

DRAFT
INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

Perris Valley Channel Lateral B, Stage 4 Project

Lead Agency:



Riverside County Flood Control and Water Conservation District
1995 Market Street
Riverside, CA 92501

Prepared By:

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JN 187014

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DRAFT MITIGATED NEGATIVE DECLARATION PERRIS VALLEY CHANNEL LATERAL B, STAGE-4 PROJECT	
Lead Agency:	Riverside County Flood Control and Water Conservation District
Project Proponent:	Riverside County Flood Control and Water Conservation District
Project Location:	The project site is located within the limits of March Air Reserve Base (MARB) and the City of Perris in Western Riverside County, east of the Interstate 215 freeway (I-215). The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within APNs 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.

Project Description:

The Riverside County Flood Control and Water Conservation District (District), in partnership with the March Joint Powers Authority (MJPA) and MARB is proposing to construct the Perris Valley Channel (PVC) Lateral B, Stage 4 Project (project). PVC Lateral B-5: Stage 1 and Stage 2 and PVC Lateral B: Stage 2 and 3 of the Lateral B system have already been constructed between Heacock Street and I-215 freeway. The project would construct PVC Lateral B Stage 4 which consists of approximately 6,000 ft of reinforced concrete box (RCB) culvert connecting the PVC Lateral B Stage 5 facility to the existing PVC Lateral B Stage 2 facility. The project’s general alignment begins at the downstream terminus of PVC Lateral B Stage 5 and heads south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B Stage 2 facility at Heacock Street. The project would include three transitions structures, four junction structures, twelve bolted down manholes for security, and two inlets along the southernmost end of the alignment to collect on-site flows from MARB. The project would also include two lateral stubs and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the City of Perris. The project would be located mostly within MARB right of way. This alignment will go through APN 294-180-055; where a 45-ft permanent easement has been dedicated for the construction and maintenance of Stage 4.

Public Review Period: September 22, 2022 to October 24, 2022

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

Biological Resources

BIO-1 A pre-construction survey for burrowing owl shall be completed by a qualified biologist no more than 30 days prior to commencement of construction activities in accordance with the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) burrowing owl survey guidelines (County of Riverside 2006). If burrowing owls are observed during the preconstruction survey, impacts shall be avoided through implementation of the burrowing owl avoidance measures as described in the MSHCP.

Cultural Resources

- CUL-1** If deposits of prehistoric or historical materials are encountered during project construction, all work within 50 feet of the discovery shall be halted until an archaeologist can evaluate the findings and make recommendations. A qualified archaeologist, meeting the Secretary of the Interior’s Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find. The archaeologist shall have the authority to modify the no-work radius as appropriate, using professional judgement.
- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.
 - If the professional archaeologist determines that the find represents a cultural resource from any time period or cultural affiliation, the handling of the cultural resource(s) shall follow the applicable recommendations as described in the Cultural Resources Management Plan (CRMP) prepared for the Project, as required by TCR-1.

Geology and Soils

- GEO-1** Due to the potential to impact sensitive paleontological resources during construction activities, the District shall prepare or cause for a Paleontological Resource Impact Mitigation Program (PRIMP) to be prepared prior to commencement of ground disturbing activities. The PRIMP shall be based on the final construction grading plans prepared by the District and detail construction requirements for all work consisting of excavation at depths greater than 4 feet below the original ground surface in undisturbed geologic contexts.

Tribal Cultural Resources

- TCR-1** The District shall prepare or cause for the preparation of a Tribal/Cultural Resources Management Plan (TCRMP) prior to ground disturbing activities. The CRMP shall be based on the final construction grading plans prepared by the District and may include requirements for pre-construction cultural sensitivity training, notification, and monitoring protocol. The TCRMP will consider concerns of the consulting Tribes and the consulting Tribes will have an opportunity to review and comment on the draft TRCRMP.

In the event that the consulting Tribes are not able to reasonably accommodate the District’s requests and/or needs regarding monitoring, the District may proceed with Mitigation Measure TCR-2 as needed:

- TCR-2** The District may, at its discretion, conduct archaeological monitoring and/or reconnaissance of the project site using a qualified archaeologist that is not a Tribal monitor or representative of a Native American Tribe. This would occur only a needed during ground-disturbing construction activities.

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1.0 BACKGROUND

1.1 SUMMARY

Project Title:	Perris Valley Channel Lateral B, Stage 4 Project
Lead Agency Name and Address:	Riverside County Flood Control and Water Conservation District 1995 Market Street Riverside, CA 92501
Lead Agency Contact:	Jerry Aguirre, MURP, ERS II Kevin Cunningham Associate Flood Control Planner Environmental Project Email: jeraguir@rivco.org Manager or Email: kcunning@rivco.org
Project Location:	The project site is located within the limits of MARB and the City of Perris in Western Riverside County, east of the Interstate 215 freeway (I-215). The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within APNs 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.
General Plan Designation:	MJPA: Aviation City of Perris: Perris Valley Commerce Center Specific Plan (PVCC SP); Planning Area 1 (North Industrial)
Zoning:	MJPA: Aviation City of Perris: Perris Valley Commerce Center Specific Plan (PVCC SP)

1.2 INTRODUCTION

The Riverside County Flood Control and Water Conservation District (District) is the Lead Agency for this Initial Study. The Initial Study has been prepared to identify and assess the anticipated environmental impacts of the Perris Valley Channel Lateral B, Stage 4 Project (project). This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Pub. Res. Code, Section 21000 *et seq.*) and State CEQA Guidelines (14 CCR 15000 *et seq.*). CEQA requires that all State and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. A CEQA Initial Study is generally used to determine which CEQA document is appropriate for a project (Negative Declaration [ND], Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]). This Initial Study addresses the direct, indirect, and cumulative environmental effects of the project, as proposed.

1.2.1 Statutory Authority And Requirements

In accordance with CEQA (Public Resources Code Section 21000-21177) and pursuant to California Code of Regulations Section 15063, the District, acting in the capacity of Lead Agency under CEQA, is required to undertake the preparation of an Initial Study to determine if the proposed project would have a significant environmental impact. If, as a result of the Initial Study, the Lead Agency finds that there is evidence that any aspect of the project may cause a significant environmental effect, the Lead Agency shall further find that an Environmental Impact Report (EIR) is warranted to analyze project-related and cumulative environmental impacts. Alternatively, if the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration for that project. Such determination can be made only if “there is no substantial evidence in light of the whole record before the Lead Agency” that such impacts may occur (Public Resources Code Section 21080(c)).

The environmental documentation, which is ultimately selected by the District in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and/or other discretionary approvals would be required.

The environmental documentation is subject to a public review period. During this review, public agency comments on the document relative to environmental issues should be addressed to the District. The District will consider the comments received as a part of the project’s environmental review and will include them as part of the Initial Study/Mitigated Negative Declaration documentation for adoption.

1.2.2 Purpose

CEQA Guidelines Section 15063 identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include:

- A description of the project, including the location of the project;
- Identification of the environmental setting;
- 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;
- Discussion of ways to mitigate significant effects identified, if any;
- Examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and
- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study.

1.2.3 Consultation

As soon as a Lead Agency (in this case, the District) has determined that an Initial Study would be required for the project, the Lead Agency is directed to consult informally with all Responsible Agencies and Trustee Agencies that are responsible for resources affected by the project, to obtain the recommendations of those agencies as to whether an EIR or Negative Declaration should be prepared for the project. Following receipt of any written comments from those agencies, the Lead Agency considers any recommendations of those agencies in the formulation of the preliminary findings. Following completion of this Initial Study,

the Lead Agency initiates formal consultation with these and other governmental agencies as required under CEQA and its implementing guidelines.

1.3 SURROUNDING LAND USES/ENVIRONMENTAL SETTING

The project site is partially located within the limits of the City of Perris and lands owned by MJPA and MARB in southwestern Riverside County, on the east side of I-215. The project site is currently vacant land with an asphalt-paved road traversing the site from north to south. The site is bordered on the north, south, and east by MARB, and on the west by PODS Moving and Storage (located at 1330 Nandina Avenue), as well as multiple exterior equipment storage yards. The project site's vicinity is generally characterized by industrial and military uses.

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2.0 PROJECT DESCRIPTION

2.1 PROJECT PURPOSE AND NEED

The Perris Valley Master Drainage Plan (MDP) was adopted in July 1987 and last revised in 1991 with the purpose of identifying the drainage problems and providing a guide for the construction of primary drainage facilities in the Perris Valley area. The MDP Line B (now “Lateral B”) was originally proposed as an open channel on the west side of I-215 from Van Buren Boulevard to just south of Harley Knox Boulevard before extending east to Perris Valley Channel. However, since the MDP was last updated, the Perris Valley area surrounding March Air Reserve Base (MARB) has experienced new development that has prompted the need to revise the alignment and construct Lateral B to support existing and future drainage needs for the area. The purpose of the project is to provide flood protection to MARB and the adjacent area by constructing the regional storm drain facility needed to convey 100-year runoff to the existing Lateral B, Stage 2 channel east of Heacock Street. A secondary objective of the project is to provide an adequate outlet for Lateral B-7 and B-8 to be constructed as part of future development proposals in the City of Perris.

2.2 PROJECT DESCRIPTION

The Riverside County Flood Control and Water Conservation District (District), in partnership with the March Joint Powers Authority (MJPA) and MARB, is proposing to construct the Perris Valley Channel (PVC) Lateral B, Stage 4 Project (Project). PVC Lateral B-5 Stage 1 and Stage 2 and PVC Lateral B Stage 2 and 3 of the Lateral B system have already been constructed between Heacock Street and I-215. The project would construct PVC Lateral B Stage 4 which consists of approximately 6,000 ft of reinforced concrete box (RCB) culvert connecting the PVC Lateral B Stage 5 facility to the existing PVC Lateral B Stage 2 facility. The project’s general alignment begins at the downstream terminus of PVC Lateral B Stage 5 and heads south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B Stage 2 facility at Heacock Street; refer to [Exhibit 1, *Regional Location*](#) and [Exhibit 2, *Project Location*](#). The project would include three transition structures, four junction structures, twelve bolted down manholes for security, and two inlets along the southernmost end of the alignment to collect onsite flows from MARB. The project would also include two lateral stubs and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the City of Perris. The project would be located mostly within MARB right of way, as shown on [Exhibit 3, *Site Plan*](#). This alignment will go through APN 294-180-055; where a 45-ft permanent easement has been dedicated for the construction and maintenance of Stage 4.

2.3 PROJECT DESIGN

The original design for the PVC Lateral B included open channel facilities on the west side of the I-215 from Van Buren Boulevard to just south of Harley Knox Boulevard before extending east to Perris Valley Channel. The PVC Lateral B, Stage 4 project has been revised to be constructed as an approximately 6,000 lineal feet of RCB starting at Heacock Street (at the upstream end of PVC Lateral B, Stage 2) to the downstream terminus of the PVC Lateral B Stage 5 facility, which is currently under construction as part of the VIP-215 project. Specific details of the project design include (refer to [Exhibit 2, *Site Plan*](#)):

- One transition from double 14’x9’ RCB to double 10’x10’ RCB at STA 10+43.58-10+73.58 located at the intersection of Perris Valley Lateral B Stage 2 and Heacock Street;
- Approximately 3,000 LF of 10’x10’ RCB from STA 10+73 located at the intersection of Perris Valley Lateral B Stage 2 and Heacock Street to STA 42+00 at APN 294200005;

- One transition from double 10'x10' to 10'x14' RCB at STA 42+00 – STA 42+30;
- Approximately 3,000 LF of 10'x14' RCB from STA 42+30 at APN 294200005 to STA 67+50 at APN 294180038;
- One transition from 10'x14' RCB to single 10'x10' RCB at STA to STA 67+50 - 67+66.97 at APN 294180038;
- Two inlets collecting onsite flows from MARB;
- Two lateral stubs and bulkheads (for Lateral B-7 and Lateral B-8);
- Approximately 12 manholes bolted down for MARB security;
- MARB Perimeter fence replacement at various locations;
- Removal and replacement of MARB perimeter road, as needed; and
- Removal of the Stage 5 interim outlet structure.

2.4 PROJECT LOCATION

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consists of MARB to the east and scattered industrial development to the north, south and west. The project site is located within the limits of MARB and the City of Perris in Western Riverside County, east of the Interstate 215 freeway (I-215). The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within APNs 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.

2.5 PROJECT TIMING

2.5.1 Construction Timing, Duration, and Equipment

The project would be constructed in one phase. Construction of the Lateral B, Stage 4 facility is expected to begin in Spring 2023 and last approximately 12 months. Construction equipment would include the following: excavator, dozer, scraper, skip loader, backhoe, water truck, crane, concrete pump, haul trucks, motor grader, sheepsfoot roller (or other compacting equipment). The construction equipment mix is shown in Table 2-1, Phase I Construction Equipment.

Table 2-1: Phase I Construction Equipment

Construction Phase	Equipment	Quantity
	Excavator*	1-2
	Dozer*	1-2
	Scraper*	1-2
	Skip Loader	1
	Backhoe	1
	Water Truck*	1-2
	Crane*	1-2
	Concrete Pump*	1-2
	Haul Trucks**	10-15
	Motor Grader	1
	Sheepsfoot Roller	1

*Contingent on the project schedule, there may be up to two of this type of equipment.
** Up to 15 trucks could be on site when a scheduled dirt haul occurs.

Construction of the project would occur 5 days a week (20 days per month) and is estimated to require approximately 20 to 60 people to be on site each day, depending on the nature of construction occurring at any one time.

2.5.2 Utility Line Relocation

Construction of this project would not require utility relocations.

2.5.3 Maintenance

The mainline RCB to be constructed by the project would be inspected and maintained by the District. Due to the “self-cleaning” nature of this facility, maintenance is expected to be minimal. Two existing inlets collecting local drainage within MARB property would be maintained by MARB. Additionally, the proposed inlet along Heacock Street would require maintenance that may include vegetation removal or thinning, sediment removal, and debris and trash removal.

2.6 REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS

The following permits and approvals are anticipated for the proposed project:

Agreements, Permits, and Approvals	Granting Agency
IS/MND Approval	Riverside County Flood Control and Water Conservation District
Section 404 Permit	U.S. Army Corps of Engineers
401 Certification	Regional Water Quality Control Board
General Permit Order 2009-0009-DWQ, Storm Water Pollution Prevention Plan, and Best Management Practices	State Water Resources Control Board

2.7 CONSULTATION WITH CALIFORNIA NATIVE AMERICAN TRIBES

The following California Native American tribes traditionally and culturally affiliated with the project area have been notified of the project: Agua Caliente Band of Cahuilla Indians, Pala Band of Mission Indians, Pechanga Band of Luiseño Indians, Ramona Band of Cahuilla Indians, Rincon Band of Luiseño Indians, and Soboba Band of Luiseño Indians. The Agua Caliente Band of Cahuilla Indians, Pechanga Band of Luiseño Indians, and Soboba Band of Luiseño Indians have requested consultation pursuant to Public Resources

Code section 21080.3.1. A summary of the consultation process, including the determination of significance of impacts to tribal cultural resources, is provided in Section 4.18 of this Initial Study.



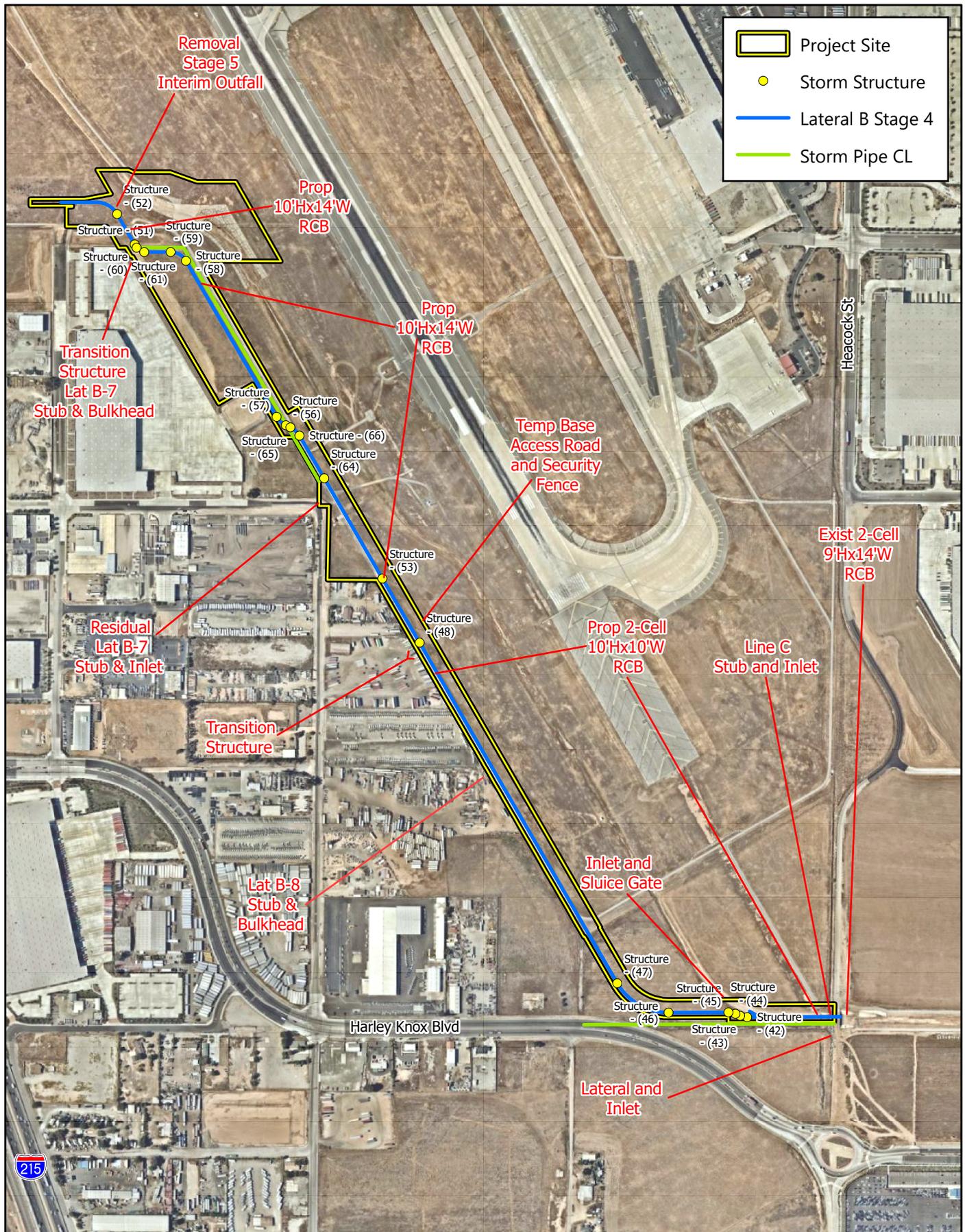
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PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT



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PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT



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3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

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

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

Determination:

On the basis of this initial evaluation:

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

I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section 4.0 have been added. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

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



Joan Valle
Chief of Regulatory

09-20-22

Date

4.0 ENVIRONMENTAL ANALYSIS

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by CEQA Guidelines Appendix G and is used by the District in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to fully analyze the project's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated with appropriate answers provided according to the analysis undertaken as part of the Initial Study. The analysis considers the project's long-term, direct, indirect, and cumulative impacts. To each question, there are four possible responses:

- **No Impact.** The project will not have any measurable environmental impact on the environment.
- **Less Than Significant Impact.** The project will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- **Less Than Significant with Mitigation Incorporated.** The project will have the potential to generate impacts that may be considered as a significant effect on the environment, although mitigation measures or changes to the project's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- **Potentially Significant Impact.** The project will have impacts that are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels. Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

The following evaluation provides responses to the questions in the CEQA Environmental Checklist. A brief explanation for each question in the checklist is provided to support each impact determination. All responses consider the whole of the action involved, including construction and operational impacts, as well as direct and indirect impacts. Environmental factors potentially affected by the proposed project are presented below and organized according to the provided checklist format. Evaluation of the following resources was based on review of preliminary alignment plans and other sources listed in Section 6.0, Bibliography, of this analysis.

