 11, and Article 3). A hazardous material is defined in CCR Title 22 as:

> [a] substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed (CCR Title 22 Section 66260.10).

Hazardous materials in various forms can result in death, serious injury, long-lasting health effects, or damage to buildings, homes, and other property. Hazards to human health and the environment can occur during the production, storage, transportation, use, or disposal of hazardous materials.

Large users and transporters of hazardous materials are monitored and regulated by EPA and other federal, state, and county regulatory agencies, such as the California Department of Toxic Substances Control (DTSC) and the Riverside Fire Department (RFD). The City has two levels of a Hazardous Materials Response Plan: one for all responders and another for the City's Hazardous Materials Response Team.

EPA has identified a total of 29 sites in the City and within its Sphere of Influence in its 2007 Toxic Release Inventory database (City of Riverside 2007). These are sites known to release toxic chemicals into the air. EPA's Toxic Release Inventory reporting program closely monitors the emissions from these facilities to ensure that their annual limits allowed under federal regulations are not exceeded and that public health and safety are protected.

Given the City's proximity to the Santa Ana River and its heavy reliance upon local groundwater basins for drinking water, improper use and disposal of hazardous materials poses a significant threat. Sources of possible contaminants include septic systems, composting activities, and business practices. At present, the water supplied by RPU typically meets or exceeds state and federal water regulations and guidelines. RPU staff monitors the quality of the water supply and complies with state and federal regulatory requirements (City of Riverside 2007).

Martha McLean Anza Narrows Park

The project site is not on any known active hazardous material sites, within 0.25 mile of a school, or within a Very High Fire Hazard Severity Zone of local or state responsibility (CAL FIRE 2023). Construction of the proposed project would involve the transport, use, and disposal of hazardous materials that are typically associated with operating construction equipment, such as fuels, solvents, chemicals, and oils. The proposed project site is within Airport Influence Area Zone D for the Riverside Municipal Airport (RCALUC 2005).

Jurupa Avenue Trailhead

The project site is not on any known active hazardous material sites (DTSC 2023), within 0.25 mile of a school, or within a Fire Hazard Severity Zone (FHSZ) of local or state responsibility (CAL FIRE 2023). Construction of the proposed project would involve the transport, use, and disposal of hazardous materials that are typically associated with operating construction equipment, such as fuels, solvents, chemicals, and oils. The proposed project site is within Airport Influence Area Zone C for the Riverside Municipal Airport (RCALUC 2005).

Discussion

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. No transport, use, or disposal of hazardous materials is proposed as part of proposed activities during operation.

Construction of the proposed project would involve the transport, use, and disposal of hazardous materials such as fuel, solvents, chemicals, and oils associated with operating construction equipment. Such transport, use, and disposal would comply with applicable regulations such as the federal Resource Conservation and Recovery Act, which regulates the generation, transport, treatment, storage, and disposal of hazardous waste; California Department of Transportation (Caltrans) Hazardous Materials regulations, which cover all aspects of hazardous materials packaging, handling, and transportation; and the local Certified Unified Program Agency regulations. Although these materials would be transported, used, and disposed of during the construction phase, these materials are typically used in construction projects and would not represent the transport, use, and disposal of acutely hazardous materials. However, compliance with federal, state, and local regulations, in combination with construction BMPs implemented from a SWPPP as listed in Section X, *Hydrology and Water Quality*, would ensure that all hazardous materials are transported, used, stored, and disposed of properly, which would minimize a significant hazard to the public during the construction phase of the project. As such, any impact would be less than significant.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. As discussed above in Threshold IX.a, construction of the proposed project would involve the transport, use, and disposal of hazardous materials such as fuel, solvents, chemicals, and oils associated with operating construction equipment. These materials are commonly used in construction projects and do not represent acutely hazardous materials. While it is possible that these substances could be released during construction activities, compliance with federal, state, and local regulations and implementation of construction BMPs from the SWPPP would minimize risk to the public and environment. Furthermore, during operation, both parks would not require hazardous materials to operate. As such, the impact would be less than significant.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. There is the potential for hazardous emissions or handling of hazardous materials, such as gas, oil, hydraulic fluid, or degreaser, from construction equipment. However, no schools are within 0.25 mile of either project site or proposed within 0.25 mile. As such, no impact would occur.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project was not identified in the State Water Resource Control Board's GeoTracker, DTSC's EnviroStor, or California Environmental Protection Agency's Cortese List Data Resources online databases (DTSC 2023). No impact would occur.

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

Martha McLean Anza Narrows Park

Less-than-Significant Impact. The project site is within 2 miles of the Riverside Municipal Airport, a public airport in the City of Riverside. The facility primarily functions as a reliever airport for commercial service airports in the Los Angeles metropolitan area.

The proposed project site is within Airport Influence Area Zone D for the Riverside Municipal Airport according to the Riverside County Airport Land Use Compatibility Plan (RCALUC 2005). No residences are proposed as part of this project, so the proposed project would not result in a safety hazard for people residing in the project area. During construction and maintenance of the proposed project, workers could be subject to safety hazards due to prolonged daily presence within the Airport Influence Area. However, the proposed project is not within any of the Community Noise Equivalent Level (CNEL) noise contours designated for the Riverside Municipal Airport and, as such, workers would not be exposed to excessive noise. The impact on people working in the project area would be temporary and would be considered less than significant.

Jurupa Avenue Trailhead

Less-than-Significant Impact. The proposed project is within 2 miles of the Riverside Municipal Airport. The project site is within Airport Influence Area Zone C for the Riverside Municipal Airport according to the Riverside County Airport Land Use Compatibility Plan (RCALUC 2005). No residences are proposed as part of this project, so the proposed project would not result in a safety hazard for people residing in the project area. During construction and maintenance of the proposed project, workers could be subject to safety hazards due to prolonged daily presence within the

Airport Influence Area. However, the proposed project is within the 60-decibel (dB) CNEL noise contour designated for the Riverside Municipal Airport. The City's Municipal Code includes the following exterior noise standards: 65 A-weighted decibels (dBA) for office/commercial land uses; 70 dBA for industrial land uses; and 65 dBA for public recreation facilities. As such, workers would not be exposed to excessive noise. The impact on people working in the project area would be temporary and would be considered less than significant.

Overall Impact

Less-than-Significant Impact. Both project sites would develop parks that would not conflict with any of the applicable Airport Influence Zones C or D regulations of the Riverside Municipal Airport. Therefore, impacts would be less than significant.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project sites are within natural areas designated for open space uses and the proposed project would not alter any roadways that could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. None of the project activities would involve modifications to facilities that are critical to emergency response, such as police, fire, and hospital facilities. No impact would result.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. No part of the proposed project area is immune from fire danger. Structural and automobile fires represent the most common types of fire in urbanized areas and can be caused by a variety of human, mechanical, and natural factors. Urban fires have the potential to spread to other structures or areas, particularly if not extinguished promptly. Wildland fires are common in the Santa Ana River watershed from natural causes, arson, and unintended incidents. As discussed in Section XX, *Wildfire,* the proposed project is not in an FHSZ of local or state responsibility (CAL FIRE 2023). Additionally, the proposed project would not include the construction of new fire-prone structures and would utilize mostly natural and fire-resistant materials such as gravel, reused concrete, and steel. The removal of invasive grasses and the reestablishment of native species may lower risks associated with wildland fires. As such, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires and the impact would be less than significant.

X Hydrology and Water Quality

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

Affected Environment

The hydrology and water quality analysis provided below is based on the Drainage Study and Stormwater Quality Technical Reports prepared for Jurupa Avenue Trailhead (Rick Engineering Company 2023a) and Martha McLean Anza Narrows Park (Rick Engineering Company 2023b). The proposed project is in the Santa Ana River watershed, which drains from the San Bernardino Mountains to the valley floor of the Inland Empire, Prado Basin, Orange County, and ultimately to the Pacific Ocean. The watershed area upstream of the project area is approximately 9 square miles

with two major drainage channels, Spring Brook Wash and University Wash, which provide most of the runoff to the project area. These channels were constructed by the U.S. Army Corps of Engineers and are maintained by Riverside County Flood Control and Water Conservation District. Other major tributaries to the Santa Ana River include Temescal Creek, Day Creek, San Sevaine Channel, Box Springs Channel, and Anza Channel.

Due to the discharges from wastewater treatment plants serving the upper valley cities including Highland, San Bernardino, Rialto, Colton, and Loma Linda, the river flows perennially. Groundwater and urban runoff begin to enter the river as it flows past the City of Riverside. The proposed project is in the Upper Santa Ana Valley-Riverside-Arlington groundwater basin.

The Santa Ana River Reach 3 is 303(d) impaired for copper, lead, and indicator bacteria. The Middle Santa Ana River Waterbodies - Nitrogen Compounds Total Maximum Daily Load also manages bacteria levels and was approved by EPA on May 16, 2007. Major sources of bacteria include animal waste from dairies (State Water Resources Control Board 2023). Groundwater quality is poor, particularly with respect to ambient water quality related to total dissolved solids (on average greater than 950 milligrams per liter [mg/L]) and nitrate (on average greater than 20 mg/L, as nitrogen) (IEUA 2018). The total dissolved solids Basin Plan groundwater quality objective is 980 mg/L and the recommended secondary Maximum Contaminant Level is 500 mg/L. The Basin Plan groundwater quality objective for nitrate is 10 mg/L (Santa Ana Regional Water Quality Control Board 2019).

Martha McLean Anza Narrows Park

Generally, the Martha McLean Anza Narrows Park project site drains north, directly to the Santa Ana River. A small portion of the site drains south and off site where it is directed to a storm drain inlet in Jurupa Avenue. The Martha McLean Anza Narrows Park project site also contains one natural sump that does not drain off site, and presumably infiltrates. An existing storm drain on site discharges flows from an earthen basin in the northwestern portion of the Martha McLean Anza Narrows Park project site. Offsite flows are also conveyed to a discharge point beyond the Martha McLean Anza Narrows Park project site boundary on the Santa Ana River via a storm drain that runs through the southeastern portion of the site. The project site is predominantly outside of the Federal Emergency Management Agency (FEMA) 100-year floodplain; however, a portion of the northern and eastern boundary of the Martha McLean Anza Narrows Park project site including the Santa Ana River is within the FEMA 100-year floodway and floodplain (zone AE) (FEMA 2008).

Jurupa Avenue Trailhead

The Jurupa Avenue Trailhead project site is predominantly outside of the FEMA 100-year floodplain; however, the Santa Ana River is within the FEMA 100-year floodplain (zone AE), including a small portion at the northern boundary of the Jurupa Avenue Trailhead project site (FEMA 2008). However, according to a Flood Insurance Study in the project area, the Jurupa Avenue Trailhead project site is not actually within 100-year floodplain inundation limits. In addition, a Biological Avoidance Area Boundary exists between the Jurupa Avenue Trailhead project site and flooding sources. There are no existing drainage structures on the site. Generally, discharge from the project site flows northeast and a small portion of the site discharges to the south. The Jurupa Avenue Trailhead project site drains to Hole Lake, which ultimately drains to the Santa Ana River (Rick Engineering 2023a).

Discussion

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

Martha McLean Anza Narrows Park

Less-than-Significant Impact. There would be no pollutant discharges associated with the proposed project. During construction, soil disturbances and grading work could result in short-term water quality impacts associated with soil erosion and subsequent sediment transport to adjacent properties, roadways, or watercourses. There would be protections in place to prevent the transport of sediment related to construction activities from migrating into the Santa Ana River as well as hazardous materials such as gasoline or oils from construction equipment that could be accidentally released. The proposed project would comply with existing NPDES Construction General Permit requirements, including the preparation of a SWPPP required for all projects larger than 1 acre in size. As part of a SWPPP, BMPs would be identified to reduce polluted runoff. In addition, the proposed project would prepare a Water Quality Management Plan and include implementation of structural low-impact development (LID) BMP design features (two bioretention BMPs and one infiltration self-retaining BMP). Implementation of structural LID BMPs design features would capture runoff and treat, retain, and discharge flows, mimicking pre-project conditions. Proposed improvements include landscape refurbishments that would also allow for natural treatment of stormwater runoff. Implementation of the proposed project would not violate water quality standards or waste discharge requirements. Therefore, with compliance with existing regulations and implementation of BMPs and design features, the proposed project's impact on water quality would be less than significant.

Jurupa Avenue Trailhead

Less-than-Significant Impact. There would be no pollutant discharges associated with the proposed project. During construction, the removal of soil debris and grading work could result in short-term water quality impacts associated with soil erosion and subsequent sediment transport to adjacent properties, roadways, or watercourses. There would be protections in place to prevent the transport of sediment related to construction activities from migrating into the Santa Ana River as well as hazardous materials such as gasoline or oils from construction equipment that could be accidentally released. The proposed project would comply with existing NPDES Construction General Permit requirements, including the preparation of a SWPPP required for all projects larger than 1 acre in size. As part of a SWPPP, BMPs would be identified to reduce polluted runoff. A Water Quality Management Plan would also be prepared and include the implementation of one bioretention BMP. The bioretention BMP would capture runoff generated by the proposed improvements to treat, retain, and discharge flows, mimicking pre-project conditions. In addition, to enhance the natural characteristics at the proposed project site, the project design would incorporate natural materials, shade trees, native shrubs, flowers, and succulents into the landscape design, which allow for natural treatment of stormwater runoff. Implementation of the proposed project would not violate water quality standards or waste discharge requirements. Therefore, with compliance with existing regulations and implementation of BMPs and design features, the proposed project's impact on water quality would be less than significant.

Overall Impact

Less-than-Significant Impact. Both project sites would incorporate a SWPPP and a Water Quality Management Plan, which would ensure that there would be less-than-significant water quality impacts during project construction and operation. Therefore, the proposed project would have less-than-significant impacts.

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

Martha McLean Anza Narrows Park

Less-than-Significant Impact. Implementation of the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. The project proposes improvements to an existing public park for recreational uses. Following project implementation, the groundwater recharge and drainage characteristics would remain similar to existing conditions. The majority of the Martha McLean Anza Narrows Park site would remain pervious in a natural state, with a minimal increase in impermeable ground cover (3 percent), including concrete pathways, roadways, and parking improvements. Proposed improvements include landscape refurbishments that would allow runoff and precipitation to infiltrate into the ground and allow groundwater to recharge the underlying aquifers, similar to existing conditions. No groundwater supplies would be utilized during construction or operation of the proposed project. Therefore, the proposed project would have less-than-significant impacts on groundwater resources.

Jurupa Avenue Trailhead

Less-than-Significant Impact. Implementation of the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. The proposed project is a public park and trailhead primarily consisting of permeable surfaces including natural land cover and landscaped areas. There would be approximately a 7 percent increase in impermeable ground cover; however, the Jurupa Avenue Trailhead project site would predominantly remain in a natural, pervious state (approximately 12 percent of the project site). The landscaped, natural state of the Jurupa Avenue Trailhead project site would allow runoff and precipitation to infiltrate into the ground, similar to existing conditions, and allow groundwater to recharge the underlying aquifers. No groundwater supplies would be utilized during construction or operation of the proposed project. Therefore, the proposed project would have a less-than-significant impact on groundwater resources.

Overall Impact

Less-than-Significant Impact. Both project sites would only minimally increase the impermeable ground cover, allowing similar groundwater recharge compared to existing conditions. Additionally, project construction and operation would not require groundwater. Therefore, impacts would be less than significant.

c.1. 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 that would: Result in substantial erosion or siltation on or off site?

Martha McLean Anza Narrows Park

Less-than-Significant Impact. The Martha McLean Anza Narrows Park project site is primarily undeveloped land and does not contain a stream or river; therefore, the course of a stream or river would not be altered. While the Martha McLean Anza Narrows Park project site is situated atop a slope, implementation of the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation on or off site. Development of the proposed project would temporarily alter the drainage patterns of the Martha McLean Anza Narrows Park project site; however, after construction activities, drainage patterns would be similar to existing conditions.

Once the proposed project is operational, the drainage characteristics would be similar to existing conditions. The site would remain predominantly pervious, with proposed impervious features such as concrete pathways, roadways, and parking improvements limited to approximately 13 percent of the Martha McLean Anza Narrows Park project site. The greatest potential for erosion and siltation impacts would occur during project construction. However, maintenance activities during project operations involving vehicles traveling to the site and use of small equipment to remove weeds from the site may also result in potential erosion and siltation impacts. A SWPPP would be prepared in compliance with NPDES Construction General Permit requirements. The SWPPP would specify both construction BMPs and permanent operational measures for erosion control. With adherence to existing regulations, the proposed project would result in less-than-significant impacts from erosion or siltation.

Jurupa Avenue Trailhead

Less-than-Significant Impact. The Jurupa Avenue Trailhead project site is primarily undeveloped land and does not contain a stream or river; therefore, the course of a stream or river would not be altered. While the Jurupa Avenue Trailhead project site is situated atop a slope, implementation of the proposed project would not alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation on or off site. Development of the proposed project would temporarily alter the drainage patterns of the Jurupa Avenue Trailhead project site. However, after construction activities, drainage patterns would be the same as existing conditions, predominantly discharging northeast, with a small portion discharging south, ultimately draining to the Santa Ana River.

The proposed site design would include permanent energy dissipation features, where applicable. Once operational, the proposed project would primarily consist of natural landscaped areas as well as parking for cars and horse trailers, concrete plazas, and shaded rest areas. The greatest potential for erosion and siltation impacts would occur during project construction. However, maintenance activities during project operations involving vehicles traveling to the site and use of small equipment to remove weeds from the site may also result in potential erosion and siltation impacts. A SWPPP would be prepared in compliance with NPDES Construction General Permit requirements. The SWPPP would specify both construction BMPs and permanent operational measures for erosion

control. With adherence to existing regulations, the proposed project would result in less-than-significant impacts from erosion or siltation.

Overall Impact

Less-than-Significant Impact. Both project sites would not alter the course of a river. Additionally, the proposed project would implement a SWPPP for both project sites to ensure that there would be less-than-significant erosion and siltation impacts.

c.2. 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 that would: Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?

Martha McLean Anza Narrows Park

Less-than-Significant Impact. The proposed project is a public park, with the majority of the site remaining in a pervious, natural state, and includes landscape refurbishments. Implementation of the proposed project would not substantially alter the existing drainage pattern of the site or alter the course of a stream or river, as no streams or rivers are on site. The proposed project would implement two bioretention BMPs and one infiltration self-retaining BMP to capture runoff generated by proposed improvements to treat, retain, and discharge flows, mimicking pre-project conditions. Generally, the Martha McLean Anza Narrows Park project site would remain pervious, with proposed impervious features such as concrete pathways, roadways, and parking improvements limited to approximately 13 percent of the project site. Once the proposed project is operational, the drainage characteristics would be similar to existing conditions. Existing storm drains on site or running through the site and the natural sump on site would continue to operate, similar to existing conditions. The proposed project would comply with all existing City drainage requirements. Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that could result in flooding on or off site, and impacts would be considered less than significant.

