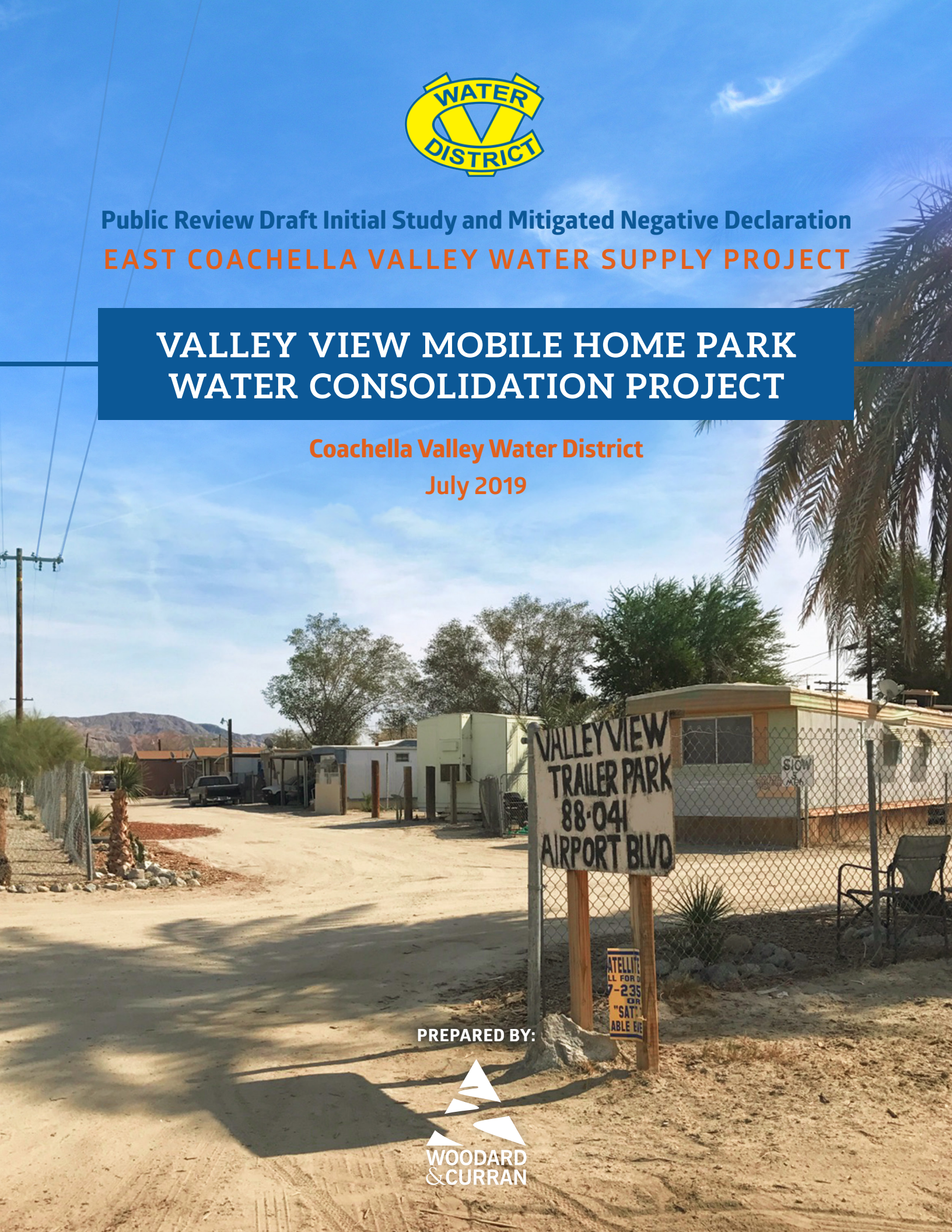
Public Review Draft Initial Study and Mitigated Negative Declaration

EAST COACHELLA VALLEY WATER SUPPLY PROJECT

VALLEY VIEW MOBILE HOME PARK WATER CONSOLIDATION PROJECT

Coachella Valley Water District

July 2019



PREPARED BY:

WOODARD & CURRAN

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East Coachella Valley Water Supply Project

Valley View Mobile Home Park
Water Consolidation Project

Prepared for:

Coachella Valley Water District
P.O. Box 1058
Coachella, CA 92236

Prepared by:

WOODARD & CURRAN
10509 Vista Sorrento Parkway, Suite 205
San Diego, CA 92121
858.875.7405

woodardcurran.com

COMMITMENT & INTEGRITY DRIVE RESULTS

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Coachella Valley Water District
July 2019

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Acronym List

BMPs	Best Management Practices
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CDFW	California Department of Fish and Wildlife
CDP	Census Designated Place
CFR	Code of Federal Regulations
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CVWD	Coachella Valley Water District
CWA	Clean Water Act
DAC	Disadvantaged Community
DIP	Ductile Iron Pipe
DEH	Riverside County Department of Environmental Health
DWSRF	Drinking Water State Revolving Fund
ECVWSP	East Coachella Valley Water Supply Project
EIR	Environmental Impact Report
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
gpm	gallons per minute
Hp	Horsepower
HCP	Habitat Conservation Plan
IS/MND	Initial Study/Mitigated Negative Declaration
MBTA	Migratory Bird Treaty Act
MCL	Maximum contaminant level
MHP	Mobile Home Park
MMRP	Mitigation Monitoring and Reporting Plan
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
RAA	Running annual average
RO	Reverse Osmosis

RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resources Control Board
SWS	Small Water System
USDA	US Department of Agriculture
USEPA	US Environmental Protection Agency
USFWS	US Fish and Wildlife Service

1. INTRODUCTION

1.1 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 Valley View Mobile Home Park (MHP) Water Consolidation Project (the "proposed project" or "proposed action"), which consists of consolidation of nine independent small water systems (SWS) into CVWD's drinking water system. The proposed project is one of two highest ranked consolidation projects within the East Coachella Valley Water Supply Project (ECVWSP), an evaluation of water consolidation opportunities for disadvantaged communities (DACs) in CVWD's eastern service area that was assessed in 2018.

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 Valley View MHP Water Consolidation 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.

1.2 Scope of this Document

This IS/MND has been prepared in accordance with CEQA (as amended) (Public Resources Code §§21000 et. seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, §§15000 et. seq.), as updated on December 28, 2018. 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. 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.

This IS/MND evaluates the potential for environmental impacts to resource areas identified in Appendix G of the 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

The proposed project may receive funding under the Drinking Water State Revolving Fund (DWSRF), which is administered by the State Water Resources Control Board (SWRCB) via funds from US Environmental Protection Agency (USEPA). Project grant funding may also come from the US Department of Agriculture (USDA) Rural

Development Program. Therefore, to support compliance with the federal environmental review requirements of the funding programs, this document includes analysis pertinent to several federal regulations (also referred to as federal cross-cutters or CEQA-Plus). Guidelines for complying with cross-cutting federal authorities can be found in the DWSRF regulations at 40 Code of Federal Regulations (CFR) §35.3575 and the USDA Environmental Policies and Procedures at 7 CFR §1970.

The federal cross-cutters analyzed in this document include:

- Environmental Alternative Analysis
- Archaeological and Historic Preservation Act (AHPA)
- Clean Air Act
- Coastal Zone Management Act
- Endangered Species Act (ESA)
- Environmental Justice
- Farmland Protection Policy Act
- Fish and Wildlife Coordination Act (FWCA)
- Floodplain Management: Executive Orders 11988, 12148, and 13690
- Magnuson-Stevens Fishery Conservation and Management Act
- Migratory Bird Treaty Act
- National Historic Preservation Act (NHPA)
- Protection of Wetlands
- Rivers and Harbors Act, Section 10
- Safe Drinking Water Act, Sole Source Aquifer Protection
- Wild and Scenic Rivers Act

1.3 CEQA Process

In accordance with CEQA Guidelines §15073, this Draft IS/MND is being circulated for a 30-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 has circulated the Draft IS/MND to the State Clearinghouse for distribution to State agencies. In addition, CVWD has circulated a Notice of Intent to Adopt a Mitigated Negative Declaration to the County Clerk, responsible agencies, and interested entities (July 25 – August 23, 2019). A copy of the Draft IS/MND is available for review at: www.cvwd.org.

Written comments should be submitted to CVWD by 5:00 PM on August 23, 2019. Contact person is listed below.

Please submit written comments to:
Elizabeth Meyerhoff, Environmental Specialist
Coachella Valley Water District
75515 Hovley Lane East
Palm Desert, CA 92211

Following the 30-day public review period, CVWD will evaluate [any] written comments received on the Draft IS/MND and incorporate any substantial evidence that the proposed project could have a significant impact on the environment into the Final IS/MND.

If there is no such substantial evidence, CVWD's Board of Director's will consider adopting the Final IS/MND and Mitigation Monitoring and Reporting Program (MMRP) in compliance with CEQA, at a publicly-noticed meeting. CVWD's Board of Director meetings are held the second Tuesday and fourth Thursday of the month.

1.4 Impact Terminology

The scope of the environmental resource areas is listed above in Section 1.2. The level of significance for each resources 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 Environmental Impact Report (EIR) must be prepared to meet the requirements of CEQA.

1.5 Mitigation Monitoring and Reporting Program

Table 1-1 provides a summary of potential impacts and mitigation measures by resource area. Pursuant to State CEQA Guidelines §§15097 and 15126.4, the following mitigation measures have been incorporated into the project design and would be implemented before or during construction in accordance with the project; thereby, reducing all identified potential environmental impacts to a less than significant level. The table does not include impacts or criteria that were deemed No Impact or Less than Significant due to actions associated with the Valley View MHP Consolidation Project; rather, the table focuses on potentially significant impacts and associated mitigation measures.

Table 1-1: Mitigation Measures for Saint Anthony Project

Impact Statement	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Biological Resources			
Impact BIO-a: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Potentially Significant	**Mitigation Measure BIO-1: Roosting Bats Impact Avoidance and Minimization** To avoid disturbance of roosting bats, which are CDFW Species of Special Concern, CVWD shall, at least two weeks prior to, but not more than 30 days prior to, the start of construction, contract with a qualified biologist to conduct a pre-construction survey for roosting bats. The survey shall include all trees, bridges, and structures suitable for roosting by the western yellow bat and western mastiff bat. The pre-construction survey shall be conducted within the disturbance footprint and a 100-foot buffer with inaccessible areas (i.e. private lands) surveyed with binoculars, as feasible. If active bat roosts are present onsite, a buffer zone of 100 feet shall be established around the roosts that excludes construction activities or other disturbances. Tree removal activities shall occur only during periods when bats are not roosting in those trees proposed to be removed, as determined by a qualified biologist. If active maternity roosts or non-breeding bat hibernacula are found in trees scheduled to be removed, removal activities will be conducted during a season when young are not present. **Mitigation Measure BIO-2: Pre-Construction Burrowing Owl Surveys** To avoid potential impacts to burrowing owl, a pre-construction clearance survey for burrowing owls 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 BUOW and their habitat. If burrowing owls are found within the study 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.	Less than Significant

Impact Statement	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		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-3: 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, 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	

Impact Statement	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		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.	
Cultural Resources			
Impact CUL-a: Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? **Impact CUL-b:** Cause a substantial adverse change in the significance of a unique archeological resource pursuant to §15064.5. **Impact CUL-c:** Disturb any human remains, including those interred outside of formal cemeteries.	Potentially Significant	**Mitigation Measure CUL-1: 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. 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. The project archeologist and Native American monitor will provide a brief orientation to construction crews on the first day of construction. **Mitigation Measure CUL-2`: Unanticipated Discovery of Cultural Resources** In the event that cultural resources are unearthed during project construction, the project archaeologist, 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,	Less than Significant

Impact Statement	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		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-3: Unanticipated Discovery of Human Remains** The discovery of human remains is always 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 archaeologist 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	

Impact Statement	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		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.	
Hazards and Hazardous Materials			
Impact HAZ-b: Potential to 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.	Potentially Significant	**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 Prevention Control Plan that includes a project-specific contingency plan for hazardous materials and waste operations. 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; and • Spill control and countermeasures, including employee spill prevention/response training.	Less than Significant
Impact HAZ-f: Potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Potentially Significant	**Mitigation Measure TRA-1**, in *Transportation,* shall apply.	Less than Significant

Impact Statement	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Noise			
Impact NOI-a: Temporary or permanent increase in ambient noise levels in excess of applicable standards. **Impact NOI-b:** Generation of excessive groundborne vibration or groundborne noise.	Potentially Significant	**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 shall be provided, 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.	Less than Significant

Impact Statement	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		• 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.	
Transportation			
Impact TRA-a: Potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. **Impact TRA-d:** Result in inadequate emergency access?	Potentially Significant	**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.	Less than Significant

Impact Statement	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
		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. 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.	
3.19 Tribal			
Impact CUL-a: Potential to 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	Potentially Significant	**Mitigation Measures CUL-1, CUL-2 and CUL-3** under *3.5 Cultural Resources, shall apply.*	Less than Significant

Impact Statement	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
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.			
Wildfire			
Impact WIL-a: Substantially impair an adopted emergency response plan or emergency evacuation plan**.**	Potentially Significant	**Mitigation Measure MM 3.17-1,** under *3.17 Transportation, shall apply*.	Less than Significant

2. PROJECT DESCRIPTION

2.1 Project Overview

The Valley View MHP Water Consolidation Project consists of consolidation of nine, independent small water systems (SWSs) into CVWD's potable water system over several phases, as shown in **Table 2-1**. Each SWS is shown in **Figure 2-1**. The proposed project would construct approximately 19,500 linear feet of pipeline and would be placed within the public right-of-way along Avenue 66, Fillmore Street, Desert Cactus Drive and Avenue 55 in unincorporated Riverside County.

Table 2-1: Valley View MHP Water Consolidation Project Sites

Small Water System	Assessor's Parcel Number (APN)	County Land Use Designation	Zoning Designation
Campos MHP	757-080-018	Medium Density Residential	R-A-10
De Leon Ranch	763-370-026	Agriculture	A-2-20
Desert View MHP	757-070-022	Medium High Density Residential	R-A-20
Luciano Valenzuela MHP	757-100-009	Rural Community - Low Density Residential	R-A-20
Magdaleno Lopez	757-070-049; 757-070-034; 757-070-045; 757-070-041	Medium Density Residential	R-A-20
Meza's Ranch	757-080-021	Medium Density Residential	R-A-5
Soto Water	763-370-009	Agriculture	A-1-20
Valley View MHP	757-100-015	Medium Density Residential	R-A-20
Vista Norte Estates	757-100-013	Rural Community - Low Density Residential	R-A-20
Source: County of Riverside 2019			

2.1.1 Project Background

CVWD is a potable water retailer that services a region covering approximately 1,000 square miles, mostly within the Coachella Valley in Riverside County, California, and has service area within Imperial and San Diego Counties. In the East Coachella Valley region of its service area, there are a number of rural communities that are not connected to CVWD's potable water system. These communities are all classified as disadvantaged communities (DACs) with median household incomes (MHIs) less than 80 percent of the California statewide MHI (U.S. Census Bureau 2019a; U.S. Census Bureau 2019b) and depend on local private wells connected to independent SWSs to supply their potable water. The local groundwater supplies of several of the SWSs have shown elevated concentrations of arsenic, fluoride and other constituents that are currently regulated by the State or may be in the near future (e.g., hexavalent chromium) according to Riverside County Department of Environmental Health (DEH) Inspection Reports.

To improve the reliability and potential safety of water supply and quality to the SWSs, CVWD is evaluating the consolidation of the SWSs into CVWD's potable water system. The ECVWSP was initiated in early 2018 via a SWRCB planning grant to evaluate and prioritize the SWSs for potential consolidation, as well as develop preliminary engineering and environmental compliance documents for the highest priority systems. CVWD is partnering with its

DAC Infrastructure Task Force[1] to implement the ECVWSP in coordination with other water and wastewater infrastructure projects in the East Coachella Valley.

The System Identification task of the ECVWSP addressed the SWSs identified for potential consolidation into the CVWD potable system; evaluated the current and projected water demand for each SWS; evaluated the infrastructure expansion and pump energy requirements to deliver the water; and evaluated the associated planning level capital and operations and maintenance (O&M) costs. The 83 SWSs identified for consolidation were grouped into 43 projects based on relative proximity of the SWSs. Four projects were then identified as suitable for grouping into a single regional project, bringing the total number of projects to 39. The projects were named based on the largest SWS each consolidation project would connect.

The findings from the System Identification task were then carried forward into the System Prioritization task to identify the top two consolidation projects to advance to develop preliminary engineering and environmental documents. The task evaluated and ranked the 39 water consolidation projects. The evaluation process included developing criteria for the projects, weighting the criteria, scoring the projects against each criterion, and ranking each project using a decision-making software (Criterium Decision Plus) to then selecting projects for preliminary design. The two highest priority projects for advancing to preliminary design and environmental compliance were the Saint Anthony MHP and Valley View MHP. Development of the Valley View MHP Water Consolidation Project is the subject of this IS/MND. A separate IS/MND is being prepared for the Saint Anthony MHP Water Consolidation Project.

2.1.2 Project Purpose and Need

The proposed project is necessary to address public health potable water concerns in local DACs. The project would create water reliability and functionality for potable water for the identified SWSs to ensure adequate public health throughout the project area. The local groundwater supplies of the SWSs have shown elevated concentrations of arsenic, fluoride and other constituents that are currently regulated by the State or may be in the near future (e.g., hexavalent chromium). Based on Riverside County DEH Inspection Reports, five of the nine SWSs within the proposed project show maximum contaminant level (MCL) exceedance for arsenic and/or fluoride at their respective groundwater supply wells. Four of the nine SWSs in the proposed project have installed treatment that addresses the regulatory violations.

Consolidation into the CVWD potable water system would provide a higher level of reliability and redundancy for the SWSs, which are currently operated by the system owners. The CVWD potable water system is operated and maintained by full-time State of California certified operational staff. Furthermore, the existing fire suppression systems for the Campos MHP, Luciano Valenzuela, and Vista Norte Estates SWSs offer less protection than a municipal water supply could provide; as such, consolidation into the CVWD system would provide a more robust and reliable water supply for fire protection. Finally, the SWSs have minimal or no security at their existing well sites (i.e. fencing or mechanical equipment enclosure). Campos MHP and Luciano Valenzuela SWSs have mechanical well equipment housed in a wooden structure. Desert View MHP, Meza's Ranch, Soto, Valley View and Vista Norte Estates SWSs have minimal fencing surrounding the mechanical well equipment. De Leon Ranch and Magdaleno Lopez have no fencing or equipment enclosure. Consolidation into CVWD's centralized system would eliminate this risk exposure.

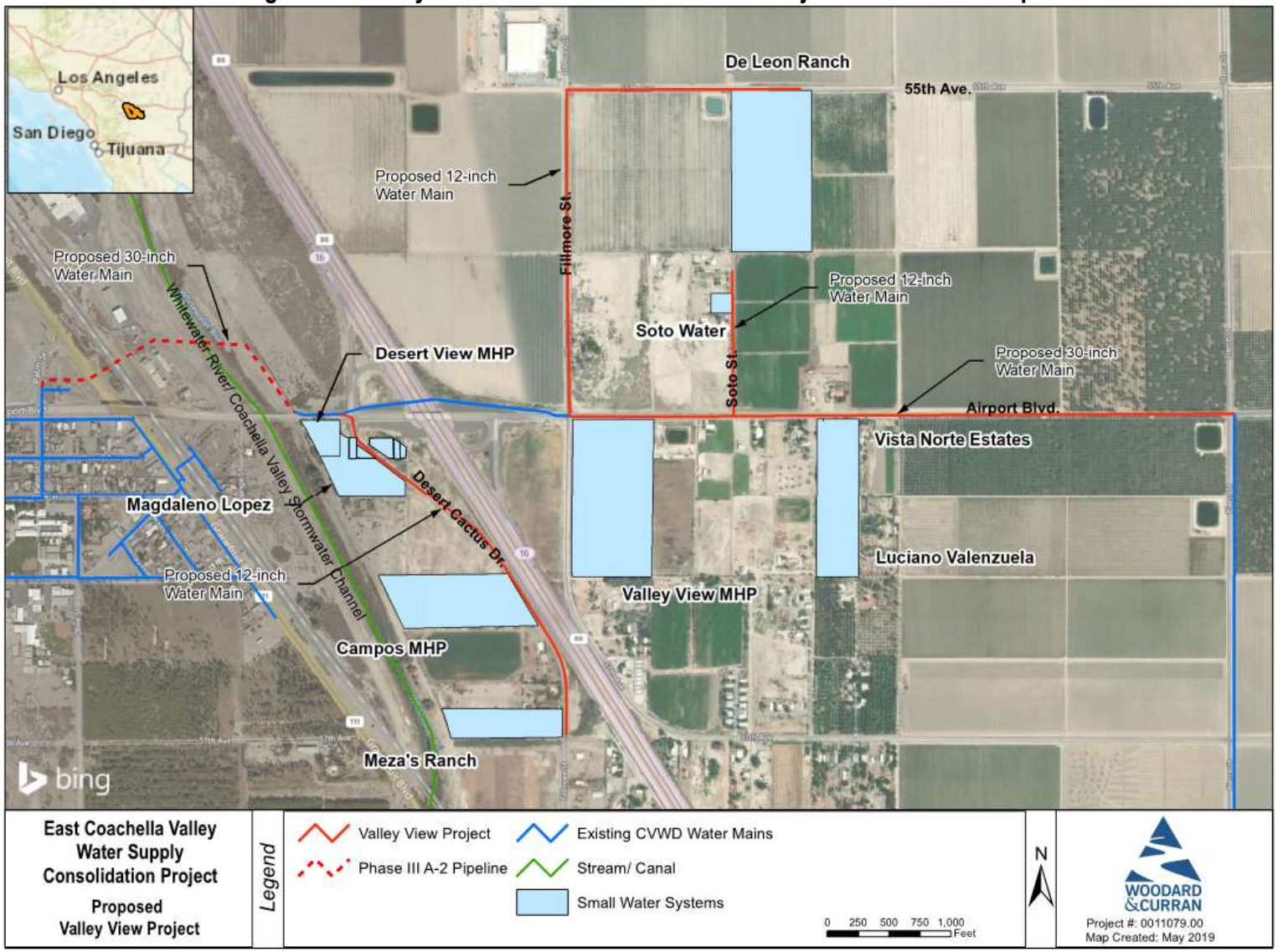
The objectives of the proposed project are twofold:

[1] The Disadvantaged Community Infrastructure Task Force is comprised of CVWD staff, CVWD Board members, non-profit organizations including Pueblo Unido Community Development Corporation, and DAC business owners and residents.

1. To improve the reliability, safety, and security of the water supply for rural DACs of the Valley View MHP Water Consolidation Project that are not currently connected to the CVWD potable water system; and

2. To implement a cost-effective, technically feasible, long-term water supply solution for the drinking water quality deficiencies identified in the existing small water systems of the Valley View MHP Water Consolidation Project.

Figure 2-1: Valley View MHP Water Consolidation Project Site Location Map



2.2 Environmental Setting

The proposed project is located in the eastern portion of the greater Coachella Valley within Riverside County, California near the community of Thermal. Highway 86 cuts through the project area at Airport Boulevard. The project area is south of Avenue 55, west of Pierce Street, north of Avenue 57, and east of State Route 111/Grapefruit Boulevard, as shown on **Figure 2-2.** The County land use and zoning designations are summarized in **Table 2-1**.

The eastern portion of the Coachella Valley is located at the northern end of the Salton Sea; California's largest lake. 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. The project area is located in the Coachella Valley region of the Salton Sea Air Basin, and it is located in the Whitewater River Watershed. The area encompasses rural desert communities, agricultural production, and the Jacqueline Cochran Regional Airport. The Torres-Martinez Desert Cahuilla Indians Reservation occupies significant portions of the southwestern eastern Coachella Valley. This reservation is designated in a checkerboard pattern extending south from Avenue 62 on through to the Riverside County border into Imperial County (County of Riverside 2016).

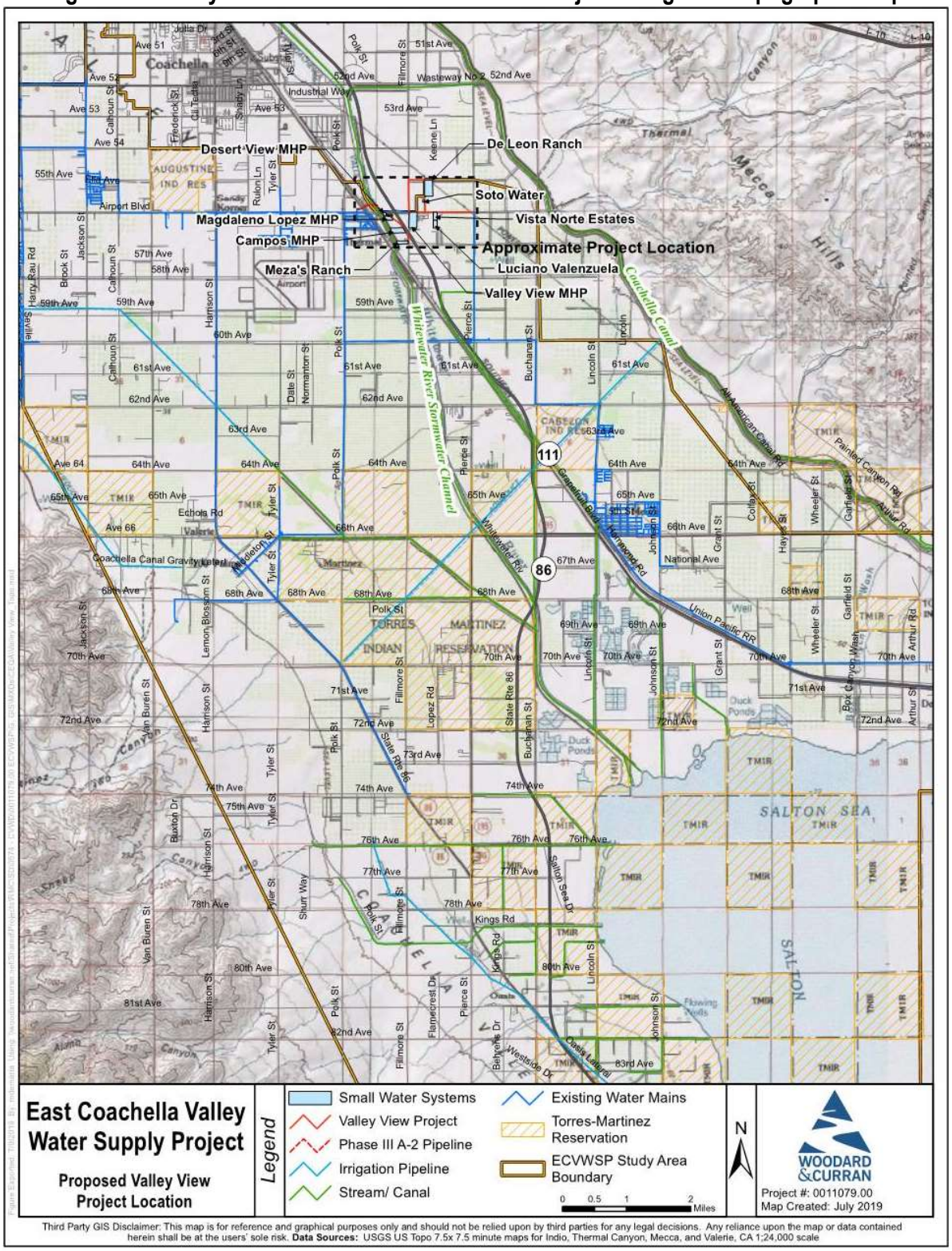
The community of Thermal is located west of State Route 111, south of the City of Coachella, and contains light industrial uses as well as some residential and commercial uses. The Riverside County-owned Jacqueline Cochran Regional Airport is located in the westerly part of Thermal and the airport's 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).

State Route 111 and Highway 86 are the main north-south connector routes within the eastern 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 State Route 195 near Mecca, approximately six miles south of the proposed project site, 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 Highway 86, approximately four miles north of the proposed project, is a County-eligible Scenic Highway. The CV-Link multi-modal transportation trail is planned to be built near the Airport Boulevard bridge where it crosses the Whitewater River/Coachella Valley Stormwater Channel, at the western edge of the proposed project, and a CV-Link connector route would be provided to the core of Thermal, adjacent to the northern edge of Thermal Town Center. Once constructed, the CV-Link would be located near Desert View MHP (County of Riverside 2016). The project site is served by a Class I bike path on Avenue 66 and a regional trail located along the Whitewater River/ Coachella Valley Stormwater Channel, according to Figure 9 in the 2016 Riverside County Eastern Coachella Valley Area Plan (County of Riverside 2016) (see **F**).

The *Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan* (CVMSHCP) is a comprehensive multiple species habitat conservation planning program that addresses multiple species needs, including habitat and the preservation of natural communities in the Coachella Valley area of Riverside County. The proposed project is not located within or adjacent to a conservation area associated with 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).

Figure 2-2: Valley View MHP Water Consolidation Project – Regional Topographic Map



The eastern Coachella Valley is traversed by the San Andreas fault, an active fault with a significant probability of earthquake activity; the proposed project is located in an area of high liquefaction susceptibility. A large 100-year floodplain extends southerly from Thermal to the Salton Sea, approximately six miles southwest of the proposed project; another flood hazard area is located approximately three miles east of the proposed project. The desert and mountainous region in the northeastern area of the East Coachella Valley, roughly three miles east of the proposed project, has a high and very high wildfire susceptibility; however, the wildfire susceptibility is moderate to low in the valley (County of Riverside 2016).

2.3 Existing Facilities and Conditions

The proposed project consists of nine privately owned SWSs: Campos MHP, De Leon Ranch, Desert View MHP, Luciano Valenzuela, Magdaleno Lopez, Meza's Ranch, Soto Water, Valley View MHP, and Vista Norte Estates. Detailed descriptions of the existing facilities, conditions, and water quality for each SWS are provided below. The existing potable water supply for the nine SWSs consists of local groundwater supplied by privately-owned groundwater wells. The SWSs do not have access to surface water or municipal water supplies; there are no alternate potable water sources available in the event that the operation of the potable wells is interrupted.

The systems for Luciano Valenzuela, Vista Norte Estates, Magdaleno Lopez, Campos MHP, Meza's Ranch, De Leon Ranch, and Soto Water are operated and maintained by the property owners. The systems for Valley View MHP and Desert View MHP are maintained and operated by a D1/T1 operator.

The capacity of the supply wells for each SWS is unknown, as pump curves, well development reports, and flow metering records are not available. Leakage in the pipelines of each SWS is not known because well discharge flow for each system is not metered.

The County of Riverside requires the SWSs to have a minimum fire suppression storage capacity of 15,000 gallons for emergency conditions. Campos MHP, Luciano Valenzuela MHP, and Vista Norte Estates meet the current County requirement for emergency storage and have enough emergency storage capacity to meet the anticipated maximum emergency daily demand for the system. De Leon Ranch, Desert View MHP, Magdaleno Lopez, Meza's Ranch, Soto Water, and Valley View MHP SWSs do not have emergency storage capacity.

Existing site conditions were evaluated during site visits on December 6 and 7, 2018 and February 12, 2019. In addition, County of Riverside DEH inspection reports were reviewed to understand existing site conditions and the reports are summarized herein.

Table 2-2 summarizes the existing service connections and estimated population associated with the proposed project, as well as an estimate of water supply capacity in terms of maximum daily water demand.

Table 2-2: Valley View MHP Project Connections

Small Water System	Existing Service Connections	Estimated Population[1]	Estimated Max. Day Demand (gpm)[2]
Campos MHP	14	56	7.56
De Leon Ranch	13	52	7.02
Desert View MHP	22	88	11.88
Luciano Valenzuela MHP	13	52	7.02
Magdaleno Lopez	6	24	3.24
Meza's Ranch	12	48	6.48
Soto Water	8	32	4.32
Valley View MHP	42	168	22.68
Vista Norte Estates	13	52	7.02
Total	**143**	**572**	**77.31**

1. Assumes 4 persons per service connection.
2. Assumes a max day demand of 0.54 gallons per minute (gpm)/unit

Further details on the existing facilities and conditions at each SWS can be found in *Sections 2.4.2.1* through *2.4.2.9*, below.

2.4 Proposed Project Description

A layout map showing the location of the proposed project system components is presented in **Figure 2-1**. New infrastructure for the proposed project would consist of the following, which are described in more detail in the following sections (*Sections 2.4.1* through *2.4.2.7*):

- 30-inch diameter water main along Airport Boulevard that would connect to the existing 18-inch diameter water main on Pierce Street.
- 12-inch diameter water mains in Soto Street, Fillmore Street, 55th Avenue, and Desert Cactus Drive connecting to the 30-inch water main along Airport Boulevard.
- 1-inch and 2-inch diameter service laterals. These would connect to the proposed 30-inch and 12-inch diameter water mains in Airport Boulevard, Soto Street, Avenue 55, and Desert Cactus Drive and would extend to the property boundaries of each SWS.
- On-property pipelines to complete service to the existing SWSs. These pipelines would connect the 1-inch and 2-inch diameter laterals to the existing potable distribution system at each SWS.
- 6-inch diameter piping connecting from the proposed water mains to fire hydrants or backflow preventors to provide fire service to each SWS. Fire hydrants would be located in accordance with CVWD and Riverside County Fire Department standards.

The Valley View MHP Consolidation Project Preliminary Engineering Report (PER; CVWD 2019) also includes a 30-inch water main that would connect to the existing CVWD water main on Palm Street and continue east under Highway 111 and the Whitewater River/Coachella Valley Stormwater Channel to Airport Boulevard. The diameter would increase to 32-inches for the portion of the pipe crossing under Highway 111 and the Whitewater River/Coachella Valley Stormwater Channel. This segment is not a part of the proposed project covered under this IS/MND.

A summary of the pipeline components is presented in **Table 2-3.** Overall, the project would construct approximately 5,400 linear feet of 30-inch pipeline, 9,100 linear feet of 12-inch pipeline, 1,100 linear feet of 1-inch and 2-inch water

service lines, 2,300 linear feet of 6-inch ductile iron pipe (DIP) fire service lines, and 1,500 linear feet of on-property 1-inch and 2-inch diameter pipelines, for a total of approximately 19,500 linear feet of pipeline.

The domestic water pipeline would deliver 118 acre-feet per year (AFY) of potable water to meet a maximum day demand of 72.9 gallons per minute (gpm). The pipelines would be installed at depths of five to six feet below ground surface with a width of three to five feet. Service laterals would be installed at depths of approximately five feet, with a width of three to four feet. Fire service lines would be installed at depths of approximately four feet, with a width of three to five feet. The proposed project infrastructure is described in further detail below.