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4.1 AESTHETICS

4.1.1 Environmental Setting

Scenic Resources on the Project Site

The project site is undeveloped and contains non-native grassland. Surface elevations range from approximately 1,480 to 1,520 feet above mean sea level (amsl). Neither the City of Perris nor MJPA have designated any scenic resources near the project site.

Local Viewshed

Due to the relatively flat terrain on the project site, there are distant views of prominent topographic features such as hills and mountains. To the north, the Box Springs Mountain range is located east of I-215. To the west are the Temescal Mountains; on clear days, the Santa Ana Mountains can be seen in the background. To the south, the terrain is relatively flat and no prominent topographic features can be viewed. To the east, the Bernasconi Hills that surround Lake Perris are visible, and in the background are Mount San Jacinto and San Geronio Mountains.

State Scenic Highways

The California Department of Transportation (Caltrans) manages the State Scenic Highway Program and designates scenic highway corridors that contain scenic quality landscapes. The purpose of the designation is to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The nearest officially designated State scenic highway is State Route (SR) 243, which is located approximately 23 miles east of the project site. The nearest eligible State scenic highway is SR-74, which is located approximately 7 miles south of the project site.¹

Light and Glare

There are no existing lighting systems on the project site. To the north, streetlights are located along Van Buren Boulevard and security lighting is located at the March Field Air Museum. To the west, there are no lighting systems located along I-215 adjacent to the project site; however, streetlights are located along the I-215 north and south of the project site. To the south, there are security lighting systems associated with the buildings south of the project site and lights along roadways. To the east, lighting systems are located along Runway 32/14 to assist aircraft landing, as well as security lighting at the buildings east of Runway 32/14.

¹ California Department of Transportation State Scenic Highways Mapping System. 2022.
<https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways> Accessed February 1, 2022.

4.1.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project:

- a) *Have a substantial adverse effect on a scenic vista? **Determination: No Impact.***

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

As discussed, neither the City of Perris nor MIPA have designated any scenic resources near the project site. Thus, the proposed project would not have a substantial adverse effect on a scenic vista and no impacts would occur in this regard.

- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? **Determination: No Impact.***

As discussed above, there are no State scenic highways within or adjacent to the project site. The nearest officially designated State scenic highway is SR-243 located approximately 23 miles east of the project site, and the nearest eligible State scenic highway is SR-74 located approximately 7 miles south of the project site. Views of the project site are not afforded from SR-243 or SR-74 due to intervening topography, structures, and vegetation. No impact would occur.

- 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? **Determination: Less Than Significant Impact.***

As the project is surrounded by urbanized uses in all directions, the following discussion analyzes the project's potential to conflict with applicable zoning and other regulations governing scenic quality.

Construction Impacts

Short-term visual impacts associated with project construction activities would occur due to the presence of construction equipment and work vehicles, materials and temporary debris piles, and general construction activities; however, these impacts would be temporary and limited to the short-term construction duration of the project. Based on the project's limited construction duration (12 months), these activities are not anticipated to conflict with applicable zoning or regulations during construction. Impacts would be less than significant in this regard.

Operational Impacts

As an underground RCB storm drain, there are no applicable zoning or other regulations governing scenic quality which apply to the project. Long-term operational impacts to the existing visual character of the project area would not occur with project implementation since the new storm drain would be located underground and would not be visible to the surrounding community. A less than significant impact would occur in this regard.

- d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? **Determination: Less Than Significant Impact.***

Temporary glare from construction activities (including construction equipment and related materials) is possible. However, due to the nature of a storm drain construction project and short-term construction duration, it is anticipated that no new substantial sources of light or glare would result from the project. Construction would occur mainly during daylight hours. Should nighttime construction be necessary, any nighttime lighting would be directed downward and would be shielded to avoid spillover onto adjacent properties. As such, substantial impacts related to light or glare are not anticipated during project construction. Impacts are considered less than significant.

4.1.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

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4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Environmental Setting

According to the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP), California Important Farmland Finder interactive mapping system, the project alignment is designated as “Urban and Built Up Land” and “Other Land.”² The project alignment is not located in an area identified as Prime Farmland, Unique Farmland or Farmland of Statewide Importance, nor is it under a Williamson Act Contract. There are lands to the north of the project site that are designated as “Farmlands of Local Importance.” In addition, lands to the east of the project are identified as “Prime Farmland.”

4.2.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
AGRICULTURE RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to nonagricultural use or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

² California Department of Conservation Important Farmland Finder. 2022. <https://maps.conservation.ca.gov/DLRP/CIFF/> Accessed February 1, 2022.

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 nonagricultural use? **Determination: No Impact.***

As discussed above, the project alignment is designated as “Urban and Built Up Land” and “Other Land.” The project alignment is not located in an area identified as Prime Farmland, Unique Farmland or Farmland of Statewide Importance. There is land to the north of the project site that is designated as Farmland of Local Importance and there is land to the east of the project site that is identified as Prime Farmland. However, all improvements proposed with the project would not encroach onto or interfere with any activities on these adjacent lands. Therefore, the project would not convert farmland to non-agricultural use. No impact would occur.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract? **Determination: No Impact.***

The lands associated with the project alignment are not zoned for agricultural use, nor are they subject to a Williamson Act contract. In addition, the project alignment is not located within an agricultural zoning designation identified by either the MIPA or City of Perris. 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))? **Determination: No Impact.***

The proposed project alignment would not be located adjacent to areas designated or zoned as forest land. Therefore, implementation of the proposed project would not conflict with existing zoning of forest land, timberland, or timberland production, and no impact would occur.

- d) *Result in the loss of forestland or conversion of forest land to non-forest use? **Determination: No Impact.***

Refer to the response for Impact 4.2(c), above. There is no forest land located on or adjacent to the project site. No impact would occur.

- e) *Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to nonagricultural use? **Determination: No Impact.***

The project site and the surrounding properties are not currently used or zoned for agriculture. The project area is characterized as disturbed and developed and would not result in the conversion of forest land to non-forest use. No impact would occur.

4.2.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.3 AIR QUALITY

4.3.1 Environmental Setting

Regional Topography

The State of California is divided geographically into 15 air basins. The project site is located within the South Coast Air Basin (Basin), a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and the San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area of Riverside County.

The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and dispersion of air pollutants throughout the Basin.

Climate

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The climate consists of a semi-arid environment with mild winters, warm summers, moderate temperatures, and comfortable humidity. Precipitation is limited to a few winter storms. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The average annual temperature varies little throughout the Basin, averaging 75 degrees Fahrenheit (°F). However, with a less-pronounced oceanic influence, the eastern inland portions of the Basin show greater variability in annual minimum and maximum temperatures. All portions of the Basin have had recorded temperatures over 100°F in recent years.

Although the Basin has a semi-arid climate, the air near the surface is moist due to the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the Basin by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. The annual average relative humidity is 70 percent at the coast and 57 percent in the eastern part of the Basin. Precipitation in the Basin is typically nine to 14 inches annually and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall are greater in the coastal areas of the Basin.

The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet, the terrain prevents the pollutants from entering the upper atmosphere, resulting in a settlement in the foothill communities. Below 1,200 feet, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal Basin. Usually, inversions are lower before sunrise than during the day. Mixing heights for inversions are lower in the summer and more persistent, being partly responsible for the high levels of ozone (O₃) observed during the summer months in the Basin. Smog in southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods of time, allowing them to form secondary pollutants by reacting with sunlight. The Basin has a limited ability to disperse these pollutants due to typically low wind speeds.

Local Ambient Air Quality

California Air Resources Board (CARB) monitors ambient air quality at approximately 250 air monitoring stations across the State. Air quality monitoring stations usually measure pollutant concentrations ten

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feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The project site is located within Source Receptor Area (SRA) 24, Perris Valley. The closest air monitoring station contains three-year data to the project site is the Reseda Monitoring Station. Local air quality data from 2018 to 2020 is provided in Table 4.3-1, Summary of Air Quality Data. This table lists the monitored maximum concentrations and number of exceedances of Federal/State air quality standards for each year

Table 4.3-1: Summary of Air Quality Data

Pollutant	California Standard	Federal Primary Standard	Year	Maximum Concentration ¹	Days (Samples) State/Federal Std. Exceeded
Ozone (O ₃) (1-hour) ²	0.09 ppm for 1 hour	NA ⁶	2018	0.117 ppm	31 / 0
			2019	0.118 ppm	28 / 0
			2020	0.125 ppm	34 / 1
Ozone (O ₃) (8-hour) ²	0.070 ppm for 8 hours	0.070 ppm for 8 hours	2018	0.103 ppm	68 / 67
			2019	0.095 ppm	66 / 64
			2020	0.106 ppm	77 / 74
Carbon Monoxide (CO) (1-hour) ³	20 ppm for 1 hour	35 ppm for 1 hour	2018	1.128 ppm	0 / 0
			2019	1.605 ppm	0 / 0
			2020	0.914 ppm	0 / 0
Nitrogen Dioxide (NO ₂) ³	0.180 ppm for 1 hour	0.100 ppm for 1 hour	2018	0.041 ppm	0 / 0
			2019	0.038 ppm	0 / 0
			2020	0.044 ppm	0 / 0
Fine Particulate Matter (PM _{2.5}) ^{3, 4}	No Separate Standard	35 µg/m ³ for 24 hours	2018	31.3 µg/m ³	NA / *
			2019	17.6 µg/m ³	NA / *
			2020	41.6 µg/m ³	NA / *
Particulate Matter (PM ₁₀) ^{2, 4, 5}	50 µg/m ³ for 24 hours	150 µg/m ³ for 24 hours ⁶	2018	64.4 µg/m ³	2 / 0
			2019	97.0 µg/m ³	4 / 0
			2020	92.3 µg/m ³	6 / 0
ppm = parts per million; PM ₁₀ = particulate matter 10 microns in diameter or less; µg/m ³ = micrograms per cubic meter; PM _{2.5} = particulate matter 2.5 microns in diameter or less; NA = not applicable; * = insufficient data available to determine the value					
Notes:					
1. Maximum concentration is measured over the same period as the California standards.					
2. Data collected from the Perris Monitoring Station located at 237 North D Street, Perris, California, 92570.					
3. Data collected from the Lake Elsinore – West Flint Street Monitoring Station located at 506 W Flint Street, Lake Elsinore, 92530.					
4. PM ₁₀ and PM _{2.5} exceedances are derived from the number of samples exceeded, not days.					
5. PM ₁₀ exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.					
6. The Federal standard for 1-hour ozone was revoked in June 2005.					
7. The Federal standard for average PM ₁₀ was revoked in December 2006.					
Sources:					
California Air Resources Board, <i>ADAM Air Quality Data Statistics</i> , http://www.arb.ca.gov/adam/ , accessed April 29, 2022.					
California Air Resources Board, <i>AQMIS2: Air Quality Data</i> , https://www.arb.ca.gov/aqmis2/aqdselect.php , accessed April 29, 2022.					

4.3.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

An air quality memorandum was prepared for the proposed project (Michael Baker International, May 2022). Refer to [Appendix A, Air Quality Memorandum](#).

Would the project:

- a) *Conflict with or obstruct implementation of the applicable air quality plan?* **Determination: Less Than Significant Impact.**

The project site is located within the South Coast Air Basin (Basin). The South Coast Air Quality Management District (SCAQMD) has jurisdiction in the Basin, which has a history of recorded air quality violations and is an area where both state and Federal ambient air quality standards are exceeded. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The SCAQMD is required, pursuant to the Federal Clean Air Act, to reduce emissions of the air pollutants for which the Basin is in nonattainment.

In order to reduce emissions, the SCAQMD adopted the *2016 Air Quality Management plan for the South Coast Air Basin (2016 AQMP)* which establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving State and Federal air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, the Southern California Association of Governments (SCAG), and the EPA.

The 2016 AQMP pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including the *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*, updated emission inventory methodologies for various source categories, and SCAG’s latest growth forecasts. SCAG’s latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The SCAQMD considers projects that are consistent with the 2016 AQMP, which is intended to bring the Basin into attainment for all criteria pollutants, to also have less than significant cumulative impacts. While SCAG has recently adopted the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS)*, SCAQMD has not released an updated AQMP that utilizes information from the 2020-2045 RTP/SCS. The SCAQMD is planning

to adopt the updated AQMP in late 2022. As such, this consistency analysis is based off the 2016 AQMP and 2016-2040 RTP/SCS.

The project proposes to construct a storm drain facility to provide flood protection to MARB and the adjacent area. During project construction, the project would comply with SCAQMD Rule 403 in reducing fugitive dust emissions. Project operation would be similar to existing conditions. Maintenance activities that may be required during project operation would occur on an as needed basis. As such, the proposed storm drain facility would not conflict with applicable land use plans, including the General Plan 2030 and MJPA General Plan, during project construction and operation. It should be noted that the proposed storm drain facility would not involve any uses that have the potential to affect SCAG forecasts on population, housing, and employment in the region. As the SCAQMD has incorporated these forecasts into the 2016 AQMP, it could be implied that the proposed project would be consistent with the 2016 AQMP.

In addition, the project's short-term construction and long-term operational emissions would not exceed SCAQMD thresholds; refer to Impact 4.3(b) below. As such, the proposed project would not conflict with or obstruct implementation of the 2016 AQMP.

- b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*
Determination: Less Than Significant Impact.

Short-Term Construction Emissions

The project involves construction activities associated with site preparation, grading, construction, paving, and site cleanup. Project construction would occur for approximately 12 months. Earthwork would result in approximately 71,000 cubic yards of cut and 46,000 cubic yards of fill, resulting in 25,000 cubic yards of soil to be exported. Exhaust emission factors for typical diesel-powered heavy equipment are based on the program defaults of the most recent version of the California Emissions Estimator Model (CalEEMod), version 2020.4.0. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site. The analysis of daily construction emissions has been prepared using CalEEMod, refer to Appendix A. Table 4.3-2, Short-Term Construction Emissions, presents the anticipated daily short-term construction emissions.

Table 4.3-2: Short-Term Construction Emissions

Emissions Source	Pollutant (pounds/day) ¹					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Year 1	10.83	97.55	125.67	0.23	11.35	7.12
Year 2	0.63	5.17	7.58	0.01	0.29	0.25
Maximum Daily Emissions ²	10.83	97.55	125.67	0.23	11.35	7.12
SCAQMD Thresholds	75	100	550	150	150	55
Is Threshold Exceeded?	No	No	No	No	No	No
Notes:						
<ol style="list-style-type: none"> 1. Emissions were calculated using CalEEMod, version 2020.4.0. Winter emissions represent the worst-case scenario. 2. Modeling assumptions include compliance with SCAQMD Rule 403 which requires: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. 3. ROG = reactive organic gases; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter up to 10 microns; PM_{2.5} = particulate matter up to 2.5 microns; lbs = pounds 						
Refer to Appendix A for detailed model input/output data.						

Fugitive Dust Emissions

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

Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular health concern is the amount of PM₁₀ generated as a part of fugitive dust emissions. PM₁₀ poses a serious health hazard alone or in combination with other pollutants. PM_{2.5} is mostly produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. PM_{2.5} is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_x and SO_x combining with ammonia. PM_{2.5} components from material in the earth's crust, such as dust, are also present, with the amount varying in different locations.

Construction activities would comply with SCAQMD Rule 402, which prohibits fugitive dusts from creating a nuisance, and Rule 403, which requires that fugitive dust emissions controls such as regular watering or other dust prevention measures to be implemented. Adherence to SCAQMD Rule 402 and Rule 403 would greatly reduce PM₁₀ and PM_{2.5} concentrations and ensure project consistency with SCAQMD requirements and General Plan 2030. As depicted in [Table 4.3-2](#), total

PM₁₀ and PM_{2.5} emissions would not exceed the SCAQMD thresholds during construction. Thus, construction-related air quality impacts from fugitive dust emissions would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions (e.g., NO_x and CO) from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to/from the site. As presented in [Table 4.3-2](#), construction equipment and worker vehicle exhaust emissions would be below the established SCAQMD thresholds. Therefore, air quality impacts from equipment and vehicle exhaust emissions would be less than significant.

Total Daily Construction Emissions

In accordance with the SCAQMD Guidelines, CalEEMod was utilized to model construction emissions for ROG, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}. As indicated in [Table 4.3-2](#), criteria pollutant emissions during construction of the proposed project would not exceed the SCAQMD significance thresholds. Thus, construction-related air quality impacts from criteria pollutant emissions would be less than significant.

Asbestos

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

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

LONG-TERM (OPERATIONAL) EMISSIONS

The project proposes the construction of a storm drain facility. As discussed above, project operation would be similar to existing conditions and maintenance activities that may be required would occur on an as needed basis. As such, the project would not generate additional traffic trips when compared to existing conditions or result in significant operational emissions. No impacts would occur in this regard.

