Final
Initial Study and
Mitigated Negative Declaration

SCH # 2021100018

Avenue 66 Trunk Sewer Project

Prepared by:

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COMMITMENT & INTEGRITY DRIVE RESULTS

And
MSA Consulting Inc.
And
Water Resources and Policy Initiatives

March 2022

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APPENDICES

ACRONYM LIST

ABS	Acrylonitrile Butadiene Styrene
AF	acre-feet
AHPA	Archaeological and Historic Preservation Act
AMSL	Above mean sea level
APE	Area of Potential Affect
AQMP	Air Quality Management Plan
BMPs	Best Management Practices
CAAQS	California Ambient Air Quality Standards
Cal Fire	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model™
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Boards
CEQA	California Environmental Quality Act
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CGP	Construction General Permit
CFR	Code of Federal Regulations
CO_2e	Carbon Dioxide Equivalent
CNEL	Community Noise Equivalent Level

CRHR	California Register of Historical Resources
CWSRF	Clean Water State Revolving Fund
CVAG	Coachella Valley Association of Governments
CVBACM	Coachella Valley Best Available Control Measures
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CVUSD	Coachella Valley Unified School District
CVWD	Coachella Valley Water District
CWA	Clean Water Act
CWC	California Water Code
DAC	Disadvantaged Community
dB	decibel
DDM	Development Design Manual
DEH	Riverside County Department of Environmental Health
DTSC	Department of Toxic Substances Control
DPR	Department of Parks and Recreation
EDU	Equivalent dwelling unit
EIC	Eastern Information Center
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
°F	Fahrenheit
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FOG	Fats, oils, and grease
FRAP	Cal Fire Resources Assessment Program
FWCA	Fish and Wildlife Coordination Act
GHG	Greenhouse gas emissions
GIS	Geographic Information Systems
gpd	gallons per day
gpm	gallons per minute
GSA	Groundwater Sustainability Agency
GWP	Global Warming Potential
IID	Imperial Irrigation District
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration

LF	linear feet
LUST	Leaking Underground Storage Tank
LS	Lift Station
LST	Localized Significance Threshold
MHI	Median Household Income
MLD	Most Likely Descendant
MBTA	Migratory Bird Treaty Act
MGD	Million gallons per day
MMRP	Mitigation Monitoring and Reporting Plan
MHP	Mobile Home Park
MND	Mitigated Negative Declaration
mph	miles per hour
MS4	Municipal Separate Storm Sewer System
MT	metric tons
NAAQS	National Ambient Air Quality Standards
NHPA	National Historic Preservation Act
ND	Negative Declaration
NPDES	National Pollutant Discharge Elimination System
O_3	Ozone
O&M	Operations and Maintenance
OSHA	Occupational Safety and Health Administration
PM	Particulate matter
PPV	peak particle velocity
PVC	polyvinyl chloride
RCFC	Riverside County Flood Control
RCFD	Riverside County Fire Department
RCTC	Riverside County Transportation Commission
RWQCB	Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCADA	Supervisory control and data acquisition
SCAQMND	South Coast Air Quality Management District
SDAC	Severely Disadvantaged Community
SGMA	Sustainable Groundwater Management Act
SIP	State Implementation Plan
SRA	Source receptor areas
SSAB	Salton Sea Air Basin

SSOs	Sanitary Sewer Overflows
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMCC	Torres-Martinez Community Center
TMDL	Total Maximum Daily Load
USDA	US Department of Agriculture
USEPA	US Environmental Protection Agency
USFWS	US Fish and Wildlife Service
USGS	United States Geologic Survey
UWMP	Urban Water Management Plan
VAC	Visual Absorptive Capacity
VCP	Vitrified Clay Pipe
VHFHSZ	very high fire hazard severity zones
VMT	vehicle miles travelled
WRP	Water Reclamation Plant

1. INTRODUCTION

1.1 Project Title

Avenue 66 Trunk Sewer Project

1.2 Lead Agency

Coachella Valley Water District
75-515 Hovley Lane East
Palm Desert, CA 92211

Lead Agency Contact:

William Patterson, Environment Supervisor
Phone: (760) 398-2661; Email: wpatterson@cvwd.org

1.3 Purpose of this Document

Coachella Valley Water District (CVWD) has prepared this Initial Study (IS) to evaluate the potential environmental impacts related to implementation of the Avenue 66 Trunk Sewer Project (the "proposed project"), which consists of extension of CVWD sewer facilities along Avenue 66 from Polk Street to Harrison Street to provide sanitation service to the Sunbird Mobile Home Park (located near Echols Road and Harrison Street) and the Torres-Martinez Community Center (located south of Avenue 66 between Polk and Tyler Streets) located in unincorporated Riverside County.

CVWD is the lead agency under the California Environmental Quality Act (CEQA) for the proposed project. CEQA requires that the lead agency prepare an Initial Study (IS) to determine whether an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND) is needed. CVWD has prepared this IS to evaluate the potential environmental consequences associated with the Avenue 66 Trunk Sewer Project, and to disclose to the public and decision makers the potential environmental effects of the proposed project. Based on the analysis presented herein, an MND is the appropriate level of environmental documentation for the proposed project.

1.4 Scope of this Document

This IS/MND has been prepared in accordance with CEQA (as amended) (Public Resources Code §21000 et. seq.) and the 2021 State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, §15000 et. seq.), as updated on December 28, 2018, and CVWD's Local CEQA Guidelines (2020). CEQA Guidelines §15063 describes the requirements for an IS and §15070-15075 describe the process for the preparation of an MND. Where appropriate, this document makes reference to either the CEQA Statute or State CEQA Guidelines (as amended in December 2018). This IS/MND contains all of the contents required by CEQA, which includes a project description, a description of the

environmental setting, potential environmental impacts, mitigation measures for any significant effects, consistency with plans and policies, and names of preparers.

The assessment provided in Chapter 3 is based on technical reports and scientific studies prepared for the proposed project and supplemented with other public information sources, as provided in the list of references. The discussion and level of analysis are commensurate with the expected magnitude and severity of each potential impact to the environmental resource. Mitigation measures have been developed, where necessary, to reduce potential environmental impacts to a less than significant level.

This IS/MND evaluates the potential for environmental impacts to resource areas identified in Appendix G of the 2020 State CEQA Guidelines (as amended in December 2018). The environmental resource areas analyzed in this document include:

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

1.5 CEQA Process

Pursuant to State CEQA Guidelines §15073, the Draft IS/MND was circulated for a 20-day public review period to local and state agencies, and to interested organizations and individuals who may wish to review and comment on the report. CVWD circulated the Draft IS/MND to the State Clearinghouse for distribution to State agencies. In addition, CVWD circulated a Notice of Intent to Adopt a Mitigated Negative Declaration to the

Riverside County Clerk, responsible agencies, and interested entities (October 1 – October 20, 2021). A copy of the Draft IS/MND is available for review at: www.cvwd.org

Written comments could be submitted to CVWD by 5:00 PM on October 20, 2021. Contact person is listed below.

Written comments were to be submitted to:

William Patterson
Coachella Valley Water District
75-515 Hovley Lane East
Palm Desert, CA 92211

Email: WPatterson@cvwd.org

Following the 20-day public review period, CVWD evaluated comments received on the Draft IS/MND and incorporated any substantial evidence that the proposed project could have a significant impact on the environment into the Final IS/MND and prepared a Mitigation Monitoring and Reporting Program (MMRP). The MMRP specifies the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment.

Prior to approving the project, CVWD's Board of Directors will consider the IS/MND along with any written comments received, and other relevant project information, at a publicly noticed hearing. CVWD's Board of Directors shall adopt the IS/MND only if it finds on the basis of the whole record before it (including the IS and any comments received), that there is no substantial evidence that the project will have a significant effect on the environment; and that the MND reflects the lead agency's independent judgment and analysis (State CEQA Guidelines §15074). CVWD's Board of Directors meeting is scheduled for Tuesday, March 22, 2022.

1.6 Impact Terminology

The scope of the environmental resource areas is listed above in *Section 1.2*. The level of significance for each resource area uses CEQA terminology as specified below:

- **No Impact.** No adverse environmental consequences have been identified for the resource or the consequences are negligible or undetectable.
- **Less than Significant Impact.** Potential adverse environmental consequences have been identified. However, they are not adverse enough to meet the significance threshold criteria for that resource. No mitigation measures are required.
- **Less than Significant with Mitigation Incorporated.** Adverse environmental consequences that have the potential to be significant but can be reduced to less than significant levels through the application of identified mitigation strategies that have not already been incorporated into the proposed project.

- **Potentially Significant.** Adverse environmental consequences that have the potential to be significant according to the threshold criteria identified for the resource, even after mitigation strategies are applied and/or an adverse effect that could be significant and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared to meet the requirements of CEQA.

1.7 Comments and Responses

On October 20, 2021, CVWD received a request from Torres-Martinez Desert Cahuilla Indians that further subsurface investigation be conducted along Martinez Road prior to project construction. CVWD has addressed this comment through the revisions to Cultural Resources and Tribal Cultural Resources mitigation measures. CVWD has added a requirement to conduct a Phase II Archaeological Investigation and Report prior to the issuance of an installation agreement from the Tribe, and a requirement that a Data Recovery Plan be in place before the project begins construction.

1.8 Mitigation Monitoring and Reporting Program

CEQA requires that when a lead agency adopts a MND, it shall prepare a monitoring or reporting program for all required mitigation measures (CEQA Guidelines Section 15097). This MMRP describes the monitoring and reporting program for mitigation measures adopted by CVWD to avoid or substantially reduce impacts related to the Avenue 66 Trunk Sewer Project (project or proposed project) to less than significant levels. CVWD and its contractors are required to implement the adopted mitigation measures for the proposed project in accordance with the MND. The MMRP contains a checklist and description of all adopted mitigation measures, including the responsible parties, timing, and completion criteria.

Program Administration

The MMRP shall be administered by CVWD. Mitigation measures shall be incorporated into design and construction contracts, as appropriate, to ensure full implementation. The MMRP shall be maintained by the designated CVWD Project Manager and be available for inspection upon request at CVWD offices.

Mitigation Monitoring Requirements

A mitigation monitoring checklist has been developed for the proposed project and is intended for use by CVWD, as lead agency and designated monitoring entity for the proposed project. The checklist, presented as **Table 1-1**, summarizes the mitigation requirements for the proposed project, anticipates timing, and identifies responsible parties for ensuring implementation of each mitigation measure.

Table 1-1: Avenue 66 Trunk Sewer Project - Mitigation Monitoring and Reporting Program

Mitigation Measure	*Monitoring and Reporting Actions*	*Implementation Schedule*	*Monitoring Frequency*	*Responsible Party*	*Review and Approval by:*	*Verification: Status/ Date Completed/ Initials*
Mitigation Measure AES-1: Design of Aboveground Structures To minimize visual impacts on public views, permanent, aboveground structures (lift station) shall be designed to blend into the existing visual character of their surroundings, including building and wall height, color, and exterior architectural treatments.	1. Include measure in contract documents 2. Confirm design plans consider existing surrounding visual character such as building and wall height, color, and exterior architectural treatments 3. Confirm design elements are incorporated during construction	1. Contracting 2. Pre-Construction 3. Construction	1. Once 2. Once, prior to construction 3. Once, during construction	1. CVWD 2. CVWD, Construction Contractor 3. Construction Contractor	CVWD	1. _____ 2. _____ 3. _____
Mitigation Measure BIO-1: Pre-Construction Burrowing Owl Surveys To avoid potential impacts to burrowing owl, a pre-construction clearance survey for burrowing owl shall be conducted no more than fourteen (14) days prior to initiation of construction activities. The burrowing owl pre-construction survey shall be conducted on-foot within the proposed disturbance area including a 500-foot buffer. The survey methods will be consistent with the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012) and shall consist of walking parallel transects spaced adequately to obtain 100% visual coverage of the site. The survey shall be conducted by a biologist familiar with the identification of burrowing owl and their habitat. If burrowing owls are found within the project area during the pre-construction surveys, active burrows will be avoided. If possible, the timing and location of construction activities will be adjusted to avoid the occupied burrow by the appropriate distance (see below), where possible. Due to the size of the project, it is anticipated that the construction schedule and location can be modified to avoid all potential impacts to occupied burrows during the breeding season. Buffer zones for occupied burrows will be established at 500 feet during the breeding season (February 1 to August 31) and at 100 feet for the non-breeding season. These buffers may be adjusted in consultation with California Department of Fish and Wildlife and Coachella Valley Conservation Commission and monitored at the discretion of a qualified biologist. The buffer zone will be clearly marked with flagging and/or construction fencing	1. Include measure in contract documents. 2. Confirm qualified biologist conducted pre-construction survey for burrowing owl within the appropriate time frame and established a buffer zone, as appropriate. 3. Avoid construction within the buffer zone of active burrows.	1. Contracting 2. Pre-Construction 3. Construction	1. Once 2. Once, within 14 days prior to construction, or if construction re-starts 3. Continuously throughout construction, if applicable	1. CVWD 2. CVWD, Construction Contractor 3. Construction Contractor	CVWD	1. _____ 2. _____ 3. _____
Mitigation Measure BIO-2: Nesting Birds To avoid disturbance of nesting birds, including raptor species protected by the Migratory Bird Treaty Act and the California Fish and Game Code 3503, activities related to the proposed project including, but not limited to, vegetation removal, ground disturbance, and construction shall occur outside of the bird breeding season (typically January 1 to September 15) to the extent practicable. If construction must occur within the bird breeding season (January 1 through September 15), CVWD shall, no more than three days prior to initiation of ground disturbance and/or vegetation removal, contract with a qualified biologist to conduct a nesting bird and raptor pre-construction survey within the disturbance footprint plus a 100-foot buffer (300-foot for raptors), where feasible. If the proposed project is phased or construction activities stop for more than one week, a subsequent pre-construction nesting bird and raptor survey will be required prior to each phase of construction within the project site. Pre-construction nesting bird and raptor surveys shall be conducted during the time of day when birds are active and shall factor in sufficient time to perform this survey adequately and completely. A report of the nesting bird and raptor survey results, if applicable, shall be submitted to the lead agency for review and approval prior to ground and/or vegetation disturbance activities.	1. Include measure in contract documents. 2. Avoid construction activities between January 1 and September 15. OR 3. Confirm a qualified biologist conducted pre-construction nesting bird and raptor surveys and submitted a report of survey results within the appropriate time frame, and established a no-work	1. Contracting 2. Construction OR 3. Pre-construction 4. Construction	1. Once 2. Once OR 3. Once, within 3 days prior to construction, or if construction re-starts 4. Continuously throughout construction, if applicable	1. CVWD 2. Construction Contractor OR 3. CVWD, Construction Contractor 4. Construction Contractor	CVWD	1. _____ 2. _____ OR 3. _____ 4. _____

Mitigation Measure	*Monitoring and Reporting Actions*	*Implementation Schedule*	*Monitoring Frequency*	*Responsible Party*	*Review and Approval by:*	*Verification: Status/ Date Completed/ Initials*
If nests are found, their locations shall be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for songbirds, and up to 500 feet for raptors depending upon the species and the proposed work activity, and California Department of Fish and Wildlife (CDFW) approval shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. Buffers will be determined in conjunction with CDFW through the development of a nesting bird management plan. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed, and all the young have fledged. If project activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary.	buffer zone, as appropriate. 4. Confirm construction is avoided in the no-work buffer zone until biologist determines that the nest is inactive.					
Mitigation Measure CUL-1: Phase II Work Plan, Archaeological Investigation, and Report As the Avenue 66 Trunk Sewer Project will conduct ground disturbing work within the boundaries of two known Tribal Cultural Resources within Martinez Historical District, the Martinez Road site P-33-020028 (CA-RIV-10171) and the multicomponent site P-33-001292/h (CA-RIV-1292H) along the western edge of Martinez Road, a Phase II Work Plan, Phase II Archaeological Investigation, and a Phase II Technical Report shall be conducted prior to the issuance of an installation agreement by the Torres-Martinez Desert Cahuilla Indians to determine if intact deposits remain. A Phase II Work Plan (Work Plan) shall be created prior to the Phase II field work to guide the investigation. The Phase II Work Plan shall include, but not be limited to, the following elements: an overview of the project and regulatory context; a description of the environmental and cultural setting, relying on relevant portions of the Cultural Resources Technical Report (Gusick 2020); background on the results of previous investigations, cultural resources reports, and coordination with Native American groups; and the methods and research design to identify potential themes and questions, data expectations, significance thresholds, and protocols, all culminating in a detailed plan for the methods of testing within the Area of Direct Impact (ADI) for the project and artifact analysis with current industry standards. To avoid potential impacts to unknown subsurface resources in the Area of Direct Impact (ADI) in the vicinity of the Martinez Road site P-33-020028 (CA-RIV-10171) and the multicomponent site P-33-001292/h (CA-RIV-1292H) along the western edge of Martinez Road, a Phase II Archaeological Investigation (Field Work) shall be conducted. The Phase II Archaeological Investigation (Field Work) is the field work portion and shall be conducted in accordance with the Society for California Archaeology's Fieldwork and Reporting Guidelines. This work effort shall be conducted under the direction of an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology. The Phase II Field Work excavations shall be limited to the ADI, which is the area that will be directly disturbed by project-related excavation. Field work methods shall be defined in the Work Plan and may include shovel test pits, test units, transport of recovered materials to the laboratory, specialized analysis, and cataloguing of lithic artifacts, charcoal, and faunal remains. Field work also may include magnetic resistivity survey. After the Phase II Field Work, a Phase II Technical Report (Technical Report) shall be created documenting the effort. The Technical Report shall include any necessary archival research to identify significant historical associations based on mapping of encountered artifacts, collection of functionally or temporally diagnostic tools and debris, and excavation of a sample of the cultural deposits carried out during the Phase II Field Work. The significance of any new data shall be evaluated according to the criteria of the California Register of Historic Resources and if applicable, National Register of Historic Places. The Martinez National Historic District (NRD-1292) would not be reevaluated for listing eligibility. The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition).	1. Retain a qualified archaeologist to conduct Phase II Study 2. Confirm a Phase II Work Plan has been created prior to the Phase II field investigation. 3. Confirm completion of the Phase II field work and technical report.	1. Pre-Installation Agreement 2. Pre-Installation Agreement 3. Pre-Installation Agreement	1. Once 2. Once 3. Once	1. CVWD 2. CVWD, archaeologist 3. CVWD, archaeologist	CVWD	1. _____ 2. _____ 3. _____

Mitigation Measure	*Monitoring and Reporting Actions*	*Implementation Schedule*	*Monitoring Frequency*	*Responsible Party*	*Review and Approval by:*	*Verification: Status/ Date Completed/ Initials*
Mitigation Measure CUL-2: Data Recovery Plan A Phase III Data Recovery Program (DRP) shall be created for the project and include the Phase II Archeological Investigation and technical report information as necessary. The DRP shall be completed in accordance with the California Office of Historic Preservation's Planning Bulletin 5 (1991), Guidelines for Archaeological Research Design, or the latest edition thereof. The DRP shall be prepared by a qualified archaeologist who meets or exceeds the Secretary of Interior's Professional Qualifications Standards for prehistoric archaeology and be available for comments by the Torres-Martinez Desert Cahuilla Indians and CVWD. The DRP must be submitted for review and approval prior to the start of construction. Ground-disturbing work may continue under the observation of an archaeological or cultural monitor on portions of the project site that do not appear to contain significant archaeological resources. The DRP shall include the following elements: • Field Methods and Procedures: Descriptions of proposed field strategies, procedures, and operations. • Research Design/Data Classes/Data Requirements: This will describe the relevant research themes pertinent to the archaeological deposit identified and the data requirements for evaluation for the CRHR. • Background: Results of previous investigations and historical documentation research • Treatment Plan: Expected Artifact Classes and treatment plan for each, including the treatment of human remain and associated funerary objects. The treatment of human remains will be included as detailed in CUL-6. • Cataloguing and Laboratory Analysis: Description of selected cataloguing system and artifact analysis procedures of artifacts recovered and any corresponding field notes, graphics, and lab analyses, including but not limited to faunal analysis of all animal bones, radiocarbon dating when appropriate, protein residue analysis of stone tools and groundstone, and petrographic analysis of ceramic samples to assess general age ranges and source material. • Discard and Deaccession Policy: Description of and rationale for field and post-field discard and deaccession policies for cultural resources. • Interpretive Program: Consideration of an on-site/off-site public interpretive program during the course of the archaeological data recovery program. • Security Measures: Recommend security measures to protect the archaeological resource from vandalism, looting, and non-intentionally damaging activities. • Final Report: Description of proposed report format and contents and distribution of results. • Curation: Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.	1. Retain a qualified archaeologist to prepare Data Recovery Plan 2. Confirm DRP has been reviewed and approved by Torres-Martinez Desert Cahuilla Indians. 3. Confirm completion of the Phase III DRP.	1. Pre-Construction 2. Pre-Construction 3. Pre-Construction	1. Once 2. Once 3. Once	1. CVWD 2. CVWD, archaeologist 3. CVWD, archaeologist	CVWD	1. _____ 2. _____ 3. _____
Mitigation Measure CUL-3: Worker Environmental Awareness Program: Archaeologist Sensitive Training CVWD shall retain a qualified archaeologist to conduct a Worker's Environmental Awareness Program (WEAP) training for archaeological sensitivity for construction personnel prior to the commencement of any ground disturbing activities. Construction personnel shall be briefed on project-specific circumstances and general observation methods for detecting archeological resources, including tribal cultural resources. The briefing shall include appropriate actions to be taken in the event of questionable evidence or discovery.	1. Include measure in contract documents. 2. Confirm qualified archaeologist conducted WEAP training prior to construction	1. Contracting 2. Pre-Construction	1. Once 2. Once, prior to construction	1. CVWD 2. CVWD, Construction Contractor	CVWD	1. _____ 2. _____
Mitigation Measure CUL-4: Initial Monitoring of Archaeological Resources CVWD shall ensure that initial project-related ground-disturbing activities shall be observed by an archaeological and Native American monitor. These activities shall include initial site preparation, clearing/grubbing of vegetation, and excavation for placement of the sanitation system. The archaeological monitor shall be under the direction of a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology (National Park Service 1983). If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the find shall be evaluated for California Register of Historic Resources and/or National Register of Historic Places eligibility. Archaeological monitoring may be reduced or halted at the discretion of the qualified archaeologist as warranted by conditions such as encountering bedrock, sediments being excavated are fill materials, or negative findings during initial ground-	1. Include measure in contract documents. 2. Confirm archaeological and Native American monitor are invited to attend the pre-construction meeting	1. Contracting 2. Pre-Construction 3. Construction	1. Once 2. Once 3. Continuously during initial	1. CVWD 2. CVWD, Construction Contractor, 3 CVWD, Construction Contractor	CVWD	1. _____ 2. _____ 3. _____ 4. _____

Mitigation Measure	*Monitoring and Reporting Actions*	*Implementation Schedule*	*Monitoring Frequency*	*Responsible Party*	*Review and Approval by:*	*Verification: Status/ Date Completed/ Initials*
disturbing activities. If monitoring is reduced, spot checking shall occur when ground-disturbance moves to a new location or when ground disturbance will extend to depths not previously reached (unless those depths are within bedrock). Both the project archeologist and Native American monitor will be invited to attend the pre-construction meeting.	3. Confirm archaeological and Native American monitor observed initial ground-disturbing activities. 4. If resources were encountered during construction, confirm work was halted and the qualified archaeologist was consulted on eligibility, if applicable.	4. Construction	ground-disturbing activities. 4. Throughout construction, if applicable.	4. Construction Contractor		
Mitigation Measure CUL-5: Unanticipated Discovery of Cultural Resources In the event that cultural resources are unearthed during project construction, the project archeologist, in coordination with CVWD's construction inspector shall temporarily suspend all earth disturbing work within a 100-foot radius of the discovery. A qualified professional 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, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find: • 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 does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify CVWD's Construction Inspector and Environmental Services Department. CVWD shall consult on a finding of eligibility and implement appropriate treatment measures if the find is determined to be eligible for inclusion in the National Register of Historic Places (NRHP) or California Register of Historical Resources (NRHR). Work may not resume within the no-work radius until CVWD, through consultation as appropriate, determines that the site either: 1) is not eligible for the NRHP or CRHR; or 2) that the treatment measures have been completed to its satisfaction.	1. Include measures in contract documents. 2. If resources are unearthed during construction, confirm work was halted and the qualified archaeologist was consulted on eligibility, and appropriate treatment measures and no-work buffers were implemented. 3. Consult on finding and implement treatment measures, if applicable.	1. Contracting 2. Construction 3. Construction	1. Once 2. Throughout construction, if applicable. 3. Once	1. CVWD 2. CVWD, Construction Contractor 3. CVWD	CVWD	1. _____ 2. _____ 3. _____
Mitigation Measure CUL-6: Unanticipated Discovery of Human Remains The discovery of human remains is a possibility during ground-disturbing activities. In the event that human remains are found, CVWD shall temporarily suspend all earth disturbing work within a 100-foot radius of the discovery. The project archeologist would evaluate the significance of the find and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature and location of the find. If the find includes human remains, or remains that are potentially human, the professional archaeologist shall ensure reasonable protection measures are taken to protect the discovery from disturbance (Assembly Bill [SB] 2641). The archaeologist shall notify the Riverside County Coroner (as per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code (PRC), and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the Native American Heritage Commission (NAHC), which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate information center; using an open space	1. Include measure in contract documents. 2. Suspend all earth disturbing work within 100 feet of discovery, if applicable. 3. Confirm appropriate notifications have occurred, if applicable. 4. Verify adequate consultation with MLD has occurred, if applicable. 5. Verify reburial site has been appropriately recorded and human	1. Contracting 2. Construction 3. Construction 4. Construction 5. Construction 6. Construction	1. Once 2. Throughout construction, if applicable 3. Throughout construction, if applicable 4. Throughout construction, if applicable 5. Throughout construction, if applicable	1. CVWD 2. Construction Contractor 3. CVWD, Construction Contractor 4. CVWD, Construction Contractor 5. CVWD, Construction Contractor	CVWD	1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____

Mitigation Measure	*Monitoring and Reporting Actions*	*Implementation Schedule*	*Monitoring Frequency*	*Responsible Party*	*Review and Approval by:*	*Verification: Status/ Date Completed/ Initials*
or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction. If the find includes human remains, or remains that are potentially human, and the find is located on lands owned by Torres-Martinez Desert Cahuilla Indians, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlay adjacent remains, until a representative from the Torres-Martinez Desert Cahuilla Indians is notified. The Torres-Martinez Desert Cahuilla Indians would have full discretion over the treatment of the remains.	remains treated appropriately, if applicable. 6. If remains were found on land owned by the Torres-Martinez Desert Cahuilla Indians, suspend all earth disturbing work and verify adequate notification and consultation has occurred, if applicable.		6. Throughout construction, if applicable	6. CVWD, Construction Contractor		
Mitigation Measure GEO-1: Dewatering Dewatering shall be conducted throughout construction activities in locations that are exposed to existing groundwater to reduce the potential for heaving of soil within excavation areas. To control groundwater seepage to open excavations, sump pits may be utilized. If pumping to sump pits is used as mitigation, sump pits should be filled with ¾-inch clean stone and lined with geotextile filter fabric to prevent excessive particle migration. Pumped water should be discharged away from open excavations. Groundwater may also be pumped and hauled to an appropriate discharge location, as approved by CVWD. The Construction Contractor shall be aware that the dewatering and trenching operations will result in significant changes to the effective stresses of the native soil within the construction area that may result in ground movement. The Construction Contractor is solely responsible for designing and implementing the dewatering program and pipeline installation operations to prevent ground movement within and adjacent to the sewer line. CVWD shall review and approve proposed methodology and plans. The proposed project shall be constructed in accordance with existing regulatory requirements and will incorporate the geotechnical engineering recommendations from the 2018 Geotechnical Report.	1. Include measure in contract documents 2. Confirm design of the de-watering program 3. Confirm dewatering program is in compliance with existing regulatory requirements and incorporates the 2018 Geotechnical Report engineering recommendations 4, Confirm dewatering program implemented	1. Contracting 2. Pre-Construction 3. Pre-Construction 4. Construction	1. Once 2. Once, prior to construction 3. Once, prior to construction 4. Continuously throughout construction, if applicable	1. CVWD 2. CVWD, Construction Contractor 3. CVWD, Construction Contractor 4. Construction Contractor	CVWD	1. _____ 2. _____ 3. _____ 4. _____
Mitigation Measure HAZ-1: Hazardous Materials Management and Spill Control Plan Prior to construction, the Construction Contractor is required to submit to CVWD a Hazardous Materials Management Spill Control Plan that includes a project-specific contingency plan for hazardous materials and waste operations, including precautions taken in the proximity of a school zone. The plan shall be applicable to construction activities and shall establish policies and procedures according to applicable codes and regulations, including but not limited to, the California Building and Fire Codes, and federal and California Occupational Safety and Health Administration (OSHA) regulations. Elements of the Plan shall include, but not be limited to the following: • A discussion of hazardous materials management, including delineation of hazardous material storage areas, access and egress routes, waterways, emergency assembly areas, and temporary hazardous waste storage areas; • Notification and documentation of procedures; • Spill control and countermeasures, including employee spill prevention/response training and a health and safety plan; • Equipment maintenance; and • Child safety and school operations.	1. Include measure in contract documents. 2. Confirm Construction Contractor has prepared a Hazardous Materials Management and Spill Control Plan. 3. Confirm Construction Contractor follows procedures in the Hazardous Materials Management and Spill Control Plan.	1. Contracting 2. Pre-Construction 3. Construction	1. Once 2. Once 3. Periodically throughout construction	1. CVWD 2. Construction Contractor 3. Construction Contractor	CVWD	1. _____ 2. _____ 3. _____

Mitigation Measure	*Monitoring and Reporting Actions*	*Implementation Schedule*	*Monitoring Frequency*	*Responsible Party*	*Review and Approval by:*	*Verification: Status/ Date Completed/ Initials*
Mitigation Measure NOI-1: Noise and Vibration Control During Construction CVWD shall incorporate into the construction contract specifications the following noise and vibration control measures to be implemented by the Construction Contractor: • Prior to construction, the Construction Contractor shall provide [CVWD approved] written notification to residents within 500 feet of the proposed facilities undergoing construction, identifying the type, duration, and frequency of construction activities. Notification materials shall be provided in English/Spanish translation and identify a mechanism for residents to contact CVWD's Project Manager related to noise or vibration concerns. • During construction, the Construction Contractor shall use equipment (e.g., jack hammers, pavement breakers, and rock drills) which is hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust would be used. This muffler can lower noise levels from the exhaust by up to 10 dBA. External jackets on the tools themselves would be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures will be used such as drilling rather than impact equipment whenever feasible. • During construction, the Construction Contractor shall comply with compaction standards for backfill. Vibration generated during soil compaction may be minimized by using a small compactor. • During sheetpile driving for trench excavation, the Construction Contractor shall use the following measures: pushing the sheetpile in as far as possible with non-vibratory equipment (e.g., excavator) before using the vibrator; using a small, hand-operated vibratory hammer or one with a different operational frequency to further reduce the vibration potential; flooding the soils before tamping with the vibrator; and/or operating vibratory equipment with "throttling" when a vibrator must be used. • All equipment and trucks used by the Construction Contractor for project construction shall use the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) and be maintained in good operating condition to minimize construction noise impacts. All internal combustion engine-drive equipment shall be fitted with intake and exhaust mufflers which are in good condition. • During construction, the Construction Contractor shall prohibit unnecessary idling of internal combustion engines. In practice, this would mean turning off equipment if it would not be used for five or more minutes. • During construction, the Construction Contractor shall locate stationary noise-generating construction equipment, such as air compressors and generators, as far as possible from homes and businesses. • The Construction Contractor shall locate staging areas as far as feasibly possible from sensitive receptors.	1. Confirm measures are incorporated into the contract specifications. 2. Confirm CVWD-approved notices were provided to required residents 3. Implement noise and vibration control measures.	1. Contracting 2. Pre-Construction 3. Construction	1. Once 2. Once 3. Throughout construction	1. CVWD 2. CVWD, Construction Contractor 3. Construction Contractor	CVWD	1. _____ 2. _____ 3. _____
Mitigation Measure TRA-1: Traffic Control Plan Prior to construction, CVWD shall require its Construction Contractor to implement an approved Traffic Control Plan, to the satisfaction of the CVWD construction inspector and the County. The components of the Traffic Control Plan shall include: • Identification of construction staging site locations and potential road closures, • Alternate routes of traffic detours, including emergency response contact information, • Planned routes for construction-related vehicle traffic (haul routes), and • Identification of alternative safe routes to maintain pedestrian safety during construction. CVWD's Project Manager shall coordinate with the police, fire, and other emergency services to alert these entities about potential construction delays, project alignment, and construction schedule. CVWD shall minimize the duration of disruptions/closures to roadways and critical access points for emergency services. The Traffic Control Plan shall provide for traffic control measures including flag persons, warning signs, lights, barricades, and cones to provide safe passage of vehicular, bicycle and pedestrian traffic and access by emergency	1. Include measure in contract documents 2. Confirm Construction Contractor has prepared a Traffic Control Plan to the satisfaction of the CVWD Project Manager, CVWD Construction Inspector and the County. 3. Confirm CVWD's Project Manager has coordinated with emergency services about construction.	1. Contracting 2. Pre-Construction 3. Pre-Construction 4. Pre-Construction	1. Once 2. Once 3. Once 4. Once	1. CVWD 2. CVWD, Construction Contractor 3. CVWD Project Manager 4. CVWD Construction Inspector	CVWD	1. _____ 2. _____ 3. _____ 4. _____

Mitigation Measure	*Monitoring and Reporting Actions*	*Implementation Schedule*	*Monitoring Frequency*	*Responsible Party*	*Review and Approval by:*	*Verification: Status/ Date Completed/ Initials*
responders. All construction personnel shall be briefed on project-specific circumstances relating to worker and public safety with regards to traffic control. The Traffic Control Plan shall be submitted to CVWD's Project Manager and construction inspector for review and approval prior to construction. CVWD's Construction Inspector shall have the construction schedule and Traffic Control Plan reviewed by the County of Riverside to ensure construction of the proposed project does not conflict with construction activities associated with other construction projects that may be occurring at the same time in the vicinity.	4. Confirm CVWD Construction Inspector has the Traffic Control Plan reviewed by the County of Riverside.					

2. PROJECT DESCRIPTION

2.1 Project Overview

The proposed project is located in the eastern portion of the greater Coachella Valley within an unincorporated area of Riverside County, California in the community of Thermal. A regional overview map is shown in **Figure 2-1**. The City of Coachella (located about seven miles north) is the nearest major population center. The unincorporated community of Valerie is immediately adjacent to the project area to the west and the unincorporated area of Mecca is about four miles east of the project. Access to the site is via Interstate 10, State Route 86, Avenue 66, and Harrison Street.

The proposed project would extend CVWD sewer facilities along Avenue 66 from Polk Street to Harrison Street to provide sanitation service to the Sunbird Mobile Home Park (MHP) (located near Echols Road and Harrison Street) and the Torres-Martinez Community Center (TMCC) (located south of Avenue 66 between Polk and Tyler Streets). Each component of the proposed project is shown in **Figure 2-2**. The proposed project involves installation of 19,625 feet of sewer pipeline and a new lift station. The proposed project would connect the Sunbird MHP and TMCC to CVWD's existing sanitation system tributary to existing Lift Station 55-21 (LS 55-21) and then to CVWD's Water Reclamation Plant No. 4 (WRP-4). The pipeline would be installed below grade within existing paved streets and rights-of-way with an average excavation depth of ten to 14 feet and maximum depth of 25 feet. The pipeline alignment would primarily traverse public roads and a portion of the Torres-Martinez Desert Cahuilla Indian reservation land.

2.1.1 Project Purpose and Background

The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) are the *principal state agencies with primary responsibility for the coordination and control of water quality* (California Water Code (CWC) §13000 et seq.). Efforts by these agencies to preserve and protect water quality to optimize the beneficial uses of state waters, often involve the elimination of septic systems. The three primary objectives of the proposed project are to:

1. Assist disadvantaged communities with water quality needs;
2. Replace septic systems with regional sewer service; and
3. Propose facilities consistent with long-term infrastructure plans.

The proposed project is configured to directly benefit severely disadvantaged communities (SDAC) while providing the backbone to benefit additional disadvantaged communities (DAC) in the long-term. Benefits also relate to improved groundwater quality through the removal of septic systems and an increase in the production of recycled water in the future.