Table 2-3: Valley View MHP SWS Consolidation Project Summary

Small Water System	Water Main 30-inch diameter Pipeline Length (ft)	Water Main 12-inch diameter Pipeline Length (ft)	Water Service Lines 1- and 2-inch diameter Pipeline Length (ft)	Fire Service Lines 6-inch diameter Pipeline Length (ft)	On-Property Water Service Lines 1- and 2-inch diameter Pipeline Length (ft)	Additional Components
Water Main	5,400	9,100	--		--	
Campos MHP		--	33	218	97	Two water meters, one fire hydrant
De Leon Ranch		--	49	42	24	Two pairs of water meters, two fire hydrants
Desert View MHP		--	33	26	117	One pair of water meters, one fire hydrant
Luciano Valenzuela MHP		--	654	816	281	One pair of water meters, one fire hydrant
Magdaleno Lopez		--	120	29	105	One pair of water meters, four individual meters, two fire hydrants
Meza's Ranch		--	30	610	305	One water meter, two fire hydrants
Soto Water		--	88	42	364	Four pairs of water meters, two fire hydrants
Valley View MHP		--	38	66	141	One pair of water meters, two fire hydrants
Vista Norte Estates		--	33	444	59	One pair of water meters, two fire hydrants
Total	**5,400**	**9,100**	**1,100**	**2,300**	**1,500**	

2.4.1 Water Main

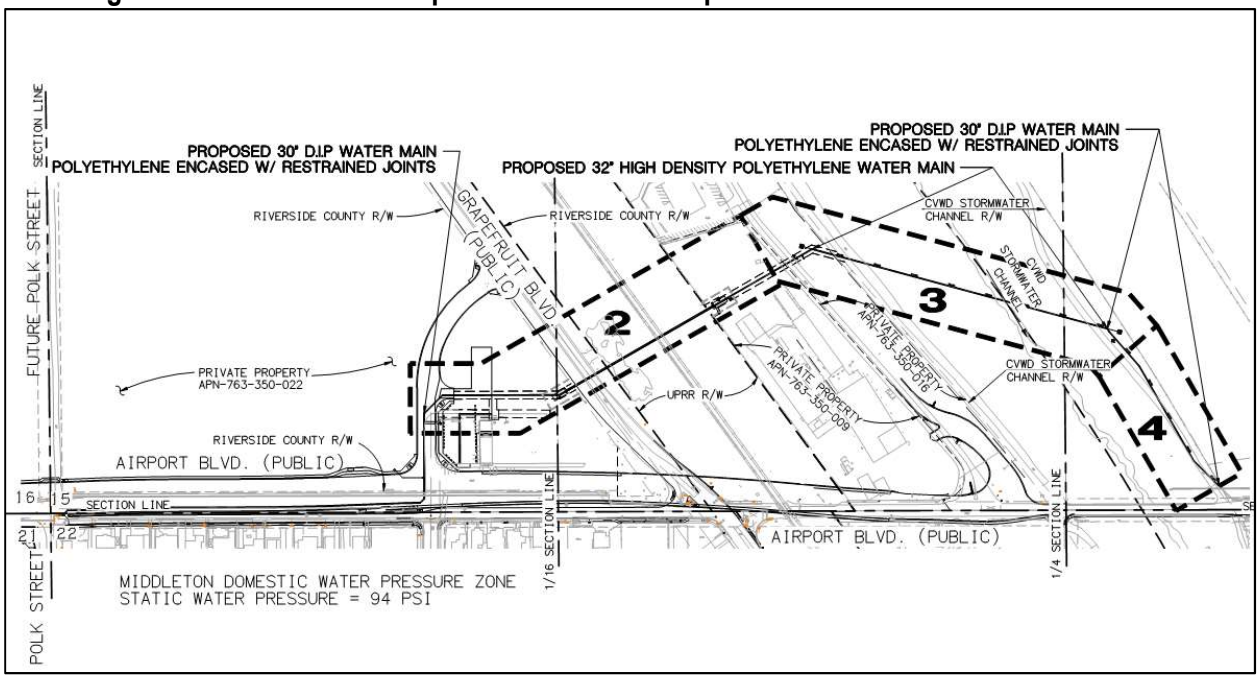
The proposed 30-inch water main on Airport Boulevard and proposed 12-inch water mains on Soto Street, Fillmore Street, Avenue 55, and Desert Cactus Drive would be ductile iron potable water pipeline with a length of approximately 2.75 miles. To the east, the proposed 30-inch main in Airport Boulevard would connect to the existing CVWD water system in Pierce Street. The alignment would continue west along Airport Boulevard and terminate at the existing 30-inch crossing on Airport Boulevard. The pipeline would cross underneath Highway 86 until it reached Desert Cactus Drive where it would continue north. The pipe would be placed five feet from the sidewalk in the west and north bound lanes to allow for one lane to remain open during construction. The 12-inch water mains would branch off the proposed 30-inch pipeline at Fillmore Street and Soto Street. The 12-inch main in Fillmore Street would extend north for one-half mile until it reached 55th Avenue where it would continue east, terminating at the De Leon Ranch SWS. On the west side of the existing 30-inch pipeline that crosses Highway 86, the proposed 12-inch water main would continue south along Desert Cactus Drive, where it would terminate at the Meza's Ranch SWS. The pipe would be constructed approximately five feet from the sidewalk in the west and north bound lanes to allow for one lane to remain open during construction. Final alignment within the roadway is pending utility research, survey, and mapping. The overall water main alignment is shown in **Figure 2-1**.

The following assumptions were made for the water main:

- 30-inch pipe would be Class 250 ductile iron zinc-coated pipe with restrained type joints and polyethylene encasement (US Pipe TR Flex or equal) or may be C-905 PVC pipe depending on a corrosion investigation.
- 12-inch pipe would be Class 350 restrained ductile iron pipe with restrained type joints (US Pipe TR Flex or equal), or may be C-905 PVC pipe depending on a corrosion investigation. The use of restrained joint ductile iron piping and stated pressure rating are in accordance with CVWD requirements for new pipe installation.
- The ductile iron pipeline installed would be wrapped in polyethylene encasement. Additional corrosion protection may be required in certain areas; therefore, an allowance is provided for additional corrosion protection measures. Corrosion areas would be identified during final design for all pipelines and included in the construction bid documents. Geotechnical data and corrosivity data would be provided during the pipeline design process to identify where additional protection measures would be needed.
- The new potable pipelines in the proposed project would connect to the east at the existing CVWD 18-inch ductile iron pipeline that runs along Pierce Street where Pierce Street intersects with Airport Boulevard. The 18-inch pipeline will be hot tapped to allow the connection at this location.
- The new potable pipelines in the proposed project would connect to the west at the existing CVWD 30-inch ductile iron pipeline at Palm Street. The 30-inch pipeline would be hot tapped to allow the connection at this location.

The existing 30-inch CVWD pipeline that runs along Airport Boulevard from the east bank of the Whitewater River/Coachella Valley Stormwater Channel to Fillmore Street is a dry pipe (it is already installed underground, but not currently carrying water). It would connect to the CVWD system through the proposed Airport Boulevard Transmission Main Phase III A-2 pipeline to the west and the proposed 30-inch pipeline on Airport Boulevard at Fillmore Street to the east. From the east bank of the Whitewater River/Coachella Valley Stormwater Channel, the Airport Boulevard Transmission Main Phase III A-2 pipeline is a 30-inch, 2,460 linear-foot pipe that would cross under the Whitewater River/Coachella Valley Stormwater Channel and Highway 111 using trenchless installation and connect to the existing CVWD water main on Palm Street. The proposed alignment for this section of pipeline is preliminary and may be altered as right-of-way is acquired. This section of the proposed alignment is shown on **Figure 2-3**. However, this segment is not a part of the proposed project covered under this IS/MND.

Figure 2-3: Water Main - Proposed Phase III A-2 Pipeline and Connection at Palm Street



2.4.2 Service Laterals and On-Property Piping and Fire Service

Fifteen 1-inch diameter and two 2-inch diameter laterals would connect to the proposed 30-inch pipeline along Airport Boulevard and 12-inch pipeline along Soto Street, Fillmore Street, 55th Avenue, and Desert Cactus Drive to provide service to the Campos, De Leon Ranch, Desert View MHP, Magdaleno Lopez, Meza's Ranch, Soto Water, Valley View MHP, and Vista Norte Estates SWSs. Service laterals would be brought up to each SWS property boundary where a pair of CVWD master meters would be installed at locations that serve multiple connections or a single CVWD master meter at locations that serve one connection. Once on property, piping would be reduced in diameter to match the existing distribution system piping. New piping would be extended from the property boundary to the location of the existing well discharge piping, where it would connect to the existing SWS. Overall, approximately 1,500 feet of piping is proposed on the SWS properties (see **Table 2-3**); however, less may be required because some of the existing onsite piping is relatively new and may not need to be replaced. Requirements specific to each SWS are presented in detail below.

The following assumptions were made for the service laterals and on-property piping:

- The copper pipeline installed would be soft type-K. The use of copper pipe is in accordance with CVWD requirements for new water service pipe installation.
- Small diameter on-property piping would be Schedule 80 PVC pipe. The use on PVC pipe on-property is intended to match the pipe material for the existing infrastructure already in place.

Finally, modifications to the existing onsite SWSs may include removal of some existing infrastructure (e.g., tanks, pipelines, connections) and demolition of the wells. Wells that are currently used to support an existing agriculture operation may remain if exempted by the Riverside County DEH, determined on a case-by-case basis.

2.4.2.1 Campos Mobile Home Park

Existing Conditions

The Campos MHP SWS serves a small mobile home park with a total of 14 service connections. The water source for this system is a well of unknown depth. The distribution system consists of 2-inch PVC main line and 1-inch lateral service lines to individual sites. The well has a five horsepower (hp) submersible pump which delivers water to four pressure tanks prior to distribution to residents. A separate fire suppression system consists of 4-inch PVC piping and hydrants connected to a fire storage tank with a capacity of 15,000 gallons. The fire storage tank is fed from the water system via an air gap at the top of the tank for backflow prevention. An overview of the SWS is shown in **Figure 2-4.**

The Campos MHP SWS is of unknown age but was installed prior to December 2013 per the DEH inspection report. The water system is in working condition, per the owner. A fire suppression storage tank is adjacent to the well shed that houses the four pressure tanks, well and pump. The fire suppression storage tank is of unknown age but is in working condition and shows little sign of corrosion. The well shed appears to be in working condition and does an adequate job of housing the well equipment. The pressure tanks of unknown age are housed inside the well shed and appear to be in working condition. However, some of the equipment shows signs of minor surface corrosion.

The well was tested for inorganic chemicals in April 2008. All chemicals met MCL standards except fluoride; fluoride measured 4.0 mg/l which exceeds the State MCL of 2.0 mg/L and federal MCL of 4.0 mg/L. In December 2013, 14 individuals, under the counter WM-50 Water Makers were installed for fluoride removal. Additional testing of the well water in December 2017 found fluoride at a concentration of 5.0 mg/L, which is above both State and federal MCL. Concurrently with the December 2017 sampling, the owner sampled each under the counter treatment units for fluoride. Results were below the 2.0 mg/L MCL for fluoride. MCLs were met for all other regulated constituents.

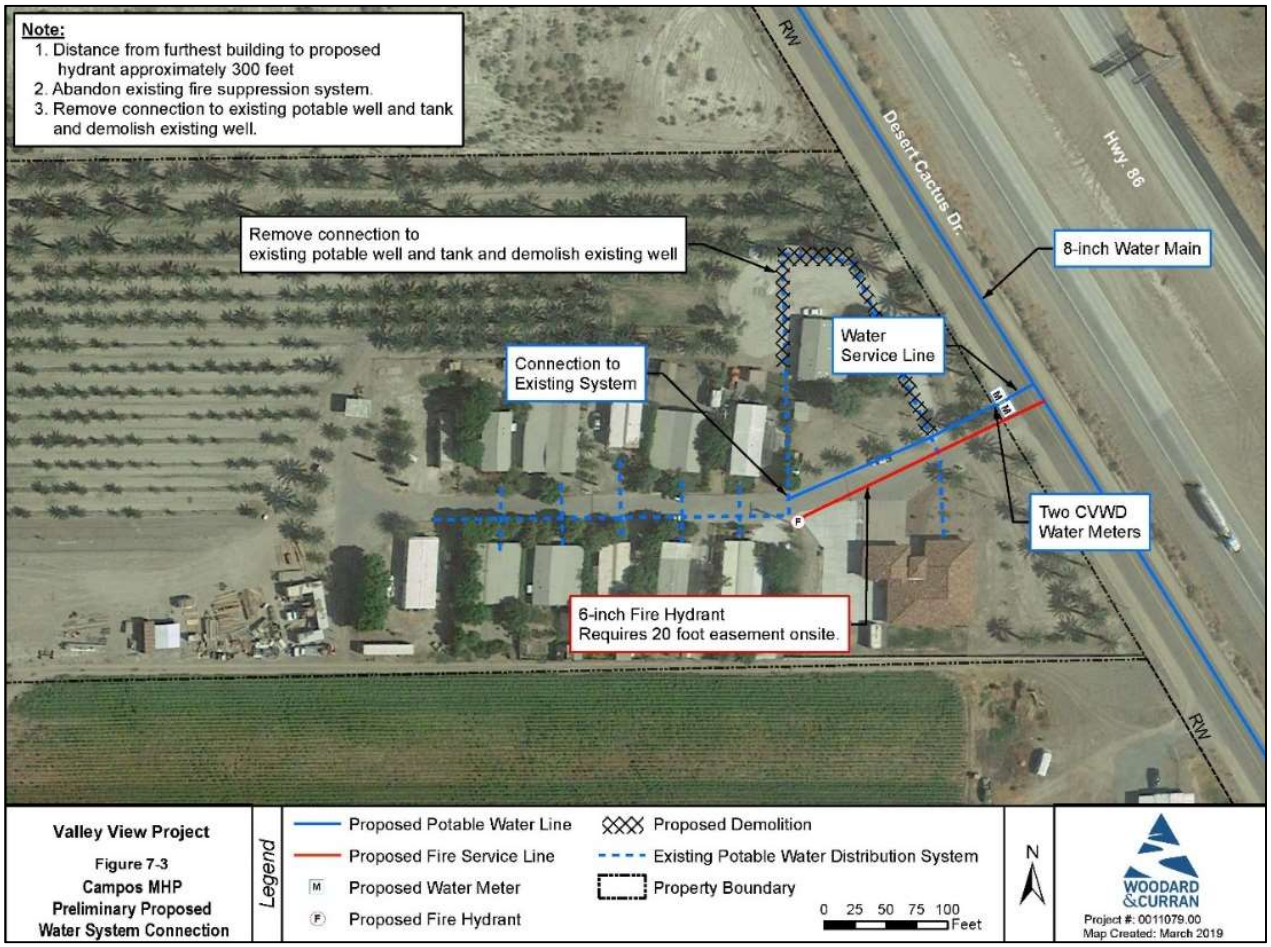
Proposed Project

Approximately 33 linear feet of 1-inch diameter water service lateral would be needed to connect from the proposed 12-inch water main along Desert Cactus Drive to the Campos SWS at the eastern parcel boundary, as shown in **Figure 2-5.** The water service lateral would extend to two ¾-inch CVWD water meters to be installed at the property line and then connect through 97 feet of 2-inch pipe to the existing potable water system near the existing well.

Approximately 218 linear feet of 6-inch ductile iron pipe (DIP) would tee off of the 12-inch water main and extend to a fire hydrant located on the SWS property. This would require a 20-foot wide easement extending the length of the fire service to provide access for maintenance.

Figure 2-4: Campos Mobile Home Park Existing Facilities

Figure 2-5: Campos Mobile Home Park Proposed Point of Connection



2.4.2.2 De Leon Ranch

Existing Conditions

The De Leon Ranch SWS serves a labor camp with 13 dwellings. The source for this system is a 12-inch diameter, 645 ft deep well with a 1.5 hp pump. The well pumps to a 1,000-gallon pressure tank and then out to the distribution system of unknown material and diameter. There are two above grade auxiliary pumps that can pump to the 1,500-gallon pressure tank on an as-needed basis. Existing irrigation piping of unknown material and diameter is present, but the system has been disconnected. There is no fire suppression infrastructure at this SWS. An overview of the SWS is shown in **Figure 2-6**.

Concentrations of fluoride and arsenic in the source potable water have been issues as both have historically exceeded the state MCL for each (2 mg/L MCL for fluoride and 10 ug/L MCL for arsenic). A Culligan Reverse Osmosis (RO) unit was installed in 2008 to address these constituents. The treatment system is located in a covered patio of the owner's house. There is an approximately 80-gallon storage tank in the water heater closet that stores treated water after the RO unit. There is a public access tap located in a sealed cabinet outside the owner's house which serves as a walk-up fill station for residents to obtain safe drinking water. In addition to the RO treatment system, a DEH approved chlorination system using approved liquid chlorine was installed in August 2011. This system was installed in response multiple violations for total coliform in the water system. The De Leon Ranch SWS is of unknown age but was installed prior to 2008 per the DEH inspection report. The existing conditions of the De Leon Ranch were not evaluated during the December 7, 2018 site visit because staff were not able to contact the owner for permissions to access the property. However, a pressure tank of unknown age and condition is visible from 55th Avenue. The water distribution system is in working condition, per the DEH April 2017 inspection report. The well is located behind the pressure tank and shows signs of minor corrosion.

The well was sampled for inorganic chemicals in March 2010. Measured constituents were within normal ranges except for fluoride and arsenic. Fluoride measured 5.4 mg/L which is above the State MCL of 2.0 mg/L and federal MCL of 4.0 mg/L. Arsenic measured 16 µg/L which is above the MCL of 10 µg/L. Fluoride and arsenic were measured again in October 2016 and exceeded the MCLs measured at 2.9 mg/L and 11 µg/L, respectively. Arsenic was then measured in January 2017 at 11 µg/L, again exceeding the MCL.

A Culligan RO unit was installed in 2008 to treat both fluoride and arsenic. Quarterly sampling of the treated water for the year 2016 was received except for 3rd quarter. Results from the 1st, 2nd and 4th quarters showed non-detect for arsenic and fluoride. Treated water sampling for the 1st quarter 2017 has also been completed and results showed non-detect for both arsenic and fluoride. The well water system has also historically experienced multiple positive test results for total coliform. To address this issue, an approved chlorination system using approved liquid chlorine was installed in August 2011. At the time of DEH inspection, the chlorine residual in the system measured 1.4 mg/L. Sampling from 1st through 4th quarter 2016 tested negative for both total coliform and E. coli in the well, distribution system, and the treatment station.

Proposed Project

Approximately 49 linear feet of 1-inch diameter water service lateral would be needed to connect from the proposed 12-inch water main extended along Soto Street to the De Leon Ranch SWS at the western parcel boundary, as shown in **Figure 2-7**. The water service lateral would extend from two locations to two pairs of ¾-inch CVWD water meters to be installed at the property line. The first lateral would connect through 12 feet of 2-inch pipe to the existing potable water system near the eastern side of the SWS. The second connection point would require 12 feet of 2-inch pipe and connect just west of the center of the property to the existing system. Approximately 42 linear feet of 6-inch DIP and a hydrant assembly would tee off of the 12-inch water main at two locations shown in **Figure 2-7**.

Figure 2-6: De Leon Ranch Existing Facilities

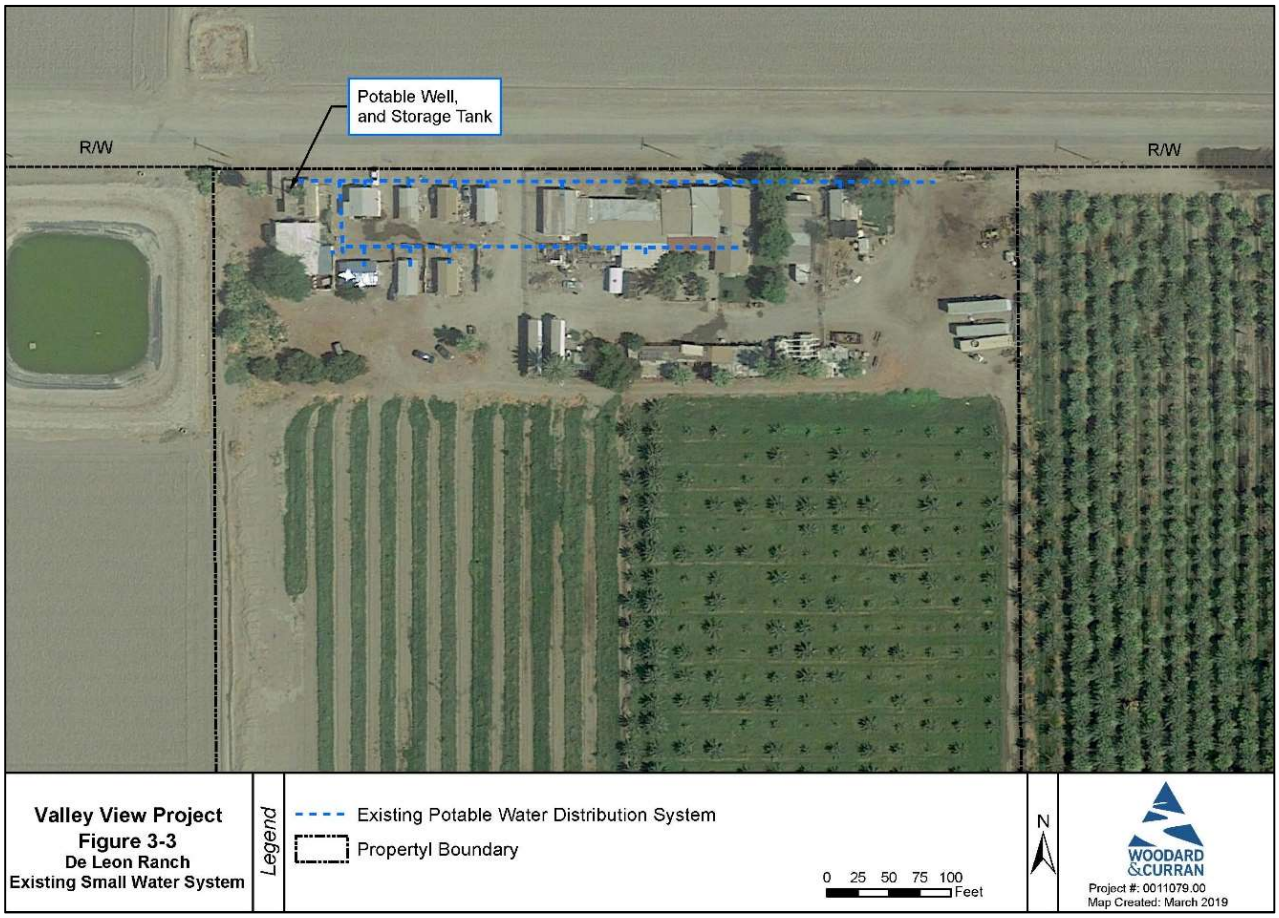
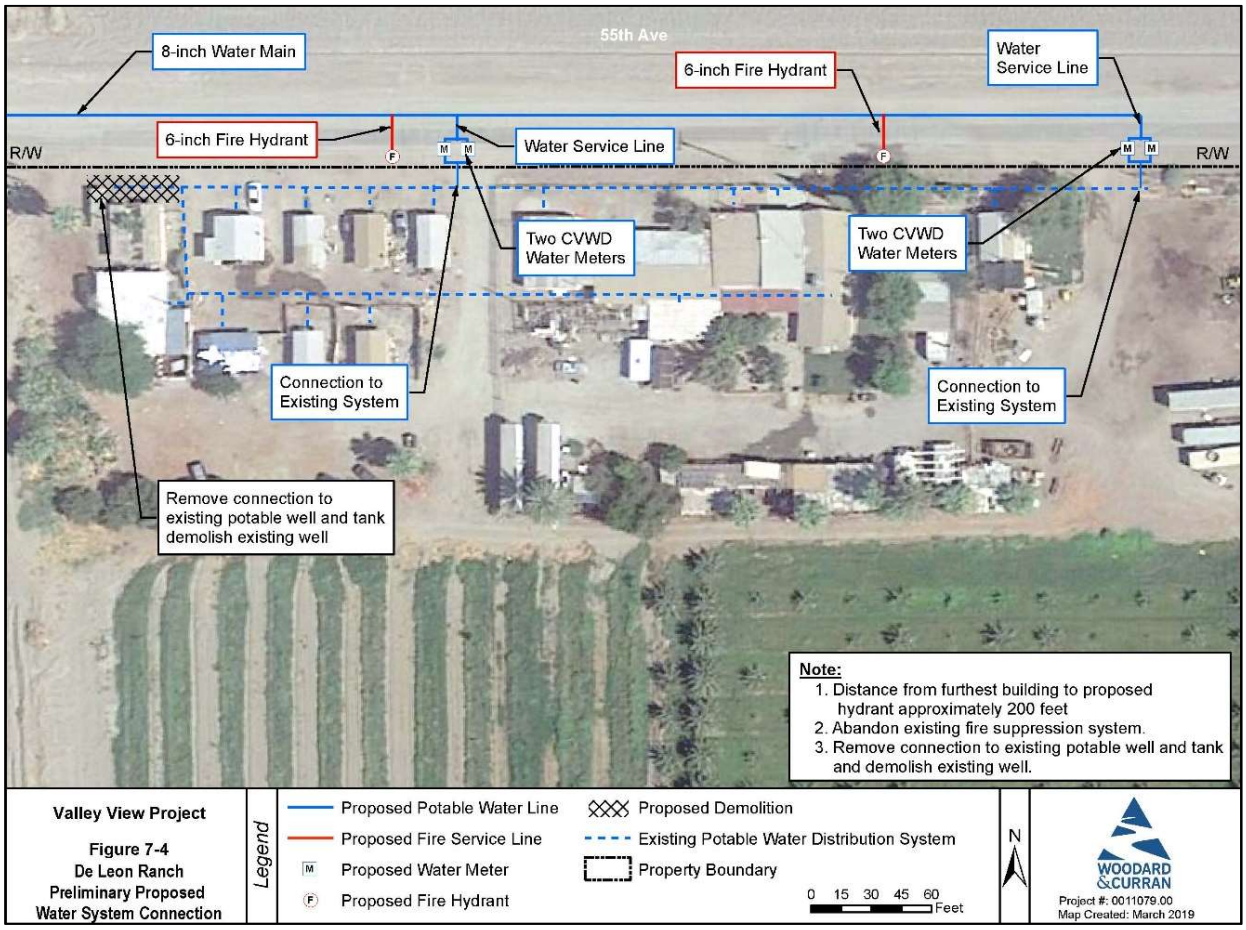


Figure 2-7: De Leon Ranch Proposed Point of Connection



2.4.2.3 Desert View Mobile Home Park

Existing Conditions

The Desert View MHP is a community water system serving a mobile home park with 22 service connections. The water source for this system is a deep well with a submersible pump which conveys water to a 1,200-gallon pressure tank and then to the distribution system. The distribution system consists of galvanized and PVC pipe ranging between 1-inch to 2-inch in diameter. There is no separate piping or storage for irrigation. The well is located on the adjacent property located to the south. There is no fire suppression infrastructure at this SWS. There is no treatment on site. An overview of the SWS is shown in **Figure 2-8**.

The Desert View MHP SWS is of unknown age but was installed prior to 2009 per the DEH inspection report. The SWS is in working condition, per the owner. The pressure tank is of unknown age and shows signs of wear. The level of corrosion could not be accurately assessed. The fencing surrounding the well and pump equipment is made of several different types of material and does not provide a high level of security. The supply well for the Desert View MHP is not located within the property boundary; it is located approximately 80 feet south of the pressure tank on the parcel immediately to the south. The owner of the property to the south freely grants access to the Desert View MHP owner and designated personnel on an as-requested basis to allow maintenance and servicing of the well equipment.

The well was tested for inorganic chemicals in April 2012; results were within standards. Arsenic measured 5.7 µg/L (MCL= 10 µg/L) and fluoride measured 1.9 mg/L (MCL=2.0 mg/L). Due to past fluoride results, fluoride has been sampled quarterly. The most recent results had a running annual average (RAA) of 1.3 mg/L. Due to one past arsenic result of 32 µg/L in 2008, the well has been sampled for arsenic periodically. The RAA from 2010-2011 was 6.125 µg/L. Results since 2008, including the most recent in April 2012, have been below 7.0 µg/L. The well is currently on a three year sampling schedule for arsenic. All other regulated constituents (hexavalent chromium, nitrate, perchlorate, Volatile Organic Chemicals (VOC's)) have met MCLs.

Proposed Project

Approximately 33 linear feet of 2-inch diameter water service lateral would be needed to connect from the proposed 30-inch water main along Airport Boulevard to the Desert View MHP SWS at the northern parcel boundary, as shown in **Figure 2-9**. The water service lateral would extend to a pair of ¾-inch CVWD water meters to be installed at the property line and then connect through 117 feet of 2-inch pipe to the existing potable water system.

Approximately 26 linear feet of 6-inch DIP would tee off of the proposed 30-inch water main and extend to a fire hydrant located just short of the SWS boundary. This would not require an easement for maintenance.

Figure 2-8: Desert View Mobile Home Park Existing Facilities

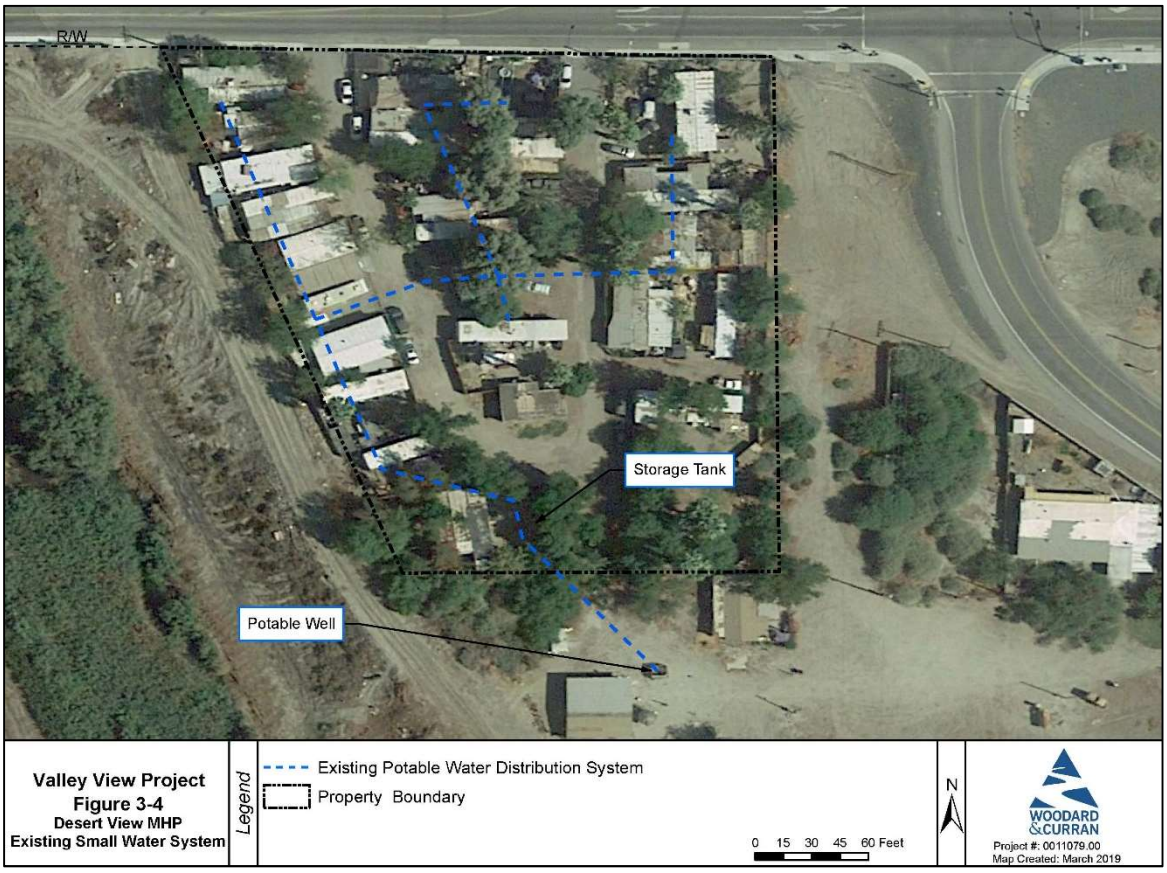
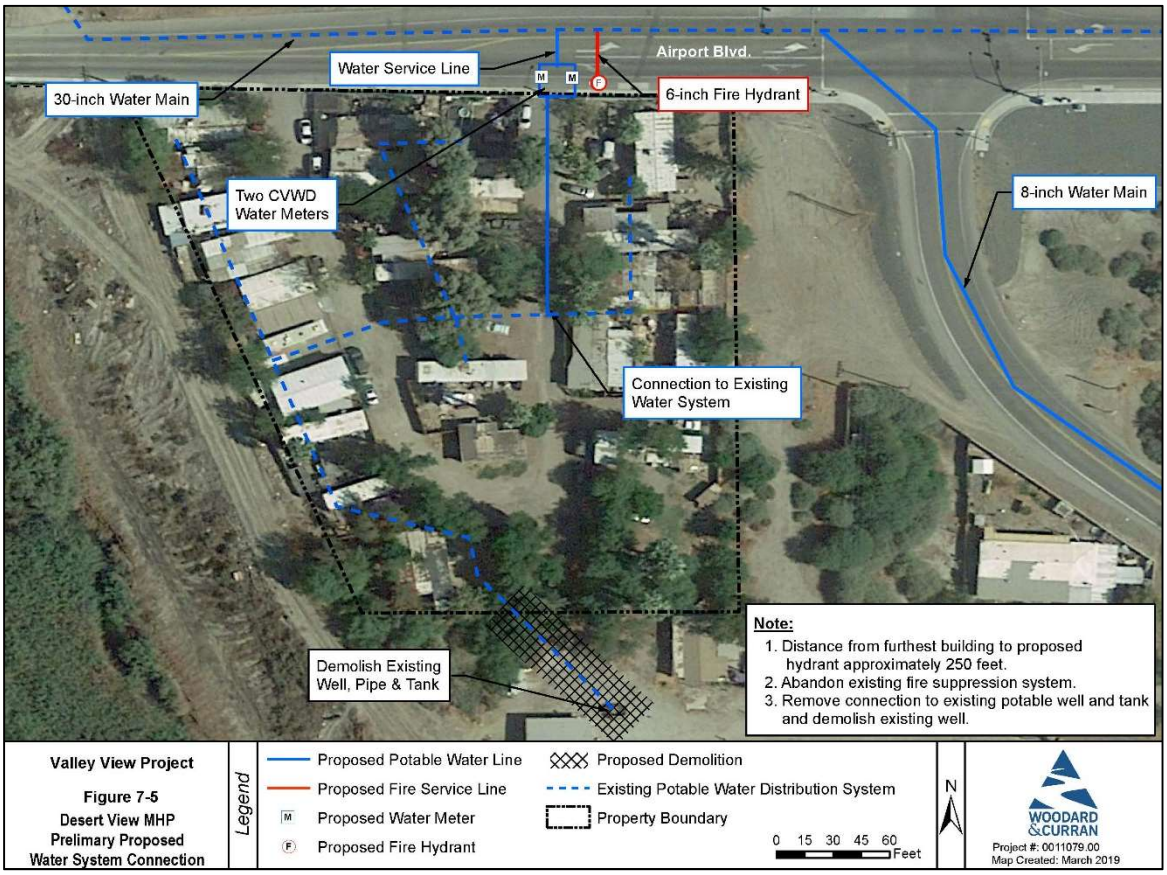


Figure 2-9: Desert View Mobile Home Park Proposed Point of Connection



2.4.2.4 Luciano Valenzuela Mobile Home Park

Existing Conditions

The Luciano Valenzuela SWS serves a mobile home park with 13 connections. The SWS receives water from a well of unknown depth. There is a line shaft vertical turbine well pump that supplies water to the potable water system and fire suppression systems. Two separate water lines of unknown material and diameter start from the well located in a well house. The water line for the fire suppression system conveys water to a 15,000-gallon tank and then to two fire hydrants. Conveyance method (i.e. pump or gravity) from the fire storage tank to the hydrant is unknown. A double check valve prevents fire suppression water from entering the distribution system. A second water line travels outside the well house to a 5,000-gallon storage tank and then is boosted to an upright 200-gallon pressure tank back inside the well house where it then delivers water to the distribution system. A second water line from the 200-gallon tank sends water through an RO system installed to treat for fluoride, as this constituent has historically exceeded the MCL of 2 mg/L. Treated water from the RO system is conveyed to an approximate 86-gallon tank that for storage. The treated water tank serves as a fill station for MHP residents to obtain drinking water. An overview of the existing infrastructure of the SWS is shown in **Figure 2-10**.