Air Quality Health Impacts

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

The issue of correlating regional air pollution to human health effects was raised in litigation regarding the Friant Ranch project, which is a 942-acre master-planned community in Fresno County. In 2011, litigation was filed by the Sierra Club and other groups challenging the adequacy of Fresno County's EIR for failing to comply with CEQA. The Superior Court upheld all aspects of the EIR, but an appeal then followed, ultimately reversing the decision as it held that the EIR was deficient in its informational discussion of air quality impacts as they connect to adverse human health effects. In the appeal process the South Coast Air Quality Management District (SCAQMD) and San Joaquin Valley Air Pollution Control District (SJVAPCD) took the lead on behalf of air quality regulating agencies to file amicus briefs to identify the infeasibility of conducting this type of analysis using the tools that are currently available. As noted in the Brief of Amicus Curiae by the SCAQMD, the SCAQMD acknowledged that it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Further, as noted in the Brief of Amicus Curiae by the SJVAPCD, SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

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

- c) *Expose sensitive receptors to substantial pollutant concentrations?* **Determination: Determination: Less Than Significant Impact.**

The closest sensitive receptor for the purpose of an LST analysis is the single-family residence located approximately 145 feet to west from project site at 5137 Patterson Avenue. In order to

identify impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction and operations impacts (area sources only).

Localized Significance Thresholds

LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized air quality impacts. The SCAQMD provides the LST screening lookup tables for one-, two-, and five-acre projects emitting CO, NO_x, PM_{2.5}, or PM₁₀. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The LST Mass Rate Screening Threshold was based on the anticipated daily acreage disturbance for construction (two-acre site), the distance to sensitive receptors (25 meters), and the source receptor area (SRA 24 – Perris Valley).

Construction

The LST thresholds for two-acre projects were utilized for the construction LST analysis per SCAQMD guidance. The nearest sensitive use is a single-family residence located approximately 145 feet (44.2 meters) to the west of the project site. Therefore, the LSTs for 25 meters were utilized as this is the most conservative threshold for sensitive use located at this distance. Table 4.3-3, Localized Significance of Construction Emissions, shows the localized construction-related emissions. It is noted that the localized emissions presented in Table 4.3-3 are less than those in Table 3 because localized emissions include only on-site emissions (i.e., from construction equipment and fugitive dust). As shown in Table 4.3-3, emissions would not exceed the LST mass rate screening thresholds for SRA 24.

Operations

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

Table 4.3-3: Localized Significance of Construction Emissions

Maximum Emissions	Maximum Daily Emissions (pounds/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Year 1 ^{1,3}	58.41	81.11	5.52	3.10
Year 2 ^{2,3}	5.16	7.44	0.23	0.23
Maximum Daily Emissions	58.41	81.11	5.52	3.10
<i>Localized Significance Threshold Mass Rate Screening Criteria</i> ⁴	170	883	7	4
Thresholds Exceeded?	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Note: 1. Maximum on-site daily emissions occur during site preparation for PM ₁₀ , and PM _{2.5} , and grading phase for NO _x , and CO during Year 1. 2. Maximum on-site daily emissions occur during paving phase for NO _x , CO, PM ₁₀ , and PM _{2.5} during Year 2. 3. Modeling assumptions include compliance with SCAQMD Rule 403 which requires: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. 4. The Localized Significance Threshold Mass Rate Screening Criteria was determined using Appendix C of the SCAQMD <i>Final Localized Significant Threshold Methodology</i> guidance document for pollutants NO _x , CO, PM ₁₀ , and PM _{2.5} . The Localized Significance Threshold Mass Rate Screening Threshold was based on the anticipated daily acreage disturbance for construction (two-acre site), the distance to sensitive receptors (25 meters), and the source receptor area (SRA 24).				

Conclusion

The nearest sensitive receptors are single-family residence located west of the project site. As discussed under Impact 4.3(b), the project would not exceed the SCAQMD’s land use screening thresholds during construction or operational activities. Additionally, the project would be required to comply with SCAQMD Rule 402, which prohibits fugitive dusts from creating a nuisance; and Rule 403, which aims to reduce construction-related fugitive dust emissions by requiring best management practices such as properly maintain mobile and other construction equipment, replace ground cover in disturbed areas quickly, water exposed surfaces three times daily, cover stockpiles with tarps, water all haul roads twice daily, and limit speeds on unpaved roads to 15 miles per hour. Further, construction equipment would not be confined to one area and the associated emissions would fluctuate throughout the day as well as within each phase of construction depending on the quantity, duration, and type of equipment used at the time. As such, the project would not concentrate construction emissions near sensitive receptors for an extended period of time, and sensitive receptors would not be exposed to substantial pollutant concentrations during operation of the proposed project. Impacts would be less than significant in this regard.

d) Create objectionable odors affecting a substantial number of people? *Determination: Less Than Significant Impact.*

California Health and Safety Code, Division 26, Part 4, Chapter 3, Section 41700 prohibits the emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of the public. Projects required to obtain permits from SCAQMD, typically industrial and some commercial projects, are evaluated by SCAQMD staff for potential odor nuisance and conditions may be applied (or control equipment required) where necessary to prevent occurrence of public nuisance. The proposed project would not require such a permit from SCAQMD.

According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical

plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified by the SCAQMD as being associated with odors. Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon project completion. In addition, the project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. No other types of emissions beyond those analyzed above would be generated by the proposed flood control facility. As such, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

4.3.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.4 BIOLOGICAL RESOURCES

4.4.1 Environmental Setting

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consist of MARB to the east and scattered industrial development to the north, south, and west. An existing drainage course is located within MARB approximately 350 feet west of the existing runway and 300 feet east of the western perimeter fence boundary of MARB. Runoff in this area drains from the north to south via this natural drainage course towards a soft bottom open channel at Heacock Street (Heacock Channel) eventually draining east towards Perris Valley Channel.

The project site is mostly comprised of highly disturbed, but undeveloped lands. One (1) natural vegetation community was observed and mapped within the boundaries of the project site: red brome or Mediterranean grass grassland. In addition, the project site contains two (2) land cover types that would be classified as disturbed and developed.

Soils for the project area were obtained by Michael Baker from the *Custom Soil Resource Report for Western Riverside County, California* (USDA 2022). The project site is underlain by the following soil units: Exeter sandy loam, deep, 0 to 2 percent slopes (EpA); Greenfield sandy loam, 0 to 2 percent slopes (GyA); Hanford fine sandy loam, 0 to 2 percent slopes (HgA); Monserate sandy loam, 0 to 5 percent slopes (MmB); Pachappa fine sandy loam, 0 to 2 percent slopes (PaA); and Ramona sandy loam, 0 to 2 percent slopes, MLRA 19 (RaA). Michael Baker conducted a query of the *California Hydric Soils List* (USDA 2022) in an effort to verify whether any soil units occurring within the project site are considered to be hydric. Based on the *California Hydric Soils List*, none of the soil units occurring within the project site are listed as hydric.

4.4.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*Draft Initial Study/Mitigated Negative Declaration
Perris Valley Channel Lateral B, Stage 4 Project*

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A Biological Resources Assessment (BRA) was prepared for the proposed project (Michael Baker International, July 2022). Refer to [Appendix B-1, *Biological Resources Assessment and MSHCP Consistency Analysis*](#), for the full report.

A Jurisdictional Delineation Report was prepared for the proposed project (Michael Baker International, July 2022). Refer to [Appendix B-2, *Delineation of State and Federal Jurisdictional Waters*](#), for the full report.

A Burrowing Owl Focused Survey was prepared for the proposed project (Riverside County Flood Control and Water Conservation District, July 2022). Refer to [Appendix B-3, *Burrowing Owl Focused Survey*](#), for the full report.

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 US Fish and Wildlife Service?*
Determination: Less Than Significant With Mitigation Incorporated.

Michael Baker biologists prepared a BRA to document the results of a literature review and field survey/habitat assessment conducted on January 19, 2022. The field survey was conducted to characterize existing site conditions and assess the potential for special-status biological resources to occur within the project site that could pose a constraint to implementation of the proposed project. The following species types were evaluated pursuant to special-status consideration in the BRA:

Special-Status Plant Species

No special-status plant species were observed within the project site. Based on the results of the literature review and the field survey, Michael Baker determined that paniculate tarplant (*Deinandra paniculata*; California rare plant rank (CRPR) 4.2), which is known to occur on MARB and often occurs in non-native grasslands in Riverside County, has a moderate potential to occur within the project site. All other special-status plant species either have a low potential to occur or are not expected within the project site based on existing site conditions and a review of specific habitat requirements, occurrence records, and known distributions. Paniculate tarplant is not a covered species under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), and because it has a CRPR of 4.2, it is generally not evaluated for potential

significant impacts under CEQA and generally does not require additional permitting for impacts. No impact to special-status plant species would occur in this regard.

Special-Status Wildlife Species

Special-status wildlife species that were observed within or adjacent to the project site during the field surveys included burrowing owl (*Athene cunicularia*; California species of special concern [SSC]), California horned lark (*Eremophila alpestris actia*; California watch list [WL] species), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*; California SSC). Based on the results of the literature review and the field survey, Michael Baker determined that Cooper's hawk (*Accipiter cooperii*; California WL species) has a high potential to occur within the project site. All other special-status wildlife species identified during the literature review either have a low potential to occur or are not expected within the project site based on existing site conditions and a review of specific habitat requirements, occurrence records, and known distributions. Impacts to Cooper's hawk, California horned lark, and San Diego black-tailed jackrabbit are all fully covered under the MSHCP and require no additional permitting as long as the project is consistent with the MSHCP and its preservation goals. Impacts to burrowing owl are not considered fully covered. Under the MSHCP, focused surveys are required to be conducted in suitable habitat on the project site and within 500 feet of the project limits.

Burrowing Owl

Because the project site contains suitable habitat for BUOW and that two pairs of burrowing owl were observed adjacent to the project site during the initial field survey on January 19, 2022, focused surveys throughout the entire project site and in suitable habitat within 500 feet were required.

District biologists conducted a focused burrow survey and focused surveys for burrowing owl on four (4) separate days during the 2022 breeding season. The focused burrow survey and focused surveys were conducted in accordance with the survey guidelines and protocols provided in the *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area* (RCA 2006). The results of the focused surveys were negative and indicated that the site is not presently occupied by burrowing owls. Although no burrowing owls were detected during the focused surveys, direct impacts to burrowing owl through ground disturbance and habitat loss and indirect impacts from construction noise and vibrations may occur. Impacts to burrowing owl would be less than significant with the implementation of Mitigation Measure BIO-1.

- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? **Determination: Less Than Significant Impact.***

Based on the results of the Jurisdictional Delineation Report, approximately 1.02 acres (1,393 linear feet) of United States Army Corps of Engineers (USACE)/Santa Ana Regional Water Quality Control Board (RWQCB) non-wetland Waters of the United States is located within the boundaries of the project site. Additionally, an off-site unvegetated streambed occurs between the Perris Valley Channel and the MARB runway that qualifies as Waters of the United States, totaling 4.71 acres (4,530 linear feet). Refer to Table 4.4-1, State and Federal Jurisdictional Resources and Proposed Impacts.

Table 4.4-1: State and Federal Jurisdictional Resources and Proposed Impacts

Hydrologic Feature	Latitude / Longitude	Cowardin Class	Class of Aquatic Feature	Acreage (Linear Feet)		
				USACE/RWQCB Non-Wetland WoUS		
				Total Acreage	Impacts	
					Permanent	Temporary
PVC (North Segment)	33.859205° / -117.244730°	Riverine	Non-Wetland	0.68 (827)	0.00 (0)	0
PVC (South Segment)	33.870352° / -117.254872°	Riverine	Non-Wetland	0.34 (566)	0.28 (511)	0
Offsite Channel	33.870354° / -117.244862°	Riverine	Non-Wetland	3.33 4,530	0	0
TOTAL*				4.35 (5,923)	0.28 (511)	0

Refer to Appendix B-2, *Delineation of State and Federal Jurisdictional Waters*

*Total may not equal to sum due to rounding.

As discussed in Appendix B-2, the project meets the requirements of Nationwide Permit 43 (Stormwater Management Facilities) and would require a preconstruction notification (PCN). Issuance of a Water Quality Certification from the Santa Ana RWQCB for temporary and permanent impacts to non-wetland Waters of the United States will be required as a condition of the 404 Nationwide Permit process. With issuance of the project’s Nationwide Permit 43 and Water Quality Certification, impacts to USACE non-wetland Waters of the United States would be less than significant.

- c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? **Determination: No Impact.***

Wetlands are defined under the Federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. Based on Jurisdictional Delineation Report, the project site does not support wetland Waters of the State or wetland Waters of the United States. Further, the proposed project does not involve the placement of fill within the off-site streambed, therefore, issuance of a 404 permit for this component of the project is not required. No impact would occur in this regard.

- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? **Determination: Less Than Significant Impact.***

As discussed in the BRA, no fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would support populations of fish were observed in the project site during the field survey. Therefore, no fish are expected to occur and the project would not interfere with the movement of migratory fish.

Due to the highly disturbed nature of the project site and surrounding areas, the project site does not currently function as a migratory corridor or linkage. Wildlife movement into or out of the project site is likely reduced by the presence of surrounding high-traffic roadways (i.e., I-215) and existing residential and commercial developments, which have fragmented the connection between the project site and surrounding naturally-occurring vegetation communities. Nesting

birds are protected pursuant to the federal Migratory Bird Treaty Act (MBTA) of 1918 and the California Fish and Game Code (CFGF). Particularly, the MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. No active or remnant bird nests were observed within the project site during the field survey. A single house sparrow was observed carrying nesting material into a maintenance shed on the western edge of the property at the corner of Patterson Avenue and Nandina Avenue. However, the nests of non-native bird species, including house sparrow, are generally not protected by the MBTA or CFGF. No native birds exhibiting any signs of nesting activity were observed during the field survey. With adherence to the MBTA and CFGF, impacts to migratory birds would be reduced to less than significant.

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? **Determination: Less Than Significant Impact.***

Refer to Impact 4.4(a) and 4.4(f) for a discussion regarding the project's consistency with the MSCHP. The project site and area of construction is devoid of trees that therefore would not conflict with an existing tree preservation policy or ordinance. Therefore, no impact would occur.

- f) *Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan? **Determination: Less Than Significant With Mitigation Incorporated.***

A Biological Resources Assessment and MSHCP Consistency Analysis was prepared for the project in July 2022 by Michael Baker International and is included in Appendix B-1 to this Initial Study. The MSHCP consistency analysis presented in the report is summarized in the response below.

Western Riverside County Multiple Species Habitat Conservation Plan

As a permittee to the Western Riverside County MSHCP, the District is required to comply with Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, and 7 of the MSHCP. The Project site is located within the MSHCP plan area but is not located within any Subunits, Criteria Cells, Conservation Areas, Cores/Linkages, or P/QP lands identified by the MSHCP.

Section 6.1.2

Based on the results of the vernal pool habitat assessment as described in the Biological Resources Assessment and MSHCP Consistency Analysis (Appendix B-1), neither vernal pools nor habitat for vernal pool fairy shrimp occur within or adjacent to the project site. However, the project site includes a total of 2.40 acres (1,393 linear feet) of non-wetland unvegetated ephemeral streambed that is considered a riverine riparian resource under Section 6.1.2 of the Western Riverside MSHCP. Implementation of the proposed project will result in permanent impacts to 0.41 acres of streambed, that does not support riparian vegetation or riparian bird habitat. An offsite segment of unvegetated non-wetland streambed totaling 4.71 acres extends from the northerly outlet of Perris Valley Channel and extends south for 4,530 feet where it joins the channel again at the southern outlet. Construction of the proposed channel improvements will divert approximately 50% of the water that typically drains to the offsite streambed. However, there is no riparian vegetation, wetlands or other water dependent resources within the channel that would be impacted by this partial diversion. The water conveyance function of the unvegetated feature will remain and will continue to be supported by onsite flows from MARB and rainfall. Therefore, the permanent impacts to the ephemeral streambed and indirect impacts to the offsite channel does not require a DBESP because no MSCHP resources on site are dependent on this channel and water delivery downstream to resources would continue post project. Therefore, the project is consistent with Section 6.1.2 of the MSHCP.

Section 6.1.3

Section 6.1.3 of the MSHCP addresses protection of Narrow Endemic Plant Species and requires surveys to be conducted in defined survey areas throughout the MSHCP area. According to the RCA's online MSHCP Information Application and Figure 6-1 of the MSHCP, the proposed project is not located within a survey area for Narrow Endemic Plant Species. Therefore, nothing further is required to demonstrate consistency with this section of MSHCP.

Section 6.3.2

Section 6.3.2 of the MSHCP addresses additional survey needs and procedures. The proposed project is not located within a mapped survey area for Amphibians, Mammals, Narrow endemic plant species, Criteria Species or Delhi Sands Flower-loving Fly, but is in a burrowing owl survey area, and was determined to provide suitable habitat for the species.

District biologists conducted a focused burrow survey and focused surveys for burrowing owls on four (4) separate days during the 2022 breeding season. The focused burrow survey and focused surveys were conducted in accordance with the survey guidelines and protocols provided in the Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area (RCA 2006). The results of the focused surveys were negative and indicated that the site is not presently occupied by burrowing owls. Although no burrowing owls were detected during the focused surveys, indirect impacts to burrowing owl may occur through ground disturbance, habitat loss, construction noise and vibration. Impacts to burrowing owl would be less than significant with the implementation of Mitigation Measure BIO-1. As such, the project is consistent with Section 6.3.2 of the MSHCP.

Section 6.1.4

Section 6.1.4 of the MSHCP addresses guidelines pertaining to urban/wildlands interface. The urban/wildlands interface guidelines presented in Section 6.1.4 of the MSHCP are intended to address indirect effects associated with new development in proximity to MSHCP Conservation Areas. The project site is not located adjacent to any Criteria Cells, Conservation Areas, Cores/Linkages, or P/QP lands identified by the MSHCP and thus would not affect these areas. As such, the 6.1.4 guidelines do not apply and the project is considered to be consistent with Section 6.1.4 of the MSHCP.