Jurupa Avenue Trailhead

Less-than-Significant Impact. The proposed project is a public park that has been designed to maximize permeable surfaces on site, and includes landscaped areas. Implementation of the proposed project would not alter the existing drainage pattern of the site or alter the course of a stream or river, as no streams or rivers are on site. There would be an increase in impermeable ground cover on the Jurupa Avenue Trailhead project site. However, one structural LID bioretention BMP is proposed to capture runoff generated by proposed improvements to treat, retain, and discharge flows, mimicking pre-project conditions. Proposed land use improvements include shaded rest areas, parking for cars and horse trailers, concrete plazas, and equestrian facilities. Drainage patterns would be the same as existing conditions, ultimately draining to the Santa Ana River. The proposed project would comply with all existing City drainage requirements. Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that could result in flooding on or off site, and impacts would be considered less than significant.

Overall Impact

Less-than-Significant Impact. The proposed project would minimally increase the impervious groundcover at both project sites and would implement a SWPPP with BMPs and LID measures that would ensure that there would be less-than-significant impacts regarding runoff and flooding.

c.3. 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 that would: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Martha McLean Anza Narrows Park

Less-than-Significant Impact. The proposed project would not introduce any sources that could degrade water quality within the nearby Santa Ana River or its tributaries. No hazardous materials or chemicals would be stored on site that could be a source of pollution to runoff. Under proposed conditions, the Martha McLean Anza Narrows Park project site would remain predominantly pervious, consisting of natural cover. For areas of the project site where an increase of impervious surfaces is proposed, the project would implement two bioretention BMPs and one infiltration self-retaining BMP to capture runoff generated by proposed impervious area improvements. Structural LID BMPs would treat, retain, and discharge flows, mimicking pre-project conditions. The natural site characteristics and landscape refurbishments on the Martha McLean Anza Narrows Park project site would also improve water quality by naturally filtering out pollutants from stormwater runoff and managing stormwater flow volumes and rates. Existing storm drains on site or running through the site and the natural sump on site would continue to convey flows through and off the Martha McLean Anza Narrows Park project site. The proposed project would generally maintain the site's existing drainage pattern, with runoff typically draining toward the Santa Ana River. The proposed project is not anticipated to generate a substantial increase in polluted runoff as compared to the existing conditions. As part of the SWPPP, construction BMPs would be identified to reduce pollutants in stormwater runoff. Therefore, drainage impacts would be considered less than significant.

Jurupa Avenue Trailhead

Less-than-Significant Impact. The proposed project would not introduce any sources that could degrade water quality within the nearby Santa Ana River or its tributaries. No hazardous materials or chemicals would be stored on site that could be a source of pollution to runoff. A bioretention BMP north of the proposed impervious plaza area would capture runoff from the proposed parking lot and adjacent impervious plazas and walkways. The bioretention BMP would provide water quality treatment and mimic pre-project runoff volume and discharge. The remaining portions of the Jurupa Avenue Trailhead project site are considered self-treating areas, as the site consists primarily of natural slopes that drain off site toward Hole Lake. The proposed project would allow natural treatment of water through infiltration of runoff, potentially improving downstream water quality, as the majority of the project would primarily be pervious areas consisting of natural cover. The natural site characteristics could improve water quality by naturally filtering out pollutants from stormwater runoff and managing stormwater flow volumes and rates. Drainage patterns would be the same as existing conditions, predominantly discharging northeast, with a small portion

discharging south, ultimately draining to the Santa Ana River. In addition, the project would comply with existing NPDES requirements, including the preparation of a SWPPP. As part of the SWPPP, BMPs would be identified to reduce pollutants in stormwater runoff. Therefore, drainage impacts would be considered less than significant.

Overall Impact

Less-than-Significant Impact. The proposed project would not introduce any sources that could degrade water quality. Additionally, both project sites would implement a SWPPP with BMPs and LID measures that would ensure that stormwater from the project sites would not exceed the capacity of the existing stormwater drainage systems.

c.4. 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 that would: Impede or redirect flood flows?

Martha McLean Anza Narrows Park

No Impact. Based on FEMA's National Insurance Maps, the site is predominantly outside of a 100-year floodplain. A portion of the northern and eastern boundary of the Martha McLean Anza Narrows Park project site including the Santa Ana River is within the FEMA 100-year floodway and floodplain (zone AE) (FEMA 2008). However, no proposed improvements are within the floodway or floodplain extents. The proposed project would not place structures within a 100-year floodplain. The landscaped, natural state of the proposed project site as well as improvements including a playground, concrete pathways, roadways, parking improvements, signage, and circulation and vehicular control throughout park would not impede or redirect flood flows. The existing restroom building would be replaced with a small restroom. Therefore, implementation of the proposed project would not be expected to 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 that would impede or redirect flood flows.

Jurupa Avenue Trailhead

No Impact. Based on FEMA's National Insurance Maps, the site is predominantly outside of a 100-year floodplain. A small portion on the northern boundary of the Jurupa Avenue Trailhead project site is with the FEMA 100-year floodway (zone AE) (FEMA 2008). However, the 1 percent Annual Chance Flood Base Flood Elevation (base flood elevation of 693 feet, North American Vertical Datum of 1988) is below the lowest developable ground elevation of 704 feet (North American Vertical Datum of 1988) found at the project site. Furthermore, a Biological Avoidance Area Boundary exists between the Jurupa Avenue Trailhead project site and flooding sources. In addition, the proposed project would not place structures within a 100-year floodplain. The landscaped, natural state of the proposed project site as well as the shaded rest areas, parking, concrete plazas, and equestrian facilities would not impede or redirect flood flows. Therefore, implementation of the proposed project would not be expected to 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 that would impede or redirect flood flows. There would be no impact.

Overall Impact

No Impact. The proposed project would only develop areas that are outside of a 100-year floodplain. Additionally, all project components would not impede or redirect flood flows. Therefore, there would be no impact.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project is a substantial distance from the Pacific Ocean. Therefore, the project is not subject to inundation by a tsunami. A tsunami is large ocean wave associated with a seismic event. There are no reservoirs adjacent to the project sites; therefore, the project would not be prone to inundation by a seiche. A seiche is an oscillation of a land-locked waterbody, such as a lake. In addition, the proposed project sites are not close to a large waterbody. Because the nearby Santa Ana River and its tributaries are not currently subject to inundation by seiche or tsunami, the proposed project would not risk release of pollutants due project inundation. Therefore, no impacts would result.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project sites consist of primarily undeveloped City-owned and -managed parkland and are not associated with infrastructure required to implement a water quality control plan or sustainable groundwater management plan. The project does not propose development that would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Additionally, the proposed project would include structural LID BMPs, vegetation, and landscape refurbishments to improve groundwater infiltration. Therefore, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and no impact would occur.

XI Land Use and Planning

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Physically divide an established community?	☐	☐	☐	☒
b.	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Affected Environment

For several decades, public and private agencies, nongovernmental organizations, and communities have collaborated on honing a vision for the future of development in the Santa Ana River corridor. The SARCP developed the Santa Ana River Parkway and Open Space Plan in 2018 and identified the Jurupa Avenue Trailhead and Martha McLean Anza Narrows Park, along with other park sites in Riverside County, as underused, existing public open spaces that can be improved to provide better public use and enjoyment of the area.

Martha McLean Anza Narrows Park

The Martha McLean Anza Narrows Park site is 39.5 acres of City-owned and -managed parkland that currently consists of turf, trees, irrigated plants, walking paths, picnic tables, a disc golf course, and restrooms. The site has direct Santa Ana River access through a chain-link fence, where there is a mix of native and nonnative plants and trees. The path to the river is an informal and uneven mix of stones, sand, and river debris. The project site is surrounded by the Santa Ana River Trail to the north, the Santa Ana River Trail and single-family homes to the east, Union Pacific Railroad and a vacant lot across Jurupa Avenue to the south, and Union Pacific Railroad to the west.

Martha McLean Anza Narrows Park has a GP 2025 land use designation of Public Park (P) and a zoning designation of Public Facilities (PF). The surrounding parcels have a Public Park (P) land use to the north, Public Park (P) and Low Density Residential (LDR) land uses to the east, Right-of-Way (ROW) and High Density Residential (HDR) land uses to the south, and Right-of-Way (ROW) to the west (City of Riverside 2023). The Martha McLean Anza Narrows Park project site is in Ward 1 of the Grand neighborhood area.

Jurupa Avenue Trailhead

The Jurupa Avenue Trailhead site is 7.7 acres of undeveloped City-owned and -managed parkland with ground cover of dry grasses and dirt paths. The site does not currently include recreational elements or public amenities, like drinking fountains or bathrooms. The Jurupa Avenue Trailhead project site is along Jurupa Avenue. It is bordered by a residential neighborhood to the west, and the north and east sides of the project run along the Hole Lake recreation area.

Jurupa Park is zoned as Residential Estate (RE) and has a GP 2025 land use designation of Open Space (OS). Surrounding parcels have Open Space (OS) land uses to the north, Commercial and Public Facilities/Institutional to the east, Private Recreation and Open Space (OS) to the south, and Medium Density Residential to the west (City of Riverside 2023). The Jurupa Avenue Trailhead project site is in Ward 7 in the La Sierra Acres neighborhood area.

Discussion

a. Physically divide an established community?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The physical division of an established community typically refers to the construction of a linear feature, such as a highway or railroad, or removal of a means of access, such as a road or bridge, that would affect mobility within or between existing communities. The proposed improvements for Martha McLean Anza Narrows Park would occur within the boundaries of the existing park, and the proposed improvements for the Jurupa Avenue Trailhead would include the development of approximately 7.7 acres as a public park within the Residential Estate (RE) zoning designation and the Open Space (OS) GP 2025 land use designation. As such, the proposed project would not physically divide a community.

The proposed project sites are City-owned and -managed and would be developed in accordance with the City's existing land use regulations. While both sites are adjacent to established residential communities, no new urban development is proposed as part of the project. Recreational improvements for land designated for open space uses are generally considered a beneficial impact on a community, as the proposed project would provide two formal and direct connections to the Santa Ana River Trail and other recreational amenities such as restrooms, bike stops, shade, seating areas, and parking near planned commercial development. Martha McLean Anza Narrows Park and the Jurupa Avenue Trailhead would not create a barrier or physically divide an establish community. No impact would occur.

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

Martha McLean Anza Narrows Park

No Impact. The Martha McLean Anza Narrows Park project site has a GP 2025 land use designation of Public Park (P) (City of Riverside 2023). According to the GP 2025 Land Use and Urban Design Element, Public Park (P) designated areas may be developed to include large multipurpose fields for community events and informal recreation, areas for active sports play, tot lots, picnic areas, multipurpose sports fields and courts, public golf courses, concessions, community event space, outdoor amphitheaters, nature study centers, maintenance/support facilities, and caretaker facilities (City of Riverside 2019).

According to the City's Property Search mapping tool, the Martha McLean Anza Narrows Park project site is zoned as Public Facilities (PF) (City of Riverside 2022). The City's zoning code states that Public Facilities (PF) zoned areas should be preserved areas for official and public uses of property and related activities, including civic center, public schools, public buildings, parks and

recreation facilities, waterworks and drainage facilities, and similar areas that, for the welfare of the City, should be kept clear of particular structures or improvements, and for watershed areas for conservation of flood or stormwaters or for protection against flood or stormwaters. As detailed in Section 2.4, *Project Characteristics*, the proposed project would develop scenic outlooks, formal river access, playgrounds, an outdoor classroom, a new trail, exercise stations, bike stops, seating, a restroom, landscaping, and parking, which would provide recreational amenities to the public and conform to the project site's GP 2025 land use and zoning designation allowable uses.

The proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.

Jurupa Avenue Trailhead

No Impact. The Jurupa Avenue Trailhead project site has a GP 2025 land use designation of Open Space (OS) (City of Riverside 2023). According to the GP 2025 Land Use and Urban Design Element, the Open Space (OS) land use designation provides lands, both private and public as shown on the Land Use Map, for the preservation of natural resources, hillsides, and creeks; as well as open space for the protection of public health and safety, including floodways and stormwater retention areas, which is consistent with the vegetation buffer, native plant seeded area, and biological avoidance zone proposed for the site plan (City of Riverside 2019). The Jurupa Avenue Trailhead project site would remain an undeveloped, natural, open space with improvements added for enhanced recreational uses and natural resource preservation, which would be consistent with the GP 2025 land use designation.

According to the City's Property Search mapping tool, the proposed project site is zoned as Residential Estate (RE) (City of Riverside 2022). This zone was established to provide areas for large-lot single-family residences where the keeping of livestock and other farm animals and agricultural uses are not permitted. The City's zoning code states that parks are not permitted on land zoned Residential Estate (RE) but City projects are exempt from Title 19. The Santa Ana River Trail is an existing feature of the Jurupa Avenue Trailhead project site, so the site already serves a recreational purpose. Given that the proposed project would support the existing use of the site, the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

The proposed project is consistent with GP 2025, and would support the current use of the Jurupa Avenue Trailhead site. The proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.

Overall Impact

The proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur for either park site.

XII Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Affected Environment

The California Department of Conservation classifies the regional significance of mineral resources in accordance with the California Surface Mining and Reclamation Act of 1975. The proposed project sites are not within a state-classified mineral resource zone (MRZ) (City of Riverside 2012). Historically, the quarrying of granitic rock was an important industry in the City. However, such operations have not been active for decades, and most extraction sites are now beyond the urban periphery (City of Riverside 2012).

Martha McLean Anza Narrows Park

As depicted on Figure 5.10-1, Mineral Resources, of the City's GP 2025 Programmatic EIR, the Martha McLean Anza Narrows Park site is designated as MRZ-4, which are areas containing known mineral occurrences or undetermined mineral resource significance (City of Riverside 2007).

Jurupa Avenue Trailhead

The Jurupa Avenue Trailhead site is not within an MRZ designation (City of Riverside 2012).

Discussion

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

Martha McLean Anza Narrows Park

No Impact. The Martha McLean Anza Narrows Park project site is designated as MRZ-4 (City of Riverside 2007). Historically, the quarrying of granitic rock was an important industry in the City. However, such operations have not been active for decades, and most extraction sites are now beyond the urban periphery (City of Riverside 2012). The project site is currently an existing park surrounded by urban development. Therefore, the project site is not suitable as a mineral resource

area. Furthermore, there are no mines on or in the vicinity of the Martha McLean Anza Narrows Park project site (CDOC 2016). Therefore, implementation of the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region or the state, and no impact would occur.

Jurupa Avenue Trailhead

No Impact. The Jurupa Avenue Trailhead project site is not within a MRZ designation (City of Riverside 2012). Furthermore, there are no mines on or in the vicinity of the Jurupa Avenue Trailhead project site (CDOC 2016). The proposed project site is zoned as Residential Estate (RE) and, according to Table 19.150.020.B, Incidental Uses, in the City's Municipal Code, mining and mineral extraction within the Residential Estate (RE) zoning designation would require a Conditional Use Permit. Furthermore, while the quarrying of granitic rock was an important industry in Riverside historically, these operations have not been active for decades, and no excavation of mineral resources is occurring on site. Therefore, implementation of the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region or the state, and no impact would occur.

Overall Impact

Implementation of the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region or the state, and no impact would occur.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The GP 2025 Final Program EIR determined that there are no specific areas within the City boundary or Sphere of Influence that have locally important mineral resource recovery sites, and the proposed project site is not identified as a mineral resource area in GP 2025 (City of Riverside 2007). Therefore, the proposed project would not result in a loss of availability of a locally important resource recovery site delineated on a local general plan, specific plan, or other land use plan. No impact would occur.

XIII Noise

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	☐	☒	☐	☐
b.	Generate excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c.	Be 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 and expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Affected Environment

The study area for this resource includes the proposed project sites and closest neighboring properties in all directions, all of which are in the cities of Riverside and Jurupa Valley.

Martha McLean Anza Narrows Park

The closest noise-sensitive receptors in the City of Riverside are homes adjacent to the southeastern portion of the project site. Additionally, residences are to the south, across Jurupa Avenue. The closest noise-sensitive receptors in the city of Jurupa Valley are farther away to the north, more than 1,200 feet from the project site. Immediately west of the project site is a railroad, and farther west of the tracks are a variety of commercial and industrial land uses. Noise levels in the vicinity of the study area are moderate. The primary noise sources include traffic along nearby streets, trains on the railroad, aircraft from local airports, general neighborhood sources (e.g., air conditioners and various landscaping activities), and natural background noise. Jurupa Avenue, which borders the project site to the south, is a major arterial street. The railroad bounding the western border of the project site is an active Union Pacific Railroad used to transport freight and intercity passengers. The closest airports to the project site include Riverside Municipal Airport, a public airport owned by the City of Riverside approximately 0.9 mile southwest of the project site; and Flabob Airport, a privately owned airport approximately 1.7 miles northeast of the project site in the city of Jurupa Valley.

To quantify the existing ambient noise conditions, long-term (approximately 45-hour) and short-term (15- to 20-minute) noise monitoring was conducted in the project vicinity. Long-term noise monitoring was conducted at one location, designated LTe, at the southeastern side of the proposed project site, adjacent to the closest neighboring homes on Tuscan Court, between June 29 and July 1,

2022. Long-term monitoring was conducting using a Piccolo Type 2 sound level meter manufactured by Soft dB.[9] Short-term monitoring was also conducted at two locations. The first, ST1, was approximately 1,300 feet north of the project site, near homes in the city of Jurupa Valley; the noise measurement at this location was conducted on Wednesday, August 1, 2018. The second short-term monitoring location, STc, was approximately 300 feet southwest of the project site, near homes across Jurupa Avenue; the noise measurement at this location was conducted on Wednesday, June 29, 2022. Short-term monitoring was performed with a Larson Davis 831 Type 1 sound level meter and a Rion NL 22 Type 2 sound level meter.[10] All sound level meters were field-calibrated prior to the measurement to ensure accuracy, using a Larson Davis CAL200 or BWSA CA114 acoustical calibrator; the calibration was also re-checked at the conclusion of the measurement. The monitoring results are summarized in Table XIII-1.