The Luciano Valenzuela SWS is of unknown age but was installed prior to 2004 per the DEH inspection report. The SWS is in working condition according to the owner. There is a well shed that houses tanks, the treatment system, pump and well. The equipment inside the shed is of unknown age, but the owner has indicated that it is functioning properly. The tanks and piping appear to be free of corrosion.

This system was sampled for inorganic chemicals in August 2004. Measured constituents were within normal ranges except fluoride. Fluoride measured 3.2 mg/L which is above the State MCL of 2.0 mg/L. A centralized RO treatment device was installed to remove fluoride. The most recent testing data from December 2017 indicated that the RO device was meeting all drinking water standards, including the MCL for fluoride. MCLs were met for all other regulated constituents.

Proposed Project

Approximately 654 linear feet of 1-inch diameter water service lateral along Filmore Street would be needed to connect from the proposed 30-inch water main on Airport Boulevard to the Luciano Valenzuela MHP SWS northern parcel boundary, as shown in **Figure 2-11**. A pair of three-quarter-inch CVWD water meters would be installed on the right-of-way of Airport Boulevard. At the SWS property line the 1-inch diameter pipe would expand to 2-inch PVC for 281 linear feet and connect to the existing SWS potable water infrastructure.

Approximately 816 linear feet of 6-inch DIP along Filmore Street would tee off of the proposed 30-inch water main on Airport Boulevard and extend to a fire hydrant located on the SWS property. This would require a 20-foot wide easement extending the length of the fire service to provide access for maintenance.

Figure 2-10: Luciano Valenzuela Mobile Home Park Existing Facilities

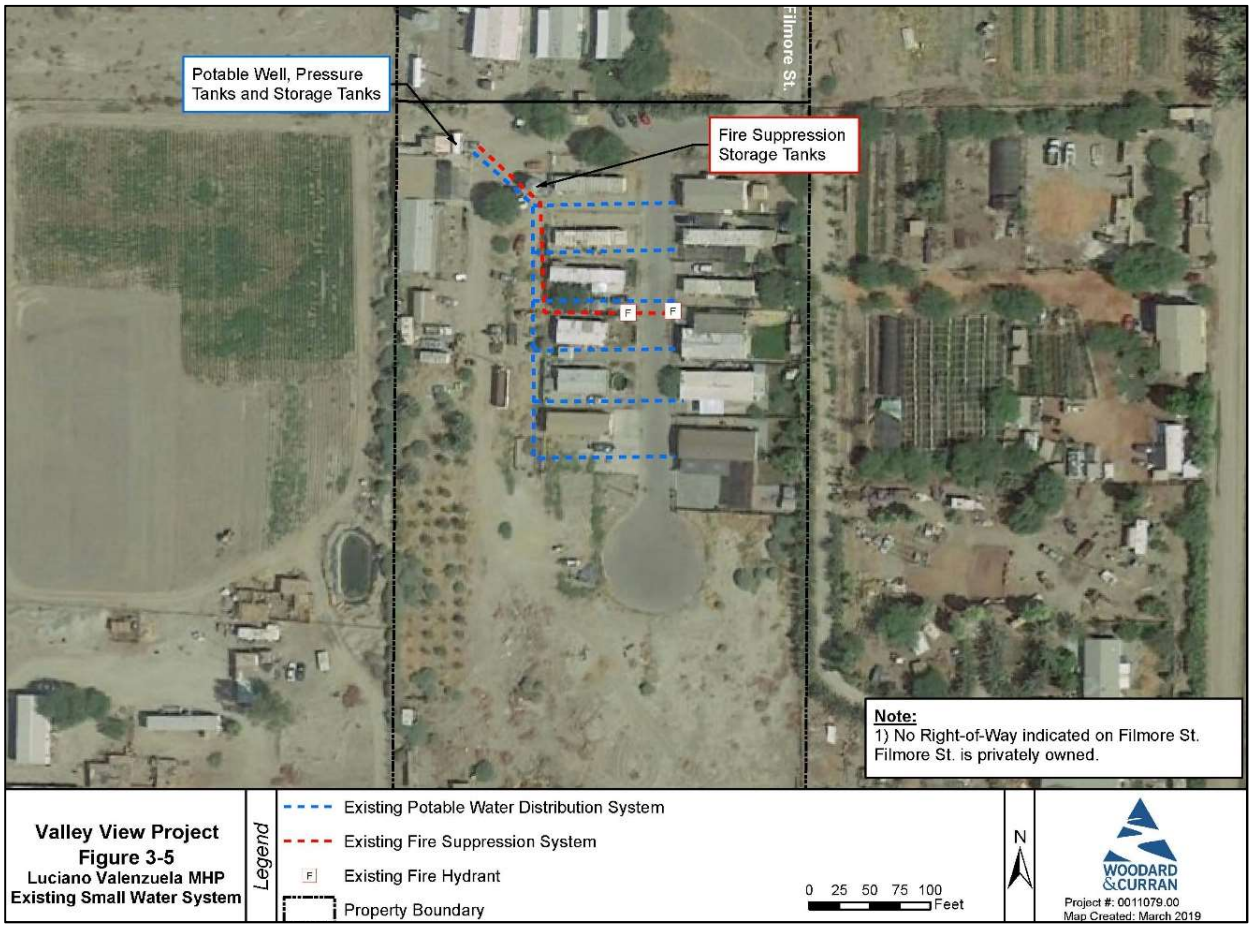
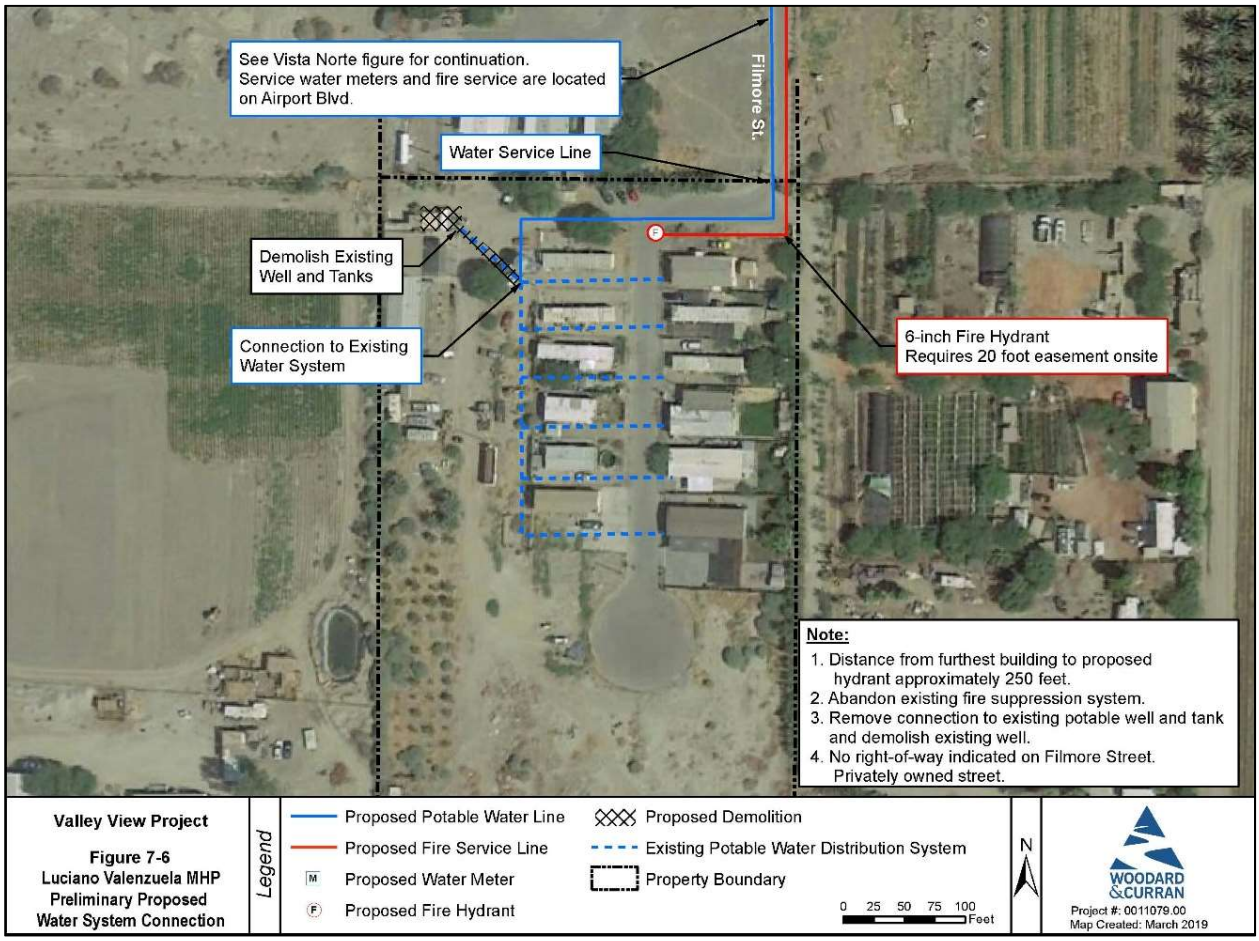


Figure 2-11: Luciano Valenzuela Mobile Home Park Proposed Point of Connection



2.4.2.5 Magdaleno Lopez

Existing Conditions

The Magdaleno Lopez SWS serves six residential connections. Three of the connections are on the west side of Desert Cactus Drive and three connections are on the east side of Desert Cactus Drive. The source for this system is a 350-ft deep, 5-inch diameter well that has a submersible pump which feeds a pressure tank (approximately 50 to 80 gallons). The tank discharges into the piping for the potable distribution system. Above ground piping appears to be 1¼-inch diameter galvanized steel, and below ground piping diameter and material are unknown. An abandoned tank is located next to the tank currently in use. The well system contains high fluoride levels and the well casing was observed to be deteriorating. There is no treatment on site and no fire suppression infrastructure. An overview of the SWS is shown in **Figure 2-12**.

The Magdaleno Lopez SWS well was constructed in 1993, per the DEH inspection report. The SWS is in working condition, per the owner. There is no housing for the well and supporting equipment. The pressure tank is less than five years old and shows little or no signs of corrosion. The well pump and associated piping are of unknown age but there is no evidence of corrosion.

Fluoride was measured in August 1992 and August 1993. The August 1993 fluoride sample exceeded the State MCL of 2.0 mg/L. The state SWSs are currently required to sample the well for inorganic chemicals, iron, manganese and chloride at least once. DEH records do not show sampling for these constituents.

Proposed Project

Approximately 120 linear feet of 1-inch diameter water service lateral would be needed to connect from the proposed 12-inch water main along Desert Cactus Drive to the Magdaleno Lopez SWS, as shown in **Figure 2-13**. The water service lateral would extend to the property line at five locations and would then connect through 105 feet of 2-inch PVC pipe to the existing potable water system. One pair of three-quarter-inch CVWD meters would be needed to serve two residences on the south west parcel and four individual ¾-inch CVWD meters would be needed to serve the four other residences.

Approximately 29 linear feet of 6-inch DIP would tee off of the proposed 12-inch water main on Desert Cactus Drive at two locations and extend to two fire hydrants located just short of the SWS boundary. This would not require an easement for maintenance.

Figure 2-12: Magdaleno Lopez Existing Facilities

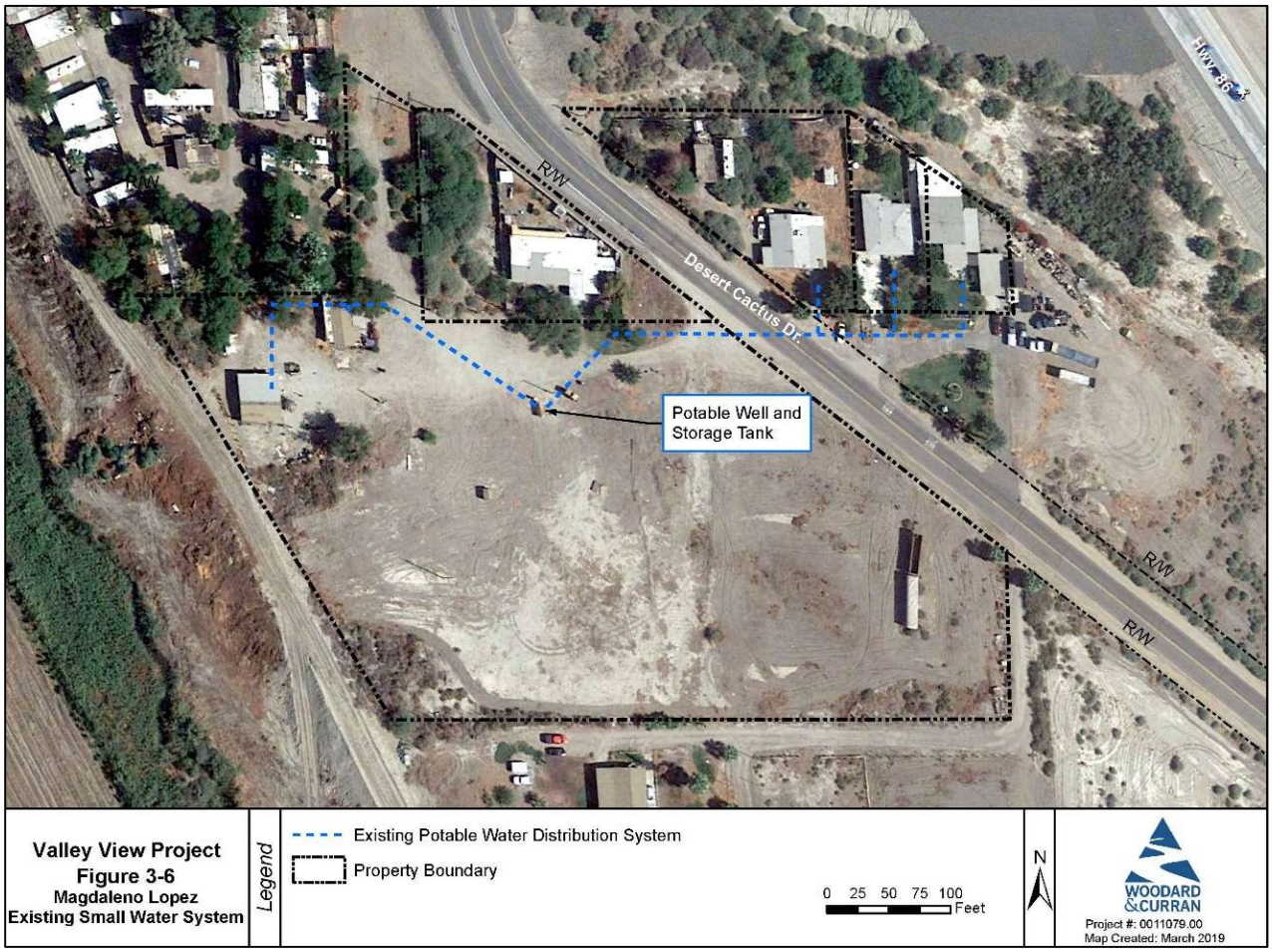
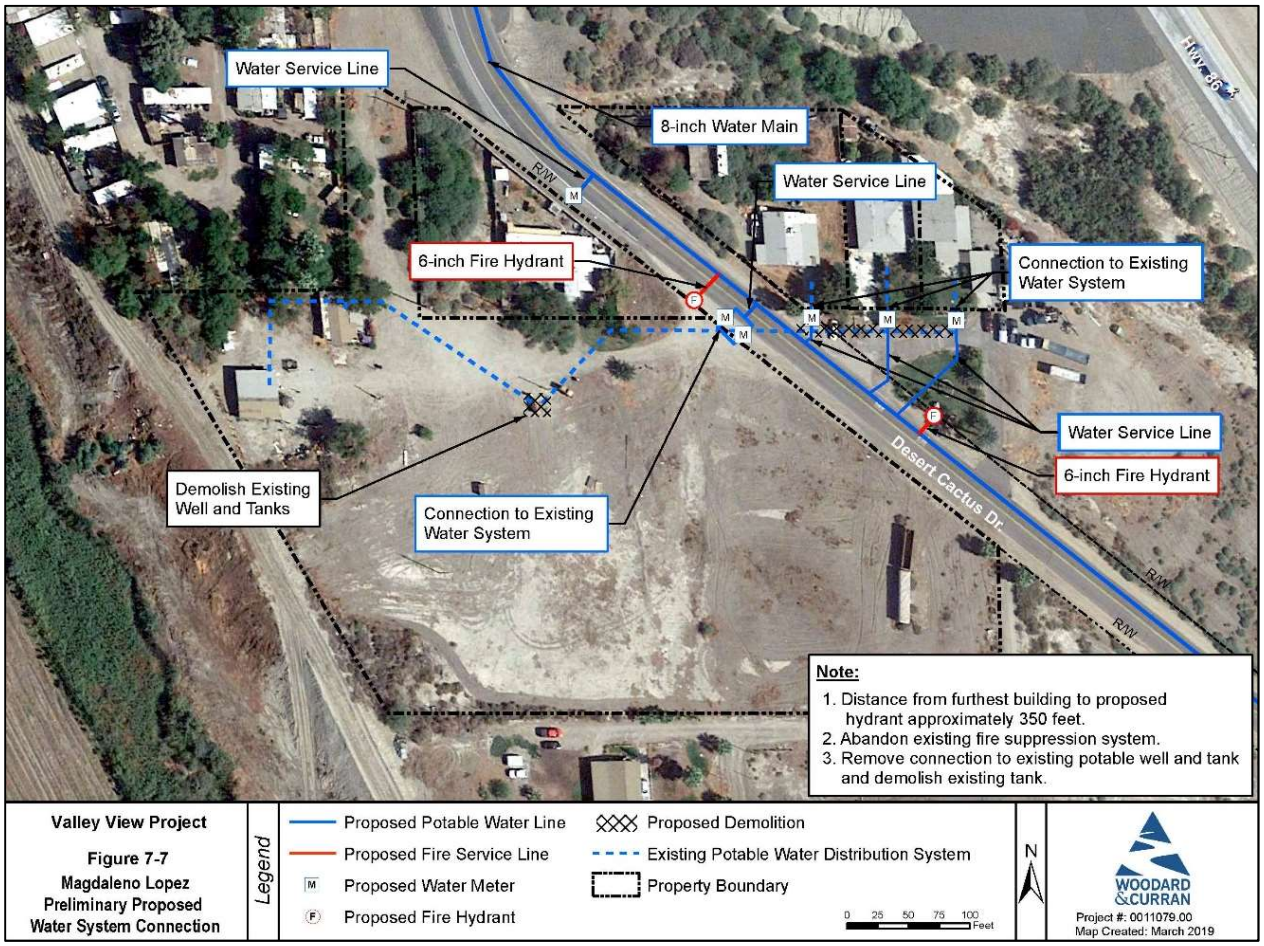


Figure 2-13: Magdaleno Lopez Proposed Point of Connection



2.4.2.6 Meza's Ranch

Existing Conditions

The Meza's Ranch SWS is a new community water system serving a main residence and seven mobile homes that was approved in December 2016. Eight of the 12 service connections are currently being used. The source for this system is a 350-ft deep, 8-inch well with a 5-hp submersible pump. The well pumps to a 2,500-gallon steel storage tank. A 2-hp booster pump then sends water out to four 119 pressure tanks that feed the mobile homes in the west, one 119 bladder tank that feeds the main residence in the east, and two 7,500-gallon tanks for fire suppression. The fire suppression tanks convey water to two fire hydrants through a booster pump and 4-inch galvanized steel piping that runs west parallel to the potable water piping. The main house has an under the counter fluoride treatment system, as fluoride has been shown to be above the 4.0 mg/L MCL. An overview of the SWS is shown in **Figure 2-14**.

The Meza's Ranch SWS well was constructed in 1993, per the DEH inspection report. The SWS is in working condition according to the owner. Fencing surrounds the well, but the supporting equipment is not enclosed. The potable water storage tanks, pumps, and piping are less than five years old and show little or no signs of corrosion. The fire suppression storage tanks are also new and appear to be in good condition with no corrosion.

Inorganic chemicals were sampled in April 2008. Fluoride measured 4.8 mg/L in March 2017, which exceeds the State MCL of 2.0 mg/L and federal MCL of 4.0 mg/L. The main house has an under-the-counter fluoride treatment unit to address this constituent. MCLs were met for all other regulated constituents.

Proposed Project

Approximately 30 linear feet of 1-inch diameter water service lateral would be needed to connect from the proposed 12-inch water main along Desert Cactus Drive to the Meza's Ranch SWS at the eastern parcel boundary, as shown in **Figure 2-15**. The water service lateral would extend to a ¾-inch CVWD water meter to be installed at the property line and then connect through 305 feet of 2-inch PVC pipe to the existing potable water system.

Approximately 610 linear feet of 6-inch DIP would tee off of the proposed 12-inch water main on Desert Cactus Drive and extend to two fire hydrants located on the SWS property. This would require a 20 foot easement extending the length of the fire service to provide access for maintenance.

Figure 2-14: Meza's Ranch SWS Existing Facilities

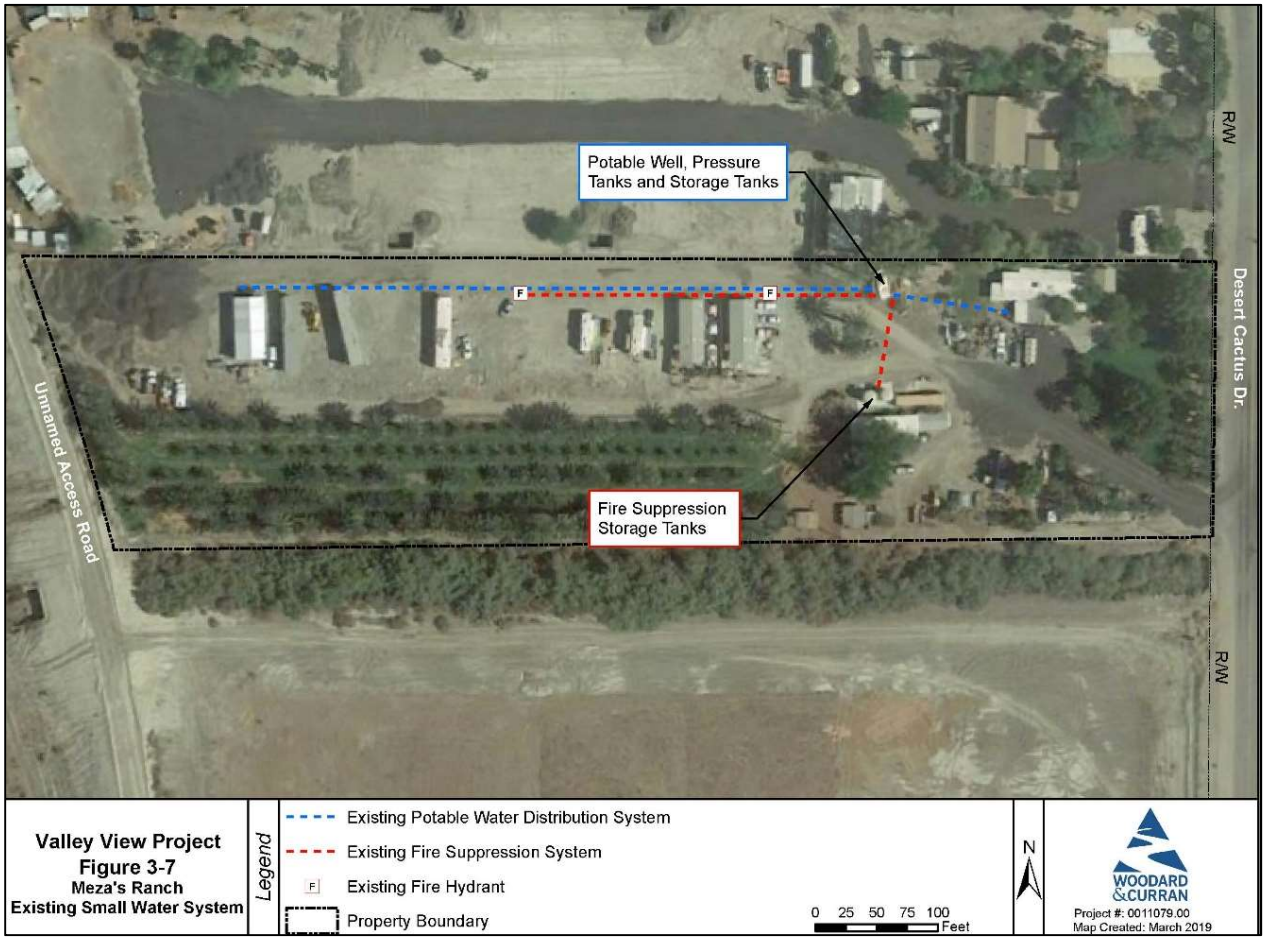
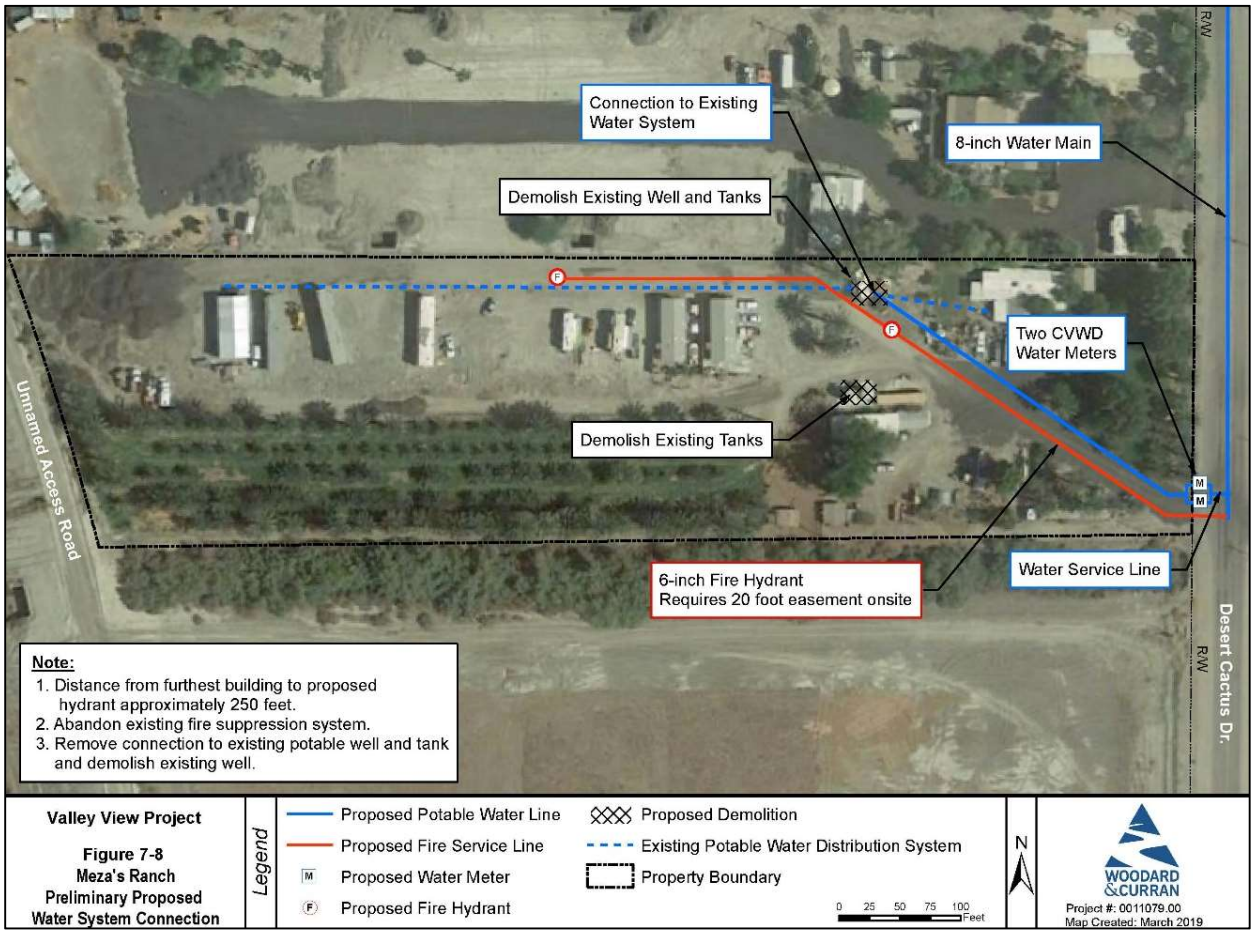


Figure 2-15: Meza's Ranch Proposed Point of Connection



2.4.2.7 Soto Water

Existing Conditions

The Soto Water SWS has eight service connections. The water source for this system is a 6-inch diameter well with a shallow well jet pump which conveys water to a 250-gallon pressure storage tank and then to the distribution system of unknown material and diameter. There is no fire suppression infrastructure at this SWS. There is no treatment on site. An overview of the SWS is shown in **Figure 2-16.**

The Soto Water SWS is of unknown age, but was installed prior to November 1998, per DEH inspection report. The SWS is in working condition according to the owner. The well and associated equipment are enclosed by fencing. The storage tank is of unknown age and its coating appears to be worn. The well pump and associated piping are of unknown age. The piping system coating it is worn.

In November 1998, this system was tested for inorganic chemicals; measured constituents met standards except for fluoride and arsenic. The most recent arsenic sample from the well was completed in September 2011 with a result of 7.3 µg/L, which is below the MCL of 10 µg/L. Fluoride was sampled from the well for four consecutive quarters from 2013-2014. The RAA was 2.4 mg/L, which meets the compliance RAA of 2.5 mg/L. MCLs were met for all other regulated constituents.

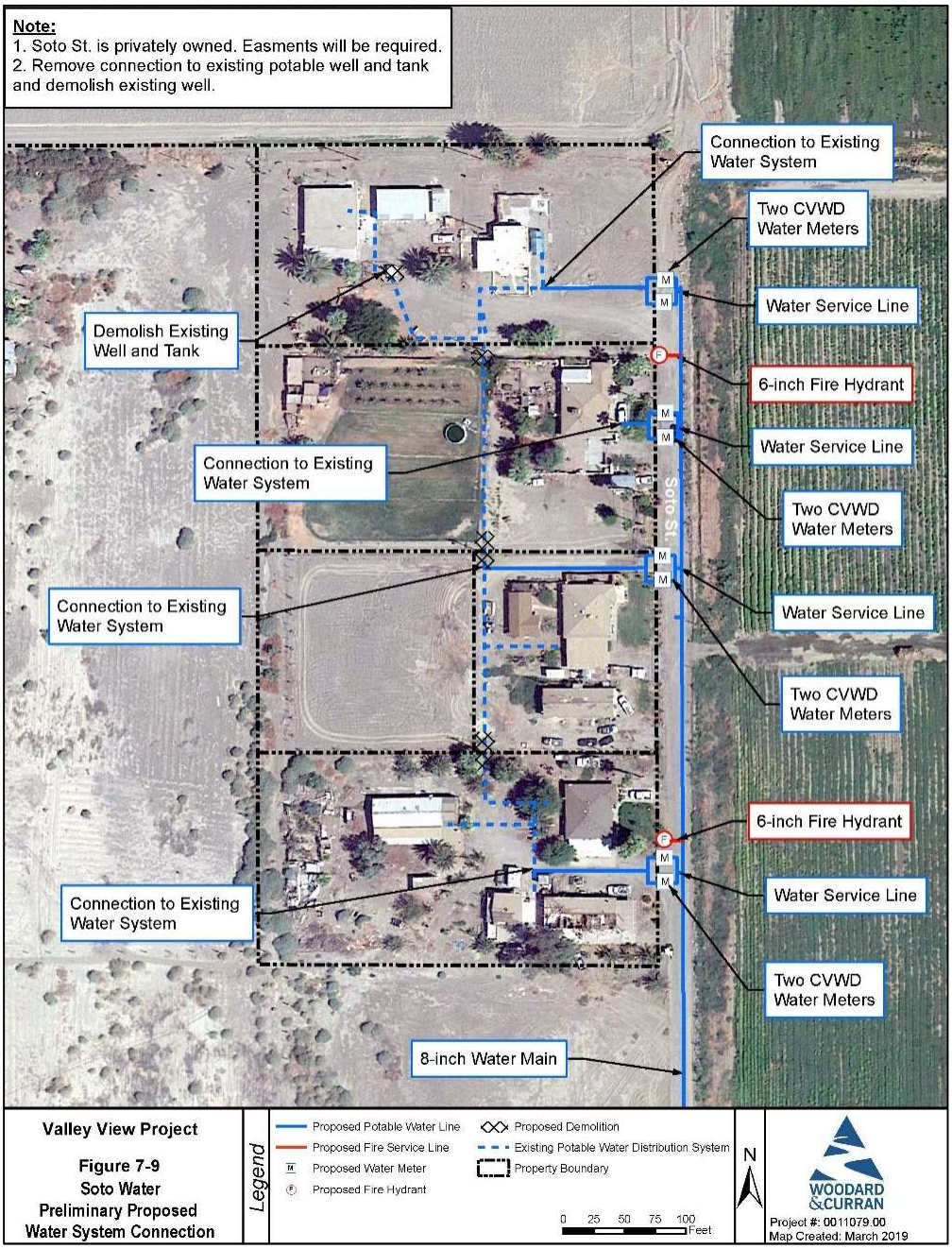
Proposed Project

Approximately 88 linear feet of 1-inch diameter water service lateral would be needed to connect from the proposed 12-inch water main along Soto Street to the Soto Water SWS, as shown in **Figure 2-17**. The water service lateral would extend to four pairs of ¾-inch CVWD water meters to be installed at the property line and then connect through 364 feet of 2-inch pipe to the either existing potable water system or the residence directly.