Section 7.5.3 and Appendix C

Section 7.5.3 of the MSHCP outlines construction guidelines when constructing facilities within the Criteria Area or within P/QP lands. The proposed project is not within a Criteria Area or within P/QP lands. The proposed project will incorporate the applicable Construction Guidelines per MSHCP Section 7.5.3 and the BMPs contained in Appendix C. As such, the proposed project will satisfy the BMP requirements of the MSHCP and is consistent with Section 7.5.3 of the MSHCP.

Based on the results of the Biological Resources Assessment and MSHCP Consistency Analysis, the project would not conflict with the MSHCP or any other habitat conservation plan. Therefore, impacts would be less than significant with mitigation incorporated.

4.4.3 Mitigation Measures

- BIO-1** A pre-construction survey for burrowing owl shall be completed by a qualified biologist no more than 30 days prior to commencement of construction activities in accordance with the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) burrowing owl survey guidelines (County of Riverside 2006). If burrowing owls are

observed during the preconstruction survey, impacts shall be avoided through implementation of the burrowing owl avoidance measures as described in the MSHCP.

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4.5 CULTURAL RESOURCES

4.5.1 Environmental Setting

A Cultural Resources Assessment (Michael Baker International, May 2022) was prepared for the project and is included as Appendix C of this IS/MND. The results of the report are summarized below and concluded that no significant prehistoric or historic-period cultural resources as defined by CEQA Section 15064.5(a) or Public Resources Code (PRC) 21083.2(g) were identified within the project's area of potential affect (APE). The report concluded that the potential to discover significant subsurface cultural deposits within the APE is low. The APE was delineated to encompass the maximum extent of ground disturbance required by the project design and equipment staging. The vertical APE for the project (defined as the maximum depth of project activities) measures approximately 12 to 16 feet. The APE is characterized as developed and undeveloped-disturbed land.

Identification of Cultural Resources Within the Project Area

Records Search

A cultural resource literature and records search was conducted for the APE and within one mile of the APE at the Eastern Information Center at the University of California, Riverside on January 18, 2022. Seventy-five cultural resource investigations have been conducted previously within one mile of the APE. Five of these studies involved portions of the APE, resulting in approximately 100 percent of the APE having been previously studied. As a result of these studies, 49 cultural resources have been identified within one mile of the APE: 26 prehistoric and 23 historic-period sites. Three of the 49 previously recorded cultural resources are recorded within the APE as described below, including the following: 1) a segment of the historic Lateral B – Oleander Channel); 2) a historic flood control channel); and 3) a segment of Webster Avenue. These resources are described in detail below.

- **Segment of Flood Control Channel** – This resource is a segment of a flood control channel. The recorded segment measures approximately 4,270 feet in length. It is 50 feet wide across the top, 20 feet wide across the flat bottom, and is approximately 10 feet deep. This segment features hard-earth, sloped embankments along most of its length. Boulder rip-rap and concrete lining are found at the northwest end and at two locations where natural drainages converge with the flood control channel. This flood control structure appears in a 1966 aerial photograph. The channel continues in a southeasterly direction and drains into the Perris Valley Storm Drain Lateral B at the intersection of Oleander Avenue (Harley Knox Boulevard) and Heacock Street. This resource was evaluated and recommended ineligible for listing in the National Register or California Register. It is not a historical resource or historic property as defined by CEQA or Section 106 of the National Historic Preservation Act (NHPA).
- **Lateral B – Oleander Channel** – This resource is a segment of a flood control channel known as the Lateral B – Oleander Channel. It was constructed in the 1950s as part of the Perris Valley Storm Drain to alleviate flooding across the relatively flat landscape. The Lateral B – Oleander Channel drains southeast towards the San Jacinto River. This segment is bisected by Webster Avenue, which is carried over the channel by a concrete culvert. The segment of the channel features a combination of hard-earth sloped embankments, stone rip-rap, and concrete-lined slopes. This segment of the Lateral B – Oleander Channel measures 290 feet long, between 40 and 90 feet wide at the top, between 24 and 40 feet wide across the flat bottom, and 10 feet deep. This resource has been formally evaluated and recommended ineligible for listing in the National Register and California Register. It is not a historical resource or historic property as defined by CEQA or Section 106 of the NHPA.

- **Segment of Webster Avenue** – This resource is a segment of road comprising multiple construction types including an unpaved, graded dirt road south of Harley Knox Boulevard, and a dirt and partially gravel road north of Harley Knox Boulevard. This segment of Webster Avenue measures approximately 30 feet wide. It has existed since the 1890s and appears never to have been paved. Despite its age, evaluation of the resource concluded it lacks historic significance. This resource has been formally evaluated and recommended ineligible for listing in the National Register and California Register. It is not a historical resource or historic property as defined by CEQA or Section 106 of the NHPA.

Sacred Lands File Search

On January 13, 2022, a letter was sent to the Native American Heritage Commission (NAHC) describing the project and asking the commission to review its Sacred Lands File for any Native American cultural resources that might be affected by the project. Also requested were the names of Native Americans who might have information or concerns about the APE. The NAHC responded on March 3, 2022, stating that a search of the Sacred Lands File provided positive results and to contact the Pechanga Band of Indians for more information. The NAHC also provided a list of Native American contacts. Refer to Section 4.18, Tribal Cultural Resources, of this IS/MND for a discussion regarding tribal consultation pursuant to AB-52.

Buried Site Sensitivity Summary

Archaeological site sensitivity is considered low based upon a lack of previously recorded archaeological sites within the APE, and the previous disturbance in the APE. Previously recorded prehistoric sites within one mile of the APE seem largely dependent upon the presence of bedrock exposures, which were a critical resource for food processing. The APE has no exposures of bedrock.

The project site is located within a highly developed military air base. Previous ground disturbances include the construction of the existing runways and AFB facilities. The APE was likely entirely flattened during the construction of the facility for plane approach and departure safety. This inference is supported by the gradual flattening and normalization of the topography after the construction of the base according to the historic map analysis. The earthmoving during construction would likely have removed the contextual relationships for considerations of the integrity of any finds. Therefore, the APE has low sensitivity for significant or potentially significant prehistoric or historic-period archaeological sites because of historic and modern development.

Survey Results

As a result of the records search and field survey, four built environment resources were identified within the APE. Two of the built environment resources are segments of previously recorded flood control structures associated with the PVC, one is a previously recorded road segment, and one is a new built environment resource identified during the survey as a MARB utility building (Utility Building #1300). No additional prehistoric or historical archeological resources were encountered during the survey.

Neither the existing flood control structures nor the road segment are eligible for listing in the National Register and California Register because they do not meet any of the criteria for historical significance. The fourth resource identified during the survey (Utility Building #1300) does not appear to meet any of the significance criteria required for listing in the National Register or California Register, or as a Riverside County Historical Landmark designation. It is not a historical resource as defined by CEQA Section 15064.5(a) or 36 CFR Part 800.

4.5.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A Cultural Resources Assessment was prepared for the proposed project (Michael Baker International 2022). Refer to [Appendix C, Cultural Resources Assessment](#), for the full report.

Would the project:

- a) *Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? **Determination: No Impact.***

Cultural resources are evaluated using California Register of Historical Resources (CRHR) eligibility criteria in order to determine whether any of the sites are Historical Resources, as defined by CEQA. CEQA requires that impacts to Historical Resources be identified and, if the impacts would be significant, that mitigation measures to reduce the impacts be applied.

A Historical Resource is a resource that:

1. Is listed in or has been determined eligible for listing in the CRHR by the State Historical Resources Commission;
2. Is included in a local register of historical resources, as defined in Public Resources Code 5020.1(k);
3. Has been identified as significant in a historical resources survey, as defined in Public Resources Code 5024.1(g); or
4. Is determined to be historically significant by the CEQA lead agency [CCR Title 14, Section 15064.5(a)]. In making this determination, the CEQA lead agency usually applies the CRHR eligibility criteria.

The eligibility criteria for the CRHR are as follows [CCR Title 14, Section 4852(b)]:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2. It is associated with the lives of persons important to local, California, or national history.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, the resource must retain integrity. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association [CCR Title 14, § 4852(c)]. Impacts to a Historical Resource (as defined by CEQA) are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired [CCR Title 14, Section 15064.5(a)].

As discussed, four historic-age built environment resources were identified within the APE. Two of the built environment resources are segments of previously recorded flood control structures associated with the PVC, one is a previously recorded road segment, and one is a new built environment resource identified during the survey as a MARB utility building (Utility Building #1300). Based on the Cultural Resources Assessment, the four historic-age built environment resources were found ineligible for the National Register, CRHR, or local designation. As such, these resources are not considered a historical resource under CEQA and development of the proposed project would not result in impacts to historic resources. No impact would occur in this regard.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? **Determination: Less Than Significant With Mitigation Incorporated.***

As discussed, no archaeological resources were identified during the background research and pedestrian field survey for the project. Nevertheless, given that the project would require excavation of up to 16 feet, there is potential that project-related ground-disturbing activities could uncover previously undiscovered cultural resources. In the unlikely event that archaeological resources are encountered during project construction, Mitigation Measure CUL-1 would require all project construction efforts to halt until an archaeologist examines the site, identifies the archaeological significance of the find, and recommends a course of action. With implementation of Mitigation Measure CUL-1, the project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines, and impacts would be reduced to less than significant levels.

- c) *Disturb any human remains, including those interred outside of formal cemeteries? **Determination: Less Than Significant Impact.***

Due to the level of disturbance on the project site and in the site vicinity, it is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during earth removal or ground-disturbing activities. Nonetheless, if human remains are found, those remains would require proper treatment, in accordance with applicable laws. State of California Public Resources Health and Safety Code Section 7050.5 through 7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the NAHC and consultation with the individual identified by the NAHC to be the most likely descendant. If human remains are found during excavation, excavation must stop near the find and any area that is reasonably suspected to overlay adjacent remains until the County Coroner has been called out, the remains have been investigated, and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with the aforementioned regulations, impacts related to the disturbance of human remains are less than significant.

4.5.3 Mitigation Measures

CUL-1 If deposits of prehistoric or historical materials are encountered during project construction, all work within 50 feet of the discovery shall be halted until an archaeologist can evaluate the findings and make recommendations. A qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find. The archaeologist shall have the authority to modify the no-work radius as appropriate, using professional judgement.

- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.
- If the professional archaeologist determines that the find represents a cultural resource from any time period or cultural affiliation, the handling of the cultural resource(s) shall follow the applicable recommendations as described in the Cultural Resources Management Plan (TCRMP) prepared for the project, as required by Mitigation Measure TCR-1.

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4.6 ENERGY

4.6.1 Environmental Setting

Electricity/Natural Gas Services

Southern California Edison provides electrical services to Riverside County through State-regulated public utility contracts. Southern California Edison, the largest subsidiary of Edison International, is the primary electricity supply company for much of Southern California. It provides 14 million people with electricity across a service territory of approximately 50,000 square miles.

The Southern California Gas Company provides natural gas services to the project area. Southern California Gas services approximately 21.6 million customers, spanning roughly 20,000 square miles of California.

Energy Consumption

Electricity use is measured in kilowatt-hours (kWh), and natural gas use is measured in therms. Vehicle fuel use is typically measured in gallons (e.g. of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh.

The electricity consumption associated with all non-residential uses in Riverside County from 2016 to 2020 is shown in [Table 4.6-1](#). As indicated, the demand has decreased since 2016.

Table 4.6-1: Non-Residential Electricity Consumption in Riverside County 2016-2020

Year	Non-Residential Electricity Consumption (kilowatt hours)
2020	8,014,699,265
2019	8,165,546,506
2018	8,248,461,330
2017	8,229,302,912
2016	8,249,798,573

Source: California Energy Commission. Energy Consumption Data Management System (ECDMS). 2022. <https://ecdms.energy.ca.gov/> Accessed 2-14-22.

The natural gas consumption associated with all non-residential uses in Riverside County from 2016 to 2020 is shown in [Table 4.6-2](#). As indicated, with the exception of year 2019, the demand has decreased since 2016.

Table 4.6-2: Non-Residential Natural Gas Consumption in Riverside County 2016-2020

Year	Non-Residential Electricity Consumption (kilowatt hours)
2020	134,892,256
2019	147,961,563
2018	139,190,917
2017	139,148,907
2016	143,265,401

Source: California Energy Commission. Energy Consumption Data Management System (ECDMS). 2022. <https://ecdms.energy.ca.gov/> Accessed 2-14-22.

Total automotive fuel consumption in Riverside County from 2015 to 2019 is shown in [Table 4.6-3](#). As shown, on-road automotive fuel consumption increased from 2015 to 2016 but has decreased since 2016. Riverside County's heavy-duty diesel fuel consumption has increased since 2015.

Table 4.6-3: Automotive Fuel Consumption in Riverside County 2015-2020

Year	Gasoline Fuel Consumption (Thousand Gallons)	Heavy-Duty Vehicle/Diesel Fuel Consumption (Thousand Gallons)
2020	733,004	257,800
2019	743,907	256,047
2018	756,450	253,005
2017	768,458	249,415
2016	799,118	247,131
2015	771,276	230,281

Source: California Air Resources Board, EMFAC2017.

4.6.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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ENERGY – Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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? **Determination: Less Than Significant Impact.***

This analysis focuses on the one source of energy that is relevant to the proposed project: transportation fuel for vehicle trips associated with project construction. The project’s gasoline fuel consumption during the construction period is estimated to be 122,785 gallons of fuel, which would increase the annual construction-related gasoline fuel use in the county by 0.01 percent during the time that project construction takes place. As such, project construction would have a nominal effect on local and regional energy supplies, especially over the long-term. Additionally, construction equipment fleet turnover and increasingly stringent State and federal regulations on engine efficiency combined with State regulations limiting engine idling times and require recycling of construction debris, would further reduce the amount of transportation fuel demand during project construction. For these reasons, it is expected that construction fuel consumption associated with the project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. As such, this impact would be less than significant.

As the proposed project consists of stormwater infrastructure improvements (i.e. RCB channel for flood control purposes), project operations would not involve new buildings or uses which would introduce new permanent stationary or mobile sources of emissions within the project area. The project would not result in increased vehicular trips to and from the project site and would not

generate new operational emissions. As a result, project operations would not result in increased energy consumption from electricity, natural gas, or fuel usage.

- b) *Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?*
Determination: Less Than Significant Impact.

As stated above in Impact 4.6(a), project operation would not have operational energy, natural gas, or fuel consumption. The project would not result in increased vehicular trips to and from the project site. As the project would not have any operational energy, natural, or fuel usage, the project would not conflict with any State or local plan for renewable energy or energy efficiency. Therefore, the proposed project would result in less than significant impacts associated with renewable energy or energy efficiency plans.

4.6.3 Mitigation Measures

No significant impacts were identified and no mitigation is required.

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4.7 GEOLOGY AND SOILS

4.7.1 Environmental Setting

Geomorphic Setting

Regional/Local

The project area is located within the MJPA Planning Area and the City of Perris, in the northern portion of the Perris Plain in the Santa Ana Basin. The Santa Ana Basin covers an area of approximately 2,000 square miles and is located within the Peninsular Ranges geomorphic province. The Peninsular Ranges province consists of several northwesterly-trending ranges in southwestern California. The province is truncated to the north by east-west trending Transverse Ranges. Prior to the mid-Mesozoic, the region was covered by seas and thick marine sedimentary and volcanic sequences were deposited. The bedrock geology that dominates the elevated areas of the Peninsular Ranges consists of high-grade metamorphic rocks intruded by Mesozoic plutons. During the Cretaceous, extensive mountain building occurred during the emplacement of the southern California batholith. The Peninsular Ranges have been significantly disrupted by Tertiary and Quaternary strike-slip faulting along the Elsinore and San Jacinto faults. The tectonic activity has resulted in the present terrain.

Project Site

The MARB is located on the Perris Erosional Surface and the Paloma Surface. The depositional surface is underlain by sediments of various thicknesses that have filled the Perris Groundwater Basin. There are bedrock outcroppings in the western and central portions of the MARB. The buried bedrock surface was defined by a gravimetric survey and described as complex bedrock scour surface morphology. The ground surface at the Main Base is relatively flat. Depth to bedrock ranges from the surface (at the bedrock outcroppings) to 900 feet below ground surface (bgs). Subsurface investigations at the Main Base show that most of the underlying sediments consist of laterally discontinuous, interbedded fine to medium sands, silts, and lean clays with minor amounts of gravel. The uppermost units are not affected by elevation changes in the bedrock surface; deeper units are interrupted by bedrock highs.

Soils

Based on review of the Custom Soil Resource Report for Western Riverside County, California (USDA 2022), the project site is underlain by the following six (6) classified soil units: Exeter sandy loam, deep, 0 to 2 percent slopes (EpA); Greenfield sandy loam, 0 to 2 percent slopes (GyA); Hanford fine sandy loam, 0 to 2 percent slopes (HgA); Monserate sandy loam, 0 to 5 percent slopes (MmB); Pachappa fine sandy loam, 0 to 2 percent slopes (PaA); and Ramona sandy loam, 0 to 2 percent slopes, MLRA 19 (RaA). Michael Baker conducted a query of the California Hydric Soils List (USDA 2022) in an effort to verify whether any soil units occurring within the project site are considered to be hydric. Based on the California Hydric Soils List, none of the soil units occurring within the project site are listed as hydric.

Groundwater

There is an existing aquifer underlying the MARB, which has been divided into three hydrostratigraphic units (HSUs)³ including the upper alluvium, lower alluvium and bedrock units based on variations in contaminant concentrations. The upper alluvial unit is approximately 70 feet thick (northwestern portion of the MARB) to 170 feet thick (east of the Base) and extends from the ground surface to elevations ranging from 1,478 feet amsl at the northwestern portion of the MARB to 1,290 feet amsl southeast of the MARB. This unit predominantly comprises silts and clays. The lower alluvial unit has a thickness that

³ A hydrostratigraphic unit is defined as a part of a body of rock that forms a distinct hydrologic unit with respect to the flow of ground water.

varies across the MARB and region based on buried bedrock elevation. This unit includes sands, silts, and clays. The bedrock unit, which is composed of weathered and fractured bedrock, ranges in thickness from 10 feet to 200 feet across the MARB and region.

Groundwater on the MARB has been characterized as semi-confined. Groundwater at in the western portion of MARB is essentially unconfined. Groundwater on western MARB exists in a relatively thin layer of weathered crystalline bedrock and alluvial soils. On the MARB, groundwater flow direction in the upper alluvial unit is generally to the southeast. Regional groundwater elevations have been rising since the 1970s; this rise in groundwater levels, along with changes in well production on and around the MARB, has caused changes in the groundwater flow direction over the years.