Table XIII-1. Summary of Noise Measurement Results for Martha McClean Anza Narrows Park

Site#	Location	Date	Time of Day	Range of Hourly L_{eq} Values (Average), dBA	Range of Hourly L_{50} Values (Average), dBA
LTe	5965 Tuscan Court, adjacent to the southeast portion of the project site	6/29/22 to 7/1/22	Daytime (7 a.m. to 10 p.m.)	47.1–55.8 (52.0)	42.2–50.4 (45.9)
			Nighttime (10 p.m. to 7 a.m.)	40.8–57.1 (50.1)	40.2–46.9 (43.2)
ST1	Intersection of Avenue Juan Diaz and Riverview Drive, north of the project site	8/1/18	1:05 p.m.	50.8	42.3
STc	Southwest of the project site, near 6024 William Street	6/29/22	11:58 a.m.	55.1	53.7

L_{eq} = Equivalent sound level. The L_{eq} describes the average acoustical energy content of noise for an identified period of time, commonly 1 hour.
dBA = A-weighted decibel level. A logarithmic measurement scale that approximates the frequency response of the human ear.
L_{50} = Noise level exceeded for 50% of the time (i.e., 30 minutes per hour).

Jurupa Avenue Trailhead

The closest noise-sensitive receptors to the Jurupa Avenue Trailhead project site are neighboring homes to the west. Additional homes are south of Jurupa Avenue. Existing noise levels in the study area are moderate and the nearest noise-sensitive receptors are not close to major noise sources such as freeways, railroads, or industrial activities. The primary noise sources include traffic along nearby streets, aircraft from local airports, general neighborhood sources (e.g., air conditioners and landscaping activities), and natural background noise (e.g., songbirds, insects, rustling leaves). Van Buren Boulevard, which borders the project site to the northeast, is a major arterial street. Jurupa

[9] Type 2 sound level meters are considered general purpose grade for field use.
[10] Type 1 sound level meters are considered precision grade.

Avenue, which borders the project site to the south, is also an arterial street. The closest airports to the Jurupa Avenue Trailhead project site include Riverside Municipal Airport, a public airport owned by the City of Riverside approximately 0.75 mile southeast of the project site; and Flabob Airport, a privately owned airport approximately 3.4 miles northeast of the project site in the city of Jurupa Valley.

To quantify the existing ambient noise conditions in the project vicinity, noise monitoring was conducted between Wednesday, August 1 and Friday, August 3, 2018. Long-term noise monitoring was conducted at one location, designated LT3, at the west side of the Jurupa Avenue Trailhead project site, adjacent to the closest neighboring homes on Bradford Street. Monitoring was conducting using a Piccolo Type 2 sound level meter manufactured by Soft dB. The sound level meter was field-calibrated prior to the measurement to ensure accuracy, using a Larson Davis CAL200 acoustical calibrator; the calibration was also re-checked at the conclusion of the measurement. The monitoring results are summarized in Table XIII-2.

Table XIII-2. Summary of Noise Measurement Results for the Jurupa Avenue Trailhead Site

Site#	Location	Date	Time of Day	Range of Hourly L_{eq} Values (Average), dBA	Range of Hourly L_{50} Values, dBA
LT3	West side of Jurupa Avenue Trailhead site, adjacent to the rear property line of 7124 Bradford Street	8/1/18 to 8/3/18	Daytime (7 a.m. to 10 p.m.)	53.6–59.9 (57.2)	52–58 (55)
			Nighttime (10 p.m. to 7 a.m.)	53.4–64.6 (59.2)	50–63 (56)

L_{eq} = Equivalent sound level. The L_{eq} describes the average acoustical energy content of noise for an identified period of time, commonly 1 hour.
dBA = A-weighted decibel level. A logarithmic measurement scale that approximates the frequency response of the human ear.
L_{50} = Noise level exceeded for 50% of the time (i.e., 30 minutes per hour).

Discussion

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

The City of Riverside Municipal Code regulates noise from both construction and operational sources. Construction noise is controlled with limits on the hours during which construction activities are permitted. Section 7.35.010 B.5. prohibits "[o]perating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, grading or demolition work between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and between 5:00 p.m. and 8:00 a.m. on Saturdays or any time on Sunday or federal holidays." Additionally, Section 7.35.020 G. provides an explicit exemption from the City's noise standards for "[n]oise sources associated with the construction, repair, remodeling, or grading of any real property; provided a permit has been obtained from the City as required; and provided said activities do not take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or at any time on Sunday or a federal holiday."

Stationary (non-transportation) noise sources associated with project operation are regulated by Section 7.25.010 of the municipal code. For the noise-sensitive land uses considered in this IS, the applicable exterior noise limits are summarized in Table XIII-3.

Table XIII-3. Applicable City of Riverside Exterior Noise Standards

		Residential	
Noise Level that May Not Be Exceeded for More than…	**Noise Metric Descriptor**	**Daytime (7:00 a.m. to 10:00 p.m.)**	**Nighttime (10:00 p.m. to 7:00 a.m.)**
30 minutes in any hour	L_{50}	55 dBA	45 dBA
15 minutes in any hour	L_{25}	60 dBA	50 dBA
5 minutes in any hour	$L_{8.33}$	65 dBA	55 dBA
1 minute in any hour	$L_{1.67}$	70 dBA	60 dBA
Anytime (i.e., maximum noise level)	L_{max}	75 dBA	65 dBA

Note: If the measured ambient noise level exceeds that permissible within any of the first four noise limit categories, the allowable noise exposure standard shall be increased in 5-dB increments in each category as appropriate to encompass the ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level. L_{XX} = noise level exceeded for a percentage of the time; L_{max} = maximum noise level

Due to Martha McLean Anza Narrows Park's proximity to noise-sensitive receptors in the neighboring city of Jurupa Valley, applicable regulatory information from this city is described below.

Chapter 11.05, Noise Regulations, of the City of Jurupa Valley Municipal Code regulates noise from both construction and operational sources. The code also states, "This chapter is not intended to establish thresholds of significance for the purpose of any analysis required by the California Environmental Quality Act…and no such thresholds are established." However, this does not preclude the use of the municipal code by any CEQA lead agency to establish thresholds of impact for any individual project. As such, the municipal code standard is used to assess potential impacts from Martha McLean Anza Narrows Park on sensitive receivers in the city of Jurupa Valley.

The municipal code specifies various categories of construction noise, maintenance, and operations that are either entirely exempt from the municipal code noise standards or are exempt during certain hours. Exemptions that would potentially apply to the proposed project are listed in Sections 11.05.020(1), 11.05.020(2), and 11.05.020(3) of the municipal code, which exempt construction associated with facilities owned or operated by or for a governmental agency; capital improvement projects of a governmental agency; and the maintenance or repair of public properties.

Based on the exemptions described above, noise associated with construction and property maintenance of parks owned or operated by or for a governmental agency are entirely exempt from the municipal code noise standards. Some of the municipal code exemptions described above could also apply to project operations. These exemptions would be 1 (facilities owned or operated by or for a governmental agency), 3 (the maintenance or repair of public properties), and 10 (property maintenance between the hours of 7:00 a.m. and 8:00 p.m.).

Non-exempt stationary (non-transportation) noise sources are regulated by Section 11.05.040 of the municipal code. For the noise-sensitive land uses considered in this analysis, the applicable exterior noise limits are summarized in Table XIII-4. Although park operations would likely be considered

exempt from the City of Jurupa Valley noise standards, the exterior noise standards are used in the following analysis to assess potential operational noise impacts.

Table XIII-4. Applicable City of Jurupa Valley Exterior Noise Standards

		Residential	
Noise Level that May Not Be Exceeded for…	**Noise Metric Descriptor**	**Daytime (7:00 a.m. to 10:00 p.m.)**	**Nighttime (10:00 p.m. to 7:00 a.m.)**
Anytime (i.e., maximum noise level)	L_{max}	55 dBA	45 dBA

Surface transportation noise sources (i.e., traffic and rail) are typically regulated by the applicable general plan. However, no significant surface transportation noise impacts would occur because the proposed project would not generate substantial vehicular traffic (refer to Section XVII, *Transportation*) or affect railroad operations. The effects of project-generated traffic are discussed briefly under *Traffic Noise*, below. Aircraft noise is discussed separately under Threshold XIII.c, below.

Martha McLean Anza Narrows Park

Less than Significant with Mitigation Incorporated.

Construction Noise

Two types of short-term noise impacts could occur during project construction. First, construction vehicles would incrementally increase noise levels on access roads. This would include construction worker vehicles and haul trucks traveling to and from the project site. Although there would be a relatively high single-event noise level, which could cause an intermittent noise nuisance (e.g., passing trucks at 50 feet would generate up to 77 A-weighted decibels [dBA]), the effect on longer-term ambient noise levels would be small. Therefore, there would be no impacts related to the short-term noise associated with commuting construction workers and transporting equipment and materials to the proposed project site.

The second category of construction noise would be noise generated during onsite project construction. These potential noise impacts were evaluated based on the proposed project's construction equipment schedule and phasing assumptions developed as part of the air quality analysis (refer to Section III, *Air Quality*). Construction noise was analyzed using data and modeling methodologies from the Federal Highway Administration's Roadway Construction Noise Model (FHWA 2008), which predicts average noise levels at nearby receptors using information such as the type of equipment, distance between the source to receptor, and usage factor (the fraction of time the equipment is operating in its noisiest mode while in use). This methodology calculates the composite average noise level for multiple equipment items scheduled during each construction phase. Because of the acoustically soft ground conditions around the project site (i.e., unpaved ground with grass, trees, and other plants), it was assumed that construction noise levels would be reduced at a rate of 7.5 decibels (dB) per doubling of distance from the source. However, to provide a conservative analysis, the potential barrier effects provided by topography, walls, fences, buildings, and other objects were not included in the calculations. The average construction noise level for an 8-hour workday (i.e., 8-hour equivalent continuous sound level [L_{eq}]) during each phase

of construction was calculated at a reference distance of 50 feet. The reference noise levels were then adjusted for each receiver based on the acoustical average distance from the project site to each receiver.[11] These distances were estimated using project plans and aerial photography (Google Earth).

Detailed construction noise analysis tables are provided in Appendix I. The tables include the construction equipment and phasing, individual noise source levels, and noise levels for each phase of construction. The results for receptors are summarized in Table XIII-5.

[11] The acoustical average distance is used to represent noise sources that are mobile or distributed over an area (such as the analyzed construction area); it is calculated by multiplying the shortest distance between the receiver and the noise source area by the farthest distance and then taking the square root of the product.

Table XIII-5. Summary of Estimated Construction Noise Levels for the City of Riverside

		Construction Noise Level, $L_{eq}(h)$, dBA					
City	**Receiver**	**Phase 1 Demolition**	**Phase 2 Site Preparation**	**Phase 3 Grading**	**Phase 4 Building Construction**	**Phase 5 Paving**	**Phase 6 Architectural Coating**
Riverside	5681 Tucson Court	70	68	68	67	65	60
	5965 Tucson Court	70	68	68	68	65	60
	6027 Sheppard Street	58	56	57	56	53	48
	6019 William Street	55	53	54	53	50	45
Jurupa Valley	5760 Riverview Drive	46	44	44	43	41	36

$L_{eq}(h)$ = hourly equivalent sound level

Construction noise levels would be temporary and would cease once project construction is complete. Regarding potential impacts in the City of Riverside, the results of the analysis shown in Table XIII-5 indicate that average noise levels during construction would range from approximately 60 to 70 dBA L_{eq} at the closest neighboring homes (along Tucson Court), depending on the phase of construction. These noise levels would exceed the measured daytime ambient noise levels of approximately 47 to 65 dBA L_{eq} (based on the noise measurement at LTe) and construction noise would be clearly audible at these homes. At more distant homes to the southwest, on Sheppard Street and William Street, construction noise levels would range from approximately 45 to 58 dBA L_{eq}, which would also exceed the measured daytime ambient noise level of approximately 55 dBA L_{eq} (based on the noise measurement at STc).

If construction is restricted to the time periods permitted by the City of Riverside Municipal Code, it would be exempt from any specific noise limits. Any construction-related noise occurring outside the permitted time periods could cause a significant impact. Therefore, MM-NOI-1 would be required to limit noise-generating construction activity to the permitted daytime hours and to implement standard noise-reduction methods to minimize potential annoyance at nearby noise-sensitive receptors. With implementation of MM-NOI-1, the noise impacts during construction would be less than significant in the City of Riverside.

Regarding potential impacts in the city of Jurupa Valley, the results of the analysis shown in Table XIII-5 indicate that average noise levels during construction would range from 36 and 46 dBA L_{eq} at the closest home (5760 Riverview Drive), depending on the phase of construction. These noise levels would be below the measured daytime ambient noise level of approximately 51 dBA L_{eq} (based on the noise measurement at ST1).

The City of Jurupa Valley Municipal Code identifies in Sections 11.05.020(1), 11.05.020(2), and 11.05.020(3) that construction of associated facilities owned or operated by or for a governmental agency, capital improvement projects of a governmental agency, and the maintenance or repair of public properties is considered exempt from any noise standard. Therefore, impacts related to construction noise for Martha McLean Anza Narrows Park would be considered less than significant in the city of Jurupa Valley.

Traffic Noise

All traffic would access the project site via Jurupa Avenue, which is a four-lane divided roadway classified in the City of Riverside's General Plan Circulation and Community Mobility Element (February 2018) as a four-lane, 110-foot-wide arterial road. Based on the traffic assessment for the proposed project (Appendix J1), the proposed project is anticipated to generate a total of 70 new trips per day on a typical weekday and 63 new trips per day on a typical Saturday. This would include seven trips during the weekend peak morning hour (four inbound, three outbound), eight trips during the weekday PM peak hour (four inbound, four outbound), and seven trips during the highest Saturday peak hour (four inbound, three outbound). The existing park sees an estimated total of 790 trips on a typical weekday and 790 trips on a typical Saturday. Traffic volume increases associated with the proposed project would be small, especially relative to the size of the existing Jurupa Avenue. As such, the proposed project would create a negligible change to existing traffic noise levels. The impact of the proposed project on traffic noise levels would be less than significant and no mitigation measures are required for traffic noise.

Noise from Onsite Operations

Based on conceptual plans and descriptions of the proposed project, improvements to the existing Martha McLean Anza Narrows Park would bring a variety of passive recreational opportunities including native planting and pollinator gardens, terraced hillside steps and river steps, paths, trails, shaded seating area and crosswalk to river access, exercise stations, and overlooks. Active park elements include an outdoor classroom, community band shell, exercise stations, and play areas. The proposed project is designed to provide free or low-cost, easily accessible recreational opportunities so that the community has convenient access to play, exercise, connect with nature, and gather as a community.

The anticipated buildout for the proposed project includes the following features that would be expected to generate noise when used by visitors to the park:

- Nature play area
- Water play area
- Community band shell
- Parking lots

In addition, modest levels of noise may be generated by people congregating at passive use areas such as the proposed bike rest stop, community meadow and gathering space, shaded seating areas, overlook areas, and benches. In many of these cases, the existing park contains these attractions already, making noise associated with them a part of the local ambient noise levels. Furthermore, noise contributions at nearby homes from passive park uses is expected to be negligible relative to the primary noise sources, such as the play areas, community band shell, and parking lot.

To estimate hourly average (L_{50}) and maximum noise levels at the nearest homes due to onsite park activities, a noise analysis was conducted that considered the following:

- 100 children playing continuously within each of the two play areas (nature play area and water play area) throughout an entire hour (i.e., 200 children total)
- On- and off-axis noise propagation from amplified speech and music at the proposed band shell
- 36 inbound and 35 outbound vehicles using the parking lot in a single hour. This matches the maximum trip estimates provided in the project traffic assessment (Appendix J1).

The noise levels for children playing were based on noise measurements conducted at Linda Vista Elementary School in San Diego. Noise levels were measured from approximately 10:30 a.m. to 11:40 a.m. to capture morning recess, and from 12:20 p.m. to 1:40 p.m. to capture lunch recess. The measurements indicated an L_{50} noise level of 59 dBA at an acoustical average distance of 120 feet with an average of approximately 58 children playing simultaneous at various locations including flat asphalt playground areas, climbing/play equipment, a tetherball area, and a decomposed granite field. The measured noise levels were normalized to a reference distance of 50 feet. The maximum noise level, 82 dBA maximum noise level (L_{max}) at a distance of 60 feet, was the highest measured L_{max} level captured during the two measurement periods. These noise levels were then adjusted to account for the assumed number of children playing at Martha McLean Anza Narrows Park and the distances to the closest homes.

Noise associated with the band shell would include amplified speech or music from events or live concerts. Noise measurements taken by ICF personnel were obtained from a previous study

involving a small outdoor live music venue. A blues band with full amplification performed at the venue; it is anticipated that this would be representative of acts at the louder end of the range at the proposed band shell. Noise levels were measured at 200 feet from the front of the center of the stage (on-axis) during the live performance and found to be approximately 79.1 dBA L_{eq} and 96.8 dBA L_{max}. In addition, performance noise was measured 100 feet from the side of the stage (off-axis) and was found to be approximately 73.3 dBA L_{eq} and 90.4 dBA L_{max}. For the purposes of this analysis, it was assumed that the measured L_{eq} noise level provides a reasonable estimate of the L_{50} noise level considered by the City's noise standards (it is noted that both metrics are ways of describing the average noise level). Based on conceptual drawings and the orientation of the proposed band shell, on- and off-axis noise levels were then propagated from the proposed location to the nearest homes.

The noise level for the parking lot was estimated using prediction algorithms provided by SoundPLAN noise modeling software that indicated a sound power of approximately 91 dBA for a parking lot with 71 trips per hour. Although this sound power level represents an L_{eq} noise level, it is used as a conservative estimate for the L_{50} noise level considered by the City's noise standards (with only 71 trips per hour, the actual noise-generating activity within the parking facilities would likely last less than 30 minutes per hour). Maximum parking lot noise was estimated using source data for a car door slamming provided by SoundPLAN noise modeling software. In this case, source data were a maximum sound power level of 98 dBA (SoundPLAN 2022). These estimated sound power levels were adjusted to account for the distance to the nearest homes.

Complete calculations for the noise from play areas, band shell, and parking lot activity are provided in Appendix I. A summary of the overall noise levels from the analyzed onsite activities at the nearest homes in the City of Riverside is provided in Table XIII-6, which shows noise levels are anticipated to exceed the City's allowable daytime noise standard of 55 dBA L_{50} by up to 7 dB.

Table XIII-6. Summary of Estimated Noise Levels at Homes in the City of Riverside from Onsite Activities for the Martha McLean Anza Narrows Park Site

	Noise Level, dBA L_{50}			
Receiver	**Play Areas**	**Band Shell**	**Parking Lot**	**Combined Noise Level**
5681 Tucson Court	31.8	46.7	44.2	48.7
5965 Tucson Court	32.2	47.5	39.3	48.2
6027 Sheppard Street	33.2	61.1	25.6	61.1
6019 William Street	39.3	61.6	25.6	61.7

Additionally, Table XIII-7 shows combined noise levels at the nearest home in the city of Jurupa Valley. The noise standard in the city of Jurupa Valley has a noise threshold of 55 dBA L_{max}. In this case, estimated noise levels would exceed the allowable threshold at the nearest home by approximately 2 dB.