Approximately 42 linear feet of 6-inch DIP would tee off of the proposed 12-inch water main on Soto Street and extend to two fire hydrants located on the SWS property. This would require a 20 foot easement extending the length Soto Street to allow for maintenance.

Figure 2-16: Soto Water Existing Facilities

Figure 2-17: Soto Water Proposed Point of Connection



2.4.2.8 Valley View Mobile Home Park

Existing Conditions

This is a community water system serving a mobile home park with 42 service connections. The source water is from a 400 ft well with a submersible pump with a 12-inch diameter casing. There is a second well located in an open field area adjacent to the MHP that is currently not in service. The active well pumps to two 2,200-gallon gravity storage tanks. Three 1.5 horsepower pumps boost pressure from the storage tanks to three 119-gallon pressure tanks. Past inspection reports indicate that the distribution system consist of PVC piping ranging in size between 1 ¼ -inch to 2-inch in diameter. Also onsite are a 5,000-gallon tank, a 1,100-gallon pressure tank, and two 119-gallon captive air pressure tanks. However, these were observed to be abandoned and no longer in use from the December 7, 2018 site visit. There is no fire suppression infrastructure at this SWS. There is no treatment on site. An overview of the SWS is shown in **Figure 2-18**.

The Valley View MHP SWS is of unknown age but was installed prior to 2008 per the DEH inspection report. The SWS is in working condition, according to the owner. The well and associated equipment are enclosed with fencing. The potable water storage tanks, pressure tank, and system pumps are less than five years old and show no signs of corrosion. The well/pump is of unknown age and has some corrosion on its exterior. There is a backup well on the property that is currently not used. There is debris surrounding the area and it is inaccessible.

Inorganic chemicals were sampled in November 2013; all standards were met.

Proposed Project

Approximately 38 linear feet of 2-inch diameter water service lateral would be needed to connect from the proposed 30-inch water main along Airport Boulevard to the Valley View MHP SWS at the northern parcel boundary, as shown in Figure 2-19. The water service lateral would extend to a pair of ¾-inch CVWD water meters to be installed at the property line and then connect through 141 feet of 2-inch pipe to the existing potable water system.

Approximately 66 linear feet of 6-inch DIP along would tee off of the proposed 30-inch water main on Airport Boulevard at two locations and extend to two fire hydrants located just short of the SWS boundary. This would not require an easement for maintenance.

Figure 2-18: Valley View Mobile Home Park Existing Facilities

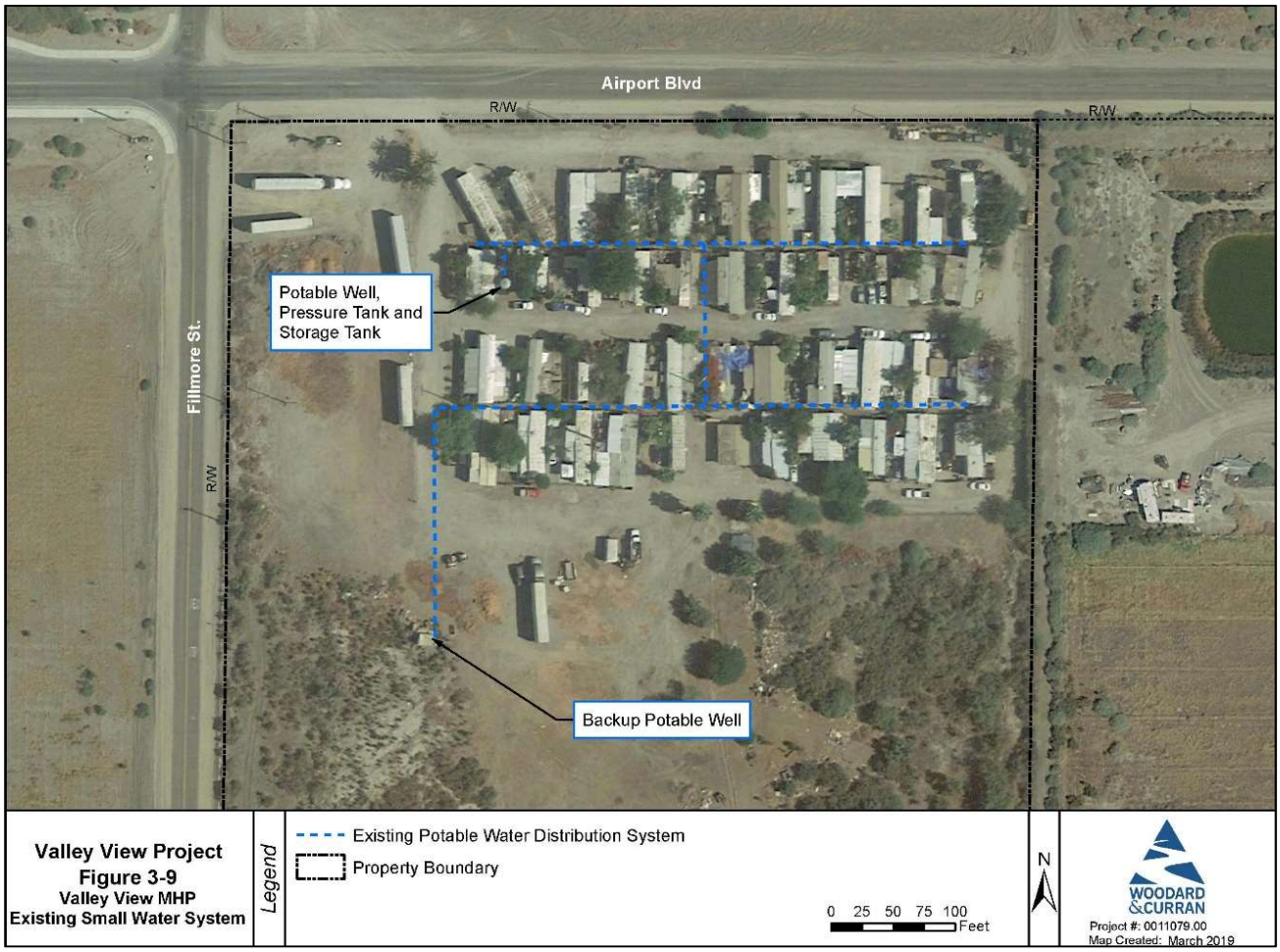
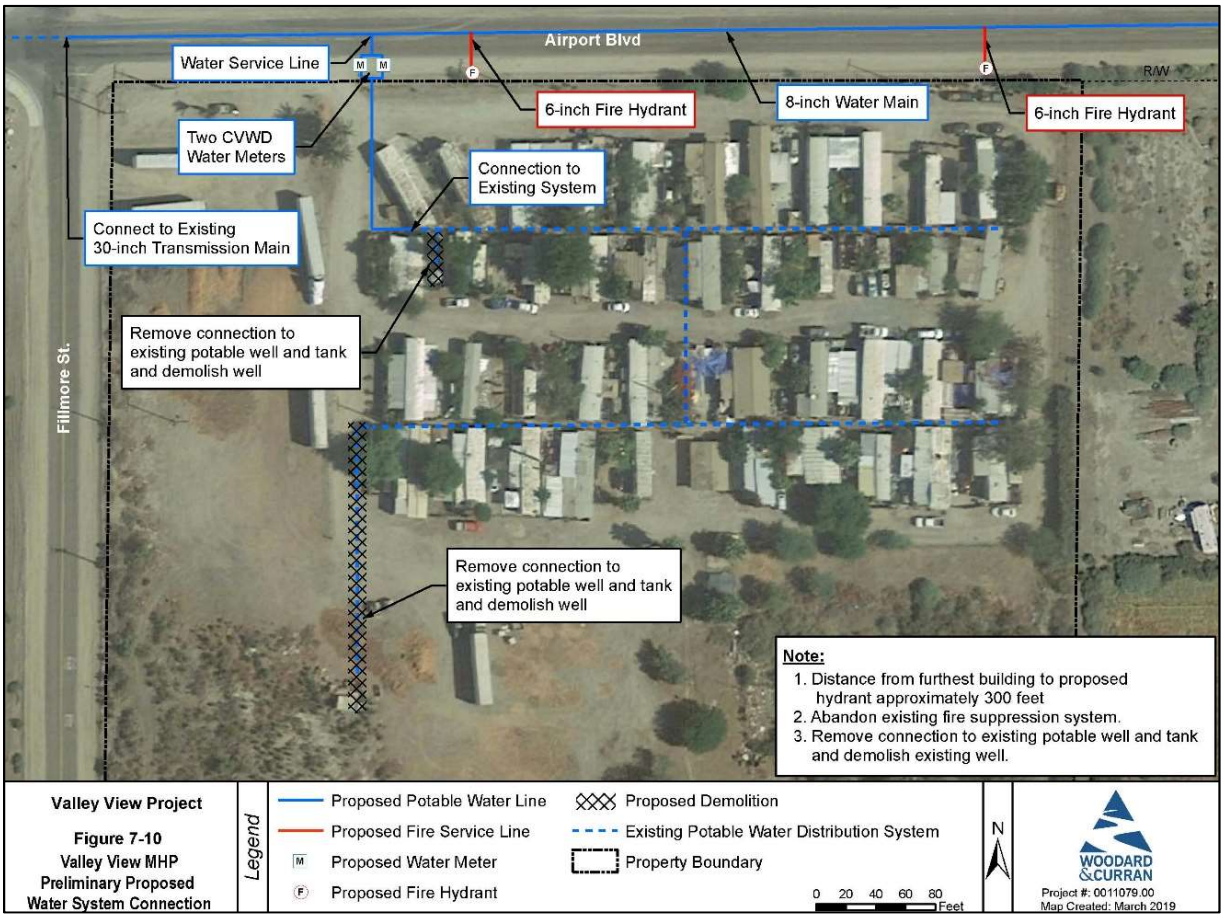


Figure 2-19: Valley View Mobile Home Park Proposed Point of Connection



2.4.2.9 Vista Norte Estates

Existing Conditions

The Vista Norte Estates SWS is comprised of 13 service connections. The source water is from a 600-ft deep, 6-inch diameter well. The distribution system consists of a 3-inch PVC line and 2-inch lateral service lines. The well has a 7-hp submersible pump which delivers water to a 3,500-gallon pressure tank and then to the distribution system. A separate fire suppression system consists of 4-inch PVC piping. The fire storage tank is 15,000 gallons and is separated from the potable water supply by an approved air gap for backflow prevention. A pump connected to the discharge of the 15,000-gallon tank conveys water through a 4-inch galvanized steel pipe for service to the fire suppression system. There is no treatment on site. An overview of the SWS is shown in **Figure 2-20**.

The Vista Norte Estates SWS is of unknown age, but was installed prior to April 2009, per the DEH inspection report. The SWS is in working condition, per the owner. The well and associated equipment is enclosed by fencing. The tanks are of unknown age and have no visible corrosion.

This system's well water was sampled for arsenic, fluoride, manganese, chloride and TDS in April 2009. Arsenic measured non-detect and fluoride measured 0.9 mg/L, which are both below their respective MCLs of 10 µg/L and 2.0 µg/L. MCLs were met for all other regulated constituents.

Proposed Project

Approximately 33 linear feet of 1-inch diameter water service lateral would be needed to connect from the proposed 30-inch water main along Airport Boulevard to the Vista Norte Estates SWS at the northern parcel boundary, as shown in **Figure 2-21**. The water service lateral would extend to a pair of ¾-inch CVWD water meters to be installed at the property line and then connect through 59 feet of 2-inch pipe to the existing potable water system.

Approximately 444 linear feet of 6-inch DIP would tee off of the proposed 30-inch water main on Airport Boulevard and extend to two fire hydrants located on the SWS property. This would require a 20 foot easement extending the length of the fire service to allow for maintenance.

Figure 2-20: Vista Norte Estates Existing Facilities

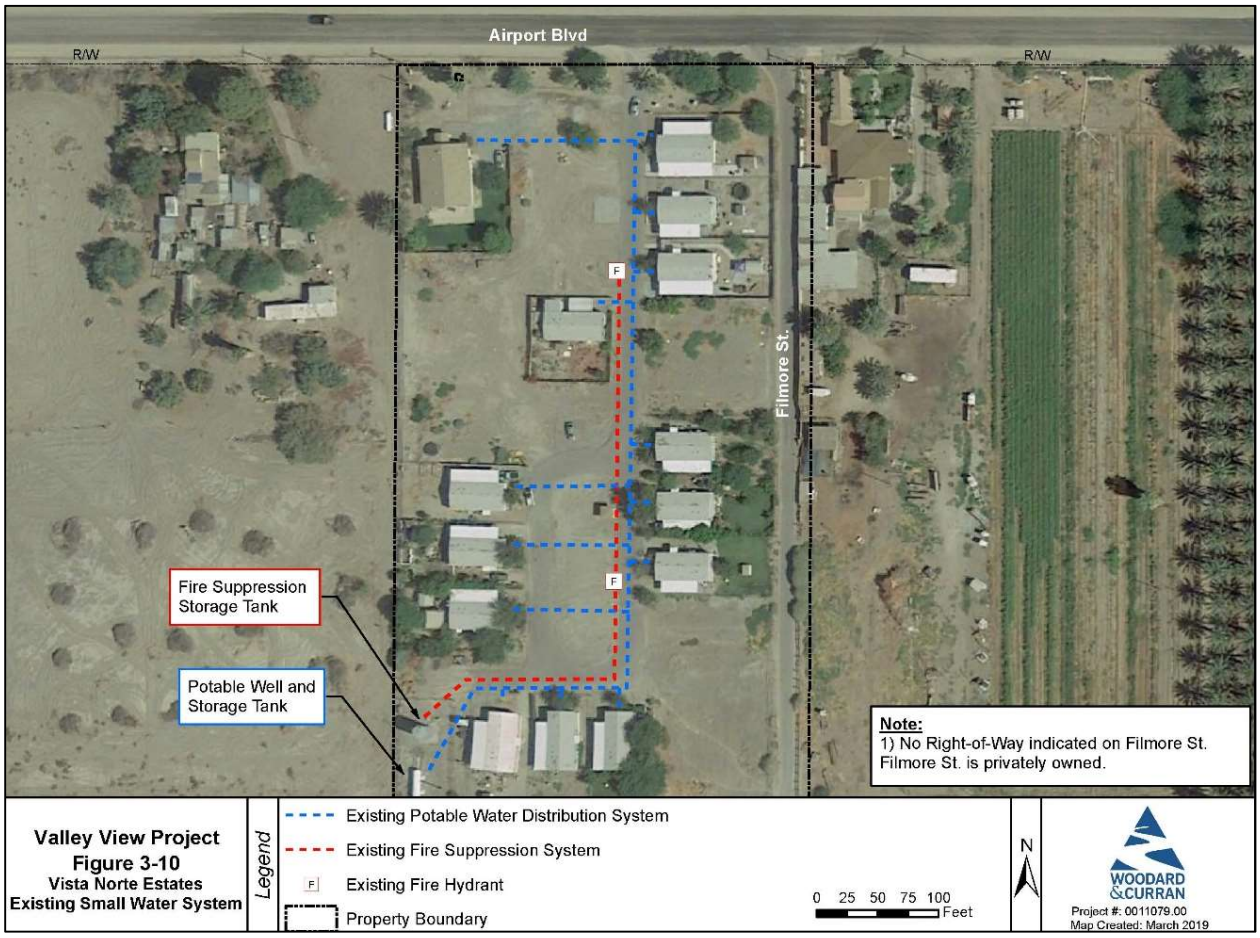
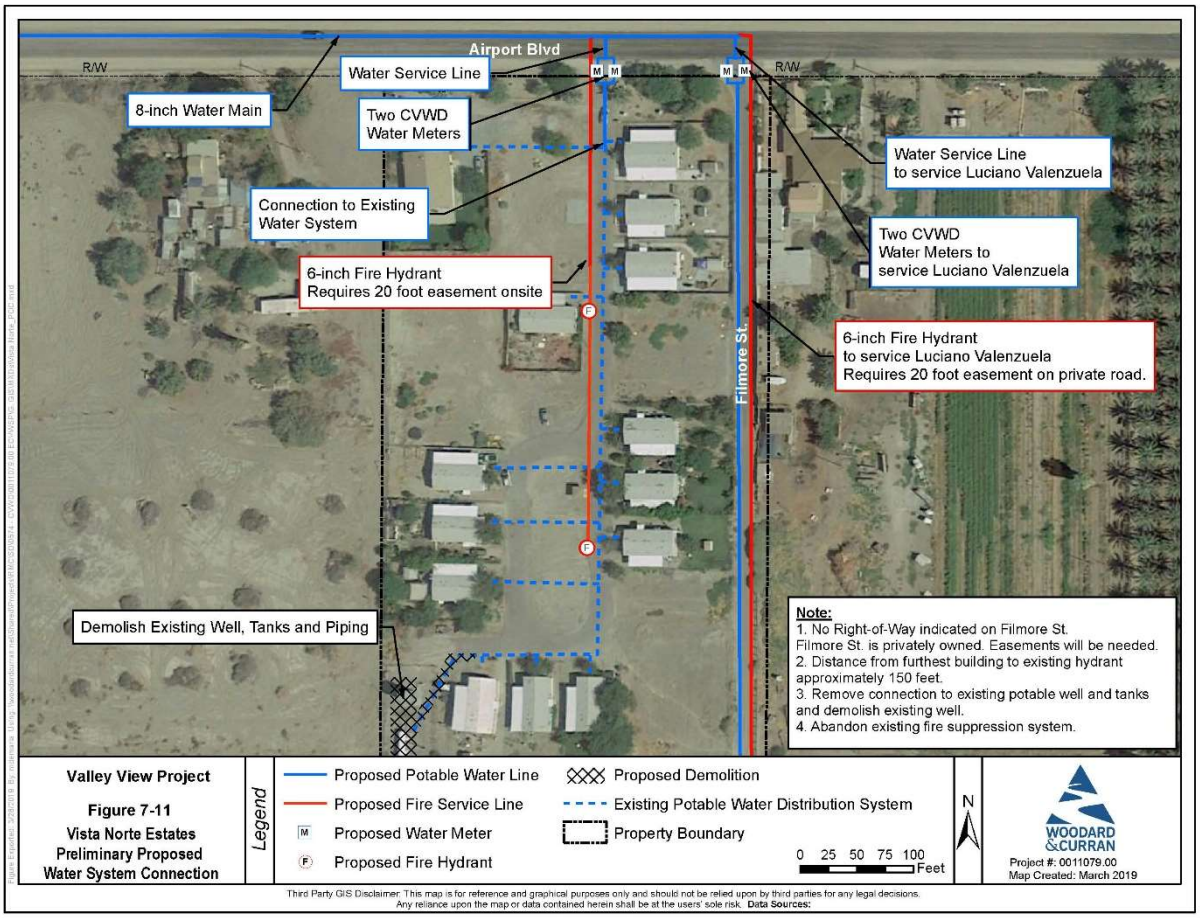


Figure 2-21: Vista Norte Estates Proposed Point of Connection



2.4.3 Construction Methods

Well Demolition

The process for demolition of on-site wells would depend on the size and depth of the well. Generally, for shallower and/or smaller diameter wells, the well would be over-drilled and then the borehole backfilled with grout. Larger or deeper wells would require perforating the casing (often with a subsurface explosion containing bb's) and then pressure-grout the well/borehole. The work would be conducted in accordance with a County DEH well demolition permit and performed by a certified well driller (license required), with oversight by a County DEH inspector and in conformance with State well standards.

Pipeline Installation

The water pipelines would be installed within existing County of Riverside roadway rights of way and SWS properties. 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. 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 five feet wide and five to six feet deep. Deeper installations may be required under special circumstances, such as large utility or channel crossings.

  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 compactability and stability.
- **Surface Restoration** – After the pipe is installed, the ground surface of the pit 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

2.4.4 Construction Trip Generation

During construction, the proposed project would generate trips with construction crews and materials deliveries. Although the number of SWS or associated pipelines that would be under construction at any given time is not specified, construction would proceed at a rate of approximately 150 linear feet per day. Construction would generate up to 35 round-trip trips per day, including one round trip for off hauling of export material, and one round trip for delivery of

materials. Construction would involve approximately 7,000 cubic yards (cy) of material export, assuming as much native fill is reused for backfill of trenches as possible.

2.4.5 Construction Schedule

Construction is anticipated to last 12 months. The project's maximum area of disturbance during the construction period would encompass about 51,300 square feet (sq. ft.), or no more than two acres, not including staging areas. The pipelines would be installed at depths of five to six feet below ground surface with a trench width of three to five feet. All construction activities would occur within the County of Riverside roadway rights-of-way and SWS properties. Disturbance activities would occur on existing dirt 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 appropriate native species.

Project construction activity is anticipated to occur continuously, between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday only and excluding federal holidays, which is compliant with the County of Riverside Ordinance Regulating Noise.

2.4.6 Construction Best Management Practices

CVWD would require implementation of the following construction BMPs with the project:

- *Drainage / Erosion Control* - During the construction, existing storm water 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 as applicable to the project site's stormwater drainage features. In addition, the project 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 a depth of five to six feet below ground surface. If encountered at this depth, groundwater would be controlled using standard methods including stone sumps wrapped in filter fabric and dewatering basins or baffled tanks if required.

- *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. Refer to mitigation measure **TRA-1 Traffic Control Plan**.

- *Air Quality / Dust Suppression* – The construction contractor would be required to comply with South Coast Air Quality Management District (SCAQMD) rule 403.1 to control dust during construction, specific to the Coachella Valley. The contractor is required to have an approved Fugitive Dust Control Plan prior to grading or excavation. The contractor is 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.

2.4.7 Operation and Maintenance

CVWD would continue to operate its domestic water system with no operational modifications. New water meters would be read per established CVWD schedules.

2.4.8 Permits

The Riverside County DEH requires operational permits for mobile home parks located in the unincorporated communities. The County's Department of Building and Safety is responsible for issuing occupancy permits for mobile home parks.

All SWSs in the proposed project have either been issued or have finalized their Polanco park / MHP permits with the County of Riverside. Note that some of the existing on-site wells will continue to operate for irrigation purposes and will not be demolished after the proposed project is implemented, and will be determined in coordination with SWRCB and the DEH. **Table 2-4** summarizes the SWSs' permit statuses as of October 2018.

Table 2-4: SWS Permit Status

Small Water System	Riverside County Permit Status
Campos MHP	FINAL
De Leon Ranch	FINAL
Desert View MHP	FINAL
Luciano Valenzuela MHP	FINAL
Magdaleno Lopez	FINAL-CUP (21 Spaces)
Meza's Ranch	FINAL
Soto Water	Ok SFRs predate 1960
Valley View MHP	FINAL
Vista Norte Estates	FINAL

Additionally, the permits listed in **Table 2-5** may be required for project construction.

Table 2-5: Permits and Approvals

Agency	Permit or Approval
Local	
County of Riverside	• Encroachment, Road and Construction Permits • Mobile Home Park/ Polanco Park Permit • Well Demolition Permit
South Coast Air Quality Management District	• Permit to Construct • Fugitive Dust Control Plan
State	
State Water Resources Control Board (SWRCB)	• Drinking Water Supply Permit Amendment • Drinking Water Supply Deactivation notification letter • NPDES General Permit for Storm Water Discharges associated with Construction Activities
California Department of Transportation (Caltrans)	• Encroachment Permit
Regional Water Quality Control Board (RWQCB), Colorado River Region	• General Permit for Construction Discharges (dewatering/ test water)
Federal	
United States Environmental Protection Agency / SWRCB	• Funding under the Drinking Water State Revolving Fund
United States Department of Agriculture	• Funding under the Rural Development Program

3. ENVIRONMENTAL CHECKLIST

1. **Project title:** Valley View Mobile Home Park (MHP) Water Consolidation 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:** Elizabeth Meyerhoff, Environmental Specialist
   Coachella Valley Water District
   75515 Hovley Lane East
   Palm Desert, CA 92211
   (760) 398-2651 x 2775

4. **Project location:** The proposed project is located in the eastern Coachella Valley area of Riverside County, California near the community of Thermal. Highway 86 transects the project area at Airport Boulevard. The project area is south of Avenue 55, west of Pierce Street, north of Avenue 57, and east of State Route 111/Grapefruit Boulevard. It consists of twelve parcels: Campos MHP (APN: 757-080-018), De Leon Ranch (APN: 763-370-026), Desert View MHP (APN: 757-070-022), Luciano Valenzuela (APN: 757-100-009), Magdaleno Lopez Water System (757-070-049; 757-070-034; 757-070-045; 757-070-041), Meza's Ranch (APN: 757-080-021), Soto Water (APN: 763-370-009), Valley View MHP (APN: 757-100-015), and Vista Norte Estates (APN: 757-100-013).

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

6. **County of Riverside General Plan designation:** Agriculture; Rural Community - Low Density Residential; Medium Density Residential; and Medium High Density Residential

7. **County of Riverside Zoning:** A-1-20; A-2-20; R-A-5; R-A-10; and R-A-20

8. **Description of project**: The Valley View MHP Water Consolidation Project consists of consolidation of nine independent small water systems into CVWD's potable water system. The proposed project would deliver 118 acre-feet per year of potable water to meet a maximum day demand of 72.9 gallons per minute. The proposed project would construct approximately 19,500 linear feet of water system laterals within existing roadways or within property currently owned by the small water systems owners.

9. **Surrounding land uses and setting:** The project area is bordered as follows: North: City of Coachella (residential, commercial, and light industrial land); East: agricultural lands, the Coachella Canal, and Mecca Hills further east; South: land designated business park, light industrial, and rural community; and West: Whitewater River/Coachella Valley Stormwater Channel, State Route 111, and land designated commercial retail and light industrial. John Kelley Elementary School is located approximately one-half mile west of the proposed project site.

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

Local:

- Riverside County – Encroachment, Road and Construction Permits; Riverside County - Mobile Home Park/Polanco Park Permit; Well Demolition Permit
- SCAQMD – Fugitive Dust Control Plan; Permit to Construct

State:

- Caltrans – Encroachment Permit
- Colorado River RWQCB – General Permit for Construction Discharges (dewatering/ test water)
- SWRCB Division of Drinking Water (DDW) - Drinking Water Supply Permit Amendment
- SWRCB DDW - Drinking Water Supply Deactivation notification letter
- SWRCB – General Permit for Storm Water Discharges associated with Construction Activities

Federal:

- USEPA/SWRCB – funding under the DWSRF
- USDA – funding under the Rural Development Program

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

CVWD has received formal written notification requests from several local Native American tribes as a result of Assembly Bill 52 (Gatto,2014). Refer to *Section 3.18 Tribal Cultural Resources* for a complete discussion.

NAHC identified 19 Native American contacts who may have knowledge of cultural resources of Native American origin at the project site. Rincon prepared and mailed letters to each of these groups on behalf of CVWD on January 22, 2019. On February 20 and 22, 2019, Rincon followed up with the Native American contacts who had not replied. Twelve responses were received from this outreach effort. A summary of each response received as of March 21, 2019 can be found 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 and 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: Jennifer Ziv — July 23, 2019
Jennifer Ziv
Senior Environmental Planner /Project Manager
Woodard & Curran
Date

Reviewed by: E Meyerhoff — July 23, 2019
Elizabeth Meyerhoff
Environmental Specialist
Coachella Valley Water District
Date

Reviewed by: E Meyerhoff — July 23, 2019
For William Patterson
Environmental Supervisor
Coachella Valley Water District
Date

Submitted by: Steve Bigley — July 23, 2019
Steve Bigley
Director of Environmental Services
Coachella Valley Water District
Date

Environmental Assessment Committee:

Concurrence by: _____ July 23, 2019

Sylvia Bermudez
Environmental Assessment Committee Chair
and Clerk of the Board
Coachella Valley Water District

Date

General Manager Determination:

Approved by: _____ July 23, 2019

J.M. Barrett
General Manager
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) 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 area is relatively undeveloped and composed largely of low density residential and 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).

There are no designated state scenic highways within the project area. State Route 111, from Bombay Beach on the Salton Sea to State Route 195 near Mecca, approximately six miles south 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 Highway 86, approximately four miles north of the proposed project, is a County-eligible Scenic Highway (County of Riverside 2016). The project area is located to the east of Highway 86, which is not recognized as a State or County designated or eligible scenic highway.

a, c) Less than Significant Impact

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 project area is located within the unincorporated community of Thermal in a predominantly undeveloped, agricultural area. The visual character of the project area, as shown in the photos below, is defined by the relatively level low density residential and agricultural lands and surrounding mountains which can be seen in the distance from the project area.

View looking east from Soto MHP

Valley View MHP and Mecca Hills in distance

The proposed project would construct approximately 16,000 linear feet of pipelines and associated onsite piping, meters, hydrants and valves to consolidate nine independent, privately owned SWSs into CVWD's potable water system. Construction of the proposed project would temporarily impact views and the visual character of the project area through placement of large-scale construction equipment along and adjacent to roadways. These construction impacts would be temporary in nature and ground surfaces would be restored to pre-construction conditions upon completion. The majority of project facilities would be located below grade except for minor above grade features such as hydrants, meters, and air valves, and would therefore not impact scenic vistas or the visual character or quality of the project area upon completion of construction. Thus, impacts would be less than significant.

b) No Impact

The proposed project is not within view of a State or County designated or eligible scenic highway. Interstate 10, located approximately four miles to the north of the project area, is recognized as a County-eligible scenic highway and State Route 111, located approximately six miles to the southeast, is recognized as a State-eligible scenic highway. Highway 86, from which the project area is visible, is not recognized as a State or County designated or eligible scenic highway. Therefore, the proposed project would not substantially damage scenic resources within a state scenic highway and no impacts would occur.

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. The proposed project would not create any new source of light or glare following construction because the project does not include the introduction of permanent lighting; and therefore, the proposed project would not create a new source of light or glare that would adversely affect day or nighttime views within the project area and no impacts would occur.

Mitigation Measures: None required or recommended.

3.2 Agriculture and Forestry Resources

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 project area is composed primarily of agricultural land, and also includes major roadways, low-density residential developments, and the Whitewater River/Coachella Valley Stormwater Channel.

According to the California Department of Conservation (DOC 2019) and shown in **Figure 3-1**, the project area is almost entirely composed of important farmland, including prime farmland and farmland of local importance. Per DOC mapping of Williamson Act enrolled lands, and shown in **Figure 3-2**, the project area is not located on lands protected by a Williamson Act contract, although parcels surrounding the project site are covered by a Williamson Act contract (DOC 2016).

The California Department of Forestry and Fire Protection (CalFire) 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. CalFire 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.

Figure 3-1: Important Farmland Map

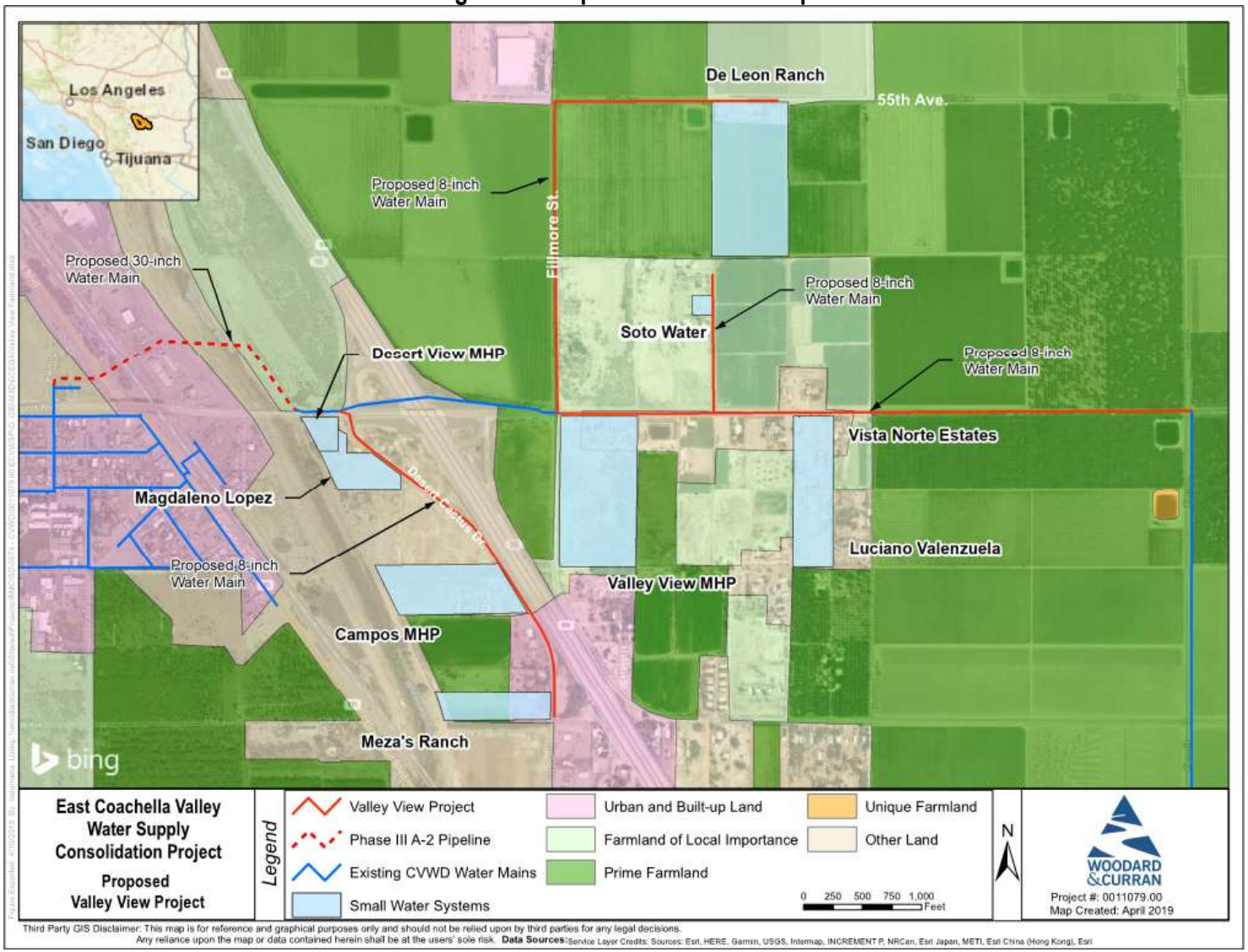


Figure 3-2: Williamson Act Lands

Notes: Green color indicates Williamson Act-Prime Agricultural land; yellow color indicates Williamson Act-nonrenewal land; pink color indicates urban and built up land.
Source: California Department of Conservation Division of Land Resource Protection Conservation Program Support, "Riverside County Williamson Act FY 2015/16 Sheet 2 of 3," 2016.

a, b, e) Less than Significant Impact

A majority of the project area outside of the public right-of-way is mapped as important farmland, including prime farmland and farmland of local importance. The proposed project would construct approximately 16,000 linear feet of pipelines and onsite improvements to consolidate nine independent, privately owned SWS into CVWD's potable water system. The proposed project would primarily be constructed within roadway rights-of-way, as well as on privately owned properties to connect CVWD's potable water system 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 project would not result in land use changes and would, therefore, not convert important farmland to a non-agricultural use, conflict with zoning regulations, or result in other changes that would indirectly result in conversion of nearby farmland to non-agricultural use. There are Williamson Act lands within the project area, however, the proposed project would not directly impact Williamson Act contracted lands because the land use and zoning of those lands would not be altered. Therefore, impacts to important farmland and Williamson Act contracted lands would be less than significant and no mitigation is required.