The Sunbird MHP is comprised of 10 acres of high-density single-family homes with a population of approximately 490 residents and 86 mobile home units. The community qualifies as a SDAC with a median household income (MHI) less than 60% of the statewide MHI, according to the DWR DAC Mapping Tool (DWR 2020). A Notice of Noncompliance issued by the Colorado River RWQCB on November 3, 2016 informed the property manager (Newport Pacific) that the septic systems were in violation of the Waste Discharge Requirement Order 97-500. Newport Pacific is currently required to evacuate six community septic tanks on a bi-weekly basis for transport and disposal at CVWD's WRP-4. This situation is unsustainable, and modifications to the existing septic system are problematic for various reasons. The Leadership Counsel for Justice and Accountability requested technical assistance from the SWRCB to develop options for connection to CVWD's sewer collection system.

The TMCC is located about half a mile south of Avenue 66 on Martinez Road. A MHP and several residential areas are also located along this stretch of Martinez Road, although they are not part of the current project. The TMCC septic system comprises19 independent tanks of varying capacity on 25 acres. Buildings connect directly to the nearest septic tank. The TMCC residential area includes elder apartments, single-family units, and trailers quantified as 11 residential units (23 equivalent dwelling units [EDU]). The remaining 20-acre TMCC non-residential area encompasses tribal offices, a medical clinic, and recreational facilities.

Wastewater generated by the Sunbird MHP is around 17,200 gallons per day (gpd) and by the TMCC site is 8,600 gpd (Woodard & Curran 2020). Projected annual average flow to serve both locations is approximately 25,800 gpd. Project facilities would be sized and located such that other existing low-income housing could be connected, which has the potential to double the initial annual average flow. The proposed sewer collection system would be designed to accommodate the peak hour flow for all existing DAC residences in the tributary area, based on CVWD's Developmental Design Manual (DDM), and shown in **Figure 2-3**. Ultimately, the wastewater conveyance pipelines would accommodate the demand projections over the next 3 to 5 years that are anticipated in CVWD's DDM. The project would allow for expansion to connect other small communities in the project area, increasing the average flow by approximately 85,400 GPD (Akel Engineering Group 2017).

Figure 2-1: Avenue 66 Trunk Sewer – Regional Location Map

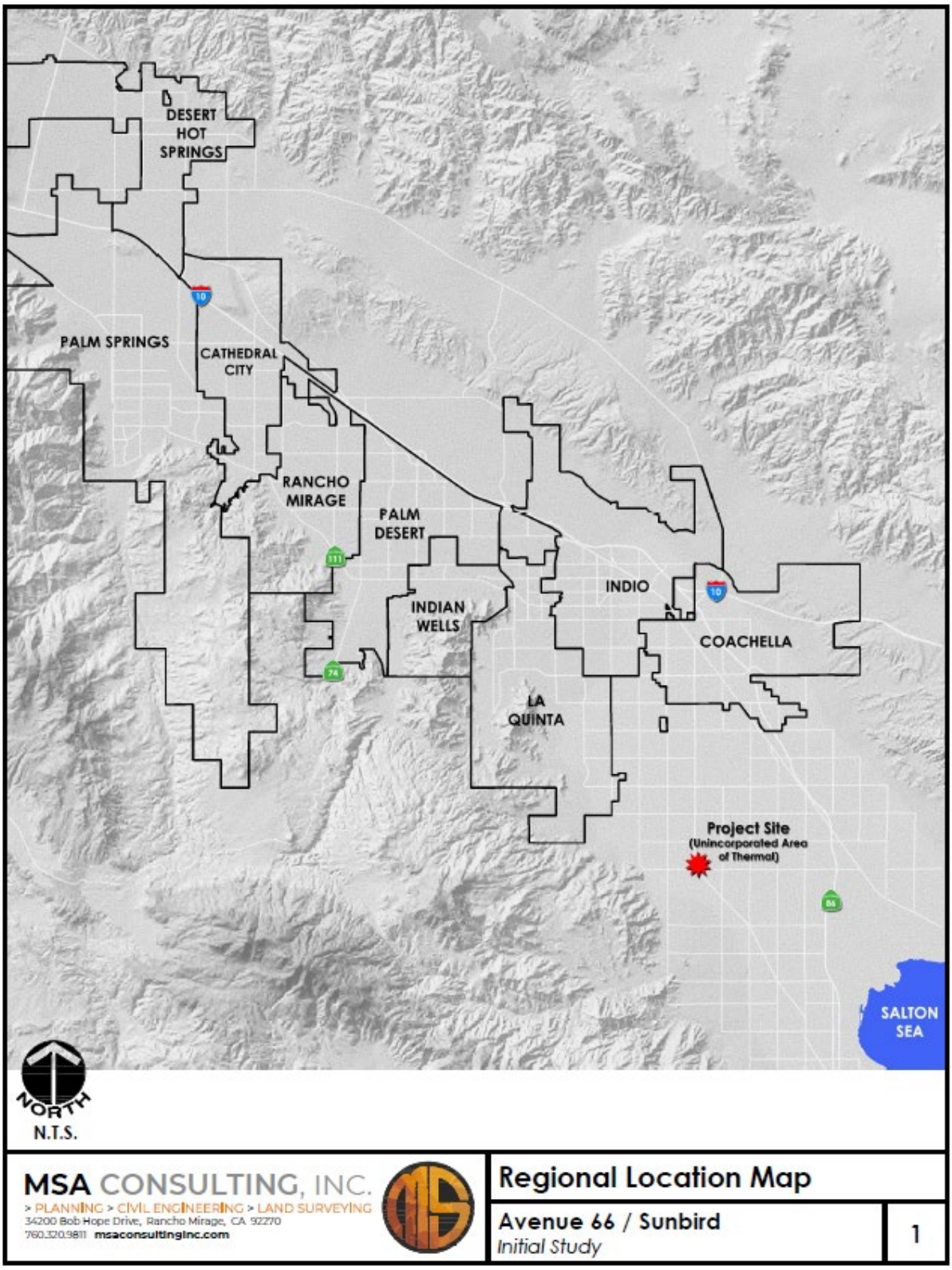


Figure 2-2: Avenue 66 Trunk Sewer– Project Vicinity Map

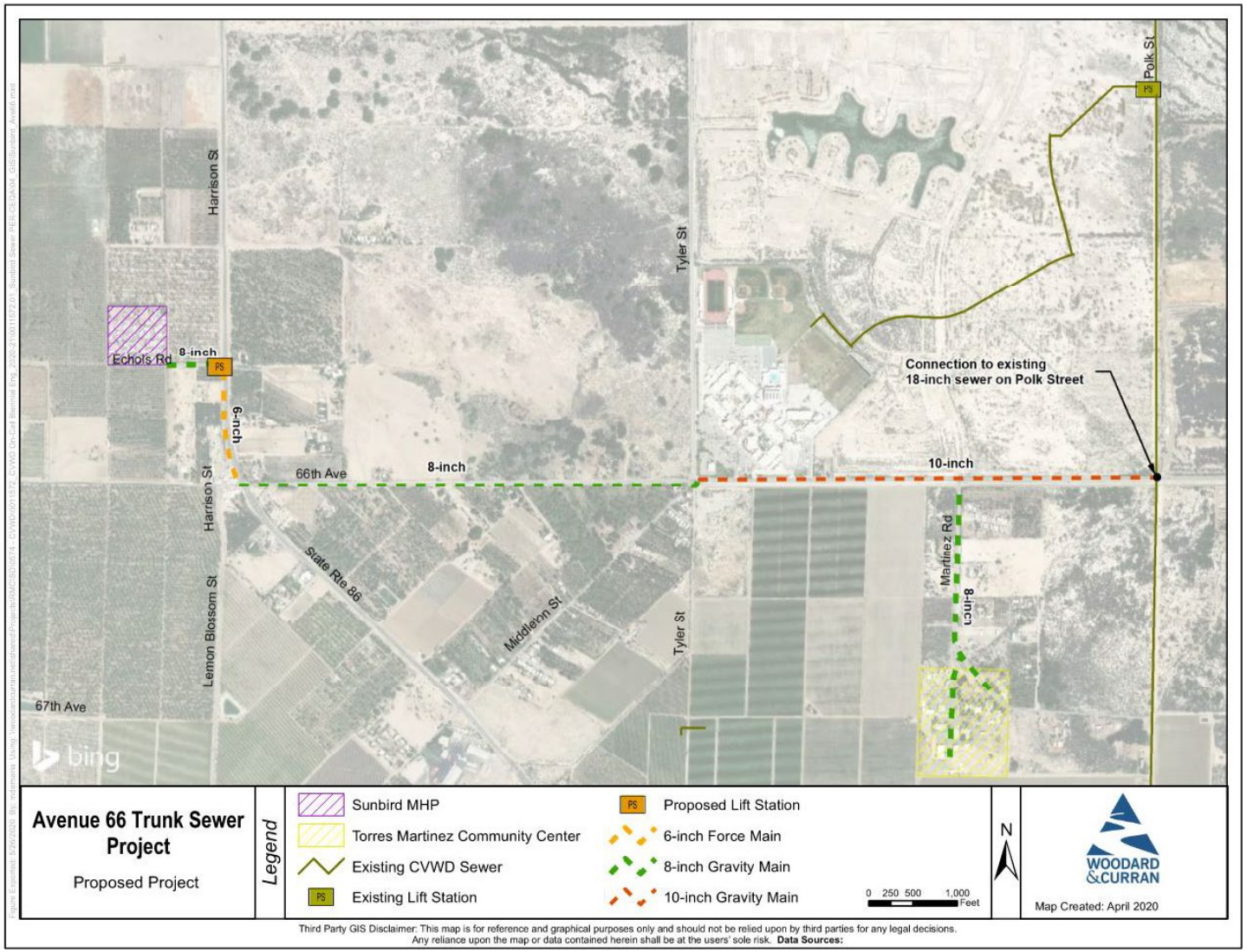
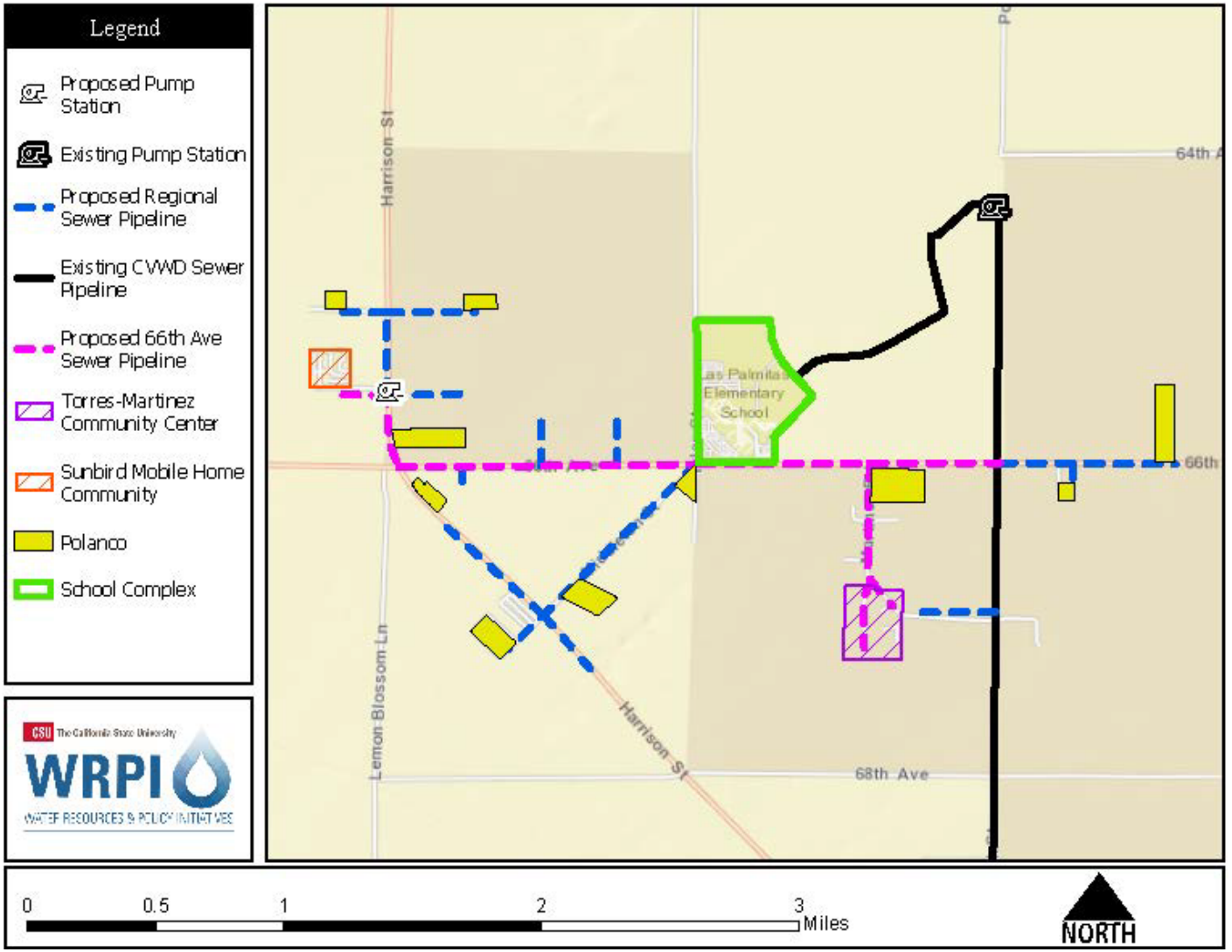


Figure 2-3: Proposed and Future Wastewater System Expansion



2.2 Environmental Setting

The project is within Riverside County, surrounded primarily by vacant land and irrigated agriculture. Residential, commercial, and industrial developments are scarce (see images in *Section 2.3 Environmental Setting*, below). Most residential developments are well-established trailer parks. Existing development within the project area consists of multi-family residential (trailer parks or mobile home parks, including the Sunbird MHP), single-family residential, community-services, commercial, agricultural land, education (Toro Canyon Middle School and Las Palmitas Elementary School) and the TMCC. The TMCC includes administration buildings, a health clinic, recreational areas, roads, and residential units. Tribal lands are located throughout the project area. Specifically, the Torres-Martinez Desert Cahuilla Indian properties are located north and south of the proposed project alignment along Avenue 66. The land use designations established in the *Riverside County General Plan Eastern Coachella Valley Area Plan* are shown in **Figure 2-4**.

The proposed project is within the *Eastern Coachella Valley Area Plan* (County of Riverside 2016). The *Eastern Coachella Valley Area Plan* covers the area at the northern end of the Salton Sea, California's largest inland sea. Physically, the eastern Coachella Valley is bounded by the Santa Rosa Mountains to the west, and the Mecca Hills and the edge of Joshua Tree National Park to the northeast.

Thermal

The community of Thermal is located west of State Route 111, south of the City of Coachella, and contains light industrial uses as well as some residential and commercial uses. The Riverside County-owned Jacqueline Cochran Regional Airport is located in the westerly part of Thermal and the airport's compatibility zones D and E overlay the proposed project sites. Historically, Thermal has been an important agricultural center, and remains so, with some of its more prominent crops including dates, table grapes, grapefruit, and assorted vegetables. In the core area of the community, to the north of Thermal Town Center, are two schools – John Kelley Elementary School and La Familia Continuation High School, a Riverside County Sheriff's station, and Riverside County Thermal Fire Station 39 (County of Riverside 2016).

Valerie

According to the *Eastern Coachella Valley Area Plan*, the community of Valerie, located at the junction of State Route 86 and Avenue 66, incorporates mobile and single-family detached homes and historic agricultural land uses. The Coachella Valley Fish Traps, an archaeological site listed on the National Register of Historic Places, is located west of Valerie, approximately three miles west of the proposed project area.

Farmland

The majority of the land surrounding the proposed project is identified as Prime Farmland or Farmland of Local Importance (County of Riverside N.d.a). The area immediately south of TMCC is designated Agricultural Preserve (County of Riverside N.d.a).

Climate

Local climate can be characterized as hot and dry with instances of zero measurable annual rainfall. However, record storm events have generated over six inches of precipitation in six hours. Average annual rainfall is calculated at about three inches per year with the majority occurring between December and February. Summer temperatures commonly exceed 100 degrees Fahrenheit (°F). Common mid-day temperatures range from 110-120°F. High temperatures coupled with gentle but constant prevailing winds yield high evaporation rates. Freezing temperatures are infrequent.

Topographic Features

The topography of the project area is relatively flat as characteristic of an ancient lakebed. There are no drainage channels, lakes, hills, or rock outcroppings within the project site. The intersection of Avenue 66 and Harrison Street, on the project's western extreme, contains the project's highest point at an elevation of -93 feet above mean sea level (AMSL). The lowest surface elevation is on the eastern extreme at Polk Street at -162 feet AMSL. The average slope across the project site is less than 1%.

Hydrology

The Coachella Valley is drained primarily from north to south through the Coachella Valley Stormwater Channel, which is channelized about two miles east of the project site. The project is located in the Whitewater River Watershed, which drains the area from the San Bernardino Mountains to the Salton Sea.

Flood control improvements along the Coachella Valley Stormwater Channel protect the site from regional events, although the *Eastern Coachella Valley Area Plan* locates the project site within a Special Flood Hazard Area, which extends northerly from the Salton Sea to Valerie, overlapping the project site (County of Riverside 2016). The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Number 06065C2910H designates the site as Zone A – an area subject to 1% annual-chance flood event with inundation of less than one foot.

Geologic Features and Soils

The eastern Coachella Valley is traversed by the San Andreas fault, an active fault with a significant probability of earthquake activity. The project site is located between the San Andreas Fault zone to the north and San Jacinto Fault zone to the south. There are also many other active/potentially active late Quaternary faults within a 100-kilometer

(approximately 62-mile) radius of the project. The most active or potentially active fault line is located approximately 7 miles away from the project site.

The northwestern Coachella Valley is an alluvial lowland that extends southeast from the San Gorgonio Pass region to the north end of the Salton Sea. The lowland is traversed by multiple branches of the San Andreas Fault and is punctuated by localized compressions resulting in the uplift of dome-shaped hills of sand and gravel. Current geologic understanding suggests that the lowland is a contractional region formed over the last one-million years by left-lateral strike slip branches of the San Andres Fault. The left-lateral strike-slip motion is presently active and results in earthquakes in the northern Coachella Valley. Sediments are deposited in the lowland portions of the basin, also known as depositional basins. Sediments in the depositional basins are the main water-bearing units in the Coachella Valley and have been utilized for sand and gravel resources (Kamalzare, PhD., M. ASCE, 2018). However, there are no mineral resource areas in proximity to the project area (County of Riverside N.d.a).

The Riverside County Liquefaction Susceptibility Map locates the project site in an area of high susceptibility due to shallow groundwater, soil type, and potential ground shaking from nearby faults (County of Riverside 2016).

Groundwater

Boring samples presented in the Kamalzare geotechnical report indicate the existence of a high groundwater table at the intersection of Avenue 66 and Polk Street, as well as the intersection of Avenue 66 and Martinez Road (Kamalzare, PhD., M. ASCE, 2018). The Kamalzare geotechnical investigation encountered water at the depth of 13.2 feet below the ground surface at the intersection of Avenue 66 and Polk Street and 16 feet below ground surface at the intersection of Avenue 66 and Martinez Road. The geotechnical study indicates that the groundwater elevation is -181 feet AMSL at Polk Street and increases to -163 feet AMSL at Martinez Road.

Wildfire

The desert and mountainous regions in the East Coachella Valley, roughly two miles to the west and seven miles to the east of the proposed project site, have a high to very high wildfire susceptibility; however, the wildfire susceptibility is moderate to low in the valley (County of Riverside 2016).

Conservation Areas

The project area is not within a designated Conservation Area of the *Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan* (referred to as the CVMSHCP). The CVMSHCP was adopted by the plan participants in 2007 and 2008 and permits were issued by the wildlife agencies in late 2008 (County of Riverside 2016). CVWD is a permittee to the CVMSHCP. The closest Conservation Areas of the CVMSHCP to the project site are the *Santa Rosa and San Jacinto Mountains*

Conservation Area, two miles to the west, and the *Coachella Valley Stormwater Channel and Delta Conservation Area*, three miles to the east.

Air Basin

The project area is located in the Coachella Valley Planning Area of the Salton Sea Air Basin, which is managed by the South Coast Air Quality Management District (SCAQMD). The basin is nonattainment for ozone and respirable particulate matter (PM_{10}) (SCAQMD 2017).

Night Sky

The entire proposed project area is within Zone B of the Mount Palomar Nighttime Lighting Policy Area (County of Riverside 2016).

Transportation

State Route 111 and State Route 86 are the main north-south connector routes within the east Coachella Valley. The Southern Pacific Railroad runs adjacent to State Route 111 and the Salton Sea, to Riverside County's southern boundary. State Route 111, from Bombay Beach on the Salton Sea to Avenue 66 near Mecca, approximately five miles east of the proposed project, is a State-eligible Scenic Highway, providing views of the Salton Sea and the surrounding mountainous wilderness. Interstate 10 from Chiriaco Summit to the intersection with State Route 86, approximately ten miles north of the proposed project, is the nearest County-eligible Scenic Highway to the proposed project.

Avenue 66 is the main east-west connector route to the proposed project, and Harrison Street, adjacent to Sunbird MHP, connects the project site to other communities on the western side of the east Coachella Valley. Avenue 66 is classified as an Urban Arterial and Harrison Street is classified as Expressway. Both Avenue 66 and Harrison Street are identified as having regional Class I bike paths (County of Riverside 2016).

Airports

The southernmost edge of the Jacqueline Cochrane Regional Airport sphere of influence, Zone D compatibility zone, overlaps the proposed alignment along Martinez Road and along Avenue 66 between Tyler Street and the project's eastern terminus (County of Riverside N.d.a).

Utilities

CVWD provides water, wastewater, recycled water, and flood control services to the region. The CVWD service area covers about 1,000 square miles and serves a population of about 300,000 residents. As part of water delivery, CVWD implements groundwater recharge within its service area.

CVWD currently provides potable water service to about 110,133 municipal connections of various user types, including residential, commercial, and industrial. Groundwater is

supplied through 93 active wells. Imported water from the State Water Project and Colorado River is used to replenish the groundwater basin. CVWD services municipal customers through three public water systems; Sunbird MHP is a part of the Cove Communities Public Water System. Some trailer parks are independent of CVWD and use onsite wells for their potable (drinking) water.

CVWD's wastewater collection and treatment systems process almost 17 million gallons per day (MGD) from approximately 95,000 residential and commercial accounts. CVWD's collection system serves approximately 254,420 customers. The system has approximately 1,160 miles of sewer collection piping, 28 lift stations, and five wastewater reclamation plants with a total capacity of 33.1 MGD. The average daily wastewater flow in 2019 was 16.7 MGD and it is expected to increase in the future (CVWD 2019).

Figure 2-4: Riverside County Land Use Map

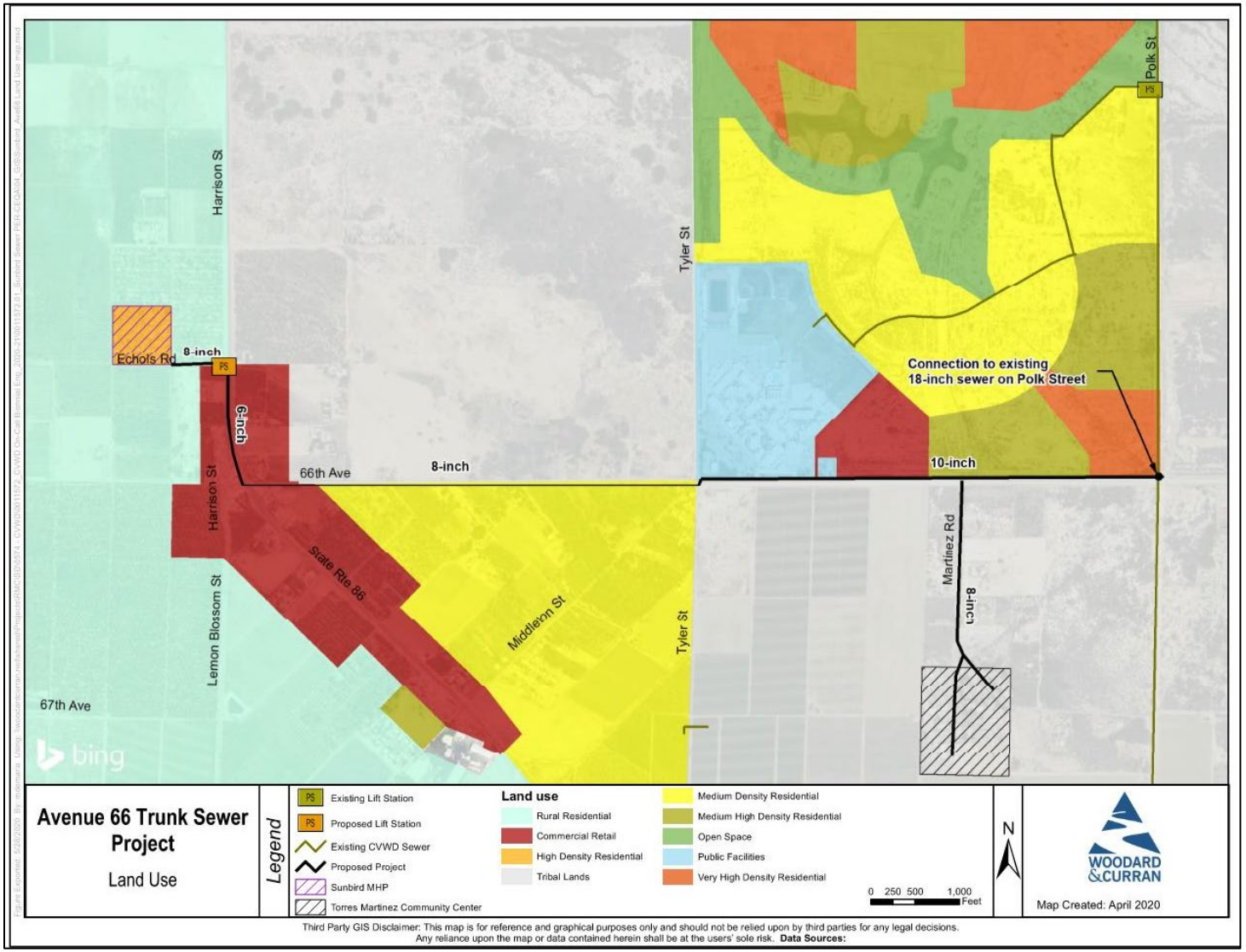
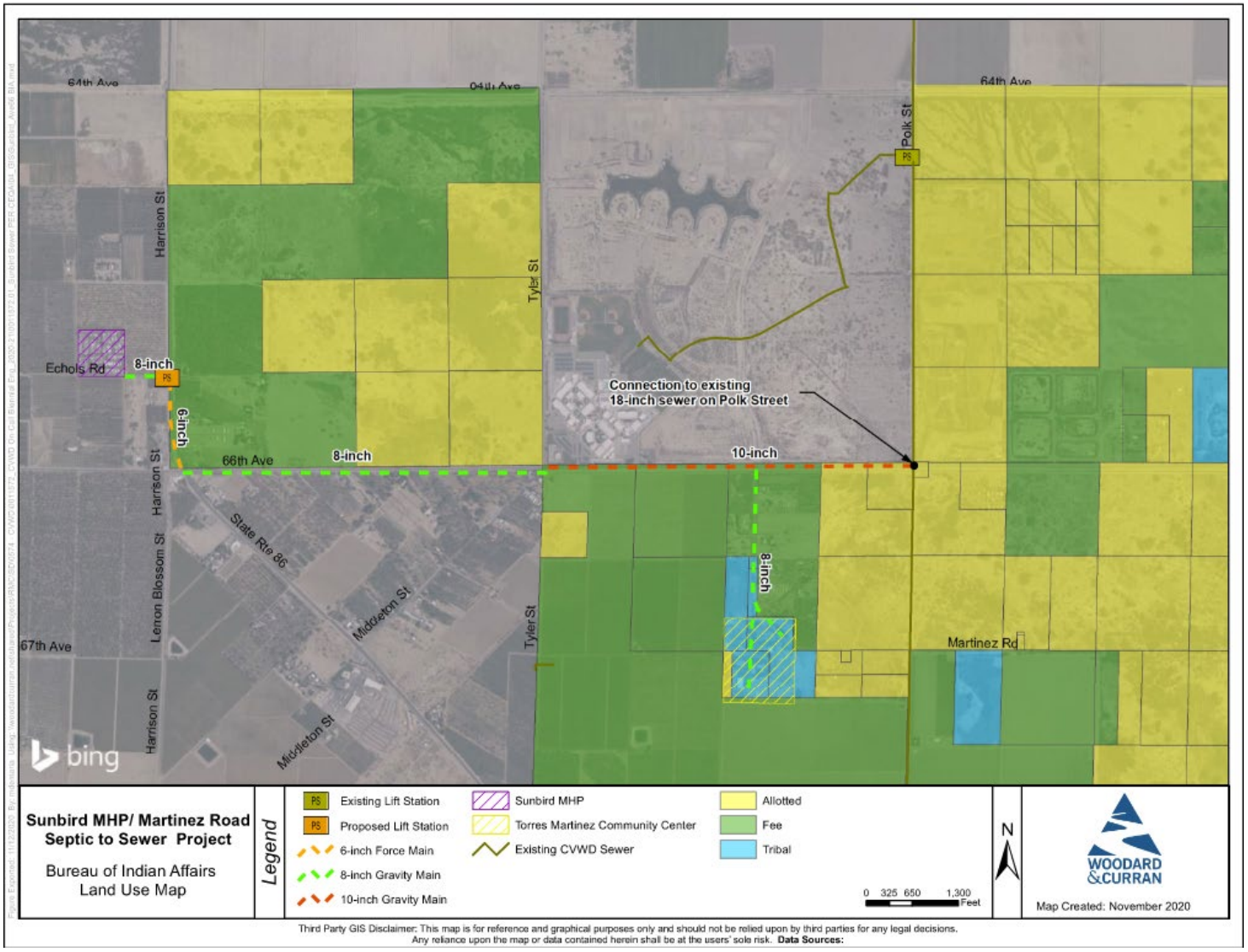


Figure 2-5: Bureau of Indian Affairs Land Use Map



2.3 Existing Facilities and Conditions

Sunbird Mobile Home Park

The Sunbird MHP includes10 acres with high-density single-family homes with a population of approximately 490 residents and 86 mobile home units. The Sunbird MHP septic system is composed of six interconnected tanks of varying capacity. The mobile homes and tanks are connected through a network of Acrylonitrile Butadiene Styrene (ABS) pipe to serve the 86 mobile homes. A Notice of Noncompliance issued by the Colorado River RWQCB on November 3, 2016 informed the property manager (Newport Pacific) that the septic systems were in violation of the Waste Discharge Requirement Order 97-500. Newport Pacific is currently required to evacuate six community septic tanks on a bi-weekly basis for transport and disposal at CVWD's WRP-4.

The following image was captured in November 2018. It shows the view looking west from Harrison Street, down Echols Road towards Sunbird MHP.

Torres Martinez Community Center

The TMCC is located about half a mile south of Avenue 66 on Martinez Road. A MHP and several residential areas are also located along this stretch of Martinez Road, although they are not part of the current project. The TMCC septic system is comprised of 19 independent tanks of varying capacity on 25 acres. Buildings connect directly to the nearest septic tank. The TMCC residential area is served by nine septic tanks and includes elder apartments, single-family units and trailers quantified as 11 residential units (23 EDUs). The remaining 20-acre TMCC non-residential area is served by 10 septic tanks and encompasses tribal offices, a medical clinic and recreational facilities.

The following image was captured in November 2018 as part of the biological resources field survey (see Appendix C). It shows the view looking south, down Martinez Road towards the TMCC.

CVWD Existing Sewer Line on Polk Street

The gravity sewer pipeline along Polk Street extends about two miles south from existing LS 55-21 to Oasis Gardens Mobile Home Park. The existing 18-inch vitrified clay pipe (VCP) is designed to support the proposed project in addition to other service areas (Watson Engineering 2012).

CVWD Existing Lift Station on Polk Street

Lift Station 55-21 is located between Avenue 64 and Avenue 66 and conveys wastewater to WRP-4. The lift station currently serves the school complex and residential areas south of Avenue 64 through the Polk Street pipeline. Currently, LS 55-21 operates with one 300 gallon per minute (gpm) pump and a larger 600 gpm pump that remains on standby. The lift station currently does not have adequate capacity to serve the additional flows from Sunbird MHP and TMCC and other consolidation projects in the vicinity (Watson Engineering 2012 [CVWD Drawing No. 37830]; Albert A. Webb Associates 2003 [Coachella Valley Unified School District (CVUSD) and Kohl Joint Project Sewer Main Plan and Profile CVWD Drawing No. 29366-29378]). LS 55-21 upgrades are necessary for a consolidation project that would be constructed sooner than the Sunbird MHP and TMCC connections and is therefore not a part of this proposed project.

Water Reclamation Plant No. 4

LS 55-21 conveys wastewater through a system of force mains to WRP-4. WRP-4, first commissioned in 1986, is one of five reclamation plants operated by CVWD and is located at 63002 Fillmore Street in unincorporated Thermal, Riverside County. WRP-4 operates under a National Pollutant Discharge Elimination System (NPDES) permit issued by the Colorado River RWQCB and adopted May 19, 2017. The Waste Discharge Requirement authorization (R7-2017-0006) became effective June 1, 2017 for discharge into the Coachella Valley Stormwater Channel.

According to the *2015 CVWD Urban Water Management Plan* (UWMP) (CVWD 2016), the volume of wastewater collected in 2015 by WRP-4 was 5,145 acre feet (AF), about 27% of the total wastewater collected by CVWD in 2015. The current maximum capacity is 9.9 MGD and the annual average influent flow was 5.1 MGD in 2017. Currently, reclaimed water from WRP-4 is discharged to the Coachella Valley Stormwater Channel. CVWD is planning a facility upgrade to include tertiary treatment for delivery into a recycled water system (CVWD 2016).

The current treatment process consists of two parallel systems. The first is a lagoon system consisting of pre-aeration ponds, aeration lagoons, and polishing ponds with a capacity of 7.0 MGD (CVWD 2016). The second is a sludge system consisting of two activated sludge basins, two secondary clarifiers, and sludge handling facilities with a capacity of 2.9 MGD. The combined effluent from both systems is disinfected and de-chlorinated prior to discharge into the Coachella Valley Stormwater Channel (RWQCB 2017).

2.4 Proposed Project Description

A layout map showing the location of the proposed project components is presented in **Figure 2-2** (see *Section 2.1 Project Overview*, above). New infrastructure for the proposed project would consist of the following:

1. Approximately 19,625 feet gravity sewer pipeline extension and force main, with stub-outs along the proposed alignment for future connections;
2. A new lift station; and
3. Onsite work, including abandonment of existing onsite community septic systems.

2.4.1 Pipelines

Sunbird MHP would be served by an 8-inch pipeline constructed along Echols Road. A new lift station at the intersection of Echols Road and Harrison Street (see *Section 2.4.2* below) would discharge to an 8-inch gravity pipeline in Avenue 66 through a 6-inch force main. The Avenue 66 trunk line would extend from Harrison Street to Tyler Street, where it would increase in size from 8-inch to 10-inch. From Tyler Street, the 10-inch trunk line would continue along Avenue 66 to Polk Street where it would connect to an existing 18-

inch pipeline. In addition, an 8-inch lateral would be constructed within Martinez Road to connect the TMCC to the proposed trunk line in Avenue 66 between Tyler and Polk Streets.

Eight-inch stub-outs would be constructed along the proposed alignment on Avenue 66 for future connections to three trailer parks: one located at the intersection of Avenue 66 and Martinez Road; one located at Avenue 66 and Tyler Street; and one located on the east side of Harrison Street just north of Avenue 66.

Proposed project pipeline features would include:

- Sunbird MHP Sewer Gravity Lateral (1,175 linear feet [LF] of 8” pipeline)
- Echols Road Sewer Gravity Lateral (815 LF of 8” pipeline)
- Harrison Street Sewer Force Main (1,304 LF of 6” pipeline & lift station)
- Avenue 66 Sewer Gravity Main (5,045 LF of 10” pipeline)
- Avenue 66 Sewer Gravity Main (5,200 LF of 8” pipeline)
- Martinez Road Sewer Gravity Lateral (2,996 LF of 8” pipeline)
- TMCC Sewer Gravity Lateral (2,016 LF of 4”, 6”, and 8” pipelines)

The proposed force main is a 6-inch diameter polyvinyl chloride (PVC) pipe. The recommended force main alignment has two 45-degree elbow fittings to reduce the potential for stoppages where a 90-degree change of direction in the force main is required. The final design for the force main shall follow all requirements in the CVWD DDM (CVWD 2019).