Table XIII-7. Summary of Estimated Noise Levels from Onsite Activities to Homes in the City of Jurupa Valley for the Martha McLean Anza Narrows Park Site

Receiver	Play Noise Levels, dBA L_{max}	Band Shell Noise Levels, L_{max}	Parking Lot Noise Levels, dBA L_{max}	Combined Noise Levels, dBA L_{max}
5760 Riverview Drive	49.1	55.9	28.8	56.7

It should be noted that children are not anticipated play at the park during the nighttime hours established by both the City of Riverside and the City of Jurupa Valley (10:00 p.m. to 7:00 a.m.). Similarly, the band shell is also not anticipated to be used during these hours. Therefore, nighttime noise levels would be substantially lower than indicated in Table XIII-6 and Table XIII-7, and would be below the nighttime noise standards of 45 dBA L_{50} (City of Riverside) and 45 dBA L_{max} (City of Jurupa Valley).

Nonetheless, onsite operational noise is estimated to exceed the applicable daytime noise thresholds, resulting in a significant impact. Table XIII-6 and Table XIII-7 show that the dominant contributor to these exceedances would be noise associated with amplified speech or music coming from the band shell. Therefore, MM-NOI-2 would be required to limit noise levels from band shell uses. With implementation of MM-NOI-2, the noise impacts during park operation would be less than significant.

Mitigation Measures

MM-NOI-1: Limit Construction to Permitted Hours and Employ Noise-reducing Construction Practices

The following noise-control measures shall be incorporated into the project contract specifications to ensure project construction complies with the City of Riverside Municipal Code and to reduce construction noise and vibration effects.

- Construction activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m. on weekdays and 8:00 a.m. to 5:00 p.m. on Saturdays, and shall not occur at any time on Sundays or federal holidays. Outside of these hours, construction personnel shall not be permitted on the job site, and material or equipment deliveries and collections shall not be permitted.
- All construction equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications.
- All mobile or fixed construction equipment used on the project that is regulated for noise output by a local, state, or federal agency shall comply with such regulations while used for project construction.
- All construction equipment shall be properly maintained.
- All construction equipment shall be operated only when necessary and shall be switched off when not in use.
- Construction employees shall be trained in the proper operation and use of the equipment.

- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
- Construction site and access road speed limits shall be established and enforced during the construction period.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
- To minimize potential public objections to unavoidable noise, the contractor shall maintain good communication with the surrounding community regarding the schedule, duration, and progress of the construction. Notification shall be provided advising that there will be loud noise associated with construction and providing a telephone contact number for affected parties to ask questions and report any unexpected noise levels. The onsite construction supervisor shall have the responsibility to receive and resolve noise complaints with notification required to be provided to the City for review and concurrence.

MM-NOI-2: Regulate Special Events at the Proposed Martha McLean Anza Narrows Park Amphitheater

City of Riverside PRCSD, Planning and Design Division, shall ensure that special events at the proposed amphitheater adhere to adopted noise standards and ordinances to minimize potential noise impacts on surrounding neighborhoods. Special events at the proposed amphitheater shall be properly regulated to comply with noise standards presented in Table XIII-3 and Table XIII-4. Methods to control noise levels and minimize potential impacts at the surrounding neighborhoods may include, but are not limited to, the following:

- Designing specifications for the amphitheater that help control noise (e.g., limiting sound system and loudspeaker output, ensuring proper orientation of loudspeakers).
- Limiting hours of operation, which may include avoiding early morning or late evening hours, limiting large events to weekends only, or requiring hard stop times at which the sound system must be powered off so that events are not allowed to run over their assigned time.
- Enacting operational controls to ensure compliance with ordinances and minimize potential nuisances; these may include limits on crowd sizes, proper policing of events, prohibiting consumption of alcohol, or prohibiting the use of noise-making devices by event attendees.
- Monitoring community noise; in the event of noise complaints from the surrounding community, it may be necessary to conduct noise monitoring during special events to determine if noise exceedances are occurring. In the event that exceedances are confirmed, additional noise control methods should be implemented.

Jurupa Avenue Trailhead

Less than Significant with Mitigation Incorporated.

Construction Noise

Two types of short-term noise impacts could occur during project construction. First, construction vehicles would incrementally increase noise levels on access roads. This would include construction worker vehicles and haul trucks traveling to and from the Jurupa Avenue Trailhead project site. Although there would be a relatively high single-event noise level, which could cause an intermittent noise nuisance (e.g., passing trucks at 50 feet would generate up to 77 dBA), the effect on longer-

term ambient noise levels would be small. Therefore, there would be no impacts related to the short-term noise associated with commuting construction workers and transporting equipment and materials to the Jurupa Avenue Trailhead project site.

The second category of construction noise would be noise generated during onsite project construction. These potential noise impacts were evaluated based on the proposed project's construction equipment schedule and phasing assumptions developed as part of the air quality analysis (refer to Section III, *Air Quality*). Construction noise was analyzed using data and modeling methodologies from the Federal Highway Administration's Roadway Construction Noise Model (FHWA 2006), which predicts average noise levels at nearby receptors by analyzing the type of equipment, distance between the source to receptor, and usage factor (the fraction of time the equipment is operating in its noisiest mode while in use). This methodology calculates the composite average noise level for multiple equipment items scheduled during each construction phase. Because of the acoustically soft ground conditions around the project site (i.e., unpaved ground with grass, trees, and other plants), it was assumed that construction noise levels would be reduced at a rate of 7.5 dB per doubling of distance from the source. However, to provide a conservative analysis, the potential barrier effects provided by topography, walls, fences, buildings, and other objects were not included in the calculations. The average construction noise level for an 8-hour workday (i.e., 8-hour equivalent continuous sound level [L_{eq}]) during each phase of construction was calculated at a reference distance of 50 feet. The reference noise levels were then adjusted for each receiver based on the acoustical average distance from the project site to each receiver.[12] These distances were estimated using project plans and aerial photography (Google Earth).

Detailed constriction noise analysis tables are provided in Appendix I. The tables include the construction equipment and phasing, individual noise source levels, and noise levels for each phase of construction. The results are summarized in Table XIII-8.

Table XIII-8. Summary of Estimated Construction Noise Levels for the Jurupa Avenue Trailhead Site

	Construction Noise Level, L_{eq}(h), dBA			
Receiver	**Phase 1 Site Preparation**	**Phase 2 Grading**	**Phase 3 Building Construction**	**Phase 4 Paving**
7164 Bradford Street	70	75	71	73
7120 Bradford Street	72	77	73	76
7106 Bradford Street	68	74	70	72
6948 Glendale Avenue	47	52	48	51
8607 Parker Way	45	50	46	49

L_{eq}(h) = hourly equivalent sound level

Construction noise levels would be temporary and would cease once project construction is complete. The results of the analysis indicate that average noise levels during construction would range from approximately 68 to 77 dBA at the closest neighboring homes on Bradford Street,

[12] The acoustical average distance is used to represent noise sources that are mobile or distributed over an area (such as the analyzed construction area); it is calculated by multiplying the shortest distance between the receiver and the noise source area by the farthest distance and then taking the square root of the product.

depending on the phase of construction. These noise levels would exceed the measured daytime ambient noise levels of approximately 54 to 60 dBA and construction noise would be clearly audible at these homes. At more distant homes to the south, on Glendale Avenue and Parker Way, construction noise levels would range from approximately 45 to 52 dBA, which would be below the measured daytime ambient noise levels. If construction is restricted to the time periods permitted by the City of Riverside Municipal Code, it would be exempt from any specific noise limits. Any construction-related noise occurring outside the permitted time periods could cause a significant impact. Therefore, MM-NOI-1 would be required to limit noise-generating construction activity to the permitted daytime hours and to implement standard noise-reduction methods to minimize potential annoyance at nearby noise-sensitive receptors. With implementation of MM-NOI-1, the noise impacts during construction would be less than significant.

Traffic Noise

All traffic would access the Jurupa Avenue Trailhead project site via Jurupa Avenue, which is a four-lane divided roadway classified in the City of Riverside's *General Plan Circulation and Community Mobility Element* (February 2018) as a four-lane, 110-foot-wide Arterial. Based on the Traffic Assessment for the proposed project (Appendix J2), the proposed project is anticipated to generate a total of 93 trips per day on a typical weekday and 90 trips per day on a typical Saturday. This would include seven trips during the weekday AM peak hour (three inbound/four outbound), eight trips during the weekday PM peak hour (four inbound/four outbound), and nine trips during the highest Saturday peak hour (four inbound/five outbound). These traffic volumes are very small, especially relative to the size of the existing Jurupa Avenue. As such, the project would create a negligible change to existing traffic noise levels. The impact of the proposed project on traffic noise levels would be less than significant and no mitigation measures are required for traffic noise.

Noise from Onsite Operations

The proposed project would develop a public park and trailhead to provide a variety of passive recreational opportunities including paths and trails, native planting and pollinator gardens, seating, shade structures, educational signage, and overlooks. Active park elements include bike paths and play areas. The proposed project is designed to provide a low-use, high-security development that capitalizes on the views, existing trail, geologic features, and native landscaping options on the project site. Vehicular parking would be provided on site along Jurupa Avenue.

The anticipated buildout for the proposed project includes the following features that would be expected to generate noise when used by visitors to the park:

- Parking lot
- Nature play area
- Arroyo Plaza play area
- Music play area with trees

In addition, modest levels of noise may be generated by people congregating at passive use areas such as the proposed bike hub, shade structures, the Great Lawn, and benches. However, due to the low-use nature of the park, the noise contributions at nearby homes from passive park uses is expected to be negligible relative to the primary noise sources from the parking lot and play areas.

To estimate hourly noise levels at the nearest homes due to onsite park activities, a noise analysis was conducted that considered the following:

- 10 children playing continuously at each of the three play areas (nature play area, arroyo plaza play area, and music play area) throughout an entire hour (i.e., 30 children total).
- Four inbound and five outbound vehicles using the parking in a single hour. This matches the maximum trip estimates provided in the project Traffic Assessment (Appendix J2).

The noise levels for children playing were based on noise measurements conducted at Linda Vista Elementary School in San Diego. Noise levels were measured from approximately 10:30 a.m. to 11:40 a.m. to capture morning recess, and from 12:20 p.m. to 1:40 p.m. to capture the lunch recess. The measurements indicated a noise level exceeded for 50 percent of the time (L_{50}) of 59 dBA at an acoustical average distance of 120 feet with an average of approximately 58 children playing simultaneously at various locations including flat asphalt playground areas, climbing/play equipment, a tetherball area, and a decomposed granite field. The measured noise levels were normalized to a reference distance of 50 feet, then adjusted to account for the assumed number of children playing at Jurupa Avenue Trailhead and the distances to the closest homes.

The noise level for the parking lot was estimated using prediction algorithms provided by SoundPLAN noise modeling software that indicate a sound power[13] of approximately 77 dBA for a parking lot with nine trips per hour. Although this sound power level represents an L_{eq}, it is used as a conservative estimate for the L_{50} noise level considered by the City's noise standards (with only nine trips per hour, the actual noise-generating activity at the parking lot would likely last fewer than 30 minutes per hour). The estimated sound power level was adjusted to account for the distances to the closest homes.

Complete calculations for the noise from play areas and parking lot activity are provided in Appendix I. A summary of the overall noise levels from the analyzed onsite activities at three homes neighboring the park are provided in Table XIII-9. As shown in Table XIII-9, the combined noise levels would all be below the City's daytime noise standard of 55 dBA L_{50}. Because children would not be anticipated to play at the park during the City's nighttime hours of 10:00 p.m. to 7:00 a.m., nighttime noise levels would be substantially lower than indicated in Table XIII-9 and would be below the City's nighttime noise standard of 45 dBA L_{50}.

Table XIII-9. Summary of Estimated Noise Levels from Onsite Play Areas and Parking Lot at the Jurupa Avenue Trailhead Site

	Noise Level, dBA L_{50}		
Receiver	**Three Play Areas**	**Parking Lot**	**Combined Noise Level**
7100 Bradford Street	37.8	18.2	37.9
7120 Bradford Street	53.2	35.0	53.3
7164 Bradford Street	50.7	38.8	51.0
6948 Glendale Avenue	31.4	14.9	31.5
8607 Parker Way	30.8	14.2	30.9

$L_{eq}(h)$ = hourly equivalent sound level

[13] Sound power is the total airborne sound energy radiated by a sound source per unit of time. The sound power is a characteristic of the noise source that is independent of distance and location.

Additional noise at the park would be generated by musical equipment at the music play area. The specifications of this equipment, including the types, numbers, and noise level output, are currently unknown, but such equipment could include acoustical play features similar to bells, xylophones, and percussion instruments, or installations with electronic sound sources. If the musical play equipment were to generate more than 50 dBA L_{50} at the nearest home, the total combined noise level could exceed the City's daytime standard of 55 dBA.[14] Due to the uncertainty in the final musical play equipment noise levels, it is conservatively assumed that total combined noise from onsite park activities with musical play equipment could exceed the City's daytime noise standard, which would be a significant impact. Therefore, MM-NOI-3 would be required to limit noise levels from musical play equipment. With implementation of MM-NOI-3, the noise impacts during park operation would be less than significant.

Mitigation Measures

MM-NOI-1: Limit Construction to Permitted Hours and Employ Noise-reducing Construction Practices, as described under *Martha McLean Anza Narrows Park, Mitigation Measures*, above.

MM-NOI-3: Select and Install Musical Play Equipment with Noise Levels Not to Exceed 50 dBA L_{50} at the Surrounding Homes (Jurupa Avenue Trailhead)

The musical play equipment at the project site shall be selected and installed to ensure it does not generate more than 50 dBA L_{50} at the surrounding homes when in use. (This limit is selected to keep overall noise levels from Jurupa Avenue Trailhead to 55 dBA L_{50} or less as required by the City's daytime noise standard.) This may be achieved by including site-specific noise limits (50 dBA L_{50} at the surrounding homes) in the procurement contract(s) for musical play equipment. Prior to construction of the music play area, the contractor supplying and/or installing the musical equipment shall provide written evidence demonstrating, to the City's satisfaction, that the design will comply with the stated noise limits. If compliance with the 50 dBA L_{50} noise limit cannot be demonstrated by the contractor, the City and/or contractor shall retain a qualified acoustical consultant to conduct site-specific noise modeling based on actual equipment selections and noise level data (provided by the manufacturer or measured at existing installations) and detailed designs for the music play area layout. If the noise modeling indicates noise levels from the equipment will exceed 50 dBA L_{50}, then noise-reduction techniques shall be implemented as necessary to reduce the noise levels to 50 dBA L_{50} at the surrounding homes. These noise reduction techniques may include, but are not limited to:

- Select quieter musical equipment, reduce the number of equipment items, and/or limit the noise output from electronic sound sources.
- Add noise barriers between the music play area and the affected homes. Noise barriers should be constructed of materials with a minimum surface density of 4 pounds per square foot or a demonstrated sound transmission class of 25. Alternatively, noise barriers may be provided by earthen berms or by blocking the line of sight between the musical play equipment and the homes using the grading/terrain of the park.

[14] Based on worst-case noise levels predicted at 7120 Bradford Street:
55 dBA (City's noise standard) – 53.3 dBA (combined play and parking noise) = 50 dBA

Overall Impacts

Less than Significant with Mitigation Incorporated. Construction and operation of the proposed parks could generate significant noise impacts. Therefore, mitigation measures have been recommended to reduce the impacts of both construction and operational noise from both proposed project sites related to construction for Martha McLean Anza Narrows Park (MM-NOI-1 and MM-NOI-2) and construction and use of musical play equipment for Jurupa Avenue Trailhead (MM-NOI- and MM-NOI-3). With implementation of the required mitigation measures (MM-NOI-1, MM-NOI-2, and MM-NOI-3), the impacts would be reduced to a less-than-significant level.

b. Generate excessive groundborne vibration or groundborne noise levels?

The Cities of Riverside of Jurupa Valley do not provide any quantitative criteria regarding groundborne noise and vibration. Therefore, while the proposed project would not be subject to Caltrans oversight, guidance published by the agency nonetheless provides groundborne vibration criteria that are useful in quantifying potential impacts. Caltrans' widely referenced *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020) provides guidance for two types of potential impacts: (1) damage to structures, and (2) human response/potential annoyance. Guideline criteria for each are provided in Table XIII-10 and Table XIII-11.

Table XIII-10. Caltrans Guideline Vibration Damage Criteria

	Maximum PPV (in/s)	
Structure and Condition	**Transient Sources**	**Continuous/Frequent Intermittent Sources**
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans 2020.
PPV = Peak particle velocity. The maximum instantaneous positive or negative peak amplitude of the vibration velocity.
in/s = inches per second. The unit of measurement for PPV.
Transient source = a vibration source that creates a single isolated vibration event, such as blasting or drop balls.
Continuous/frequent intermittent source = a vibration source that generates a continuous, repetitive vibration such as impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Table XIII-11. Caltrans Guideline Vibration Annoyance Criteria

	Maximum PPV (in/s)	
Human Response	**Transient Sources**	**Continuous/Frequent Intermittent Sources**
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10

Human Response	Maximum PPV (in/s)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Severe	2.0	0.4

Source: Caltrans 2020.
in/sec = inches per second; PPV = peak particle velocity

Construction-related vibration was analyzed using data and modeling methodologies provided by Caltrans' *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020). This guidance manual provides typical vibration source levels for various types of construction equipment, as well as methods for estimating the propagation of groundborne vibration over distance. Table XIII-12 provides reference peak particle velocity (PPV) levels for construction equipment expected to be used by the proposed project; the levels are provided for a reference distance of 25 feet. All the analyzed equipment is classified as continuous/frequency intermittent vibration sources.

Table XIII-12. Construction Equipment Vibration Levels

Equipment Item	Reference PPV at 25 feet, in/s [a]
Vibratory roller	0.21
Large bulldozer[b]	0.089
Small bulldozer[d]	0.003

Notes:
[a] Obtained from Caltrans 2020.
[b] Considered representative of other heavy earthmoving equipment such as excavators, graders, backhoes, etc.
[c] Considered representative of smaller equipment such as small skid steers and mini excavators.
in/sec = inches per second

The following equation from the guidance manual was used to estimate the change in PPV levels over distance:

$$PPV_{rec} = PPV_{ref} \times (25/D)^{n}$$

where PPV_{rec} is the PPV at a receptor; PPV_{ref} is the reference PPV at 25 feet from the equipment; D is the distance from the equipment to the receiver, in feet; and n is a value related to the vibration attenuation rate through ground (the default recommended value for n is 1.1).