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 and no mitigation is required.

Mitigation Measures: None required or recommended.

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 East 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. The project area is located in the Coachella Valley region of the Salton Sea Air Basin (SSAB). The Coachella Valley region is under the regulatory jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD monitors air pollutant levels to ensure the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are met and, if they are not met, to develop strategies to meet the standards. Air pollution in the project area is monitored at stations located in Palm Springs and Indio.

The NAAQS, which are required under the Clean Air Act to be determined by the United States Environmental Protection Agency (US EPA), provide public health protection, including protecting the health of sensitive populations such as asthmatics, children, and the elderly (US EPA 2019). Similarly, the CAAQS are established to protect the health of the most sensitive groups and are mandated by State law. US EPA has set NAAQS criteria for six pollutants, which are called "criteria pollutants": Carbon Monoxide (CO), Lead (Pb), Nitrogen Dioxide (NO_2), Ozone (O_3), Particulate Matter (PM_{10} and $PM_{2.5}$), and Sulfur Dioxide (SO_2). California has added three additional criteria pollutants: Hydrogen Sulfide (H_2S), Visibility Reducing Particles, and Vinyl Chloride. In addition, California regulates about 200 different chemicals, referred to as toxic air contaminants (TACs) (CARB 2019).

Depending on whether or not the NAAQS or CAAQS are met or exceeded, the SSAB is classified as being in "attainment" or "nonattainment." The *2016 Air Quality Management Plan* (AQMP; SCAQMD 2017) assesses the attainment status of the Coachella Valley portion of the SSAB. The NAAQS and CAAQS attainment statuses for the Coachella Valley portion of the SSAB are listed in **Table 3-1**. As shown therein, the SSAB is in nonattainment for the State standards for 1-hour ozone, nonattainment for both the federal and State standards for 8-hour ozone, and nonattainment for respirable particulate matter, PM_{10} (SCAQMD 2017). Thus, the Coachella Valley portion of the SSAB is required to implement strategies that would reduce pollutant levels to recognized standards. The AQMP provides a strategy for the attainment of State and federal air quality standards.

Table 3-1: Criteria Pollutant Attainment Status - Coachella Valley Portion of the Salton Sea Air Basin

Pollutant	State (CAAQS)	Federal (NAAQS)
O_3 – 1-hour	Nonattainment (0.09 ppm)	Attainment (0.12 ppm)
O_3 – 8-hour	Nonattainment (0.070 ppm)	Pending – Expect Nonattainment (Severe) (0.070 ppm)
PM_{10} – 24-hour	Nonattainment (50 µg/m^3)	Nonattainment (Serious) (150 µg/m^3)
PM_{10} – Annual	Nonattainment (20 µg/m^3)	--
$PM_{2.5}$ – 24-hour	--	Unclassifiable/ Attainment (35.0 µg/m^3)
$PM_{2.5}$ – Annual	Attainment (12.0 µg/m^3)	Unclassifiable/ Attainment (12.0 µg/m^3)
CO	Attainment (1-hour [20 ppm]; 8-hour [9 ppm])	Unclassifiable/ Attainment (1-hour [35 ppm]; 8-hour [9 ppm])
NO_2	Attainment (1-hour [0.18 ppm]; annual [0.030 ppm])	Unclassifiable/ Attainment (1-hour [0.10 ppm]; annual [0.053 ppm])
SO_2	Attainment (1-hour [0.25 ppm]; 24-hour [0.04 ppm])	Unclassifiable/ Attainment (1-hour [75 ppb]; 24-hour [0.14 ppm]; annual [0.03 ppm])
Lead	Attainment (30-day average [1.5 µg/m^3])	Unclassifiable/ Attainment (3-months rolling [0.15 µg/m^3])
Sulfates	Attainment (24-hour [25 µg/m^3])	--
H_2S	Unclassified (1-hour [0.03 ppm/42 µg/m^3])	--
Source: SCAQMD 2017; CARB 2016; SCAQMD 2016.		

The SCAQMD provides numerical thresholds to analyze the significance of a project's construction and operational emissions on regional air quality. These thresholds are designed such that a project consistent with the thresholds would not have an individually or cumulatively significant impact on the SSAB's air quality. These thresholds are included in **Table 3-2** with the proposed project's estimated emissions.

In addition, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs have been developed for nitrogen oxides (NO_x), CO, PM_{10} and $PM_{2.5}$. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality 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, distance to the sensitive receptor, and project size. LSTs only apply to emissions within a fixed stationary location; they are not applicable to mobile sources. The use of LSTs is voluntary, to be implemented at the discretion of local agencies (SCAQMD 2008).

The SCAQMD LSTs are defined for 37 source receptor areas (SRAs). The project site is located in source receptor area 30 (SRA-30), Coachella Valley (SCAQMD 2008). LSTs have been developed for emissions within construction areas up to five acres in size. The SCAQMD provides lookup tables for sites that measure up to one, two, or five acres. The footprint of the proposed project would be approximately two acres. However, construction of the pipelines would not occur over the entire two acres continuously. Instead, construction of the proposed project would proceed at a rate of approximately 150 linear feet of pipeline per day, which is equivalent to an active construction site less than 0.1 acre per day. Pursuant to SCAQMD guidance, LSTs for the one-acre site should be used for sites that are less than one acre in size. On occasion, ground disturbance for the proposed project may exceed the estimated rate of 150 LF/day and the equivalent 0.1 acre per day; however, in no case would the area under active construction at any given time exceed the one acre limit set in the LST lookup table. LSTs for construction on a one-acre site in SRA-30 are shown in **Table 3-2** with the proposed project's estimated emissions.. LSTs are provided for receptors at a distance of 25 meters (82 feet) from the project site boundary, which is the most conservative LST distance (LSTs range from 25 to 500 meters). The closest sensitive receptors to the project site are the residences located adjacent to the proposed pipelines.

General Conformity with state implementation plans is a national Clean Air Act regulation that applies to most federal actions. For Drinking Water State Revolving Fund (DWSRF) funded projects, a Clean Air Act General Conformity analysis applies only to projects in a nonattainment area or an attainment area subject to a maintenance plan. It is only required for criteria pollutants for which an area has been designated nonattainment or maintenance. The General Conformity Rule ensures that actions taken by federal agencies in nonattainment and maintenance areas do not interfere with the State's plans to meet NAAQS. 40 CFR Part 93.153 defines de minimis levels, which are the minimum threshold for which a conformity determination must be performed. If the proposed project's annual emissions from construction and/or operation are below the applicable de minimis levels, the project is not subject to a General Conformity determination.

Based on the federal attainment statuses for the SSAB, the de minimis levels that apply to the SSAB are summarized in **Table 3-3** with estimated emissions from the proposed project. These levels apply to all direct and indirect annual emissions generated during construction and operation of the project.

a) Less than Significant Impact

The SCAQMD's *2016 AQMP*, which assesses the attainment status of the Coachella Valley portion of the SSAB and provides a strategy for attainment of State and federal air quality standards, is the applicable air quality plan. The AQMP strategies are developed based on population, housing, and employment growth forecasts anticipated under local city general plans and the Southern California Association of Governments' (SCAG) *2016 Regional Transportation Plan/Sustainable Communities Strategy* (SCAG 2016).

A project would conflict with or obstruct an applicable air quality plan if it would lead to population, housing or employment growth that exceeds the forecasts used in the development of the applicable air quality plan. The proposed project would construct approximately 16,000 linear feet of pipelines and associated onsite piping, meters, hydrants and valves to consolidate nine independent, privately owned SWSs into CVWD's potable water system. The proposed project would expand CVWD's municipal water delivery infrastructure and would serve a pre-determined number of existing communities, which currently rely on SWSs, with a reliable potable water source from CVWD's municipal water system. Therefore, the proposed project would not lead to population, housing or employment growth that exceeds the forecasts used in the development of the AQMD. Potential for conflicts with the AQMP would be less than significant.

b) Less than Significant Impact

The proposed project would result in emissions of criteria pollutants from short-term construction activities and long-term O&M activities. Construction emissions were estimated using the California Emissions Estimator Model

(CalEEMod 2016.3.2), which was developed by the SCAQMD and is used throughout California to quantify criteria pollutants and greenhouse gas emissions (GHGs).

The CalEEMod emissions scenarios were based on project-specific information, found in *Section 2 Project Description*. In instances where project-specific information was not available (e.g. construction equipment horsepower, length of worker trips, soil moisture content), the analysis relied on CalEEMod default values for construction activities.

SCAQMD's Rule 403 (Fugitive Dust) and Rule 403.1 (Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources) require construction projects to implement measures to suppress fugitive dust emissions, such as watering of exposed soils and the preparation of a Fugitive Dust Control Plan. The construction contractor would be required to have a Fugitive Dust Control Plan approved by either the SCAQMD or Riverside County prior to grading or excavation activities.

Construction Emissions

Air emissions of criteria pollutants during construction would result from the use of construction equipment with internal combustion engines, and offsite vehicles to transport workers, deliver materials to the site, and haul export material from the site. Project construction would also result in fugitive dust emissions, which would be lessened through the implementation of the fugitive dust control measures required by SCAQMD rules. **Table 3-2** summarizes the maximum daily pollutant emissions during construction of the project.

Table 3-2: Proposed Project Maximum Daily Construction Emissions (lbs/day)

Emissions Source	NO_x	ROG	CO	SO_x	$PM_{2.5}$	PM_{10}
Construction equipment	28	3	31	<0.1	1.5	1.6
Offsite emissions	1	<1	3	<0.1	0.2	0.8
Fugitive dust (with required fugitive dust controls)	--	--	--	--	<0.1	<0.1
Total Maximum Daily Emissions	**29**	**3**	**34**	**<0.1**	**1.7**	**2.4**
SCAQMD Regional Thresholds	*100*	*75*	*550*	*150*	*55*	*150*
Threshold exceeded?	***No***	***No***	***No***	***No***	***No***	***No***
LST (onsite stationary emissions only)	*132*	*--*	*878*	*--*	*3*	*4*
Threshold exceeded?	***No***	***--***	***No***	***--***	***No***	***No***

Notes: NO_x (oxides of nitrogen) and ROG (reactive organic gases)/VOC (volatile organic compounds) are ozone precursors, which chemically react in the presence of sunlight to form ground-level ozone. For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds. Emissions presented are the highest of winter or summer modeled emissions. Values may not sum due to rounding. See Appendix A for CalEEMod output sheets. Figures are from mitigated emissions scenario to account for standard dust control measures. Source for Regional Thresholds: SCAQMD 2015. Source for LSTs: SCAQMD, Final LST Methodology Document, Appendix C – Mass Rate LST Look-up Tables, Revised October 2009.

As shown in **Table 3-2**, project construction emissions would not exceed SCAQMD regional thresholds or LSTs. Therefore, impacts on regional air quality and local receptors due to construction-related air pollutant emissions would be less than significant.

Operational Emissions

Long-term, operational emissions of criteria pollutants would result from motor vehicle trips associated with O&M of the proposed pipelines. However, as explained in *Chapter 2 Project Description*, CVWD would continue to operate its water system with no operational modifications. New water meters would be read per established CVWD schedules. Thus, the project would not result in a change in existing O&M activities. The project does not propose stationary infrastructure, such as buildings or pump stations, that would substantially increase demand for electricity or natural

gas; energy consumption from the proposed meters and hydrants would be minimal. The LSTs do not apply to the proposed project because they are only applicable to emissions within a fixed stationary location; they are not applicable to mobile sources.

Overall, the project would offset energy currently used to pump and treat water supplied by the SWSs. Operation and maintenance emissions associated with the pipelines would be negligible. Because emissions would be minimal, the proposed project would not result in a cumulatively considerable net increase of a criteria pollutant for which the SSAB is non-attainment. Operational increase in criteria pollutants would be less than significant.

General Conformity Assessment

Table 3-3 summarizes the proposed project's total annual construction emissions and compares those to the applicable de minimis threshold for the SSAB region. As shown in **Table 3-3**, the project's criteria air pollutant emissions would not exceed the applicable de minimis thresholds. Therefore, the general conformity requirements do not apply to these emissions and the project is exempt from a conformity determination.

Table 3-3: Maximum Annual Project Emissions Compared to De Minimis Thresholds (tons/year)

Emissions Source	NO_x	VOC	PM_{10}
Maximum construction emissions	3	<1	<1
De Minimis Threshold	*25*	*25*	*70*
Threshold exceeded?	***No***	***No***	***No***
Notes: Notes: NO_x (oxides of nitrogen) and ROG (reactive organic gases)/VOC (volatile organic compounds) are ozone precursors, which chemically react in the presence of sunlight to form ground-level ozone. For the purposes of this analysis, the terms ROG and VOC are used interchangeably. Sources: USEPA 2017; SCAQMD 2017.			

c) Less than Significant Impact

Sensitive receptors are typically defined as schools (preschool – 12th grade), hospitals, resident care facilities, senior housing facilities, day care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. Land uses on the SWS sites include both mobile homes and single-family residences. John Kelley Elementary School is located approximately one-half mile west of the project area.

As discussed under "b" above, the project's construction and operational emissions would not exceed the SCAQMD regional thresholds or LSTs, which are set at levels that protect public health. Furthermore, construction emissions would be temporary and would not be located in the same location for the entire 12-month construction period. Sensitive receptors would be exposed to temporary construction air pollution emissions while adjacent pipelines are being actively installed. However, emissions would be less than applicable thresholds and mitigation would not be required.

CO hotspots have the potential to occur in traffic-congested roadways and intersections with poor circulation. The proposed project would involve minimal O&M trips. Furthermore, construction-related CO emissions would be below SCAQMD regional and LST thresholds (see **Table 3-2**). Therefore, the project would not have the potential to cause a CO hotspot on roadways adjacent to sensitive receptors. Project impacts on sensitive receptors would be less than significant.

d) Less than Significant Impact

The project would involve emissions of sulfur compounds from use of oil and diesel fuel during construction, which would potentially result in unpleasant odors. Construction would be temporary and would not be located in a single location for the duration of the 12-month construction period. Odorous emissions from construction equipment tend to

dissipate quickly within short distances from the construction site. Once the project is operational, the underground potable water pipelines would not be associated with odors. Impacts would be less than significant.

Mitigation Measures: None required or recommended.

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

A *Biological Resources Technical Study* was prepared in February 2019 by Rincon Consultants, Inc. for the project. A field survey of the project area and associated biological resources was conducted by Rincon biologists on February 12, 2019. The complete Biological Resources Technical Study is provided in **Appendix B**. The study area covered by the *Biological Resources Technical Study* is shown in **Figure 3-3**, below.

Biological conditions in the project area were evaluated by confirming applicable biological regulations, policies, and standards; reviewing biological literature pertinent to the site and vicinity; and conducting a reconnaissance-level biological survey of the site. Rincon conducted a literature review to obtain baseline information about the biological resources with potential to occur at the project site and surrounding areas. As part of the literature review, Rincon reviewed the latest versions of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB) and Biogeographic Information and Observation System, U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal and Information for Planning and Consultation (IPaC), USFWS National Wetland Inventory, U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey, and California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Plants (Rincon 2019). A complete list of special status species previously documented within a five-mile radius of the project site was compiled from the CNDDB and USFWS-IPaC queries, shown in Appendix A of the Biological Resources Technical Study, which is included as Appendix B to this IS/MND.

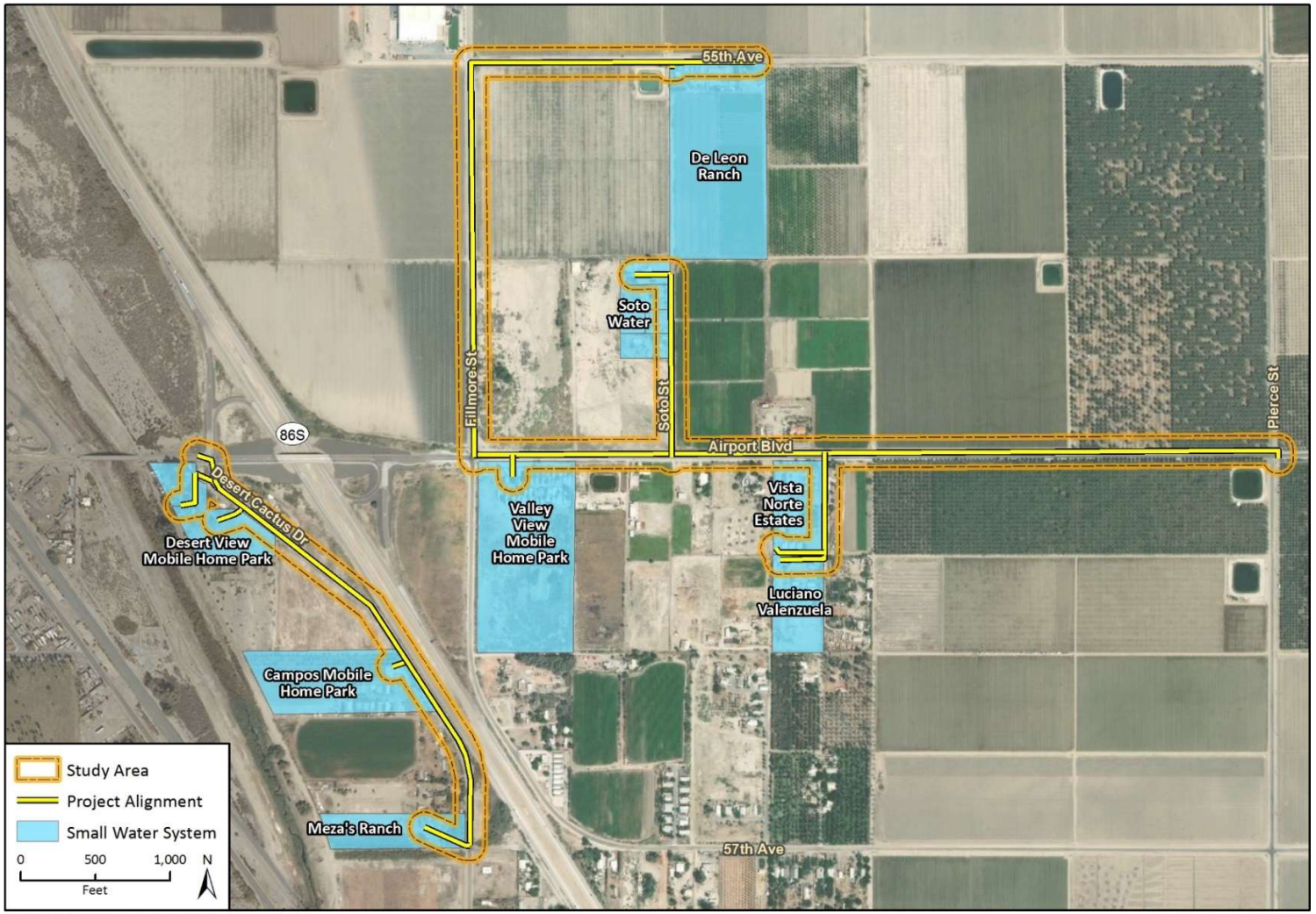
The project site, as well as a 100-foot buffer around the project site, was surveyed on foot by biologists familiar with the biological resources located in the regional vicinity of the property. **Figure 3-3** shows the study area boundaries. Inaccessible private property was surveyed using binoculars. An inventory of all plant and animal species observed was compiled, the existing vegetation communities were further classified, and the general site and habitat conditions were documented and are provided in Appendix C of the Biological Resources Technical Study, which is included as **Appendix B** to this IS/MND.

The project is located within the *Coachella Valley Multiple Species Habitat Conservation Plan* (CVMSHCP) planning area. The CVMSHCP, which was approved in 2008, is a comprehensive, multi-jurisdictional habitat conservation plan focusing on the conservation of species and their associated habitats in the Coachella Valley region of Riverside County. The overall goal of the CVMSHCP is to maintain and enhance biological diversity and ecosystem processes within the region while allowing for future economic growth (CVAG 2007).

The CVMSHCP covers 27 sensitive plant and wildlife species (CVMSHCP covered species) as well as 27 natural communities and includes 21 conservation areas. Covered species include both listed and non-listed species that are conserved by the CVMSHCP. The overall provisions for the plan are subdivided according to specific resource conservation goals that have been organized according to geographic areas, or Conservation Areas. These are identified as Core, Essential, or Other Conserved Habitat for sensitive plan, invertebrate, amphibian, reptile, bird, and mammal species, Essential Ecological Process Areas, and Biological Corridors and Linkages.

The project is located within the planning boundary of the CVMSHCP but is not a part of or adjacent to any specific Conservation Area. The closest Conservation Area is called the *Coachella Valley Stormwater Channel and Delta CVMSHCP Conservation Area*, which occurs on the south side of Avenue 66, two miles south of the project area.

Figure 3-3: Biological Resources Study Area



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Additional data provided by CVWD 2019.

Source: Rincon 2019

Habitat/Vegetation Communities

The majority of the project alignment is within developed urban and agricultural areas. The vegetation communities within the project area include agriculture, disturbed/ruderal, and developed; the vegetation communities do not include vacant, undisturbed lands. Disturbed or ruderal habitat consists of areas that have been physically disturbed and are no longer recognizable as a native or naturalized vegetation association but continue to retain a soil substrate. Within the project area, this habitat type is dominated by Russian thistle (*Salsola tragus*), a variety of thistles from the Centaurea, Cynara, and Carduus genera, mustards (*Brassica* spp., *Hirschfeldia incana*, *Sisymbrium* spp.), and non-native grasses (*Bromus* spp., *Schimus* spp.). Agricultural areas within the project area include active farmland supporting a variety of crops including dates and lettuce. Agricultural areas also include pastureland and fallow cropland. These areas are usually tilled/disked regularly, irrigated, and are subject to regular planting and harvesting. Developed areas within the project area include mobile home parks, paved and dirt roads, and other buildings and paved areas. Mobile home parks within the project area contain ornamental trees and shrubs such as eucalyptus (*Eucalyptus* spp.), palm trees (*Washingtonia* spp., *Phoenix dactylifera*), and oleander (*Nerium oleander*).

Wildlife

The project site and surrounding areas provide habitat suitable for wildlife species that commonly occur in southern California suburban areas. Wildlife observed on or adjacent to the site included bird species such as American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), snowy egret (*Egretta thula*), northern mocking bird (*Mimus polyglottos*), and common raven (*Corvus corax*). Coyoter (Canis latrans) scat, as well as some lizards and small animal burrows were observed within disturbed/ruderal areas.

Special Status Plants

While 27 special status plant species have been previously documented within a five-mile radius of the project area by the CNDDB and USFWS-IPaC, the project site does not contain suitable habitat for any special status species. The project site is not anticipated to be suitable to support special status plant species due to the disturbance history of the site, lack of suitable soils, inappropriate hydrologic conditions, absence of appropriate vegetation communities, or being outside the elevation range of the species.

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. USFWS-IPaC includes federally listed plant species and (if designated) critical habitat. According to the CNDDB and USFWS-IPaC, no sensitive plant species or communities have been tracked within a five-mile radius of the project area.

Special Status Wildlife

Rincon evaluated 26 wildlife species for their potential to occur within the project area. The assessment of the potential for these species to occur is based upon the presence of suitable habitat as identified during field surveys and existing knowledge of species occurrences and distributions in the region. The site was determined to contain marginally suitable habitat for western yellow bat (*Lasiurus xanthinus*) and western mastiff bat (*Eumops perotis californicus*). Accordingly, these species have moderate potential to occur within the project area. Western yellow and western mastiff bat could roost in trees adjacent to the project site. Burrowing owl (*Athene cunicularia*) was determined to have low potential to occur in the project area, although some elements of suitable habitat exist in the unpaved portions of the site, particularly along irrigation levees. No special status wildlife species were observed within the project area during the field survey.

The project area provides suitable habitat for nesting or migratory bird species, which area protected by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Commission (CFGC) (FGC 3503 and 3503.5). The project

area provides suitable habitat for numerous species of birds common in the area and nesting birds are likely to be present within the project area during the nesting season.

Jurisdictional Resources

Section 404 of the federal Clean Water Act establishes a program to regulate the discharge of dredged or fill materials into "waters of the United States." Section 404 permits are administered by the U.S. Army Corps of Engineers (USACE). Section 401 of the Clean Water Act further regulates the discharge of dredged or fill materials and is administered in California by the SWRCB and Regional Water Quality Control Boards (RWQCBs). CDFW's Lake and Streambed Alteration Program (Fish & Game Code Section 1600) is focused on protection and conservation of fish and wildlife resources within the bed, channel, and bank of "waters of the State". Areas potentially subject to USACE, RWQCB, and CDFW jurisdiction were assessed during the literature review and field survey.

The Whitewater River/Coachella Valley Stormwater Channel[1] was evaluated for USACE, RWQCB, and CDFW jurisdiction. The Whitewater River/Coachella Valley Stormwater Channel is a previously developed, unlined downstream extension of the Whitewater River constructed as a drainageway for agricultural irrigation return, treated wastewater, and stormwater runoff. The Whitewater River/Coachella Valley Stormwater Channel is a direct tributary to the Salton Sea, which is considered a Traditionally Navigable Water by the USACE. As such, the Whitewater River/Coachella Valley Stormwater Channel is considered jurisdictional for all three regulatory agencies, USACE, RWQCB, and CDFW. CVWD routinely maintains the Whitewater River/Coachella Valley Stormwater Channel in order for it to function.

The Whitewater River/Coachella Valley Stormwater Channel is located adjacent to the western property boundary of Desert View MHP, Campos MHP, and Meza's Ranch. As demonstrated on Figures 2c and 3b in Appendix B, the channel is outside of the Study Area and Area of Potential Effects. The proposed project does not require a crossing of the channel, and therefore, regulatory permitting under Section 404 (USACE) and Section 401 (RWQCB) of the federal Clean Water Act would not be required. The proposed project would not impact resources within channel; therefore, a Lake and Streambed Alteration Agreement under Fish & Game Code Section 1600 (CDFW) also would not be required.

Wildlife Corridors, Linkages, and Preserves

Wildlife movement and habitat fragmentation are important issues in assessing impacts to wildlife. Habitat fragmentation occurs when a proposed action results in a single, unified habitat area being divided into two or more

[1] The Whitewater River Stormwater Channel and the Coachella Valley Stormwater Channel (Whitewater River/Coachella Valley Stormwater Channel) system follows a gentle slope from northwest to southeast, with the headwaters forming in the San Bernardino Mountains near Palm Springs and terminating at the Salton Sea. The Whitewater River/Coachella Valley Stormwater Channel is the 50-mile backbone stormwater protection system for the Coachella Valley. The western half of the channel runs along the natural alignment of the Whitewater River, which cuts diagonally across the valley to Point Happy in La Quinta (near Highway 111 and Washington Street). This section of the channel is called the Whitewater River Stormwater Channel. Downstream from Point Happy, a man-made section of the stormwater channel conveys floodwaters to the Salton Sea. This portion of the channel is called the Coachella Valley Stormwater Channel. The two sections were built separately, but they form one continuous channel. The Whitewater River/Coachella Valley Stormwater Channel is a regional flood conveyance system, and also receives subsurface drainage from agricultural lands, rising groundwater, wastewater from treatment plants, and urban runoff.

areas in such a way that the division isolates the two new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or from one habitat type to another, as in the fragmentation of habitats within and around "checkerboard" residential development. Habitat fragmentation also can occur when a portion of one or more habitats is converted into another habitat, as when annual burning converts scrub habitats to grasslands habitat. The project area is located within previously disturbed and routinely managed areas that offer little to no value to wildlife movement. These areas are subject to frequent human disturbance that do not provide linkage to wildlife habitat.

a) Less than Significant with Mitigation Incorporated

A project-level *Biological Resources Technical Study* (**Appendix B**) was prepared to identify potential impacts to special-status species that would result from the proposed project. Although 27 special status plant species have been previously documented within a five-mile radius of the project area by the CNDDB and USFWS-IPaC, the field survey determined that the project site does not contain suitable habitat for any special status species. It was determined that the project site does not contain suitable habitat to support special status plant species because of the disturbance history of the site, lack of suitable soils, inappropriate hydrologic conditions, or absence of appropriate vegetation communities. Due to the absence of special status plant species within the project impact area, impacts to special status plant species are not anticipated to result from the proposed project.

Special-status wildlife were evaluated for their potential to occur within the project area, which includes the area of ground disturbance for construction of the pipelines and a 25-foot buffer on either side of the pipeline (See **Figure 3-3**) where direct or indirect impacts could occur. Twenty-six special-status wildlife species were previously recorded within a five-mile radius of the project area and were evaluated for their potential to occur within the project site based upon presence of suitable habitat as identified during the field surveys and existing knowledge of the project area. The site was determined to contain marginally suitable habitat for western yellow bat (Lasiurus xanthinus) and western mastiff bat (Eumops perotis californicus). Accordingly, these species have moderate potential to occur within the project site. Western yellow and western mastiff bat could roost in trees adjacent to the project site. Burrowing owl (*Athene cunicularia*) was determined to have low potential to occur in the project area, although some elements of suitable habitat exist in the unpaved portions of the site, particularly along irrigation levees. No special status wildlife species were observed during the field survey. **Mitigation Measures BIO-1** and **BIO-2** would be implemented to reduce the potential to impact any roosting bats or burrowing owls.

There is habitat within and adjacent to the project area that is suitable for nesting birds, which are protected by the MBTA and the CFGC (FGC 3503 and 3503.5). Therefore, the proposed project has the potential to result in impacts to nesting birds through increased injury or mortality, or disruption of normal adult behaviors resulting in the abandonment or harm to eggs and nestlings if construction activities would be required during the nesting season. Construction occurring within the vicinity of nesting birds may also result in indirect impacts resulting from noise and dust. If construction activities related to the proposed project would occur during the nesting season, **Mitigation Measure BIO-3** would be implemented to reduce potential impacts to nesting birds to less than significant levels. Therefore, with implementation of **Mitigation Measures BIO-1, BIO-2 and BIO-3**, direct and indirect impacts to special status wildlife species and nesting birds would be less than significant.

b) Less than Significant Impact

Land cover within the project alignment is primarily developed urban and agricultural areas. According to the CNDDB and USFWS-IPaC search, no sensitive plant communities have been recorded within a five-mile radius of the project area. Additionally, no sensitive vegetation communities were observed within or adjacent to the project area. Furthermore, project impacts would be limited to previously disturbed areas, such as within roadway rights-of-way and on private, developed properties, with high human activity. Therefore, potential impacts to sensitive vegetation communities would be less than significant and no mitigation would be required.

c) Less than Significant Impact

The Whitewater River/Coachella Valley Stormwater Channel is located to the west and outside of the project area. The Whitewater River/Coachella Valley Stormwater Channel is a direct tributary to the Salton Sea. The Whitewater River/Coachella Valley Stormwater Channel near the project area contains dense tamarisk scrub (in the pilot channel) and other small connecting irrigation drains/channels are unvegetated due to routine maintenance activities. The Whitewater River/Coachella Valley Stormwater Channel is subject to USACE, RWQCB, and CDFW jurisdiction; however, the project is not located with the jurisdictional features and no jurisdictional permits would be required.

As part of project design, a SWPPP, which would include BMPs, would be developed to ensure the proposed project would not directly impact the Whitewater River/Coachella Valley Stormwater Channel. Therefore, impacts to state or federally protected wetlands or other potentially jurisdictional features would be less than significant, and no mitigation would be required.

d) Less than Significant Impact

The proposed project is located within previously developed and routinely managed areas that offer little to no value to wildlife movement. Therefore, the proposed project is not anticipated to have an effect on localized, regional, or urban-adapted wildlife movement. Additionally, ground surfaces would be restored to pre-construction conditions and the project area would retain the existing contiguity and would therefore not result in habitat fragmentation in the region. The proposed project would not include additional lighting and construction activities would occur during the day and would not indirectly impact potential nocturnal wildlife movement through nighttime lighting or noise generation. Therefore, direct and indirect impacts to wildlife movement would be less than significant and no mitigation would be required.

e) No Impact

Riverside County Ordinance 559 protects oak woodlands and requires a permit for removal of any native trees on parcels greater than one-half acre in size and above 5,000 feet in elevation; however, activities conducted by public utilities are exempt. No protected trees would be removed as part of the proposed project, as no trees within the project area meet these criteria. The proposed project would not conflict with any local policy or ordinance and impacts would be less than significant. No mitigation would be required.

f) No Impact

The proposed project is within the CVMSHCP plan area; however, it is not within any of the designated Conservation Areas. As such, the proposed project would avoid direct impacts to the CVMSHCP Conservation Areas and would not conflict with the CVMSHCP conservation objectives. As permittee in the CVMSHCP, CVWD mitigates its development impact to parcels outside of the conservation areas but within the plan boundaries through compliance with the Local Development Mitigation Fee guidelines. However, the project does not disturb or permanently impact any undisturbed vacant parcels that would be applicable. There would be no impact and no mitigation would be required.

Mitigation Measures:

Mitigation Measure BIO-1: Roosting Bats Impact Avoidance and Minimization

To avoid disturbance of roosting bats, which are CDFW Species of Special Concern, CVWD shall, at least two weeks prior to, but not more than 30 days prior to, the start of construction, contract with a qualified biologist to conduct a pre-construction survey for roosting bats. The survey shall include all trees, bridges, and structures suitable for roosting by the western yellow bat and western mastiff bat. The pre-construction survey shall be

conducted within the disturbance footprint and a 100-foot buffer with inaccessible areas (i.e. private lands) surveyed with binoculars, as feasible.

If active bat roosts are present onsite, a buffer zone of 100 feet shall be established around the roosts that excludes construction activities or other disturbances. Tree removal activities shall occur only during periods when bats are not roosting in those trees proposed to be removed, as determined by a qualified biologist. If active maternity roosts or non-breeding bat hibernacula are found in trees scheduled to be removed, removal activities will be conducted during a season when young are not present.

Mitigation Measure BIO-2: 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 BUOW 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 study 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-3: Nesting Birds

To avoid disturbance of nesting birds, including raptor species protected by the MBTA and CFGC 3503 and 3503.5, 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

A *Cultural Resources Assessment Report* was prepared in April 2019 by Rincon Consultants, Inc. for the proposed project. An intensive pedestrian field survey of the project area was conducted on February 12 and 13, 2019 and on April 18, 2019. *The Cultural Resources Assessment Report* was prepared to satisfy CEQA; AB52 Tribal Cultural Resources; the National Environmental Policy Act (NEPA); and Section 106 of the National Historic Preservation Act (NHPA). The complete *Cultural Resources Assessment Report* is provided in **Appendix C**; and is summarized within this IS/MND. The field survey identified no archaeological resources in the project area. In addition, results of the field investigation confirm no historic-age buildings or structures are located within the project area.