Pipeline Construction Methods

The pipeline would be installed below grade within existing paved streets, County of Riverside roadway rights-of-way, and tribal land/roadways. Preliminary design indicates that the Avenue 66 and Martinez Road pipelines would have an average depth of 10 feet and a maximum of 14 feet. The pipeline depth along Echols Road would approach a maximum of 25 feet. Pipeline trenching widths would be three to four feet. Concrete encasement is recommended for sewer pipelines that cross under domestic water pipelines and do not meet CVWD’s minimum vertical separation of three feet from outer diameter to outer diameter. The proposed project does not propose pipelines that cross underwater. The proposed force main would have a minimum cover of four feet and a maximum cover of 12 feet from the proposed finish grade to the top of pipe. There would be a total of 50 manholes for the entire proposed project. Most of the manholes (27) are proposed along Avenue 66 to provide access for inspection and maintenance and are properly spaced to meet the DDM requirement (manhole spacing shall not exceed 400 feet).

Typical pipeline construction processes are described below:

Staging Area(s) – At various locations along the construction route, staging areas would be required to store pipe, construction equipment, and other construction-related material. Potential staging areas include vacant private and public land, parking lots, and segments of closed traffic lanes.

Surface Preparation – Surface preparation involves removing structures (such as fences or posts), pavement, and/or vegetation from the trenching areas. Equipment may include jack hammers, pavement saws, graders, bulldozers, loaders, and trucks.

Trench Excavation/Shoring - A backhoe, excavator, or trencher would be used to dig trenches for pipe installation. In general, trenches would have vertical side walls to minimize the amount of soil excavated, and the area needed for the construction easement. Soils excavated from the trenches, if of suitable quality, would be stockpiled alongside the trench or in staging areas for later reuse in backfilling the trench. If not reusable, the soil would be hauled off site for disposal. Disposal options include use as cover material at sanitary landfills and use as "clean fill" at other sites. In general, pipe trenches would be three to four feet wide and 10 to 14 feet deep.

Dewatering is anticipated to be necessary due to the potential for rising groundwater. Groundwater is expected to be encountered when project excavation depths reach 13-16 feet. Most of the construction depth would be, on average, 10 to 14 feet deep; however, certain segments could be installed as deep as 25 feet. Any proposed sewer pipelines installed at depths below 13 feet are expected to require dewatering. Specific locations where dewatering would be necessary would be determined during final design.

Pipeline trenches, in any given location, would be open for two to three days on average. During construction, vertical wall trenches would be temporarily "closed" at the end of each work day, by covering with steel plates or backfilled. Trenches would be backfilled with either the excavated soil or imported material. Dump trucks would be used to deliver imported, engineered backfill material to stockpiles near the trenching operation. Native soil would be reused for backfill to the greatest extent possible; however, the soil may not have the properties necessary for compatibility and stability.

Surface Restoration – After the pipe is installed, the ground surface areas would be restored. When pipe is installed on paved roadways, the asphalt would be patched and restored to pre-construction conditions. When the pipe is installed in dirt access roads, the dirt would be graded and compacted. In natural or vegetated areas, native plantings would be installed as required.

2.4.2 Lift station

The existing Polk Street sewer pipeline is tributary to LS 55-21 and discharges to WRP-4. LS 55-21 currently does not have enough capacity to service the proposed project and

other consolidation projects in the vicinity. LS 55-21 upgrades are necessary for a consolidation project that would be constructed sooner than the Sunbird MHP and TMCC connections and is therefore not a part of this proposed project.

A new lift station will be constructed at the southeast corner of Harrison Street and Echols Road. The proposed lift station may include the following components, to be verified during final design: debris capture depending on the wastewater characteristics; backup power to avoid sanitary sewer overflows (SSOs) during an outage; sulfide treatment could be needed if the wastewater residence time gets too high; fats-oils-grease (FOG) capture; supervisory control and data acquisition (SCADA) to monitor health of the station but controls would be local. The number of active pumps would be determined during final design of the project. Per CVWD standards, there would be at least two pumps because the sewer lift stations are typically operated under a lead-lag system whereby the lead pump runs until the demand on the system is too great for the pump to meet, at which point the lag pump initiates until demand is met. The estimated amount of energy consumed by the pumps at the new lift station would be 24,000 kWh per year. The lift station site would cover one-half acre once construction is complete. The CVWD DDM (CVWD 2019) requires the lift station be located 100 feet away from any nearby structure and include a fence around the system at a 25-foot setback and another 25-foot buffer zone between the fence and the surrounding environment. The lift station and appurtenances would be at least five feet away from the fence wall. The new lift station would be housed in a shade structure that would be approximately seven feet tall, 20 feet long, and four feet wide.

Electrical service at the new lift station would be provided by Imperial Irrigation District (IID). IID would construct: a new 40-foot distribution pole; a new 75 kilovolt-ampere (kVA) transformer; current transformers inside the meter cabinet and new meter; and conductors from the new pole to the transformer (3 – 1/0: Phases A, B, C 15kV insulated. Neutral is concentric to each wire) and from transformer to meter cabinet (4 – 1/0: Phases A, B, C & Neutral 600V insulated). The construction contractor would be responsible for constructing one used and one spare 2-to-5-inch primary riser and conduit from the pole to the transformer pad; a small transformer pad; a 2- to 4-inch secondary riser and conduit from the transformer pad to the meter cabinet. CVWD will continue to consult with IID staff related to the design, installation or improvements to the new and/or improved project features.

Lift Station Construction Methods

Construction activities involved in the construction of a new lift station typically include the following:

Site Preparation – This phase of construction may involve brush removal. No structural demolition would be needed. Construction survey would define the limits of the new facilities.

Earthwork – After the site is cleared of underbrush, grading would begin. It is expected that the contractor would attempt to balance cut and fill quantities within the construction area to the extent feasible. Material excavated would be used to create screening berms and/or spread across other areas of the site to establish a preliminary grade for forming concrete slabs. Most excavated materials would be used on site. Following rough grading, additional excavation would bring the site to final grade and allow for preparation for underground piping and structural slabs. Depending on location, excavations could require dewatering of shallow groundwater.

Additional site work would include paving, temporary and permanent security fencing, site lighting, installation of additional access roads and staging areas to accommodate construction, operation, and maintenance.

Structural Improvements – Prior to pouring concrete, structural forms, rebar, and conduits would be installed for the lift station. After the concrete is poured, it would be finished and cured before the forms are removed. After the concrete footing, slab, and walls are poured, the overhead structural steel and roof decking would be erected, or concrete roof would be poured.

Paving – All access roads would be paved. Paving would be performed incrementally throughout the site area as large construction and non-rubber tread equipment are removed from the site.

Electrical/Instrumentation – After the structure is erected or retrofitted, electrical equipment (e.g., machinery control consoles, switchboards, and lighting) would be installed. Site work such as installing pull boxes, conduits, and cables would continue. After roofs on the building is completed, flow meters, level probes, pressure instruments, process analyzers, and other instrumentation would be installed. Additionally, sampling and monitoring equipment would be installed.

Startup and Testing – Lift station personnel (i.e., engineers, inspectors, operators, maintenance crews, and instrumentation specialists) and the contractor would work with the equipment vendors to understand how each piece of equipment would operate and function. Under supervision, the construction contractor would start up and test the equipment on site to guarantee that pumps, motors, valves, monitoring and communication equipment are functional, meet design standards and all necessary regulatory performance criteria.

2.4.3 Onsite work

Onsite construction includes connections to the proposed sewer system and abandonment of six community septic systems at the Sunbird MHP site and 19 community septic systems at the TMCC. The process for abandonment of the community septic systems would depend on the size and depth of the septic system. The septic systems would be abandoned in place. Abandonment of the onsite septic systems is expected to take approximately two months. As shown on the following page, the two

months of septic system abandonment work would occur after the proposed facilities have been constructed and have been tested to be operable. Testing could take up to three months. The first phase of onsite work to abandon the existing septic tanks would involve import of approximately 2,000 gallons of cement slurry to fill each septic tank. The second phase would involve excavation with a crew of three workers, a dump truck and backhoe, and excavation to depths of four to 10 feet to backfill the septic tank with drain rock and the cement slurry.

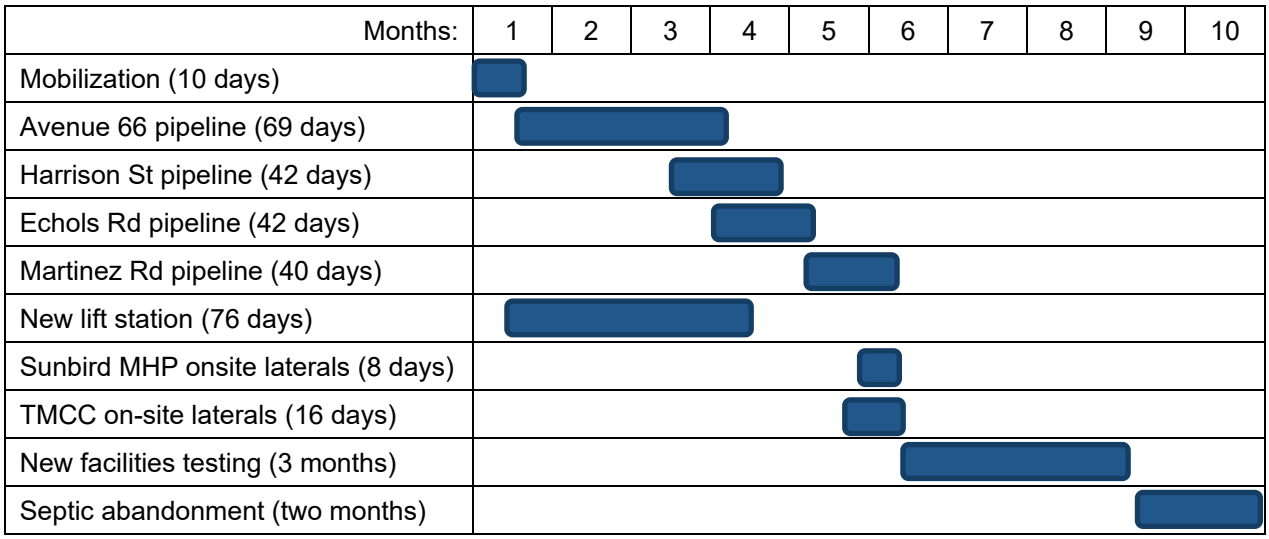
2.5 Project Construction

2.5.1 Construction Schedule

Construction is anticipated for the duration of 10 months. The project's maximum area of disturbance during the construction period would encompass about three acres, not including staging areas. Disturbance activities would occur in existing roadways, on existing access roads and in vegetated areas adjacent to the access roads. Disturbed areas would be restored to original grade and vegetated areas would be replanted with the appropriate native species.

Construction of the pipeline would proceed at a rate of approximately 150 linear feet per day. During construction, the project would generate trips with construction crews, materials deliveries, and export/import of fill material from excavation and trenching.

Project construction activity is anticipated to occur continuously between the hours of 7:00 am and 6:00 pm, Monday through Friday only (not on the weekend) and excluding federal holidays, which is compliant with the County of Riverside Ordinance Regulating Noise. The expected timing of each phase of construction are as follows:



2.5.2 Construction Standards

CVWD would implement the following standard construction measures with the project.

Drainage / Erosion Control - During construction, existing stormwater facilities including catch basins, manholes, and ditches would be protected using erosion control measures. Design standards outlined in the *Riverside County Whitewater River Region Stormwater Quality Best Management Practice Design Handbook for Low Impact Development* (Riverside County Flood Control and Watershed Conservation District [FCWCD] 2014) would be implemented by the construction contractor as applicable to the project site's stormwater drainage features. In addition, the construction contractor would be required to obtain a Construction General Permit pursuant to NPDES, which would require development of a construction SWPPP and implementation of best management practices to prevent polluted runoff from leaving the construction site.

Groundwater Dewatering - The proposed pipe would be installed at an average depth of ten to 14 feet below ground surface, and a maximum depth of 25 feet. If encountered at this depth, groundwater would be controlled using standard methods including stone sumps wrapped in filter fabric. During final design, another geotechnical investigation would be conducted to determine the current level of groundwater along the entire proposed alignment and recommend a dewatering plan based on the final design for the project. The dewatering plan would be determined during final design. The water collected during dewatering would be discharged away from open excavations. Refer to **Mitigation Measure GEO-1**.

Traffic Controls - Construction of the proposed project may necessitate individual traffic lane closures. Traffic control requirements would require that emergency crews have access, as needed, and that the contractor coordinates the location of the work daily for routing of emergency vehicles. Traffic control would also require the contractor to make reasonable efforts, wherever possible, to provide landowners access to their property and

patrons access to businesses during execution of the work. The construction contractor may be required to have a County-approved traffic control plan. Refer to Mitigation Measure **TRA-1 Traffic Control Plan**.

Air Quality / Dust Suppression –The contractor would be required to comply with the California Air Resources Boards (CARB) In-Use Off-Road Diesel-Fueled Fleets Regulations, which would limit vehicle idling time to five minutes, restrict adding vehicles to construction fleets that have lower than Tier 3 engines, and establish a schedule for retiring older, less fuel-efficient engines from the construction fleet. In order to reduce emissions of dust and particulate matter during construction, prior to grading or excavation, the Construction Contractor would be required to prepare a Fugitive Dust Control Plan, subject to the approval of CVWD and South Coast Air Quality Management District (SCAQMD), to comply with SCAQMD Rule 403 and Rule 403.1. As a standard condition, any ground surface area that is temporarily disturbed by construction activities must be entirely covered by the Fugitive Dust Control Plan and must be properly re-stabilized to satisfy the SCAQMD performance standards. The Fugitive Dust Control Plan shall include, but not be limited to, dust control best management practices identified in the Coachella Valley Fugitive Dust Control Handbook, such as:

- Measures to prevent sediment track-out onto public roads.
- Measures to prevent visible dust emissions from exceeding a 20-percent opacity.
- Measures to prevent visible dust emissions from extending more than 100 feet (vertically or horizontally from the origin of a source) or crossing any property line.
- Other dust control measures may include construction phasing, maintenance/ cleaning of construction equipment, soil stabilization, installation of track-out prevention devices, and wind fencing.
- The Fugitive Dust Control shall identify any areas that shall remain undisturbed by the construction activities.
- Implementation of the Fugitive Dust Control Plan shall occur under the supervision of an individual with training on Dust Control in the Coachella Valley and shall be enforceable by SCAQMD inspectors during the period of construction.

Geotechnical Standards - Although construction of the proposed project would create limited potential for adverse impacts, the following standard conditions would be incorporated:

- **Training.** All construction personnel would be briefed on project-specific circumstances relating to construction safety and erosion control.
- **Code Compliance.** All site preparation and construction would comply with the design provisions contained within the project specific Geotechnical Reports.
- **General Compliance.** All trench and backfill grading would be performed in accordance with typical CVWD specifications.

- **Seismic Design Parameters**. The project would follow seismic design parameters from USGS, outlined in **Table 2-1** below. Geologic observations will be performed during grading. The project design features will include:
    - **Site preparation and construction** should comply with the structural design provisions for Seismic Zone 4 in the Uniform Building Code;
    - **Excavations** should include shoring or slope inclinations in conformance with California Occupational Safety and Health Administration (OSHA) regulations for Type C soils; and
    - **Pavements** should be designed to meet Caltrans or other acceptable standards.

Table 2-1: USGS Seismic Design Parameters

Seismic Parameter	Recommended Value
Site Class	E*
Mapped Spectral Acceleration-S_s	1.500 g
Mapped Spectral Acceleration-S_1	0.637 g
MCE Spectral Acceleration-S_{ms}	1.350 g
MCE Spectral Acceleration-S_{m1}	1.528 g
Design Spectral Acceleration-S_{ds}	0.900 g
Design Spectral Acceleration-S_{d1}	1.019 g
Peak Ground Acceleration-PGA	0.555 g

*Site Class E (Soft Clay) - Where a site does not qualify under the criteria for Site Class F and there is a total thickness of soft clay greater than 10 ft (3 m) where a soft clay layer is defined by s_u < 500 psf (25 kPa), w ≥ 40 percent, and PI > 20, it shall be classified as Site Class E. (s_u-undrained shear strength, w-moisture content, PI- Plasticity Index) (American Society of Civil Engineers)

2.6 Operation and Maintenance

CVWD would continue to operate its sewer system with no operational modifications. The project pipelines would require routine maintenance, once operational. The new lift station would be controlled locally but monitored via a SCADA system. New operation and maintenance (O&M) trips to the new lift station, and to inspect the pipelines, would be incorporated into CVWD's existing sewer system operations. The estimated amount of energy consumed by the pumps at the new lift station would be 24,000 kWh per year. The proposed project would not result in a significant net change in O&M activities.

2.7 Permits or Approvals Anticipated

The permits and approvals listed in **Table 2-2** may be required for project construction. The types of permits necessary to construct the project would be confirmed during the design phase.

Table 2-2: Anticipated Permits and Approvals

Agency	Permit or Approval	Status
Local		
Torres-Martinez Desert Cahuilla Indians	Right of Entry	Pending
Torres-Martinez Desert Cahuilla Indians	Easements for CVWD facilities located on Tribal property	Pending
CVWD	Service Agreement with Sunbird Mobile Home Park	Draft
CVWD	Service Agreement with Torres-Martinez Desert Cahuilla Indians	Draft
CVWD	CEQA Documentation and Project Approval	Draft
County of Riverside Transportation Department	Encroachment Permit	Pending
SCAQMD	Permit to Construct	Prior to construction
SCAQMD	Fugitive Dust Control Plan	Prior to construction
State		
RWQCB	National Pollutant Discharge Elimination System NPDES Discharge Permit for CVWD's Water Reclamation Plant No. 4	Approved
State Water Resources Control Board (SWRCB)	NPDES General Permit for Storm Water Discharges associated with Construction Activities	Pending
SWRCB	Initial Funding Agreement	Pending
SWRCB	Final Funding Agreement	Pending

3. ENVIRONMENTAL CHECKLIST FORM

1. **Project title:** Avenue 66 Trunk Sewer Project

2. **Lead agency name and address:** Coachella Valley Water District
   75515 Hovley Lane East
   Palm Desert, CA 92211

3. **Contact person and phone number:** William Patterson
   Environmental Supervisor
   Coachella Valley Water District
   75515 Hovley Lane East
   Palm Desert, CA 92211
   (760) 398-2651 x 2775

4. **Project location:** The proposed project site is located in the eastern Coachella Valley area of Riverside County, California in the community of Thermal. The project would be generally located within roadway rights-of-way on Avenue 66 between Harrison Street and Polk Street, and within roadway rights-of-way on Echols Road and Martinez Road. It also consists of work within the following parcels: Sunbird Mobile Home Park (APN: 751-060-026); Torres-Martinez Community Center (APNs: 751-230-002; 751-210-008; and 751-210-009); and a new lift station site (APN: 751-060-012).

5. **Project sponsor's name and address:** Same as Lead Agency

6. **County of Riverside General Plan designation:** Agriculture, Commercial Retail, High Density Residential, Tribal Lands, Medium Density Residential, Public Facilities, Medium High Density Residential, Very High Density Residential

7. **County of Riverside Zoning:** A-1-10 (Light Agriculture); C-1/C-P (General Commercial); W-2 (Controlled Development Areas); SP Zone (The Kohl Ranch Specific Plan [HDR – High Density Residential; MHDR – Medium High Density Residential; OS – Open Space; PF – Public Facility/School])

8. **Description of project**: The proposed Avenue 66 Trunk Sewer Project would extend CVWD sewer facilities along Avenue 66 from Polk Street to Harrison Street to provide sanitation service to the Sunbird Mobile Home Park (located on Echols Road near Harrison Street) and the Torres-Martinez Community Center (located south of Avenue 66 between Polk and Tyler Streets). The proposed project involves installation of 19,625 feet of sewer pipeline, and a new lift station.

9. **Surrounding land uses and setting:** The project is surrounded primarily by vacant land and irrigated agriculture. Residential, commercial, and industrial developments are scarce. Most residential developments are well-established trailer parks. Existing

development within the project area consists of multi-family residential (trailer parks or mobile home parks), single-family residential, community-services, commercial, agricultural land, education (Toro Canyon Middle School and Las Palmitas Elementary School) and the Torres-Martinez Community Center (TMCC). The TMCC includes administration buildings, a health clinic, recreational areas, roads, and residential units. Tribal lands are scattered throughout the project area: the Torres-Martinez Desert Cahuilla Indian properties are located north and south of the proposed project alignment along Avenue 66.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.).** Refer to Table 2-2: Anticipated Permits and Approvals.

Local:

- Torres-Martinez Desert Cahuilla Indians – Right of Entry
- Torres-Martinez Desert Cahuilla Indians – Easements for CVWD facilities located on Tribal property
- CVWD – Service Agreement with Sunbird Mobile Home Park
- CVWD – Service Agreement with Torres-Martinez Desert Cahuilla Indians
- Riverside County – Encroachment permit
- SCAQMD – Fugitive Dust Control Plan
- SCAQMD – Permit to Construct

State:

- SWRCB – NPDES General Permit for Storm Water Discharges associated with Construction Activities
- SWRCB – Initial Funding Agreement
- SWRCB – Final Funding Agreement

11. **Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 2180.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

On April 1, 2019, CVWD mailed formal AB 52 consultation letters to the eight (8) local Native American tribal governments which have previously requested to consult under AB 52. CVWD received several written response letters within the 30-day response timeframe, and one formal request for consultation in July 2019. Staff met with the

tribal staff to discuss the project. Refer to *Section 3.18 Tribal Cultural Resources* for further discussion.

The results of the Native American Heritage Commission (NAHC) Sacred Land Files included a contact list of Native American individuals or organizations who may have additional information regarding sacred resources in the area and who should be contacted regarding the proposed scope of the project. Letters were mailed and follow-up phone calls and/or emails were made to all individuals and groups on the list. The results of the outreach to Native American individuals and organizations can be found in the Cultural Resources Report in Appendix D and are summarized in *Section 3.18 Tribal Cultural Resources*.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. With adherence to the mitigation program identified within this IS/MND, the potentially significant impacts would be reduced or minimized to a less than significant level.

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

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial evaluation:

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

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

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

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

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

Prepared by: _____ 03/08/2022
Haley Johnson
Environmental Planner /Project Manager
Woodard & Curran
Date

Reviewed by: _____ 3/10/2022
William Patterson
Environmental Supervisor
Coachella Valley Water District
Date

Submitted by: _____ 3/10/22
Steve Bigley
Director of Environmental Services
Coachella Valley Water District
Date

Approved by Board: _____ 3/29/22
Sylvia Bermudez
Clerk of the Board
Coachella Valley Water District
Date

3.1 Aesthetics

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

Discussion

The proposed project proposes installation of sewer infrastructure serving the Sunbird MHP and TMCC. Both sites are located in the unincorporated community of Thermal in the eastern Coachella Valley in Riverside County. The Coachella Valley is relatively flat, surrounded by undeveloped northwest-southeast trending mountainous areas to the east (Mecca Hills and Joshua Tree National Park) and west (Santa Rosa and San Jacinto Mountains). Portions of the eastern Coachella Valley are relatively undeveloped and are composed largely of agricultural lands. The general visual character of the eastern Coachella Valley includes date groves and agricultural uses; desert oasis areas; cove-like communities at the base of the Santa Rosa Mountains; the Whitewater River/Coachella Valley Stormwater Channel; the Salton Sea State Recreation Area; and desert and mountain vistas (County of Riverside 2014).

The current land uses surrounding the project area consists of scattered residential and mobile home parks, agricultural lots, open, desert (vacant) parcels, a middle school facility, and paved roadways (see **Figure 2-4** and **Figure 2-5**). Specifically, the Sunbird MHP is surrounded by date-palm groves, and cultivated fields and residential housing surrounds the TMCC.

The proposed infrastructure includes new sewer pipelines that will connect the two communities to the existing CVWD sewer system within Polk Street. The new sewer

pipelines will be located underground, and therefore out of the public viewshed. The project also proposes a new lift station near the intersect of Echols Road and Harrison Street. According to preliminary design, the proposed lift station would contain features both underground and above ground; with 8-foot perimeter fencing on a half-acre. There would be no buildings, only a shade structure. The lift station itself will be 140 square feet. CVWD's DDM requires the lift station be located 100 feet away from any nearby structure and will include a fence around the system at a 25-foot setback and another 25-foot buffer zone between the fence and the surrounding environment. The lift station and appurtenances would be at least 5 feet away from the fence wall (DDM, 2019). New electrical facilities would be constructed at the new lift station site, including a distribution pole and a transformer.

CVWD's *Coachella Valley Water Management Plan 2010 Update Environmental Impact Report* (CVWMP 2010 Update EIR) notes that factors that determine the conspicuousness of a development are slope, existing vegetative screening, surface patterns, soils, geology, and prominent positions in the landscape (CVWD 2011).

a, c) Less than Significant with Mitigation Incorporated

The *Riverside County General Plan* (County of Riverside 2015) defines scenic vistas as points accessible to the general public that provide a view of the countryside. The perception of scenic vistas from a particular setting vary according to location and the surrounding context. Views are influenced in part by the presence and intensity of man-made neighboring improvements, such as structures, overhead utilities, and vegetation.

The CVWMP 2010 Update EIR indicates that the Coachella Valley floor is considered generally low in landscape quality, due to the lack of diversity, and vivid features or contrasts. It is also not spatially distinct and considered degraded by manmade intrusions. The CVWMP 2010 Update EIR study area, which includes the Project Area, is considered to have a low Visual Absorptive Capacity (VAC), which refers to the potential of the landscape to accept or absorb manmade changes without prominent visual alteration. The area is considered to have a low VAC due to the sparse vegetation, monochrome and evenly textured surfaces, and erodible ground. However, the mountains bordering the Coachella Valley provide a dramatic backdrop to residents and motorists. Distant views of the Little San Bernardino Mountains north of the project site and more prominent views of the Santa Rosa Mountains west and southwest of the Project are partially obstructed to motorists travelling on Avenue 66 and Harrison Street by the agricultural lots and vegetation that currently existing in the area.

The proposed lift station (along Harrison Street), would be consistent with the existing visual setting by implementing **Mitigation Measure AES-1**. **Mitigation Measure AES-1** would require that the site house relatively small, low structures, typically painted with pale earth tones to blend with the native soils. Therefore, it would remain consistent with the existing commercial and agricultural landscape and have no aesthetic impact. Pipelines would be buried and have no visual impact.

Project implementation may result in short-term impacts regarding the visual character or quality of the Project Area as a result of disturbed roadways, excavation, trenching, placement of materials and staging of equipment. Construction activities include the excavation of the existing road surface where the sewer pipeline would be placed. This short-term effect on visual continuity is considered negligible because after construction the alignment would be returned to existing conditions or otherwise improved. The sewer pipelines would not substantially degrade the existing visual character or quality of the site and its surroundings. The proposed lift station at the corner of Harrison Street and Echols Road, would be small and low in design (7 feet high) on one-half acre site with a surrounding 8-foot fence. The structure would blend with the native soils and be surrounded by rock gravel in character with the site. Therefore, construction is not expected to substantially degrade the existing visual character or have a substantial adverse effect on a scenic vista. Impacts would be less than significant.

b) No Impact

The proposed project is not within view of a State or County designated scenic highway. Highway 74 is the closest Officially Designated State Scenic Highway to the project site, lying approximately 16 miles northwest of the project property. State Route 111, from State Route 195 near Mecca, to Bombay Beach on the Salton Sea, is considered an Eligible State Scenic Highway, however, it is not officially designated. The closest portion of State Route 111 lies almost 6 miles east of the proposed lift station on Harrison Street. Interstate 10, a County Eligible Scenic Highway is approximately 9.5 miles north of the project. Due to the project's distance from State Highway 74, State Route 111 and Interstate 10, the project is not located within view of a State or County designated or eligible viewshed. Construction of the proposed project would not damage trees, rock outcroppings, historical buildings, or any other visible feature other than existing road surfaces. There would be no impacts related to scenic highways.

d) Less than Significant Impact

Construction of the proposed project may create a temporary source of light from construction equipment parked onsite and potentially security lighting at staging areas, but the impact would cease upon completion of construction. Lighting needs during construction will be minimal and temporary, as construction-related activity would occur during daylight hours.

The proposed project is located within the Mount Palomar Nighttime Lighting Policy Area, therefore, Zone B lighting regulations from the *East Coachella Valley Area Plan* apply (County of Riverside 2016). The proposed project would install one high pressure sodium type security light mounted on a pole at least 15 feet above the ground at the new proposed lift station.

The proposed project would create a new source of light following construction because the project introduces a permanent security light. However, the light would not adversely affect day or nighttime views within the project area. The new light would be consistent

with other existing security lighting in the vicinity of the proposed lift station. For example, the existing streetlights and gas station lighting at the intersection of Harrison Street and Avenue 66, approximately 1,200 feet south of the proposed lift station. Impacts would be less than significant.

Mitigation Measures:

AES-1: Design of Aboveground Structures. To minimize visual impacts on public views, permanent, aboveground structures (lift station) shall be designed to blend into the existing visual character of their surroundings, including building and wall height, color, and exterior architectural treatments.

3.2 Agriculture and Forestry Resources

		Potentially Significant Impact	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the Project:					
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

Discussion

The proposed project includes the installation of 19,625 linear feet sewer infrastructure within the existing paved roads and public right-of-way, located primarily along Avenue 66 in unincorporated Riverside County. In addition, the project includes installation of sewer facilities along Martinez Road to serve the TMCC, and installation of sewer facilities along Echols Road to serve the Sunbird MHP. A new lift station on the east side of Harrison Street, near the intersection of Echols Road would be constructed. New electrical facilities would be constructed at the new lift station site, including a distribution pole and a transformer.

According to the California Department of Conservation (DOC 2019) and shown in **Figure 3-1**, a large portion of the project vicinity is composed of important farmland, including prime farmland and farmland of local importance. The pipeline alignment runs adjacent/through prime farmland, farmland of local importance, urban and built-up land, and "other" land. According to the DOC, Urban and Built-Up Land is typically defined as land occupied by structures with a building density of at least 1 unit to 1.5 acres and is primarily used for purposes including residential, industrial, commercial, institutional, railroads, and airports. Other Lands are those not included in any other mapping category and can be reserved for vacant, nonagricultural lands surrounded by urban development. Prime Farmland has characteristics that allow it to sustain long-term high yields of agricultural production. The land is required to have been used for production of irrigated crops within the last four years. Farmland of Local Importance, as defined in Riverside County, are soils that would be classified as Prime and Statewide but lack available irrigation water.

The proposed lift station on the southeast corner of Echols Road and Harrison Street would cover one-half acre and is located on prime farmland. Per DOC mapping of Williamson Act enrolled lands, the project area is not located on lands protected by a Williamson Act contract, although parcels within the vicinity of the project area are covered by a Williamson Act contract (DOC 2016).

A portion of the project area is zoned as Tribal lands and is surrounded by public facilities, commercial retail, residential and agriculture land use designations as shown in **Figure 3-2**, a cropped version of the 2016 Eastern Coachella Valley Land Use Map. **Figure 2-5** demonstrates the Bureau of Indian Affairs land use parcels. Most facilities in the proposed project would be constructed within public right-of-way of established roadways or within property currently owned by the MHP owner. Portions of the proposed project are located on Tribal lands of the Torres-Martinez Desert Cahuilla Indians (such as the pipeline along Martinez Road), as shown in **Figure 3-2**. Easements may be needed for CVWD facilities located within Tribal property.

Figure 3-1: California DOC Important Farmland Map

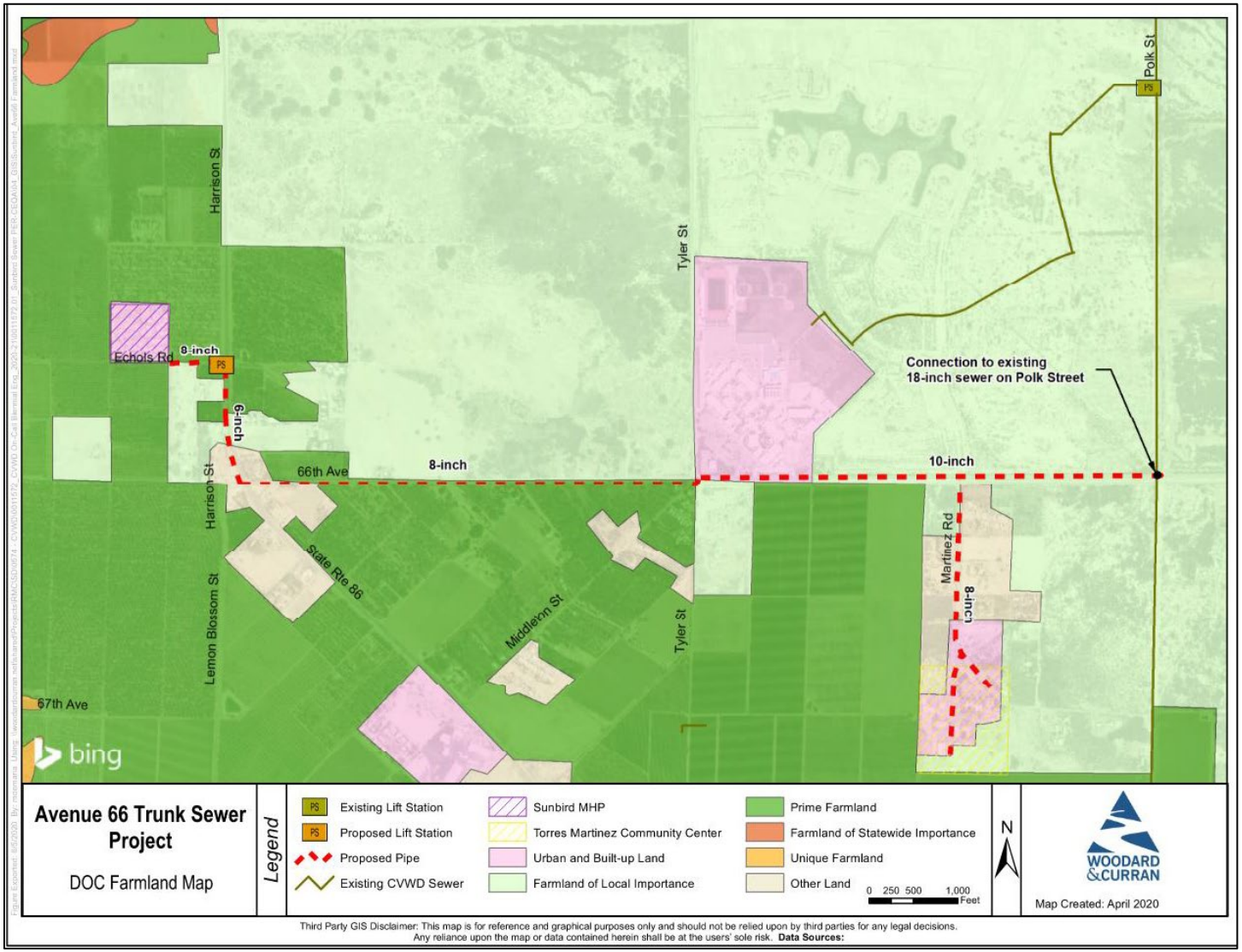
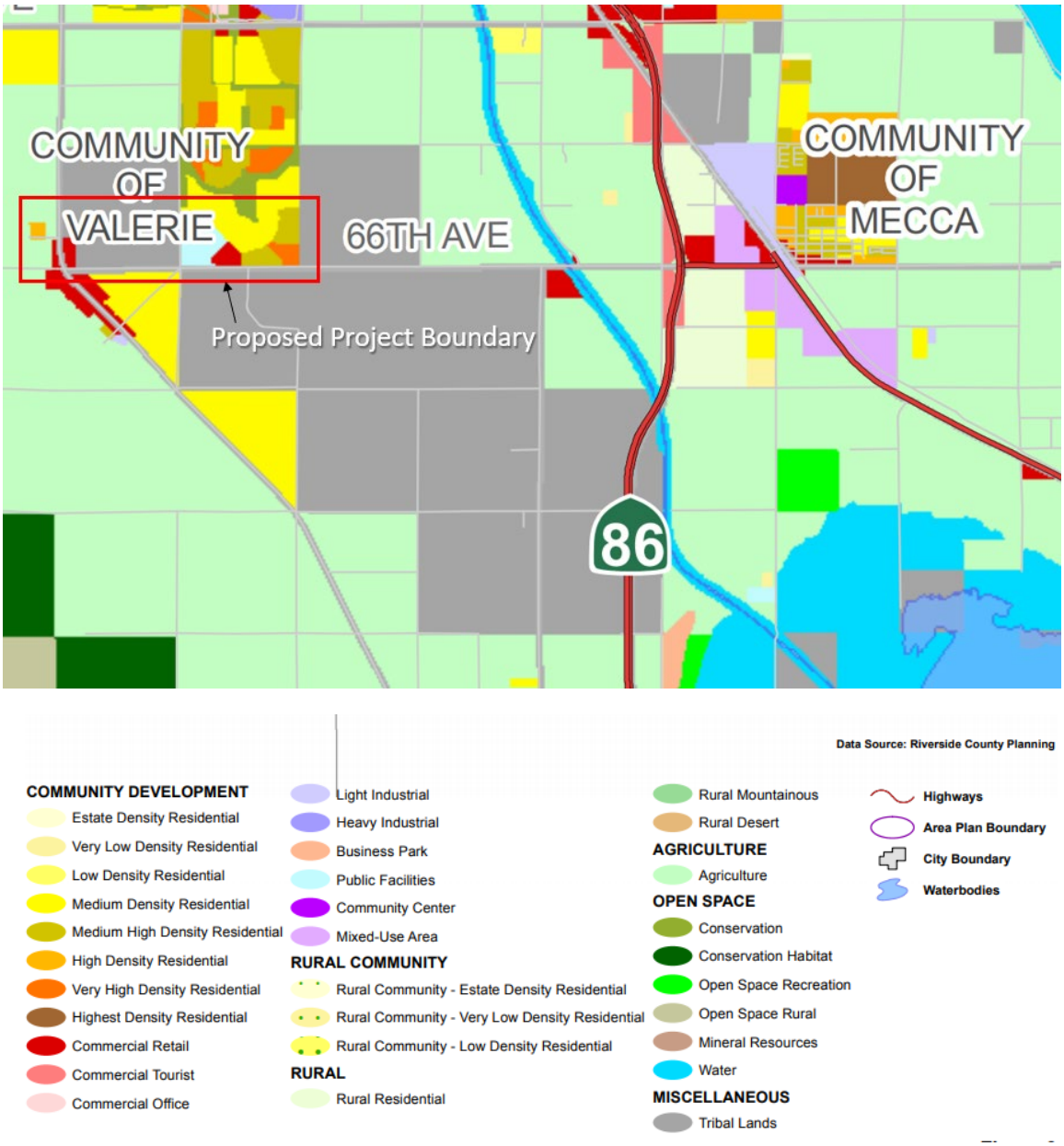


Figure 3-2: 2016 Riverside County's Eastern Coachella Valley Land Use Map



The California Department of Forestry and Fire Protection (Cal Fire) published maps (Cal Fire 2006) which classifies land cover throughout the state into eight major forest or range-related classes, including Forestland - Conifer Forest, Forestland - Hardwood Forest, Forest and Rangeland - Conifer Woodland, Forest and Rangeland - Hardwood Woodland, Rangeland - Shrub, Rangeland - Desert, Rangeland - Herbaceous, and Rangeland - Wetland. Cal Fire also classifies land cover throughout the state into four

non-forest and rangeland classes including Urban, Barren/Other, Water, and Agriculture. The project area is primarily designated as Agriculture with small pockets of Urban land (Cal Fire 2006). There are no designated forest lands within the project area.

a, e) Less than Significant Impact

A majority of the project area outside of the public right-of-way is mapped by the DOC as important farmland, including prime farmland and farmland of local importance. The proposed project would be constructed within roadway rights-of-way, tribal land, as well as on privately owned properties to connect CVWD's sewer infrastructure to the properties. The majority of the proposed project components would be located below-grade and ground surfaces would be restored to pre-construction conditions.