Geologic Hazards

A fault is a fracture in the crust of the earth along which rocks on one side have moved relative to those on the other side. Based on criteria established by the California Geological Survey (CGS), faults are classified as active, potentially active, or inactive. According to those criteria, active faults are those that have shown evidence of movement within the past 11,700 years (i.e., Holocene epoch). Potentially active faults are those that have shown evidence of movement between 11,700 and 1.6 million years ago (Quaternary age). Faults showing no evidence of surface displacement within the last 1.6 million years are considered inactive for most design purposes, with the exception of the design of some critical buildings or structures (e.g., hospitals, communication centers and emergency response centers).

There currently is not a published Alquist-Priolo Earthquake Zone Map for the project area (Riverside East Quadrangle). As such, the CGS has not mapped any active or potentially active faults with potential surface fault rupture in the Riverside East Quadrangle. In addition, the Riverside County Information Technology (RCIT) interactive GIS website does not depict any fault zones near the project area.

While there are no known faults that cross the project area, several faults in the region have the potential to produce seismic impacts. Three significant faults pass within 20 miles of the project area. The Elsinore Fault passes within 13 miles of the project area, extending approximately 4 miles west of Lake Mathews and the City of Corona and south into the City of Lake Elsinore. This northwest/southwest trending fault has the capability of producing up to a 6.0 magnitude (M) earthquake. The San Andreas Fault is located approximately 16 miles northeast of the project area, generally following the San Bernardino Mountains. The San Andreas Fault extends 600 miles from Eureka in Humboldt County south to the International Border with Mexico. The San Andreas Fault is estimated to have the capability of producing up to an 8.4 M earthquake. The nearest fault to the project area, the San Jacinto Fault, is located approximately 8 miles from the project area. The San Jacinto Fault is considered to be one of the most seismically-active faults in the region. The San Jacinto Fault Zone is a right-lateral strike-slip fault with minor right-reverse with a slip rate ranging between 7 and 17 millimeters (mm)/year. This fault is more than 125 miles long from northwest of the City of El Centro in Imperial County to northwest of San Bernardino, passing through the intersection of I-10 and I-215, the City of Loma Linda and the Box Springs Mountains. The interval between surface ruptures ranges between 100 and 300 years. The San Jacinto Fault Zone has the capability of producing up to a 7.0 M earthquake. An earthquake with a 7.58 M is the estimated seismic event that could impact the project area.

Liquefaction

The ground surface on the project site is relatively flat and surface elevations range from approximately 1,480 to 1,520 feet amsl. The RCIT interactive GIS website indicates that the on-site project area is located within a zone of moderate high liquefaction susceptibility.

Landslides

As discussed above, the project site is relatively flat with on-site surface elevations ranging from 1,480 to 1,520 feet amsl.

4.7.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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GEOLOGY AND SOILS – Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A Paleontological Resources Survey was prepared for the proposed project (Michael Baker International, March 2022). Refer to Appendix D, Paleontological Resources Identification Memo, for the full report.

Would the project:

- a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*
 - i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other*

substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

*ii) Strong seismic ground shaking? **Determination: No Impact.***

The project site has one potentially active fault within its vicinity, the San Jacinto fault, which lies approximately 8 miles to the southeast of the project site. There are no faults located within an Alquist-Priolo Earthquake Fault Zone within the project site. Because none of these faults cross or trend toward the project site, fault-line surface rupture is not considered a hazard. Consequently, the project would have no impact regarding exposing people or structures to rupture of a known earthquake fault. No impact would occur.

*iii) Seismic-related ground failure, including liquefaction? **Determination: Less Than Significant Impact.***

The Alquist-Priolo Earthquake Fault Zoning Act prohibits the construction of buildings for human occupancy across the trace of a known fault, and requires structures intended for human occupancy to be set back generally 50 feet from the fault trace. As discussed above, the RCIT interactive GIS website indicates that the on-site project area is located within a zone of moderate high liquefaction susceptibility. However, there is no published Alquist-Priolo Earthquake Zone Map for the Riverside East Quadrangle. As such, the CGS has not mapped any active or potentially active faults with potential surface fault rupture in the Riverside East Quadrangle. The RCIT interactive GIS website does not depict any fault zones near the project area. The nearest fault, the San Jacinto Fault, is located approximately 8 miles from the project area. Based on the fault data collected and known for the San Jacinto Fault, the proposed project would be located at a distance greater than 50 feet from the nearest San Jacinto Fault trace, which would be consistent with the requirements of the Alquist-Priolo 50-foot setback requirement. As such, the possibility of a seismic-related ground failure on the project site is considered to be low.

In addition, design and construction of the proposed project would follow the recommendations of the site-specific geotechnical investigation that is required for the project, to be prepared by a registered civil, structural engineer, and/or engineering geologist. At a minimum, the project would be required to adhere to seismic requirements in the most current version of the California Building Code (CBC) and the requirements and standards contained in the applicable chapters of the MIPA and City of Perris Municipal Codes. Thus, development of the project would not expose people or structures to potential substantial risk of loss, injury, or death involving rupture of a known earthquake fault, and impacts regarding seismic-related ground failure would be less than significant.

*iv) Landslides? **Determination: Less Than Significant Impact.***

Landslides can generally occur in areas that have steep slopes and can be caused by seismic activity and/or extended periods of rain resulting in high water saturation of soils. As discussed above, the project site is relatively flat and there are no slopes located within or adjacent to the project site. As such, the potential for landslides and seismically induced slope instability at the project site is considered to be low. Further, the proposed project would not create new significant slopes on-site which would create or be subject to landslide hazards. Therefore, impacts to the proposed project associated with landslides or other forms of natural slope instability would be less than significant.

- b) *Result in substantial soil erosion or the loss of topsoil? **Determination: Less Than Significant Impact.***

Project construction would result in ground surface disruption during excavation, grading, and trenching that would create the potential for erosion to occur. According to the MJPA Development Code, Section 9.08.080, *Grading*, an erosion control plan for the project would be prepared by a registered civil engineer and submitted to and approved by the MJPA Commission prior to grading plan approval. The erosion control plan would address methods of control (i.e., desilting basins, check dams, sandbagging) and interim storm drain construction if necessary. Construction activities would be carried out in accordance with applicable standard erosion control practices required pursuant to the MJPA Development Code, CBC, and the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit issued by the RWQCB, as applicable. In accordance with these requirements, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared that incorporates Best Management Practices (BMPs) to control water erosion during the proposed project's construction period. Soil erosion impacts would be reduced to a less than significant level in this regard.

- 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 on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? **Determination: Less Than Significant Impact.***

The project site is relatively flat, lacking steep slopes; therefore, landslides are not anticipated. In addition, the project would construct below ground or at grade drainage improvements. Structures associated with the project would be required to comply with MJPA, District, State, and/or federal design criteria and/or other accepted non-building structure standards to reduce the risks associated with seismically induced ground failures. Therefore, the project would have a less than significant impact related to 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 risks to life or property? **Determination: Less Than Significant Impact.***

As stated above, six soil groups are represented within the project site. The project site is primarily comprised of Ramona sandy loam soils with 0 to 2 percent slopes followed by Hanford fine sandy loam soils with 0 to 2 percent slopes according to the California Hydric Soils List (USDA 2022). Additionally, no habitable structures are proposed as part of the project. Due to the soil characteristics mentioned above, the project is not anticipated to create a substantial risk to life or property. A less than significant impact would occur.

- e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? **Determination: No Impact.***

The project does not propose the use or construction of septic tanks; therefore, no impact as a result of the presence of soils incapable of supporting the use of septic tanks or alternative wastewater disposal systems would occur.

- f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? **Determination: Less Than Significant With Mitigation Incorporated.***

Paleontological resources are the preserved fossilized remains of plants and animals. Fossils and traces of fossils are preserved in sedimentary rock units, particularly fine- to medium-grained marine, lake, and stream deposits, such as limestone, siltstone, sandstone, or shale, and in ancient soils (paleosols). Such resources are also found in coarse-grained sediments, such as

conglomerates or coarse alluvium sediments. Additionally, fossils are rarely preserved in igneous or metamorphic rock units. Fossils may occur throughout a sedimentary unit and are more likely to be preserved subsurface, where they have not been damaged or destroyed by previous ground disturbance, amateur collecting, or natural causes such as erosion. In contrast, archaeological and historic resources are often recognized by surface evidence of their presence.

A Paleontological Resources Survey was prepared for the project and included a request for a fossil locality records search through the Western Science Center (WSC) located in Hemet, CA; refer to [Appendix D](#). One paleontological locality was recorded within a general, 5-mile radius search. Significant fossil localities (e.g., Diamond Valley Lake) have been found outside this radius in similar geologic formations to those observed in the project area. The sensitivity of the Pleistocene-age alluvium formations, such as those in the project area, is typically high in intact geologic contexts. Therefore, the project area is considered highly sensitive for paleontological resources.

Due to the depth and nature of ground-disturbing activities, the project has high potential to disturb paleontological resources. Following the protocol from the County of Riverside General Plan (Riverside County 2015: Table 4.7.2), full-time paleontological monitoring is recommended during ground disturbance, at depths greater than 4 feet, in undisturbed geologic contexts which have the potential to contain significant paleontological resources. Activities occurring along the current surface and at depths less than 4 feet do not require full-time monitoring. Implementation of Mitigation Measure GEO-1 will ensure that paleontological resources are protected in the event of any discovery during earthwork activities and will reduce impacts to less than significant.

4.7.3 Mitigation Measures

- GEO-1** Due to the potential to impact sensitive paleontological resources during construction activities, the District shall prepare or cause for a Paleontological Resource Impact Mitigation Program (PRIMP) to be prepared prior to commencement of ground disturbing activities. The PRIMP shall be based on the final construction grading plans prepared by the District and detail construction monitoring requirements for all work consisting of excavation at depths greater than 4 feet below the original ground surface in undisturbed geologic contexts.

4.8 GREENHOUSE GAS EMISSIONS

4.8.1 Environmental Setting

The natural process through which heat is retained in the troposphere is called the “greenhouse effect.” The greenhouse effect traps heat in the troposphere through a threefold process as follows: short wave radiation emitted by the sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long wave radiation; and GHGs in the upper atmosphere absorb this long wave radiation and emit this long wave radiation into space and toward the Earth. This “trapping” of the long wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

California is a substantial contributor of global GHGs, emitting approximately 418 million metric tons of carbon dioxide equivalent (MMTCO₂e) per year. A carbon dioxide equivalent is defined as the number of metric tons of CO₂ emissions with the same global warming potential as one metric ton of another GHG. Methane (CH₄) is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which is to increase the earth’s ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation will be required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of CO₂, CH₄, and nitrous oxide (N₂O) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found that CO₂ concentrations ranged from 180 to 300 parts per million (ppm). For the period from approximately 1750 to the present, global CO₂ concentrations increased from a pre-industrialization period concentration of 280 to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range. As of May 2022, the highest monthly average concentration of CO₂ in the atmosphere was recorded at 420 ppm.

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 ppm carbon dioxide equivalent (CO₂e) concentration is required to keep global mean warming below 2 degrees Celsius (°C), which in turn is assumed to be necessary to avoid dangerous climate change.

4.8.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A greenhouse gas emissions memorandum was prepared for the project (Michael Baker International, June 2022). Refer to [Appendix E, Greenhouse Gas Emissions Memorandum](#).

Would the project:

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?* **Determination: Less Than Significant Impact.**

The City has not adopted a numerical significance threshold for assessing impacts related to GHG emissions. Similarly, the SCAQMD, CARB, or any other state or regional agency has not yet adopted a numerical significance threshold for assessing GHG emissions that applies to the project. Since there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the project’s impacts related to GHG emissions focuses on its consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. This evaluation of consistency with such plans is the sole basis for determining the significance of the project’s GHG-related impacts on the environment.

Notwithstanding, for informational purposes, the analysis also calculates the amount of GHG emissions that would be attributable to the project using recommended air quality models, as described below. The primary purpose of quantifying the project’s GHG emissions is to satisfy State CEQA Guidelines Section 15064.4(a), which calls for a good-faith effort to describe and calculate emissions. The estimated emissions inventory is also used to determine if there would be a reduction in the project’s incremental contribution of GHG emissions as a result of compliance with regulations and requirements adopted to implement plans for the reduction or mitigation of GHG emissions. However, the significance of the project’s GHG emissions impacts is not based on the amount of GHG emissions resulting from the project.

Project-Related Sources of Greenhouse Gases

The proposed project would result in direct and indirect emissions of CO₂, N₂O, and CH₄, and would not result in other GHGs that would facilitate a meaningful analysis. Therefore, this analysis focuses on these three forms of GHG emissions. Project-related GHG emissions include emissions from construction activities. The most recent version of the California Emissions Estimator Model (CalEEMod), version 2020.4.0, was used to calculate direct and indirect project-related GHG emissions. [Table 4.8-1, Estimated Greenhouse Gas Emissions](#), presents the estimated CO₂, N₂O, and CH₄ emissions associated with the proposed project. CalEEMod outputs are contained within [Appendix E](#).

Table 4.8-1: Estimated Greenhouse Gas Emissions

Source	CO ₂	CH ₄		N ₂ O		Total MTCO ₂ e ^{2,3}
	Metric tons/year ¹	Metric tons/year ¹	Metric tons of CO ₂ e ^{1,3}	Metric tons/year ¹	Metric tons of CO ₂ e ^{1,3}	
Direct Emissions						
Construction (amortized over 30 years) ⁴	47.04	0.01	0.36	<0.01	0.05	47.45
<i>Total Project-Related Emissions³</i>	<i>48.36 MTCO₂e/year</i>					
Notes:						
Carbon dioxide equivalent = CO ₂ e; metric tons of carbon dioxide equivalent per year = MTCO ₂ e per year						
1. Project emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD.						
2. Totals may be slightly off due to rounding.						
3. Carbon dioxide equivalent values calculated using the U.S. Environmental Protection Agency Website, Greenhouse Gas Equivalencies Calculator, http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator , accessed May 13, 2022.						
4. Total project construction GHG emissions equate to 1,423.39 MTCO ₂ e. Value shown is amortized over the lifetime of the project (assumed to be 30 years).						
Refer to Appendix E for detailed model input/output data.						

Construction of the project would emit GHG emissions, as indicated in [Table 4.8-1](#). In total, the project would result in approximately 47.45 MTCO₂e per year when amortized over 30 years (or a total of 1,423.39 MTCO₂e emissions). Maintenance activities that may be required during project operation would occur on an as needed basis. Typical maintenance activities for the mainline RCB would be conducted by the District. Due to the “self-cleaning” nature of this facility, maintenance is expected to be minimal. Two existing inlets collecting local drainage within MARB property would be maintained by MARB. Additionally, the proposed inlet along Heacock Street would require maintenance that may include vegetation removal or thinning, sediment removal, and debris and trash removal, none of which would have the potential to result in significant air pollution. The project would generate minimal trips in operations. As a result, the project would not result in significant increase in operational GHG emissions.

- b) *Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? **Determination: Less Than Significant Impact.***

Consistency with Applicable GHG Plans, Policies, or Regulations

The GHG plan consistency analysis for the project is based on the project’s consistency with the 2017 Scoping Plan, and 2020-2045 RTP/SCS. The 2017 Scoping Plan describes the approach California will take to reduce GHG emissions by 40 percent below 1990 levels by the year 2030. The 2020-2045 RTP/SCS is a regional growth management strategy that targets per-capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region and incorporates local land use projections and circulation networks in city and county general plans. The following discussion analyzes the project’s consistency with the CARB 2017 Scoping Plan, and SCAG 2020-2045 RTP/SCS.

Consistency with the SCAG 2020-2045 RTP/SCS

The SCAG’s 2020-2045 RTP/SCS includes performance goals that were adopted to help focus future investments on the best-performing projects, as well as different strategies to preserve, maintain, and optimize the performance of the existing transportation system. The 2020-2045 RTP/SCS is forecasted to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets, adopted in March 2018. Five key SCS strategies are included in the 2020-2045 RTP/SCS to help the region meet its regional VMT and GHG reduction goals, as required by the State. [Table 4.8-2, Consistency with the 2020-2045 RTP/SCS](#), shows the project’s

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consistency with these five strategies found within the 2020-2045 RTP/SCS. As shown, the proposed project would be consistent with the GHG emission reduction strategies contained in the 2020-2045 RTP/SCS.

Table 4.8-2: 2020-2045 RTP/SCS Project Consistency Analysis

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Focus Growth Near Destinations and Mobility Options		
<ul style="list-style-type: none"> • Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations • Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets • Plan for growth near transit investments and support implementation of first/last mile strategies • Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses 	Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.	Not Applicable. The proposed project consists of a storm drain facility. As such, no new land uses, or development are proposed that would focus growth near destinations and mobility options. Therefore, this strategy is not applicable to the proposed project.
Promote Diverse Housing Choices		
<ul style="list-style-type: none"> • Preserve and rehabilitate affordable housing and prevent displacement • Identify funding opportunities for new workforce and affordable housing development • Create incentives and reduce regulatory barriers for building context sensitive accessory dwelling units to increase housing supply • Provide support to local jurisdictions to streamline and lessen barriers to housing development that supports reduction of greenhouse gas emissions 	PGA, Job Centers, HQTAs, NMA, TPAs, Livable Corridors, Green Region, Urban Greening.	Not Applicable. Refer to response above regarding project consistency with the “Focus Growth Near Destinations and Mobility Options” strategy. The proposed project does not include residential development; thus, this strategy is not applicable.
Leverage Technology Innovations		
<ul style="list-style-type: none"> • Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space • Improve access to services through technology—such as telework and telemedicine as well as other incentives such as a “mobility wallet,” an app-based system for storing transit and other multi-modal payments • Identify ways to incorporate “micro-power grids” in communities, for example solar energy, hydrogen fuel cell power storage and power generation 	HQTA, TPAs, NMA, Livable Corridors.	Not Applicable. Refer to response above regarding project consistency with the “Focus Growth Near Destinations and Mobility Options” strategy. The proposed project consists of a storm drain facility with minimal maintenance activities anticipated; thus, this strategy is not applicable.
Support Implementation of Sustainability Policies		
<ul style="list-style-type: none"> • Pursue funding opportunities to support local sustainable development implementation projects that reduce greenhouse gas emissions • Support Statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations • Support local jurisdictions in the establishment of Enhanced Infrastructure Financing Districts (EIFDs), Community Revitalization and Investment Authorities (CRIAs), or other tax increment or value capture tools to finance sustainable infrastructure and development projects, including parks and open space 	Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.	Not Applicable. Refer to response above regarding project consistency with the “Focus Growth Near Destinations and Mobility Options” strategy. The proposed project consists of a storm drain facility with minimal maintenance activities anticipated; thus, this strategy is not applicable.