On January 17, 2019, as part of the *Cultural Resources Assessment Report*, a cultural resource records search of the California Historical Resources Information System (CHRIS) was conducted at the Eastern Information Center at the University of California, Riverside, and a search of the National Register of Historic Places, (NRHP), the California Register of Historical Resources (CRHR), and the California State Historic Resources Inventory list was conducted. The records search was conducted to identify any previously recorded cultural resources and previously conducted cultural resources studies within the project area and a one-half-mile radius surrounding it.

The CHRIS records search indicate that 14 previous cultural resources studies have been conducted within a one-half-mile search radius of the project area. Of these studies, five overlapped with approximately 10 percent of the project area. A total of 26 cultural resources have been previously recorded within a one-half-mile radius of the proposed project. These include 10 historic period buildings located in the community of Thermal, eight historic period structures (Union Pacific Railway, Coachella Valley Stormwater Channel, transmission lines, a road segment, and four asphalt driveways), one historic period archaeological site (road remnant), four prehistoric isolated artifacts (single ceramic sherds), and three historic period isolated artifacts (single glass bottle fragments). None of these known cultural resources are in the project area. Five resources, including historic period transmission lines (P-33-020764), a historic period road remnant (P-33-020750), two historic period isolated artifacts (P-33-024735 and P-33-024736), and a

prehistoric isolated ceramic sherd (P-33-024737) have been recorded adjacent to the project area (i.e., less than 500 feet).

In addition, Rincon consulted the Riverside County Historical Commission, the Palm Springs Historical Society, the Coachella Valley Archaeological Society, the Coachella Valley Historical Society, and the Historic Society of Palm Desert, to request information regarding historical resources in the proposed project area. One response from the Historic Society of Palm Desert noted that the area has the potential for prehistoric period and historic period archaeological remains but did not mention any specific resources.

Section 106 Native American outreach was initiated in January 2019. In addition, CVWD initiated AB52 consultation in May 2019. *Section 3.1.18 Tribal Cultural Resources* provides an overview of the tribal outreach and consultation regarding the proposed project.

a-c) Less than Significant with Mitigation Incorporated

According to a CHRIS records search, 26 cultural resources have been recorded within one-half-mile of the project area. Although no previously recorded cultural resources are located within the project area, five were located within 500 feet of the project area. No cultural resources were found within the project area during the field survey conducted in 2019.

Although archeological sensitivity of the project area is considered low based on the records search, there is potential for ground-disturbing activities to expose previously unrecorded cultural resources. **Mitigation Measure CUL-1** would require the initial ground-disturbing activities be observed by an archaeological and Native American monitor. **Mitigation Measure CUL-2** would require that all earth disturbing work be temporarily suspended if cultural resources are discovered during construction. With implementation of **Mitigation Measure CUL-3**, potential impacts resulting in a substantial adverse change to the significance of historical and/or archeological resources would be reduced to less-than-significant levels.

The discovery of human remains is a possibility during ground disturbing activities associated with construction projects. **Mitigation Measure CUL-3** would be implemented to ensure proper procedure would be in place if human remains were unearthed during construction activities. The implementation of this measure would reduce impacts to less-than-significant levels.

Mitigation Measures:

Mitigation Measure CUL-1: 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. 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. The project archeologist and Native American monitor will provide a brief orientation to construction crews on the first day of construction.

Mitigation Measure CUL-2: 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. 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-3: Unanticipated Discovery of Human Remains

The discovery of human remains is always 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 archaeologist 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.

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 Imperial Irrigation District (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 east valley, and Southern California Edison in the remaining service area. CVWD employs approximately 530 full time employees.

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 3-4** summarizes the anticipated construction fleet for the proposed project. **Table 3-5** summarizes the estimated material delivery and hauling truck trips, and worker vehicle trips for each type of construction activity.

Table 3-4: Construction Fleet Summary

Construction Phase	Duration (days)	Anticipated Fleet	Usage (hours/day)
Grading	261 days	1 Excavator 1 Forklift 6 Tractor/Loader/Backhoes 1 Trencher	8 8 7 8
Re-paving	261 days	1 Cement and Mortar Mixer 1 Paver 1 Paving Equipment 2 Rollers 1 Tractor/Loader/Backhoes	8 8 8 8 8
Sources: Project-specific information provided by design engineers and duration based on total construction timeframe of one year see *Section 2 Project Description*. CalEEMod Version 2016.3.2; see Appendix A for model output.			

Table 3-5: 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)
Grading	261 days	33	4	1
Re-paving	261 days	33	4	1
Sources: Project-specific information provided by design engineers; see *Section 2 Project Description*. CalEEMod Version 2016.3.2; see Appendix A for model output.				

The proposed project would implement typical construction practices such as trenching and repaving. As shown in **Table 3-4** and **Table 3-5**, 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.

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 pumping and treatment of well water at the SWSs. Finally, the energy consumption of the proposed project is necessary to provide a safe and reliable drinking water supply at each of the nine locations. As such, operation of the project would not result in wasteful, inefficient, or unnecessary consumption of energy.

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 that about two percent of the total energy used in the state is related to water conveyance; it calls for, "increased water conservation and efficiency, improved coordination and management of various water supplies, greater understanding of the water-energy nexus, deployment of new technologies in drinking water treatment, groundwater remediation and recharge, and potentially brackish and seawater desalination." By connecting the SWSs to CVWD's drinking water supply, the project would support the Scoping Plan objective of improved coordination and management of various water supplies, and offset energy demands associated with pumping and treatment at the SWSs.

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 SCAQMD significance screening thresholds and it would support Riverside County's *Climate Action Plan* (CAP) goal of reducing per-capita water consumption by providing a metered drinking water supply (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 or recommended.

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 proximity to the project area. The San Andreas and San Jacinto have been designated by the California Geological Survey as Alquist-Priolo Earthquake Fault Zones. The San Andreas Fault runs through the Coachella Valley and is located approximately one and one-half miles east of the project area. The San Jacinto Fault is a major strike-slip fault zone located approximately 15 miles southwest of the project area (USGS 2019).

a, c) Less than Significant Impact

The primary 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 would 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 is located approximately one and one-half miles from the San Andreas fault and approximately 15 miles from the San Jacinto fault, which are two of California's most active faults. 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 3/20/2019), 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, impacts related to ground rupture would be less than significant.

However, due to the proximity of the proposed project to two active fault zones, the project area is subject to seismic ground shaking. Although, impacts related to strong seismic ground shaking would potentially be significant in the project area, the proposed project would construct approximately 16,000 feet of underground pipelines and associated onsite piping, meters, hydrants and valves to consolidate nine existing SWS into CVWD's potable water system and would not include any land use components that would bring additional people to the area or structures the 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 California Geologic Survey's on-line *Earthquake Hazard Zone Application* (accessed 3/20/2019) provides liquefaction and landslides zones. The proposed project is not located within a liquefaction or landslide zone or located on a geologic unit that is unstable or would become unstable. Additionally, the project area is relatively level. As such, the proposed project would not result in impacts related to seismic-related ground failure or landslides. Impacts would be less than significant, and no mitigation would be required.

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. However, construction of the proposed project would include BMPs as specified in the SWPPP to control wind or water erosion of exposed soils. 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. Potential impacts associated with erosion of top soil would be less than significant. With implementation of the standard construction BMPs, the potential for soil erosion during proposed project construction would be considered less than significant and no 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. According to the UC Davis on-line *SoilWeb Tool* (accessed 3/20/2019), the project area is underlain primarily by a variety of sandy loam soils. Design of the proposed pipelines would adhere to CVWD's professional engineering standards to avoid adverse effects of potential expansive soils. Therefore, impacts related to expansive soils would be less than significant.

e) No Impact

Septic tanks or other alternative wastewater disposal systems would not be a part of the proposed project. Accordingly, no impact would occur.

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 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).

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. In addition, project excavation is expected to reach depths of five to six feet below the ground surface and is, therefore, not expected to reach depths where sensitive paleontological resources would be expected to occur. 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: None required or recommended.

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 one ton of a gas will absorb over a given period of time, relative to the emissions of one 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 *Climate Action Plan* (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 2018 to contain further guidance on Riverside County's GHG Inventory reduction goals, thresholds, policies, guidelines, and implementation programs. In particular, the CAP elaborates on 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 is qualified for CEQA tiering and streamlining of individual projects' CEQA review.

The County CAP GHG inventory included GHG emissions resulting from Water Supply, including GHG emissions resulting from energy used to pump/transport these imported sources of water from their sources to Riverside County. The CAP includes GHG emissions reduction programs and regulations, which include the following measures to reduce GHG emissions from purchased water:

- Measure R1-W1: Renewable Portfolio Standard Related to Water Supply and Conveyance. Increase electricity production from eligible renewable power sources to 33 percent by 2020.
- Measure R2-W1: Water Use Reduction Initiative. Encourages Riverside County to adopt a per capita water use reduction goal in support of the Governor's Executive Order S-14-08 which mandates the reduction of water use of 20 percent per capita. In addition, implement County General Plan Policies LU 4.1d and f, C 5.2 and OS 2.1 through OS 2.4 and provide incentives for all new proposed development projects to comply with the California Green Building Standards Code to reduce indoor potable water use by 20 percent and outdoor potable water use by 50 percent.
- Measure R2-W2: Increase Reclaimed Water Use. New development is able to achieve "points" against the CAP screening tables by including the use of recycled water (County 2018).

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 $MTCO_2e$/year for determining whether a project would have a less than significant cumulative GHG impact (SCAQMD 2008b).

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 last approximately 12 months. Once operational, the project pipelines would require routine maintenance. However, as explained in *Section 2 Project Description*, CVWD would continue to operate its water system with no operational modifications. New water meters would be read per established CVWD schedules. 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, it would not have a substantial demand for electricity or natural gas because the water mains would be pressurized in accordance with CVWD's existing master plan. Therefore, indirect GHG emissions from the project's energy supply would be negligible. The proposed project may be associated with occasional GHG emissions from 'area' sources, including operation of landscaping equipment or recoating pipelines.

GHG emissions were estimated using CalEEMod version 2016.3.2, consistent with the methodology and project-specific assumptions used to quantify air pollutant emissions (see *Section 3.3*). The GHG emissions analyzed herein do not account for emissions from existing energy consumption associated with the current SWS operations. Consistent with SCAQMD guidance, construction emissions were amortized over the life of the project, defined as 30 years, added

to the operational emissions, and compared to the applicable interim GHG significance threshold Tier 3 (SCAQMD 2008b). Annualized GHG emissions are summarized in **Table 3-6**.

Table 3-6: Proposed Project GHG Emissions ($MTCO_2e$/year)

Source	$MTCO_2e$
Energy	*Negligible*
Mobile	*Negligible*
Area	<0.1
Amortized Construction Emissions	20.3
Total	**20.3**
SCAQMD Threshold	*10,000*
Significant?	***No***

The results of the inventory for construction and operational emissions, as shown in the CalEEMod output tables in Appendix A, are presented in **Table 3-6**. GHG emissions from the project would be below SCAQMD thresholds of significance. The project would not generate GHG emissions, directly or indirectly, that may have a significant impact on the environment and no mitigation would be necessary.

b) Less than Significant Impact

The *2017 Climate Change 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. The *Scoping Plan* also recognizes that about two percent of the total energy used in the state is related to water conveyance; it calls for, "increased water conservation and efficiency, improved coordination and management of various water supplies, greater understanding of the water-energy nexus, deployment of new technologies in drinking water treatment, groundwater remediation and recharge, and potentially brackish and seawater desalination." By connecting the SWSs to CVWD's drinking water supply, the project would support improved coordination and management of various water supplies, and offset energy demands associated with pumping and treatment at the SWSs.

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 SCAQMD significance screening thresholds. It would also support Riverside County's CAP goal of reducing per-capita water consumption by providing a metered drinking water supply. 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 or recommended.

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 2015) 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. There are no active hazardous materials cleanup sites listed on the SWRCB's GeoTracker database within proximity to the proposed project; however, there are seven closed LUST Cleanup Sites within one mile of the proposed project. The closest active cleanup site listed on the GeoTracker database is located approximately one and one-half miles to the west on Airport Boulevard. There are no hazardous sites listed on the EnviroStor database within one mile of the proposed project. The closest active cleanup site listed on the EnviroStor database is located approximately one and one-half miles to the southwest of the project.

The California Department of Forestry and Fire Protection's (CalFire) 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, CalFire produces maps designating very high fire hazard severity zones (VHFHSZ) within State and Local Responsibility Areas. The project is located within the Western Riverside County's Local Responsibility Area (LRA). The Western Riverside LRA map designates the project area as a non-VHFHSZ (CalFire 2006).

The Jacqueline Cochran Regional Airport is located approximately one and one-half miles west of the project area. The proposed project does not overlap the airport's forecasted noise contours (County 2015, Appendix I-1, Figure 43). The airport's Compatibility Zones D and E overlay the proposed project area. Compatibility zones are established around airports for assessing land use compatibility within an airport influence area. For Zone D, airspace review would be required for proposed development taller than 70 feet; children's schools, hospitals, nursing homes are discouraged; 10 percent of proposed development must be open land; and highly-noise sensitive outdoor nonresidential uses are prohibited. In Zone E, airspace review would be required for proposed development taller than 100 feet; there are no prohibited uses other than hazards to flight and no requirements for open space (Riverside County Airport Land Use Commission [ALUC] 2004).

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 construction contractor 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. The transportation and routine use of temporary, construction-related hazardous materials would not represent a significant hazard to the public or environment due to compliance with existing standards; and therefore, the impact would be less than significant and no mitigation is required.

b) Less than Significant with Mitigation Incorporated

Construction of the proposed project would 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 would result in the release of hazardous materials into the environment. **Mitigation Measure HAZ-1** requires that the construction contractor develop and implement a Hazardous Materials Management Spill Prevention and Control Plan that includes project-specific contingencies. With **Mitigation Measure HAZ-1**,

impacts resulting from potential hazardous materials-related accidents would be reduced to a less-than-significant level.

c) No Impact

The Project site is not located within one-quarter mile of an existing or proposed school. La Familia High School is located approximately one-half mile to the west of the project area. Therefore, the proposed project would not have the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. There would be no impact, and no mitigation is required.

d) Less than Significant Impact

The GeoTracker and EnviroStor database searches indicated there are no active hazardous materials cleanup sites within the proposed project area. SWRCB's GeoTracker database lists seven closed LUST Cleanup Sites within one mile of the proposed project and DTSC's EnviroStor database lists one active cleanup site approximately one and one-half miles southwest of the project area. Therefore, 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. Impacts would be less than significant, and no mitigation would be required.

e) Less than Significant Impact

The Jacqueline Cochran Regional Airport is located approximately one and one-half miles west of the project area. However, the proposed project would construct approximately 16,000 linear feet of pipeline and associated onsite piping, meters, hydrants and valves to consolidate nine independent, privately owned SWS into CVWD's potable water system. Upon completion of construction, none of the project components would not create an aircraft safety hazard or expose workers or residents 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 16,000 linear feet of pipelines and associated onsite piping, meters, hydrants and valves to connect nine SWS's into CVWD's potable water system. Construction activities would take place within public rights-of-way as well as on private and public land and 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. *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) Less than Significant 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 and disturbed areas; the project area does not contain and is not adjacent to wildlands. Riverside County Fire Department Station 39 is located at 86-911 Avenue 58 at the intersection of Polk Street, approximately one mile to the southwest of the project area. The project area has a low risk of wildfire. Therefore, impacts would be less than significant, and no mitigation would be required.

Mitigation Measures:

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. The Plan will be applicable to construction activities and will 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 will 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; and
- Spill control and countermeasures, including employee spill prevention/response training.

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

Surface Water

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 *Colorado River Basin Water Quality Control Plan* (Basin Plan, Colorado River RWQCB 1993 and amended through October 2005) designates water quality standards for the Whitewater River/Coachella Valley Stormwater Channel in the form of beneficial uses and numeric and narrative water quality objectives. Beneficial uses of the Whitewater River/Coachella Valley Stormwater Channel include Freshwater Replenishment (FRSH), Contact Water Recreation (REC I; unauthorized use), Non-Contact Water Recreation (REC II; unauthorized use), Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), and Preservation of Rare, Threatened, or Endangered Species (RARE).

Currently, within the Coachella Valley Stormwater Channel the 17 mile stretch from Dillon Road 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, Toxicity, (SWRCB 2016). 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.

The United States Department of Homeland Security Federal Emergency Management Agency (FEMA) National Flood Insurance Program provides Flood Insurance Rate Maps (FIRM) that identify flood hazard areas, called Special Flood Hazard Areas (SFHA). SFHAs are defined as areas that will be inundated by the flood event having a one percent chance of being equaled or exceeded in any given year. The one percent chance flood is also referred to as the base flood or 100-year flood. SFHAs are labeled as Zone A, Zone AO, Zone AH, Zones A1-30, Zone AE, Zone A99, Zone AR, Zone AR/AE, Zone AR/AO, Zone AR/A1-A30, Zone AR/A, Zone V, Zone VE, and Zones V1-V30. Moderate flood

hazard areas, labeled Zone B or Zone X (shaded) are also shown on the FIRM, and are areas between the limits of base flood and the 0.2 percent annual chance (or 500 year) flood. The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2 percent annual chance flood, are labeled Zone C or Zone X (unshaded) (FEMA 2019).

Groundwater

The Coachella Valley Groundwater Basin (California Department of Water Resources [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, Palm Desert Groundwater Replenishment Facility, and the Thomas E. Levy 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, 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 *Section 2 Project Description*, the majority of the SWSs being consolidated as part of the proposed project have had various water quality issues, primarily with elevated levels of fluoride and arsenic.

a) Less than Significant Impact

Potential water quality impacts associated with construction of the proposed project would be limited to short-term erosion/sedimentation that would occur during construction of the pipeline alignments. The temporary disturbance area, including construction and staging areas, would total approximately 51,300 sq. ft., or approximately two acres. 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 storm water 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. With implementation of the SWPPP, storm water 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.

Therefore, the proposed project would not be expected to violate water quality standards or waste discharge requirements or otherwise degrade surface or groundwater quality because it would comply with all existing regulations and permits. Impacts would be less than significant, and no mitigation measures would be required.

b) Less than Significant Impact

As discussed in *Section 3.14 Population and Housing*, the proposed project would consolidate existing SWSs and would not induce population growth or result in an increase in water demands. The SWSs currently use groundwater pumped from private groundwater wells. With the proposed project, the SWSs would be connected to CVWD's potable water supplies. CVWD's potable water supplies are also pumped from the Coachella Valley Groundwater Basin, which CVWD recharges through three operational groundwater replenishment facilities. Therefore, the proposed project would not be expected to substantially change groundwater supplies or interfere with groundwater recharge efforts. Impacts would be less than significant, and no mitigation would be required.

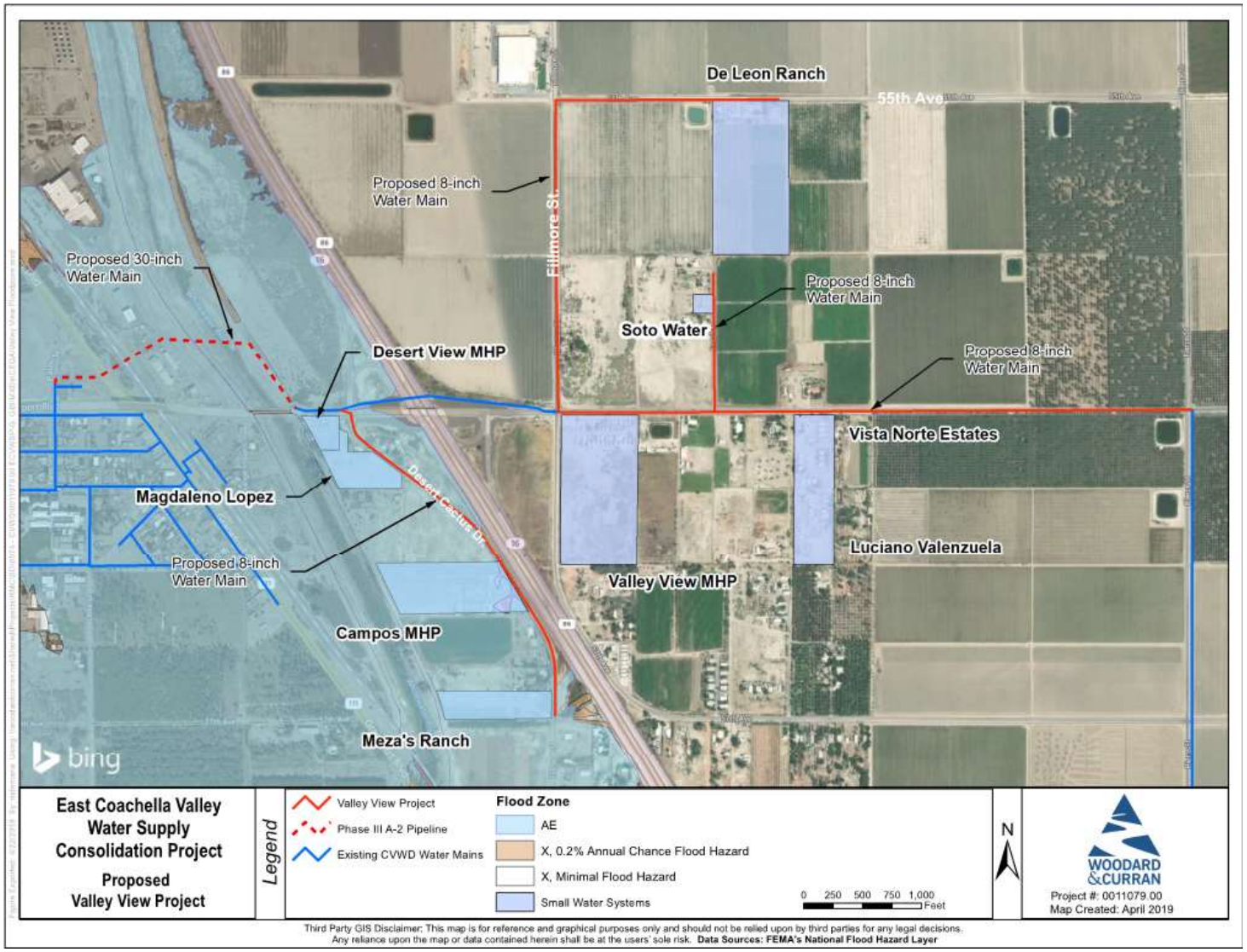
c) Less than Significant Impact

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, and no changes in impervious surface areas would occur. 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, as well as measures to address other construction-related pollutants such as potential leaks from construction equipment.

The portion of the project area to the west of Highway 86 is located within a FEMA SFHA (Zone AE – 100-year flood zone). FEMA flood hazard zones within the project area are shown in **Figure 3-4**. Desert View MHP, Magdaleno Lopez, Campos MHP, and Meza's Ranch, as well as the proposed 12-inch water main along Desert Cactus Drive are within FEMA SFHA Zone AE – 100-year flood zone (FEMA 2018). The rest of the project area is designated Zone X (unshaded), which means it is not in an area prone to flooding. The proposed project would include installation of underground water distribution pipelines and associated valves, meters and hydrants that would not risk release of pollutants due to flooding. 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 or recommended.

Figure 3-4: FEMA Flood Insurance Rate Map



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 area is located in the unincorporated community of Thermal in Riverside County. According to Riverside County's *Eastern Coachella Valley Area Plan* (County of Riverside 2016), the project area includes commercial retail, low density residential, and agriculture land use designations.

a) No Impact

The proposed project would construct approximately 16,000 linear feet of pipelines and associated onsite piping, meters, hydrants and valves to consolidate nine independent, privately owned SWSs into CVWD's potable water system. 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 majority of project features (other than fire hydrants and meters) would be located underground and would not result in a physical barrier within the existing community. No impacts would occur, and no mitigation would be required.

b) No Impact

The proposed project would construct water pipelines to consolidate nine privately owned SWSs into CVWD's municipal water system and would not conflict with land use plans, policies, or regulations. 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. Therefore, the proposed project would be consistent with all applicable land use plans, policies and regulations of agencies with jurisdiction over the proposed 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 or recommended.

3.12 Mineral Resources

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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, as identified in the Riverside County General Plan Open Space Element (County 2015) and on the DOC CGS Mineral Land Classification online mapping tool (DOC 2015), the CGS classifies the project area as Mineral Resource Zone 1 (MRZ-1). MRZ-1 indicates that there are no significant mineral deposits or there is little likelihood of their presence (CGS 2007).

a, b) No Impact

The project area is classified as MRZ-1, indicating that there are no significant mineral resources or there is low probability of the presences of mineral resources. The proposed project would construct water distribution pipelines within roadway rights-of-way and on previously developed or disturbed land. Therefore, the proposed project would not result in the loss of availability of a known mineral resource of value locally or to the region and the residents of the state and no impacts would occur.

Mitigation Measures: None required or recommended.

3.13 Noise

Would the Project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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. The element includes policies, standards, criteria, programs, diagrams, a reference to action items, and maps related to protecting public health and welfare from noise (see **Table 3-7** and **Table 3-8**).

Table 3-7: 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.						

Table 3-8: 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 County of Riverside Noise Ordinance would not apply to the proposed project. However, they can be used to understand acceptable sound levels in the region. The ordinance stipulates that sound levels shall not exceed the exterior sound level standards at neighboring property lines shown in **Table 3-9**.

Table 3-9: County of Riverside Sound Level Standards

General Plan Component	General Plan Land Use Designation	Maximum Decibel Level (dB L_{MAX})	
		7am – 10pm	10pm – 7am
Community Development	Medium High Density Residential (MHDR)	55	45
	Medium Density Residential (MDR)	55	45
Rural Community	Low Density Residential (LDR)	55	45
Agriculture	Agriculture (AG)	45	45
Source: Riverside County Ordinance 847 Noise.			

Existing Conditions

The existing noise setting in the project area consists of residential activities and traffic noise from Highway 86 and other surrounding roadways. Base year noise levels were assessed for the County of Riverside General Plan (County 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)
Highway 86 between southern city limits of Coachella and Avenue 66 (adjacent to the proposed project)	37,900	78.6	1,144
Airport Boulevard between Van Bueren Street and Frederick Street (approximately four miles west of the proposed project)	6,200	64.4	110
Source: County of Riverside General Plan Appendix I-1.			

The closest airport to the project area is the Jacqueline Cochran Regional Airport, located in the westerly part of Thermal. The proposed project does not overlap the airport's forecasted noise contours (County 2015, Appendix I-1, Figure 43). The airport's Compatibility Zones D and E overlay the proposed project area. Compatibility zones are established around airports for assessing land use compatibility within an airport influence area. For Zone D, airspace review would be required for proposed development taller than 70 feet; children's schools, hospitals, nursing homes are discouraged; 10 percent of proposed development must be open land; and highly-noise sensitive outdoor nonresidential uses are prohibited. In Zone E, airspace review would be required for proposed development taller than 100 feet; there are no prohibited uses other than hazards to flight and no requirements for open space (Riverside County Airport Land Use Commission [ALUC] 2004).

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 12 months and 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. A list of construction equipment that may be used at any one time during construction can be found in *Section*

2 Project Description. The typical noise level of each piece of construction equipment that would 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 quieter environments, truck noise would be more noticeable than where the existing ambient noise level is high.

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 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 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) (see **Table 3-8**). 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
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. 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.

Once operational, the proposed below-ground conveyance pipelines 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 vibration impacts.

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.

c) Less than Significant Impact

The proposed project would construct approximately 16,000 linear feet of pipelines and associated onsite piping, meters, hydrants and valves to consolidate nine independent, privately owned SWSs into CVWD's potable water system. Although the proposed project would include expansion of CVWD's municipal water delivery infrastructure, it would serve existing communities and does not propose new housing or businesses that would be exposed to excessive noise levels. Thus, impacts related to aircraft noise would be less than significant.

Mitigation Measures:

To lessen possible noise and vibration impacts, the project shall implement practical noise control measures **Mitigation Measure NOI-1** for construction. Impacts are considered less than significant with mitigation incorporated.

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 shall be provided, 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

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 is located within the unincorporated community of Thermal in Riverside County. According to the U.S. Census 2013-2017 American Communities Survey (ACS) 5-Year Estimates, the population of Thermal is approximately 2,166 and there are approximately 839 housing units, of which approximately 35 percent (292) are mobile homes. As shown in **Table 2-2**, the proposed project would consolidate nine SWSs that include a total of 143 service connections and an estimated population of 572 with CVWD's potable water system.

a) Less than Significant Impact

The proposed project involves expansion of CVWD's municipal water delivery infrastructure within its service area; the direct use would serve specific existing communities that currently rely on SWSs with a reliable potable water source from CVWD's municipal water system. The proposed expansion of CVWD's municipal water distribution infrastructure, and subsequent indirect growth, is consistent with planned growth in the area. The Riverside County General Plan *Eastern Coachella Valley Area Plan* (County 2012) expected the Eastern Coachella Valley region to double its population between 2010 and 2020. 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 construct water distribution pipelines to consolidate nine privately owned SWSs into CVWD's municipal water system and would not displace existing people or housing. Therefore, there would be no impacts related to displacement of people or housing would occur and no mitigation would be required.

Mitigation Measures: None required or recommended.

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

Riverside County Fire Department, in cooperation with Cal Fire, provides fire protection and emergency services to unincorporated areas of Riverside County. Station 39 is located at 86-911 Avenue 58 at the intersection of Polk Street, approximately one mile to the southwest of the project area.

The Riverside County Sheriff's Department provides law enforcement services, and the California Highway Patrol provides traffic enforcement services within the project area. The Riverside County Sheriff's Thermal Station is located at 86625 Airport Boulevard approximately one-half mile to the west of the project area.

There are no schools located within the project area. La Familia High School is located approximately one-half mile to the west of the project area.

There are no parks located within the project area. The Canal Regional Park is located approximately 1.5 miles to the northeast of 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 population growth would not result from construction of the proposed project as it would serve existing communities (see *Section 3.13 Population and Housing*). 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 of the 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 is required.

Mitigation Measures: None required or recommended.

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 includes commercial retail, low density residential, and agriculture land use designations. There are no parks located within the project area. The Canal Regional Park is located approximately 1.5 miles to the northeast of the project area and HITS Desert Horse Park is located approximately two miles to the west of the project area. Riverside County contains bicycle, pedestrian, and equestrian trails. Within the project area, Airport Boulevard, Fillmore Street, Desert Cactus Drive, and Pierce Street are designated as a Class I bicycle paths (County 2016). A regional trail runs along the Whitewater River/Coachella Valley Stormwater Channel just west of the project area.

a, b) No Impact

There are no parks within the project area and consolidation of SWS into CVWD's potable water system would not increase the use of existing parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Similarly, the proposed project would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. Thus, no impacts would occur, and no mitigation is required.

Mitigation Measures: None required or recommended.

3.17 Transportation

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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

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 Congestion Management Program (CMP; RCTC 2011) was adopted in December 2011 and is planned to be incorporated in the *Long Range Transportation Plan* (LRTP). The LRTP, which will be published later in 2019, will take a comprehensive review of projects on the state highway, regional arterials, rail and bus, freight network, and active transportation. According to the 2011 CMP, all roadway segments in the Coachella Valley in 2011 were operating at acceptable levels of service (i.e., were not congested) except for Ramon Road between Bob Hope Drive and Interstate 10, approximately 20 miles northwest of the proposed project area (RCTC 2011).

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* includes a multipurpose path along Airport Boulevard between Polk Street and the Whitewater River/Coachella Valley Stormwater Channel (CVAG 2017b).

The Southern California Association of Governments (SCAG) *Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS; SCAG 2016) identifies strategies to meet mobility of all modes, legislative, financial and air quality requirements in the six county area of Southern California. It is updated every four years, most recently in June 2016. Most of the projects identified in the Coachella Valley focus on expanding the Sunline Transit Agency facilities (SCAG 2016).

The project site is served by a Class I bike path on Avenue 66 and a regional trail located along the Whitewater River/ Coachella Valley Stormwater Channel, according to Figure 9 in the 2016 Riverside County Eastern Coachella Valley Area Plan (County of Riverside 2016). These existing facilities are shown in **F**.

Figure 3-5: Trails and Bikeway System

Source: 2016 Riverside County Eastern Coachella Valley Area Plan (County of Riverside 2016)

Existing circulation around the SWSs typically consists of two-lane roads with no bicycle or pedestrian facilities. The image to the right shows access at the Magdaleno Lopez SWS site, which is typical of the other SWSs in the project area.


Existing conditions at Magdaleno Lopez SWS

As shown in **Table 3-10**, Highway 86 where it runs adjacent to the proposed project area (between southern city limits of Coachella and Avenue 66) had a measured average daily number of vehicle trips of 37,900 in 2007.

a) Less than Significant with Mitigation Incorporated

Construction is anticipated to last 12 months and occur on weekdays between the hours of 7 am and 6 pm. During construction, the project would generate trips associated with construction crews and materials deliveries. Assuming a rate of construction of 150 LF per day, construction would generate up to 40 round-trip trips per day, including trips for off hauling of export material, delivery of materials, and construction worker commuting. Construction

would involve approximately 6,943 cy of material export which is accounted for in this truck trip count. All construction activities would occur within the County of Riverside roadway rights-of-way and SWS properties. Disturbance activities would occur on existing paved and dirt access roads and in vegetated areas adjacent to the access roads.

Construction would be temporary, and potential traffic-related impacts would not occur in the same location over the 12-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 CMP, the CVAG studies, or the SCAG RTP/SCS, which focus on long-term, regional circulation projects.

Once operational, the project would not conflict with these regional transportation plans because it would install below-ground pipelines and associated onsite piping, meters, hydrants and valves that would not have a permanent impact on circulation. CVWD would continue to operate its water 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**. 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 Section 15064.3, subdivision (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 12 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 Section 15064.3, subdivision (b) and there would be no impact.

c) No Impact

The project would install below-ground pipelines and associated onsite piping, meters, hydrants and valves, which would not have a permanent impact on geometric roadway design. All disturbed areas would be restored to original grade. CVWD would continue to operate its water system with no operational modifications using standard vehicles, which would not introduce incompatible uses to roadways. The project would not result in transportation hazards.

d) Less than Significant with Mitigation Incorporated

As explained under Impact a), above, construction of the 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:

To lessen possible circulation and emergency access impacts during construction, the project shall implement practical transportation control measure **Mitigation Measure TRA-1**. Impacts are considered less than significant with mitigation incorporated.

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. 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

A *Cultural Resources Assessment Report* was prepared in March 2019 by Rincon Consultants, Inc. for the proposed project. A field survey of the project area and associated cultural resources, including tribal resources, was conducted on February 12 and 13, 2019 and on April 18, 2019. The complete Cultural Resources Assessment Report is provided in **Appendix C**.

On January 15, 2019, Rincon conducted a search of the Sacred Lands File was requested from the Native American Heritage Commission (NAHC). On January 17, 2019, a search of the cultural records at the Eastern Information Center at the University of California, Riverside was conducted to identify any previously recorded cultural resources and previously conducted cultural resources studies within a one-half-mile radius of the proposed project. *Section 3.5 Cultural Resources* provides an overview of the Eastern Information Center and other database searches that were conducted for the Project. According to the search, 14 previous cultural resources studies have been conducted within a one-half-mile radius of the project area. However, no previously recorded sites or historic-era properties are located within the project area. No cultural resources were discovered during the field survey.