The proposed lift station at the intersection of Echols and Harrison would be located on Prime Farmland. The proposed lift station would be located on a one-half acre site owned by CVWD, and therefore the proposed project would not convert a significant amount of Prime farmland to a non-agricultural land.

The Project Report indicates that the proposed project would benefit agriculture and the local economy through the improvement of existing and planned low-income housing (Woodard & Curran 2020). Residents of MHPs in the area tend to be employed by agriculture related operations. The proposed project would convert one half-acre of Prime Farmland to non-agricultural use for the construction of a lift station. The lift station itself would be 140 square feet surrounded by perimeter fencing. Construction and operation of the lift station itself would not constitute a significant impact on agriculture because the proposed conversion of land to non-agricultural uses is small in the context of agricultural acreage in the eastern Coachella Valley. Indeed, the majority of the area within the eastern Coachella Valley, surrounding the Salton Sea to the west and stretching north toward the City of Coachella, is devoted to agriculture and planted in such crops as date palms, grapes, citrus and seasonal row crops (County of Riverside 2016). One half-acre to accommodate the proposed lift station and associated electrical facilities would be small relative to the region and less than significant.

The lift station does not conflict with zoning regulations or result in other changes that could indirectly result in conversion of nearby farmland to non-agricultural use. The lift station would not introduce roads or other utilities that would induce unplanned growth in the area. New electrical facilities would be constructed at the new lift station site, including a distribution pole and a transformer, but those facilities would service the new lift station only. The lift station would not limit the ability of lands surrounding it to continue to be used for agricultural purposes.

The remaining project features are not located on lands mapped for agriculture or zoned agriculture; and therefore, the proposed project would have a less than significant direct or indirect impact on agricultural resources.

b) No Impact

Riverside County participates in the Williamson Act Program; however, the proposed project is not located on agricultural land that have Williamson Act contracts and would not conflict with any of the areas under contract with the local government through this program (CA DOC 2016). Areas under this program are recorded and can be found through the Land Conservation Act Maps for Riverside County. Project improvements would be constructed within existing rights-of-way and under paved or dirt roadways. As such, the proposed project would not affect agricultural zoning, or a Williamson Act contract. The proposed project would have no impacts.

c, d) No Impact

There are no forest lands or timberlands within the project area. Therefore, there would be no conflict with zoning or loss or conversion of forest land or timberland. No impacts to forest land or timberland would occur.

Mitigation Measures: None required.

3.3 Air Quality

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

Discussion

The project site and the Coachella Valley are located in a portion of the Salton Sea Air Basin (SSAB), within the jurisdiction of the SCAQMD. The regional climate, as well as the temperature, wind, humidity, precipitation, and amount of sunshine significantly influence the air quality in the SSAB. Climate in the Coachella Valley is a continental, desert-type climate, with hot summers, mild winters, and very little annual rainfall. Precipitation is less than six inches annually and occurs mostly in the winter months from active frontal systems and in the late summer months from thunderstorms.

The Coachella Valley is exposed to frequent gusty winds. The flat terrain of the valley and strong temperature differentials, created by intense solar heating, produce moderate winds and deep thermal convection. Wind speeds exceeding 31 miles per hour (mph) occur most frequently in April and May. The Coachella Valley also includes a blowsand zone, which is identified in SCAQMD Rule 403.1 as "the corridor of land extending two miles to either side of the centerline of the Interstate 10, beginning at the State Route 111/Interstate 10 junction and continuing southeast to the Interstate 10/Jefferson Street interchange in Indio." The defined blowsand zone is exposed to higher seasonal wind speeds, wind erosion, and suspended particle levels. The project is situated outside of the defined blowsand zone, but it is exposed to the seasonal high wind speeds like other parts of the Coachella Valley. As subsequently discussed, SCAQMD has established Rules 403 and 403.1 to address wind erosion and fugitive dust impacts, particularly during land disturbance activities associated with construction.

As part of the Air Quality Monitoring Network Plan, SCAQMD has established 37 permanent monitoring stations, three of which are located in the Coachella Valley, specifically in the City of Palm Springs, City of Indio, and community of Mecca. The site-specific information for the Coachella Valley permanent air monitoring sites is shown below.

Table 3-1: SCAQMD Air Quality Monitoring Locations

Location	AQS ID	Pollutants Monitored	Distance from Project
Mecca (Saul Martinez)	060652005	PM10	5.8 miles. to the east
Indio	060652002	O3, PM10, PM2.5	10 miles. to the northwest
Palm Springs	060655001	CO, NO2, O3, PM10, PM2.5	26 miles to the northwest

Existing air quality is measured and evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. Depending on whether the standards are met or exceeded, the SSAB is classified as being in "attainment" or "nonattainment." The National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) attainment statuses for the Coachella Valley portion of the SSAB are listed in **Table 3-2**. As shown therein, the SSAB is in nonattainment for the State standards for 1-hour ozone, both the federal and State

standards for 8-hour ozone and particulate matter less than 10 microns in size. Thus, the Coachella Valley portion of the SSAB currently exceeds several State and federal ambient air quality standards and is required to implement strategies that would reduce pollutant levels to recognized acceptable standards.

Table 3-2: Coachella Valley Portion of the Salton Sea Air Basin Attainment Status

Pollutant	Standard	Standard	Designation
1-Hour Ozone	0.12 ppm 0.09 ppm	NAAQS CAAQS	Attainment Nonattainment
8-Hour Ozone	0.070 ppm 0.070 ppm	NAAQS CAAQS	Nonattainment (Severe-15)[1] Nonattainment
CO	1-hour [0.10 ppm]; annual [0.053 ppm 1-hour [20 ppm]; 8-hour [9 ppm]	NAAQS CAAQS	Unclassifiable/Attainment Attainment
NO_2	1-hour [0.10 ppm]; annual [0.053 ppm] 1-hour [0.18 ppm]; annual [0.030 ppm]	NAAQS CAAQS	Unclassifiable/Attainment Attainment
SO_2	1-hour [75 ppb]; 24-hour [0.14 ppm]; annual [0.03 ppm] 1-hour [0.25 ppm]; 24-hour [0.04 ppm]	NAAQS CAAQS	Designations Pending/ Unclassifiable/Attainment[2] Attainment
PM_{10}	24-hour [150 µg/m^3] 24-hour [50 µg/m^3] annual [20 µg/m^3]	NAAQS CAAQS	Nonattainment (Serious) Nonattainment
$PM_{2.5}$	24-hour [35.0 µg/m^3] annual [12.0 µg/m^3] annual [12.0 µg/m^3]	NAAQS CAAQS	Unclassifiable/Attainment Attainment
Lead	3-months rolling [0.15 µg/m^3]) 30-day average [1.5 µg/m^3])	NAAQS CAAQS	Unclassifiable/Attainment Attainment
Hydrogen Sulfide	1-hour [0.03 ppm/ 42 µg/m^3]	CAAQS	Unclassified[3]
Sulfates	24-hour [25 µg/m^3]	CAAQS	Attainment

NAAQS: National Ambient Air Quality Standards / CAAQS: California Ambient Air Quality Standards
CO: carbon monoxide / PM_{10}: particulate matter less than 10 microns in size / $PM_{2.5}$: particulate matter less than 2.5 microns in size
NO_2: nitrogen dioxide; SO_2: sulfur dioxide
[1] Designated Nonattainment (Severe-15) for the 1997 and 2008 8-Hour Ozone NAAQS. Designation is pending for the 2015 8-Hour Ozone NAAQS, but Nonattainment (Severe) is expected.
[2] Designated Unclassifiable/Attainment for the Annual SO_2 NAAQS. Designations pending for the 1-Hour SO_2 NAAQS with SSAB expected to be designated Unclassifiable/Attainment.

[3] *Three full years of data are not yet available for a designation, but Nonattainment is anticipated in at least part of the Coachella Valley.*
Source: SCAQMD 2017.

Based on the attainment status discussed above, the two air pollutants of concern relevant to the Coachella Valley are ozone (O_3) and respirable particulate matter (PM_{10}).

Ozone (O_3) is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_X) undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant. Although also produced within the Coachella Valley, most ozone pollutants affecting the Valley are transported by coastal air mass from the Los Angeles and Riverside/San Bernardino air basins, thereby contributing to occasionally high local ozone concentrations.

PM_{10} (particulate matter less than 10 microns) is an air pollutant consisting of solid or liquid particles of soot, dust, smoke, fumes, and aerosols. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. PM_{10} also causes visibility reduction and is a criteria air pollutant.

The Riverside County portion of the SSAB is designated by the U.S. Environmental Protection Agency (EPA) as a "Severe-15" ozone nonattainment area for the 1997 8-hour federal ozone standard (0.080 ppm) and the more stringent 2008 standard (0.075 ppm). Violations of the ambient air quality standards for ozone in the Coachella Valley are primarily due to pollutant transport from the neighboring South Coast Air Basin (SCAB). Ozone is formed on sunny days from ozone precursors in the lower atmosphere that are emitted upwind of the Coachella Valley, in the coastal and central Los Angeles County areas of the SCAB. Pollutant transport through the Banning Pass, from the SCAB to the SSAB, is the primary cause of the high ozone concentrations experienced in the Coachella Valley in the late afternoon and early evening. The attainment date for the 1997 8-hour ozone standard was June 15, 2019. The attainment date for the 2008 8-hour ozone standard is July 20, 2027.

Furthermore, the Coachella Valley is currently designated as a serious nonattainment area for PM_{10} (particulate matter with an aerodynamic diameter of 10 microns or less). In the Coachella Valley, there are two primary sources of PM_{10}: natural sources consisting of sea salts, volcanic ash, and pollens, and man-made or anthropogenic sources. Man-made sources originate from direct emissions, such as industrial facilities, fugitive dust sources (e.g., construction sites) and paved and unpaved road dust.

To maintain compliance with the NAAQS and CAAQS, SCAQMD has adopted a series of Air Quality Management Plans (AQMPs). AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. The SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission

sources, and enforces such measures through educational programs or fines, when necessary.

The SCAQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. In March of 2017, SCAQMD released the most current Final Air Quality Management Plan (2016 AQMP), which serves as a regional blueprint for achieving the federal air quality standards. The 2016 AQMP is addressing the Clean Air Act planning requirements for O_3 in the SCAB and the Coachella Valley portion of the SSAB. The 2016 AQMP includes both stationary and mobile source strategies to ensure that the approaching attainment deadlines are met and public health is protected to the maximum extent feasible. As with prior AQMP versions, a comprehensive analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures is included in the 2016 AQMP with the latest data and methods. Land use designation considerations are an important component of the AQMP development. The 2016 AQMP provides local guidance for the State Implementation Plans (SIP), which establishes the framework for the air quality basins to achieve attainment of the State and the NAAQS. Additional background regulatory information is provided in each subsequent response.

The U.S. EPA-approved *2002 Coachella Valley PM_{10} State Implementation Plan* (2002 CVSIP) includes an attainment strategy for meeting the PM_{10} standards. Some of the existing measures include the requirement of detailed dust control plans from builders that specify the use of more aggressive and frequent watering, soil stabilization, wind screens, and phased development to minimize fugitive dust. Appropriate air quality measures to prevent fugitive dust are required by SCAQMD Rules 403 and 403.1 that apply to the Coachella Valley strategy for reducing fugitive dust emissions.

a) Less than Significant Impact

The proposed project has been evaluated for consistency with the local air quality management plans, which are the 2016 AQMD, the Coachella Valley PM_{10} SIP, and the SCAQMD Air Quality Significance Thresholds. The AQMD links local planning to the ambient air quality standards and attainment dates for criteria air pollutants. This assessment takes into consideration whether the project forms part of the expected conditions identified in local plans (General Plan Land Use and Zoning) and whether the project adheres to the County's air quality goals, policies, and local development assumptions factored into the regional 2016 AQMP. Moreover, the air emissions associated with the short- term construction activities were analyzed for the purpose of this document and are summarized under Impact "b", below. By complying with the adopted thresholds, the proposed project is also complying with the overall attainment strategies reflected in the 2016 AQMP.

The proposed underground gravity sewer pipeline would be constructed primarily in existing rights-of-way to serve existing residents. As discussed in the Land Use and Planning Section of this document, the gravity sewer pipeline component of the project would not alter or result in modifications to the existing zoning and land use designations,

nor would it conflict with any County land uses or local area planning efforts or policies. The proposed lift station at Echols Road and Harrison Street would be constructed on land that is currently used for agricultural production but is zoned as tribal land and will support residents of the Torres-Martinez Desert Cahuilla Indians. Therefore, the proposed project would be consistent with all applicable land use plans, policies and regulations of agencies with jurisdiction over the project

The project is not expected to obstruct with implementation of the applicable air quality plans because it would not induce unplanned growth above the levels projected in the County of Riverside General Plan, which form the basis of the emissions attainment dates of the SCAQMD 2016 AQMP. Based on the quantitative air emissions findings provided in Impact "b", the project's short-term emissions would not result in or cause violations to regional or localized emissions thresholds, which are established to comply with the NAAQS, CAAQS, or the attainment efforts included in the 2016 AQMP, the Coachella Valley PM_{10} SIP and other relevant regional plans. Therefore, the proposed project would not interfere with the ability of the region to comply with federal and State ambient air quality standards and plans.

As a standard condition, the project proponent is required to comply with SCAQMD Rule 403, 403.1. These regulations require the project have an approved dust control plan and implement best management practices and measures identified in the *Coachella Valley Fugitive Dust Control Handbook*, therefore assisting with the effort to comply with the PM_{10} CVSIP and SCAQMD thresholds for PM_{10} emissions. As a standard condition, any ground surface area that is temporarily disturbed by construction activities must be entirely covered by the dust control plan and must be properly re-stabilized to satisfy the SCAQMD performance standards. Compliance with Rules 403 and 403.1 will address the high wind conditions that may be experienced during construction. Less than significant impacts are anticipated relative to conflict with or obstruction of implementation of the applicable air quality plan following the implementation of standard conditions.

b) Less than Significant Impact

Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. Currently, the NAAQS and CAAQS are exceeded in parts of the SSAB. Pertaining to the NAAQS, the project region within the SSAB is in nonattainment for ozone (8-hour) and PM_{10}. For the CAAQS, the project region within the SSAB is in nonattainment for ozone (1-hour and 8-hour) and PM_{10}.

In response, the SCAQMD has adopted a series of programs and the 2016 AQMP to meet the state and federal ambient air quality standards. AQMP programs are updated regularly to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. As previously

mentioned, the project's consistency with the local land use and zoning regulations adopted by the County of Riverside make it consistent with the growth assumptions factored into the regional 2016 AQMP, but the project-specific emissions must also be evaluated against regional thresholds to reach a finding of significance in the context of CEQA. An impact is potentially significant if concentration of emissions exceed the State or Federal ambient air quality standards.

SCAQMD Regional Air Quality Significance Thresholds

To assist lead agencies in determining the significance of air quality impacts, SCAQMD has established suggested short-term construction-related and long-term operational impact significance thresholds for direct and indirect impacts on air quality. Significance thresholds are recommended therein for both local and regional air quality impacts associated with short-term project construction and long-term operations. **Table 3-3** displays the established construction and operational daily significance thresholds, which are recommended for use by lead agencies in considering potential impacts on air quality. Project effects would be considered significant if the emissions exceed these thresholds.

In November of 2017, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model™ (CalEEMod™) Version 2016.3.2. CalEEMod serves as an adopted platform to calculate both construction emissions and operational emissions from a land use project. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (NOx, VOC, PM_{10}, $PM_{2.5}$, SOx, and CO) and greenhouse gas (GHG) emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. CalEEMod utilizes widely accepted methodologies for estimating emissions combined with default data that can be used when site-specific information is not available. Sources of these methodologies and default data include but are not limited to the United States USEPA AP-42 emission factors, CARB vehicle emission models, studies commissioned by California agencies such as the California Energy Commission (CEC) and CalRecycle. In addition, some local air districts provided customized values for their default data and existing regulation methodologies for use for projects located in their jurisdictions.

CalEEMod Version 2016.3.2 was utilized to estimate the short-term construction-related emissions of criteria air pollutants and greenhouse gas emissions that would be associated with the construction activities necessary to implement the proposed project. **Table 3-4** summarizes the short-term emissions of the six criteria pollutants associated with the construction activities required to implement the proposed project. The construction period includes all aspects of project development, including site preparation, grading, excavation/trenching/backfilling, and site restoration activities including re-paving. The emissions presented in **Table 3-4** represent the mitigated levels, after implementation of the dust control best management practices required by SCAQMD.

Peak day emissions estimates are provided by construction phase type and reflect activities in the season or year with the highest daily emissions. As shown in **Table 3-3**, the air pollutant emissions during the construction phase with the highest daily emissions are not projected to exceed any of the significance thresholds for short-term construction-related emissions recommended by the SCAQMD. Based upon the projected emissions of the criteria air pollutants, the proposed project would have less than significant impacts relative to short-term impacts to air quality.

Table 3-3: Short-Term Air Pollutant Emissions Associated With Construction of the Proposed Project (Pounds/Day)

	ROG/VOC	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Total Emissions	5	43	38	<1	6	4
SCAQMD Mass Daily Construction and Operation Threshold	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: CalEEMod does not directly calculate ozone (O_3) emissions. Instead, the emissions associated with ozone precursors are calculated. VOC and ROGs are summed in the CalEEMod report under the header ROG.

The emissions are based on the CalEEMod mitigated results due to the local standard requirement to implement Rule 403 and 403.1 to control fugitive dust. Implementation of dust control measures are referred to as mitigation measures in CalEEMod for modeling purposes; CalEEMod does not have functionality to model standard project dust control measures separate from mitigation measures.

SCAQMD Localized Significance Thresholds

The SCAQMD has also developed and published the Final Localized Significance Threshold (LST) Methodology to identify potential impacts that could contribute or cause localized exceedances of the Federal and/or State ambient air quality standards. LST methodology was developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. The purpose of analyzing LSTs is to determine whether a project may generate significant adverse localized air quality impacts in relation to the nearest exposed sensitive receptors, such as schools, churches, residences, hospitals, day care facilities, and elderly care facilities. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project, size, and distance to the sensitive receptor. Therefore, meeting the lowest allowable emissions thresholds translates to meeting the most stringent air quality standards. As part of the LST methodology, SCAQMD has divided its jurisdiction into 37 SRAs which can be used to determine whether a project may generate significant adverse localized air quality impacts. The proposed development is located in SRA 30, which covers the Coachella

Valley. LSTs only apply to certain criteria pollutants: carbon monoxide (CO), NO_xPM_{10}, and $PM_{2.5}$.

Geographic Information Systems (GIS) analysis was used to delineate the project area and identify the nearest sensitive receptors using the distance intervals established by the LST methodology, which are 25 meters (82 feet), 50 meters (164 feet), 100 meters (328 feet), 200 meters (656 feet), and 500 meters (1,640 feet). Based on this analysis, the nearest sensitive receptors to the project include homes and school facilities. The shortest distance interval establishes the strictest threshold with the lowest emissions allowances needed to maintain compliance. As the distance from the project area increases, so do the allowable emissions amounts. As a conservative approach, the shortest distance of 25 meters (82 feet) was utilized for this analysis, allowing for the most stringent emissions standards to be used.

CalEEMod™ Version 2016.3.2 was utilized to calculate the maximum daily on-site emissions that would occur during construction based on the closest acreage interval allowed by the LST methodology, which is five acres (the project's maximum area of disturbance during construction would encompass about three acres, not including staging areas). The data provided in **Table 3-4** demonstrates that the construction activities would not generate emissions in excess of the site-specific LSTs; therefore, site-specific impacts during construction of the project would be less than significant. Based on the LST methodology, if the calculated emissions for the proposed construction or operational activities are below the LST emission levels and no potentially significant impacts are found to be associated with other environmental issues, then the proposed construction or operation activity is not significant for air quality.

Table 3-4: Localized Significance Thresholds (LSTs) Associated with Construction of the Proposed Project With Receptors at 25 Meters (82 Feet), 5-Acre Area Increments (In Pounds/Day)

Emission Source	**NO_x**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Maximum Emissions Resulting from Excavation, Building Construction, and Resurfacing	43	38	6	4
SCAQMD LST for SRA 30	304	2,292	14	8
LST Threshold Exceeded?	**No**	**No**	**No**	**No**
Sources: CalEEMod Results and AQMD LST Look-Up Tables Note: The PM_{10} and $PM_{2.5}$ emissions are based on the CalEEMod mitigated results due to the local standard requirement to implement Rule 403 and 403.1 to control fugitive dust.				

SCAQMD Fugitive Dust Control Rules

The SCAQMD requires any emission reductions resulting from existing rules or ordinances to be included as part of the unmitigated project emissions. Those measures that are legally mandated and therefore required of all developments by applicable

ordinances, rules, and regulations are not considered mitigation by SCAQMD. The project would be required to comply with SCAMQD Rule 403 and 403.1, which require methods to prevent sediment track-out onto public roads, prevent visible dust emissions from exceeding a 20-percent opacity, and prevent visible dust emissions from extending more than 100 feet (vertically or horizontally from the origin of a source) or crossing any property line. These and other standards would be enforceable by SCAQMD inspectors during the period of construction. As such, compliance with applicable rules and regulations is not considered mitigation by the SCAQMD.

Relative to the PM_{10} emissions threshold, construction activities associated with the project would be required to adhere to the local dust control policies and ordinance to minimize potential temporary construction related emissions. An approved Fugitive Dust (PM_{10}) Control Plan will be required under SCAQMD rules prior to issuance of a grading permit. Implementation of the Fugitive Dust Control Plan is required to occur under the supervision of an individual with training on Dust Control in the Coachella Valley (Rule 403 and 403.1). The Fugitive Dust Control plan shall include methods to prevent sediment track-out onto public roads, prevent visible dust emissions from exceeding a 20-percent opacity, and prevent visible dust emissions from extending more than 100 feet (vertically or horizontally from the origin of a source) or crossing any property line. Other BMPs may include proper construction phasing, proper maintenance/cleaning of construction equipment, soil stabilization, installation of track-out prevention devices, and wind fencing. The Fugitive Dust Control plan must also identify any areas that shall remain undisturbed by the construction activities. With implementation of the Fugitive Dust Control plan pursuant to SCAQMD Rule 403 and 403.1, short-term construction-related impacts would be less than significant.

During the life of the utility project, it would not generate long-term criteria pollutant emissions. New operation and maintenance (O&M) trips to the new lift station, and to inspect the pipelines, would be incorporated into CVWD's existing sewer system operations. The new lift station would be controlled locally but monitored via a SCADA system. The estimated amount of energy consumed by the pumps at the new lift station would be 24,000 kWh per year; however, criteria pollutant emissions from electricity consumption are associated with power plants, not individual projects. Operational air pollutant emissions would, therefore, be negligible. Consequently, the project would not contribute substantially to a significant individual or cumulative impact on existing or projected exceedances of the State or federal ambient air quality standards or result in a cumulatively considerable net increase in the emissions of any criteria pollutant for which the project region is designated nonattainment. Project-related emissions would be consistent with the 2016 AQMP, the Coachella Valley PM_{10} SIP, and all SCAQMD Air Quality Significance Thresholds; therefore, long-term operational air quality impacts associated with the project should not be considered cumulatively considerable. Impacts would be less than significant.

c) Less than Significant Impact

Project effects would also be considered potentially significant if emissions affected sensitive receptors such as schools or nursing homes, Sensitive receptors are facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Land uses with sensitive receptors include residential, long-term health care facilities, schools, rehabilitation centers, playgrounds, convalescent centers, child-care centers, retirement homes, and athletic facilities among others. The proposed project will occupy a corridor primarily within existing rights-of-way surrounded by a combination of vacant land, agricultural fields, residential units and school facilities.

During construction, the project is expected to produce temporary and localized emissions, which based on the modeling results would not exceed the SCAQMD mass thresholds of significance. The SCAQMD mass emissions thresholds of significance are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. Therefore, projects that have emissions levels below the thresholds are assumed to have less than significant public health impacts for sensitive receptors in the region. The LST analysis performed on this site also demonstrated that the highest project emissions during construction would not exceed the strictest thresholds (**Table 3-4**) for the nearest sensitive receptors. The project Construction Contractor is required to comply with SCAQMD Rule 403 and 403.1 by implementing an approved, project- specific Fugitive Dust Control Plan. The Plan will outline required activities and best management practices for preventing or reducing temporary emissions from reaching any substantial concentrations. At any point during construction, the project will be required to prevent sediment track-out, visible dust emissions from exceeding a 20-percent opacity, and visible dust emissions from extending more than 100 feet (vertically or horizontally from the origin of a source) or crossing any property line. These standard requirements are consistent with the SCAQMD Rule 403 and 403.1 and the Coachella Valley Best Available Control Measures (CVBACM), as identified in the Coachella Valley Fugitive Dust Control Handbook. Compliance with applicable SCAQMD Rules and Regulations is not considered mitigation by the SCAQMD. During the life of the project, activities and operations related to the proposed project are not expected to generate emissions concentrations that exceed the SCAQMD mass thresholds. Impacts would be less than significant impacts.

d) Less than Significant Impact

Objectionable odors can be associated with toxic or non-toxic emissions. While odors seldom cause physical harm, they can be unpleasant and lead to considerable annoyance and distress among the public. Examples of facilities commonly known to generate objectionable odors include wastewater treatment plants, sanitary landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, and food packaging facilities (CARB 2005). Examples of facilities known to be susceptible to odors are

residences, long-term health care facilities, schools, rehabilitation centers, playgrounds, convalescent centers, childcare centers, retirement homes, and athletic facilities.

The proposed project is not expected to generate substantial or permanent objectionable odors that would be detectable for a substantial number of people.

Mitigation Measures: None required.

3.4 Biological Resources

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

Discussion

The unincorporated community of Thermal is located west of State Route 111, south of the City of Coachella, in unincorporated Riverside County. The eastern Coachella Valley accommodates several ecological habitats that are home to numerous flora and fauna. The project proposes installation of 19,625 feet of sewer pipeline, a new lift station, and abandonment of onsite septic systems at Sunbird MHP and TMCC. New electrical facilities would be constructed at the new lift station site, including a distribution pole and a transformer. The project area is surrounded by vacant land, irrigated agriculture, and sparse residential, commercial, and industrial developments.

In November 2017, James W. Cornett, of Ecological Consultants prepared a General and Focused Biological Resources Assessment for the 3.5-mile-long proposed sewer corridor. The Biological Resources Assessment covered a component that is not a part of the proposed project, improvements to LS 55-21. In August 2018, CVWD Biologist Brett Daniels, surveyed the 2,500-linear foot alignment along Martinez Road. These reports describe the biological resources within the project footprint and assist in the assessment contained within this section. See **Appendix B** and **Appendix C** for a copy of the reports.

The project area is within the boundary of the *Coachella Valley Multiple Species Habitat Conservation Plan* (CVMSHCP) but is not within a designated Conservation Area of the CVMSHCP. The CVMSHCP was adopted by the plan participants in 2007 and 2008 and permits were issued by the wildlife agencies in late 2008 (County of Riverside 2016). CVWD is a permittee to the CVMSHCP. The closest Conservation Areas of the CVMSHCP to the project site are the *Santa Rosa and San Jacinto Mountains Conservation Area*, two miles to the west, and the *Coachella Valley Stormwater Channel and Delta Conservation Area*, three miles to the east.

a) Less than Significant with Mitigation Incorporated

Avenue 66/Harrison Street

The biological assessment prepared for the Avenue 66/Harrison Street alignment (Cornett 2017) included reviews of literature and institutional records to determine the possible occurrence of sensitive species. A biological field survey was conducted between October 20, 2017 and November 13, 2017. Plant and animal surveys were conducted by walking parallel transects through the centers and edges of the corridor and 100 yards beyond the proposed corridor boundary for a total width of 300 yards. The field survey also included day and night live animal trapping.

As discussed previously, the project area has been disturbed by human activity. Much of the proposed project corridor is occupied by date groves, dense tamarisk thickets, and dwellings. The project area does not provide a significant source of cover or food resources for any sensitive or listed migratory bird species. No observations of the

protected burrowing owl were recorded (Cornett 2017), and no evidence of this species presence was found. The burrowing owl is not typically found in areas of regular human use. Additionally, the owls create burrows by expanding existing rodent burrows and observable rodent burrows were rare within the project boundary.

The field survey (Cornett 2017) further revealed no intact plant communities within the proposed utility line corridor or sensitive plant species. However scattered and disturbed remnants of the mixed saltbush scrub community were found. These species occupy hundreds of square miles in the Coachella and Imperial Valleys. Many kinds of introduces and exotic weed species were found within the proposed corridors. The abundance of exotic weed species is an indication of the severe human disturbance and activities within the project area. The Inventory of Rare and Endangered Plants of California, published by the California Native Plant Society, *the CNDDB Special Plant List* (2017) and the *Endangered, Threatened and Rare Plants of California* (2017) indicate no listed or sensitive plant species that might occur within the project area.

Martinez Road

The biological report for the 2,500 LF alignment along Martinez Road was prepared in 2018 (Daniels 2018). The purpose of this report was to characterize biological resources present at the site and to assess the potential for the site to support special-status resources, wetland or waterways and special-status candidates. The biological evaluation includes a literature review and habitat level survey of the project site. A field survey was done by CVWD's biologist on August 23, 2018. The surveys consisted of a site walkover to identify potential waterways, plant communities, dominant plant species, and wildlife present on the site.

The entire project area on Martinez Road has been subject to extensive disturbance and grading activities associated with the construction of Tribal housing on both the east and west sides of the proposed pipe alignment as well as heavy agriculture use. The biological report states (Daniels 2018) that no special status species, or supportive habitat, was observed onsite during the survey. The site offers limited habitat, and forage for wildlife species as the area is highly developed. However, the report states, although no special-status wildlife species were observed during the survey, migratory bird species could potentially move through the site. Their occurrence would be transient and would not be affected by activities onsite, as there is no supportive habitat for nesting or roosting within the immediate right-of-way.

The CNDDB query for Martinez Road revealed no listed or threatened species within a one-mile radius of the project site but did list three plant species as occurring in the region, Jackass-Clover, Chaparral Sand-Verbena, and Mecca Aster. Chaparral Sand-Verbena has been recorded approximately 4 miles south of the Interstate 10 freeway in the Mecca Hills on the east side of the Coachella Canal which is 8 miles east of the project site. This species is typically associated with chaparral, coastal scrub, and desert dunes and open desert scrub on alluvial soils. No potential habitat for this species was observed onsite and thus is not expected on or near the project site. Jackass-Clover is associated with

Playas, Desert Dunes and Mojavean/Sonoran Desert scrub. Mecca Aster is associated with Sonoran Desert scrub and more specifically with steep canyon slopes in areas of sandstone and clay. No supportive habitat for either of these plant species was observed onsite during the field survey and thus it is not expected on or near the project site. Additionally, no special status plant species associated with the CVMSHCP were observed during the survey within the project bounds or immediately adjacent to the site.

Both studies concluded that no adverse significant impacts to biological resources in the project area are expected to result from project implementation with adherence to certain Mitigation Measures (**BIO-1: Pre-construction Burrowing Owl Survey** and **BIO-2: Nesting Birds**). The 2018 Biological Report (Daniels 2018) recommended environmental training and preconstruction surveys for nesting birds and burrowing owl due to the potential for birds to move through the site.

Therefore, there would be less than significant impacts to species identified as candidate, sensitive, or special status, including Jackass-Clover (*Wislizenia refracta ssp. refracta*), Chaparral Sand-Verbena (*Abronia villosa var. aurita*), Mecca Aster (*Xylorhiza cognata*), Desert tortoise (*Gopherus agassizii*), and migratory birds (see species lists in **Appendix B**) following the recommended Mitigation Measures listed below.

b) No Impact

Avenue 66/Harrison Street

Per the biological report (Cornett 2017), the corridor does not include Desert Dry Wash Woodland habitat or impact a blue-stream corridor. The field survey did not reveal any on-site naturally occurring springs, permanent aquatic habitats or drainages. Most of this road alignment has been heavily disturbed and impacted by human activity. The entire area shows evidence of being graded in historical times for development of home sites, commercial uses, storage yards, agricultural fields, utility alignments and roadways.

Martinez Road

No jurisdictional waterways or resources were observed onsite (Daniels 2018). The biological report for the Martinez Road segment states that the area is devoid of any riparian or intermittent streambeds with an established bed and bank feature. The entire project site has been subject to extensive site disturbance and grading activities associated with the constriction of Tribal housing on both the east and west sides of the proposed pipeline alignment, in addition to heavy agricultural use.