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Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
<ul style="list-style-type: none"> • Work with local jurisdictions/communities to identify opportunities and assess barriers to implement sustainability strategies • Enhance partnerships with other planning organizations to promote resources and best practices in the SCAG region • Continue to support long range planning efforts by local jurisdictions • Provide educational opportunities to local decisions makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy 		
Promote a Green Region		
<ul style="list-style-type: none"> • Support development of local climate adaptation and hazard mitigation plans, as well as project implementation that improves community resiliency to climate change and natural hazards • Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration • Integrate local food production into the regional landscape • Promote more resource efficient development focused on conservation, recycling and reclamation • Preserve, enhance and restore regional wildlife connectivity • Reduce consumption of resource areas, including agricultural land • Identify ways to improve access to public park space 	<p>Green Region, Urban Greening, Greenbelts and Community Separators.</p>	<p>Not Applicable. Refer to response above regarding project consistency with the “Focus Growth Near Destinations and Mobility Options” strategy. The proposed project consists of a storm drain facility with minimal maintenance activities anticipated; thus, this strategy is not applicable.</p>

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

Consistency with the 2017 Scoping Plan

The 2017 Scoping Plan identifies GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan (2013). Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. *Table 4.8-3, Consistency with the 2017 Scoping Plan*, provides an evaluation of applicable reduction actions/strategies by emissions source category, and demonstrates that the project would be consistent with the reduction actions/strategies outlined in the 2017 Scoping Plan.

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Table 4.8-3: Consistency with the 2017 Scoping Plan

Actions and Strategies	Project Consistency Analysis
SB 350	
Achieve a 50 percent Renewables Portfolio Standard (RPS) by 2030, with a doubling of energy efficiency savings by 2030.	Consistent. The proposed project would not be an electrical provider and would not delay the goals of SB 350. Furthermore, the project would not consume electricity during operation. As such, the project would comply with SB 350.
Low Carbon Fuel Standard (LCFS)	
Increase stringency of carbon fuel standards; reduce the carbon intensity of fuels by 18 percent by 2030, which is up from 10 percent in 2020.	Consistent. Motor vehicles (including trucks) driven within the project area and hauling trucks driven during project construction would be use LCFS compliant fuels. As such, the project would comply with LCFS.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario)	
Maintain existing GHG standards of light and heavy-duty vehicles while adding an addition 4.2 million zero-emission vehicles (ZEVs) on the road. Increase the number of ZEV buses, delivery trucks, or other trucks.	Not Applicable. The project proposes a storm drain facility and would only generate minimal trips during operation as the maintenance activities would occur as needed basis. The minimal trip increase would not impeded with implementation of such reduction strategy. As such, the project would not be applicable to this strategy.
Sustainable Freight Action Plan	
Improve the freight system efficiency and maximize the use of near zero emission vehicles and equipment powered by renewable energy. Deploy over 100,000 zero-emission trucks and equipment by 2030.	Not Applicable. As discussed above, the project proposes a storm drain facility and would not generate any trips during operation. As such, the project would not be applicable to this strategy.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy	
Reduce the GHG emissions of methane and hydrofluorocarbons by 40 percent below the 2013 levels by 2030. Furthermore, reduce the emissions of black carbon by 50 percent below the 2013 levels by the year 2030.	Consistent. The project would not emit a large amount of CH ₄ (methane) emissions; refer to Table 4.8-1 . Additionally, no hydrofluorocarbons would be emitted during project implementation. As such, the proposed project would not conflict with the SLCP reduction strategy.
SB 375 Sustainable Communities Strategies	
Increase the stringency of the 2035 GHG emission per capita reduction target for metropolitan planning organizations (MPO).	Consistent. As shown in Table 4.8-2 , the key strategies associated with the 2020-2045 RTP/SCS are not applicable to the proposed storm drain facility. Thus, the project would not conflict with the goals of SB 375.
Post-2020 Cap and Trade Programs	
The Cap-and-Trade Program will reduce greenhouse gas (GHG) emissions from major sources (covered entities) by setting a firm cap on statewide GHG emissions while employing market mechanisms to cost-effectively achieve the emission-reduction goals.	Not Applicable. As shown in Table 4.8-1 , the project would generate approximately 47.45 MTCO ₂ e per year, which is below the 25,000 MTCO ₂ e/yr Cap-and-Trade screening level. Therefore, the project would not be applicable to the program.
Source: California Air Resources Board, 2017 Scoping Plan, November 2017.	

Conclusion

In summary, the plan consistency analysis provided above demonstrates that the proposed project complies with or exceeds the plans, policies, regulations and GHG reduction actions/strategies outlined in the 2020-2045 RTP/SCS and CARB 2017 Scoping Plan. Therefore, the project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs. Impacts in this regard would be less than significant.

4.8.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 Environmental Setting

A Phase I Environmental Site Assessment (Phase I ESA) was prepared for the proposed project (Group Delta Consultants, Inc. 2022). Refer to Appendix F, *Phase I Environmental Site Assessment*, for the full report.

Current Site Uses

The project site is currently vacant land with an asphalt-paved road traversing the site from north to south. The site is bordered on the north, south, and east by MARB, and on the west by PODS Moving and Storage (1330 Nandina Avenue), and multiple exterior equipment storage yards. The site's vicinity is generally characterized by industrial and military uses.

Historic Site Uses

Aerial photographs and historical topographic maps of the project site and adjoining properties from 1938 to 2018 were reviewed to identify historical land development. Based on this review, it was determined that agricultural lands (row crops) were present from 1938 to 1953. Following those years, the site appears to be vacant land, with an asphalt-paved road traversing the Site from north to south. The MARB runway appears in its current configuration to the east of the site. The adjoining properties to the west of the site start to be developed industrially by 1978 and reach their current configuration by 1990.

Project Site Reconnaissance Results

During the site reconnaissance conducted as part of the Phase I ESA prepared for the project, a groundwater monitoring well (89F4E-MW-001) was observed in the northern portion of the site. In addition, signage for a high-pressure gas pipeline was observed at the adjoining property to the east (5137 Patterson Avenue) at the site perimeter. No evidence of natural gas pipelines was found on the National Pipeline Mapping System (NPMS) database maintained by the Office of California State Fire Marshal. However, the signage may refer to an inactive, old, unreported, or abandoned pipeline. The potential east-adjoining high-pressure gas pipeline does not represent a Recognized Environmental Condition (REC); however, it does represent an Area of Concern (AOC) to the site.

Hazardous Materials Sites

The regulatory database review conducted as part of the Phase I ESA determined that the project site is located on the MAFB National Priority List (NPL) site, based on the Department of Toxic Substances Control (DTSC) (Envirostor) and State Water Resources Control Board (SWRCB) databases. The 7,123-acre MARB and the former MAFB has been used for aircraft maintenance and repair, refueling operations, and training activities since 1918. Facility operations contaminated soil and groundwater with hazardous chemicals. Three zones of groundwater contamination beneath the base were identified. Groundwater contamination has migrated to drinking water wells located off-base that are no longer in use. However, a groundwater containment system has been installed to prevent off-site groundwater migration and the off-site plume is being monitored. The MAFB NPL long-term cleanup is ongoing. Two groundwater plumes (identified as OU-1 and OU-2) are located at the eastern portion of the former MAFB.

According to a review of closed and open release cases at MARB and the former MAFB, no documented releases have occurred within the site boundaries, including all individual sites associated with groundwater plumes OU-1 and OU-2.

The *Final Fourth Five-Year Review Report at MARB and former MAFB, California* was prepared and dated July 16, 2019. According to sampling results from 2017, none of the upper and lower alluvial or bedrock groundwater contamination plumes for tetrachloroethene (PCE), trichloroethylene (TCE), or carbon

tetrachloride are located beneath the site. Based on the current monitoring well network, the groundwater plumes are generally decreasing in size. Although some contaminants were detected in off-base water supply wells, the contaminant concentrations were below California Maximum Contaminant Levels (MCLs) for drinking water and were generally not increasing. The Expanded Groundwater Extraction and Treatment System (EGETS) is in place and functioning as designed, however, it may be providing incomplete hydraulic control at the eastern base boundary. The protectiveness evaluation for the groundwater extraction and treatment remedy shall be reviewed once the per- and polyfluorinated alkyl substances (PFAS) investigation at former MAFB is complete, and a cleanup level is established in the future. The EGETS is located approximately 1.41 miles northeast of the site.

Based on the information provided, the MARB and former MAFB NPL site represents a REC to the project site. If encountered, expected ordnance would likely be limited to potential lead-containing bullets and spent cartridge casings.

Based on the eleven identified potential PFAS release sites due to the use of AFFF, the potential PFAS-impacted groundwater underlying the site represents an AOC.

Schools

The closest school to the project site is Rainbow Ridge Elementary School located at 15950 Indian Street in the City of Moreno Valley, approximately two miles northeast.

Airports

The proposed project is located within the boundaries of the March Inland Port Airport and within the MARB Airport Influence Area (AIA). The project is located in Compatibility Zone B2 per the *2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan* land use policy. The General Plan land use is currently designated as Aviation.

Wildland Fire Hazards

According to the Fire Hazard Severity Zones in State Responsibility Areas (SRA) Map for Riverside County (west), the project site is not located on, or near to land designated as moderate, high or very high fire hazard severity zone in SRA.⁴ In addition, no wildlands are present on or adjacent to the project site.

⁴ CalFire Fire Hazard Severity Zone Viewer (FHSZ). 2022. <https://egis.fire.ca.gov/FHSZ/>
Accessed March 11, 2022.

4.9.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A Phase I Environmental Site Assessment was prepared for the proposed project (Group Delta Consultants, Inc. 2022). Refer to Appendix E, Phase I Environmental Site Assessment, for the full report.

Would the project:

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?* **Determination: Less Than Significant Impact.**

The construction phase of the project may include the transport, storage, and short-term use of petroleum-based fuels, lubricants, pesticides, and other similar materials. Best Management Practices (BMPs) stipulating proper storage of hazardous materials and vehicle refueling would be implemented during construction as part of the Stormwater Pollution Prevention Plan (SWPPP). All transport, handling, use, and disposal of substances such as petroleum products, paints, and solvents related to the operation and maintenance of the project would comply with all federal, State, and local laws regulating the management and use of hazardous materials. The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous material. Impacts 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? **Determination: Less Than Significant Impact.***

As discussed above, the regulatory database review conducted as part of the Phase I ESA determined that the project site is located on the MAFB National Priority List (NPL) site, based on the Envirostor and State Water Resources Control Board (SWRCB) databases.

The MARB and former MAFB NPL site represents a REC to the project site. If encountered, expected ordnance would likely be limited to potential lead-containing bullets and spent cartridge casings. No direct evidence of contaminated soil on the site was found; however, contaminated groundwater underlies the site. In addition, based on the eleven identified potential PFAS release sites due to the use of AFFF, the potential PFAS-impacted groundwater underlying the site represents an AOC to the site. The project would be required to comply with current OSHA/CFR requirements in regards to potential worker contact with hazardous materials. If encountered, expected ordnance would likely be limited to potential lead-containing bullets and spent cartridge casings. MARB may require site-specific training, including spent ordnance training, prior to construction. Impacts would be less than significant in this regard.

In addition, the potential east-adjoining high-pressure gas pipeline also represents an AOC to the site. Prior to project commencement, the construction contractor will identify whether the potential pipeline encroaches onto the project site and whether it will be encountered during construction activities. If the construction contractor determines the high-pressure gas pipeline encroaches onto the project site and could be encountered during project construction, the construction contractor shall follow the appropriate engineering controls, monitoring, and security measures in compliance with current OSHA/CFR requirements. Impacts would be less than significant in this regard.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? **Determination: No Impact.***

There are no existing or proposed schools within 0.25-mile of the project site. The closest school to the project site is Rainbow Ridge Elementary School located at 15950 Indian Street in the City of Moreno Valley, approximately 2 miles northeast. Since there are no existing or proposed schools within 0.25-mile of the project site, no impact would occur in this regard.

- d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? **Determination: Less Than Significant Impact.***

Refer to Impact 4.9(b). The project would be required to comply with current OSHA/CFR requirements in regard to potential worker contact with hazardous materials. If encountered, expected ordnance would likely be limited to potential lead-containing bullets and spent cartridge casings. MARB may require site-specific training, including spent ordnance training, prior to construction. Impacts would be less than significant in this regard.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area? **Determination: Less Than Significant Impact.***

The project's location in the MIPA's AIA may expose people working on the project site to safety hazards. The MARB AIA surrounds the entire project site. The project site is located in airport compatibility zone B2, is between the 65 and 75 Community Noise Equivalent Level (CNEL) noise contour, and would be exposed to airport noise at or below 75 dBA CNEL. However, the project

would be required to implement protective measures for construction workers for occupational noise exposure, based on federal and State employee health and safety regulations (i.e., regulations of the Occupational Safety and Health Administration of the U.S. Department of Labor [OSHA] and the California Division of Occupational Safety and Health [Cal/OSHA]).

As the proposed project consists of stormwater infrastructure improvements (i.e. RCB channel for flood control purposes), project operations would not involve new buildings or uses which would result in a safety hazard for people working or residing in the project area. Therefore, impacts relative to airport hazards would be less than significant.

- f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? **Determination: Less Than Significant Impact.***

Operation of the project would not interfere with an adopted emergency response plan. However, the construction of the project has the potential to interfere with emergency response access to areas near the project site. Prior to any lane closures, a Traffic Control Plan would be implemented to ensure proper access to residences and businesses by emergency vehicles during construction and to maintain traffic flow; refer to Section 4.17, *Transportation*. Impacts to emergency access would be less than significant in this regard.

- g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? **Determination: Less Than Significant Impact.***

As discussed above, the project site is not located on, or near to land designated as moderate, high, or very high fire hazard severity zone in SRA, nor are there any wildlands located on or adjacent to the project site. Therefore, a less than significant impact would occur in this regard.

4.9.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

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4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

The project is located within the Lower Santa Jacinto River Watershed in Riverside County.⁵ The main drainage within the Lower San Jacinto River Watershed is the San Jacinto River which drains into Canyon Lake reservoir, and followed by drainage downstream into Lake Elsinore.

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consist of MARB to the east and scattered industrial development to the north, south, and west. An existing drainage course is located within MARB approximately 350 feet west of the existing runway and 300 feet east of the western perimeter fence boundary of MARB. Runoff in this area drains from the north to south via this natural drainage course towards a soft bottom open channel at Heacock Street and Oleander Avenue (Heacock Channel). Runoff from this point is conveyed along the PVC in an easterly followed by southeasterly direction for approximately 7.75 miles to the confluence of the San Jacinto River. Elevation ranges of the project area of construction range from approximately 1,503 to 1,472 feet amsl.

4.10.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

⁵ California Department of Water Resources, SGMA Basin Prioritization Dashboard, <https://gis.water.ca.gov/app/bp-dashboard/final/>, accessed April 20, 2022.

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	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project:

- a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? **Determination: Less Than Significant Impact.***

Construction Related Water Quality Impacts

During construction, the District would implement a Storm Water Pollution Prevention Plan (SWPPP), listing Best Management Practices (BMPs) to prevent construction pollutants and products from violating any water quality standard or any waste discharge requirements. These on-site BMPs would treat stormwater before it discharges into drainages. Additionally, the State has published a set of BMPs for both pre- and post-construction periods, which would be applied to the project. The District would identify the appropriate BMPs for the project. Compliance with the provisions of the best management practices would reduce impacts associated with water quality standards and discharge requirements to a less than significant level.

Operational Related Water Quality Impacts

The project involves the construction of the regional storm drain facility needed to convey 100-year runoff to the existing Lateral B, Stage 2 channel east of Heacock Street. During operation, the project would collect, convey, and discharge stormwater runoff originating from developed areas that may already produce pollutants. The District is required to comply with the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit issued by the Regional Water Quality Control Board. The amount of contaminants discharged in stormwater drainage varies based on a variety of factors, including pollutants on surfaces and the amount of rainfall. The NPDES permit requires a SWPPP to be developed and implemented and the SWPPP to identify best management practices for construction and operation in project design. Compliance with these established programs would ensure that the project would not result in substantial discharges of typical stormwater pollutants. A less than significant impact would occur.

- b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? **Determination: Less Than Significant Impact.***

The project involves the installation of a new RCB channel and no groundwater supplies would be utilized during construction or operations. However, the project could encounter groundwater during construction activities. As discussed in Section 4.9, Hazards and Hazardous Materials, the project would comply with federal Occupational Safety and Health Administration (OSHA) regulations (29 CFR 1910.120) and Cal/OSHA regulations (8 CCR Title 8, Section 5192) that describes relevant safety protocols should groundwater be encountered. Substantial groundwater loss from construction activities is not anticipated and would not result in substantially decreasing groundwater supplies in a manner that could impede sustainable

groundwater management of any groundwater basins. As such, impacts would be less than significant in this regard.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river or through the addition of impervious surfaces, in a manner which would:*

- i. *Result in substantial erosion or siltation on- or off-site? **Determination: Less Than Significant Impact.***

The project would construct drainage infrastructure to prevent flooding and to provide proper runoff conveyance during a 100-year rain event. The project is expected to convey water through improved infrastructure and would not substantially increase future erosion potential on or off site. Additionally, during construction of the project, a SWPPP including BMPs would be implemented to minimize erosion potential and water quality degradation of the project site. Therefore, impacts associated with the project to streams or rivers due to erosion or siltation are considered less than significant.

- ii. *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? **Determination: No Impact.***

The project would provide the area with improved drainage and flood protection, thereby reducing the rate or amount of surface runoff and flooding within the project area. No impact would occur.

- iii. *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? **Determination: No Impact.***

The project has been designed to convey 100-year runoff from the Stage 5 channel to the existing Stage 2 channel at Heacock Street; and provide adequate outlet to proposed developments west of the project within the city of Perris. Thus, the project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. No impact would occur in this regard.