Results of the Sacred Lands File Search by the NAHC did not indicate the presence of Native American sacred lands within the vicinity of the project area. In addition to the search of the Scared Lands File, the NAHC identified 19 Native American contacts who may have knowledge of cultural resources of Native American origin at the project site. Rincon prepared and mailed letters to each of these groups on behalf of CVWD on January 22, 2019.

On February 20 and 22, 2019, Rincon followed up with the Native American contacts who had not yet replied. Twelve responses were received from this outreach effort. A summary of each response received as of April 5, 2019 follows.

- On January 28, 2019, Rincon received a letter from Travis Armstrong, Tribal Historic Preservation Office (THPO) for the Morongo Band of Mission Indians, who stated the Tribe has no additional information to provide at this time. He indicated the Morongo Band of Mission Indians would defer to other tribes in the area when the lead agency initiates formal consultation for the project.

- On January 29, 2019, Rincon received a letter from Judy Stapp, Director of Cultural Affairs for the Cabazon Band of Mission Indians. The letter stated the Tribe does not have specific archival information on the site and the project is outside of its current reservation boundaries.

- On January 30, 2019, Rincon received a letter from Lacy Padilla, Archaeological Technician for the Agua Caliente Band of Cahuilla Indians THPO. The letter stated the project is not in the boundaries of the Tribe's reservation but is in the Tribe's Traditional Use Area. She deferred to the Augustine Band of Cahuilla Indians and Torres Martinez Desert Cahuilla Indians, stating that this letter concluded the Tribe's consultation efforts for the project.

- On February 8, 2019, Rincon received a letter from Sarah Bliss, Cultural Resources Manager, of the Twenty-Nine Palms Band of Mission Indians. She stated that though the THPO is not aware of specific cultural resources in the project area, the project is in the Chemehuevi Traditional Use Area and may have impacts to cultural resources that concern the Tribe. The THPO requests the completed report from the lead agency for evaluation.

- On February 20, 2019, Amanda Vance, Chairperson of the Augustine Band of Cahuilla Indians, responded in a letter stating the Tribe did not have any specific information on cultural resources in the project area. She encouraged Rincon contact other Tribes in the area for information and to contract with a monitor qualified in Native American cultural resources identification for onsite ground disturbance.

- On February 20, 2019, Rincon spoke on the phone with Bobby Ray, the Cultural Director for the Cahuilla Band of Indians. He stated he had no specific knowledge of cultural resources in the area. He deferred to Torres Martinez Desert Cahuilla Indians.

- On February 20, 2019, Rincon had a phone call with Joseph Ontiveros, the Cultural Director for the Soboba Band of Luiseño Indians. Mr. Ontiveros stated the Tribe would defer to Torres Martinez Desert Cahuilla Indians.

- On February 22, 2019, Rincon spoke on the phone with Steven Estrada, Chairperson for the Santa Rosa Band of Mission Indians. Mr. Estrada stated the Tribe would defer further consultation and any monitoring efforts to Torres Martinez Band of Cahuilla Indians.

- On February 22, 2019, Rincon spoke on the phone with Charles Wood, Chairperson for the Chemehuevi Indian Reservation. Mr. Wood stated the Tribe did not have any specific information or concerns and would like to defer to tribes closer to the project area.

- On February 22, 2019, Rincon corresponded with Michael Mirelez, Cultural Resource Coordinator for the Torres Martinez Desert Cahuilla Indians. Mr. Mirelez stated that although the project is outside of the Tribe's reservation, it is in their Traditional Use Area. The Tribe has concerns regarding inadvertent discoveries. Mr. Mirelez requested copies of all cultural reports, formal government-to-government consultation, and Tribal monitoring during all initial ground-disturbing activities, including survey and testing.

- On February 26, 2019, Rincon received an email from Dorothy Willis of the Los Coyotes Band of Mission Indians. Ms. Willis stated that she had discussed the project with Jacob Norte, the Tribe's Environmental Programs Director, and he had no comments on the project.

- In a letter dated March 6, 2019, the Colorado River Indian Tribe's (CRIT) THPO requested that all prehistoric cultural resources, including both known and yet-to-be-discovered sites, be avoided. If avoidance of the site is infeasible, then the THPO requested the resources be left *in situ* or reburied in a nearby area after consultation. In addition, they requested the CRIT THPO be notified within 48 hours of discovering any human remains or objects subject to provision of the Native American Graves Protection and Repatriation Act, or cultural resources such as sites, trials, and artifacts.

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 Section 21080.3.1, the parties may propose mitigation measures, including, but not limited to, those recommended in Section 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 May 2019, CVWD initiated AB 52 with local Native American tribal governments having previously requested to consult under AB 52. As of June 2019, CVWD environmental staff received written formal requests for consultation from two tribes. Staff has meet with both tribes to discuss the project in depth. CVWD continues to coordinate project specifics with the two local tribes and has conditioned the project through mitigation with providing a Native American tribal monitor during initial, earth-disturbing construction activities such as grubbing, clearing, and excavation.

ai-aii) Less than Significant with Mitigation Incorporated

A project-level *Cultural Resources Assessment Report* (**Appendix C**) was prepared to identify potential impacts to cultural resources, including tribal cultural resources, that would result from the proposed project. No tribal cultural resources have been recorded or identified within the project area, much of the project area has been previously disturbed by roadway development, housing, commercial development and agricultural activities, and therefore the possibility of encountering intact surface tribal cultural resources is considered low by Rincon's archeologist. For construction projects that require excavation, such as the proposed project, there is potential for ground-disturbing activities to expose previously unrecorded tribal cultural resources. **Mitigation Measure CUL-1** would require the initial ground-disturbing activities be observed by an archaeological and Native American monitor. **Mitigation Measure**

CUL-2 would require that all earth disturbing work be temporarily suspended if cultural resources, including tribal cultural resources, are discovered during construction.

The discovery of human remains is always a possibility during ground disturbing activities. **Mitigation Measure CUL-3** would be implemented to ensure proper procedure would be in place if human remains were unearthed during construction activities. The implementation of this measure would reduce impacts to less-than-significant levels.

With implementation of **Mitigation Measures CUL-1, CUL-2** and **CUL-3** potential impacts resulting in a substantial adverse change to the significance of tribal cultural resources would be reduced to less than significant.

Mitigation Measures: Refer to **Mitigation Measures CUL-1, CUL-2** and **CUL-3** in *Section 3.5 Cultural Resources*.

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

Water supply services for the project area are provided by CVWD. CVWD delivers irrigation and potable water, collects and recycles wastewater, provides regional storm water protection, and replenishes the Coachella Valley Groundwater Basin and is the largest water supplier in the Coachella Valley. 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 provides wastewater collection and treatment services in the project area. 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 water reclamation plants (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 change petition and tertiary treatment is constructed. The other two WRPs serve isolated communities near the Salton Sea. A sixth WRP (WRP-9) was decommissioned in July 2015.

Stormwater

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 divert floodwaters from the canyons and alluvial fans surrounding the Coachella Valley to the 50-mile Whitewater River/Coachella Valley Stormwater Channel that flows to the Salton Sea.

Solid Waste

Waste collection in the project area is provided by Burrtec. The Mecca II landfill is located in Mecca, California approximately eight miles to the southeast of the proposed project. The Coachella Transfer Station is located approximately six miles to the north of the proposed project.

Utilities

IID provides electricity services and Southern California Gas Company provides natural gas services within the project area.

a) Less than Significant Impact

The proposed project would construct approximately 16,000 linear feet of pipelines and associated onsite piping, meters, hydrants and valves to consolidate nine independent, privately owned SWSs into CVWD's potable water system. The proposed project would not require or result in the construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities beyond the expansion of CVWD's potable water delivery system included in the proposed project. As discussed in *Section 3.15 Population and Housing*, the proposed project would serve existing communities and would not induce population growth that would require new or expanded utilities. Therefore, impacts would be less than significant, and no mitigation would be required.

b) Less than Significant Impact

The proposed project would construct water pipelines to consolidate nine independent, privately owned SWSs into CVWD's potable water system. CVWD has been extensively involved in water and sewer consolidation projects, primarily for small DACs and mobile home parks in the eastern Coachella Valley. Consolidation of small, public water systems, particularly in the eastern Coachella Valley, is a priority for CVWD and the region as many of these systems are not reliable and have water quality issues. As plans to consolidate these small communities into the municipal water system have been ongoing, the increase in water demands from these consolidations are anticipated in future demand projections. Additionally, many of these communities are fairly small and would not substantially increase water demands compared to CVWD's total demands. According to CVWD's *2015 Urban Water Management Plan* (CVWD 2016), there will be sufficient supplies to meet projected demands through 2040 in normal, single-dry, and multiple-dry years.

Additionally, the proposed project would add a total of 143 service connections and an estimated population of 572 to CVWD's potable water system, as shown in **Table 2-2**. This is a relatively small addition given CVWD serves a total population of 216,900 through 107,358 municipal service connections. This represents a 0.26 percent population increase and 0.13 percent increase in service connections resulting from the proposed project. As shown in **Table 2-2**, the proposed project would result in a maximum day demand of 77.31 gpm. Thus, the proposed project would not create a substantial increase in population served or water demands. Therefore, CVWD has sufficient water supplies available to serve the proposed project and impacts would be less than significant.

c) No Impact

The proposed project would construct water pipelines to consolidate nine independent, privately owned SWSs into CVWD's potable water system and would not involve or increase wastewater collection or treatment services. Therefore, no impacts would occur, and no mitigation would be required.

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. Waste material may be hauled to the Mecca II landfill or the Coachella Transfer Station.

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. Therefore, impacts would be less than significant, and no mitigation would be required.

Mitigation Measures: None required or recommended.

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 CalFire 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 State and Local Responsibility Areas. The project is located within the Western Riverside County's LRA, which designates the project area as a non-VHFHSZ.

a) Less than Significant with Mitigation Incorporated

Construction of the proposed project would include installation of approximately 16,000 linear feet of pipelines and associated onsite piping, meters, hydrants and valves to connect nine SWS's into CVWD's potable water system. Construction activities would take place within public 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. 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 3.1.17 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

The proposed project is located within an LRA 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 would construct approximately 16,000 linear feet of pipelines and associated onsite piping, meters, hydrants and valves to connect nine SWS's into CVWD's potable water system. 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 minimally increase and may include reading and maintaining new water meters at the nine communities, 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 primarily level, low density residential and agricultural lands, and 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 Incorporated	Less Than Significant Impact	No Impact
a) Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

a) Less than Significant with Mitigation Incorporated

The proposed project would construct underground domestic water pipelines to consolidate nine SWSs with CVWD's municipal water system. The majority of the proposed project would be located within roadway rights-of-way and previously developed or disturbed areas. With implementation of mitigation measures, the proposed project would not have the potential to substantially degrade the quality of the environment, reduce wildlife habitat, result in adverse impacts to wildlife populations or communities, or eliminate important examples of major periods of California history or prehistory.

As discussed in *Section 3.4 Biological Resources*, the proposed project site does not contain suitable habitat to support special status wildlife or plant species or sensitive plant or animal communities because of the disturbance history of the site, lack of suitable soils, inappropriate hydrologic conditions, or absence of appropriate vegetation communities. However, proposed project construction has the potential to impact nesting birds, which are protected under the MBTA and CFGC, as well as burrowing owl and two species of bats, which are identified as Species of Special Concern by CDFW. **Mitigation Measure BIO-1** would require a qualified biologist to conduct pre-construction surveys for roosting bats and appropriate mitigation to be implemented to reduce potential direct and indirect impacts on bat roosts. **Mitigation Measure BIO-2** would require pre-construction surveys for burrowing owl and appropriate mitigation measures to be implemented to reduce potential direction and indirect impacts to burrowing owls. **Mitigation Measure BIO-3** would require a qualified biologist to conduct surveys for nesting birds and appropriate mitigation to be implemented to reduce potential direct and indirect impacts if construction activities must occur within the nesting

season. With implementation of **Mitigation Measures BIO-1, BIO-2 and BIO-3**, impacts to biological resources would be less than significant.

Additionally, there is potential for ground-disturbing activities to uncover previously unrecorded cultural resources. **Mitigation Measure CUL-1** would require the initial ground-disturbing activities be observed by an archaeological and Native American monitor. **Mitigation Measure CUL-2** would require that all ground disturbing work be temporarily suspended if cultural resources are discovered during construction. **Mitigation Measure CUL-3** would be implemented to ensure proper procedure would be in place if human remains were unearthed during construction activities. With implementation of **Mitigation Measures CUL-1, CUL-2** and **CUL-3**, potential impacts resulting in a substantial adverse change to the significance of Tribal, historical and/or archeological resources would be reduced to less-than-significant levels.

b) Less than Significant with Mitigation Incorporated

Implementation of the proposed project would not result in individually limited, but cumulatively considerable significant impacts. According to the CEQA Guidelines, 15065(a)(3), "cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects. As described in *Section 3.1* through *Section 3.20*, all resource topics associated with the proposed project have been analyzed in accordance with CEQA and the State CEQA Guidelines and were found to pose no impacts, less than significant impacts, or less than significant impacts with mitigation incorporated. No potentially significant impacts would occur from project implementation. Impacts related to air quality were evaluated against thresholds designed to gauge an individual project's cumulative impacts and were determined to be less than significant. Potential impacts on special status and protected species, including bats and migratory birds, would be less than significant with mitigation. Likewise, the project's potential impacts on unrecorded cultural resources and human remains would be less than significant with mitigation. Temporary impacts of construction related to handling hazardous materials, noise and vibration, and transportation circulation systems would also be less than significant with mitigation incorporated.

Related projects in the area consist primarily of other pipeline projects associated with the consolidation of the Saint Anthony MHP SWS and the Valley View MHP SWS as well as future MHP consolidation projects in the region, which includes those MHPs evaluated by CVWD as part of the MHP consolidation prioritization process for both domestic water and sewer services. The incremental impact of the proposed project, which is relatively small in scale, together with impacts of these other short and long-term related projects in the area would be considered less than significant due to the large geographical area of the projects and the extended timeframe for development of the projects (e.g. most projects would not occur simultaneously). Additionally, the related projects would be required to comply with the same or similar regulations and mitigation measures that would reduce potential impacts. Therefore, implementation of the proposed project along with current and future projects would not result cumulatively considerable significant impacts.

c) Less than Significant with Mitigation Incorporated

With implementation of mitigation measures, the proposed project would not have the potential to cause substantial adverse effects on human beings. The potential exists for accidents to occur during construction activities and routine O&M, which would result in the release of hazardous materials into the environment. **Mitigation Measure HAZ-1**, which requires development of a Hazardous Materials Management Spill Control Plan, would reduce this potential impact to a less-than-significant level. The potential also exists for temporary construction activities to cause noise and groundborne vibration that would annoy nearby residents. **Mitigation Measure NOI-1**, which requires standard construction noise control measures, would reduce this potential impact to a less-than-significant level. Finally, construction-related vehicle trips and potential lane closures would result in temporary impacts to the surrounding

transportation circulation system and emergency access. **Mitigation Measure TRA-1** would reduce these potential impacts to a less-than-significant level.

All resource topics associated with the proposed project have been analyzed in accordance with CEQA and the State CEQA Guidelines and were found to pose no impacts, less than significant impacts, or less than significant impacts with mitigation incorporated. Consequently, the proposed project would not result in any environmental effects that would cause substantial adverse effects on human beings directly or indirectly.

4. FEDERAL CROSS-CUTTING ENVIRONMENTAL REGULATIONS EVALUATION

The proposed project may receive funding under a State program that also has a federal funding component and/or from a federal program. Therefore, to assist in compliance with the federal environmental requirements, for the funding program, this document includes analysis pertinent to several federal cross-cutting regulations (also referred to as federal cross-cutters or CEQA-Plus). The basic rules for complying with cross-cutting federal authorities are set-out in the Drinking Water State Revolving Fund regulations at 40 CFR §35.3575 and the USDA Environmental Policies and Procedures at 7 CFR §1970.

This section describes the status of compliance with relevant federal laws, executive orders, and policies, and the consultation that has occurred or will occur in the near future. The topics are based on the USDA environmental policies and procedures and the SWRCB's DWSRF Program Federal Cross-cutting Environmental Regulations Evaluation Form for Environmental Review and Federal Coordination. The DWSRF Program is partially funded by the USEPA. Therefore, the SRWCB must document that projects meet the federal cross-cutters requirements.

4.1 Federal Endangered Species Act

Section 7 of the Federal Endangered Species Act (FESA) requires federal agencies, in consultation with the Secretary of the Interior, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of the critical habitat of these species. Under Section 7, a project that could result in incidental take of a listed threatened or endangered species must consult with the USFWS to obtain a Biological Opinion (BO). If the BO finds that the project could jeopardize the existence of a listed species ("jeopardy opinion"), the agency cannot authorize the project until it is modified to obtain a "nonjeopardy" opinion.

For the purpose of the proposed project, the SWRCB and/or USDA would act as the federal lead or responsible agency. The information contained within the IS/MND and the *Biological Resources Technical Study* (Rincon 2019) may be used to support project compliance with FESA and MBTA.

Section 3.4 Biological Resources describes that the project site does not contain suitable habitat for any special status plant or wildlife species. While 27 special status plant species have been previously documented within a five-mile radius of the project area by the CNDDB and USFWS-IPaC, it was determined that the proposed project site does not contain suitable habitat to support special status plant species because of the disturbance history of the site, lack of suitable soils, inappropriate hydrologic conditions, or absence of appropriate vegetation communities. No special status plant species were observed within the project area during the field survey.

Special-status wildlife were evaluated for their potential to occur within the project area, including an additional buffer area, where direct or indirect impacts could occur. Although 26 special-status wildlife species were previously recorded within a five-mile radius of the project area, the project area was determined to not provide suitable habitat to support the 26 previously documented special status wildlife species, primarily due to the disturbed nature of and high human activity within the project area. No special status wildlife species were observed during the field survey. Therefore, the proposed project is not expected to result in direct or indirect impacts to this special-status plant or wildlife species and the proposed project would not jeopardize any listed species and the lead agency would be in compliance with FESA.

4.2 National Historic Preservation Act, Section 106

The purpose of the National Historic Preservation Act (NHPA) is to protect, preserve, rehabilitate, or restore significant historical, archaeological, and cultural resources. Section 106 requires federal agencies to take into account effects on historic properties. Section 106 review involves a step-by-step procedure described in detail in the implementing regulations (36 CFR Part 800).

As described in *Section 3.5 Cultural Resources*, a cultural resource assessment for the proposed project was conducted and provided in **Appendix C**. The analysis includes a Section 106 evaluation for the proposed project and can be submitted as part of the consultation process with the State Historic Preservation Officer (SHPO). Concurrence by SHPO would ensure compliance with the NHPA.

A total of 26 cultural resources have been previously recorded within a one-half-mile radius of the proposed project. Although none of these known cultural resources are located within the project area, five resources, including historic period transmission lines (P-33-020764), a historic period road remnant (P-33-020750), two historic period isolated artifacts (P-33-024735 and P-33-024736), and a prehistoric isolated ceramic sherd (P-33-024737) have been recorded adjacent to the project area (i.e., less than 500 feet). The field survey identified no archaeological resources or historic-age buildings or structures in the project area. **Mitigation Measure CUL-1** would require the initial ground-disturbing activities be observed by an archaeological and Native American monitor. **Mitigation Measures CUL-2** would require that all earth disturbing work be temporarily suspended if cultural resources are discovered during construction until the discovery can be evaluated, and appropriate notification measures can be taken. **Mitigation Measure CUL-3** would be implemented to ensure proper procedure would be in place if human remains were unearthed during construction activities. With implementation of **Mitigation Measures CUL-1, CUL-2** and **CUL-3,** impacts to historical resources under CEQA would be less than significant and no effects to historic properties under the NHPA for the proposed project are expected.

4.3 Clean Air Act

U.S. Congress adopted general conformity requirements as part of the Clean Air Act (CAA) Amendments in 1990 and the USEPA implemented those requirements in 1993 (Sec. 176 of the FCAA (42 United States Code [U.S.C.] § 7506) and 40 CFR Part 93, Subpart B). General conformity requires that all federal actions "conform" with the State Implementation Plan as approved or promulgated by USEPA. The purpose of the general conformity program is to ensure that actions taken by the federal government do not undermine State or local efforts to achieve and maintain the national ambient air quality standards. Before a federal action is taken, it must be evaluated for conformity with the State Implementation Plan. All "reasonably foreseeable" emissions predicted to result from the action are taken into consideration. These include direct and indirect emissions and must be identified as to location and quantity. If it is found that the action would create emissions above de minimis threshold levels specified in USEPA regulations (40 CFR § 93.153(b)), or if the activity is considered "regionally significant" because its emissions exceed 10 percent of an area's total emissions, the action cannot proceed unless mitigation measures are specified that would bring the proposed project into conformance.

As described in *Section 3.3 Air Quality*, the project area lies within the SSAB. The results of the air quality modeling showed that pollutant emissions would not exceed federal General Conformity de minimis thresholds (Appendix A). Accordingly, the lead agency would be in compliance with the CAA.

4.4 Coastal Zone Management Act

The Coastal Zone Management Act (CZMA), passed by Congress in 1972 and managed by the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management, is designed to balance completing land and water issues in coastal zones. It also aims to "preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone." Within California, the CZMA is administered by the Bay Conservation and Development Commission, the California Coastal Conservancy, and the California Coastal Commission.

No portion of the proposed project is within the coastal zone. The project area is located approximately 80 miles east of the Pacific Coast. Therefore, the CMZA does not apply to the proposed project.

4.5 Farmland Protection Policy Act

The Farmland Protection Policy Act (FPPA) requires a federal agency to consider the effects of its actions and programs on the nation's farmlands. The FPPA is intended to minimize the impact of federal programs with respect to the conversion of farmland to nonagricultural uses. It assures that, to the extent possible, federal programs are administered to be compatible with State, local, and private programs and policies to protect farmland.

As described in *Section 3.2 Agriculture and Forestry Resources*, the project area is located within the eastern Coachella Valley, which contains agricultural lands. The project area includes land designated as important farmland, including prime farmland and farmland of local importance. **Figure 3-1** and **Figure 3-2** show the designated important farmland and Williamson Act contracted lands within the project area, respectively. The proposed project would construct underground pipelines to consolidate nine SWSs into CVWD's municipal water system. The proposed project would be constructed within roadway rights-of-way, as well as on private or public land. The majority of the proposed project components would be located below-grade and ground surfaces would be restored to pre-construction conditions. The proposed project would not result in land use changes and would, therefore, not impact important farmland, conflict with agricultural zoning regulations, or result in other changes that would indirectly result in conversion of nearby farmland to non-agricultural use. Therefore, the proposed project would not adversely affect any farmland areas and the lead agency would be in compliance with the FPPA.

4.6 Executive Order 11988 – Floodplain Management

Executive Order (EO) 11988 requires federal agencies to recognize the values of floodplains and to consider the public benefits from restoring and preserving floodplains.

As described in *Section 3.9 Hydrology and Water Quality*, the proposed project area to the west of Highway 86 is located within a 100-year SFHA (FEMA 2018). However, the proposed underground pipelines and associated hydrants, meters and valves would not interfere with floodplain management or expose people or structures to a significant risk of loss, injury or death involving flooding. As such, the lead agency would be in compliance with this EO.

4.7 Federal Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Executive Order 13168

The MBTA and the Bald and Golden Eagle Protection Act prohibit the take of migratory birds (or any part, nest, or eggs of any such bird) and the take and commerce of eagles. EO 13168 (Sep 22, 2000) requires that any project with federal involvement address impacts of federal actions on migratory birds.

As described in *Section 3.4 Biological Resources*, the proposed project would have less than significant impact on nesting birds with implementation of **Mitigation Measure BIO-1** if construction cannot be avoided during nesting season. Thus, the lead agency would be in compliance with this EO.

4.8 Executive Order 11990 – Protection of Wetlands

Under EO 11990 (May 24, 1977), federal agencies must avoid affecting wetlands unless it is determined that no practicable alternative is available.

As described in *Section 3.4 Biological Resources*, the project site does not support federally protected wetlands as defined by Clean Water Act Section 404 and therefore no impacts would occur. Thus, the lead agency would be in compliance with EO 11990.

4.9 Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act was passed in 1968 to preserve and protect designated rivers for their natural, cultural, and recreational value.

There are no designated Wild and Scenic Rivers within the project area, nor will any designated rivers be adversely affected by the proposed project. As a result, the Wild and Scenic Rivers Act does not apply to the proposed project.

4.10 Safe Drinking Water Act – Source Water Protection

Section 1424(e) of the Safe Drinking Water Act established the USEPA's Sole Source Aquifer Program. This program protects communities from groundwater contamination from federally-funded projects.

Within USEPA's Region 9, which includes California, there are nine sole source aquifers. None of these sole source aquifers are located within the project area. Therefore, the Sole Source Aquifer Program does not apply to the proposed project, and the lead agency would be in compliance with Section 1424(e) of the Safe Drinking Water Act.

4.11 Executive Order on Trails for America in the 21st Century

The EO on Trails for America (January 18, 2001) requires federal agencies to protect, connect, promote, and assist trails of all types throughout the United States. According to the trails map in the Riverside County *Eastern Coachella Valley Area Plan*, a Regional Trail exists along the Whitewater River/Coachella Valley Stormwater Channel along the western edge of the proposed project site (Riverside County 2015). However, the proposed project would not impact the regional trail. As a result, no adverse effects on trails would occur and the lead agency is in compliance with this EO.

4.12 Executive Order 13007 – Indian Sacred Sites

Sacred sites are defined in Executive Order 13007 (May 24, 1996) as "any specific, discrete, narrowly delineated location on federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site."

As discussed in *Section 3.18 Tribal Cultural Resources*, results of the Sacred Lands File Search by the NAHC did not indicate the presence of Native American sacred lands within the vicinity of the project area. Therefore, the proposed project would not be located on or impact any federal lands and therefore would not affect any Indian sacred sites under this EO.

4.13 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) of 1976 as amended (16 U.S.C. § 1801 et seq.), is the primary act governing federal management of fisheries in federal waters, from the three-nautical-mile state territorial sea limit to the outer limit of the U.S. Exclusive Economic Zone. It establishes exclusive U.S. management authority over all fishing within the Exclusive Economic Zone, all anadromous fish throughout their migratory range except when in a foreign nation's waters, and all fish on the continental shelf. The Act also requires federal agencies to consult with NMFS on actions that could damage Essential Fish Habitat (EFH), as defined in the 1996 Sustainable Fisheries Act (Public Law 104-297).

The proposed project would not be located in or impact any U.S. federal waters regulated under the Magnuson-Stevens Act. As described in *Section 3.4 Biological Resources*, the proposed project is not expected to have adverse effect on resident or migratory fish, wildlife species, or fish habitat in the proposed project area.

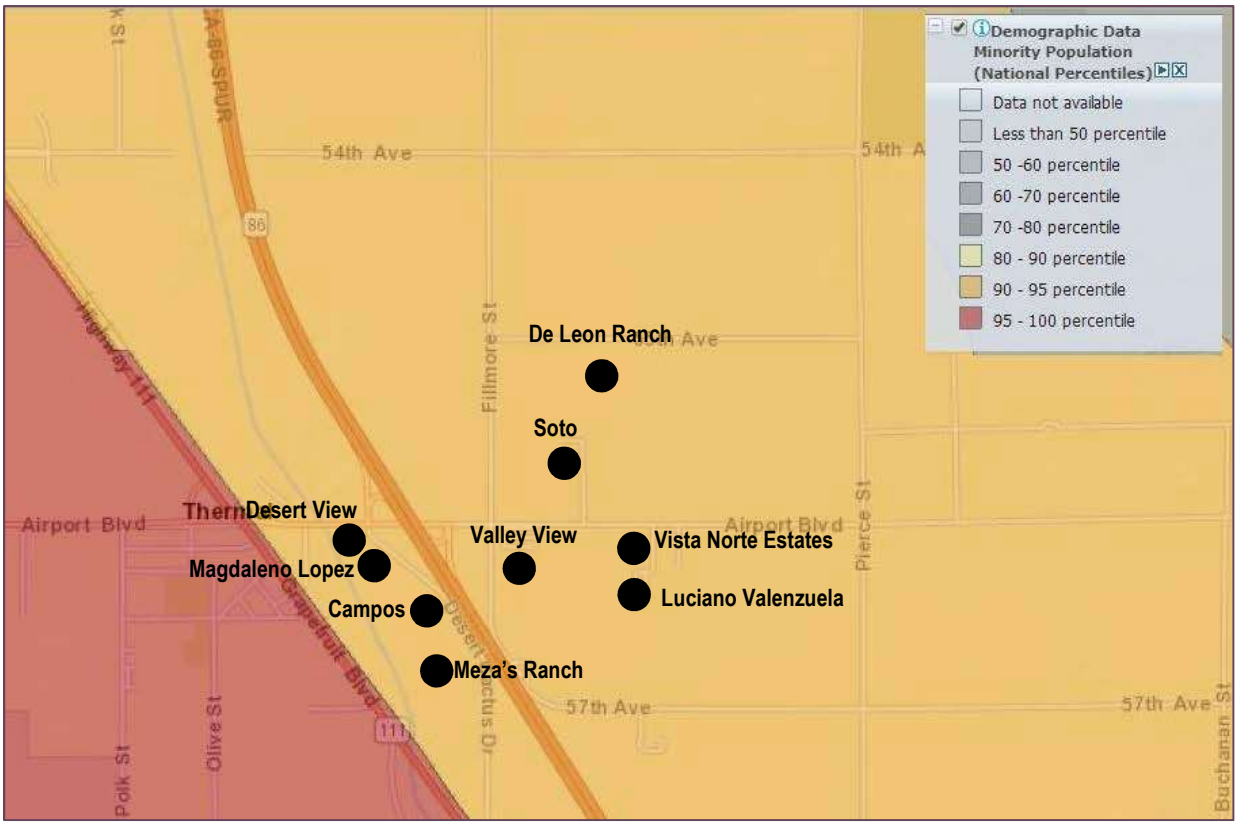
4.14 Environmental Justice

This section describes the existing socioeconomic resources in the proposed project area and the regulatory setting pertaining to environmental justice-related issues. This section also evaluates the potential for the proposed project to disproportionately affect minority or low-income groups. The USEPA defines environmental justice as:

> "The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means no group of people, including racial, ethnic, or economic groups should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, State, local, and tribal programs and policies" (USEPA 2016).

According to USEPA guidelines, a minority population is present in a study area if the minority population of the affected area exceeds 50 percent, or if the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. The majority of the project alignment would be located in the unincorporated community of Thermal in unincorporated Riverside County. According to the U.S. Census Bureau's 2013 to 2017 American Community Survey (ACS) estimates, approximately 0.2 percent of the total population of Thermal, a Census Designated Place (CDP), is identified as white, while 99.8 percent identified as Hispanic or Latino (U.S. Census Bureau, 2019a). According to the USEPA's Environmental Screening and Mapping Tool (EJScreen) (USEPA 2018), and as shown in **Figure 4-1**, the entire project area is within the 90-95 percentile for minority population. Therefore, the project area is composed of a minority population exceeding 50 percent.

Figure 4-1: USEPA EJScreen Map



USEPA guidelines recommend that analyses of low-income communities consider the U.S. Census Bureau's poverty level definitions, as well as applicable State and regional definitions of low-income and poverty communities. According to 2013 to 2017 ACS estimates, 34.5 percent of people in Thermal are considered to be in poverty. In comparison, the percentage of persons in poverty for the entire State of California was 15.1 percent for the same time period. (U.S. Census Bureau 2019a; U.S. Census Bureau 2019b).

DWR defines a Disadvantaged Community (DAC) as a community with a median household income (MHI) less than 80 percent of the California MHI. According to 2013 to 2017 ACS data, the statewide MHI was $67,169. A DAC would therefore be a community with an MHI of $53,735 or less. For this time period, the Thermal CDP MHI was $27,455. Therefore, according to DWR's definition of DACs, the Thermal CDP is considered to be a DAC (U.S. Census Bureau 2019a; U.S. Census Bureau 2019b).

Impact Analysis

For the purposes of this analysis, an impact related to environmental justice would be significant if the proposed project would cause impacts to minority or low-income populations that are disproportionately high and adverse, either directly, indirectly, or cumulatively.

The proposed pipelines would construct pipelines to consolidate nine SWSs with CVWD's municipal water system. Although the construction of the pipelines has the potential for short-term environmental effects as described in this document (e.g. short term impacts on air quality, noise, hazards/hazardous materials, traffic, etc), the consolidation of these SWSs would have the long-term benefit of providing a reliable and safe potable water source for these communities.

Although construction would generate impacts (e.g., dust, traffic, and noise), such activities would be intermittent and temporary, and would cease upon completion of work activities. Where potential impacts would occur, mitigation measures have been identified to reduce such effects to less-than-significant levels. Therefore, with the consideration of the benefits provided to these communities through implementation of the proposed project, the proposed project would not result in any disproportionately high adverse impacts on minority or low income communities. Thus, no adverse environmental justice impacts would occur.

5. ALTERNATIVES ANALYSIS

5.1 Alternatives Evaluated

Two alternatives to the project are evaluated in this section: 1) The No Project/No Action Alternative; and 2) The Consolidate All Projects Alternative. Under the No Project/No Action Alternative the nine SWSs within the Valley View MHP consolidation project would not be consolidated onto the CVWD potable water system, and the SWSs serving the individual MHPs homes would continue to operate under current conditions. Water would continue to be supplied through private onsite wells, distributed with existing onsite pipeline network and treated through individual onsite systems. The No Project/No Action Alternative would not provide a safer more reliable water supply to existing communities.

The Consolidate All Projects Alternative is consolidation of the 39 SWS identified for the ECVWSP, prior to the System Prioritization Task, as discussed in *Section 2.1.1*. Under this alternative, 39 SWSs in the East Coachella Valley, including the Valley View MHP project would be consolidated onto the CVWD potable water system. Each water consolidation project would require a combination of extensions and/or new potable water pipelines, laterals, onsite connections and onsite improvements to serve the 39 SWS.

Table 5-1 provides a comparison between the potential environmental impacts of the Valley View Mobile Home Park Consolidation Project (the proposed project) and the two alternatives with regard to the resource topics addressed in State CEQA Appendix G, Environmental Checklist, as well as the applicable federal cross-cutters. This alternatives analysis presents the environmental analysis behind choosing the proposed project.

5.2 Selected Alternative

The No Project/No Action Alternative would not achieve the project objectives to improve the reliability, safety and security of the water supply for rural disadvantaged communities in the East Coachella Valley. The No Project/No Action Alternative is also not consistent with the *2017 Climate Change Scoping Plan*, which calls for improved coordination and management of various water supplies. Although the Consolidate All Projects Alternative would have impacts largely similar to the proposed project and would largely accomplish the same Project Objectives, as explained in the Project Report, it would be far more costly than the proposed project, and would therefore conflict with the second project objective identified in *Section 2.1.2 Purpose and Need*. The proposed project is the recommended alternative because it is cost-effective, serves the greatest demand, and achieves other project objectives for drinking water compliance reliability.