As a result of the absence of wash or riparian vegetation, absence of other sensitive natural communities, there would be no impacts.

c) No Impact

The biological reports (Cornett 2017; Daniels 2018) determined that the project site does not contain wetlands, marshes or other drainage features. No blue-line stream corridors

(streams or dry washes) are shown on U.S. Geological Survey maps for the project site nor are there botanical indicators of such corridors. As a result, implementation of the project would not result in the direct removal, filling or other hydrological interruption to any of these resources. There would be no impacts.

d) Less than Significant with Mitigation Incorporated

Per the biological reports (Cornett 2017; Daniels 2018), there is no evidence of migratory wildlife or native wildlife nursery sites exist on the project site. As previously discussed, the project area has been heavily disturbed by human activity, grading, residential, and agricultural uses. Moreover, there are no existing drainages that would support wildlife corridors and the roads are not located in a known wildlife corridor. Therefore, no impacts would occur to movement of any native resident or migratory fish or wildlife species, corridors, or wildlife nursery sites.

The 2018 Biological Report (Daniels 2018) recommended environmental training and preconstruction surveys for nesting birds and burrowing owl due to the potential for birds to move through the site. With implementation of **Mitigation Measures BIO-1** and **BIO-2**, impacts to migratory species would be less than significant.

e) No Impact

The proposed project would take place within areas that have been impacted by human activity and site disturbance. Project implementation would not result in tree removal. There are no other unique local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance that would cause a conflict nor does the site support high value biological resources that could be affected. No impacts are anticipated.

f) Less Than Significant Impact

The CVMSHCP provides policies and assessment for conservation of habitats and natural communities throughout the eastern Riverside County area. The project site lies within the boundary of the CVMSHCP, but is not located within a Conservation Area under this plan. As the project specific biological reports have determined, there are no known significant biological resources on the project site. The proposed project would not conflict with any provisions of the CVMSHCP.

Mitigation Measures

Mitigation Measure BIO-1: Pre-Construction Burrowing Owl Surveys

To avoid potential impacts to burrowing owl, a pre-construction clearance survey for burrowing owl shall be conducted no more than fourteen (14) days prior to initiation of construction activities. The burrowing owl pre-construction survey shall be conducted on-foot within the proposed disturbance area including a 500-foot buffer. The survey methods will be consistent with the Staff Report on Burrowing Owl Mitigation (CDFW

2012) and shall consist of walking parallel transects spaced adequately to obtain 100% visual coverage of the site. The survey shall be conducted by a biologist familiar with the identification of burrowing owl and their habitat.

If burrowing owls are found within the project area during the pre-construction surveys, active burrows will be avoided. If possible, the timing and location of construction activities will be adjusted to avoid the occupied burrow by the appropriate distance (see below), where possible. Due to the size of the project, it is anticipated that the construction schedule and location can be modified to avoid all potential impacts to occupied burrows during the breeding season. Buffer zones for occupied burrows will be established at 500 feet during the breeding season (February 1 to August 31) and at 100 feet for the non-breeding season. These buffers may be adjusted in consultation with California Department of Fish and Wildlife and Coachella Valley Conservation Commission and monitored at the discretion of a qualified biologist. The buffer zone will be clearly marked with flagging and/or construction fencing.

Mitigation Measure BIO-2: Nesting Birds

To avoid disturbance of nesting birds, including raptor species protected by the MBTA and CFGC 3503, activities related to the proposed project including, but not limited to, vegetation removal, ground disturbance, and construction shall occur outside of the bird breeding season (typically January 1 to September 15) to the extent practicable.

If construction must occur within the bird breeding season (January 1 through September 15), CVWD shall, no more than three days prior to initiation of ground disturbance and/or vegetation removal, contract with a qualified biologist to conduct a nesting bird and raptor pre-construction survey within the disturbance footprint plus a 100-foot buffer (300-foot for raptors), where feasible. If the proposed project is phased or construction activities stop for more than one week, a subsequent pre-construction nesting bird and raptor survey will be required prior to each phase of construction within the project site.

Pre-construction nesting bird and raptor surveys shall be conducted during the time of day when birds are active and shall factor in sufficient time to perform this survey adequately and completely. A report of the nesting bird and raptor survey results, if applicable, shall be submitted to the lead agency for review and approval prior to ground and/or vegetation disturbance activities.

If nests are found, their locations shall be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for song birds, and up to 500 feet for raptors depending upon the species and the proposed work activity, and CDFW approval shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. Buffers will be determined in conjunction with CDFW through the development of a nesting bird management plan. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall

occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed, and all the young have fledged. If project activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary.

3.5 Cultural Resources

Would the Project:	*Potentially Significant Impact*	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Discussion

The project is situated in the eastern Coachella Valley. The Coachella Valley itself extends approximately 45 miles from the San Bernardino Mountains near Palm Springs to the Salton Basin near the border of Riverside, Imperial, and San Diego counties.

This section is based on a summary of the *2018 Cultural Resources Technical Report*, prepared by Dr. Amy Gusick on behalf of the Water Resources Policy Institute and revised in 2020. This section also incorporates information from the Area of Potential Effects memorandum prepared by Rincon for CVWD in 2021. See **Appendix D** and **Appendix E** for a copy of these reports.

The project-specific Cultural Resources Technical Report was prepared to determine whether the project would cause a substantial adverse change to any "historical resources" or "Tribal cultural resources" that may exist in or around the project area. The research methods performed as part of this assessment included a review of all archaeological, Native American, and historic literature covering the project site, and a pedestrian field survey. The Cultural Resources Technical Report covered a component that is not a part of the proposed project, improvements to LS 55-21. The Area of Potential Effects memorandum (Rincon 2021) provides update maps identifying the Area of Potential Effects (APE) and Area of Direct Impacts (ADI) for the proposed project.

The proposed project involves installation of 19,625 feet of sewer pipeline, a new lift station, and abandonment of onsite septic systems at Sunbird MHP and TMCC. New electrical facilities would be constructed at the new lift station site, including a distribution pole and a transformer. The pipeline would be installed below grade within existing paved streets and rights-of-way with an average excavation depth of 10 to 14 feet and maximum depth of 25 feet. The width of the trench will depend on the depth because the trenches will have side slopes laid back at 1:1 or 2:1 depending on depth and soils. Pipeline trenching widths would be three to four feet. Excavations for a new lift station are proposed in a 17-feet by 17-feet area on the northeast corner of Harrison Street and Echols Road. The trench for the wet well for the lift station will be 20 feet deep.

The APE surveyed by Gusick covers approximately 24,000 LF along existing roads. For the purposes of this analysis, the APE developed by Gusick has been defined as the ADI and a new APE has been created that encompasses the limits of project-related disturbances, the boundaries of all cultural resources and a historic district, and a 1-meter buffer of the resources (Rincon 2021). The resources are included in the APE due to the potential for direct or indirect impacts created by the Project. The APE includes all areas that could potentially be affected by the project, including staging and construction access areas. It is considered three-dimensional and includes horizontal and vertical ground disturbance for the project.

Records Search Results

Records searches at the Eastern Information Center (EIC) housed at the University of California, Riverside were conducted in July 2017 and October 2018. The results indicated that 30 cultural resource investigations had been conducted within a half-mile search radius of the project APE between 1979 and 2014.

The records search conducted at the EIC returned 21 known archaeological or historic-age resources within one-half mile of the project APE. Within the project APE there are five known resources. Four are historic-age built resources and the fifth is the Martinez Historical District. There is also one additional known historic property, Valerie Jean Date Shop, which is adjacent to the project APE. These six previously-recorded historic resources are described and addressed under Impact “a” below. In addition to the previously-recorded historic resources, the Cultural Resources Report (Gusick 2018, revised 2020) recorded three new historic resources, which are also described and addressed under Impact “a” below.

Field Survey

Field surveys were conducted of the proposed project APE in July 2017, September 2017, and November 2018. Preliminary field efforts included review of records within the project APE, the generation of a map of the recorded cultural resources using GIS, and review of historic aerials of the project APE. An intensive pedestrian and reconnaissance survey was conducted of the pipeline route, including inspection of natural open spaces, buildings and infrastructure within the linear corridor. Previously recorded cultural

resources were re-located and recorded. For any updates to previously recorded resources and for newly identified resources, California Department of Parks and Recreation (DPR) 523 forms were submitted to the EIC.

The proposed alignments on Echols Road and Harrison Street were found to be highly disturbed during the field surveys. The proposed alignment along Avenue 66 was found to be developed; all built environment resources adjacent to the APE were re-inspected, as was an historic-age levee noted on historic topographic maps. The dirt access for the proposed new lift station survey found the site was bordered on all sides by heavily graded, disturbed land. The pedestrian survey along Martinez Road and the parallel TMCC access road found that the shoulders were heavily graded and scattered with modern trash. The survey of the portion of the proposed alignment on Martinez Road that extends into the boundaries of the Martinez Historical District was conducted with the Torres-Martinez Most Likely Descendent (MLD), who identified areas within the Historical District where cremated remains were known to be located and where debitage from shovel test pits had been found from other projects.

a) Less Than Significant with Mitigation Incorporated

According to the Cultural Resources Report (Gusick 2018, revised 2020), there are six historical resources within the project APE and three historical resources adjacent to the project APE.

Four previously-recorded historic-age built resources that are within the project APE include: Martinez Road, two Caltrans rights-of-way, and a recorded segment of irrigation lateral that is part of the Coachella Canal. The fifth previously-recorded historic resource within the project APE is the Martinez Historical District. Valerie Jean's Date Shop is a known historical property adjacent to the project APE. Additional details follow:

- *Martinez Road* runs through the Torres-Martinez Desert Cahuilla Indian Reservation and is adjacent to the Martinez Historical District, which is addressed further in the next paragraph. Martinez Road has been recommended as ineligible for the National Register of Historic Places (NRHP). The road has been resurfaced and the shoulder has been graded throughout the years for routine maintenance.

- The *two Caltrans rights-of-way* are part of several rights-of-way that were recorded in 2012. They are both considered historic-period asphalt paved roads. One is at the edge of Harrison Street and the other is at the northeast corner of Avenue 66 and Harrison Street. Both rights-of-way are in poor condition and show evidence of being patched and resurfaced over the years. No cultural materials were observed at these two sites and no further cultural resource consideration was recommended.

- The *Coachella Canal* was constructed between 1949 and 1951. The recorded irrigation lateral runs along Echols Road and while this irrigation lateral is part of a contributing historical element, the segment within the project APE was replaced

with PVC pipe in 2016 to protect the pipeline from future flooding. The proposed sewer pipeline will be placed along the same alignment as this section of irrigation lateral previously replaced with PVC pipe. Due to the 10-feet separation requirements imposed by Title 22 and the California Health Code, and because this section of irrigation lateral has already been replaced, the installation of the sewer pipe will not have an adverse effect to this resource.

- The *Martinez Historical District* is a listed National Register Historic Preservation District. This Historical District encompasses the Cahuilla village site and is currently part of the Torres-Martinez Desert Cahuilla Indian Reservation. The Historical District has both prehistoric and historic components, including five historic age buildings near the project APE. There is also a cemetery located within the Historical District boundaries. Disturbance to the roads (Martinez Road and the access road to the TMCC) running through the Martinez Historical District would be temporary and the roads would be repaved and returned to the current condition after the installation of the sewer pipe. However, due to the sensitive nature of this area, further subsurface investigation will be conducted and a Data Recovery Plan will be developed prior to construction. Also, an archaeological and Tribal monitor will be required during ground disturbing activities to mitigate potentially significant impacts.

- *Valerie Jean's Date Shop* is a known historical property adjacent to the project APE on the southwest corner of Harrison Street and Avenue 66, near the trenching location for the pipeline. This resource has a National Register status and a State Point of Historical Interest status. The Cultural Resources Report found that there would be temporary impacts during the trenching of the road to the north and west of the resource. However, these impacts would be resolved once the pipeline trench is in-filled and repaved. No adverse impacts are expected to this resource.

As part of the Cultural Resources Report (Gusick 2018, revised 2020), three newly recorded historical resources were identified within a half-mile of the project APE, including a residence, roadway, and levee. These three resources were recorded with California DPR 523 forms with the EIC. The memorandum prepared by Rincon (2021) determined that one of the newly recorded resources is a previously recorded resource.

- The *single-family residence* is within Sunbird MHP but is located outside of the project APE. This adobe residence was identified on maps as early as 1953 and is likely associated with small scale farming that is common in this area. Although the house appeared to retain its original purpose it has not maintained its integrity of design, setting, or workmanship and does not appear to be eligible for the NRHP. Moreover, the residence is not within the project APE and would not be impacted by the proposed project.

- *Avenue 66*, a historic- to modern-period improved road, runs from Harrison Street to Polk Street within the project APE. The road is visible on 1944 Valerie topographic map and appears to be a main route through this section of Thermal.

No major historic event or person is associated with the road and it was not a major historic factor in the development of this area. The road has been disturbed with modern improvements and no newly identified cultural resources were found in association with this road. The memorandum prepared by Rincon (2021) determined this resource is previously recorded site P-33-020844 (Avenue 66).

- A historic-age *levee* was also identified and is first shown on the 1957 Valerie topographic map but appears to no longer be in use. Its former use may have been related to Kohl Ranch, which is currently on the property adjacent to the levee. The levee has been degraded and filled with vegetation. This levee is outside of the proposed project APE and would not be impacted by the proposed project.

Most of the proposed project area has been subjected to extensive site disturbance and human development. The entire area shows evidence of being graded in historical times for home site, storage yards, agricultural fields, utility alignments and roadways. Following implementation of **Mitigation Measures CUL-1** through **CUL-5**, listed below, the project is expected to result in less than significant impacts to historical resources. No further cultural resource considerations are recommended for the two new and six previously recorded cultural resources.

b) Less Than Significant with Mitigation Incorporated

Archaeological resources are described as cultural resources, such as structures or objects that provide evidence of past human activity. They are important for scientific, historic, and or religious reasons to cultures, communities, or individuals. The Cultural Resources Report (Gusick 2018, revised 2020) included a records search, Native American scoping, historical background research and an intensive level field survey. The Cultural Resources Report found the proposed project APE has been heavily disturbed over the years from various activities associated with agriculture, utility alignments, homes and roadways.

As mentioned in the prior discussion under the response to Impact “a”, the Martinez Historical District is listed as a National Register Historic Preservation District. This Historical District encompasses the Cahuilla village site and is currently part of the Torres-Martinez Desert Cahuilla Indian Reservation. The Historical District has both prehistoric and historic components. Within the Martinez Historical District, there is a known cemetery which is just south of the APE along Avenue 66 as well as historic documentation of two Indian Rancherias and prehistoric Cahuilla Indian village sites, that are still present. The entire project APE within Martinez Road and the TMCC reservation access road were surveyed and a portion of the proposed project APE runs directly through the Martinez Historical District.

Planned impacts to the roads that run through the Martinez Historical District would be temporary and the road would be repaved and returned to the current condition after the installation of the sewer pipeline. However, due to the sensitive nature of this area, further subsurface investigation will be conducted, and a Data Recovery Plan will be created

prior to construction. Also, an archaeological and Tribal Monitor shall be present during any ground disturbing activities. Implementation of **Mitigation Measures CUL-1 through** and **CUL-5** described below, would reduce archeological resource impacts to less than significant.

c) Less Than Significant with Mitigation Incorporated

Avenue 66/Harrison Street/ Echols Road

The Cultural Resources Report (Gusick 2018, revised 2020) included an intensive field survey of the entire alignment. The presence of human remains, or human burial sites were not encountered during previous construction activities in the proposed project APE, nor have human remains or burial sites been found in adjacent cultivated fields.

Martinez Road

There is a recorded cemetery in the Martinez Historical District, which is just south of the APE along Avenue 66. There is a possibility of encountering human remains if trenching occurs below existing fill material underneath the existing streets, which are believed to be up to three feet deep. Impacts to buried human remains along this route of the proposed project were considered to be moderately high (Gusick 2018, revised 2020).

State of California Health and Safety Code §7050.5 and CEQA Guidelines §1564.5 require that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there would be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlay adjacent remains, until the County Coroner has examined the remains. According to State of California Health and Safety Code, if the coroner determines the remains to be Native American or has reason to believe that they are Native American, the coroner shall contact he Native American Heritage Commission by telephone within 24 hours. If the MLD does not make recommendations within 48 hours, the remains are to be buried with appropriate dignity on the property where they will no longer be disturbed.

In the event of discovery or recognition of human remains in portions of the proposed project area within lands owned by Torres-Martinez Desert Cahuilla Indians (see **Figure 2-5**), there would be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlay adjacent remains, until a representative from the Torres-Martinez Desert Cahuilla Indians is notified. The Torres-Martinez Desert Cahuilla Indians would have full discretion over the treatment of the remains. These requirements are also listed as **Mitigation Measure CUL- 6** in order to ensure that they are included in the MMRP. Furthermore, before any project work is carried out within the boundaries of the Martinez Historical District site or Martinez Road site, a Phase II Archaeological Investigation and Report will be conducted to determine if buried intact deposits remain, and a Data Recovery Plan will be created. Also, archaeological sensitivity training for construction personnel will occur. These requirements are described in Mitigation Measures **CUL-1**, **CUL-2,** and **CUL-3**. Finally, initial project-related ground-disturbing

activities shall be observed by a Native American monitor, as described in Mitigation Measure **CUL-4**.

With the compliance with Mitigation Measures **CUL-1, CUL-2, CUL-3, CUL-4,** and **CUL-6**, impacts would be less than significant.

Mitigation Measures

Mitigation Measure CUL-1: Phase II Work Plan, Archaeological Investigation, and Report

As the Avenue 66 Trunk Sewer Project will conduct ground disturbing work within the boundaries of two known Tribal Cultural Resources within Martinez Historical District, the Martinez Road site P-33-020028 (CA-RIV-10171) and the multicomponent site P-33-001292/h (CA-RIV-1292H) along the western edge of Martinez Road, a Phase II Work Plan, Phase II Archaeological Investigation, and a Phase II Technical Report shall be conducted prior to the issuance of an installation agreement by the Torres-Martinez Desert Cahuilla Indians to determine if intact deposits remain.

A Phase II Work Plan (Work Plan) shall be created prior to the Phase II field work to guide the investigation. The Phase II Work Plan shall include, but not be limited to, the following elements: an overview of the project and regulatory context; a description of the environmental and cultural setting, relying on relevant portions of the Cultural Resources Technical Report (Gusick 2020); background on the results of previous investigations, cultural resources reports, and coordination with Native American groups; and the methods and research design to identify potential themes and questions, data expectations, significance thresholds, and protocols, all culminating in a detailed plan for the methods of testing within the Area of Direct Impact (ADI) for the project and artifact analysis with current industry standards.

To avoid potential impacts to unknown subsurface resources in the Area of Direct Impact (ADI) in the vicinity of the Martinez Road site P-33-020028 (CA-RIV-10171) and the multicomponent site P-33-001292/h (CA-RIV-1292H) along the western edge of Martinez Road, a Phase II Archaeological Investigation (Field Work) shall be conducted. The Phase II Archaeological Investigation (Field Work) is the field work portion and shall be conducted in accordance with the Society for California Archaeology's Fieldwork and Reporting Guidelines. This work effort shall be conducted under the direction of an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology. The Phase II Field Work excavations shall be limited to the ADI, which is the area that will be directly disturbed by project-related excavation. Field work methods shall be defined in the Work Plan and may include shovel test pits, test units, transport of recovered materials to the laboratory, specialized analysis, and cataloguing of lithic artifacts, charcoal, and faunal remains. Field work also may include magnetic resistivity survey.

After the Phase II Field Work, a Phase II Technical Report (Technical Report) shall be created documenting the effort. The Technical Report shall include any necessary archival research to identify significant historical associations based on mapping of encountered artifacts, collection of functionally or temporally diagnostic tools and debris, and excavation of a sample of the cultural deposits carried out during the Phase II Field Work. The significance of any new data shall be evaluated according to the criteria of the California Register of Historic Resources and if applicable, National Register of Historic Places. The Martinez National Historic District (NRD-1292) would not be reevaluated for listing eligibility. The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition).

Mitigation Measure CUL-2: Data Recovery Plan

A Phase III Data Recovery Program (DRP) shall be created for the project and include the Phase II Archeological Investigation and technical report information as necessary. The DRP shall be completed in accordance with the California Office of Historic Preservation's Planning Bulletin 5 (1991), Guidelines for Archaeological Research Design, or the latest edition thereof. The DRP shall be prepared by a qualified archaeologist who meets or exceeds the Secretary of Interior's Professional Qualifications Standards for prehistoric archaeology and be available for comments by the Torres-Martinez Desert Cahuilla Indians and CVWD. The DRP must be submitted for review and approval prior to the start of construction. Ground-disturbing work may continue under the observation of an archaeological or cultural monitor on portions of the project site that do not appear to contain significant archaeological resources. The DRP shall include the following elements:

- Field Methods and Procedures: Descriptions of proposed field strategies, procedures, and operations.
- Research Design/Data Classes/Data Requirements: This will describe the relevant research themes pertinent to the archaeological deposit identified and the data requirements for evaluation for the CRHR.
- Background: Results of previous investigations and historical documentation research
- Treatment Plan: Expected Artifact Classes and treatment plan for each, including the treatment of human remain and associated funerary objects. The treatment of human remains will be included as detailed in CUL-6.
- Cataloguing and Laboratory Analysis: Description of selected cataloguing system and artifact analysis procedures of artifacts recovered and any corresponding field notes, graphics, and lab analyses, including but not limited to faunal analysis of all animal bones, radiocarbon dating when appropriate, protein residue analysis of

stone tools and groundstone, and petrographic analysis of ceramic samples to assess general age ranges and source material.

- Discard and Deaccession Policy: Description of and rationale for field and post-field discard and deaccession policies for cultural resources.
- Interpretive Program: Consideration of an on-site/off-site public interpretive program during the course of the archaeological data recovery program.
- Security Measures: Recommend security measures to protect the archaeological resource from vandalism, looting, and non-intentionally damaging activities.
- Final Report: Description of proposed report format and contents and distribution of results.
- Curation: Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Mitigation Measure CUL-3: Worker Environmental Awareness Program: Archaeologist Sensitive Training

CVWD shall retain a qualified archaeologist conduct a Worker's Environmental Awareness Program (WEAP) training for archaeological sensitivity for construction personnel prior to the commencement of any ground disturbing activities. Construction personnel shall be briefed on project-specific circumstances and general observation methods for detecting archeological resources, including tribal cultural resources. The briefing shall include appropriate actions to be taken in the event of questionable evidence or discovery.

Mitigation Measure CUL-4: Initial Monitoring of Archaeological Resources

CVWD shall ensure that initial project-related ground-disturbing activities shall be observed by an archaeological and Native American monitor. These activities shall include initial site preparation, clearing/grubbing of vegetation, and excavation for placement of the sanitation system. The archaeological monitor shall be under the direction of a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology (National Park Service 1983). If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the find shall be evaluated for CRHR and/or NRHP eligibility. Archaeological monitoring may be reduced or halted at the discretion of the qualified archaeologist as warranted by conditions such as encountering bedrock, sediments being excavated are fill materials, or negative findings during initial ground-disturbing activities. If monitoring is reduced, spot-checking shall occur when ground-disturbance moves to a new location or when ground disturbance will extend to depths not previously reached (unless those depths

are within bedrock). Both the project archeologist and Native American monitor will be invited to attend the pre-construction meeting.

Mitigation Measure CUL-5: Unanticipated Discovery of Cultural Resources

In the event that cultural resources are unearthed during project construction, the project archeologist, in coordination with CVWD's construction inspector shall temporarily suspend all earth disturbing work within a 100-foot radius of the discovery. A qualified professional 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, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- 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 does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify CVWD's Construction Inspector and Environmental Services Department. CVWD shall consult on a finding of eligibility and implement appropriate treatment measures if the find is determined to be eligible for inclusion in the NRHP or CRHR. Work may not resume within the no-work radius until CVWD, through consultation as appropriate, determines that the site either: 1) is not eligible for the NRHP or CRHR; or 2) that the treatment measures have been completed to its satisfaction.

Mitigation Measure CUL-6: Unanticipated Discovery of Human Remains

The discovery of human remains is a possibility during ground-disturbing activities. In the event that human remains are found, CVWD shall temporarily suspend all earth disturbing work within a 100-foot radius of the discovery. The project archeologist would evaluate the significance of the find and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature and location of the find.

If the find includes human remains, or remains that are potentially human, the professional archaeologist shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Riverside County Coroner (as per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the PRC). The designated MLD will have 48 hours

from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate information center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

If the find includes human remains, or remains that are potentially human, and the find is located on lands owned by Torres-Martinez Desert Cahuilla Indians, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlay adjacent remains, until a representative from the Torres-Martinez Desert Cahuilla Indians is notified. The Torres-Martinez Desert Cahuilla Indians would have full discretion over the treatment of the remains.

3.6 Energy

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

Discussion

The project area is served by IID for electricity, a public utility company with a 6,471 square mile service area. IID's energy service territory covers all of Imperial County, along with parts of Riverside and San Diego Counties. The project area is served by the Southern California Gas Company for natural gas. CVWD's facilities are powered by electricity supplied by IID in the eastern Coachella Valley, and Southern California Edison in the remaining service area. New electrical facilities would be constructed at the new lift station site, including a distribution pole and a transformer (see *Section 2.4.2*). CVWD will continue to consult with IID staff related to the design, installation or improvements to the new and/or improved project features.

a) Less than Significant Impact

Construction of the proposed project would involve construction-related fossil fuel consumption from operation of diesel-powered construction equipment, and fossil fuel consumption from material hauling, delivery, and worker vehicle trips. **Table 3-5** summarizes the anticipated construction fleet for the proposed project. **Table 3-6** summarizes the estimated material delivery and hauling truck trips, and worker vehicle trips for each type of construction activity.

Table 3-5: Construction Fleet Summary

Construction Phase	Duration (days)	Anticipated Fleet	Usage (hours/day)
Excavation / Grading	131 days	1 Rubber Tired Dozer 2 Tractor/Loader/Backhoe 1 Grader	8 7 8
Lift Station Building Construction	131 days	1 Cement and Mortar Mixer 1 Generator Set 1 Crane 2 Forklift 1 Tractor/Loader/Backhoe 3 Welder	8 8 8 7 6 8
Re-paving	131 days	1 Cement and Mortar Mixer 1 Paver 1 Paving Equipment 2 Rollers 1 Tractor/Loader/Backhoe	8 8 8 8 8
Sources: Project-specific information obtained from Project Report (Woodard & Curran 2020) and duration based on a total construction timeframe; see *Section 2 Project Description*. All other assumptions obtained from default values in CalEEMod Version 2016.3.2; see **Appendix A** for model output.			

Table 3-6: Construction Trip Summary

Construction Phase	Duration (days)	Daily Worker Vehicle Trips (14.6 miles each)	Daily Vendor Trips (6.2 miles each)	Daily Hauling Truck Trips (20 miles each)
Excavation / Grading	131 days	10	0	12
Lift Station Building Construction	131 days	42	17	1
Re-paving	131 days	15	1	12
Sources: Project-specific information obtained from Project Report (Woodard & Curran 2020); see *Section 2 Project Description*. All other assumptions obtained from default values in CalEEMod Version 2016.3.2; see **Appendix A** for model output.				

The proposed project would implement typical construction practices such as trenching and repaving of the pipelines, and construction and equipping of the lift station. As shown in **Table 3-5** and **Table 3-6**, the project would not require any unusual or excessive construction equipment or practices that would result in wasteful, inefficient, or unnecessary consumption of energy compared to projects of similar type and size. In

addition, the construction fleet contracted for the proposed project would be required to comply with the CARB In-Use Off-Road Diesel-Fueled Fleets Regulations, which would limit vehicle idling time to 5 minutes, restrict adding vehicles to construction fleets with older-tier engines, and establish a schedule for retiring older, less fuel-efficient engines from the construction fleet. As such, construction of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy during construction and impacts would be less than significant.

The proposed project would have minimal daily operational energy demand associated with fossil fuels consumed for maintenance activities, including regular inspection trips (see *Section 2 Project Description*). The proposed project would implement typical operational practices compared to projects of similar type and size. In addition, the project would reduce existing energy use associated with current methods of wastewater disposal from Sunbird MHP and TMCC. Finally, the energy consumption of the proposed project is necessary to provide sustainable and sanitary wastewater treatment for Sunbird MHP and TMCC. As such, operation of the project would not result in wasteful, inefficient, or unnecessary consumption of energy. Impacts would be less than significant.

b) Less than Significant Impact

The *2017 Climate Change Scoping Plan* (CARB 2017) focuses on reducing energy demand, and GHG emissions, that result from mobile sources and land use development. The proposed project would not involve a considerable increase in new vehicle trips or land use changes that would result in an increase in vehicle trips, such as urban sprawl. The *Scoping Plan* also recognizes the water-energy nexus and the potential for local water recycling to reduce energy associated with water conveyance. By connecting Sunbird MHP and TMCC to CVWD's sanitary sewer system, the project would support the *Scoping Plan* goals of expanding local water recycling, and offsetting energy demands associated with water conveyance statewide.

The proposed project would not interfere with existing County or regional programs intended to reduce energy and improve water use efficiency. It would not result in emissions higher than the screening thresholds in Riverside County's *Climate Action Plan* (CAP) (see further analysis is *Section 3.8 Greenhouse Gas Emissions* of this document). The proposed project would not, therefore, conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant, and no mitigation would be required.

Mitigation Measures: None required.

3.7 Geology and Soils

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

Discussion

The Coachella Valley is located within California's Colorado Desert Geomorphic Province, bordered to the west by the Peninsular Ranges, to the north by the Transverse Ranges, and to the east by the Mojave Desert. The Colorado Desert is a low-lying barren desert basin, portions of which are about 245 feet below sea level.

The majority of Southern California, including the Coachella Valley, is considered a seismically active region and is subject to risk from earthquakes and other geologic effects that are triggered by earthquakes such as ground shaking, fault rupture, landslides, liquefaction, subsidence, and seiches. Two of California's most active faults, the San Andreas and San Jacinto faults, are located within the Coachella Valley. The San Andreas and San Jacinto have been designated by the California Geological Survey as Alquist-Priolo Earthquake Fault Zones. The proposed project site is located in the southeast quadrant of the Coachella Valley—an inland structural basin located between San Andreas Fault zone to the north and San Jacinto Fault zone to the south. The project area is approximately seven miles from the San Andreas fault and approximately 15 miles from the San Jacinto fault There are also many other active/potentially active late Quaternary faults within a 100-kilometer radius of the Project.

The northwestern Coachella Valley is an alluvial lowland that extends southeast from the San Gorgonio Pass region to the north end of the Salton Sea. The lowland is traversed by multiple branches of the San Andreas Fault and is punctuated by localized compressions resulting in the uplift of dome-shaped hills of sand and gravel. Current geologic understanding suggests that the lowland is a contractional region formed over the last one-million years by left-lateral strike slip branches of the San Andres Fault. The left-lateral strike-slip motion is presently active and results in earthquakes in the northern Coachella Valley. Sediments are deposited in the lowland portions of the basin, also known as depositional basins. Sediments in the depositional basins are the main water-bearing units in the Coachella Valley and have been utilized for sand and gravel resources. (Kamalzare, PhD., M. ASCE, 2018).

A geotechnical investigation for the project was conducted by Mehrad Kamalzare in 2018 and is included in **Appendix F** (Kamalzare, PhD., M. ASCE, 2018). The Geotechnical Report (Kamalzare 2018) describes soils encountered at 0-3 feet below the surface as primarily organic matter followed by silty sand. The stratums below the silty sand were reported as low plastic silt and low plastic clay. All soil types ranged with in-situ densities from 'very loose' to 'medium'. The type of soil was found to be young and unconsolidated. The site was classified as a Seismic Design Category E in accordance with the California Building Code. The report concluded that: (1) the fault rupture hazard at the site is low; (2) liquefaction susceptibility is high; and (3) seismic settlement is not expected to represent a "significant geologic hazard" provided that the construction recommendations in the study are followed.

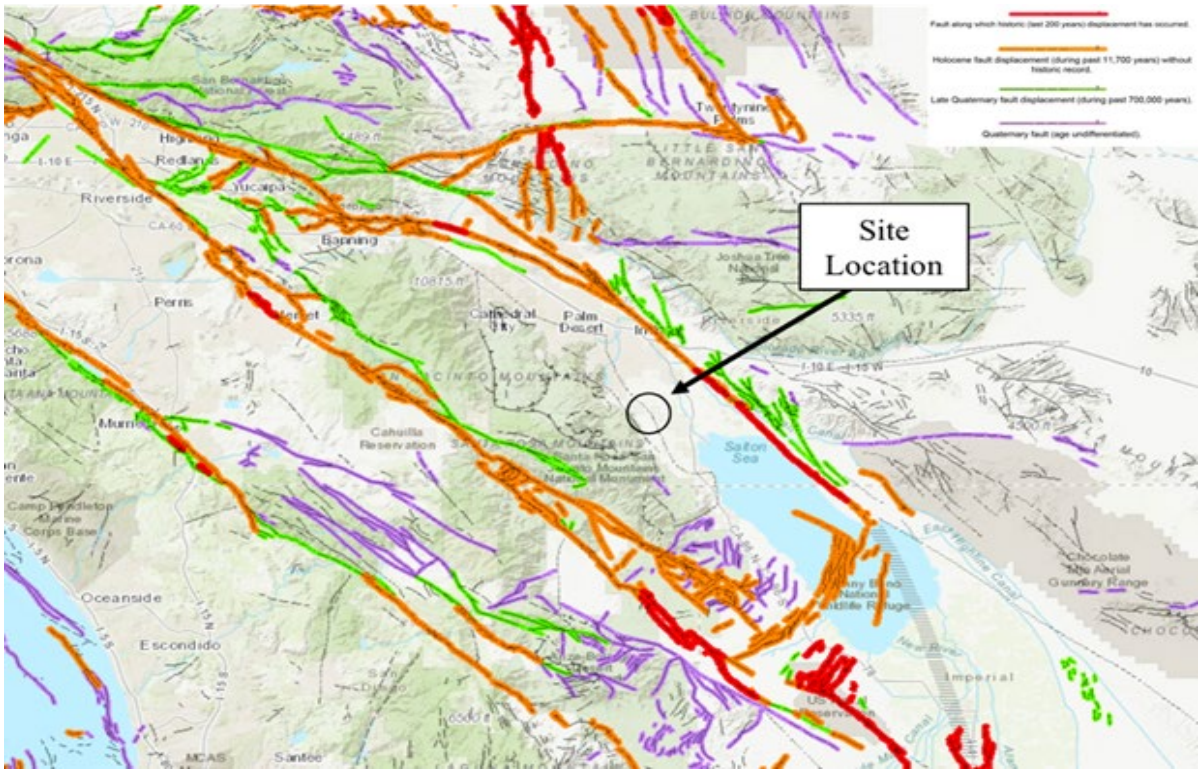
a, c) Less than Significant with Mitigation Incorporated

A seismic hazard to the proposed project is strong ground shaking from earthquakes produced by local and regional faults. The intensity of ground shaking would depend upon the magnitude of the earthquake, distance to the epicenter, and the geology of the area between the epicenter and the project site. Seismically induced ground rupture could occur with the physical displacement of surface deposits in response to an earthquake's seismic waves. Ground rupture is most likely along active faults, and typically occurs

during earthquakes of magnitude five or higher. Ground rupture only affects the area immediately adjacent to a fault.

The proposed project alignment is not located near known active fault zones. The proposed project is located approximately seven miles from the San Andreas fault and approximately 15 miles from the San Jacinto fault, which are two of California's most active faults (see **Figure 3-4**). Both the San Andreas and San Jacinto faults are designated by the California Geological Survey as Alquist-Priolo Earthquake Fault Zones. Ground rupture is most likely to occur along active faults. According to the California Geologic Survey's on-line *Earthquake Hazard Zone Application* (accessed 6/20/2020), the proposed project is not located within a fault zone. Due to the distance between the proposed project and the San Andreas and San Jacinto faults and conclusions from the Geotechnical Report (Kamalzare 2018), impacts related to ground rupture would be less than significant.

Figure 3-3: Fault Location



Source: (Kamalzare, PhD., M. ASCE)

However, due to the proximity of the proposed project to two active fault zones, the project area is subject to seismic ground shaking. The proposed project would remove 25 community septic systems, install 19,625 feet of underground gravity sewer pipeline in existing rights-of-way, and construct a new lift station. New electrical facilities would be constructed at the new lift station site, including a distribution pole and a transformer.