- iv. *Impede or redirect flood flows? **Determination: No Impact.***

Refer to the responses above. No impact would occur.

- d) *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? **Determination: No Impact.***

According to the applicable Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) (6065C1410G and 06065C1430H)⁶, the project site is not located in an area designated as a special flood hazard area. The project site is located approximately four miles southeast of Lake Elsinore and 25 miles east of the Pacific Ocean. Due to the distance from a large body of water it would not be subject to seiche or tsunami. Therefore, the project would not be at risk of releasing pollutants as a result of flood hazard, tsunami or seiche. No impact would occur.

⁶ Federal Emergency Management Agency, FEMA Flood Map Service Center. <https://msc.fema.gov/portal/home>. Accessed: April 21, 2022.

- e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? **Determination: Less Than Significant Impact.***

The project would construct improved drainage facilities and comply with the requirements of the local NPDES Stormwater Program by implementing a SWPPP listing BMPs to prevent construction pollutants and products from violating any water quality standards or waste discharge requirements. The project is located within Riverside County Lower San Jacinto River Watershed Management Area (WMA) and would comply with the requirements of the Regional MS4 Permit (Order No. R9-2013-0001, as amended by R9-2015-0001 and R9-2015-0100) issued by the California Regional Water Quality Control Board. Therefore, construction and operation of the project would not conflict or obstruct implementation of the local water quality control plan. Impacts would be less than significant in this regard.

4.10.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

As an underground RCB storm drain, there are no applicable land use plans, policies, or regulations adopted for avoiding or mitigating an environmental effect which apply to the project.

4.11.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:

- a) *Physically divide an established community?* **Determination: No Impact.**

The key factor with respect to this threshold is the potential to create physical barriers that change the connectivity between areas of a community to the extent that persons are separated from other areas of the community. The project site is located within the limits of MARB and the City of Perris in Western Riverside County, east of the I-215. Within the project limits, a west perimeter security fence borders MARB. Rather than divide an established community, the project would tie into the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. Based on existing MARB security fencing and the nature of the proposed project, the project would not divide an established community and no impacts would occur in this regard.

- b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?* **Determination: No Impact.**

As an underground RCB storm drain, there are no applicable land use plans, policies, or regulations adopted for avoiding or mitigating an environmental effect which apply to the project. No impact would occur in this regard.

4.11.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

There is no evidence of past mining excavation, prospects, tunnels or claim marker boundaries along or near to the project area. According to the Riverside County General Plan EIR (Figure 4.14-1, Mineral Resource Zones), the proposed project area is within the zoning classification of MRZ-1 (No significant mineral deposits) and MRZ-3 (Significance of mineral deposits unknown).

4.12.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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? **Determination: No Impact.***

The State Mining and Geology Board (SMGB) has established Mineral Resources Zones (MRZs) to designate lands that contain mineral deposits. The classifications used by the State to define MRZs are as follows:

- MRZ-1: Areas where the available geologic information indicates no significant likelihood of significant mineral deposits.
- MRZ-2a: Areas where the available geologic information indicates that there are significant mineral deposits.
- MRZ-2b: Areas where the available geologic information indicates that there is a likelihood of significant mineral deposits.
- MRZ-3a: Areas where the available geologic information indicates that mineral deposits exist, however, the significance of the deposit is undetermined.
- MRZ-3b: Areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined.
- MRZ-4: Areas where there is not enough information available to determine the presence of a known mineral deposit.

The California State Geologist has classified areas into MRZs and Scientific Resource Zones (SRZs). The zones identify the Statewide or regional significance of mineral deposits based on the economic value of the deposits and accessibility. According to the Riverside County General Plan EIR (Figure 4.14-1, *Mineral Resource Zones*), the proposed project area is within the zoning classification of MRZ-1 (No significant mineral deposits) and MRZ-3 (Significance of mineral

deposits unknown). Therefore, the project would not 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. 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?* **Determination: No Impact.**

Refer to Impact 4.12(a). As stated above, the County of Riverside General Plan EIR designates the project site as MRZ-1 (no significant mineral deposits) and MRZ-3 (significance of mineral deposits unknown). Therefore, the project is not forecasted to result in the loss of availability of a locally important mineral resource recovery site. No impact would occur.

4.12.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

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4.13 NOISE

4.13.1 Environmental Setting

Noise Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear (A-weighted decibels or dBA). Regarding increases in A-weighted noise levels (dBA), the following relationships should be noted for understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference.
- A change in level of at least 5 dBA is required before any noticeable change in community response would be expected. An increase of 5 dBA is typically considered substantial.
- A 10 dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response (FICON 1992).

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks, and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Mobile transportation sources, such as highways, and hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance from the source. Noise generated by stationary sources (i.e., construction) typically attenuates at a rate of approximately 6.0 to 7.5 dBA per doubling of distance from the source.

Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise levels only when the structure breaks the “line of sight” between the source and the receiver. Buildings, concrete walls, and berms can all act as effective noise barriers. Wooden fences or broad areas of dense foliage can also reduce noise, but are less effective than solid barriers.

Noise-Sensitive Receptor Locations

Some land uses are considered more sensitive to noise than others due to the types of activities typically involved at the receptor location, and the effect that noise can have on those activities and the persons engaged in them. Typically, residences, schools, motels and hotels, libraries, religious institutions, hospitals, nursing homes, and parks are generally more sensitive to noise than commercial and industrial land uses.

The predominant existing noise sources near the project site are aircraft noise from MARB to the east and roadway noise from I-215, which is adjacent to the west. Secondary noise sources include commercial-related activities associated with loading dock/delivery truck activities, trash compaction, and refuse service activities.

The nearest sensitive receptors to the project site are the residences located approximately 0.5-mile southeast of the site, on the southeast quadrant of the Webster Avenue/Markham Street intersection.

Vibration-Sensitive Receptor Locations

Typically, groundborne vibration generated by man-made activities (i.e., rail and roadway traffic, operation of mechanical equipment and typical construction equipment) diminishes rapidly with distance from the vibration source. The Caltrans *Transportation and Construction Vibration Guidance Manual* (Caltrans Manual) provides vibration structure damage criteria for: (1) Extremely fragile historic buildings, ruins, ancient monuments; (2) Fragile buildings; (3) Historic and some old buildings; (4) Older residential structures; (5) New residential structures; and (6) Modern industrial/commercial buildings. The Caltrans Manual also provides vibration human annoyance criteria. There are no vibration-sensitive receptors that could be exposed to short-term construction vibration impacts for human annoyance near the project site. As stated above, the nearest residences to the site are located 0.5-mile to the southeast.

Local Noise Standards

Local noise issues are addressed through implementation of General Plan policies, including noise and land use compatibility guidelines, and through enforcement of noise ordinance standards. A city or county’s noise ordinance will typically include regulations that restrict the amount and duration of noise from various noise sources occurring within its jurisdiction as well as prescribe noise limits for different land use types. Noise regulations and standards of the District, MJPA, and City of Perris planning areas are considered with respect to evaluating the proposed project’s noise impacts on the surrounding environment. These planning areas are being considered because construction activities will increase noise levels within each of these jurisdictions.

4.13.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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NOISE – Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project result in:

- a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? **Determination: Less Than Significant Impact.***

Construction Impacts

Relative to construction-related noise, the MIPA does not have its own Noise Ordinance. Rather, it applies the standards for noise regulation from Riverside County Ordinances 457 and 847. Ordinance 457 Section G(1) regulates construction noise impacts for all projects within one-quarter mile from an occupied residence or residences. Ordinance 847 sets forth land use compatibility relating to noise.

The project would follow the District's Standard Operating Procedures limiting construction between the hours of 7:00 AM to 5:00 PM. The City of Perris's permitted hours of construction are less stringent and allow construction to occur between the hours of 7:00 AM to 7:00 PM (or on a legal holiday, with the exception of Columbus Day and Washington's Birthday, or on Sundays), per the Perris Municipal Code Section 7.34.060, *Noise Control*. However, because the more conservative construction hours of the District would be adhered to, and since noise generated by the construction of the project would be temporary, construction-related noise impacts would be less than significant.

Operational Impacts

Due to the nature of the project as a public infrastructure (storm drain) project, operational noise upon completion of construction is not anticipated.

- b) *Generation of excessive groundborne vibration or groundborne noise levels? **Determination: Less Than Significant Impact.***

Construction of the project would involve the temporary use of large construction equipment, which would result in temporary vibrational noise. Vibrational noise is a concern when sensitive receptors are in close proximity to the vibration sources. However as discussed previously, the project site is located in an area where the predominant existing noise sources are roadway noise from I-215 and aircraft noise from the MARB, in addition to noise associated with commercial-related activities such as loading dock/delivery truck activities, trash compaction, and refuse service activities. There are no sensitive receptors within or adjacent to the project site.

In addition, construction and operational maintenance activities would be restricted to daytime hours consistent with the MIPA Municipal Code and Perris Municipal Code (refer to the response for Impact 4.13(a), above), thereby eliminating the potential for vibration impacts during sensitive nighttime hours. Once operational, the project would not be a source of groundborne vibration; therefore, impacts would be less than significant.

- c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? **Determination: Less Than Significant Impact.***

Construction Impacts

The project's location in the MARB AIA may expose people working on the project site to potentially significant noise levels. The project site is located in airport compatibility zone B2, is between the 65 and 75 CNEL noise contour, and would be exposed to airport noise at or below 75 dBA CNEL. However, the project would be required to implement protective measures for construction workers for occupational noise exposure, based on federal and State employee health and safety regulations (i.e., regulations of the Occupational Safety and Health Administration of the U.S. Department of Labor [OSHA] and the California Division of Occupational

Safety and Health [Cal/OSHA]). Therefore, construction impacts relative to airport noise would be less than significant.

Operational Impacts

Due to the nature of the project as a public infrastructure (storm drain) project, operations of the project is not anticipated to expose people residing or working in the project area to excessive noise levels. Therefore, operational impacts relative to airport noise would be less than significant.

4.13.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

The project site is currently vacant and there is no existing housing within or adjacent to the project site. The nearest residences to the project site are located approximately 0.5-mile southeast of the site, on the southeast quadrant of the Webster Avenue/Markham Street intersection.

4.14.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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POPULATION AND HOUSING – Would the project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:

- a) *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?* **Determination: No Impact.**

The project does not propose the construction of new housing or businesses and therefore is not anticipated to induce population growth directly or indirectly in the area. The project involves the construction of stormwater drainage and flood protection facilities in order to improve safety on MARB. The project would also provide flood protection to the existing adjacent warehouse development to the west of MARB. No impact would occur.

- b) *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?* **Determination: No Impact.**

Because the project site is vacant and does not contain any existing houses, project implementation would not result in the displacement of existing housing. Therefore, the proposed project would result in no impacts on existing housing.

4.14.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

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4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

Fire Protection Services

Fire services in the MIPA Planning Area and the City of Perris are provided by the Riverside County Fire Department (RCFD) through a cooperative agreement with the California Department of Forestry and Fire Protection (CalFire). RCFD services include providing fire suppression, emergency medical, rescue, and fire prevention services while serving as the operational area coordinator for the California Fire and Rescue Mutual Aid System for all fire service jurisdictions in Riverside County.

Fire protection services for the project site and vicinity are provided by existing County of Riverside fire stations in Perris and non-County fire stations from MARB (i.e., March Air Reserve Fire Department at 16499 Heacock Street) through mutual aid agreements. Existing Riverside County Fire - Mead Valley Station No. 59 located at 21510 Pinewood Street in Perris is the nearest County fire station and would provide fire response to the project site. This fire station is located approximately 2.9 miles southwest of the project site.

Police Protection Services

Law enforcement services in the MIPA Planning Area are provided by the Riverside County Sheriff's Department (RCSD). Riverside County provides community policing and operates and maintains correctional facilities. Sheriff substations are located within the cities of Riverside, Perris, and Moreno Valley (to the north of the project site). Services provided by the RCSD include first responder service, police services, search and rescue services, mutual aid coordination services, enforcement of criminal law on Tribal Lands, jail system services, court services, Coroner-Public Administrator services, and Joint Task Force services.

The RCSD operates the Moreno Valley Police Department station in the City of Moreno Valley, providing law enforcement services to that City and surrounding non-county jurisdictions under contract. The primary station that would serve the project site is the Moreno Valley Station located at 22850 Calle San Juan De Los Lagos, Moreno Valley, approximately 3.7 miles north of the project site.

Schools

The project site is served by the Val Verde Unified School District (VVUSD). The VVUSD's schools serves approximately 20,200 students residing in cities Perris, Moreno Valley, and portions of unincorporated Riverside County.

Parks

The nearest park to the project site is located in the City of Perris, Morgan Street Park located at 600 E. Morgan Street, approximately 2.7 miles to the southeast.

4.15.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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PUBLIC SERVICES

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

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*

1) *Fire protection? **Determination: No Impact.***

The proposed project would not result in the construction of any habitable structures and would not directly or indirectly induce significant population growth; refer to Impact 4.14(a), above. As a storm drain construction project, the proposed improvements would not result in the need for additional new or altered fire protection services and would not alter acceptable service ratios or response times. Rather, the project would result in improved stormwater drainage and public safety within the project area. In addition, operation of the project would not create a substantial number of jobs that would induce population growth necessitating additional services or extending response times for fire protection services. As such, project implementation would not create new demand for the development of new or physically altered fire protection services or facilities. Therefore, no impact would occur.

2) *Police protection? **Determination: No Impact.***

The proposed project would not directly or indirectly induce significant population growth. As a storm drain construction project, the project would not result in the need for additional new or altered police protection services and would not alter acceptable service ratios or response times. Further, project implementation would not create the need for the development of additional police facilities. Therefore, no impact would occur.

3) *Schools? **Determination: No Impact.***

The proposed project would not directly or indirectly induce significant population growth. As a storm drain construction project, the project would not generate additional school-aged students that would create new demand on local schools for educational services. No impact would occur in this regard.

4) *Parks? **Determination: No Impact.***

The proposed project would not directly or indirectly induce significant population growth. As a storm drain construction project, the project would not necessitate the need for additional local parks or other public facilities. No impact would occur in this regard.

5) *Other public facilities? **Determination: No Impact.***

The proposed project would not directly or indirectly induce significant population growth. As a storm drain construction project, the project would not result in the need for new or physically altered government facilities nor affect time or other performance objective. No impact would occur.

4.15.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

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4.16 RECREATION

4.16.1 Environmental Setting

As discussed in [Section 4.15.1](#), the nearest park/recreational facility to the project site is located in the City of Perris, Morgan Street Park located at 600 E. Morgan Street. Morgan Street Park is a 15-acre park that is located approximately 3.7 miles from the project site. Recreational amenities include 3 lighted soccer fields, 2 basketball courts, a tot lot, a concession stand with patio tables, restrooms, group picnic shelters, open space, picnic tables and a parking lot.

4.16.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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RECREATION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?* **Determination: No Impact.**

Refer to Impact 4.15(a)(4). No impact would occur.

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?* **Determination: No Impact.**

Refer to Impact 4.15(a)(4). No impact would occur.

4.16.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

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4.17 TRANSPORTATION

4.17.1 Environmental Setting

The project site is located in an area within the limits of MARB with the MIPA airstrip situated directly to the northeast and light industrial commercial uses situated directly to the southeast. The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest.

4.17.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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TRANSPORTATION– Would the project:

a) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project:

- a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? **Determination: Less Than Significant Impact.***

Traffic impacts associated with the project would be limited to the construction period and during maintenance activities of the proposed project. As discussed, construction of the RCB culvert and associated storm drain improvements would mostly occur within MARB right of way with the exception of the work performed to installation of the transition RCB connector at the intersection of Heacock Street and Perris Valley Boulevard. If lane closures are anticipated, the project would implement a traffic control plan that provides precautionary measures (i.e., detour signage, flagging) to address any temporary circulation impacts at this intersection. A less than significant impact would occur in this regard.

- b) *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? **Determination: Less Than Significant Impact.***

CEQA Guidelines section 15064.3, subdivision (b) details the use of vehicle miles traveled (VMT) to assess the significance of transportation impacts. As detailed in CEQA Guidelines section 15064.3, subdivision (c), a lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide. The

project meets the Governor's Office of Planning and Research's (OPR's) definition of a small project (less than 110 daily trips) and would be screened out of a VMT analysis:

Screening Threshold for Small Projects. Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day) generally may be assumed to cause a less than significant transportation impact (OPR 2018).

Routine maintenance activities for the RCB channel would not exceed the Screening Threshold for Small Projects (110 daily trips). As such, the project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Impacts would be less than significant in this regard.

- c) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?* **Determination: Less Than Significant Impact.**

No hazardous design features are proposed as part of the project and no alteration to the existing circulation system would occur. Further, as concluded in Impact 4.17(a), a Traffic Control Plan would be implemented to ensure construction activities do not adversely impact traffic flow along the project alignment, including potential construction hazards along the roadways. As an underground RCB storm drain, the project would not involve a new use that would generate new or additional vehicle trips in the area at project completion nor would the project include any incompatible uses. As such, project construction and operations would not substantially increase hazards due to a geometric design feature or incompatible use. Impacts would be less than significant..

- d) *Result in inadequate emergency access?* **Determination: Less Than Significant Impact.**

Refer to Impact 4.9(f) for a discussion concerning the applicable emergency response procedures and evacuation plans. Short-term construction trips would include the delivery of construction equipment, construction worker trips, and hauling trips for the import/export of construction materials. Construction activities would occur over a period of 12 months and would cease upon project completion. All construction equipment would be staged away from existing roadways to eliminate potential access issues for emergency vehicles and passing motorists. As such, pedestrian and vehicle access within the project vicinity would be maintained with the potential for some temporary lane closures. A Traffic Control Plan would be prepared and implemented that would ensure traffic control and public safety during all stages of project construction. Impacts would be less than significant.

4.17.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 Environmental Setting

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to “begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project.” Section 21074 of AB 52 also defines a new category of resources under CEQA called “tribal cultural resources.” Tribal cultural resources are defined as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is either listed on or eligible for the California Register of Historical Resources (CRHR) or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource.

On February 19, 2016, the California Natural Resources Agency proposed to adopt and amend regulations as part of AB 52 implementing Title 14, Division 6, Chapter 3 of the California Code of Regulations, CEQA Guidelines, to include consideration of impacts to tribal cultural resources pursuant to Government Code Section 11346.6. On September 27, 2016, the California Office of Administrative Law approved the amendments to Appendix G of the CEQA Guidelines, and these amendments are addressed within this Initial Study.