Because PPV is calculated based on the maximum instantaneous vibration, the worst-case (closest) distance between each source and receiver should be used in the analysis (rather than an average distance). However, the precise future distances between project construction equipment and each of the surround buildings is currently unknown. Therefore, potential impact distances were calculated for each equipment item relative to criteria for both potential building damage and for potential human annoyance. These results were then used as screening distances to determine where and when mitigation would be required.

Martha McLean Anza Narrows Park

Less than Significant with Mitigation Incorporated.

Construction Vibration

The results of the potential building damage analysis are provided in Appendix I and summarized in Table XIII-13. The analysis considers the building types found on the closest surrounding properties, which all appear to be modern residential structures. As shown in the table, potential damage could occur if heavy equipment operates at distances ranging from 1 foot to 19 feet from nearby buildings, depending on the type of structure and the type of construction equipment being used. Based on available aerial imagery it does not appear that construction equipment would operate within 1 foot of existing offsite buildings, so damage from small bulldozers and similar equipment (e.g., small skid steers, mini excavators) would not occur. However, construction within the larger impact distances (6 to 19 feet) of existing offsite buildings cannot be ruled out. Therefore, MM-NOI-4 would be required to reduce construction-generated groundborne vibration to below the criteria levels for potential building damage. With implementation of MM-NOI-4, the potential building damage impacts during construction would be less than significant.

Table XIII-13. Impact Distances for Potential Vibration Damage from Project Construction

Equipment Item	Building Category	Vibration Damage Impact Criteria, PPV, in/s[a]	Distance to Impact Criteria, feet
Vibratory roller	Old residential structures	0.5	19
Large bulldozer[b]	Old residential structures	0.5	9
Small bulldozer[c]	Old residential structures	0.5	1

[a] Obtained from Caltrans 2020 (all criteria are based on the values for continuous/frequent intermittent sources).
[b] Considered representative of other heavy earthmoving equipment such as excavators, graders, backhoes, etc.
[c] Considered representative of smaller equipment such as small skid steers and mini excavators.
in/sec = inches per second

The results of the potential human response/annoyance analysis are provided in Appendix I and summarized in Table XIII-14. As shown in the table, the likely human response to groundborne vibration from project construction varies from barely perceptible to potentially severe depending on the equipment used and the distance to the nearest occupied building. Groundborne vibration at the higher end of the range could cause a significant impact if it occurred during nighttime hours (when people are typically resting/sleeping and most sensitive to vibration) or for prolonged periods. However, due to the mobile nature of the construction equipment and the size of the project site, the duration of activity close to any individual receptor would be limited and the vibration levels would reduce rapidly as work moves away from the receptor location. While the City Municipal Codes do not provide quantitative construction vibration standards, they do exempt construction activities from the noise ordinance provided they occur only during the permitted daytime hours. Therefore, MM-NOI-1 would be required to limit vibration-generating construction activity to the permitted daytime hours and avoid intrusive nighttime vibration at the neighboring homes. With implementation of MM-NOI-1, the potential vibration impacts associated with human response/annoyance during construction would be less than significant.

Table XIII-14. Distances from Project Construction to Various Levels of Human Response

Equipment Item	Human Response	Response Criteria, PPV, in/s[a]	Distance to Response Criteria, feet
Vibratory roller	Barely perceptible	0.01	399
	Distinctly perceptible	0.04	113
	Strongly perceptible	0.1	50
	Severe	0.4	14
Large bulldozer[b]	Barely perceptible	0.01	183
	Distinctly perceptible	0.04	52
	Strongly perceptible	0.1	23
	Severe	0.4	7
Small bulldozer[c]	Barely perceptible	0.01	9
	Distinctly perceptible	0.04	3
	Strongly perceptible	0.1	2
	Severe	0.4	1

[a] Obtained from Caltrans 2020 (all criteria are based on the values for continuous/frequent intermittent sources).
[b] Considered representative of other heavy earthmoving equipment such as excavators, graders, backhoes, etc.
[c] Considered representative of smaller equipment such as small skid steers and mini excavators.
in/sec = inches per second

Operational Vibration

The proposed project would not include any permanent sources of vibration. As a result, there would be no operational vibration impacts.

Jurupa Avenue Trailhead

Less than Significant with Mitigation Incorporated.

Construction Vibration

The results of the potential building damage analysis are provided in Appendix I and summarized in Table XIII-15. The analysis considers the building types found on the closest surrounding properties, which all appear to be modern residential structures. As shown in the table, potential damage could occur if heavy equipment operates at distances ranging from 1 foot to 12 feet from nearby buildings, depending on the type of structure and the type of construction equipment being used. Based on available aerial imagery, it does not appear that construction equipment would operate within 1 foot of existing offsite buildings, so damage from small bulldozers and similar equipment (e.g., small skid steers, mini excavators) would not occur. However, construction within the larger impact distances (6 to 12 feet) of existing offsite buildings cannot be ruled out. Therefore, MM-NOI-5 would be required to reduce construction-generated groundborne vibration to below the criteria levels for potential building damage. With implementation of MM-NOI-5, the potential building damage impacts during construction would be less than significant.

Table XIII-15. Impact Distances for Potential Vibration Damage from Project Construction

Equipment Item	Building Category	Vibration Damage Impact Criteria, PPV, in/s[a]	Distance to Impact Criteria, feet
Vibratory roller	New residential structures	0.5	12
Large bulldozer[b]	New residential structures	0.5	6
Small bulldozer[c]	New residential structures	0.5	1

[a] Obtained from Caltrans 2020 (all criteria are based on the values for continuous/frequent intermittent sources).
[b] Considered representative of other heavy earthmoving equipment such as excavators, graders, backhoes, etc.
[c] Considered representative of smaller equipment such as small skid steers and mini excavators.
in/sec = inches per second

The results of the potential human response/annoyance analysis are provided in Appendix I and summarized in Table XIII-16. As shown in the table, the likely human response to groundborne vibration from project construction varies from below perceptible to potentially severe depending on the equipment used and the distance to the nearest occupied building. Groundborne vibration at the higher end of the range could cause a significant impact if it occurred during nighttime hours (when people are typically resting/sleeping and most sensitive to vibration) or for prolonged periods. However, due to the mobile nature of the construction equipment and the size of the project site, the duration of activity close to any individual receptor would be limited and the vibration levels would reduce rapidly as work moves away from the receptor location. While the City's Municipal Code does not provide quantitative construction vibration standards, it does exempt construction activities from the noise ordinance provided they occur only during the permitted daytime hours. Therefore, MM-NOI-1 would be required to limit vibration-generating construction activity to the permitted daytime hours and avoid intrusive nighttime vibration at the neighboring homes. With implementation of MM-NOI-1, the potential vibration impacts associated with human response/annoyance during construction would be less than significant.

Table XIII-16. Distances from Project Construction to Various Levels of Human Response

Equipment Item	Human Response	Response Criteria, PPV, in/s[a]	Distance to Response Criteria, feet
Vibratory roller	Barely perceptible	0.01	399
	Distinctly perceptible	0.04	113
	Strongly perceptible	0.1	50
	Severe	0.4	14
Large bulldozer[b]	Barely perceptible	0.01	183
	Distinctly perceptible	0.04	52
	Strongly perceptible	0.1	23
	Severe	0.4	7
Small bulldozer[c]	Barely perceptible	0.01	9
	Distinctly perceptible	0.04	3
	Strongly perceptible	0.1	2
	Severe	0.4	1

[a] Obtained from Caltrans 2020 (all criteria are based on the values for continuous/frequent intermittent sources).
[b] Considered representative of other heavy earthmoving equipment such as excavators, graders, backhoes, etc.

[c] Considered representative of smaller equipment such as small skid steers and mini excavators.
in/sec = inches per second

Operational Vibration

The proposed project would not include any permanent sources of vibration. As a result, there would be no operational vibration impacts.

Mitigation Measures

MM-NOI-4: Observe Buffer Distances around Martha McLean Anza Narrows Park and Use Less Vibration-intensive Construction Equipment to Avoid Potential Building Damage Impacts during Project Construction

The following buffer distances from offsite buildings around Martha McLean Anza Narrows Park shall be incorporated into the project contract specifications to ensure the construction contractor(s) observe the necessary clearances to avoid potential building damage during project construction:

- Avoid vibratory compaction (including vibratory rollers) within 12 feet of residential structures.
- Avoid the use of large bulldozers and similar full-size heavy earthmoving equipment (e.g., excavators, graders, backhoes) within 6 feet of residential structures.

If the prescribed buffer distances cannot be maintained, impacts shall be reduced to less-than-significant levels by using alternative equipment that avoids or reduces high vibration levels at the source. For example, a non-vibratory roller may be used in place of a vibratory roller, and smaller earthmovers (e.g., Bobcat, skid steer, mini excavator) may be used instead of full-size heavy earthmoving equipment.

MM-NOI-5: Observe Buffer Distances around Jurupa Avenue Trailhead and Use Less Vibration-intensive Construction Equipment to Avoid Potential Building Damage Impacts during Project Construction

The following buffer distances from offsite buildings around Jurupa Avenue Trailhead shall be incorporated into the project contract specifications to ensure the construction contractor(s) observe the necessary clearances to avoid potential building damage during project construction:

- Avoid vibratory compaction (including vibratory rollers) within 12 feet of residential structures.
- Avoid the use of large bulldozers and similar full-size heavy earthmoving equipment (e.g., excavators, graders, backhoes) within 6 feet of residential structures.

If the prescribed buffer distances cannot be maintained, impacts shall be reduced to less-than-significant levels by using alternative equipment that avoids or reduces high vibration levels at the source. For example, a non-vibratory roller may be used in place of a vibratory roller, and smaller earthmovers (e.g., Bobcat, skid steer, mini excavator) may be used instead of full-size heavy earthmoving equipment.

Overall Impacts

Less than Significant with Mitigation Incorporated. Construction of the proposed parks could generate significant groundborne vibration impacts. Therefore, mitigation measures have been recommended to reduce the impacts of construction vibration from both project sites. With implementation of the required mitigation measures (MM-NOI-1, MM-NOI-4, and MM-NOI-5), the impacts would be reduced to a less-than-significant level.

c. Be 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 and expose people residing or working in the project area to excessive noise levels?

Martha McLean Anza Narrows Park

No Impact. The two closest airports to the project site include Riverside Municipal Airport, a public airport owned by the City of Riverside approximately 0.9 mile southwest of the project site, and Flabob Airport, a privately owned airport approximately 1.7 miles northeast of the project site in the city of Jurupa Valley. The Riverside County Airport Land Use Commission has published noise contour maps for these two airports. Contour maps for the Riverside Municipal Airport were published for 2003 existing conditions, 2025 future conditions, and ultimate noise impacts. In all three cases, the proposed Martha McLean Anza Narrows Park is outside of the 55 dB CNEL contour (RCALUC 2005). With respect to Flabob Airport, a map showing estimated noise contours for the year 2022 shows noise levels at the proposed park would be below 55 dB CNEL (RCALUC 2004). Table 2B of the Riverside County Airport Land Use Compatibility Plan states that park uses are normally acceptable in areas with noise levels up to 65 dB CNEL and marginally acceptable in areas with noise levels of up to 70 dB CNEL (RCALUC 2004). Furthermore, the proposed project would not introduce any new aircraft noise sources and would not cause changes to flight operations at any existing airports, airfields, airstrips, or heliports in the region. As a result, there would be no aircraft noise impacts due to implementation of the proposed project.

Jurupa Avenue Trailhead

No Impact. The two closest airports to the project site are Riverside Municipal Airport, a public airport owned by the City of Riverside approximately 0.75 mile southeast of the project site, and Flabob Airport, a privately owned airport approximately 3.4 miles northeast. The Riverside County Airport Land Use Commission has published noise contour maps for these two airports. Contour maps for the Riverside Municipal Airport were published for 2003 existing conditions, 2025 future conditions, and ultimate noise impacts. The 2003 and 2025 contour maps estimate noise levels at the proposed Jurupa Avenue Trailhead to be between 55 and 60 dB CNEL; however, the ultimate noise impact map estimate noise levels as high as 63 dB CNEL (RCALUC 2005). With respect to Flabob Airport, a map showing estimated noise contours for the year 2022 shows noise levels at the proposed park would be below 55 dB CNEL (RCALUC 2004). Table 2B of the Riverside County Airport Land Use Compatibility Plan states that park uses are normally acceptable in areas with noise levels of up to 65 dB CNEL and marginally acceptable in areas with noise levels of up to 70 dB CNEL (RCALUC 2004). Furthermore, the proposed project would not introduce any new aircraft noise sources and would not cause changes to flight operations at any existing airports, airfields,

airstrips, or heliports in the region. As a result, there would be no aircraft noise impacts due to implementation of the proposed project.

Overall Impacts

No Impact. The two closest airports to the project site are Riverside Municipal Airport, a public airport owned by the City of Riverside, and Flabob Airport, a privately owned airport in the city of Jurupa Valley. The proposed project sites would not introduce any new aircraft noise sources and would not cause changes to flight operations at any existing airports, airfields, airstrips, or heliports in the region. As a result, there would be no aircraft noise impacts due to implementation of the proposed project.

XIV Population and Housing

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b.	Displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Affected Environment

Martha McLean Anza Narrows Park

The project site consists of the existing Martha McLean Anza Narrows Park. The area surrounding the project site includes undeveloped land, single-family houses, and right-of-way uses. The proposed project would not include the construction of homes or businesses, nor would it extend roads or involve the addition of infrastructure that would facilitate population growth.

Jurupa Avenue Trailhead

The Jurupa Avenue Trailhead project site is primarily undeveloped City-owned and -maintained parkland. The area surrounding the Jurupa Avenue Trailhead project site includes medium-density residential housing, open space, and commercial industrial uses. The proposed project would not include the construction of homes or businesses, nor would it extend roads or involve the addition of infrastructure that would facilitate population growth.

Discussion

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project would feature passive recreation, play areas, and bike and trail routes as active recreation elements at the Jurupa Avenue Trailhead project site and would incorporate new recreational amenities to the existing Martha McLean Anza Narrows Park. The proposed project would not directly induce population growth, as the proposed project would not include the addition of any growth-inducing infrastructure, such as new homes and businesses. Furthermore, the proposed project would not indirectly support new population or economic

expansion. The proposed project would not result in any substantial change to the existing land use pattern or trigger growth in the area. Therefore, there would be no impact.

b. Displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project sites are on City-owned parkland that does not contain housing. The proposed project would not displace any housing units or people or necessitate the construction of replacement housing elsewhere. Therefore, no impact would occur.

XV Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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 following public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Affected Environment

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

The proposed project sites are entirely within the City of Riverside and are served by RFD and the Riverside Police Department (RPD) (City of Riverside 2007).

Discussion

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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 following public services:

Fire protection?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. Mount Rubidoux, Camp Evans/Fairmount Park, and the Santa Ana River are areas with fire risk. However, the proposed project does not include development of these areas. Distribution locations, also known as points of service delivery, are established to ensure the rapid deployment

of fire resources to intervene in routine emergencies and provide the appropriate emergency response. The proposed project would not include new homes or businesses that would require additional services or extended response times for fire protection services. Therefore, the proposed project would not substantially alter the existing fire service demands following the completion of construction. RFD would not be required to expand or construct new fire station locations to serve the project area, and impacts on service ratios, response times, or other performance objectives are not anticipated. Therefore, no impact would occur.

Police protection?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. RPD provides police services to the project sites (City of Riverside 2007). The nearest police station to the project sites is approximately 1 mile southwest at 10191 Cypress Avenue (Station 7) in the Arlanza area. Construction activities would be short term, and operation and maintenance of the proposed project would be performed by City of Riverside employees or contractors. The proposed project would not include new housing or businesses that would require additional police protection services. Therefore, police protection needs would not increase, RPD would not be required to expand or construct new police stations to serve the proposed project, and impacts on service ratios, response times, or other performance objectives are not anticipated. Therefore, no impacts would occur.

Schools?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The nearest public school to the proposed project site, Terrace Elementary School, is 0.5 mile southwest of the project sites. The proposed project would not change existing demand for school services or result in adverse impacts on schools, because the proposed project would not result in an increase in population, as no new development that would result in population growth is proposed. Therefore, the proposed project would have no impact related to school services.

Parks?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project includes the development of approximately 7.7 acres for a public park on undeveloped park land for the Jurupa Avenue Trailhead and would implement additional recreational amenities to the existing Martha McLean Anza Narrows Park. The proposed project would provide new park facilities for area residents. An increase in patronage at other park facilities is not expected. Therefore, no impacts associated with the construction or expansion of park facilities would occur.

Other public facilities?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The nearest community center, Joyce Jackson Community Center, is 0.25 mile southeast of the project sites, and the nearest library is Arlanza Public Library at 8267 Philbin Avenue, more than 1 mile south of the project sites. The proposed project would not include new housing or

businesses that would require any additional services or public facilities, such as libraries or community centers. Therefore, the proposed project would have no impact related to other public facilities.

XVI Recreation

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

Affected Environment

For several decades, public and private agencies, nongovernmental organizations, and communities have worked toward the goal of developing a continuous Santa Ana River Trail (Coastal Conservancy 2018). When completed, the trail will be 110 miles long and run through Riverside County, San Bernardino County, and Orange County. In 2014, the California State Legislature created the SARCP. Among the SARCP's goals are to develop open space and trails and facilitate public access to, enjoyment of, and enhancement of recreational and educational experiences along the Santa Ana River Trail in a manner consistent with the protection of land and natural resources and economic resources in the area trail (Coastal Conservancy 2018). The SARCP developed the Santa Ana River Parkway and Open Space Plan in 2018 and identified the proposed project sites and other park sites in Riverside County as underused, existing public open space that can be improved to provide better public use and enjoyment of the area. Existing publicly accessible recreational uses along the Santa Ana River Trail include trails, trail connections, parks, and open space; parkway amenities, such as restrooms and drinking fountains, are available on some portions of the trail.

The *Riverside Comprehensive Park, Recreation & Community Services Master Plan* adopted February 4, 2020 (City of Riverside 2020), serves as a guide and implementation tool for the management and development of parks and recreational facilities and programs for the City. The master plan is part of the defined strategy to continue to address the primary actions and policies set forth in the Parks and Recreation Element of GP 2025. The City's 61.09-acre Hole Lake property, which includes the Jurupa Avenue Trailhead project site, is included in the master plan as a special use facility.