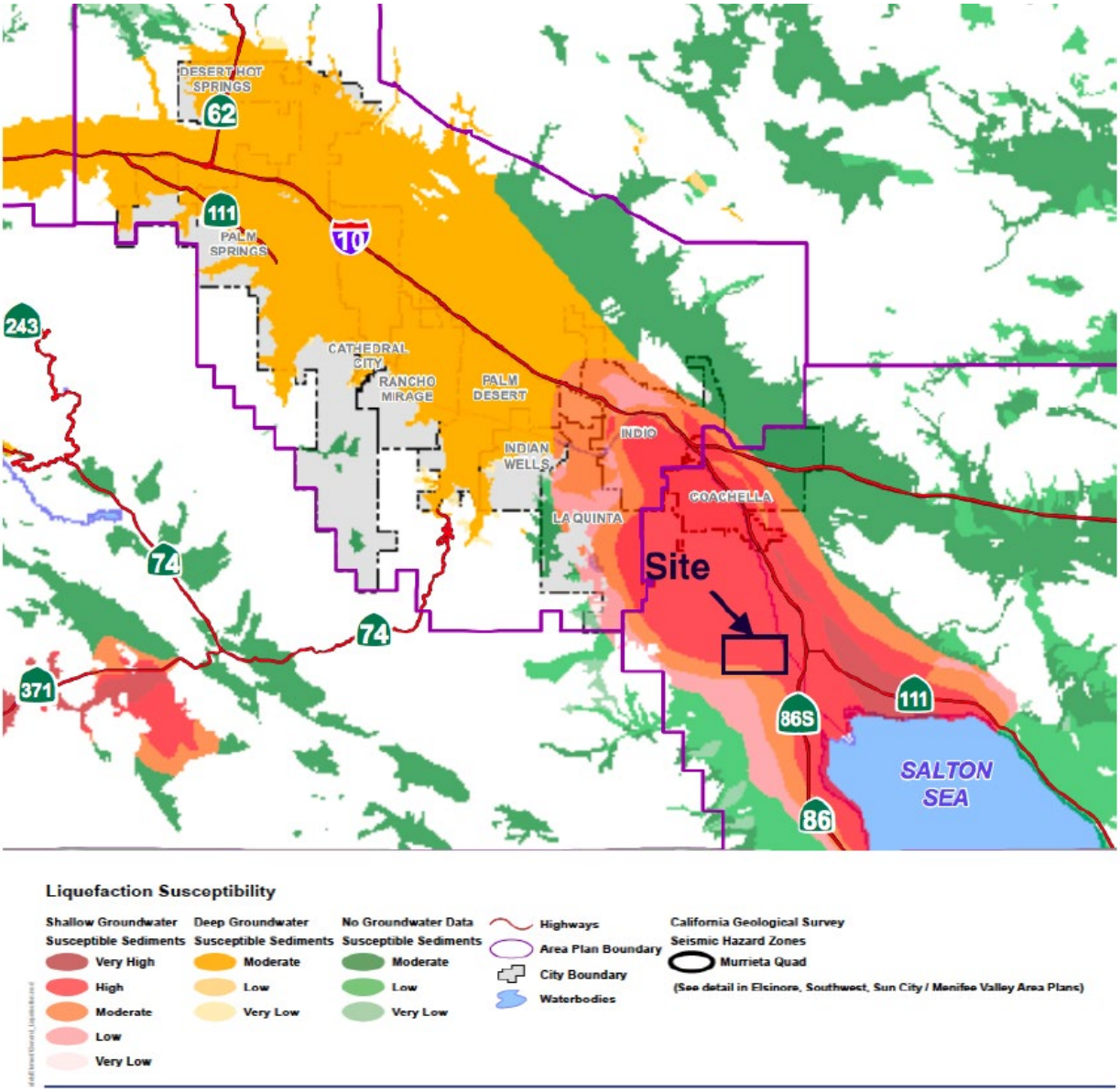
Although impacts related to strong seismic ground shaking could potentially be significant in the project area, the proposed project would not include any land use components that would bring additional people to the area or structures people would occupy. The pipelines would be designed in conformance with seismic engineering standards to reduce potential damage in the event of ground shaking**.** Therefore, the proposed project would not directly or indirectly result in substantial adverse effects, including the risk of loss, injury, or death due to seismic ground shaking and impacts would be less than significant.

The Geotechnical Report (Kamalzare 2018) concluded seismic settlement is not expected to represent a significant geologic hazard provided that the construction recommendations in the study are followed. These recommendations are included in the Construction Standards.

Regional topography is of low relief characterized by landforms attributable to Holocene Lake Cahuilla. Flat land coupled with poorly stratified alluvial soils generally rule out any potential slope stability issues. The potential impact of landslides is less than significant.

The liquefaction susceptibility map of Riverside County indicates that the proposed project site is in an area of high susceptibility due to shallow groundwater, soil type, and potential ground shaking from nearby faults (see **Figure 3-5**). The Geotechnical Report (Kamalzare 2018) states that the main factors that contribute to the project's liquefaction susceptibility are the proximity to the Salton Sea and onsite loose existing soil deposits. The area encompassing the Salton Sea experiences shallow groundwater levels. According to the study, groundwater was encountered at a depth of 16 feet at the southeast corner of Avenue 66 and Martinez Road. Dewatering is anticipated to be necessary throughout the installation of the sewer main in the eastern half of the project. However, the average depth of pipeline construction is 10 feet. The proposed lift station is anticipated to be 4 feet deep. In the event groundwater is exposed, Mitigation Measure **GEO-1** would be implemented to ensure groundwater in the project area is protected.

Figure 3-4: Riverside County Liquefaction Susceptibility Zone Map and Project Location



The soils at the site are described as primarily young and unconsolidated. As stated previously, the faults surrounding the valley could potentially cause ground shaking. Ground shaking, shallow groundwater, and unconsolidated soils combined can generate liquefaction. With adherence to Construction Standards, remedial grading and materials would be required to be utilized and United States Geologic Survey (USGS) Seismic Design Parameters would be adopted as minimum values for the project. Impacts would be less than significant with mitigation.

b) Less than Significant Impact

The proposed project would result in minor erosion of soils on or offsite during project construction due to the presence of soil piles from excavation. However, construction of the proposed project would include BMPs as specified in the SWPPP to control wind or water erosion of exposed soils (see Construction Standards in *Section 2.5.2*). Some of the BMPs included in the SWPPP may include use of silt fences to prevent erosion and sedimentation into water bodies, covering of stockpiles, use of desilting basins, limitations on work during high-wind events, and post-construction revegetation and drainage requirements. Prior to construction, the construction contractor would be required to have an approved Fugitive Dust Control Plan to offset or reduce windblown dust. With implementation of BMPs and existing measures, the potential for soil erosion or topsoil loss during proposed project construction would be considered less than significant and no additional mitigation would be required.

d) Less than Significant Impact

Expansive soils are generally high in clays or silts that shrink or swell with variation in soil moisture content and can adversely affect the structural integrity of underground facilities including pipelines. The Geotechnical Report (Kamalzare 2018) performed an expansion index test on sample soils and revealed the soil in the project area had a low expansion index. Design of the proposed pipelines would adhere to CVWD's professional engineering standards, which provide regulations related to soils and foundations, to avoid adverse effects of potential expansive soils. Therefore, impacts related to expansive soils would be less than significant.

e) No Impact

The proposed project converts 25 septic systems and connects approximately 490 residents to CVWD's sewer system. New septic tanks or alternative wastewater systems that would release directly to soils would be avoided due to the proposed project. There are no impacts related to soil suitability for septic systems.

f) Less Than Significant Impact

Significant paleontological resources are fossils or assemblages of fossils that are unique, unusual, rare, uncommon, diagnostically or stratigraphically important, and those that add to an existing body of knowledge in specific areas, stratigraphically, taxonomically, or regionally. They include fossil remains of large to very small aquatic and terrestrial vertebrates, remains of plants and animals previously not represented in certain portions of the stratigraphy, and assemblages of fossils that might aid stratigraphic correlations, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, paleoclimatology, and the relationships of aquatic and terrestrial species (County of Riverside 2002).

The proposed project area is located in the Salton Trough, a large tectonic depression that includes the Coachella and Imperial Valleys of southern California, and the western

half of the Mexicali Valley and the Colorado River delta in Mexico (Alles 2011). Over the past 4.5 million years, the Salton Trough has been periodically inundated with fresh and brackish waters, influenced by the Gulf of California, the Colorado River, and ancient Lake Cahuilla. Lake Cahuilla was a former freshwater lake that periodically occupied a major portion of the Salton Trough during the Holocene, approximately 10,000 to 240 years ago (Deméré 2002).

The *Riverside County Regional Integrated Plan* identifies the project area as having Undetermined Potential (U) for paleontological resources. Areas underlain by sedimentary rocks for which literatures or unpublished studies are not available have undetermined potential for containing significant paleontological resources.

According to the Geologic Map of the Palm Desert & Coachella 15-minute quadrangles (Dibblee and Minch 2008), the project site is underlain by alluvial sand and clay of valley areas. These relatively young sedimentary deposits are generally too young to contain fossilized material.

Project excavation is expected to reach depths of up to 14 feet below the ground surface. However, most of the project would take place in areas already disturbed and impacted by human activity. The entire area shows evidence of being graded in historical times for home site, storage yards, agricultural fields, utility alignments, and roadways. Furthermore, the project area is underlain by geologic deposits that are generally too young to contain fossilized material. As a result, the potential for encountering fossil resources during project excavation or ground disturbance is low and impacts to paleontological resources would be less than significant.

Mitigation Measures

Mitigation Measure GEO-1: **Dewatering**

Dewatering shall be conducted throughout construction activities in locations that are exposed to existing groundwater to reduce the potential for heaving of soil within excavation areas. To control groundwater seepage to open excavations, sump pits may be utilized. If pumping to sump pits is used as mitigation, sump pits should be filled with ¾-inch clean stone and lined with geotextile filter fabric to prevent excessive particle migration. Pumped water should be discharged away from open excavations. Groundwater may also be pumped and hauled to an appropriate discharge location, as approved by CVWD. The contractor shall be aware that the dewatering and trenching operations will result in significant changes to the effective stresses of the native soil within the construction area that may result in ground movement. The Contractor is solely responsible for designing and implementing the dewatering program and pipeline installation operations to prevent ground movement within and adjacent to the sewer line. CVWD shall review and approve proposed methodology and plans.

The proposed project shall be constructed in accordance with existing regulatory requirements and will incorporate the geotechnical engineering recommendations from the 2018 Geotechnical Report.

3.8 Greenhouse Gas Emissions

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

Discussion

Pollutants that are known to increase the greenhouse effect in the earth's atmosphere, thereby adding to global climate change impacts, are referred to as greenhouse gases (GHG). A number of pollutants have been identified as GHGs. The State of California definition of GHGs in the Health & Safety Code, Section 38505(g) includes carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Some GHGs, such as CO_2, occur naturally and are emitted to the atmosphere through natural processes. Water vapor is a GHG; however, it is short lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation. Other GHGs (e.g., fluorinated gases) are created and emitted solely through human activities. The most common GHGs that result from human activity are carbon dioxide, followed by methane and nitrous oxide.

The Global Warming Potential (GWP) measures how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of CO_2. "Carbon dioxide equivalent" (CO_2e) is the amount of GHG emitted multiplied by its GWP. CO_2 has a 100-year GWP of one; CH_4 has a GWP of 25; and N_2O has a GWP of 298.

Executive Order (EO) S-3-05 in 2005 set GHG emission reduction targets: reduce GHG emissions to 2000 levels by 2010; reduce GHG emissions to 1990 levels by 2020; and reduce GHG emissions to 80 percent below 1990 levels by 2050. SB 32, passed in 2016, required that CARB, in its next update to the AB 32 *Scoping Plan*, "ensure that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit no later than December 31, 2030." EO B-55 set a GHG emission reduction target for California to be carbon neutral by 2045.

CARB adopted the *Scoping Plan* in December 2008 and a *Scoping Plan Update* in December 2017. The *Scoping Plan* contains the strategies California will implement to achieve reduction of 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. In the *Scoping Plan*, "CARB recommends that lead agencies prioritize onsite design features that reduce emissions, especially from vehicle miles travelled (VMT), and direct investments in GHG reductions within the project's region that contribute potential air quality, health, and economic co-benefits locally." In 2015, the County of Riverside adopted a CAP to establish goals and policies that incorporate sustainability and GHG reduction targets into its management processes. The County set a goal to reduce emissions to 1990 levels by 2020, which is in line with the State's AB 32 GHG reduction targets. The CAP was updated in 2019 to contain further guidance on Riverside County's GHG Inventory reduction goals, thresholds, policies, guidelines, and implementation programs including 2030 thresholds to reduce emissions to 40 percent below 1990 levels. In particular the CAP elaborates on the County's *General Plan* goals and policies relative to GHG emissions and provides a specific implementation tool to guide future decisions of the County. The County's CAP includes a review process procedure for evaluating individual project GHG impacts and determining the significance under CEQA. The County's CAP is qualified for CEQA tiering and streamlining of individual projects' CEQA review. The County's CAP has set a threshold of 3,000 metric tons (MT) CO_2e per year to be used to identify projects that, when combined with the modest efficiency measures (e.g., energy efficiency matching or exceeding the Title 24 requirements in effect as of January 2017; water conservation measures that match the California Green Building Standards Code in effect as of January 2017) are considered less than significant.

On December 5, 2008, the SCAQMD Board approved interim CEQA GHG significance thresholds for stationary sources, rules, and plans using a tiered approach for determining significance. Tier 3, the primary tier the SCAQMD board uses for determining significance, set a screening significance threshold of 10,000 MTCO2e/year for determining whether a stationary source project would have a less than significant cumulative GHG impact (SCAQMD 2008b). While useful for a reference, this threshold is meant to apply to industrial projects where SCAQMD is the lead agency. Therefore, for the purposes of this analysis, the County of Riverside screening level is used as a threshold to determine significance of the proposed Project under CEQA.

Climate change is a cumulative issue. Most projects do not generate sufficient GHG emissions to directly influence climate change by any noticeable degree; however, a project can contribute incrementally to cumulative effects that are significant. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

a) Less Than Significant Impact

The project would generate GHG emissions through the burning of fossil fuels or other emissions of GHGs, as a result of both construction and operations activities. Direct

emissions would result from fuels burned to power construction equipment and worker and heavy construction equipment trips to and from the site. Construction is anticipated to be spread out over approximately 10 months.

Once operational, the project pipelines would require routine maintenance, which would have a relatively small amount of GHG emissions from vehicle trips. However, CVWD would continue to operate its water system with no operational modifications. The proposed project would not result in a net change in O&M activities and GHG emissions from mobile sources would, therefore, be negligible.

Once the project is installed, the pipelines would not have a substantial demand for electricity or natural gas because they would be pressurized in accordance with CVWD's existing master plan. The proposed project may be associated with occasional GHG emissions from 'area' sources, including operation of landscaping equipment or recoating pipelines. The estimated amount of energy consumed by the pumps at the new lift station would be 24,000 kWh per year. CalEEMod Version 2016.3.2 was used to quantify GHG emissions associated with the project. This software was developed in conjunction with the CAPCOA to estimate air emissions, including GHGs. CalEEMod utilizes widely accepted methodologies for estimating emissions combined with default data that can be used when site-specific information is not available. Sources of these methodologies and default data include but are not limited to the United States EPA AP-42 emission factors, CARB vehicle emission models, studies commissioned by California agencies such as the CEC and CalRecycle. The project's total construction and operational footprints were factored into the model to evaluate whether the estimated GHG emissions would exceed the established thresholds and therefore conflict with plans and efforts of reducing the emissions of greenhouse gases.

Construction-related GHG emissions were amortized over a 30-year period and as added to estimated annual operational GHG emissions, consistent with SCAQMD guidance (SCAQMD 2008b). The currently applicable GHG thresholds for local lead agency consideration are referenced from the Riverside County CAP. Under this guidance, a screening threshold of 3,000 $MTCO_2e$ per year has been established to identify projects that would have a less than significant impact. Annualized GHG emissions are summarized in **Table 3-7**.

Table 3-7: Proposed Project GHG Emissions ($MTCO_2e$/year)

Source	$MTCO_2e$
Energy	19
Mobile	*Negligible*
Area	*Negligible*
Amortized Construction Emissions	14
Total	33
Riverside County CAP Screening Threshold	*3,000*
Significant?	***No***

As shown in **Table 3-7** resulting from the CalEEMod calculations, the project is expected to generate approximately 33 $MTCO_2e$ per year from annualized construction, area, energy, stationary, waste, and water usage sources. As such, the project GHG emissions would not exceed the threshold of significance set at 3,000 $MTCO_2e$ per year. Having been evaluated against the regionally accepted thresholds, which are part of the State's regulations aimed at addressing climate change, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts would therefore be less than significant.

b) Less Than Significant Impact Under Assembly Bill 32 passed in 2006, California must reduce its emissions to 1990 levels (431 million metric tons) by 2020. Senate Bill 32, signed in 2016, requires the state to go even further than AB 32 and cut emissions 40 percent below 1990 levels by 2030—the most ambitious carbon goal in North America. California's primary programs for reducing greenhouse gases to 1990 levels by 2020 are the Renewables Portfolio Standard, the Advanced Clean Cars Program, the Low Carbon Fuel Standard and the Cap-and-Trade Program. Additional programs address a variety of greenhouse gas sources. These include the Short-Lived Climate Pollutants Strategy, the Sustainable Communities Strategy and the Sustainable Freight Action Plan. The *2030 Scoping Plan* (CARB 2017), lays out how these initiatives work together to reduce greenhouse gases to achieve California's 2030 target of 260 million metric tons and also to reduce smog-causing pollutants. This target will require California to more than double the rate at which it has been cutting climate-changing gases. Future reductions will occur against a backdrop of natural sources of GHGs which are increasingly variable because of the climate change California is already witnessing.

The estimated GHG emissions resulting from construction and operation of the proposed development will not exceed the 3,000 $MTCO_2e$ per year screening threshold, therefore the project's GHG emissions would not conflict with plans and policies adopted for the purpose of reducing GHGs emissions, including the Riverside County CAP and the *2030 Scoping Plan*. The *2030 Scoping Plan* focuses on reducing energy demand, and GHG emissions, that result from mobile sources and land use development. The proposed project would not involve a considerable increase in new vehicle trips or land use changes that would result in an increase in vehicle trips, such as urban sprawl. As such, the project is not expected to interfere with the applicable plans, policies or regulations adopted for the purpose of reducing GHG emissions, including AB 32 and SB 32. Impacts would be less than significant.

Mitigation Measures: None required.

3.9 Hazards and Hazardous Materials

Would the Project:	*Potentially Significant Impact*	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
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?	☐	☐	☐	☒
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

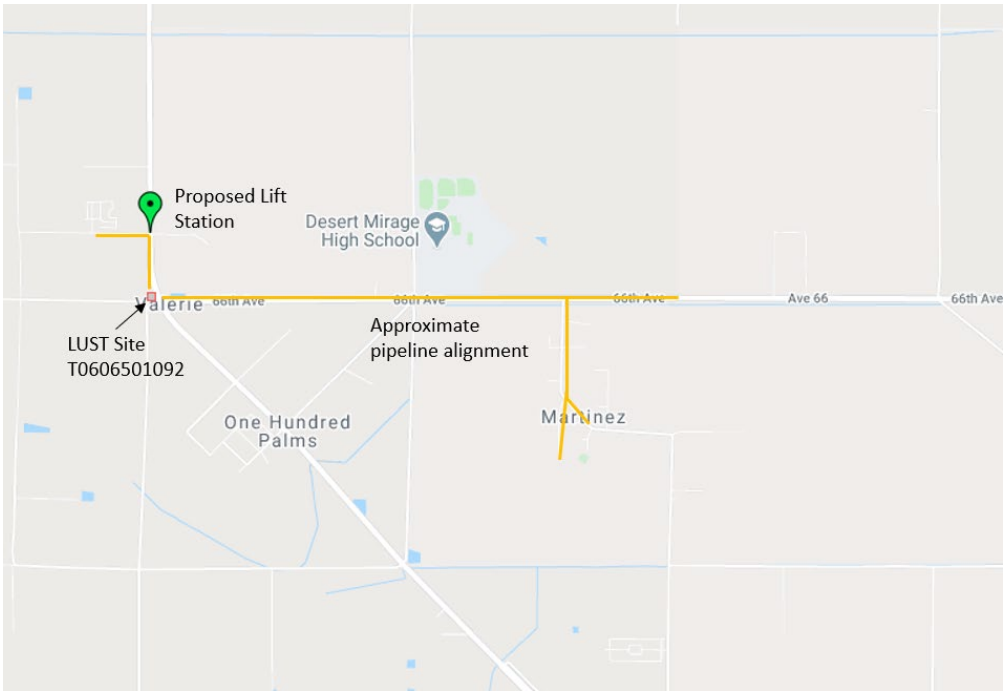
Discussion

Hazardous materials are currently used throughout the project area for agricultural, residential, transportation, construction, and other similar land uses. Through natural events, system failures, and accidents (spills), hazardous materials can become a risk to the environment and human health. Numerous local, state and federal laws exist to regulate the storage, use, handling and transportation of hazardous materials. To increase public safety and awareness of hazardous materials exposure risk, businesses and entities that handle, store, transport, or use hazardous materials are required to file

reports with appropriate authorities and maintain emergency response plans in the event of a hazardous materials release.

A regulatory records search was performed for the project area using the SWRCB *GeoTracker* database (SWRCB 2020) and the California Department of Toxic Substances Control (DTSC) *EnviroStor* database (DTSC 2019). These lists are a compilation of information from various sources listing potential and confirmed hazardous waste and hazardous substances sites in California. The *GeoTracker* database identifies a single Leaking Underground Storage Tank (LUST) cleanup site located at the northwest corner of Avenue 66 and Harrison Street, see **Figure 3-6** below (Apple Market Two, SWRCB 2020). RB Case #7T2274022 Cleanup Status is completed and the case is close. The website did not indicate the existence of: Cleanup Program Sites (CPSs, formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites), Military Sites (DoD non USTs), Land Disposal sites, Permitted UST facilities, Waste Discharge Requirement (WDR) sites, or Agricultural Waivers Program (Irrigated Lands Regulatory Program, ILRP) sites.

Figure 3-5: SWRCB GeoTracker Identified one LUST Site in the Project Area



EnviroStor identified one cleanup site within the project area. The cleanup site is the Coachella Valley Unified School complex (88 acres at Avenue 66 and Tyler Street). The investigation evaluated agricultural-generated contaminants (DDD, DDE, and DDT). The area was cleared of industrial contamination, but high levels of arsenic were discovered in the soils due to transport by surface water (flooding). Grading for floodplain mitigation was utilized to bury soils with high levels of arsenic. The Status of the site is identified as "No Further Action" As of 9/14/2000. DTSC notes that DTSC must be notified if native

soils will be disturbed. At the time of the investigation, the project site was vacant, however, it now is the location of the K-12 Education Complex. The proposed pipeline alignment is on the southside of the Education Complex along Avenue 66. The proposed project would not disturb native soil and would be constructed within the existing right-of-way.

The proposed project alignment is adjacent to or within Tribal Lands owned by the Torres-Martinez Desert Cahuilla Indians. Other areas are under the jurisdiction of Riverside County encompassing a range of land uses including Residential, Commercial and Public Facilities (schools). Most land designated as commercial and residential remains undeveloped, as depicted in **Figure 3-2** (County of Riverside 2016). The Las Palmitas Elementary School, Toro Canyon Middle School, and Desert Mirage High School are located north of and adjacent to Avenue 66 at Tyler Street. A drainage ditch located south of and adjacent to Avenue 66 collects drainage from the proposed project area (Avenue 66 and areas north).

The Cal Fire Resources Assessment Program (FRAP; CalFire 2006) assesses the amount and extent of California's forests and rangelands, analyzes their conditions, and identifies alternative management and policy guidelines. Through the FRAP, Cal Fire produces maps designating very high fire hazard severity zones (VHFHSZ) within Federal, State and Local Responsibility Areas. The project is located within both Local Responsibility Areas (Western Riverside County) and Federal Responsibility Areas. The project area is designated as a non-VHFHSZ.

The Jacqueline Cochran Regional Airport is located 2.5 miles north of Avenue 66. The Project area lies partly within the Airport Influence Area (Zone D, Primary Traffic Patterns).

a) Less than Significant Impact

Construction of the proposed project would temporarily increase the routine transport and use of hazardous materials commonly used in construction activities. Limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluids, paint, and other similar materials, would be brought into the project area, used, and stored during construction of the proposed project. The proposed project would be required to comply with applicable standards, including Division 20, Chapter 6.5, Article 6.5, Article 6.6, and Article 13 of the California Health and Safety Code and Title 40 CFR Part 263, that regulate the transport, use, storage, and disposal of hazardous materials. Upon completion of construction, the proposed project would not result in additional O&M activities requiring the transport of hazardous materials. Therefore, impacts due to transportation of minor amounts of hazardous materials would be less than significant and no mitigation would be required.

b) Less than Significant with Mitigation Incorporated

Construction of the proposed project could create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials used in construction, which include diesel fuel and minor amounts of paints, fuels, solvents and glues. The potential exists for accidents to occur during construction activities, which could result in the release of hazardous materials into the environment. **Mitigation Measure HAZ-1** requires development of a Hazardous Materials Management Spill Control Plan that includes project-specific contingencies. Upon completion of construction, the proposed project would not result in a potential to release hazardous materials into the environment. With **Mitigation Measure HAZ-1**, impacts resulting from potential hazardous materials-related accidents during construction would be reduced to a less-than-significant level.

c) Less than Significant with Mitigation Incorporated

A portion of the Project Area is located within 0.25 mile of an existing school site representing about 20% of the planned construction activity. The school complex is north of the project area at the intersection of Avenue 66 and Tyler Road. Natural drainage and predominant wind patterns are from north to south. CVWD would coordinate with school-district officials to help identify a construction schedule and prepare a Traffic Control Plan (**Mitigation Measure TRA-1**). **Mitigation Measure HAZ-1** establishes a Hazardous Materials Management and Spill Control Plan designed to address child safety and school operations. With the mitigation measure and Standard Conditions, the project impacts at any school sites resulting from the handling of hazardous materials or wastes or emissions of hazardous air contaminants would be less than significant.

d) No Impact

The GeoTracker database search indicated there are two active hazardous materials cleanup sites within a quarter mile of the proposed project. There are no active cleanup sites listed on the DTSC's EnviroStor database within a quarter mile of the project area. The Cortese List is a planning document submitted annually to Cal EPA that comprises data previously discussed in the environmental setting of this section. The project area is not located on a property identified on the list compiled by DTSC pursuant to Government Code §65962.5. Construction and operation associated with the proposed project would not create a significant hazard to the public or the environment through the release of existing materials related to a listed hazardous materials site; there would be no impact.

e) Less than Significant

The Jacqueline Cochran Regional Airport is located approximately 2.5 miles northwest of the project area. The proposed project is partially within the airport influence area (Zone D, Primary Traffic Patterns). Under Zone D, the Local Area Plan requires review with the Airport for the erection of objects over 70 feet in height. The proposed construction would not require equipment to be raised to 70 feet in height. The proposed lift station building would be a maximum of 7 feet in height with a surrounding perimeter fence 8 feet in height. The proposed IID distribution pole would be 40 feet tall. The project area is not located near a private airstrip. Upon completion of construction, none of the proposed project components would create an aircraft safety hazard or expose residents or workers in the area to excessive aircraft noise. Therefore, impacts would be less than significant, and no mitigation would be required.

f) Less than Significant with Mitigation Incorporated

Construction of the proposed project would involve installation of approximately 19,625 linear feet of pipeline, remove 25 septic systems, and construct a new lift station. New electrical facilities would be constructed at the new lift station site, including a distribution pole and a transformer. Construction activities would take place within existing rights-of-way, as well as on private and public land. Potential staging areas include vacant private and public land, parking lots, and segments of closed traffic lanes. Avenue 66 is categorized as an Urban Arterial Roadway. Harrison Street is an Expressway. Martinez Road is not categorized in the Local Area Circulation Plan. Therefore, project construction would temporarily block access to some roadways and driveways that are currently used by emergency response vehicles or in emergency evacuations. *Section 3.17 Transportation* addresses how CVWD would communicate with emergency response agencies to develop emergency access strategies under **Mitigation Measure TRA-1**. Long term, the proposed project would not physically impair or otherwise interfere with emergency response or evacuation in the project vicinity as the majority of the project components would be located below-grade and ground surfaces would be returned to pre-construction conditions. Thus, impacts would be less than significant with mitigation.

g) No Impact

Cal Fire has identified wildfire risk areas through the Fire Hazard Severity Zone maps. The Western Riverside County LRA map designates the project area as a non-VHFHSZ. The project would be constructed within roadway rights-of-way and developed or disturbed areas; the project area does not contain and is not adjacent to wildlands. See *Section 3.20 Wildfire* for more information. Riverside County Fire Department Station No. 40 is located at 91350 Avenue 66, approximately 5 miles east of the project area. The project area has a low risk of wildfire. Therefore, there would be no impacts, and no mitigation would be required.

Mitigation Measures

See **Mitigation Measure TRA-1** in *Section 3.17 Transportation*.

Mitigation Measure HAZ-1: Hazardous Materials Management and Spill Control Plan

Prior to construction the construction contractor is required to submit to CVWD a Hazardous Materials Management Spill Control Plan that includes a project-specific contingency plan for hazardous materials and waste operations, including precautions taken in the proximity of a school zone. The plan shall be applicable to construction activities and shall establish policies and procedures according to applicable codes and regulations, including but not limited to the California Building and Fire Codes, and federal and California OSHA regulations. Elements of the Plan shall include, but not be limited to the following:

- A discussion of hazardous materials management, including delineation of hazardous material storage areas, access and egress routes, waterways, emergency assembly areas, and temporary hazardous waste storage areas;
- Notification and documentation of procedures;
- Spill control and countermeasures, including employee spill prevention/response training and a health and safety plan;
- Equipment maintenance; and
- Child safety and school operations.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the Project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐

c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i)	result in substantial erosion of siltation on- or off-site;	☐	☐	☒	☐
ii)	substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
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	☐	☐	☒	☐
iv)	impede or redirect flood flows?	☐	☐	☒	☐
v)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	☐	☐	☒	☐
vi)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Discussion

The proposed project is located within the Whitewater River Watershed, which encompasses the entirety of the Coachella Valley. The drainage area of the Whitewater River Watershed is approximately 57.5 square miles and includes four sub-watersheds: Morongo, Shavers, San Gorgonio, and Coachella. The Whitewater River/Coachella Valley Stormwater Channel, which is the primary drainage course in the watershed, runs southeast through the Coachella Valley and drains to the Salton Sea. Water sheet flows southeasterly to the Salton Sea. The principal tributaries of the Whitewater River/Coachella Valley Stormwater Channel include the San Gorgonio River, Snow Creek, Falls Creek, Chino Creek, Mission Creek, Morongo Creek, Tahquitz Creek, Andreas Creek, Palm Canyon Wash, Deep Canyon Creek, and the Palm Valley Channel.

The project is located in the Colorado River Region (Region 7), where the approved *Colorado River Basin Water Quality Control Plan* (Basin Plan, Colorado River RWQCB, 1993 and amended through October 2005) identifies the beneficial water uses, describes the water quality which must be maintained to support such uses, and describes the programs, projects, and other actions necessary to achieve the standards and protect water quality. As part of Region 7, the Whitewater River Watershed Municipal Separate Storm Sewer System (MS4), is a compliance program that covers approximately 1,645 square miles, including all incorporated Coachella Valley jurisdictions and some unincorporated communities within a defined permit boundary. Based on the MS4 Permit Area Facilities Map (Exhibit WWR-7), published by Riverside County Flood Control

(RCFC), the project area and its immediate surroundings are located within the local MS4 permit boundary. The relevant proximate receiving water is the Coachella Valley Stormwater Channel, which is connected to the project by agricultural canals.

The Basin Plan establishes water quality standards for surface waters within the Colorado River Region, which include designated beneficial uses of those water bodies and the levels of water quality that must be met and maintained to protect those uses. For the nearest receiving water body to the project, Coachella Valley Stormwater Channel, the designated beneficial uses include freshwater replenishment (FRSH), water contact recreation (REC1), non-contact water recreation (REC2), warm freshwater habitat (WARM), wildlife habitat (WILD), and rare (RARE). The corresponding water quality objectives include measures that must be followed to protect against water quality degradation. To reach consistency with these objectives, the proposed project must comply with the MS4 regulations and ensure that no discharge from the project degrades the aesthetic qualities or impair the dissolved oxygen concentrations in the receiving surface waters. Accordingly, the proposed project is not permitted to discharge tainting substances, toxicity, altered runoff temperature, altered runoff pH, suspended and settable solids, total dissolved solids, bacteria, biostimulatory substances, sediment, turbidity, radioactivity, chemical constituents, and pesticide waters outside of any permit parameters.

The nearest water body to the project site is the Coachella Valley Stormwater Channel, located approximately 2.1 miles to the east (see **Figure 3-7**). The Coachella Valley Stormwater Channel is an earthen channel engineered to serve as the backbone to the region's flood control system. This channel is routinely maintained and operated by CVWD. The Coachella Valley Stormwater Channel's natural drainage follows the coalescing alluvial fan and plain surfaces descending easterly from the Santa Rosa Mountains, passes approximately 2 miles east of the project area, and continues toward the valley floor area.

Figure 3-6: Proximity of Proposed Project Area to Coachella Valley Stormwater Channel

Early agricultural development in past decades resulted in the conversion of alluvial plains into agricultural fields. As a result, portions of the alluvial plains were curtailed to accommodate farmland, which was protected by a system of berms and surface conveyances often connected to the Coachella Valley Stormwater Channel. Throughout the Thermal and Oasis floor area where the project is situated, conveyance systems from existing agricultural uses consist of earthen canals and ditches. This includes a ditch along the south side of Avenue 66. These types of canals have operated and have been maintained for decades to primarily convey irrigation return water from subsurface drains serving irrigated agricultural lands to the Coachella Valley Stormwater Channel.

In areas where the assessed water quality does not meet the standards to support beneficial uses, the water body is listed under Section 303(d) of the Clean Water Act (CWA). Currently, within the Coachella Valley Stormwater Channel, the 17-mile stretch from Point Happy (in La Quinta) to the Salton Sea is listed on the State's 303 (d) List of Impaired Water Bodies for Indicator Bacteria. In the 2-mile stretch from Lincoln Street to the Salton Sea, the Coachella Valley Stormwater Channel is listed for Polychlorinated Biphenyls (PCBs and the pesticides Toxaphene, Dichlorodiphenyltrichloroethane (DDT), and Dieldrin. The Coachella Valley Stormwater Channel is also listed for Nitrogen/Ammonia and Toxicity (SWRCB Resolution R7-2014-0025). The Colorado River RWQCB develops and implements total maximum daily loads (TMDLs) to address these impairments and help achieve water quality standards. Water quality is also addressed through compliance with the NPDES stormwater discharge permits issued to municipalities, construction sites and industrial facilities to control pollutants in storm water discharges to local surface waters.

Pertaining to construction, the project proponent must obtain coverage under State's most current Construction General Permit (CGP), Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-006-DWQ. Compliance with the CGP involves the development and implementation of a project-specific SWPPP designed to reduce potential adverse impacts to surface water quality during the period of construction (see Construction Standards in *Section 2.5.2)*. The required SWPPP prepared by a trained individual must identify the limits of disturbance during each phase of construction with specific locations where activities will require implementation of stormwater BMPs. Stormwater BMPs refer to a schedule of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent, eliminate, or reduce the pollution of waters of the receiving waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff spillage or leaks. Consistent with the CGP, SWPPP implementation must include good site management (housekeeping), non-stormwater management, erosion control, sediment controls, run-on and runoff controls, along with inspection, maintenance and repair measures. Other relevant requirements include proper waste management, proper material handling and storage within the allowable construction limits.

Groundwater

The Coachella Valley Groundwater Basin (DWR Basin No. 7-21) underlies the Whitewater River Watershed. The Coachella Valley Groundwater Basin has an estimated storage capacity of 40 million acre-feet (AF) of water within the upper 1,000 feet (CVWD 2016). The Coachella Valley Groundwater Basin is divided into four subbasins: Indio (DWR Basin No. 7-21.01), Mission Creek (No. 7-21.02), Desert Hot Springs (No. 7-21.03), and San Gorgonio (No. 7-21.04). The Indio Subbasin underlies the project area.

Natural recharge is attributed to surface runoff and subsurface inflow; however, the Indio Subbasin is primarily recharged through groundwater replenishment efforts by CVWD and Desert Water Agency. CVWD operates and maintains three replenishment facilities within the Indio Subbasin: the Whitewater River Groundwater Replenishment Facility, the Thomas E. Levy Groundwater Replenishment Facility, and the Palm Desert Groundwater Replenishment Facility. These facilities recharge imported water.