In compliance with AB 52, the District distributed an “Invitation to Consult” letter on March 29, 2022 to notify the Agua Caliente Band of Cahuilla Indians, Pala Band of Mission Indians, Pechanga Band of Luiseño Indians, Ramona Band of Cahuilla Indians, Rincon Band of Luiseño Indians, and Soboba Band of Luiseño Indians of the opportunity to consult on the project and assist the District in determining whether there were potential tribal cultural resources associated with the project area. The Agua Caliente Band of Cahuilla Indians, Pechanga Band of Luiseño Indians, and Soboba Band of Luiseño Indians responded during the mandated 30-day timeframe and requested additional information or to initiate consultation pursuant to Public Resources Code section 21080.3.1. The result of the consultation meetings coupled with the results of the Cultural Resources Assessment prepared for this project have informed the District’s significance determination regarding Tribal Cultural Resources pursuant to CEQA.

4.18.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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TRIBAL CULTURAL RESOURCES – 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

*Draft Initial Study/Mitigated Negative Declaration
Perris Valley Channel Lateral B, Stage 4 Project*

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Would the project:

- a) *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California native American tribe, and that is 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)?* **Determination: Less Than Significant Impact.**

As discussed in [Section 4.5.2](#), four historic-age built environment resources were identified within the APE and no archaeological resources were identified during the background research and pedestrian field survey for the project. Based on the Cultural Resources Assessment, the four historic-age built environment resources were found ineligible for the National Register, CRHR, or local designation. As such, these resources are not considered a historical resource under CEQA and development of the proposed project would not result in impacts to historic resources.

- b. *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? 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.* **Determination: Less Than Significant with Mitigation Incorporated.**

Although the Perris Valley area has connections to tribes that historically inhabited or passed by the area, the project site is located on a disturbed and developed portion of an established air force base. The disturbance limits of the project area consist of a paved perimeter road likely underlain by fill material, flattened areas adjacent, and an existing grouted man-made channel. As previously mentioned, the contextual relationships and likelihood of tribal cultural resource finds in the project impact area is considered very low due to previous disturbance for development of the base. However, based on discussion with the AB 52 Consulting Tribe(s)/Band(s), the project has the potential to impact TCRs. As such, the following mitigation measures shall be implemented in order to minimize potential impacts to unknown TCRs. With the inclusion and implementation of Mitigation Measures TCR-1 and TCR-2, impacts to TCRs would be reduced to less than significant.

4.18.3 Mitigation Measures

TCR-1 The District shall prepare or cause for the preparation of a Tribal/Cultural Resources Management Plan (TCRMP) prior to ground disturbing activities. The CRMP shall be based on the final construction grading plans prepared by the District and may include requirements for pre-construction cultural sensitivity training, notification, and monitoring protocol. The TCRMP will consider concerns of the consulting Tribes and the consulting Tribes will have an opportunity to review and comment on the draft TRCRMP.

In the event that the consulting Tribes are not able to reasonably accommodate the District's requests and/or needs regarding monitoring, the District may proceed with Mitigation Measure TCR-2 as needed:

TCR-2 The District may, at its discretion, conduct archaeological monitoring and/or reconnaissance of the project site using a qualified archaeologist that is not a Tribal monitor or representative of a Native American Tribe. This would occur only a needed during ground-disturbing construction activities.

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4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

Water Service

The project site is served by two different water purveyors, the Western Municipal Water District (WMWD) and the Eastern Municipal Water District (EMWD). WMWD is a member agency of the Metropolitan Water District of Southern California (MWD), that purchases imported water (both treated and raw water) from the Colorado River and the Bay-Delta, which is conveyed to southern California through the Colorado River Aqueduct and State Water Project. WMWD also purchases local groundwater supplies from Meeks and Daley Water Company, Riverside Highland Water Company, and when available, from the City of Riverside. Water is typically purchased from the City of Riverside on an emergency or off-season basis. Additional local groundwater supplies are obtained from the Temecula-Murrieta portion of the Temecula Valley Groundwater Basin and the San Bernardino Basin Area for retail supplies, and from the Arlington Subsection of the Riverside-Arlington Groundwater Basin for wholesale supplies.

WMWD provides wholesale and retail water within its district boundaries such as City of Riverside, the water agencies of Box Springs Mutual Water Company, and retail customers in unincorporated areas such as MARB. WMWD has fourteen wholesale customers and approximately 24,000 retail customers. The WMWD general district consists of a 527-square mile area of western Riverside County and an estimated population of more than 860,000.

EMWD provides potable water, wastewater treatment, and recycled water services for portions of Riverside County, including cities and agencies such as the cities of Perris and Moreno Valley and WMWD. EMWD is a member agency of MWD, and its supply is a combination of imported, ground, and recycled water. EMWD has connections with approximately 148,000 domestic water service accounts, 125 agriculture accounts, 246,000 sewer accounts, and more than 400 recycled water service accounts. The EMWD water supply consists of 49 percent imported via the Department of Water Resources (DWR) State Water Project (SWP) and MWD, and the remaining 51 percent consisted of 16 percent supplied by local groundwater and desalters and 35 percent as recycled water.

Wastewater

WMWD provides wastewater services to a portion of its service area, and participates in the Western Riverside County Regional Wastewater Authority (WRCRWA). Wastewater facilities operated by the WMWD include Western Riverside County Regional Wastewater Treatment Plant (WRCRWTP) and Western Water Recycling Facility (WWRF), formerly the March Wastewater Treatment Plant. The WRCRWTP is a regional wastewater treatment facility owned by the WRCRWA. The WRCRWA is a joint powers authority with the cities of Norco and Corona, Jurupa Community Services District, Home Gardens Sanitary District, and WMWD.

The WRCRWTP has a capacity of 8 million gallons per day (MGD) and has a planned expansion of 14 MGD and ultimate capacity of 32 MGD. The WWRF treats domestic wastewater from MARB. The WWRF produces tertiary treated wastewater to be discharged to an impoundment and then pumped to supply the recycled water system, which then provides recycled water to the Riverside National Cemetery, General Old Golf Course, and various landscaping, agricultural and commercial use sites.

Stormwater

The MIPA Planning Area is located within the limits of the Perris Valley Area Drainage Plan (ADP) and the Lake Mathews ADP of the District. Surface drainage in and around the MIPA Planning Area includes ephemeral (temporary) streams during periods of rainfall. In general, surface water runoff within the MIPA Planning Area is directed southeast through a series of storm drains and surface drainage ditches.

The primary drainage facilities within the MIPA Planning Area include the Cactus Channel, which runs in an east-west direction parallel to Cactus Avenue along the northern boundary of the Northeast Planning Subarea, and the Heacock Channel, which runs in a north-south direction adjacent to Heacock Street in the Northeast Planning Subarea. Surface runoff from existing impervious surfaces such as runways, aviation tarmacs, roadways, and buildings are collected by a series of manmade drains, which are eventually tributary to the larger Perris Valley Storm Drain System.

Solid Waste

The Riverside County Department of Waste Resources (RCDWR) owns and operates six landfills that serve the Riverside County residents. Landfills that could potentially serve the proposed project include the Badlands, Lambs Canyon, and El Sobrante landfills. Table 4.19-1 summarizes landfill locations, permitted refuse and capacity information, and expected closure date for each landfill.

Table 4.19-1: Landfill Capacity in the Project Region

Landfill	Distance from Project Site	Maximum Permitted Daily Load (tons/day)	Average Remaining Disposal Capacity (Tons)	Expected Closure Date
Badlands Landfill	15 miles	4,800	15,748,799	2022
Lamb Canyon Landfill	25 miles	5,000	19,242,950	2032
El Sobrante Landfill	30 miles	16,054	143,977,170	2051
Source: California Department of Resources Recycling and Recovery. https://www2.calrecycle.ca.gov/SolidWaste/Site/Search Badlands Landfill (33-AA-0006); Lamb Canyon Landfill (33-AA-0007); El Sobrante Landfill (33-AA-0217) Accessed April 22, 2022.				

Electrical and Natural Gas Service

Electrical and natural gas services to customers in the project area are provided by Southern California Edison (SCE) and the Southern California Gas Company (SoCalGas) respectively.

SCE provides electricity to approximately 15 million people, 180 incorporated cities, 15 counties, 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area. SCE produces and purchases their energy from a mix of conventional and renewable generating sources.

SoCalGas is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.6 million customers in more than 500 communities encompassing approximately 20,000 square miles throughout Central and Southern California, from the City of Visalia to the Mexican border. SoCalGas receives gas supplies from several sedimentary basins in the western United States and Canada, including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), the Rocky Mountains, and Western Canada as well as local California supplies.

4.19.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
UTILITIES AND SERVICE SYSTEMS – 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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?* **Determination: Less Than Significant Impact.**

The project involves the construction of flood control facilities in order to improve public safety. As discussed in [Section 2.5.2, Utility Line Relocation](#), project implementation would not require utility line relocation. Where necessary, mitigation measures have been incorporated to reduce all potentially significant impacts related to construction and operation of the proposed stormwater drainage project. As such, a less than significant impact would occur.

- b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?* **Determination: Less Than Significant Impact.**

The project does not involve activities that would require permanent water supplies. Water supplies required during the construction of the project would be limited to water utilized for dust suppression on site. New or expanded entitlements would not be required for the project. As such, a less than significant impact would occur.

- c) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? **Determination: No Impact.***

The project would improve stormwater management and would not produce wastewater. No new wastewater treatment facilities are required as a result of the project. No impacts would occur.

- d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? **Determination: Less Than Significant Impact.***

Due to the nature of the project, maintenance activities are not anticipated to generate substantial on-going solid waste during operation. Any waste generated during construction would be minimal and would be disposed of at the nearest landfill permitted to accept the construction waste. For this reason, the project would prohibit achieving State and/or local solid waste reduction goals. A less than significant impact would occur.

- e) *Comply with federal, State, and local management and reduction statutes and regulations related to solid waste? **Determination: Less Than Significant Impact.***

All construction activities would be required to demonstrate compliance with existing federal, State, and local management and reduction statutes and regulations for solid waste disposal, including the 50 percent diversion of solid waste requirement established by the California Integrated Waste Management Act of 1989 (AB 939). Conformance with AB 939 would ensure compliance with federal, State, and local management and reduction statutes and regulations related to solid waste for project construction. Additionally, project operations would not involve a change in land use with the potential to conflict with federal, State, and local management and reduction statutes and regulations related to solid waste. Overall, impacts would be less than significant.

4.19.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.20 WILDFIRE

4.20.1 Environmental Setting

The project site is located in a generally flat area within the limits of MARB with the MJPA airstrip situated directly to the northeast and light industrial commercial uses situated directly to the southeast. The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. The project area of construction consists of low-cut, ruderal growth vegetation consisting of native seasonal grasses that occur along the proposed area for the RCB alignment.

According to the Fire Hazard Severity Zones in State Responsibility Areas (SRA) Map for Riverside County (west), the project site is not located on, or near to land designated as moderate, high, or very high fire hazard severity zone in SRA⁷.

4.20.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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WILDFIRE – If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:

- a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*
Determination: No Impact.

According to the Fire Hazard Severity Zones in SRA Map for Riverside County (west), the project site is not located on, or near to land designated as moderate, high, or very high fire hazard severity zone in SRA. No impact would occur in this regard.

⁷ CalFire Fire Hazard Severity Zone Viewer (FHSZ). 2022. <https://egis.fire.ca.gov/FHSZ/>, accessed March 11, 2022.

- b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire? **Determination: No Impact.***

Refer to Impact 4.20(a).

- c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? **Determination: No Impact.***

Refer to Impact 4.20(a).

- d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? **Determination: No Impact.***

Refer to Impact 4.20(a).

4.20.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? **Determination: Less Than Significant With Mitigation Incorporated.***

As discussed in Impact 4.4(a) in Section 4.4, *Biological Resources*, BUOW focused surveys in accordance with the survey guidelines and protocols provided in the *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area* were conducted for the project site and a 500 feet buffer. The results of the focused surveys were negative. Although the survey results were negative, direct impacts to burrowing owl through ground disturbance and habitat loss and indirect impacts from construction noise and vibrations may occur. Impacts to burrowing owl would be reduced to less than significant with the implementation of Mitigation Measure BIO-1 that would require a preconstruction BUOW survey 30 days prior to commencement of construction activities. If BUOW are observed during the preconstruction survey, impacts shall be avoided through implementation of BUOW avoidance measures as described in the MSHCP.

Project implementation is not anticipated to result in impacts to known cultural or tribal cultural resources; refer to Section 4.5, *Cultural Resources*, and Section 4.18, *Tribal Cultural Resources*. In the unlikely event that archaeological resources are encountered during project construction, Mitigation Measure CUL-1 would require all project construction efforts to halt until an archaeologist examines the site, identifies the archaeological significance of the find, and

recommends a course of action. Based on discussion with the AB 52 Consulting Tribe(s)/Band(s), the project has the potential to impact TCRs. As such, Mitigation Measures TCR-1 and TCR-2 shall be implemented in order to minimize potential impacts to unknown TCRs. With the inclusion and implementation of these mitigation measures, impacts to TCRs would be reduced to less than significant.

- b) *Does the project have impacts that are individually limited, but cumulatively considerable? **Determination: Less Than Significant With Mitigation Incorporated.***

A significant impact may occur if a proposed project, in conjunction with related projects, would result in impacts that are less than significant when viewed separately, but would be significant when viewed together. As concluded in Section 4.1 through Section 4.20, the proposed project would not result in any significant impacts in any environmental categories with implementation of project mitigation measures. Implementation of mitigation measures at the project-level would reduce the potential for the incremental effects of the proposed project to be considerable when viewed in connection with the effects of past projects, current projects, or probable future projects. Impacts would be reduced to less than significant with mitigation incorporated in this regard.

- c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? **Determination: Less Than Significant With Mitigation Incorporated.***

Previous sections of this Initial Study reviewed the proposed project's potential impacts related to aesthetics, air quality, noise, hazards and hazardous materials, traffic, and other issues. As concluded in these previous discussions, the proposed project would not have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly, following conformance with the existing regulatory framework and implementation of project mitigation measures. Impacts would be reduced to less than significant with mitigation incorporated in this regard.

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6.0 BIBLIOGRAPHY

CalFire, *Fire Hazard Severity Zone Viewer (FHSZ)*. 2022. <https://egis.fire.ca.gov/FHSZ/> Accessed March 11, 2022.

California Air Resources Board, *2017 Scoping Plan*, November 2017.

California Air Resources Board, *ADAM Air Quality Data Statistics*, <http://www.arb.ca.gov/adam/>, accessed April 29, 2022.

California Air Resources Board, *AQMIS2: Air Quality Data*, <https://www.arb.ca.gov/aqmis2/aqdselect.php>, accessed April 29, 2022.

California Air Resources Board, *EMFAC2017*.

California Department of Conservation *Important Farmland Finder*. 2022. <https://maps.conservation.ca.gov/DLRP/CIFF/>, accessed February 1, 2022.

California Department of Resources Recycling and Recovery. <https://www2.calrecycle.ca.gov/SolidWaste/Site/Search> Badlands Landfill (33-AA-0006); Lamb Canyon Landfill (33-AA-0007); El Sobrante Landfill (33-AA-0217) Accessed April 22, 2022.

California Department of Transportation, *State Scenic Highways Mapping System*. 2022. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>, accessed February 1, 2022.

California Department of Water Resources, *SGMA Basin Prioritization Dashboard*, <https://gis.water.ca.gov/app/bp-dashboard/final/>, accessed April 20, 2022.

California Energy Commission. *Energy Consumption Data Management System (ECDMS)*. 2022. <https://ecdms.energy.ca.gov/>, accessed February 14, 2022.

City of Perris General Plan, amended January 25, 2022.

City of Perris General Plan EIR, certified on April 26, 2005.

County of Riverside General Plan, amended September 28, 2021.

County of Riverside General Plan EIR No. 521, certified 2016.

Federal Emergency Management Agency, *FEMA Flood Map Service Center*. <https://msc.fema.gov/portal/home>. Accessed: April 21, 2022.

Group Delta Consultants, Inc., *Phase 1Phase I Environmental Site Assessment*. March 2022.

General Plan for the March Joint Powers Authority, updated January 17, 2018.

Mead & Hunt, March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, adopted November 13, 2014.

Michael Baker International, Perris Valley Channel Lateral B, Stage 4 Air Quality Technical Memorandum. May 2022.

Michael Baker International, Perris Valley Channel Lateral B, Stage 4 Greenhouse Gas Emissions Technical Memorandum. June 2022.

Michael Baker International, Perris Valley Channel Lateral B, Stage 4 CR Report Cultural Resources Assessment. May 2022.

Michael Baker International, Perris Valley Channel Lateral B, Stage 4 Paleontological Resources Identification Memo – City of Perris, Riverside County, California. May 2022.

Michael Baker International, Perris Valley Channel Lateral B, Stage 4 (PVC – Stage 4) Project Biological Resources Assessment and MSHCP Consistency Analysis – Cities of Perris and Moreno Valley, County of Riverside, California. July 2022.

Michael Baker International, Perris Valley Channel Lateral B, Stage 4 Project Delineation of State and Federal Jurisdictional Waters – City of Perris, County of Riverside, California. July 2022.

Regional Conservation Authority (RCA). 2006. Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area. Accessed online at: https://www.wrcrca.org/species/survey_protocols/burrowing_owl_survey_instructions.pdf.

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

USDA. 2022. Custom Soil Resources Report for Western Riverside Area, California. Accessed online at: <https://websoilsurvey.sc.egov.usda.gov/>.

7.0 LIST OF APPENDICES

The following technical appendices can be made available upon request at Riverside County Flood Control and Water Conservation District. Please contact Jerry Aguirre with information requests about this project at 951.955.1245 or jeraguir@rivco.org.

Appendix A: Air Quality Memorandum

Appendix B-1: Biological Resources Assessment and MSHCP Consistency Analysis

Appendix B-2: Delineation of State and Federal Jurisdictional Waters

Appendix B-3: Burrowing Owl Focused Survey

Appendix C: Cultural Resources Assessment

Appendix D: Paleontological Resources Identification Memo

Appendix E: Greenhouse Gas Emissions Memorandum

Appendix F: Phase I Environmental Site Assessment

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