Martha McLean Anza Narrows Park

The existing Martha McLean Anza Narrows Park is composed of approximately 39.5 acres of City-owned and -managed parkland. The project site is bounded by the Santa Ana River Trail to the north and east, Jurupa Avenue to the south, and Union Pacific Railroad to the west. Proposed park improvements on a 10.63-acre portion of the park site would include a variety of passive recreational opportunities including a river trail, a community meadow, native pollinator gardens, a

bike rest stop, and an outdoor classroom. Active park elements include exercise stations, a nature play area, and terraced river and hillside steps. Other proposed recreational features are described in Section 2.4, *Project Characteristics.*

Jurupa Avenue Trailhead

The project site is approximately 7.7 acres of undeveloped City-owned and -managed parkland immediately adjacent to the Santa Ana River Trail. The proposed project site is bounded by the Santa Ana River to the north, Van Buren Boulevard to the east, Jurupa Avenue to the south, and Bradford Street to the west. The Santa Ana River Trail surrounds the project site to the east, south, and west. Additionally, the existing Rutland Park is across the street from the Jurupa Avenue Trailhead project site. The proposed project would develop a public park and trailhead to provide a variety of passive recreational opportunities including paths and trails, native planting and pollinator gardens, seating, shade structures, educational signage, and overlooks. Active park elements include bike paths and music and nature play areas. Other proposed recreational features are described in Section 2.4, *Project Characteristics.*

Discussion

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. At the existing Martha McLean Anza Narrows Park, the project proposes implementation of additional recreational components, which would allow existing park visitors to use a larger variety of recreational activities. At the Jurupa Avenue Trailhead, the project proposes the development of a special use facility public park and trailhead, which would increase recreational uses available to community members. The proposed project would not cause an increase in use or deterioration of other existing park and recreational facilities and would result in a beneficial impact by providing new park facilities for area residents. Therefore, no impact would result.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. The project proposes the improvement of an existing park and development of a public park and trailhead that would include recreational facilities. Anticipated facilities include paths and trails, native planting and pollinator gardens, seating, shade structures, educational signage, overlooks, bike hub with restrooms, new pike path alignment, and parking. The potential environmental impacts that would result from the construction of these recreational facilities are evaluated as part of the construction of the proposed project as a whole. The project involves development of a park and trailhead for recreational use by the public. Aside from the project, construction or expansion of any other recreational facilities would not be required. The

project would encourage use of recreational facilities throughout the system, potentially prolonging the life of existing parks and recreational facilities throughout the City. Maintenance activities would help prevent substantial physical deterioration of existing facilities. Therefore, impacts of the project on the environment due to construction or expansion of recreational facilities would be less than significant.

XVII Transportation

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

Affected Environment

Martha McLean Anza Narrows Park

The Martha McLean Anza Narrows Park project site is at 5759 Jurupa Avenue in the City of Riverside. Jurupa Avenue is a four-lane, 88-foot arterial and would likely be used for site access during construction. On-street parking is prohibited on Jurupa Avenue in the vicinity of the existing park. Class II bike lanes are provided on Jurupa Avenue in each direction of travel for a majority of the roadway length. Several sections of the roadway also provide a 2-foot buffer for bicyclists on both sides of the roadway. The posted speed limit on Jurupa Avenue is 45 miles per hour in the vicinity of the existing park.

Jurupa Avenue Trailhead

The Jurupa Avenue Trailhead project site is adjacent to the Santa Ana River Trail, northwest of the intersection of Jurupa Avenue (a four-lane 110-foot arterial) and Van Buren Avenue (an eight-lane 144-foot arterial). A raised median with intermittent turn lanes is currently provided west of Van Buren Boulevard. On-street parking is prohibited on Jurupa Avenue in the vicinity of the project site. Construction traffic would likely access the site via Van Buren Avenue.

Class II bike lanes are provided on Jurupa Avenue in each direction of travel for a majority of the roadway length. Several sections of the roadway also provide a 2-foot buffer for bicyclists on both sides of the roadway. The Santa Ana River Bike Trail currently runs along the north side of the roadway fronting the project site. The posted speed limit on Jurupa Avenue is 40 miles per hour in the immediate vicinity of the project site.

Discussion

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

Martha McLean Anza Narrows Park

Less-than-Significant Impact. The proposed project would incorporate park improvements to the existing Martha McLean Anza Narrows Park. All improvements would be within the project site and would not involve alterations to the existing traffic or circulation system in the project area or nearby communities. A Traffic Assessment (Appendix J1) was prepared for the proposed project and includes the results of a trip generation analysis that indicates the proposed project would generate approximately 70 trips per day on weekdays and 63 trips per day on weekends. The estimated project traffic falls below the peak-hour threshold of 110 trips in the *City of Riverside Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (City of Riverside 2020). As such, it is anticipated that the project-generated traffic would have minimal impacts on intersections and roadways in the vicinity of the project. Any potential increases to the traffic volume in the surrounding areas would be limited to trips taken by construction vehicles for project improvements and construction debris, which would only be temporary. In the long term, after the completion of the proposed project improvements, the proposed project is not anticipated to generate any additional vehicular traffic except for routine maintenance, which would be intermittent and as needed, similar to current conditions, or park patrol monitoring. While an increase in park use is expected, that increase would be within service levels per the City's General Plan. A new pattern of peak traffic may be created as a result of concerts and events at the Martha McLean amphitheater. This peak would be reduced through programming controls such as making events pre-sale tickets only to limit the number of people attending.

The proposed project would develop improvements such as adding a trail and additional parking, which would improve pedestrian and vehicular circulation within the project site compared to existing conditions. As discussed in the Traffic Assessment (Appendix J1), the new pedestrian paths would be consistent with the City of Riverside Trails Master Plan (City of Riverside 2021), and development of the proposed project would not conflict with the existing or future bicycle network in the immediate vicinity of the project site.

Therefore, impacts of the proposed project on traffic of the surrounding area would be less than significant with implementation of programming controls.

Jurupa Avenue Trailhead

Less-than-Significant Impact. The proposed project is a public park and would not involve alterations to the existing traffic or circulation system in the project area or nearby communities. A Traffic Assessment (Appendix J2) was prepared for the proposed project and includes the results of a trip generation analysis that indicates the proposed project would generate approximately 93 trips per day on weekdays and 90 trips per day on weekends. The estimated project traffic falls below the peak-hour threshold of 100 trips in the *City of Riverside Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (City of Riverside 2020). As such, it is anticipated that the project-generated traffic would have minimal impacts on intersections and roadways in the vicinity of the project. Any potential increases to the traffic volume in the surrounding areas would be limited to trips taken by construction vehicles for project improvements, and construction debris

from the proposed project to the Badlands Landfill. In the long term, after the completion of the proposed project improvements, the proposed project is not anticipated to generate any additional vehicular traffic except for routine maintenance, which would be intermittent and as needed, similar to current conditions, or park patrol monitoring.

As discussed in the Traffic Assessment (Appendix J2), the proposed project would include construction of a portion of the Santa Ana River Greenway, which would consist of a decomposed granite pedestrian path alongside the Santa Ana River Trail within the proposed developed area of the park. The proposed project also proposes realignment of the existing Class II bike lanes along Jurupa Avenue and the Santa Ana River Trail. The proposed pedestrian and trail improvements are consistent with the City of Riverside's Trails Master Plan (City of Riverside 2021), and development of the proposed project would not conflict with the existing or future pedestrian network in the immediate project vicinity. The proposed bicycle network improvements are consistent with the City's Master Plan of Trails and Bikeways in the General Plan Circulation and Community Mobility Element (City of Riverside 2018) and the City's Bicycle Master Plan Update Addendum (City of Riverside 2012). In addition, the Riverside Transit Agency provides bus transportation services to Riverside County, and bus route 21 runs adjacent to the proposed project site along Van Buren Avenue and would not be affected.

No impact related to operational traffic would result with implementation of the proposed project. Therefore, impacts of the proposed project on traffic of the surrounding area would be less than significant.

Overall Impact

The project proposes two public parks and would not involve alterations to the existing traffic or circulation system in the project area or nearby communities. No impact related to operational traffic would result with implementation of the proposed project. Therefore, impacts of the proposed project on traffic of the surrounding area would be less than significant.

b. Conflict or be inconsistent with State CEQA Guidelines section 15064.3, subdivision (b)?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. The proposed project includes improvements to City-owned and -managed parkland and thus would not generate additional VMT. As discussed in the Traffic Assessments (Appendices J1 and J2), the Western Riverside Council of Governments VMT tool indicates that the project is in low-VMT-generating areas and is therefore exempt from VMT analysis. Furthermore, the City's VMT screening criteria list local parks as a land use type that is presumed to have a less-than-significant impact. Because the proposed project is a local-serving park in an area with low VMT generation, it is screened out from further VMT analysis and is presumed to have a less-than-significant VMT impact. In addition, the project sites are estimated to generate fewer than 110 trips per day and are therefore below the City's VMT screening threshold for small projects.

Short-term traffic associated with project construction is not anticipated to significantly affect the traffic levels of the surrounding areas or cause congestion, as construction vehicles would be mainly contained on site and would be present temporarily. Most staging and parking would be contained

to the project sites, which would be closed to traffic except for maintenance vehicles and therefore would not contribute to congestion or the amount and distance of automobile travel attributable to the project. Therefore, short-term impacts during construction would be less than significant. After the completion of construction activities, the proposed project is not anticipated to generate any additional vehicular traffic and the amount of VMT would not noticeably change from existing conditions. No impact related to operational traffic would result with implementation of the proposed project.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project does not include any geometric design features that would be deemed hazardous. The proposed project would comply with existing standard development procedures, including submitting site plans to the City for review and approval prior to the issuance of building permits. The proposed project would be reviewed to ensure that there would not be an increased hazard due to a design feature, or incompatible use. Therefore, no impacts would occur.

d. Result in inadequate emergency access?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project would not impair emergency access to the proposed project sites. The proposed project would not include any characteristics (e.g., permanent road closures, long-term blocking of road access) that would physically impair or otherwise interfere with emergency response or evacuation in the proposed project's vicinity. Traffic in the surrounding areas is anticipated to be minimal and limited to onsite construction-related equipment entering and exiting the project area. All large construction vehicles entering and exiting the sites would be guided by personnel using signs and flags to direct traffic. As such, implementation of the proposed project would not result in inadequate access for any emergency response entities. Because no habitable structures or buildings are proposed and the project would only improve the existing sites for recreational uses, emergency access would be adequate, similar to existing conditions. Therefore, no impact would occur.

XVIII Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☒	☐	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Affected Environment

This section describes existing conditions pertaining to TCRs, with an analysis of the potential impacts on TCRs that could result from implementation of the proposed project. The analysis and assessment are based on consultation with Native American tribes traditionally and culturally affiliated with the project area and the cultural resources study conducted by ICF (Appendix H). Refer to Section V, *Cultural Resources*, for additional details regarding archaeological and historical resources on the proposed project sites.

A TCR is a site, feature, place, cultural landscape, sacred place, or object that is of cultural value to a recognized Native American tribe. The resource may be in or eligible for listing in the CRHR or a local historic register, or a lead agency may choose to treat a resource as a TCR. Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential significant impacts on TCRs, and reduce the potential for delay and conflict in the environmental review process (see PRC Section 21083.3.2). Information may also be available from the NAHC's Sacred Lands File per PRC Section 5097.96 and the CHRIS administered by the California Office of Historic Preservation. PRC Section 21082.3(c) also contains provisions specific to confidentiality.

The proposed project is near an ethnographic transition zone between the Gabrielino/Tongva/Kizh, Serrano, Luiseño, and Cahuilla Native American tribes. Efforts to identify TCRs included a Sacred

Lands File search with the NAHC and invitations to Native American tribes to consult on the proposed project pursuant to AB 52.

Ethnohistoric Setting

The project site is near an ethnographic transition zone between multiple Native American groups including the Gabrielino/Tongva/Kizh, Serrano, Luiseño, and Cahuilla. All four groups are speakers of Takic languages, which are part of the Uto-Aztecan linguistic stock (Bean and Shipek 1978; Bean and Smith 1978a, 1978b). Because the project area occupies a transitional zone among these groups, it is necessary to consider all five groups to fully understand the occupation history of the region. The ethnographic contexts presented in this analysis are drawn from ethnographic sources and were often recorded and written by non-Native authors. They do not necessarily represent the individual perspectives of the Native American tribes that are represented by the proposed project. Native American groups have a long history of occupation of this region for many millennia. The City of Riverside and the surrounding region contains numerous archaeological remnants of this occupation history. A discussion of the archaeological background for the proposed project is presented in detail in Section 3.3.V.

Cahuilla

The Cahuilla settled in a territory that extended west to east from the present-day City of Riverside to the central portion of the Salton Sea in the Colorado Desert, and south to north from the San Jacinto Valley to the San Bernardino Mountains. Evidence suggests the Cahuilla migrated to Southern California about 2,000 to 3,000 years ago, most likely from the southern Sierra Nevada ranges of east-central California (Moratto 1984). Cahuilla villages were usually in canyons or on alluvial fans near accessible water such as springs or where large wells could be dug. Major religious ceremonies of the clan were held in a separate ceremonial house. Houses and ancillary structures were often spaced apart, and villages typically spread over a mile or two.

The Cahuilla used more than 200 desert and mountain plants (Bean and Saubel 1972). Though 60 percent of Cahuilla territory was in the Lower Sonoran Desert environment, 75 percent of their diet came from plant resources acquired in Upper Sonoran and Transition environmental zones (Bean 1978). Key plant foods included acorns, screwbean and honey mesquite, pinon nuts, prickly-pear cactus fruit and leaves, and yucca blossoms and stalks. The Cahuilla employed a wide variety of tools and implements to gather and collect food resources. Hunting was achieved using the bow and arrow, traps, nets, slings, and blinds for land mammals and birds and nets for fish when Lake Cahuilla was filled. Food processing was achieved using a variety of tools: portable and bedrock mortars, basket hopper mortars, pestles, manos and mutates, bedrock grinding slicks, hammerstones and anvils, woven strainers and winnowers, leaching baskets and bowls, woven parching trays, knives, bone saws, and wooden drying racks. Pottery was initially introduced to the Cahuilla during the Late Pre-contact Period, and the art of ceramic production was later adopted by the Cahuilla, who used the paddle and anvil technique.

Asistencias were established near Cahuilla territory at San Bernardino and San Jacinto by 1819. Interaction with Europeans was less intense in the Cahuilla region than for coastal groups because the topography and paucity of water rendered the inland area inhabited by the Cahuilla unattractive to colonists. By the 1820s, however, the Pass Cahuilla experienced consistent contact with the ranchos of Mission San Gabriel, whereas the Mountain Cahuilla frequently received employment from private rancheros and were recruited to Mission San Luis Rey. Mexican ranchos were located

near Cahuilla territory along the upper Santa Ana and San Jacinto Rivers by the 1830s, providing the opportunity for the Cahuilla to earn money ranching and learn new agricultural techniques. The expansion of immigrants into the region introduced the Cahuilla to European diseases. By 1891, only 1,160 Cahuilla remained within what was left of their territory, down from an aboriginal population estimated at 6,000 to 10,000 (Bean 1978). Between 1875 and 1891, the United States established ten reservations for the Cahuilla within their territory: Agua Caliente, Augustine, Cabazon, Cahuilla, Los Coyotes, Morongo, Ramona, Santa Rosa, Soboba, and Torres-Martinez (Bean 1978). Four of these reservations are shared with other Native American groups, including the Chemehuevi, Cupeno, and Serrano.

Gabrielino/Tongva/Kizh

A portion of the current boundaries of the City was occupied by the Native American group known as the Gabrielino/Tongva/Kizh. Following the Spanish custom of naming local tribes after nearby missions, these people were variously called the Gabrielino, Gabrieleño, or San Gabrieleño in reference to Mission San Gabriel Arcángel. The term Gabrielino refers to the Native American group historically associated with Mission San Gabriel. This post-contact name does not reflect how these people would have identified themselves; in recent times, descendants of this group have referred to themselves as Tongva or Kizh. This subject has been argued extensively; therefore, for purposes of this report, and so as not to give preference to one group or the other, the term Gabrielino will be used herein. The Gabrielino language is one of a group of Californian Uto-Aztecan languages that have been designated as Takic (Bean and Smith 1978a:538). Linguistic analysis suggests that Takic-speaking immigrants from the Great Basin may have moved into Southern California around 500 B.C. (Kroeber 1925:579). The Gabrielino occupied much of present-day Los Angeles and Orange Counties and some portions of San Bernardino and Riverside Counties (McCawley 1996:3). The total area of the Gabrielino mainland territory exceeded 3,886 square kilometers (1,500 square miles). Gabrielino chieftanship was hereditary.

By 1500 before present, the Gabrielino had established permanent villages along rivers and streams (Bean and Smith 1978a). Johnston (1962) observed that large Gabrielino village sites were located at the mouths of canyons with flowing streams. McCawley (1996) suggests that permanent settlements were located at the intersection of two or more environmental zones, such as the prairie-foothill transition zone; elevated locations near water courses; and sheltered bays and inlets. Site types included primary residential villages, hunting and gathering areas, ritual sites, and special use locations (McCawley 1996). In the region, important food resources included acorns, sage, yucca, deer, numerous small rodents, cactus fruit, and a variety of plants, animals, and birds associated with freshwater marshes (McCawley 1996). A wide variety of tools and implements were used by the Gabrielino/Tongva to gather and collect food resources. These included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Foods were processed with a variety of tools, including hammer stones and anvils, mortars and pestles, manos and metates, strainers, leaching baskets and bowls, knives, bone saws, and wooden drying racks.

The fundamental economy of the Gabrielino/Tongva/Kizh was one of subsistence gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, deserts, riparian, estuarine, and open and rocky coastal environmental zones. Deceased individuals were either buried or cremated (Harrington 1942; McCawley 1996). Cremation was the standard practice for the mainland Gabrielino/Tongva during the contact period.

Luiseño

The name Luiseño was created by non-Native people and refers to those Takic-speaking people who were associated with that mission. The Luiseño ancestral territory included approximately 1,500 square miles. Along the coast, it extended from Agua Hedionda Creek on the south to near Aliso Creek on the northwest. Their territory extended inland to Santiago Peak, east to the Elsinore Valley, and south to east of Palomar Mountain and included most of the drainages of the San Luis Rey and the Santa Margarita Rivers. The Juaneño portion of Luiseño territory extended from the Pacific Ocean to the crest of the Santa Ana Mountains (Bean and Shipek 1978).

Luiseño clans settled in valley, foothill, coastal, and mountain areas, providing them with the resources of many different ecological niches. Individual lineages or families owned specific resource areas within the clan territory. Most inland clans also owned fishing and gathering sites on the coast, to allow for fishing and shellfish collecting. However, most of the Luiseño foods were available in locations within a day's travel of the village. The principal game animals were deer, rabbit, jackrabbit, woodrat, mice and ground squirrels, antelope, valley and mountain quail, doves, ducks, and other birds. Most predators were avoided as food as were tree squirrels and most reptiles. Coastal marine foods included sea mammals, fish, crustaceans, and mollusks (especially abalone). Trout and other fish were caught in mountain streams. Acorns were an important food resource; six species were used (Bean and Shipek 1978:552).