The Coachella Valley Groundwater Basin is designated by DWR as a medium priority basin and is subject to the provisions of the Sustainable Groundwater Management Act (SGMA). CVWD is the Groundwater Sustainability Agency (GSA) for the majority of the eastern portion of the Indio Subbasin, including the area that underlies the project area.

The RWQCB's designated beneficial uses of the Coachella Valley Groundwater Basin include Municipal and Domestic Supply (MUN), Industrial Service Supply (IND), and Agriculture Supply (AGR). Groundwater supply used for potable uses is generally of high quality; however, within allowable regulatory ranges, CVWD treats delivered groundwater with free chlorine as a precautionary measure prior to distribution for potable use. Some areas of the Coachella Valley Groundwater Basin naturally contain elevated levels of salinity and groundwater quality issues for naturally occurring substances such as

uranium, arsenic, chromium, and fluoride have occurred in isolated areas. Additionally, some localized areas have seen elevated nitrate levels. As discussed in *Chapter 2 Project Description*, this project will improve groundwater quality through the removal of septic systems and an increase in the production of recycled water in the future.

a) Less than Significant Impact

The proposed project is not expected to result in violations to water quality or waste discharge requirements. Potential water quality impacts associated with construction of the proposed project would be limited to short-term erosion/sedimentation that could occur during construction of the pipeline alignments. During construction, temporary dewatering operations would be conducted in accordance with **Mitigation Measure GEO-1** and the CVWD technical specifications, which are consistent with the allowable discharges in the MS4 due to the handling of uncontaminated groundwater. The temporary dewatering process would involve sump pumps and potential offsite discharge (see **Mitigation Measure GEO-1: Dewatering**) to ensure that the extracted water does not affect the local conditions when conveyed to the agricultural drainage system.

Construction of the proposed project would require coverage under the SWRCB's NPDES General Permit for Discharges of Storm Water Associated with Construction Activity - Construction General Permit (Order 2009-0009-DWQ). The Construction General Permit requires preparation and implementation of a SWPPP containing BMPs to control sediment and other construction-related pollutants in stormwater discharges. Such BMPs would include, but are not limited to, general housekeeping practices such as sweeping up of site debris, proper waste disposal procedures, use of tarps on any stockpiles, containment of building materials, and inspection for leaks and spills from construction vehicles and equipment.

During construction, the project would also be required to comply with SCAQMD Rule 403 and 403.1, which prompt the obligation to prepare and implement a Fugitive Dust (PM_{10}) Control Plan. Implementation of the Fugitive Dust Control Plan primarily pertains to air quality, but also supports water quality protection through the requirement of soil stabilization measures to prevent sediment erosion and track-out. With implementation of the SWPPP and Dust Control plans, stormwater discharges from the proposed project site during construction are not expected to violate existing water quality standards or waste discharge requirements set by the RWQCB. Impacts would be less than significant.

b) Less than Significant Impact

As discussed in *Section 3.14 Population and Housing*, the proposed project would extend CVWD's wastewater services to a disadvantaged community and would not induce population growth or increase water demands. During the life of the project, activities would not involve the direct withdrawal of groundwater in quantities that would affect regional groundwater levels. Therefore, the proposed project would not be expected to decrease groundwater supplies or interfere with groundwater recharge efforts. Impacts would be less than significant, and no mitigation would be required.

c) Less than Significant Impact

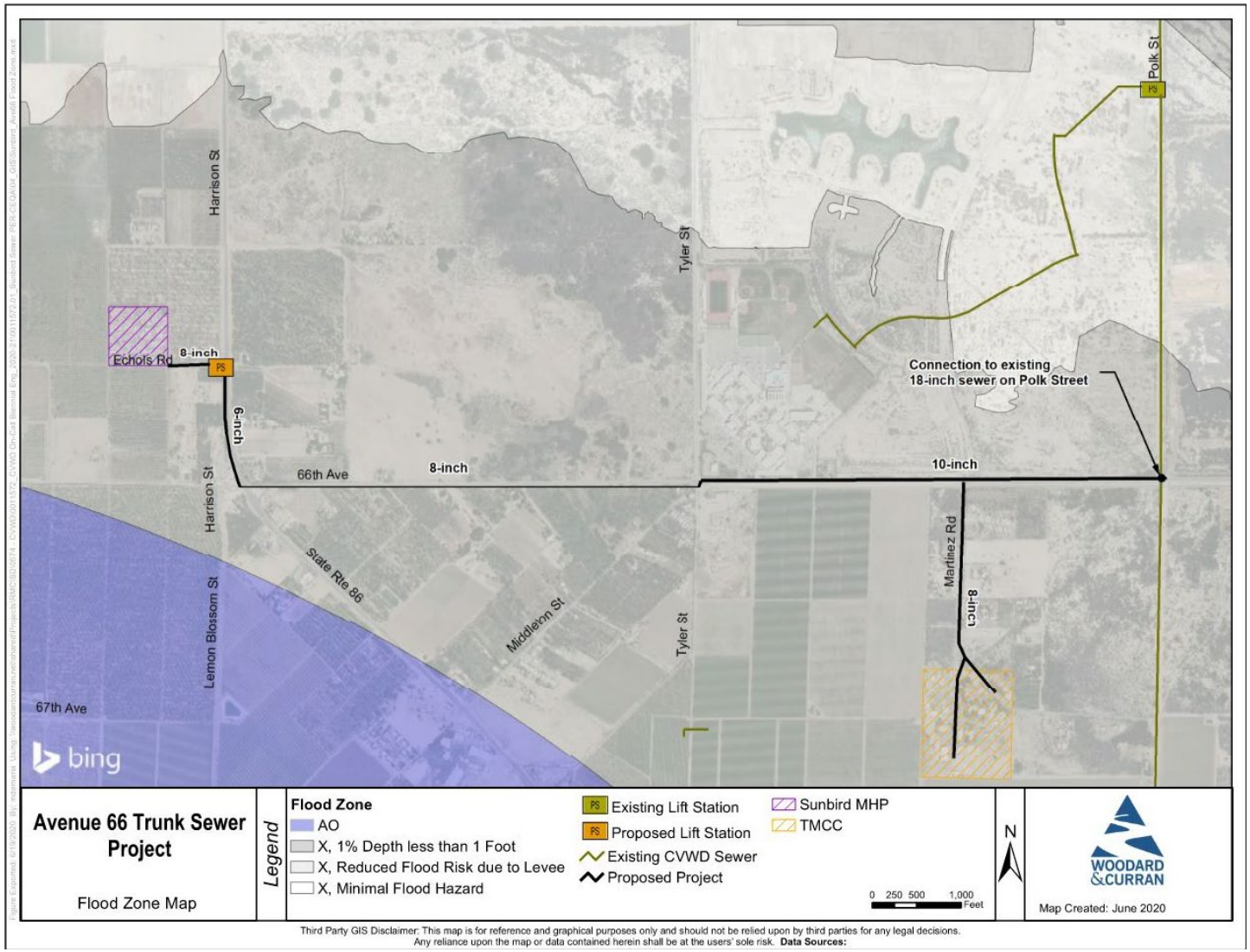
The proposed project would not result in a change in the local drainage patterns of the project area. The pipelines would be installed below ground, surfaces would be restored to pre-construction conditions. The proposed lift station construction will be 140 square feet and will not change any of the surrounding landscaping. Therefore, no changes in drainage patterns would occur and no impacts to the existing storm drain system in the project area would be expected. All construction activities would be conducted in accordance with BMPs specified in the construction SWPPP to prevent erosion and siltation, and other construction-related pollutants such as potential leaks from construction equipment.

The proposed project does not involve construction or operation of a levee or dam. The project Area is not located in areas that would be affected by levee or dam failure. The site is not susceptible to seiche or tsunami inundation because there are no major landlocked bodies of water within 6 miles. The site is not located in a landslide hazard area. Local topography and soil types are such that the potential for mudslides is extremely low. Project effects relative to increasing the impacts of a natural disaster, or further exposing people or structures to risks as a result of flooding due to failure of a levee or a dam, or seiche, tsunami, or mudflow caused by an earthquake or other natural disaster would be no impact.

FEMA evaluates potential flood hazards. The FEMA Flood Insurance Rate Maps (FIRMs) serve as the basis for identifying those potential hazards and determining the need for and availability of federal flood insurance. According to FIRM panel 06065C2910H, effective March 6, 2018, the entire project area lies within Zone X, which is categorized by FEMA as a 500-year flood zone with minimal flood hazard (see **Figure 3-8**). As designed, the proposed development would not alter the existing flood zone characteristics identified in the Flood Insurance Rate Maps. As such, the project would not result in any structures or housing in an area subject to flooding by the (100-year, 1-percent-annual-chance) flood depths designated by FEMA. Although portions of the proposed project would be located within the 500-year flood hazard zones, the proposed project would include installation of underground pipelines, and construction of a lift station and associated electrical facilities that would not risk release of pollutants due to flooding upon completion of construction. The proposed project would not conflict with the implementation of a water quality control plan or sustainable groundwater management plan. Thus, potential impacts to drainage patterns resulting in erosion, flooding, or water quality issues would be less than significant and no mitigation measures would be required.

Mitigation Measures. None required.

Figure 3-7: Flood Zone in Proposed Project Area



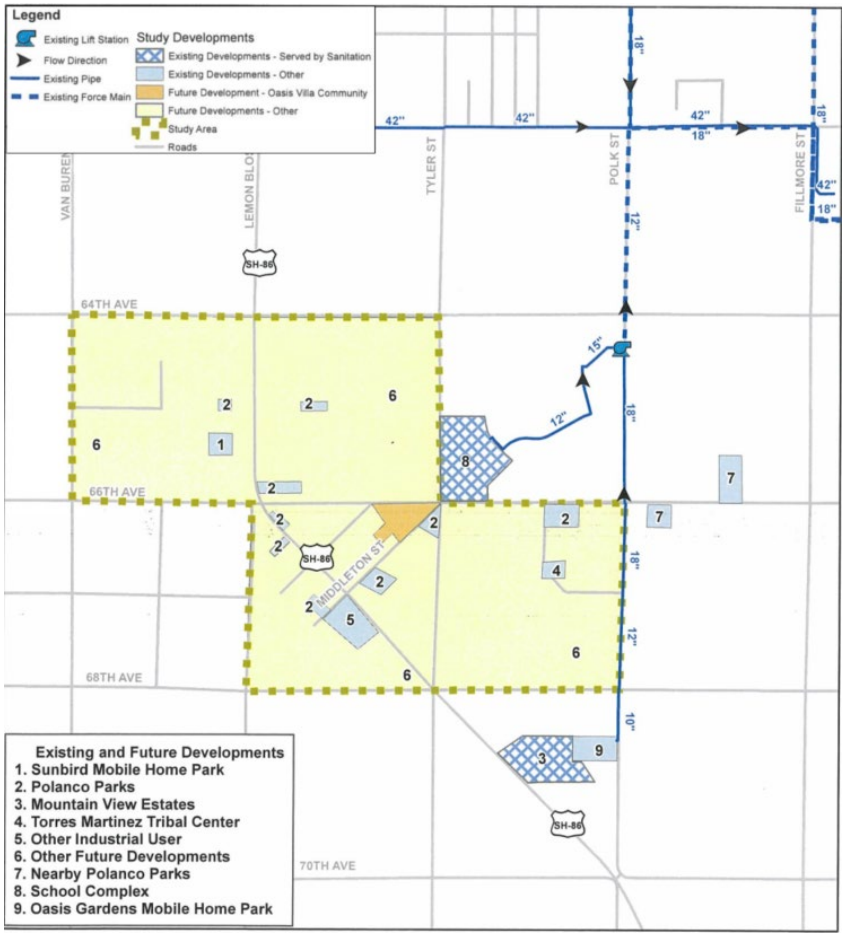
3.11 Land Use and Planning

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

Discussion

The project alignment is located within the unincorporated community of Thermal within Riverside County. Thermal contains agriculture, industrial uses as well as residential and commercial uses, open space and schools. According to the *Riverside County Eastern Coachella Valley Area Plan* (County of Riverside 2016), the project area depicted in **Figure 3-2** includes tribal lands, public facilities, commercial retail, residential and agriculture land use designations. Residential, commercial, and industrial developments are scarce as indicated by the development map (**Figure 3-9**)**.** Most residential developments (locations 1, 2, 3, 7, and 9) are well-established trailer parks.

Figure 3-8: Existing and Proposed Community Developments



The proposed pipeline route along Avenue 66 is bordered by date farms and vacant lots with a few commercial and residential structures along Harrison and Avenue 66. On the northeast corner of Tyler and Avenue 66, there are three schools located adjacent to the project alignment Las Palmitas Elementary School, Toro Canyon Middle School, and Desert Mirage High School. The pipeline route is also bordered by the Torres-Martinez Desert Cahuilla Indian Reservation north of Avenue 66 between Harrison Road and Tyler Road and then south of Avenue 66 between Tyler Road and Polk Street.

a) No Impact

The proposed project would remove 25 community septic systems, install 19,625 feet of underground gravity sewer pipeline (including on-site connections) in existing rights-of-way, and a new lift station. New electrical facilities would be constructed at the new lift station site, including a distribution pole and a transformer. Construction of the proposed pipelines would temporarily affect adjacent land uses through increased dust, noise, and traffic, but impacts would cease upon completion of construction and would not permanently affect the existing surrounding land uses. The proposed lift station at Echols

and Harrison Road is located next to date palm groves and would not divide an established community. There would be no impacts.

b) No Impact

The project area does not alter or encourage modifications to existing zoning or land use plans. The proposed lift station is zoned as tribal land and would support residents at the TMCC. The pipelines would be installed below-grade within roadway rights-of-way and on public and private lands and would comply with Riverside County's land use policies and regulations. All surfaces would be restored to pre-construction conditions upon completion of construction. The proposed lift station at Echols Road and Harrison Street would be constructed on land zoned as tribal land and support residents of the Torres-Martinez Desert Cahuilla Indians. Therefore, the proposed project would be consistent with all applicable land use plans, policies and regulations of agencies with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. No impacts would occur, and no mitigation would be required.

Mitigation Measures: None required.

3.12 Mineral Resources

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

Discussion

Mineral resource extraction is an important component of Riverside County's economy. Riverside County has extensive deposits of clay, limestone, iron, sand, and aggregates (County 2015). However, according to the *Riverside County General Plan Open Space Element* (County of Riverside 2015) and the California DOC CGS *Mineral Land Classification* online mapping tool (DOC 2015), the project area is located in an unstudied area and has no Mineral Resource Zone designation. There are no mineral resource extraction facilities within the project area.

a, b) Less than Significant Impact

The project area is located in an unstudied area and has no MRZ designation. The proposed project would construct gravity sewer pipelines within roadway rights-of-way and construct an accompanying one-half acre lift station and associated electrical facilities. Because the construction activities would primarily occur on developed land, the proposed project would not result in a substantial loss of availability of locally or regionally important mineral resources and impacts would be less than significant.

Mitigation Measures: None required.

3.13 Noise

	Potentially Significant Impact	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
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?	☐	☐	☐	☒

Discussion

Potential noise levels are compared to local ambient noise standards, within the context of the existing ambient noise setting. The term, “ambient noise” refers to the composite of noise from all perceptible sources. It constitutes the existing level of environmental noise at a given location (County of Riverside 2015). A decibel (dB) is a unit for measuring the relative amplitude of a sound equal approximately to the smallest difference normally detectable by the human ear, the range of which includes approximately one hundred thirty (130) decibels on a scale beginning with zero decibels for the faintest detectable sound. A-weighting (dBA) means the standard A-weighted frequency response of a sound level meter, which de-emphasizes low and high frequencies of sound in a manner similar to the human ear for moderate sounds. Maximum sound level (L_{MAX}) means the maximum

sound level measured on a sound level meter (County of Riverside 2007). Community Noise Equivalent Level (CNEL) is the average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7pm to 10pm and after the addition of 10 decibels to sound levels in the night from 10pm to 7am. Day-Night Average Level (L_{dn}) is the average equivalent A-weighted sound level during a 24-hour day, obtained after addition of 10 decibels to sound levels in the night from 10pm to 7am. CNEL and L_{dn} both represent daily levels of noise exposure averaged on an annual or daily basis (County of Riverside 2015).

A series of land uses have been deemed noise sensitive land uses by the State of California. These land uses require a serene environment as part of the overall facility or residential experience. Many of these facilities depend on low levels of sound to promote the wellbeing of the occupants. These uses include, but are not necessarily limited to, schools, hospitals, rest homes, long term care facilities, mental care facilities, residential uses, places of worship, libraries, and passive recreation areas (County of Riverside 2015).

Groundborne vibration can be described by both its amplitude and frequency. Amplitude may be characterized by particle velocity, which is measured in inches or millimeters per second. Vibration can be felt outdoors, but the perceived intensity of vibration impacts is much greater indoors, due to the shaking of the structure. Some of the most common sources of vibration come from trains, transit vehicles, construction equipment, airplanes, and large vehicles. Several land uses are especially sensitive to vibration, and therefore have a lower vibration threshold. These uses include, but are not limited to, concert halls, hospitals, libraries, vibration-sensitive research operations, residential areas, schools, and offices (County of Riverside 2015).

The *Riverside County General Plan Noise Element* (County of Riverside 2015) provides a systematic approach to identifying and appraising noise problems in the community; quantifying existing and projected noise levels; addressing excessive noise exposure; and community planning for the regulation of noise. It includes policies, standards, criteria, programs, diagrams, a reference to action items, and maps related to protecting public health and welfare from noise.

This Plan identifies a number of noise sensitive receptors including schools, hospitals, rest homes, long-term care facilities, residential, places of worship, libraries, and passive recreation areas. CNEL for community noise is shown below in **Table 3-8**. Sensitive receptors have a lower acceptable CNEL level than commercial or industrial noise levels. The County of Riverside discourages these sensitive land uses in areas with background noise greater than 65 dBA. Mobile noise sources may be one of the most disturbing noise producers in a community because they are louder than background noises and more intense than many acceptable stationary noise sources. Though the noise emitted from mobile sources is temporary, it is often more disturbing because of its abruptness, especially single noise-producing events such as vehicle backfires

Table 3-8: County of Riverside Land Use Compatibility for Community Noise Exposure

Land Use Category	Range of "Normally Acceptable" Community Noise Exposure Level (L_{dn} or CNEL, dBA)					
	55	60	65	70	75	80
Residential-low density single family, duplex, mobile homes	■	■				
Residential-multiple family	■	■	■			
Transient lodging-motels, hotels	■	■	■			
Schools, libraries, churches, hospitals, nursing homes	■	■	■	■		
Playgrounds, neighborhood parks	■	■	■	■		
Golf courses, riding stables, water recreation, cemeteries	■	■	■	■	■	
Office buildings, businesses, commercial, and professional	■	■	■	■		
Industrial, manufacturing, utilities, agriculture	■	■	■	■	■	
Source: *County of Riverside General Plan Noise Element* 2015.						

The *Riverside County General Plan* also determines vibration as another contributor to community disturbance. Groundborne vibration, also referred to as earthborne vibration, can be described as perceptible rumbling, movement, shaking or rattling of structures and items within a structure. Similar to noise, vibration can be described by both its amplitude and frequency. Amplitude is characterized by displacement, velocity, and/or acceleration. Typically, particle velocity (measured in inches or millimeters per second) and/or acceleration (measured in gravities) are used to measure vibration. Groundborne vibration can generate a heightened disturbance in residential areas. Human reaction to typical vibration levels is shown in **Table 3-9** below. These vibrations can disturb structures and household items while creating difficulty for residential activities such as reading or other tasks. Although groundborne vibration is sometimes perceptible in an outdoor environment, it is generally not deemed a problem as it is when experienced inside of a building. Groundborne vibration can be measured in terms of amplitude and frequency or vibration decibels (VdB). The operation of trains, buses, large trucks and construction activities that include pile driving, blasting, earth moving, and heavy vehicle operation commonly cause these vibrations. Other factors that influence the propagation or attenuation of groundborne vibration include distance to source, foundation materials, perimeter controls, soil and surface types.

Table 3-9: Reaction to Typical Vibration Levels

Vibration Level Peak Particle Velocity (inches/second)	Human Reaction
0.0059-0.0188	Threshold of perception, possibility of intrusion
0.0787	Vibrations readily perceptible
0.0984	Continuous vibration begins to annoy people
0.1968	Vibrations annoying to people in buildings
0.3937-0.5905	Vibrations considered unpleasant when continuously subjected and unacceptable by some walking on bridges
Source: *County of Riverside General Plan Noise Element* 2015.	

Riverside County Ordinance No. 847 Regulating Noise establishes countywide standards regulating noise and regulates noise in order to protect the health, safety, and general welfare of Riverside County residents. According to Ordinance 847, sound emanating from capital improvement projects of a government agency are exempt from the provisions of the ordinance. Therefore, the sound levels set in the Riverside County Noise Ordinance would not apply to the proposed project. The proposed project area is a blend of agricultural, commercial, and residential uses. The Ordinance can be used to understand acceptable sound levels in the region. However, using the Ordinance as a guideline, the Rural Community land use designation has a maximum decibel level set at 55 dBL_{max}. and Agriculture has a maximum decibel level set at 45 dBL_{max}. The OSHA standard for workers with 8 hours of exposure per day is 85 dBA. The use of construction equipment would be limited to the hours between 7 am to 7 pm on weekdays, and 8 a.m. to 5 pm on Saturdays. Construction activities would not be permitted on Sundays or federal holidays.

Existing Conditions

The ambient noise level of a region is the total noise generated within the specific environment and is usually composed of sounds emanating from natural and manmade sources. Noise levels monitored in a region tend to have wide spatial and temporal variation due to the great diversity of contributing sources. This is especially true for the proposed project area with its blend of agricultural, commercial and residential land uses.

The existing noise setting in the project area consists of residential activities and traffic noise from State Route 86 and other surrounding roadways. Base year noise levels were assessed for the *County of Riverside General Plan* (County of Riverside 2015). **Table 3-10** summarizes the existing traffic noise levels around the project area.

Table 3-10: County of Riverside Base Year Condition (2007) Traffic Noise Levels

Roadway Segment	Average Daily Trips (ADT)	L_{dn} (dBA) 50 feet from centerline of outermost lane	Centerline to 60 L_{dn} (feet)
Harrison Street between 62nd Avenue and 54th Avenue (approx. 2 miles north of Sunbird MHP)	12,300	72.9	403
State Route 86 between Pierce Street and 81st Avenue (approx. 2 miles east of LS 55-21)	8,200	72.2	360
Source: *County of Riverside General Plan* Appendix I-1.			

The closest airport to the project area is the Jacqueline Cochran Regional Airport; however, the proposed project does not overlap the airport's forecasted noise contours (County of Riverside 2015, Appendix I-1, Figure 43).

a) Less than Significant with Mitigation Incorporated

The project has the potential to expose persons to noise resulting from construction activities and operations. Noise within the County of Riverside is regulated under the County's Noise Ordinance and acceptable noise levels are established in the County's *General Plan* (see discussion above).

Construction is anticipated to last 10 months. Construction activities would result in temporary noise increases. Construction noise levels would fluctuate depending on the construction phase, equipment type, and duration of use; distance between noise source and receptor; and presence or absence of existing barriers between noise source and receptor. The typical noise level of each piece of construction equipment that may be used for the project is shown in **Table 3-11**.

Table 3-11: Typical Construction Equipment Noise Levels

Equipment	Typical Noise Levels (dBA, at 50 feet)
Excavators	81
Backhoe	78
Dump truck	76
Front end loader	79
Water trucks	84[1]
Pavers	77
Roller	80
Flat-bed delivery trucks	74
Forklifts	75[1]
Concrete mixer truck	79
Jack hammer	89
Source: FHWA, 2006. 1. Water truck noise level was assumed to be comparable to a tractor. Forklift noise level was assumed to be comparable to a man lift.	

In general, project construction would be temporary and sporadic and would vary depending on the type of component being constructed. Construction along the pipeline alignments would continuously move from one location to another, as pipeline installation proceeds from one segment to the next. Thus, noise levels would affect any one receptor for a short duration of time.

During construction, truck traffic would generate noise levels along haul routes. Construction would involve four to five round-trip material delivery and/or soil export truck trips per day. Noise sensitive land uses located adjacent to proposed project construction areas and along haul routes would be subject to truck noise during construction.

Truck noise depends upon vehicle speed, load, terrain, and other factors. The effects of construction-related truck traffic would depend on the level of background noise already occurring at a particular receptor site, and the existing ambient noise levels. In quiet environments, truck noise would be more noticeable than where the existing ambient noise level is high.

Project-specific noise-sensitive receptors include: the school complex located at the northeast corner of Tyler Street; the TMCC on Martinez Road; the community of Valerie at Harrison Street and Avenue 66; and residences at the Sunbird MHP east of Harrison Street. None of these receptors are located within 100 feet of the proposed construction zone. Approximately 80 percent of the proposed pipeline alignment is adjacent to agricultural fields and open desert.

According to the Riverside County Noise Ordinance, Ordinance 847, sound emanating from capital improvement projects of a government agency are exempt from the provisions of the ordinance. Therefore, impacts-related to construction noise associated with the proposed project would be exempt from Riverside County Noise Ordinance standards. Furthermore, construction would occur during daytime hours consistent with the limits on private construction activities in the Noise Ordinance. In addition, the existing conditions in the project area are not quiet; the area is already subject to elevated ambient noise levels due to prominent traffic noise. Nonetheless, due to the close proximity of construction activities to residences, impacts from construction noise would be potentially significant. With implementation of **Mitigation Measure NOI-1**, which requires the construction contractor to implement the best available noise control techniques and equipment, construction-related noise levels would be reduced to less than significant.

Once operational, the proposed below-ground conveyance pipelines are not expected to result in a permanent increase in noise, other than noise associated with occasional vehicle maintenance trips. Operational noise generated by the project may be associated with the intermittent use of electrical motors to pump wastewater at the small capacity lift station near the Sunbird MHP. However, noise would be suppressed through containment within the lift-station housing. Noise at the construction site and nearby sensitive receptors would be monitored and reported through the Torres-Martinez Desert Cahuilla Indian Tribe. Operational vehicle maintenance trips would occur during daytime hours, between 7am and 8pm, consistent with the Riverside County Noise Ordinance. Therefore, the project would have less-than-significant long-term operational noise impacts.

b) Less than Significant with Mitigation Incorporated

Construction also has the potential to cause groundborne vibration and groundborne noise. Generally, a project would result in a significant impact if it produced groundborne vibration levels equal to or in excess of 0.1968 in/sec peak particle velocity (PPV). Typical vibration levels for construction equipment are shown in **Table 3-12**.

Table 3-12: Typical Construction Equipment Vibration Levels

Equipment	Typical Vibration Source Levels PPV at 25 feet (in/sec)
Vibratory roller	0.210
Caisson drilling	0.089
Loaded trucks	0.076
Jack hammer	0.035
Small bulldozer	0.003
Source: Source: FTA, 2006.	

As shown in **Table 3-12**, if a vibratory roller is used for construction of the proposed project, for example to replace roadways, it would result in groundborne vibration at levels that would cause annoyance to people in buildings at distances of 25 feet. The drilling equipment for the proposed trenchless pipeline segments would not be expected to result in significant vibration levels. According to the Federal Transit Administration Transit Noise and Vibration Impact Assessment (FTA 2006), groundborne vibration from construction attenuates based on peak particle velocity of the equipment and distance from the equipment to the receiver. Groundborne vibration from construction of the project is expected to attenuate to reach a less than significant level at a distance of 40 feet.

Potential impacts from construction-related groundborne vibration would be potentially significant. However, with implementation of **Mitigation Measure NOI-1**, construction-related vibration levels would be reduced to less than significant. Once operational, the proposed below-ground sewer pipelines and new lift station operation are not expected to result in a permanent source of groundborne vibration, other than vehicles associated with occasional maintenance trips. Operational vehicle maintenance trips would occur during daytime hours, between 7am and 8pm, consistent with the Riverside County Noise Ordinance. Therefore, the project would have less-than-significant long-term operational vibration impacts.

c) Less than Significant

The Jacqueline Cochran Regional Airport is located in the westerly part of the town of Thermal, approximately three miles north of the proposed project area. The Project partially lies within the Airport Influence Area Zone D (Primary Traffic Patterns), however it is not located within the 65 dBA noise contours for the airport. There are no private airstrips within the vicinity of the proposed project area. Although the proposed project would include expansion of CVWD's wastewater infrastructure, it would serve existing communities and does not propose new housing or businesses that would be exposed to excessive noise levels. Project construction and operations would not expose people residing or working in the proposed project area to excessive noise levels; no impact.

Mitigation Measures

Mitigation Measure NOI-1: Noise and Vibration Control During Construction

CVWD shall incorporate into the construction contract specifications the following noise and vibration control measures to be implemented by the construction contractor:

- Prior to construction, the Construction Contractor shall provide [CVWD-approved] written notification to residents within 500 feet of the proposed facilities undergoing construction, identifying the type, duration, and frequency of construction activities. Notification materials shall be provided in English/Spanish translation and identify a mechanism for residents to contact CVWD's Project Manager related to noise or vibration concerns.
- During construction, the Construction Contractor shall use equipment (e.g., jack hammers, pavement breakers, and rock drills) which is hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust would be used. This muffler can lower noise levels from the exhaust by up to 10 dBA. External jackets on the tools themselves would be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures will be used such as drilling rather than impact equipment whenever feasible.
- During construction, the Construction Contractor shall comply with compaction standards for backfill. Vibration generated during soil compaction may be minimized by using a small compactor.
- During sheetpile driving for trench excavation, the Construction Contractor shall use the following measures: pushing the sheetpile in as far as possible with non-vibratory equipment (e.g., excavator) before using the vibrator; using a small, hand-operated vibratory hammer or one with a different operational frequency to further reduce the vibration potential; flooding the soils before tamping with the vibrator; and/or operating vibratory equipment with "throttling" when a vibrator must be used.
- All equipment and trucks used by the Construction Contractor for project construction shall use the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) and be maintained in good operating condition to minimize construction noise impacts. All internal combustion engine-drive equipment shall be fitted with intake and exhaust mufflers which are in good condition.
- During construction, the Construction Contractor shall prohibit unnecessary idling of internal combustion engines. In practice, this would mean turning off equipment if it would not be used for five or more minutes.

- During construction, the Construction Contractor shall locate stationary noise-generating construction equipment, such as air compressors and generators, as far as possible from homes and businesses.
- The Construction Contractor shall locate staging areas as far as feasibly possible from sensitive receptors.

3.14 Population and Housing

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

Discussion

The proposed project proposes to replace the existing septic sewer infrastructure that currently serves the 490 residents at Sunbird MHP and TMCC, with new sewer lines and a small capacity lift station. The proposed sewer infrastructure would connect to an existing 18-inch sewer line located on Polk Street, which eventually discharges at WRP-4. The Project does not propose new residential, commercial, or industrial developments, but does provide facilities that are sized to meet reasonable growth and connect additional DAC residences in the future.

The Project Report (Woodard & Curran 2020) contains additional information on population growth and needed wastewater flows in the region. Data from the U.S. Census Bureau indicate that approximately 800 people live in census blocks that generally represent the Project service area (American Fact Finder, 2010 Census Summary). Changes estimated by the Census Bureau indicate that the population declined by 2016. The prospects for a large population increase in these census blocks are nominal over the next twenty years.

The current population located within the project area is 490 residents. The current population of the Sunbird MHP is approximately 430 residents with 86 mobile homes. There is room for a few additional trailers, but the manager has indicated that these openings would remain vacant. The TMCC contains limited housing including: three single family homes, four mobile homes, and four elder apartments. Sixty people are

estimated to reside onsite and this population is not expected to vary. Tribal offices and service centers currently employ 27 people. This number is expected to increase over the next five years with the addition of a small fire department.

In the Project Report (Woodard & Curran 2020), CVWD estimates that the project pipelines can serve residents at Sunbird MHP and TMCC, with the projected annual average flow of 25,800 gpd. Connections to the project facilities over the next three to five years are expected to increase the average flow an additional 85,400 gpd (Akel Engineering Group 2017). The Akel Study projects that new development will overtake the farming community within 20-40 years resulting in a build-out demand of about 1.5 MGD. Current estimates are that future growth will be slower than anticipated and therefore the proposed Project is not sized to service new development. The need for future upsizing will be determined by CVWD.

a) No Impact

The proposed Project would extend existing sewer infrastructure to accommodate the existing Sunbird MHP and the TMCC, and the proposed sewer pipe is sized to accommodate additional connections within the next three to five years. These connections include nearby trailer parks, industrial connections, and Oasis Villa. However, upsizing will be needed in the future to service new development. The purpose of the proposed project is to eliminate existing septic systems and replace them with connections to the regional wastewater collection and treatment system. The proposed expansion of CVWD's wastewater infrastructure, and subsequent indirect growth, is consistent with planned growth in the area. The *Eastern Coachella Valley Area Plan* (County of Riverside 2012) expected the Eastern Coachella Valley region to double its population between 2010 and 2020. Current estimates show this population growth is slower than anticipated. Therefore, the proposed project would not induce substantial unplanned population growth, directly or indirectly, in the project area. Impacts would be less than significant, and no mitigation would be required.

b) No Impact

The proposed Project would be constructed entirely within public right of way and would not displace any existing housing or require replacement housing. There would be no impacts.

Mitigation Measures: None required.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Discussion

Fire Protection

The project area falls under the jurisdiction of CAL FIRE Riverside County Fire Department (RCFD). The RCFD is staffed with a combination of County and State of California Department of Forestry & Fire Protection employees. They operate 96 fire stations that serve 1,360,000 residents over 6,970 miles of Riverside County. There are two fire stations located in proximity of the project area. Thermal's primary fire station is RCFD Station No. 39, located at 56-911 Avenue 58, this station is approximately 5 miles from the proposed project. Riverside County Fire Department Station No. 40 at 91350 Avenue 66 is located approximately 5 miles east of the project area. It is the goal of the RCFD fire service to have the first engine company arrive on the scene within five minutes 90 percent of the time. Response times to emergency calls within the City average approximately four minutes or less 80 percent of the time.

Police

The Riverside County Sheriff's Department is contracted to provide law enforcement services to the community of Thermal. The Sheriff's department is located out of the Thermal Sheriff Station at 86-625 Airport Boulevard, approximately 5 miles from the project site. They have a response time of three minutes for emergency calls. The department has 36 sworn officers and 2-non-sworn totaling 38 positions.

Schools

The project falls within the boundary of the CVUSD. There are eight schools in the community of Thermal, three of which are located within a mile of the project area. All three schools are located at the complex adjacent to the proposed project at Tyler Street. These three schools are Desert Mirage High School, Toro Canyon Middle School, and Las Palmitas Elementary School.

Parks

The Desert Recreation District provides park and recreational services to Thermal. It is the largest recreation district in California serving over 1,800 square miles. There are no parks located within the project area.

a) No Impact

The proposed project would not change existing demand for public services (e.g., fire and police protection, schools, parks, libraries, or health clinics) because the proposed project would serve existing communities and would not significantly or directly induce population growth (see *Section 3.13 Population and Housing*). Lane closures and other potential traffic impacts caused by construction activities of the proposed project would have potential to impede emergency response to those areas, or to areas accessed via those routes. To ensure that project construction will not interfere with emergency response times or other performance public service objectives, the proposed project will implement the required Traffic Control Plan in **Mitigation Measure TRA-1**. Operations of the proposed Project would not alter emergency access. In addition, the O&M requirements for the proposed project would be minimal, and therefore would not result in an increase in the need for new staff from public protection services entities. As implementation of the proposed project would not change the demand for any public services, it would not require additional equipment or resources for those public service providers. The proposed project would have no impact on public services, and no mitigation would be required.

Mitigation Measures: None required.

3.16 Recreation

		Potentially Significant Impact	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion

According to Riverside County's *Eastern Coachella Valley Area Plan* (County of Riverside 2016), the project area and vicinity includes tribal lands, public facilities, commercial retail, residential and agriculture land use designations. There are no parks located within the project area. Riverside County contains bicycle, pedestrian, and equestrian trails. Within the project area, portions of Harrison, Tyler, Filmore, and Avenue 66 are designated as Class I bike paths (County of Riverside 2016). The portion of Harrison Street between Echols Rd and Avenue 66 is considered not only a Class I bike path but is also a Class II bike path and a Design Guidelines trail. A regional trail follows the Whitewater River/Coachella Valley Stormwater Channel and along a portion of Avenue 66 to the west of the Whitewater River/Coachella Valley Stormwater Channel, ending at Avenue 66 and Tyler Street.

a, b) No Impact

The proposed project would not increase the demand for neighborhood or regional parks, or other recreational facilities. The project proposes the extension of a gravity sewer pipeline and small capacity lift station to service the existing Sunbird MHP and TMCC. No residential land uses are proposed as part of the project that would increase the use of existing recreational facilities and regional parks. No construction or expansion of other recreational facilities is required for project implementation. There would be no impacts to recreational facilities and no mitigation is required.