The Luiseño settlement pattern was seasonally based. In the winter, the larger clan coalesced into a shared habitation village and lived primarily on stored foods such as acorns. Beginning in the spring, the winter village group divided into smaller groups, with each group occupying and exploiting a small area where fresh vegetal resources could be gathered. Occasionally, journeys to the coast to collect shellfish may have occurred (White 1963). This breakup of the village group into family groups at the end of winter, after the stored fall crops were depleted, was a normal occurrence in hunter-gatherer societies and compensated for sparse spring resources, which were generally harder to find and less plentiful. At the end of summer and beginning of fall, a secondary base camp, frequently situated near an oak grove, was inhabited for 2 to 3 months for acorn collecting as well as hunting. These summer-fall camps were subdivisions of the primary winter camp and occupied by smaller subdivisions of the larger clan group.

Serrano

The Serrano were originally a relatively small group residing within the San Bernardino and Sierra Madre Mountains, and the term "Serrano" has come to be ethnically defined as the name of the people in the San Bernardino Mountains (Kroeber 1925). The Serrano occupied an area in and around the San Bernardino Mountains between approximately 1,500 and 11,000 feet AMSL. Their territory extended west into the Cajon Pass, east as far as Twentynine Palms, north past Victorville, and south to the Yucaipa Valley. Year-round habitation tended to be out on the desert floor, at the base of the mountains, and up into the foothills, with all habitation areas requiring year-round water sources (Kroeber 1908; Bean and Smith 1978b). Most Serrano lived in small villages near water sources (Bean and Smith 1978b). Houses measuring 12 to 14 feet in diameter were domed and constructed of willow branches and tule thatching.

The subsistence economy of the Serrano was one of hunting and collecting plant goods, with occasional fishing (Bean and Smith 1978b). Large and small animals were hunted, including mountain sheep, deer, antelope, rabbits, small rodents, and various birds, particularly quail. Plant

staples consisted of seeds; acorn nuts of the black oak; pinon nuts; bulbs and tubers; and shoots, blooms, and roots of various plants, including yucca, berries, barrel cacti, and mesquite. Fire was used as a management tool to increase yields of specific plants, particularly chia. Trade and exchange were important aspects of the Serrano economy. Those living in the lower-elevation desert floor villages traded foodstuffs with people living in the foothill villages who had access to a different variety of edible resources.

Mainly due to the inland territory that Serrano occupied beyond Cajon Pass, contact between Serrano and Europeans was relatively minimal prior to the early 1800s. As early as 1790, Serrano began to be drawn into mission life (Bean and Vane 2002). More Serrano were relocated to Mission San Gabriel in 1811 after a failed indigenous attack on that mission. Most of the remaining western Serrano were moved to an asistencia built near Redlands in 1819, where they provided much of the labor to establish the Mill Creek Zanja that irrigated much of the land between present day Mentone and the asistencia (Bean and Smith 1978b). By 1834, most western Serrano had been moved to the missions. Only small groups of Serrano remained in the area northeast of the San Gorgonio Pass and were able to preserve some their native culture. In the 1860s, a smallpox epidemic decimated many indigenous Southern Californians, including the Serrano (Bean and Vane 2002). Surviving Serrano sought shelter at Morongo with their Cahuilla neighbors; Morongo later became a reservation (Bean and Vane 2002). Other survivors followed the Serrano leader Santos Manuel down from the mountains and toward the valley floors, and eventually settled what later became the San Manuel Band of Mission Indians Reservation. This reservation was established in 1891.

Regulatory Setting

Assembly Bill 52

On September 25, 2014, California Governor Jerry Brown signed into law AB 52, which amended PRC Section 5097.94 and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 to establish a new category of environmental resources that must be considered under CEQA: TCRs. This amendment took effect on July 1, 2015. The amendment defines TCRs as either (1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are included in the CRHR or a local register of historical resources, or that are determined to be eligible for inclusion in the CRHR; or (2) resources determined by the lead agency, in its discretion, to be significant based on the criteria for listing in the CRHR. For projects with applications filed on or after July 1, 2015, lead agencies are also required to consult with California Native American tribes that are traditionally and culturally affiliated with the geographic area of a proposed project, including tribes that may not be federally recognized, if the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area, and the tribe requests consultation, prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project.

Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource." Furthermore, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects on tribal cultural resources, the consultation shall include those topics (PRC Section 21080.3.2(a)). The environmental document

and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3(a)).

Public Resources Code Section 5097

PRC Section 5097 addresses archaeological, paleontological, and historic sites on state land as well as the cooperative efforts with the NAHC that are to proceed as part of a project being evaluated under CEQA. PRC Section 5097 specifies the procedures to be followed in the event of the unexpected discovery of human remains on nonfederal public lands. PRC Section 5097.5 considers it a misdemeanor to knowingly and willfully excavate upon or remove, destroy, injure, or deface any historic or pre-contact ruins, burial grounds, archaeological site, or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological, or historical feature situated on public lands, except with the express permission of the public agency having jurisdiction over the lands. The disposition of Native American burials falls within the jurisdiction of the NAHC, which prohibits willfully damaging any historic, archaeological, or vertebrate paleontological site or feature on public lands (PRC Section 5097.9). PRC Section 5097.98 stipulates that whenever the NAHC receives notification of a discovery of Native American human remains from the county corner, it shall immediately notify those people it believes to be the most likely descendants of the deceased Native American. The descendants may inspect the site of discovery and make recommendations on the removal or reburial of the remains.

Health and Safety Code 7050.5

Health and Safety Code 7050.5 addresses the protection of human remains discovered in any location other than a dedicated cemetery and makes it a misdemeanor for any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law, except as provided in PRC Section 5097.99. It further states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions concerning investigation of the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in PRC Section 5097.98. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the NAHC.

California Government Code Section 6254(r) and 6254.10

California Government Code Section 6254(r) and Section 6254.10 of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission,

the State Lands Commission, the Native American Heritage Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

California Native American Graves Protection and Repatriation Act of 2001

The California Native American Graves Protection and Repatriation Act conveys to American Indians of demonstrated lineal descendance human remains and funerary items that are held by state agencies and museums. Human remains require special handling and must be treated with dignity. Procedures for the handling of human remains are pursuant to §15064.5e of the State CEQA Guidelines, Section 5097.98 of the PRC, and Section 87.429 of the County's Grading Ordinance. In the event of the discovery of human remains and/or funerary items, the following procedures, as outlined by the NAHC, must be followed (14 CCR 15000 et seq.).

1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
    a. The County Coroner must be contacted to determine that no investigation of the cause of death is required, and
    b. If the Coroner determines that the remains are Native American:
        i. The Coroner shall contact the NAHC within 24 hours.
        ii. The NAHC shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
        iii. The MLD [most likely descendant] may make the recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code, Section 5097.98, or
2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance.
    a. The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 24 hours after being notified by the commission;
    b. The descendant identified fails to make a recommendation; or
    c. The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

Methodology and Thresholds of Significance

Efforts to identify TCRs included a Sacred Lands File search with the NAHC and invitations to Native American tribes to consult on the proposed project pursuant to AB 52.

Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential significant impacts on TCRs, and reduce the potential for delay and conflict in the environmental review process (see PRC Section 21083.3.2). Information may also be available from the NAHC's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. PRC Section 21082.3(c) also contains provisions specific to confidentiality.

On the City's behalf, ICF contacted the NAHC on June 24, 2022, requesting a search of the Sacred Lands File and a listing of potentially interested Native American groups and individuals. The NAHC responded on August 1, 2022, stating that the search was positive. While the NAHC did not identify the locations of any resources, it recommended contacting the Gabrieleño Band of Mission Indians – Kizh Nation for additional information. Additionally, the NAHC provided a list of 31 Native American representatives who may have knowledge of cultural resources near the proposed project sites.

As part of the effort to determine whether the proposed project may result in impacts on TCRs, the City sent consultation letters on September 22, 2022, via email and certified U.S. Mail, to the tribes listed below as formal notification of the proposed project and to invite them to consult on the proposed project under AB 52:

- Agua Caliente Band of Cahuilla Indians: Patricia Garcia, Director of Tribal Historic Preservation Office
- Cahuilla Band of Indians: Bobby Ray Esparza, Cultural Coordinator
- Gabrieleño Band of Mission Indians – Kizh Nation: Andrew Salas, Chairperson
- Gabrieleno/Tongva San Gabriel Band of Mission Indians: Anthony Morales, Chairperson
- Morongo Band of Mission Indians: Robert Martin, Tribal Chairman
- Pechanga Cultural Resources Department: Ebru T. Ozdil, Planning Specialist
- Rincon Band of Luiseño Indians: Cultural Resources Manager
- San Manuel Band of Mission Indians: Jessica Mauck, Director of Cultural Resources Management
- Soboba Band of Luiseño Indians: Joseph Ontiveros, Cultural Resources Department

The City also met with representatives from the Sherman Indian Museum on September 22, 2022. As part of this meeting, museum representatives provided information about Native American sites near the project site. Representatives from the museum also requested that the project name perhaps honor indigenous culture in the area and to be careful of exposing sensitive sites to the public.

At the time of this report, four tribes responded to the invitation to consult emails and letters from the City. Three tribes wish to consult and requested additional information about the project (Morongo Band of Mission Indians, San Manuel Band of Mission Indians, and Soboba Band of Luiseño Indians), and one tribe (Agua Caliente Band of Cahuilla Indians) has deferred to other tribes and ended consultation. At the time of this analysis, five tribes have not responded (Cahuilla Band of Indians, Gabrieleño Band of Mission Indians – Kizh Nation, Gabrieleno/Tongva San Gabriel Band of Mission Indians, Pechanga Cultural Resources Department, and Rincon Band of Luiseño Indians). No tribes have provided information related to TCRs for the Martha McLean Anza Narrows and Jurupa Avenue Trailhead park sites at the time of this analysis. Responses to consultation are summarized below and in Table XVIII-1.

- On September 29, 2022, Nicole Raslich, Archaeological Technician from the Agua Caliente Band of Cahuilla Indians Tribal Historic Preservation Office, responded via email to the City that the tribe appreciated the City's efforts and inquiry. Ms. Raslich stated that a records check of the Tribal Historic Preservation Office's cultural registry showed that the project is not located within the tribe's Traditional Use Area and that the tribe defers to other tribes in the area. Thus, consultation with Agua Caliente Band of Cahuilla Indians could be considered concluded.

- On September 29, 2022, Alisa Sramala from the City of Riverside Parks, Recreation, and Community Services Department sent an email notification to Joseph Ontiveros and Jessica Valdez of the Soboba Band of Luiseño Indians stating that the certified letter containing the invitation to consult under AB 52 had been returned. Ms. Sramala also included a copy of the invitation to consult letter in the email. On October 7, 2022, Jessica Valdez, Cultural Resource Specialist with the Soboba Band of Luiseño Indians, sent a letter and response from Joseph Ontiveros, Tribal Historic Preservation Officer, requesting to consult under AB 52. As part of this letter, requests for more information were made by the tribe. At the time of this writing, additional consultation between the tribe and the City has not been conducted , but will continue during project design development.
- On October 3, 2022, Laura Chatterton, Cultural Resource Specialist with the Morongo Band of Mission Indians Tribal Historic Preservation Office, responded to the City via email that the Project is within the ancestral territory and Traditional Use Area of the Cahuilla and Serrano people of the Morongo Band of Mission Indians. Ms. Chatterton recommended that the tribe participate (monitor) any ground-disturbing activities as part of the Project. Additionally, the tribe stated that they would like to initiate government-to-government consultation under AB 52. The tribe also requested additional information such as the cultural resources technical report. At the time of this writing, it is unknown if additional consultation between the tribe and the City has been conducted.
- On October 11, 2022, Ryan Nordness, Cultural Resource Analyst for the San Manuel Band of Mission Indians (Yuhaaviatam) replied via email that a portion of the overall project (Camp Evans at Fairmont Park) was within Serrano ancestral territory and that the proposed project is of interest to the tribe. The Yuhaaviatam of San Manuel National Cultural Resources Department requested copies of the cultural report, geotechnical report, and project plans showing the depth of proposed disturbance upon availability. It was stated that these materials would assist Yuhaaviatam in ascertaining how the tribe will assume consulting party status under CEQA and participate in project review and implementation. Nordness also stated that if this information cannot be provided within the 30-day consultation window, the tribe automatically elects to be a consulting party under CEQA. At the time of this writing, it is unknown if additional consultation between the tribe and the City has been conducted.
- On October 18, 2022, Cheryl Madrigal, Tribal Historic Preservation Officer for the Rincon Band of Luiseño Indians, replied via email that the projects are within the Territory of the Luiseño people, and Rincon is traditionally and culturally affiliated to the project area, and asked that the tribe be notified of any construction projects associated with the Riverside Gateway Project. Madrigal stated the tribe had no further comments at this time and do not request consultation .

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the proposed project would be considered to have a significant effect if it would result in any of the conditions listed below.

- Potential to cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the CRHR or in a local register of historical resources as defined in PRC Section 5020.1(k).
- Potential to cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Table XVIII-1. Native American Consultation Record (as of January 2025)

Native American Group/ Individual	First Contact Certified Letter/Email	Date of Tribal Response	Second Contact Phone/Email/Letter	Date of Tribal Response	Additional Contacts Phone/Email/Letter	Summary of Communications
Agua Caliente Band of Cahuilla Indians – Patricia Garcia, Director of Tribal Historic Preservation Office ACBCI-THPO@aguacaliente.net 5401 Dinah Shore Drive, Palm Springs, CA 92264	09/22/2022 (email and certified letter)	09/29/2022 (email response)	N/A	N/A	N/A	09/22/22 – City sent email and certified letter to tribe. 09/29/22 – email response from Nicole A Raslich, Archaeological Technician, stating that a records check of the tribe's cultural registry revealed that this project is not within the tribe's Traditional Use Area. Agua Caliente deferred to the other tribes in the area, and the email concluded consultation efforts.
Cahuilla Band of Indians – Bobby Ray Esparza, Cultural Coordinator Besparza@cahuilla.net 52701 Highway 371, Anza, CA 92539	09/22/2022 (email and certified letter)	No response	N/A	N/A	N/A	09/22/22 – City sent email and certified letter to tribe. As of this time, no further contact with the tribe has occurred.
Gabrieleño Band of Mission Indians - Kizh Nation Andrew Salas, Chairperson admin@gabrielenoindians.org PO Box 393, Covina, CA 91723	09/22/2022 (email and certified letter)	No response	N/A	N/A	N/A	09/22/22 – City sent email and certified letter to tribe. As of this time, no further contact with the tribe has occurred.
Gabrieleno/Tongva San Gabriel Band of Mission Indians Anthony Morales, Chairperson GTTribalcouncil@aol.com PO Box 693, San Gabriel, CA 91778	09/22/2022 (email and certified letter)	No response	N/A	N/A	N/A	09/22/22 – City sent email and certified letter to tribe. As of this time, no further contact with the tribe has occurred.
Morongo Band of Mission Indians – Robert Martin, Tribal Chairman thpo@morongo-nsn.gov abrierty@morongo-nsn.gov lchatterton@morongo-nsn.gov 12700 Pumarra Road, Banning, CA 92220	09/22/2022 (email and certified letter)	10/03/2022 (email)	10/03/2022 (email)	N/A	N/A	09/22/22 – City sent email and certified letter to tribe. 10/03/22 – Laura Chatterton, Cultural Resource Specialist, sent an email to the City stating Morongo received the letter regarding the project and that the proposed project is within the ancestral territory and Traditional Use Area of the Cahuilla and Serrano people of the Morongo Band of Mission Indians. It was also stated that tribal participation (monitoring) is recommended during all ground-disturbing activities. The Morongo Tribal Historic Preservation Office requests to initiate government-to-government consultation under AB 52. The tribe also requested additional information about the project. As of this time, no further contact with the tribe has occurred.
Pechanga Cultural Resources Department – Ebru T. Ozdil, Planning Specialist eozdil@pechanga-nsn.gov jochoa@pechanga-nsn.gov PO Box 2183, Temecula, CA 92593	09/22/2022 (email and certified letter)	No response	N/A	N/A	N/A	09/22/22 – City sent email and certified letter to tribe. As of this time, no further contact with the tribe has occurred.
Rincon Band of Luiseño Indians – Cultural Resources Manager crd@rincon-nsn.gov One Government Center Lane, Valley Center, CA 92082	09/22/2022 (email and certified letter)	10/18/2022	N/A	N/A	N/A	10/18/2022 - On October 18, 2022, Cheryl Madrigal, Tribal Historic Preservation Officer for the Rincon Band of Luiseño Indians, replied via email that the projects are within the Territory of the Luiseño people, and Rincon is traditionally and culturally affiliated to the project area, and asked that the tribe be notified of any construction projects associated with the Riverside Gateway Project. Madrigal stated the tribe had no further comments at this time and do not request consultation.

Native American Group/ Individual	First Contact Certified Letter/Email	Date of Tribal Response	Second Contact Phone/Email/Letter	Date of Tribal Response	Additional Contacts Phone/Email/Letter	Summary of Communications
San Manuel Band of Mission Indians – Jessica Mauck, Director of Cultural Resources Management jmauck@sanmanuel-nsn.gov 26569 Community Center Dr, Highland, CA 92346	09/22/2022 (email and certified letter)	10/10/22 (email)	10/11/2022 (email)	N/A	N/A	09/22/22 – City sent email and certified letter to the tribe. 10/10/22 – Ryan Nordness, Cultural Resource Analyst, replied via email that a portion of the overall project (Camp Evans at Fairmont Park) was within Serrano ancestral territory and that the proposed project is of interest to the tribe. Yuhaaviatam of San Manuel Nation requested copies of the cultural report, geotechnical report, and project plans showing the depth of proposed disturbance upon availability. It was stated that these materials would assist *Yuhaaviatam* in ascertaining how the tribe will assume consulting party status under CEQA and participate in project review and implementation. Nordness also stated that if this information cannot be provided within the 30-day consultation window, the tribe automatically elects to be a consulting party under CEQA. As of this time, no further contact with the tribe has occurred.
Soboba Band of Luiseño Indians Joseph Ontiveros, Cultural Resources Department jontiveros@soboba-nsn.gov jvaldez@soboba-nsn.gov PO Box 487, San Jacinto, CA 92581	09/22/2022 (email and certified letter)	No response	09/29/2022 (email)	10/07/2022 (email)	10/07/2022 (email)	09/29/22 – City sent email to Joseph Ontiveros and Jessica Valdez stating that a certified mail notification was returned as unclaimed and asked if there was a street address instead of a PO box to send the letter. 10/07/22 – Jessica Valdez, Cultural Resources Specialist, responded via email requesting a time for a consultation meeting and/or phone call. The tribe also included a letter from Joseph Ontiveros, Tribal Historic Preservation Officer. As of this time, no further contact with the tribe has occurred.

Discussion

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact with Mitigation Incorporated. The cultural resources records search and archaeological pedestrian survey have not identified any previously recorded cultural resources within the study areas for the Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead sites that have been identified as TCRs. To date, consultation with Tribes has not resulted in the identification of TCRs or other Native American resources in the Martha McLean Anza Narrows or Jurupa Avenue Trailhead park sites. Two pre-contact Native American sites have been identified with each of the project sites; however, it is unknown whether Native American tribes would consider these resources to be TCRs. P-33-009652 is a pre-contact milling site in the Jurupa Avenue Trailhead project site area. ICF recommended this site as ineligible for the CRHR. P-33-000127 is a pre-contact milling site in the Martha McLean Anza Narrows Park project site. ICF has recommended P-33-000127 as eligible by for the CRHR for the purposes of the proposed project only due to the potential for the site to contain buried archaeological resources that could be affected by the proposed project.

Both park sites are considered archaeologically sensitive due to their potential to contain unknown buried archaeological resources. In addition to the milling station site (P-33-009652), an archaeological site (P-33-000884) known to be of importance to the Morongo Band of Mission Indians and that could be considered a TCR (ICF 2019) is less than 300 feet from the northwestern boundary of the Jurupa Avenue Trailhead site. At the Martha McLean Anza Narrows Park site, buried archaeological artifacts have been found in two different locations. Because of the proximity of these previously recorded archaeological resources, proximity to at least one site known to be of importance to Native American tribes, and the potential for containing as-yet unidentified archaeological resources, both project sites should be considered to have potential for containing TCRs. Some pre-contact resources may be considered TCRs and can include sites, features, and objects listed in the CRHR, eligible to be listed in the CRHR, or locally listed as defined in PRC Section 5020.1(k).

The City has provided information about the project to nine tribes, three of whom (Morongo Band of Mission Indians, San Manuel Band of Mission Indians, and Soboba Band of Luiseño Indians) have requested formal notification in accordance with AB 52. The Agua Caliente Band of Cahuilla Indians deferred consultation, and five tribes have not responded. Consultation is ongoing; however, it is unknown whether the tribes consider the project sites as sensitive for TCRs. Additionally, the NAHC has identified the overall project as being positive for Sacred Lands, although the locations are unspecified. The NAHC recommended contacting the Gabrieleño Band of Mission Indians – Kizh Nation for additional information. Through continued consultation with tribes on a project site–

specific basis and implementation of MM-TCR-1, it is possible that the City will be able to determine whether the project sites are known locations of TCRs.

The excavation of soil in potentially undisturbed areas would occur on both project sites. Excavation activities, particularly those that involve disturbance of previously unexcavated native soil, could result in the discovery of previously unidentified resources that might be considered TCRs. Therefore, ground-disturbing activities could result in disturbance or destruction of TCRs, which would be a significant impact. Implementation of MM-CUL-1 through MM-CUL-5 (presented in Section V, *Cultural Resources*), and MM-TCR-1 (see below) would reduce this potential impact to less-than-significant levels.

b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact with Mitigation Incorporated. As discussed above, the proposed park sites have the potential to encounter pre-contact Native American archaeological resources that could be considered or have elements that could be considered TCRs. As of the time of this report, no TCRs have been identified specifically for the project sites. The NAHC has identified the overall Riverside Gateway Parks proposed project area as being positive for Sacred Lands and has suggested the City conduct additional consultation with Native American tribes to gather more information about them. Resources listed as Sacred Lands are likely to be considered TCRs, and the delineation of the locations of such resources will be necessary prior to construction. Additionally, because the proposed project could affect pre-contact Native American archaeological sites that might be considered TCRs or have elements that might be considered TCRs, it is possible that the proposed project could cause a substantial adverse change in the significance of a TCR (if they exist) with value to a California Native American tribe and that is a resource determined by the lead agency to be significant.

At the time of this reporting, not all tribes have responded to the City's invitation to consult under AB 52, and consultation is ongoing, nor have any consulting Tribes identified TCRs or other resources within the Martha McLean/Anza Narrows and Jurupa Avenue Trailhead park sites. It is possible that, through the consultation process, locations of individual TCRs can be delineated and a determination can be made as to whether TCRs would be affected. As such, any ground-disturbing activities associated with the proposed project could have the potential to cause a substantial adverse change in the significance of a TCR with cultural value to a California Native American tribe and that is a resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. Continued consultation with Native American tribes and implementation of MM-CUL-1 through MM-CUL-5 (listed in Section V, *Cultural Resources*) and MM-TCR-1 would reduce these impacts to less-than-significant levels.

Mitigation Measures

Implementation of MM-CUL-1 through MM-CUL-5 (described in Section V, *Cultural Resources*) would reduce potential impacts on TCRs to less-than-significant levels.

- **MM-CUL-1**: Retain a Qualified Archaeologist and Develop Worker Environmental Awareness Program Training to Be Delivered to Construction Crews
- **MM-CUL-2**: Avoid Archaeological Sites through the Establishment of Environmentally Sensitive Areas
- **MM-CUL-3:** Provide Archaeological and Native American Monitoring
- **MM-CUL-4:** Unanticipated Discoveries Protocol
- **MM-CUL-5**: Human Remains and Associated or Unassociated Funerary Objects

MM-TCR-1: Implement Tribal Cultural Resources Protocols and Measures Determined through Consultation

If it is determined that construction activities at the Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead sites would cause a substantial adverse change in the significance of a TCR, the City should develop protocols and mitigation measures with consulting tribes, consistent with PRC Section 21080.3.2(a), to avoid or reduce impacts on TCRs during construction and operation. Mitigation measures may include project redesign or modification to avoid resources. The City shall develop minimization and avoidance methods where possible with Native American tribes participating in AB 52 consultation to develop mitigation measures for TCRs that may experience substantial adverse changes.

In the absence of any specific mitigation measures developed during AB 52 consultation, the City shall implement standard mitigation measures set forth in PRC Section 21084.3 (b), as follows:

1. Avoidance and preservation of the resources in place including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space to incorporate the resources with culturally appropriate protection and management criteria
2. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource including, but not limited to, the following:
    - Protecting the cultural character and integrity of the resource
    - Protecting the traditional use of the resource
    - Protecting the confidentiality of the resource
    - Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places
    - Protecting the resource

XIX Utilities and Service Systems

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
c.	Result in a determination by the wastewater treatment provider that 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?	☐	☐	☒	☐
d.	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Affected Environment

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

The City of Riverside established its own water utility, RPU, in 1913. RPU's primary water source is local groundwater basins from the Bunker Hill Basin in San Bernardino and Riverside North and South Basins in Riverside. RPU has the ability to purchase water from Western Municipal Water District to meet peak water demand during summer months or during emergencies. As of 2022, RPU provided water service to over 66,000 customers.

Stormwater flows directly into the City's storm drain system, which then discharges into the Santa Ana River. The Santa Ana River drains a watershed of over 2,700 square miles, which includes Orange County, the northwestern corner of Riverside County, the southwestern corner of San Bernardino County, and a small portion of Los Angeles County (City of Riverside 2007).

The City of Riverside Public Works Department provides for the collection, treatment, and disposal of all wastewater generated within the City, except for a small area south of Van Buren Boulevard, which is served by Western Municipal Water District through its Riverside Regional Water Quality Treatment Plant and complies with state and federal requirements governing the treatment and discharge of wastewater.

The City of Riverside Public Works Department collects trash from approximately 38,500 households (70 percent of all households in the City) largely using automated trash collection trucks. Excessive waste generation is discouraged by the Public Works Department by charging additional fees if a second trash container is required. All non-hazardous solid waste collected is taken to the Robert A. Nelson Transfer Station, which is owned by the County of Riverside and operated under a 20-year franchise by a private company. Waste is then transferred to the Badlands Landfill for disposal. However, local trash haulers may dispose of collected waste at other county landfills in the area, such as the Lamb Canyon Landfill and El Sobrante Landfill. All Riverside County landfills are Class III disposal sites permitted to receive non-hazardous municipal solid waste (City of Riverside 2007).

RPU serves electricity to the entire City (City of Riverside 2007).

Discussion

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. Construction of the proposed project would require some water for dust control to be imported by water trucks. Any wastewater generated during construction of the proposed project would be minimal, consisting of portable toilet waste generated by construction workers. The wastewater generated during construction would be collected within portable toilet facilities and then properly diverted or transferred by a permitted portable toilet waste hauler and appropriately disposed of at an identified liquid-disposal station. Through implementation of state and local laws and proper disposal of wastewater generated during construction, impacts related to construction would be considered less than significant.

During project operation, the proposed project would not require natural gas or telecommunications. The proposed project would introduce new landscaping and a water play arroyo at Martha McLean Anza Narrows Park, which would marginally increase water use compared to existing conditions; however, the water use would not require the construction of a new water facility or stormwater/wastewater drains to serve the proposed project. Although the water play paseo may use electricity to power the water flow, it would use minimal electricity and adhere to Title 24 standards, which would not cause the construction of additional electric facilities to server the project. Project operation at the Jurupa Avenue Trailhead would not include demand for wastewater services because the proposed project would not include a need for wastewater services such that capacity would need to be expanded to support the proposed project. Therefore, impacts would be less than significant, and no mitigation measures are required.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. Table 7-4 of RPU's 2020 Urban Water Management Plan details that RPU would still have a surplus of water during normal, dry, and multiple dry years (RPU 2021). The proposed project would use minimal water for landscaping, water play areas, and other public park improvements and development. The proposed project sites would adhere to the allowable developments under the project site's Public Facilities (PF) and Residential Estate (RE) zoning designations, which means that the City anticipated this and other similar types of development, and they would be adequately served by utilities. The proposed project would not generate substantial new demand for water supply in comparison to the sites' previous uses as a public park and an undeveloped park. Therefore, impacts would be less than significant, and no mitigation measures are required.

c. Result in a determination by the wastewater treatment provider that 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?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. As stated above, proposed project construction activities would generate minimal wastewater, which would be collected by a permitted portable toilet waste hauler and appropriately disposed of at an identified liquid-disposal station. Local liquid-disposal facilities have sufficient capacity to serve the proposed project. The proposed project is two public parks that would not generate wastewater through new development. No new wastewater treatment facility would be required due to the proposed project. Therefore, proposed project impacts would be considered less than significant.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. The waste generated during construction of the proposed project would primarily consist of soil disposal as well as general construction debris and worker personal waste. The construction contractor would be required to dispose of solid waste in accordance with local solid waste disposal requirements. In compliance with EPA guidelines Section 01 74 19, Waste Management and Disposal, the proposed project would be required to develop and submit a Construction Waste Management Plan for diverting and implementing procedures to maximize the diversion of demolition and construction waste from landfill disposal. The submitted Construction Waste Management Plan will include calculations on end-of-project recycling rates, salvage rates, and landfill rates itemized by waste material. Construction waste not recycled or salvaged would be taken to a nearby landfill to be determined by the construction contractor. The closest municipal solid waste landfill to the proposed project site is the County of Riverside Badlands Landfill in the city of Moreno Valley, approximately 20 miles east of the proposed project sites. Badlands Landfill

has a permitted throughput of 4,800 tons per day and has a remaining capacity of 7.8 million tons (CalRecycle 2023). The site accepts solid waste. The landfill's cease operation date is anticipated to be January 2059. The landfill would have sufficient capacity to accommodate the proposed project's disposal needs. Therefore, the proposed project's impact on solid waste capacity of local infrastructure or solid waste reduction goals would be considered less than significant.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

Less-than-Significant Impact. The proposed project would comply with all federal, state, and local management and reduction laws and regulations related to the disposal of solid waste. There are no exceptional waste requirements that would require an exception to any statutes and regulations related to solid waste during project construction or operations. The proposed project would not significantly affect a landfill through accommodation of the proposed project's solid waste disposal needs. During site preparation and removal of dirt and other site debris, green waste would be generated and completely removed from the proposed project site and disposed of at the closest acceptable landfill or composting facility in Riverside County. Except for routine maintenance associated with park uses, the proposed project would not generate a substantial amount of waste once operational. Therefore, the proposed project would have a less-than-significant impact related to solid waste.

XX Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment?	☐	☐	☐	☒
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Affected Environment

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

The proposed project is not in or directly adjacent to a Fire Hazard Severity Zone (FHSZ), as designated by the California Department of Forestry and Fire Protection (CAL FIRE 2023). The nearest FHSZ is designated as moderate and is across the Santa Ana River and approximately 0.2 mile away from the proposed project sites. The proposed project is also not in or adjacent to a local or state responsibility area where a local government or the State of California, respectively, has financial responsibility for wildland protection.

Discussion

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project sites are not within or adjacent to an FHSZ. The proposed project would not involve modifications to facilities that are critical to emergency response, such as police,

fire, and hospital facilities, and project improvements would not impede access to these facilities in an emergency. Therefore, the proposed project would not affect an adopted emergency response plan or emergency evacuation plan and no impacts would occur.

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project is not in an FHSZ and would utilize largely natural and fire-resistant materials, including decomposed granite, gravel, cobblestones, landscaping boulders, reused concrete, and steel, and landscaping would be drought tolerant. The landscape design at the Jurupa Avenue Trailhead would replace most of the currently existing dry grasses with thoughtfully selected shade trees, shrubs, groundcover, and meadow plants, many of which are native to Riverside. The eastern portion of the Jurupa Avenue Trailhead site, which includes ornamental trees and native and nonnative vegetation, contains the biological avoidance zone and would not be developed as part of the project. Because the proposed project is not in an FHSZ and would maintain similar natural, open space as currently exists at the proposed project sites, it would not exacerbate wildfire risk or expose occupants to pollutant concentrations from a wildfire. Therefore, no impacts would occur.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The proposed project does not involve the construction or maintenance of roads, power lines, or other utilities that could potentially exacerbate wildfire risk. Furthermore, the proposed project is not in an FHSZ. As such, no impacts would occur.

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

Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead

No Impact. The Martha McLean Anza Narrows Park site is relatively flat and located in Zone X, which is a minimal hazard flood zone. Furthermore, the project would incorporate park amenities to the existing park, which would not substantially alter the existing draining pattern of the Martha McLean Anza Narrows Park project site or increase the rate or amount of surface runoff in a manner that could result in flooding on or off site. While much of the Jurupa Avenue Trailhead site is flat, it does have steeped terraced edges along Hole Lake with slopes as steep as 60 percent within the southern portion. However, the proposed project is not in an FHSZ, proposes only one small bathroom structure to be built on the flat portion of the Martha McLean Anza Narrows Park project site, and would maintain similar natural, open space as currently exists at the project sites. The

proposed project would also not substantially alter the existing draining pattern of the project sites or increase the rate or amount of surface runoff in a manner that could result in flooding on or off site. Therefore, the proposed project would not expose people or structures to significant risks of flooding or landslides, and no impact would occur.

XXI Mandatory Findings of Significance

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a.	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b.	Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐
c.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

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

Less than Significant with Mitigation Incorporated. As discussed in Section IV, if development of the proposed project sites occurred during the bird breeding season, the proposed project could have potential to directly affect nesting birds. Impacts on active nests, eggs, or nestlings would be a violation of state and federal nesting bird protections. However, the proposed project would implement MM-BIO-1 to ensure project compliance with the MSHCP and these state and federal laws to prevent a significant impact on sensitive avian species.

As discussed in Section V, 11 historical and architectural resources were identified within the proposed project study area, and the project has the potential to affect one of these resources. In addition, proposed ground disturbance has the potential to encounter archaeological, tribal cultural, or paleontological resources or human remains. However, implementation of MM-CUL-1 through MM-CUL-5, MM-PAL-1, and MM-TCR-1 would reduce these impacts to less-than-significant levels.

With incorporation of MM-BIO-1, MM-BIO-2, MM-CUL-1 through MM-CUL-4, MM-PAL-1, and MM-TCR-1, implementation of the proposed project would not substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

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

Less-than-Significant Impact.

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this proposed project. A cumulative effect assessment looks at the collective impacts individual land use plans and projects pose. Cumulative impacts can result from individually minor, but collectively substantial, impacts taking place over a period of time.

As discussed above in Section 1.3, *Riverside Gateway Program*, after completing the 2018 update to the Citywide Parks System Master Plan, PRCSD proposed to complete planning and design for improvements and enhancement to eight existing and proposed park areas along the Santa Ana River (see Appendix A, Figure 2, Local Vicinity Map). The greatest concern for cumulative impacts for the proposed project is that the Jurupa Avenue Trailhead and Martha McLean Anza Narrows Park improvements would be constructed at the same time as the other projects planned for the Riverside Gateway Program, and that the construction impacts could be cumulatively considerable. Even if all of the parks were constructed at the same time, the mitigation measures described in this document and the environmental documents for each of the park sites would be implemented, and the City would support coordination between the construction sites and implementation of mitigation measures to reduce construction impacts. As such, construction impacts would not be expected to be cumulatively considerable.

As stated previously, implementation of mitigation measures for biological resources, cultural resources, paleontological resources, noise, and tribal cultural resources would reduce construction impacts for the Martha McLean Anza Narrows Park and Jurupa Avenue Trailhead park sites. If the proposed project is constructed separately from the other parks, the proposed project would not result in impacts that are individually limited but cumulatively considerable. While a significant cumulative impact would occur within the geographic context, the project's contribution would not be cumulatively considerable with implementation of mitigation measures. No potentially significant impacts resulting from project development have been identified in this IS/Mitigated Negative Declaration, and no other impacts would be deemed cumulatively considerable. All project impacts, whether individual or cumulative, would be less than significant with incorporation of MM-BIO-1, MM-BIO-2, MM-CUL-1 through MM-CUL-5, MM-PAL-1, MM-NOI-1 through MM-NOI-5, and MM-TCR-1.

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

Less than Significant with Mitigation Incorporated. The proposed project would implement improvements to an existing park and develop a public park that would provide a variety of recreational uses including new bike path alignments, gathering space, educational opportunities, lighting, overlooks, art informal play, and other passive recreational features. A public park is a common suburban use that typically does not cause substantial adverse effects either directly or indirectly on human beings. Park and recreational facilities are generally considered a beneficial impact for a community, and any environmental effects from the proposed project would be mitigated as noted in this IS.

Chapter 4
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Chapter 5
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XXI Mandatory Findings of Significance

None.