Mitigation Measures: None required.

3.17 Transportation

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

Discussion

The project area is located in Thermal, an unincorporated community in Riverside County, approximately six miles southwest of the intersection of State Route 86 and State Route 111 near Mecca. Primary access to the area is provided through State Route 86 from Interstate 10 at the City of Indio.

Transportation in the Coachella Valley is planned through the Riverside County Transportation Commission (RCTC) and the Coachella Valley Association of Governments (CVAG) in a regional effort. The RCTC plans and implements transportation and transit improvements and assists local governments with funding for local streets and roads to promote accessible transportation throughout Riverside County. RCTC's current *Long Range Transportation Plan* (LRTP) was adopted in 2019 and provides a comprehensive review of projects on the state highway, regional arterials, rail and bus, freight network, and active transportation. According to this plan, SunLine provides an intercity bus in Thermal. According to the LRTP, roadways in Coachella Valley are mostly non-congested.

The CVAG *Transportation Prioritization Study* (CVAG 2017b) was developed for the evaluation of the regional transportation system needs within the Coachella Valley and to assist CVAG in making funding decisions. The CVAG *Active Transportation Plan* (CVAG 2017a) provides goals and objectives related to alternative transportation within the Coachella Valley, and was prepared in conjunction with the *Transportation Prioritization Study*. The *Transportation Prioritization Study* notes that most of the roads in the area are two lane rural roads with pavement widths that vary between 24 and 28 feet; some roads have paved shoulders, but most do not (CVAG, 2017).

There are no rail systems or mass transit routes in proximity of the Project Area. Pedestrian and bicycle traffic are primarily associated with traffic to and from the existing school campus. Curb and sidewalk are located on the north side of Avenue 66 along the school campus frontage. Curb and sidewalk are also located adjacent to the Tribal Community Center Section, between Martinez Road and Tyler Street. Avenue 66 is a 2-lane east-west Urban Arterial highway (152 feet wide) characteristic of signalized and non-signalized intersections and reduced speed zones. Harrison Street north of Avenue 66 is identified in the Riverside County Circulation Element as an Expressway (128 to 220 feet wide). Martinez Road, Echols Road and other local roadways are identified as Collectors (74 feet wide). Segments of Avenue 66 are identified as a Regional Trail and Class I Bike Path. Harrison Street is designated as a Design Guidelines Trail, Historic Trail, and Class I Bike Path.

a) Less than Significant Impact with Mitigation Incorporated

Pipeline construction is anticipated to last up to 69 calendar days and occur on weekdays between the hours of 7:00 am and 6:00 pm. Multiple sections of roadway would be under construction simultaneously. Lift Station construction would last approximately 40 calendar days for electrical and mechanical crews to make adjustments and install the new pumps.

During construction, the project would generate trips associated with construction crews and materials deliveries. Construction would proceed for approximately 10 months. Work on the pipelines and lift station would occur simultaneously, while onsite septic abandonment would follow construction of the new facilities (see Section 2.5.1). Construction would generate up to 90 round-trips per day, which includes trips for off hauling of export material, import of fill material, construction worker commuting, delivery of materials, and removal of the onsite septic systems. Operations of the proposed buried sewer pipeline and lift station would not affect transportation or traffic except for standard maintenance activities. Additional project-related traffic volumes during construction would be minor, however; the movement of traffic lanes to allow for construction would require reduced speed and provide the potential for congestion at two intersections.

Construction staging would occur primarily within existing roadways and public rights-of-way within the unincorporated Thermal area in Riverside County and within the Torres-Martinez Tribal Lands and TMCC. Project approvals would include an encroachment permit from the County of Riverside.

Construction-related traffic would be temporary, and potential traffic-related impacts would not occur in the same location over the 10-month construction period but would rather move along the pipeline alignment. All disturbed areas would be restored to original grade. As such, temporary construction impacts are not expected to have a significant impact related to the RCTC *Congestion Management Plan* (2011), the CVAG studies, or the SCAG RTP/SCS, which focus on long-term, regional circulation projects. Project-related effects relative to adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise are not significant.

Once operational, the project would not conflict with these regional transportation plans because it would install below-ground pipelines, a lift station and associated electrical facilities, and onsite work that would not have a permanent impact on circulation. CVWD would continue to operate its wastewater system with no operational modifications using standard vehicles. Long-term impacts on the circulation system plans would be less than significant.

Although construction impacts would not be substantial, construction of the proposed project may necessitate individual traffic lane closures. To ensure the appropriate traffic controls are implemented and potential traffic impacts related to lane closures are less than significant, the proposed project shall implement **Mitigation Measure TRA-1**. The Traffic Control Plan shall be developed in coordination with the Torres-Martinez Desert Cahuilla Indians, County of Riverside, and the CVUSD. Project coordination with emergency responders and development of an approved Traffic Control Plan would result in potential traffic impacts related to road closures and detours would be less than significant.

b) No Impact

CEQA Guidelines §15064.3(b) stipulates criteria for analyzing transportation impacts in terms of "vehicle miles traveled" for land use projects and transportation projects. VMT refers to the amount and distance of automobile travel attributable to a project.

Construction of the proposed project would involve temporary trips associated with workers, delivery of construction supplies and equipment, and hauling materials to and from the site. These trips would be temporary over the 10-month duration of construction and would not result in a perceivable increase in vehicle miles traveled that would exceed County thresholds of significance. Truck trips associated with operation and maintenance would be limited and incorporated into CVWD's existing operation and maintenance program. The VMT generated during operation of the proposed project would be minimal. Therefore, the project would not be inconsistent with CEQA Guidelines §15064.3(b) and there would be no impact.

c) No Impact

Neither proposed project construction nor operation would substantially increase traffic hazards or create incompatible uses at or adjacent to the project area. The proposed project would be located primarily below existing paved and dirt roads or rights of way, would not permanently alter existing roads, and would not result in the creation of new roads or intersections. The proposed lift station and associated electrical facilities (distribution pole, transformer) would be constructed within a relatively small area (approximately one-half acre) at the intersection of Harrison Street and Echols Road. Therefore, the proposed project would not substantially increase hazards due to a design feature or incompatible land uses. Project-related effects relative to roadway design and compatible use hazards would have no impact. The proposed project would not result in transportation hazards.

d) Less than Significant with Mitigation Incorporated

As explained under Impact "a", above, construction of the proposed project would generate trips associated with construction crews and materials deliveries and may necessitate individual traffic lane closures. Lane closures and other construction activities have the potential to result in inadequate access for emergency vehicles. Traffic control requirements would require that emergency crews have access, as needed, and that the contractor coordinates the location of the work daily for routing of emergency vehicles. Traffic control would also require the contractor to make reasonable efforts, wherever possible, to provide landowners access to their property and patrons access to businesses during execution of the work. To ensure that project construction would not interfere with emergency response times, the proposed project would implement **Mitigation Measure TRA-1**. With the incorporation of traffic control measures identified in **Mitigation Measure TRA-1**, impacts would be less than significant.

Mitigation Measures

Mitigation Measure TRA -1: Traffic Control Plan

Prior to construction, CVWD shall require its construction contractor to implement an approved Traffic Control Plan, to the satisfaction of the CVWD construction inspector and the County. The components of the Traffic Control Plan shall include:

- Identification of construction staging site locations and potential road closures,
- Alternate routes of traffic detours, including emergency response contact information,
- Planned routes for construction-related vehicle traffic (haul routes), and
- Identification of alternative safe routes to maintain pedestrian safety during construction.

CVWD's Project Manager shall coordinate with the police, fire, and other emergency services to alert these entities about potential construction delays, project alignment, and construction schedule. CVWD shall minimize the duration of disruptions/closures to roadways and critical access points for emergency services. The Traffic Control Plan shall provide for traffic control measures including flag persons, warning signs, lights, barricades, and cones to provide safe passage of vehicular, bicycle and pedestrian traffic and access by emergency responders. All construction personnel shall be briefed on project-specific circumstances relating to worker and public safety with regards to traffic control. The Traffic Control Plan shall be submitted to CVWD's Project Manager and construction inspector for review and approval prior to construction.

CVWD's construction inspector shall have the construction schedule and Traffic Control Plan reviewed by the County of Riverside to ensure construction of the

proposed project does not conflict with construction activities associated with other construction projects that may be occurring at the same time in the vicinity.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Discussion

Tribal cultural resources are nonrenewable resources and often yield unique information about past societies and environments, and can provide information for modern day social, scientific, and heritage knowledge. The consideration and preservation of important examples of history within Riverside County benefits the public by maintaining historic identity and a sense of place and tradition.

Public Resource Code 21074(a) identifies “Tribal Cultural Resources” as either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

(Added by Stats. 2014, Ch. 532, Sec. 4. (AB 52) Effective January 1, 2015.)

a) Less Than Significant with Mitigation Incorporated

As discussed in *Section 3.5 Cultural Resources*, a project and site-specific study was prepared to analyze historical and archaeological resources (Gusick 2018, revised 2020). This assessment included a records search, outreach with Native American communities, historical background research and an intensive level field survey. The proposed project area has been heavily disturbed over the years from various activities associated with agricultural use and development, utility alignments, roadways, and commercial, educational, recreational and residential use.

The Martinez Historical District (District) is listed as a National Register Historic Preservation District. This Historical District encompasses the Cahuilla village site and is currently part of the Torres-Martinez Desert Cahuilla Indian Reservation. Within the Historical District, there is a known cemetery as well as historical documentation of two Indian Rancherias and prehistoric Cahuilla Indian village sites, that are still present. The entire project ADI within Martinez Road within the TMCC reservation access road was surveyed and a portion of the proposed project ADI runs directly through the Historical District. The NAHC has determined Martinez Road to be ineligible for the NRHP. The road has been resurfaced and the shoulder has been graded, paved, and resurfaced throughout the years for routine maintenance. Planned impacts to the roads that run through the Historical District will be temporary. Prior to any project construction activities, further subsurface testing will be carried out to determine if intact deposits remain, and a Data Recovery Plan will be created, as required by **Mitigation Measures CUL-1** and

CUL-2. An Archaeological and Tribal Monitor would be present during ground disturbing activities, as required by **Mitigation Measure CUL-4**.

The results of the NAHC Sacred Land Files indicated that there were sacred sites within the region that may be impacted by the proposed project and to contact the Torres-Martinez Desert Cahuilla Indians for more information. The NAHC search also included a contact list of 32 Native American individuals or organizations who may have additional information regarding sacred resources in the area and who should be contacted regarding the proposed scope of the project. Utilizing the NAHC provided contact list, outreach letters were mailed to all 32 individuals/groups on the list and follow-up phone calls and/or emails were made to the 29 individuals and groups on the list that did not respond to the initial contact. The results of the outreach to Native American individuals and organizations can be found in the Cultural Resources Report in Appendix D and are summarized below:

- **Torres-Martinez Desert Cahuilla Indians** requested formal consultation with CVWD, as well as Tribal monitoring for all ground disturbing activities (letter received October 27, 2017). The request has been met; subsurface investigation will be conducted prior to construction under **Mitigation Measure CUL-1** and Native American tribal monitoring has been included as **Mitigation Measure CUL-4**. A Data Recovery Plan will be in place should tribal cultural resources be encountered during construction, as required in **Mitigation Measure CUL-2**.

- **Agua Caliente Band of Cahuilla Indians** stated no concerns and deferred to the Torres-Martinez Desert Cahuilla Indians (letter received September 20, 2017).

- **Twenty-Nine Palms Band of Mission Indians** identified the project APE as adjacent to the Chemehuevi Traditional Use Area, and their Tribal Historic Preservation Officer requested a copy of the Cultural Resources Report. The request has been met (letter received September 26, 2017).

- **Viejas Band of Kumeyaay Indians** stated the site has no significant ties to the Viejas and recommend Tribes closer to the cultural resource be contacted. However, it would like to be informed of any inadvertent finds (letter received September 7, 2017).

- **Morongo Band of Mission Indians** indicated that the project is on land sensitive for Cahuilla Tribal cultural resources and deferred to nearby Tribal government (letter received November 29, 2018).

The Cultural Resources Report (Gusick 2018, revised 2020) found no additional listed or eligible for listing Tribal Cultural Resources within the project area.

Assembly Bill (AB) 52 Consultation

AB 52 (Gatto, 2014) established a formal consultation process between a lead agency and all California Native American Tribes regarding tribal cultural resource evaluation. AB 52 mandates that a lead agency shall provide formal written notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have previously requested notice. The AB 52 consultation is initiated early in the project review phase by written notification including a brief description of the proposed project and its location, and the lead agency contact information. The Native American tribal government has 30 days to request project-specific consultation pursuant to this section (Public Resources Code §21080.1).

As a part of the consultation pursuant to PRC §21080.3.1, the parties may propose mitigation measures, including, but not limited to, those recommended in §21084.3, capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource. If the California Native American tribe requests consultation regarding alternatives to the project, recommended mitigation measures, or significant effects, the consultation shall include those topics. The consultation may include discussion concerning the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and, if necessary, project alternatives or the appropriate measures for preservation or mitigation that the California Native American tribe may recommended to the lead agency. Further, consultation shall be considered concluded when either of the following occurs: (1) The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource, or (2) A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

In March 2019, CVWD initiated AB 52 with eight (8) local Native American tribal governments having previously requested to consult under AB 52. As of June 2019, CVWD environmental staff had received several written responses including formal request for AB 52 consultation. CVWD staff has discussed the project in depth with the interested parties. As a result, the project is conditioned with mitigation providing a Native American tribal monitor during initial, earth-disturbing construction activities such as grubbing, clearing, and excavation for the placement of sanitation improvements (refer to Mitigation Measures CUL-1 through CUL-4).

Implementation of **Mitigation Measures CUL-1** through **CUL-6** would reduce potential impacts to previously-undiscovered tribal cultural resources to less than significant levels.

Mitigation Measures: **Mitigation Measures CUL-1, CUL-2, CUL-3, CUL-4, CUL-5**, and **CUL-6** in *Section 3.5 Cultural Resources* are applicable to tribal cultural resources, and are provided below.

Mitigation Measure CUL-1: Phase II Work Plan, Archaeological Investigation, and Report

As the Avenue 66 Trunk Sewer Project will conduct ground disturbing work within the boundaries of two known Tribal Cultural Resources within Martinez Historical District, the Martinez Road site P-33-020028 (CA-RIV-10171) and the multicomponent site P-33-001292/h (CA-RIV-1292H) along the western edge of Martinez Road, a Phase II Work Plan, Phase II Archaeological Investigation, and a Phase II Technical Report shall be conducted prior to the issuance of an installation agreement by the Torres-Martinez Desert Cahuilla Indians to determine if intact deposits remain.

A Phase II Work Plan (Work Plan) shall be created prior to the Phase II field work to guide the investigation. The Phase II Work Plan shall include, but not be limited to, the following elements: an overview of the project and regulatory context; a description of the environmental and cultural setting, relying on relevant portions of the Cultural Resources Technical Report (Gusick 2020); background on the results of previous investigations, cultural resources reports, and coordination with Native American groups; and the methods and research design to identify potential themes and questions, data expectations, significance thresholds, and protocols, all culminating in a detailed plan for the methods of testing within the Area of Direct Impact (ADI) for the project and artifact analysis with current industry standards.

To avoid potential impacts to unknown subsurface resources in the Area of Direct Impact (ADI) in the vicinity of the Martinez Road site P-33-020028 (CA-RIV-10171) and the multicomponent site P-33-001292/h (CA-RIV-1292H) along the western edge of Martinez Road, a Phase II Archaeological Investigation (Field Work) shall be conducted. The Phase II Archaeological Investigation (Field Work) is the field work portion and shall be conducted in accordance with the Society for California Archaeology's Fieldwork and Reporting Guidelines. This work effort shall be conducted under the direction of an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology. The Phase II Field Work excavations shall be limited to the ADI, which is the area that will be directly disturbed by project-related excavation. Field work methods shall be defined in the Work Plan and may include shovel test pits, test units, transport of recovered materials to the laboratory, specialized analysis, and cataloguing of lithic artifacts, charcoal, and faunal remains. Field work also may include magnetic resistivity survey.

After the Phase II Field Work, a Phase II Technical Report (Technical Report) shall be created documenting the effort. The Technical Report shall include any necessary archival research to identify significant historical associations based on mapping of encountered artifacts, collection of functionally or temporally diagnostic tools and debris, and excavation of a sample of the cultural deposits carried out during the Phase II Field Work. The significance of any new data shall be evaluated according to the criteria of the California Register of Historic Resources and if applicable, National Register of Historic Places. The Martinez National Historic District (NRD-

1292) would not be reevaluated for listing eligibility. The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition).

Mitigation Measure CUL-2: Data Recovery Plan

A Phase III Data Recovery Program (DRP) shall be created for the project and include the Phase II Archeological Investigation and technical report information as necessary. The DRP shall be completed in accordance with the California Office of Historic Preservation's Planning Bulletin 5 (1991), Guidelines for Archaeological Research Design, or the latest edition thereof. The DRP shall be prepared by a qualified archaeologist who meets or exceeds the Secretary of Interior's Professional Qualifications Standards for prehistoric archaeology and be available for comments by the Torres-Martinez Desert Cahuilla Indians and CVWD. The DRP must be submitted for review and approval prior to the start of construction. Ground-disturbing work may continue under the observation of an archaeological or cultural monitor on portions of the project site that do not appear to contain significant archaeological resources. The DRP shall include the following elements:

- Field Methods and Procedures: Descriptions of proposed field strategies, procedures, and operations.
- Research Design/Data Classes/Data Requirements: This will describe the relevant research themes pertinent to the archaeological deposit identified and the data requirements for evaluation for the CRHR.
- Background: Results of previous investigations and historical documentation research
- Treatment Plan: Expected Artifact Classes and treatment plan for each, including the treatment of human remain and associated funerary objects. The treatment of human remains will be included as detailed in CUL-6.
- Cataloguing and Laboratory Analysis: Description of selected cataloguing system and artifact analysis procedures of artifacts recovered and any corresponding field notes, graphics, and lab analyses, including but not limited to faunal analysis of all animal bones, radiocarbon dating when appropriate, protein residue analysis of stone tools and groundstone, and petrographic analysis of ceramic samples to assess general age ranges and source material.
- Discard and Deaccession Policy: Description of and rationale for field and post-field discard and deaccession policies for cultural resources.
- Interpretive Program: Consideration of an on-site/off-site public interpretive program during the course of the archaeological data recovery program.

- Security Measures: Recommend security measures to protect the archaeological resource from vandalism, looting, and non-intentionally damaging activities.
- Final Report: Description of proposed report format and contents and distribution of results.
- Curation: Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Mitigation Measure CUL-3: Worker Environmental Awareness Program: Archaeologist Sensitive Training

A qualified archaeologist shall be retained to conduct a Worker's Environmental Awareness Program (WEAP) training for archaeological sensitivity for construction personnel prior to the commencement of any ground disturbing activities. Construction personnel shall be briefed on project-specific circumstances and general observation methods for detecting archeological resources, including tribal cultural resources. The briefing shall include appropriate actions to be taken in the event of questionable evidence or discovery.

Mitigation Measure CUL-4: Initial Monitoring of Archaeological Resources

CVWD shall ensure that initial project-related ground-disturbing activities shall be observed by an archaeological and Native American monitor. These activities shall include initial site preparation, clearing/grubbing of vegetation, and excavation for placement of the sanitation system. The archaeological monitor shall be under the direction of a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology (National Park Service 1983). If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the find shall be evaluated for CRHR and/or NRHP eligibility. Archaeological monitoring may be reduced or halted at the discretion of the qualified archaeologist as warranted by conditions such as encountering bedrock, sediments being excavated are fill materials, or negative findings during initial ground-disturbing activities. If monitoring is reduced, spot-checking shall occur when ground-disturbance moves to a new location or when ground disturbance will extend to depths not previously reached (unless those depths are within bedrock). Both the project archeologist and Native American monitor will be invited to attend the pre-construction meeting.

Mitigation Measure CUL-5: Unanticipated Discovery of Cultural Resources

In the event that cultural resources are unearthed during project construction, the project archeologist, in coordination with CVWD's construction inspector shall temporarily suspend all earth disturbing work within a 100-foot radius of the discovery. A qualified professional 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, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- 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 does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify CVWD's Construction Inspector and Environmental Services Department. CVWD shall consult on a finding of eligibility and implement appropriate treatment measures if the find is determined to be eligible for inclusion in the NRHP or CRHR. Work may not resume within the no-work radius until CVWD, through consultation as appropriate, determines that the site either: 1) is not eligible for the NRHP or CRHR; or 2) that the treatment measures have been completed to its satisfaction.

Mitigation Measure CUL-6: Unanticipated Discovery of Human Remains

The discovery of human remains is a possibility during ground-disturbing activities. In the event that human remains are found, CVWD shall temporarily suspend all earth disturbing work within a 100-foot radius of the discovery. The project archeologist would evaluate the significance of the find and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find.

If the find includes human remains, or remains that are potentially human, the professional archaeologist shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Riverside County Coroner (as per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate information center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

If the find includes human remains, or remains that are potentially human, and the find is located on lands owned by Torres-Martinez Desert Cahuilla Indians, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlay adjacent remains, until a representative from the Torres-Martinez Desert Cahuilla Indians is notified. The Torres-Martinez Desert Cahuilla Indians would have full discretion over the treatment of the remains.

3.19 Utilities and Service Systems

	Potentially Significant Impact	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the Project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider 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?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion

Water Supply

CVWD provides domestic water service in the project vicinity and is the largest provider of potable water in the Coachella Valley. CVWD's *2010 CVWMP* and *2015 UWMP* have

been developed to assist the agency in reliably meeting current and future water demands in a cost-effective manner. CVWD's pressurized pipeline domestic water distribution systems have 30 pressure zones and consist of approximately 96 groundwater production wells, 2,000 miles of pipeline, and 135 million gallons of storage in 61 enclosed reservoirs. In 2015, CVWD provided 92,974 AF of water to 212,871 residents through 107,358 active meters. CVWD's irrigation system consists of 485 miles of buried pipelines, 19 pumping plants, and 1,300 AF of storage and provides approximately 392,000 acre-feet per year (AFY) of Colorado River water and blended recycled water to over 1,100 customers covering approximately 76,354 acres. CVWD's water supplies come from groundwater, recycled water, imported water from the State Water Project (via the California Aqueduct) and the Colorado River via the Coachella Canal, a branch of the All-American Canal. All potable water is pumped from the groundwater basin. Imported and recycled water supplies are used to meet non-urban water demands and for groundwater replenishment.

Wastewater and Recycled Water

CVWD has provided wastewater collection and treatment services to their customers since 1968, and currently provides wastewater services to more than 94,000 home and business accounts, serving an estimated population of 248,000 (CVWD 2018). CVWD treats nearly 6.3 billion gallons of wastewater a year and recycles more than 2 billion gallons of wastewater each year. CVWD's wastewater collection system consists of approximately 1,100 miles of 6-inch through 36-inch diameter sewers and includes 35 sewage lift stations and associated force mains. The system contains trunk sewers, generally 10-inches in diameter and larger, that convey the collected wastewater flows to CVWD's treatment facilities. CVWD operates five WRPs, two of which (WRP-7 and WRP-10) generate recycled water for irrigation of golf courses and large landscaped areas. WRP-4 became operational in 1986 and serves communities from La Quinta to Mecca. WRP-4 effluent is not currently recycled; however, it will be recycled in the future after obtaining an approved wastewater discharge change petition, environmental analysis, and tertiary treatment facilities are constructed. The other two WRPs (WRP-1 and WRP-2) serve small communities near the Salton Sea.

Solid Waste

Solid waste disposal and recycling services for the community of Thermal is provided by Burrtec Waste and Recycling Services. Burrtec provides an array of services and offers residents containers for landfill waste, green waste, and recyclables. Residential and commercial waste and recycling is taken to the Coachella Valley Transfer Station. Waste from the Transfer Station is then taken to a permitted landfill or recycling facility outside of the Coachella Valley. These include Badlands Disposal site, El Sobrante Sanitary Landfill, and Lamb Canyon Disposal Site. Cal-Recycle data indicates the Badlands Disposal site has 15,748,99 cubic yards of remaining capacity, the El Sobrante Landfill has a remaining capacity of 145,530,000 tons of solid waste, and Lamb Canyon Disposal has remaining solid waste capacity of 19,242,950 cubic yards. As part of its long-range planning and management activities, the Riverside County Waste Management

Department (RCWMD) ensures that Riverside County has a minimum of 15 years of capacity at any given time, for future landfill disposal.

Stormwater and Flood Control

CVWD provides regional flood protection for its stormwater unit within the Coachella Valley. CVWD's stormwater unit extends from the Whitewater River Spreading Area to Salton City, encompassing approximately 378,000 acres. CVWD's regional flood control system consists of a series of debris basins, levees, and stormwater channels that convey floodwaters from the canyons and alluvial fans surrounding the Coachella Valley to the 50-mile Whitewater River/Coachella Valley Stormwater Channel and to the Salton Sea.

Utilities

IID provides electricity services and Southern California Gas Company provides natural gas services within the project area. See *Section 3.6 Energy* for more detail.

a,c) Less than Significant Impact

The proposed project would not require or result in the construction of new or expanded water treatment, stormwater drainage, or telecommunications facilities beyond the expansion of CVWD's wastewater system included in the proposed project. As described in *Section 2.4.2 Lift Station* and discussed in *Section 3.6 Energy*, the proposed project would construct a new lift station which would rely on electricity supplied by IID. The estimated amount of energy consumed by the pumps at the new lift station would be 24,000 kWh per year. New electrical facilities would be constructed at the new lift station site, including a distribution pole and a transformer. The construction of the new lift station and associated electrical facilities would not cause a significant environmental effect, as discussed elsewhere in this document. CVWD will continue to consult with IID staff related to the design, installation or improvements to the new and/or improved project features. The proposed project would not require the construction of new IID electric or natural gas plants because the proposed project energy demand would be much smaller than the total amount of electricity IID supplies in a year (IID controls more than 1,100 megawatts of energy). As discussed in *Section 3.14 Population and Housing*, the proposed project would serve existing communities and would not directly induce population growth that would require new or expanded utilities. Therefore, impacts would be less than significant, and no mitigation would be required.

Project implementation would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. The proposed project diverts wastewater from uncontrolled septic-system discharge to controlled discharge at an existing, permitted treatment facility, WRP-4. The proposed lift station would convey wastewater from Sunbird MHP and TMCC to WRP-4. Estimated annual average flow based on 40-year growth projections at full system buildout is projected to be 2.5 mgd. The wastewater generated by the Sunbird MHP and TMCC is only one percent of the projected 40-year growth, however; the proposed project would install pipelines to

accommodate additional three to five year population growth which are expected to increase the average flow an additional 85,400 gpd. CVWD would not require additional capacity to serve the proposed project demand. Impacts would be less than significant.

b) No Impact

As described in *Section 2.4.3 Onsite work*, the proposed project would eliminate the operation of 25 community septic systems, install 19,625 feet of sanitation pipeline, and a new lift station. New electrical facilities would be constructed at the new lift station site, including a distribution pole and a transformer. Project implementation would have no effect on domestic water usage with the short-term exception of a nominal increase required for construction. Water supplies available to serve the proposed project from existing entitlements and resources would not change, nor is there any necessity for new or expanded entitlements. There would be no impact on water and wastewater services.

d, e) Less than Significant Impact

Construction and implementation of the proposed project is not anticipated to generate a significant amount of solid waste. To the extent feasible, excavated soil would be reused on site. The construction contractor(s) would be required to dispose of excavated soil and solid wastes in accordance with local solid waste disposal requirements. Solid waste disposal and recycling services for the community of Thermal are provided by Burretc.

Solid waste generation would be limited to construction-related activities and would not affect available solid waste disposal capacity in the region. No long-term solid waste generation would be associated with the proposed project. The waste generated during construction activities are required to be disposed of in accordance with all applicable federal, State, and local statutes and regulations. Therefore, impacts would be less than significant, and no mitigation would be required.

Mitigation Measures: None required.

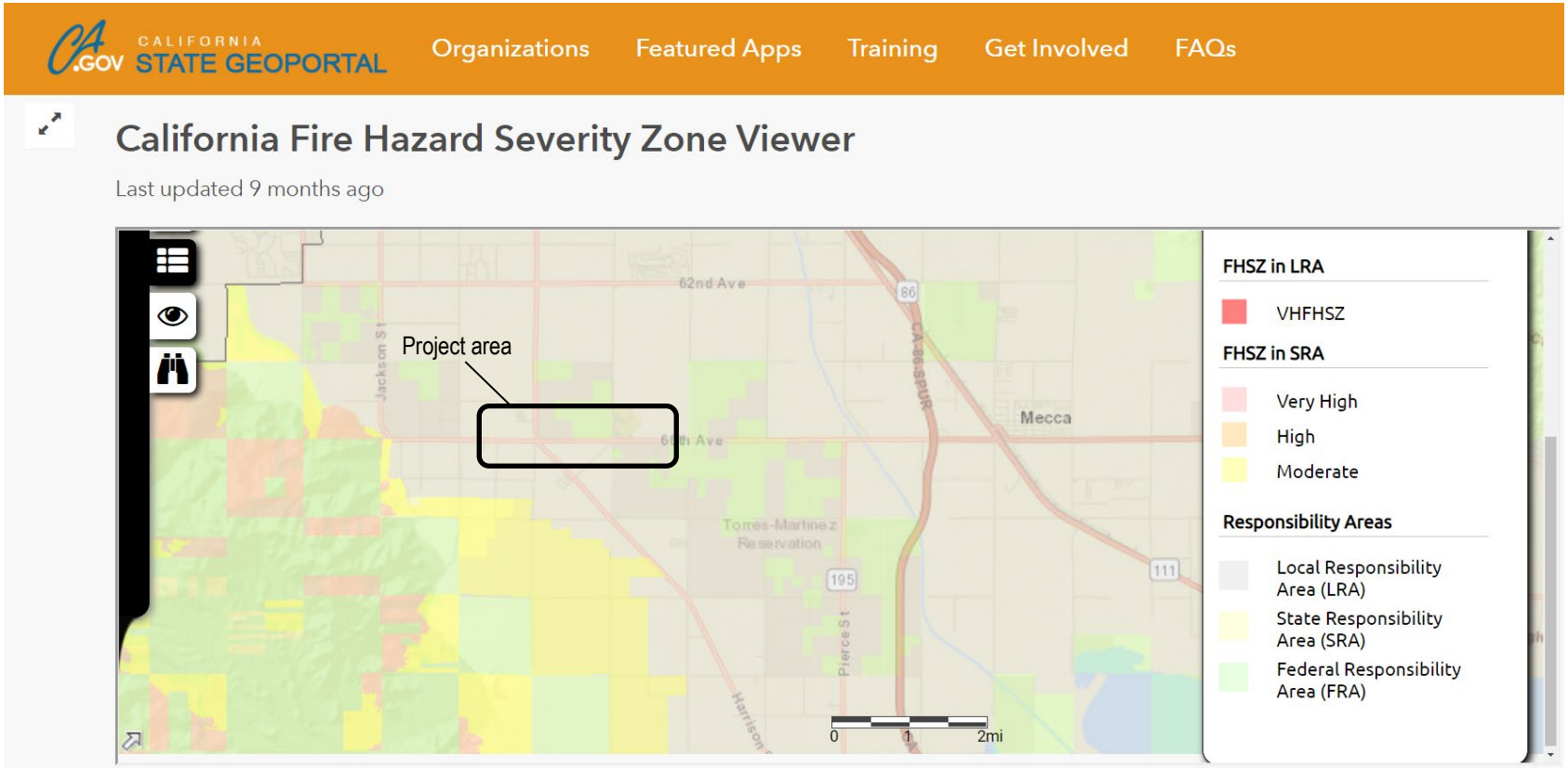
3.20 Wildfire

	Potentially Significant Impact	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Discussion

The Cal Fire Resources Assessment Program (FRAP; CalFire 2006) assesses the amount and extent of California's forests and rangelands, analyzes their conditions, and identifies alternative management and policy guidelines. Through the FRAP, Cal Fire produces maps designating very high fire hazard severity zones (VHFHSZ) within Federal, State and Local Responsibility Areas. The project is located within both Local Responsibility Areas (Western Riverside County) and Federal Responsibility Areas. The project area is designated as a non-VHFHSZ.

Figure 3-9: CalFire Map



a) Less than Significant with Mitigation Incorporated

Construction activities would take place within public rights-of-ways, as well as on private and public land. Potential staging areas include vacant private and public land, parking lots, and segments of closed traffic lanes. Therefore, project construction would temporarily block access to some roadways and driveways that are currently used by emergency response vehicles or in emergency evacuations. **Mitigation Measure TRA-1** addresses how CVWD would communicate with emergency response agencies to develop emergency access strategies (see *Section 3.17 Transportation*). Long-term, the proposed project would not physically impair or otherwise interfere with emergency response or evacuation in the project vicinity as the majority of the project components would be located below-grade and ground surfaces would be returned to pre-construction conditions. Thus, impacts would be less than significant with mitigation.

b) Less than Significant Impact

The proposed project is located within Local Responsibility Area and Federal Responsibility Area designated as non-VHFHSZ. Therefore, the proposed project would not exacerbate wildfire risks, and thereby expose proposed project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant, and no mitigation would be required.

c) No Impact

The proposed project involves installation of 19,625 feet of sewer pipeline and a new lift station. New electrical facilities would be constructed at the new lift station site, including a distribution pole and a transformer. The proposed project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or result in temporary or ongoing impacts to the environment. O&M activities associated with the proposed project would include lift station and pipeline maintenance and inspection, which would not require activities that would exacerbate fire risk. Therefore, no impacts would occur, and no mitigation would be required.

d) No Impact

The project area is surrounded by vacant land and irrigated agriculture. Residential, commercial, and industrial developments are scarce. Most residential developments are well-established trailer parks. There are no slopes or hills within the project area. The majority of project components would be located below-grade, surfaces would be restored to pre-construction conditions, and implementation of the proposed project would not impact site drainage. Therefore, the proposed project would not expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. No impacts would occur, and no mitigation would be required.

Mitigation Measures: Refer to **Mitigation Measure TRA-1** in *Section 3.17 Transportation*.

3.21 Mandatory Findings of Significance

		Potentially Significant Impact	*Less Than Significant With Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a)	Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b)	Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c)	Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, 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?

a) Less Than Significant with Mitigation Incorporated

Implementation of the project Mitigation Measures would ensure that construction and operation of the proposed project does not have the potential to significantly 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. Project impacts would be less than significant with the mitigation identified in this IS/MND incorporated.

b) Less Than Significant Impact

CEQA Guidelines §15064(h)(1) requires that a "lead agency consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable." Where a lead agency is examining a project with an incremental effect that is not cumulatively considerable, a lead agency need not consider the effect significant, but must briefly describe the basis for concluding the incremental effect is not cumulatively considerable.

As previously described, the proposed project would contribute incrementally to the impacts on the environment; however, no potentially significant impacts were identified that could not be mitigated to a less-than-significant level. Compliance with the mitigation measures included in Sections 3.1 through 3.20 of this IS/MND would ensure that implementation of the proposed project does not have impacts that are individually limited, but cumulatively considerable.

c) Less Than Significant with Mitigation Incorporated

Compliance with the Mitigation Measures included in Sections 3.1 through 3.20 of this IS/MND would ensure that implementation of the proposed project does not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. Project impacts would be less than significant with mitigation incorporated.

CONCLUSION

The proposed project involves activities that could result in potentially significant environmental impacts. In order to reduce or avoid potential environmental impacts, the project is conditioned with a mitigation program referred as the MMRP. With implementation of the MMRP, potentially significant impacts would be mitigated to less than significant levels.

4. REPORT PREPARATION

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APPENDIX A: CALEEMOD DATA SHEETS

APPENDIX B: BIOLOGICAL RESOURCES ASSESSMENT

APPENDIX C: AVENUE 66 TRUNK SEWER PROJECT BIOLOGICAL SURVEY REPORT

APPENDIX D: CULTURAL RESOURCES TECHNICAL REPORT SUNBIRD/MARTINEZ ROAD

APPENDIX E: AREA OF POTENTIAL EFFECTS MAP

APPENDIX F: GEOTECHNICAL ENGINEERING STUDY