Table 5-1 presents a summary of the environmental impacts of the proposed project, the proposed project with mitigation incorporated (if applicable), the No Project/No Action Alternative, and the Consolidation of All Projects Alternative. **Table 5-1** summarizes the impacts as either No impact, Less than Significant Impact; Potentially Significant Impact; or Not Applicable (N/A).

Table 5-1: Comparison of Alternatives – Environmental Impacts

Issue Areas	Proposed Project		Alternatives	
	MND Findings	With Mitigation	No Project/ No Action	Consolidate All Projects
Aesthetics				
Scenic vistas; Visual character and quality; Light and glare	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Scenic resources along a State Scenic Highway	No impact	N/A	No impact	No impact
The proposed project involves the construction of underground pipelines, which would not be visible after the completion of construction. There are no scenic highways in the project area. Construction would occur primarily during daytime hours and any lighting necessary for construction would be directed towards installation activities and away from adjacent land uses. During construction, aesthetics would be temporarily impaired by construction equipment; however, once construction is complete, the proposed project would not be visible and would not result in permanent changes to scenic vistas, visual quality, or light and glare. The No Project/ No Action alternative would not involve construction of new structures that would impede views, change visual character, or add new substantial sources of light, and thus would not result in aesthetic impacts. The Consolidate All Projects Alternative would have a similar impact to the proposed project in that there would be temporary visual impacts during construction; however, once construction is complete the facilities would not be visible and would not result in permanent impacts.				
Agriculture and Forestry				
Convert farmland; Conflict with zoning for agricultural use; Indirect conversion of farmland	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Loss of forest use; Conflict with zoning for forest use	No impact	N/A	No impact	No impact
Pipelines would be constructed primarily within existing roadways and some public and privately-owned properties, with connections to existing small water systems, including onsite improvements on privately owned properties, and would not result in conversion of farmland or loss of forest land. Similarly, the No Project/ No Action Alternative and the Consolidate All Projects Alternative would not impact agricultural or forest land.				
Air Quality				
Consistency with AQMP; Non-attainment criteria pollutants	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Consistency with air quality standards; Sensitive receptors	Less than Significant Impact	N/A	No impact	Potentially Significant / Less than Significant with mitigation
Objectionable odors	Less than Significant Impact	N/A	No impact	Less than Significant Impact

Issue Areas	Proposed Project		Alternatives	
	MND Findings	With Mitigation	No Project/ No Action	Consolidate All Projects
The proposed project involves connecting small water systems that serve existing communities to provide them with safer, more reliable supply of potable water. The Project's pipeline alignments were described in CVWD's *Urban Water Management Plan*, and would serve growth that was planned for in local growth forecasts, and thus would not conflict with the *Air Quality Management Plan* (AQMP). Assuming 150 linear feet of pipeline would be constructed each day, proposed project construction emissions would not exceed regional or localized significance thresholds, nor would they exceed de minimis thresholds, so federal general conformity requirements do not apply. The proposed project would not generate substantial operational emissions and emissions would not exceed the South Coast Air Quality Management District (SCAQMD) thresholds for any criteria pollutants. The proposed project would a minor increase in motor vehicle trips associated with maintenance; however, intermittent trips from a single vehicle would not generate emissions exceeding regional thresholds for operation. Construction-related odors from diesel equipment would be temporary and, once operational, the project would not create objectionable odors. The No Project/ No Action Alternative would not generate any construction emissions and would not result in any changes to operational emissions. If the improvements proposed under the Consolidate All Projects Alternative proceed at a rate similar to the proposed project, emissions would be less than significant. However, construction emissions could exceed air quality significance thresholds if the Consolidate All Projects Alternative were to result in simultaneous construction of multiple pipeline projects. Such impacts would be reduced to a less-than-significant level by requiring mitigation to phase construction so as to avoid exceeding construction emissions thresholds.				
Biological Resources				
Sensitive species	Potentially Significant Impact	Less than Significant Impact	No Impact	Potentially Significant / Less than Significant with Mitigation
Sensitive habitat; Wetlands; Wildlife corridors;	Less than Significant Impact	N/A	No Impact	Less than Significant Impact
Local policies and ordinances	No Impact	N/A	No Impact	No Impact
Habitat Conservation Plans or Natural Community Conservation Plans	No Impact	N/A	No Impact	Less than Significant Impact

Issue Areas	Proposed Project		Alternatives	
	MND Findings	With Mitigation	No Project/ No Action	Consolidate All Projects
The project area does not contain suitable habitat for any special status species; however, it provides general nesting bird, burrowing owl, and roosting bat habitat. Mitigation would reduce potential construction impacts on birds protected under the MBTA and FGC 3503 and 3503.5 and CDFW special-status species to less than significant. The proposed project does not have the potential to impact sensitive vegetation communities or wildlife corridors because construction would occur in developed urban and agricultural areas. The project is near the Whitewater River/Coachella Valley Stormwater Channel, a jurisdictional water, but the implementation of BMPs would help minimize impacts. The proposed project would not conflict with the *Coachella Valley Multiple Species Habitat Conservation Plan* (CVMSHCP); the project is located within the CVMSHCP planning area boundary but is not within any specific Conservation areas of the CVMSHCP. The No Project/No Action Alternative would involve no construction and therefore would not have the potential to result in impacts on migratory birds or other biological resources. The Consolidate All Projects Alternative, similar to the proposed project, would significantly impact birds protected under the MBTA and FGC 3503 and 3503.5 and CDFW special-status species, if present, but mitigation would reduce impacts to a less than significant level. The Consolidate All Projects Alternative would implement BMPs and would ensure that the Whitewater River/Coachella Valley Stormwater Channel would not be affected by construction. The Consolidate All Projects Alternative may include one project within the *Delta Conservation Area* of the CVMSHCP; mitigation measures would require to compliance with the CVMSHCP guidelines, resulting in less than significant impacts.				
Cultural Resources				
Historical resources; Archaeological resources;	Potentially Significant Impact	Less than Significant Impact	No impact	Potentially Significant / Less than Significant with mitigation
Human remains	Potentially Significant Impact	Less than Significant Impact	No impact	Potentially Significant / Less than Significant with mitigation
The records search did not identify any cultural resources within the project area, but there are resources recorded within 500 feet of the construction area. There is a possibility of identifying unanticipated cultural resources during ground disturbing activities associated with the proposed project. Following evaluation and notification, and implementation of cultural resource mitigation measures would reduce potential impacts to less than significant. The potential for encountering human remains is low; however, compliance mitigation measures would ensure less than significant impacts. The No Project/No Action Alternative would not involve construction and therefore would not have the potential to disturb previously unknown cultural resources or human remains. Because of the larger construction area, construction of the Consolidate All Projects Alternative would have a greater potential than the proposed project to identify unanticipated cultural and historical resources, as well as unanticipated human remains. However, compliance with standard evaluation, noticing procedures, compliance with existing code and cultural resource mitigation measures would result in less than significant impacts.				

Issue Areas	Proposed Project		Alternatives	
	MND Findings	With Mitigation	No Project/ No Action	Consolidate All Projects
Energy				
Wasteful, inefficient or unnecessary consumption of energy resources	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Conflict with state or local plans for renewable energy or energy efficiency	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Construction of the proposed project would comply with required energy efficiency measures and operational energy use would offset energy currently used to pump and treat water at existing small water systems. Impacts associated with energy consumption would thus be less than significant. By consolidating existing water systems, the proposed project would support the *2017 Climate Change Scoping Plan* objective to reduce energy demand by improving coordination and management of water supplies. The proposed project would thus not conflict with state or local plans for energy efficiency and impacts would be less than significant. The No Project/No Action Alternative would not use energy for construction, and operational energy use would remain the same as under existing conditions. The Consolidate All Projects Alternative is a larger project and would thus require more construction energy, but impacts would still be less than significant with implementation of required energy efficiency measures.				
Geology and Soils				
Geological hazards; Erosion and topsoil loss; Unstable soils; Expansive soils	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Alternative wastewater disposal systems	No impact	N/A	No impact	No impact
Paleontological Resources	Less than Significant Impact	N/A	No impact	Less than Significant Impact
The proposed project involves construction of pipelines to consolidate water systems and thus would not involve exposure of people or structures to seismically induced risk. The project would minimize soil erosion via implementation of Best Management Practices in a SWPPP prepared in accordance with the SWRCB's Construction General Permit. Compliance with CVWD's professional engineering standards would ensure less than significant impacts related to risks of unstable soils or geologic hazards. The project is not located on expansive soils, nor would it involve the use of septic tanks or alternative wastewater disposal systems. The potential for encountering fossil resources is low because ground disturbing activities would only reach a depth of five to six feet below ground surface and pipelines would be constructed primarily within roadway rights of way and other public and private lands that are already disturbed; significant impacts to paleontological resources are thus not expected. The No Project/No Action Alternative would involve no construction and thus is not expected to result in impacts related to geologic hazards, septic systems or paleontological resources. Similar to the proposed project, the Consolidate All Projects Alternative would have less than significant impacts related to geologic hazards, erosion, topsoil loss, unstable soils, and expansive soils due to compliance with existing permits, Best Management Practices, and engineering standards, and would not be expected to encounter paleontological resources.				
Greenhouse Gas (GHG) Emissions				
GHG emissions	Less than Significant Impact	N/A	No Impact	Less than Significant Impact

Issue Areas	Proposed Project		Alternatives	
	MND Findings	With Mitigation	No Project/ No Action	Consolidate All Projects
Conflict with GHG reduction plans	Less than Significant Impact	N/A	Potentially Significant Impact	Less than Significant Impact
The proposed project's maximum annual GHG emissions (including amortized construction emissions) would not exceed SCAQMD's recommended annual threshold for CO_2e emissions. GHG emissions of the proposed project would be less than significant, and the project would support the *2017 Climate Change Scoping Plan*, which calls for improved coordination and management of various water supplies. The No Project/No Action Alternative would not involve construction, and GHG impacts of operation would not change from the existing condition. However, the No Project/No Action Alternative would not support applicable GHG reduction plans because it would not improve coordination and management of water supplies. The Consolidate All Projects Alternative, similar to the proposed project, would result in annual GHG emissions that are less than the SCAQMD's annual threshold, as long as construction follows a similar schedule to the proposed project. The Consolidate All Projects Alternative would support applicable GHG reduction plans because it would support coordination of water supplies.				
Hazards and Hazardous Materials				
Routine handling of hazardous materials; Listed hazardous materials sites; Airport safety hazard; Wildland fire	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Accidental release of hazardous materials;	Potentially Significant Impact	Less than Significant Impact	No impact	Potentially Significant / Less than Significant with mitigation
Emergency response or evacuation plans conflict	Potentially Significant Impact	Less than Significant Impact with mitigation	No impact	Less than Significant Impact with mitigation
Hazardous materials near schools	No impact	N/A	No impact	No impact
Construction of the proposed project would temporarily increase the routine transport and use of hazardous materials, but transport and use of hazardous materials would not be needed for pipeline operation. There are no active hazardous materials sites in the project area. The proposed pipelines would extend into the Jacqueline Cochran Regional Airport influence area as defined in the Airport Land Use Plan but would not cause an airport safety hazard. There are no private airstrips in the project area. The project area is not a Very High Fire Hazard Severity Zone, and standard fire safety practices would be used during construction. These hazards are thus expected to be less than significant. There is a risk of accidental hazardous materials release during construction. Mitigation requiring a Hazardous Materials Management and Spill Control Plan would reduce impacts to less than significant. Temporary traffic lane closures during construction would impede emergency response; mitigation to require a Traffic Management Plan would reduce impacts to less than significant. There are no schools present near the proposed project alignment. The No Project/No Action alternative would involve no construction and would thus have no impacts associated with hazardous materials or other hazards. Similar to the proposed project, the construction of the Consolidate All Projects Alternative would increase risks related to hazardous materials spills and would require a Hazardous Materials Management and Spill Control Plan as mitigation to have less than significant impacts. Construction would impede emergency access vehicles, which would require a Traffic Management Plan as mitigation. The Consolidate All Projects Alternative is not expected to result in significant impacts associated with use of hazardous materials during construction, airport/airstrip hazards or wildfires. There are no known active hazardous				

Issue Areas	Proposed Project		Alternatives	
	MND Findings	With Mitigation	No Project/ No Action	Consolidate All Projects
material cleanup sites in the Consolidate All Projects Alternative alignment area, according to SWRCB GeoTracker. There are no schools near the pipeline alignments for the Consolidate All Project Alternatives.				
Hydrology and Water Quality				
Water quality standards or otherwise degrade water quality	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Groundwater supply and recharge	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Drainage alterations that cause erosion/sedimentation; flooding; exceed capacity of stormwater system; redirect or impede flood flows;	Less than Significant Impact	N/A	No impact	Less than Significant Impact
In flood hazard, tsunami, or seiche zones risk release of pollutants	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Conflict with or obstruct water quality control plan or sustainable groundwater management plan	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Excavation, grading, and other activities associated with construction of the proposed project would result in soil disturbance that would cause water quality violations through potential erosion and subsequent sedimentation of receiving water bodies.,. However, compliance with the SWRCB's Construction General Permit including implementation of BMPs outlined in a SWPPP would result in less than significant impacts to water quality. The proposed project would connect small water systems to the CVWD potable water system, but would not alter the amount of groundwater use because both the small water systems and CVWD water system pump groundwater from the Coachella Valley Groundwater Basin. Disturbance of drainage patterns and runoff to the stormwater drainage system would be temporary and less than significant. The project would not have an impact related to flooding risks, or seiche, tsunami, or mudflows. The No Project/No Action Alternative would not involve construction of new facilities so would not have construction or operational impacts on water quality or drainage patterns, and there would be no impact related to flooding risks, or seiche, tsunami, or mudflows. The Consolidate All Projects Alternative would comply with the permitting requirements of the Construction General Permit and thus would have a less than significant impact on water quality. The Consolidate All Projects Alternative would not impact groundwater supplies, similar to the proposed project. There would be no impact related to flooding risks, or seiche, tsunami, or mudflows.				

Issue Areas	Proposed Project		Alternatives	
	MND Findings	With Mitigation	No Project/ No Action	Consolidate All Projects
Land Use and Planning				
Divide an established community;	No impact	N/A	No impact	No impact
Conflict with an applicable land use plan	No impact	N/A	No impact	No impact
The project would not divide an established community and would not change land use, so it would not conflict with any applicable plan, policy or regulation with jurisdiction over the project. The No Project/No Action Alternative would not divide an established community and would not change land use; thus, no impact would occur. Once constructed, the Consolidate All Projects Alternative would not divide an established community and would comply with applicable land use plans.				
Mineral Resources				
Loss of availability of a known, valuable mineral resource or mineral resource recovery site	No impact	N/A	No impact	No impact
No impact would occur because there are no known mineral resources or mineral recovery sites in the vicinity of the project corridor. The same would be true for the No Project/ No Action Alternative and the Consolidate All Projects Alternative.				
Noise				
Excessive noise; Permanent increase in noise levels; Temporary increase in noise levels; Ground-borne vibration	Potentially Significant Impact	Less than Significant Impact	No impact	Potentially Significant / Less than Significant with mitigation
Aircraft noise	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Construction noise from the proposed project would be temporary and exposure of any single receptor would be limited to a few days at most. Although construction noise associated with capital improvement projects of a governmental agency are exempt from the Riverside County noise ordinance, construction noise and vibration impacts on residents are considered potentially significant, so noise control measures would be employed to ensure that impacts are less than significant. The proposed project would serve existing communities and would thus not expose new residents or workers to noise. Operation of the project would not generate perceptible noise. The No Project/No Action Alternative would not entail construction of new facilities and would thus have no temporary or permanent noise impacts. Similar to the proposed project, the impacts from temporary construction noise and vibration for the Consolidate All Projects Alternative would be less than significant with mitigation; there would be no operational noise impacts, and impacts associated with aircraft noise would be less than significant.				
Population and Housing				
Population growth	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Displacement of housing or people	No impact	N/A	No impact	No impact

Issue Areas	Proposed Project		Alternatives	
	MND Findings	With Mitigation	No Project/ No Action	Consolidate All Projects
The proposed project would not directly induce population growth, as it would serve the existing communities that currently rely on the SWSs. Additionally, the proposed expansion of the CVWD potable system, and subsequent indirect growth, is consistent with planned growth in the area. Groundwater would continue to be supplied from the same groundwater basin. The project would not displace housing or people. Neither the No Project/No Action Alternative nor the Consolidate All Projects Alternative would displace housing or people. The No Project/No Action Alternative would not include new facilities and would not induce population growth. Similar to the project, the Consolidate All Projects Alternative would require the same level of groundwater production, and would not directly induce population growth as it would serve the needs of the existing communities that currently rely on the SWSs. The CVWD infrastructure expansion would be planned in accordance with the existing *Riverside County General Plan* for the Eastern Coachella Valley region, and would not substantially induce unplanned growth. There are no impacts associated with either alternative.				
Public Services / Recreation				
Fire protection services; Police protection services	No impact	N/A	No impact	No impact
Schools; Other services-libraries	No impact	N/A	No impact	No impact
Recreational facilities	No impact	N/A	No impact	No impact
The project would not require additional or unusual fire or police protection resources or change existing demand for public services. It does not propose new recreational facilities that would impact the environment. There would be no impacts to public services or recreation associated with the proposed project. Similarly, there would also be no impacts from the No Project/No Action Alternative or the Consolidate All Projects Alternative.				
Transportation and Traffic				
Circulation system performance; Emergency access	Potentially Significant Impact	Less than Significant Impact	No impact	Potentially Significant / Less than Significant with mitigation
Consistency with CEQA Guidelines section 15064.3 subdivision (b) (VMT); Traffic hazards	No impact	N/A	No impact	No impact
Construction would require lane closures for pipeline construction, and would generate only minimal vehicle trips for construction workers. To ensure that potential traffic impacts are less than significant, the proposed project would implement transportation mitigation measures, including notifying emergency service providers and schools, implementing a traffic control plan, and avoiding high volume intersections. The buried pipelines would not result in traffic hazards. The No Project/ No Action Alternative involves no construction and would not impact traffic circulation, emergency access, VMT, alternative transportation facilities, or create traffic hazards. The Consolidate All Projects Alternative would implement mitigation similar to that of the proposed project to minimize construction impacts on congestion, traffic, and emergency vehicle access. The Consolidate All Projects Alternative would not have a permanent impact involving VMT or traffic hazards.				

Issue Areas	Proposed Project		Alternatives	
	MND Findings	With Mitigation	No Project/ No Action	Consolidate All Projects
Tribal Cultural Resources				
Tribal cultural resources	Potentially Significant Impact	Less than Significant Impact	No impact	Potentially Significant / Less than Significant with mitigation
CVWD consulted with several California Native American tribes pursuant to AB 52. Although no tribal cultural resources have been identified in the project area, there is the potential for undiscovered resources to be encountered during construction. To reduce the potential impacts on tribal cultural resources, the project would implement mitigation in the event of an unanticipated discovery of cultural resources, tribal or otherwise, during project construction. Doing so would reduce impacts to less than significant. The No Project/ No Action Alternative would not impact tribal cultural resources because it would not involve ground-disturbing activities. The Consolidate All Projects Alternative, similar to the proposed project, would implement mitigation measures in the event of discovery of unanticipated tribal cultural resources to reduce impacts to less than significant.				
Utilities and Service Systems				
Construction of new utilities causing environmental effects	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Sufficient water supply	Less than Significant Impact	N/A	No impact	Less than Significant Impact
Wastewater treatment capacity	No impact	N/A	No impact	No impact
Solid waste capacity; Solid waste compliance	Less than Significant Impact	N/A	No impact	Less than Significant Impact
The proposed project includes new water lines but construction would not have significant environmental effects; no new wastewater, stormwater, power, or telecommunications facilities would be required. CVWD has determined that it has sufficient water supplies to serve the new service connections associated with the proposed project. The project would not require wastewater treatment capacity. Construction would generate a minimal amount of excess soils that would be reused onsite to the extent feasible; there would be no long-term solid waste generated by the proposed project so impacts would be less than significant. The No Project/ No Action Alternative would not include construction of any facilities and would have no additional demands for water, wastewater or solid waste facilities. The Consolidate All Projects Alternative would have similar impacts to the proposed project: it would not require additional wastewater treatment, stormwater or other facilities, and would have a less than significant impact related to solid waste. CVWD has sufficient water supplies to serve all of the small water systems that would be connected under the Consolidate All Projects Alternative.				
Wildfire				
Impair an adopted emergency response or evacuation plan	Potentially Significant Impact	Less than Significant Impact	No Impact	Potentially Significant /Less that Significant with Mitigation

Issue Areas	Proposed Project		Alternatives	
	MND Findings	With Mitigation	No Project/ No Action	Consolidate All Projects
Exacerbate wildfire risk due to required installation or maintenance of associated infrastructure	No impact	N/A	No impact	Less than Significant Impact
Exacerbate wildlife risk due to slope prevailing winds, or other factors	No Impact	N/A	No Impact	Less than Significant Impact
Expose people or structures to risks from runoff, post-fire slope instability or drainage changes.	No Impact	N/A	No Impact	Less than Significant Impact
The project area is not in a Very High Fire Hazard Severity Zone, and standard fire safety practices would be used during construction. Thus, no impacts are expected related to exacerbation of wildfire risk. Temporary traffic lane closures during construction would impede emergency response; mitigation to require a Traffic Management Plan would reduce impacts to less than significant. The No Project/No Action alternative would involve no construction, and would thus have no impacts associated with exacerbation of wildfire risk and would not impact emergency response or evacuation plans. Similar to the proposed project, the Consolidate All Projects Alternative construction would impede emergency access vehicles, which would require a Traffic Management Plan as mitigation. The Consolidate All Projects Alternative is not expected to result in significant impacts associated with exacerbation of wildfires.				
Federal Cross-Cutters				
Federal Endangered Species Act	**Comply**	**Comply**	**No Impact**	**Comply**
The proposed project site does not contain suitable habitat for any special status plant or wildlife species. All trenching would occur within paved or previously disturbed areas; therefore, the proposed project is not expected to result in direct or indirect impacts on special-status plant species. Mitigation would minimize potential impacts on protected nesting birds. The proposed project would not jeopardize listed species and the SWRCB and/or USDA would be in compliance with the Federal Endangered Species Act (ESA). The No Project/ No Action Alternative would involve no construction and thus would not impact sensitive species. The Consolidate All Projects Alternative, similar to the proposed project, would involve trenching within paved or previously disturbed areas and would not impact undisturbed habitat. With mitigation to protect nesting birds, the Consolidate All Projects Alternative would not jeopardize listed species.				
National Historic Preservation Act, Section 106	**Comply**	**Comply**	**No impact**	**Comply**
The cultural resources assessment conducted for the proposed project would be submitted as part of the consultation process with the State Historic Preservation Officer (SHPO). Concurrence by SHPO would ensure compliance with the National Historic Preservation Act (NHPA). No cultural resources were identified within the project area and the proposed project would implement mitigation measures in the event of unanticipated discovery of cultural resources. The No Project/ No Action Alternative would not affect undisturbed soils or historical resources. Similar to the proposed project, the Consolidate All Projects Alternative would conduct a cultural resources assessment, implement mitigation measures, and consult with SHPO to comply with the NHPA.				

Issue Areas	Proposed Project		Alternatives	
	MND Findings	With Mitigation	No Project/ No Action	Consolidate All Projects
Clean Air Act	**Comply**	**N/A**	**No impact**	**Comply**
The results of the air quality modeling showed that pollutant emissions would not exceed federal General Conformity *de minimis* thresholds and impacts were less than significant; the SWRCB and/or USDA would be in compliance with the Federal Clean Air Act (CAA). The No Project/ No Action Alternative would result in no changes to existing emissions and air quality. For the Consolidate All Projects Alternative, impacts to air quality from construction emissions would be similar to that of the proposed project, so long as construction proceeded at a similar rate. Both Alternatives are expected to comply with the CAA.				
Coastal Zone Management Act	**N/A**	**N/A**	**N/A**	**N/A**
No portion of the proposed project area, the No Project/ No Action Alternative Area, nor the Consolidate All Projects Alternative area are within the coastal zone. Therefore, the Coastal Zone Management Act does not apply.				
Farmland Protection Policy Act (FPAA)	**Comply**	**N/A**	**No impact**	**Comply**
Neither the proposed project, No Project/ No Action Alternative, nor the Consolidate All Projects Alternative are located in areas currently under agricultural production, nor do they contain farmland. The proposed project and Alternatives would not conflict with State, local, and private programs and policies to protect farmland, and the SWRCB and/or USDA would be in compliance with the FPAA.				
Executive Order 11988 – Floodplain Management	**Comply**	**N/A**	**No impact**	**Comply**
The proposed project pipelines would be located underground and would not interfere with floodplain management or expose people or structures to a significant flooding risk. As such, the SWRCB and/or USDA would be in compliance with Executive Order 11988. Likewise, the No Project/ No Action Alternative and the Consolidate All Projects Alternative would not expose people or structures to significant flood-related risk.				
Federal Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Executive Order 13168	**Comply**	**Comply**	**No impact**	**Comply**
The proposed project would have less than significant impacts on protected birds with implementation of mitigation if construction cannot be avoided during the nesting season. The No Project/ No Action Alternative would involve no construction and would not affect protected birds. The Consolidate All Projects Alternative, with the incorporation of mitigation to protect nesting birds, would have a less than significant impact.				
Executive Order 11990 – Protection of Wetlands	**No impact**	**N/A**	**No impact**	**No impact**
The proposed project does not involve construction within federally protected wetlands as defined by Clean Water Act Section 404; therefore, no impacts would occur, and the SWRCB and/or USDA would be in compliance. Similarly, the No Project/ No Action Alternative and the Consolidate All Projects Alternative would not impact federally protected wetlands.				
Wild and Scenic Rivers Act	**N/A**	**N/A**	**N/A**	**N/A**
There are no designated Wild and Scenic Rivers within the project area. Neither the proposed project the No Project/ No Action Alternative, or the Consolidate All Projects Alternative would result in an impact.				

Issue Areas	Proposed Project		Alternatives	
	MND Findings	With Mitigation	No Project/ No Action	Consolidate All Projects
Safe Drinking Water Act – Source Water Protection	**N/A**	**N/A**	**N/A**	**N/A**
There are no sole-source aquifers in the project area. Neither the proposed project, the No Project/ No Action Alternative, or the Consolidate All Projects Alternative would result in an impact.				
Executive Order on Trails for America in the 21st Century	**N/A**	**N/A**	**N/A**	**N/A**
There are no trails in the project area. Neither the proposed project, the No Project/ No Action Alternative, or the Consolidate All Projects Alternative would result in an impact.				
Executive Order 13007 – Indian Sacred Sites	**N/A**	**N/A**	**N/A**	**N/A**
Neither the proposed project, No Project/ No Action Alternative, nor Consolidate All Projects Alternative would be located on or impact any federal land that is identified as an Indian sacred site.				
Magnuson-Stevens Fishery Conservation and Management Act	**N/A**	**N/A**	**N/A**	**N/A**
The proposed project is not located in, nor would it impact any U.S. federal waters regulated under the Magnuson-Stevens Act. The proposed project is not expected to have an adverse effect on Essential Fish Habitat, migratory fish, wildlife species, or fish habitat in a protected area. Similarly, the No Project/ No Action Alternative and Consolidate All Projects Alternative would not affect Essential Fish Habitat or waters regulated under the Magnuson-Stevens Act.				
Environmental Justice	**Comply**	**N/A**	**Comply**	**Comply**
The proposed project alignment would be located in the community of Thermal, which has a 98.8 percent minority population and is considered to be low income or disadvantaged. The proposed project would have short-term construction impacts, but would achieve the long-term goal of supply a safer, more reliable water supply to this disadvantaged community. The No Project/ No Action Alternative would have no impacts, but would result in no benefits to the community. The Consolidate All Projects Alternative would also be located within the community of Thermal. Therefore, similar to the proposed project, the Consolidate All Projects Alternative would have short-term impacts, but would result in long-term benefits to a disadvantaged community.				

6. REPORT PREPARATION

6.1 Report Authors

This report was prepared by Agency, Woodard & Curran, subconsultants. Staff from these agencies and companies that were involved include:

Coachella Valley Water District

- Elizabeth Meyerhoff, Environmental Specialist
- William Patterson, Environmental Supervisor
- Steve Bigley, Director of Environmental Services
- Dan Ruiz, Engineering Manager

Woodard & Curran

- Rosalyn Prickett, AICP, Principal
- Jennifer Ziv, Project Manager
- Haley Johnson, CEQA Analyst
- Alexis Cahalin, CEQA Analyst

Rincon Consultants, Inc.

- Tiffany Clark, PhD, RPA, Senior Archaeologist
- Lindsay Porras, MA, RPA, Archaeologist
- Megan Minter, Senior Biologist
- Steven J. Hongala, Senior Ecologist
- Jon Montgomery, GIS Analyst

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APPENDIX A: AIR QUALITY MODELING CALEEMOD DATA SHEETS

Valley View SWS Consolidation

Riverside-Salton Sea County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	92.00	1000sqft	2.11	92,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	15			**Operational Year**	2022
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MWhr)	1270.9	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Assumes pipeline trenches 5 feet wide.

Construction Phase - Assumes piping install and resurfacing happens simultaneously somewhere on alignment.

Off-road Equipment - Construction equipment list provided by engineers.

Off-road Equipment -

Grading - Hauling trips captured on trips screen.

Trips and VMT - Trips provided by engineers.

Vehicle Trips -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	6.00	261.00
tblConstructionPhase	NumDays	10.00	261.00
tblConstructionPhase	PhaseEndDate	5/11/2021	3/31/2022
tblConstructionPhase	PhaseEndDate	3/29/2022	3/31/2022
tblConstructionPhase	PhaseStartDate	5/4/2021	4/1/2021
tblConstructionPhase	PhaseStartDate	3/16/2022	4/1/2021
tblGrading	AcresOfGrading	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	23.00	33.00
tblTripsAndVMT	WorkerTripNumber	15.00	33.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.1380	28.3431	33.2408	0.0531	0.7911	1.6182	2.4093	0.2089	1.4899	1.6988	0.0000	5,165.6402	5,165.6402	1.4001	0.0000	5,200.6418
2022	2.8150	25.1816	32.8097	0.0529	0.7914	1.3615	2.1529	0.2090	1.2538	1.4628	0.0000	5,140.6047	5,140.6047	1.3983	0.0000	5,175.5612
Maximum	**3.1380**	**28.3431**	**33.2408**	**0.0531**	**0.7914**	**1.6182**	**2.4093**	**0.2090**	**1.4899**	**1.6988**	**0.0000**	**5,165.6402**	**5,165.6402**	**1.4001**	**0.0000**	**5,200.6418**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.1380	28.3431	33.2408	0.0531	0.7844	1.6182	2.4026	0.2082	1.4899	1.6981	0.0000	5,165.6401	5,165.6401	1.4001	0.0000	5,200.6418
2022	2.8150	25.1816	32.8097	0.0529	0.7847	1.3615	2.1462	0.2083	1.2538	1.4621	0.0000	5,140.6047	5,140.6047	1.3983	0.0000	5,175.5612
Maximum	**3.1380**	**28.3431**	**33.2408**	**0.0531**	**0.7847**	**1.6182**	**2.4026**	**0.2083**	**1.4899**	**1.6981**	**0.0000**	**5,165.6401**	**5,165.6401**	**1.4001**	**0.0000**	**5,200.6418**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.85**	**0.00**	**0.29**	**0.35**	**0.00**	**0.05**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0510	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0201	0.0201	5.0000e-005		0.0215
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0510**	**9.0000e-005**	**9.4100e-003**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**3.0000e-005**		**0.0201**	**0.0201**	**5.0000e-005**	**0.0000**	**0.0215**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0510	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0201	0.0201	5.0000e-005		0.0215
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0510**	**9.0000e-005**	**9.4100e-003**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**3.0000e-005**		**0.0201**	**0.0201**	**5.0000e-005**	**0.0000**	**0.0215**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching and install	Grading	4/1/2021	3/31/2022	5	261	
2	Resurfacing	Paving	4/1/2021	3/31/2022	5	261	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.11

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching and install	Excavators	1	8.00	158	0.38
Resurfacing	Cement and Mortar Mixers	1	8.00	9	0.56
Trenching and install	Forklifts	1	8.00	89	0.20
Trenching and install	Trenchers	1	8.00	78	0.50
Resurfacing	Pavers	1	8.00	130	0.42
Resurfacing	Rollers	2	8.00	80	0.38
Trenching and install	Rubber Tired Dozers	0	0.00	247	0.40
Trenching and install	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Resurfacing	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Trenching and install	Graders	0	0.00	187	0.41
Resurfacing	Paving Equipment	1	8.00	132	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching and install	9	33.00	4.00	1.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Resurfacing	6	33.00	4.00	1.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Trenching and install - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0122	0.0000	0.0122	1.3200e-003	0.0000	1.3200e-003			0.0000			0.0000
Off-Road	1.7242	16.7976	18.9122	0.0264		1.0300	1.0300		0.9476	0.9476		2,554.8707	2,554.8707	0.8263		2,575.5281
Total	**1.7242**	**16.7976**	**18.9122**	**0.0264**	**0.0122**	**1.0300**	**1.0422**	**1.3200e-003**	**0.9476**	**0.9489**		**2,554.8707**	**2,554.8707**	**0.8263**		**2,575.5281**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	8.3000e-004	1.1000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005		0.3063	0.3063	2.0000e-005		0.3067
Vendor	8.9700e-003	0.3595	0.0638	9.6000e-004	0.0230	6.4000e-004	0.0237	6.6300e-003	6.1000e-004	7.2400e-003		101.4961	101.4961	7.7100e-003		101.6888
Worker	0.1557	0.0886	1.2126	3.5000e-003	0.3664	2.1600e-003	0.3685	0.0972	1.9900e-003	0.0992		349.0270	349.0270	8.3300e-003		349.2352
Total	**0.1647**	**0.4489**	**1.2765**	**4.4600e-003**	**0.3895**	**2.8000e-003**	**0.3923**	**0.1038**	**2.6000e-003**	**0.1064**		**450.8294**	**450.8294**	**0.0161**		**451.2306**

3.2 Trenching and install - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4900e-003	0.0000	5.4900e-003	5.9000e-004	0.0000	5.9000e-004			0.0000			0.0000
Off-Road	1.7242	16.7976	18.9122	0.0264		1.0300	1.0300		0.9476	0.9476	0.0000	2,554.8707	2,554.8707	0.8263		2,575.5281
Total	**1.7242**	**16.7976**	**18.9122**	**0.0264**	**5.4900e-003**	**1.0300**	**1.0355**	**5.9000e-004**	**0.9476**	**0.9482**	**0.0000**	**2,554.8707**	**2,554.8707**	**0.8263**		**2,575.5281**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	8.3000e-004	1.1000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005		0.3063	0.3063	2.0000e-005		0.3067
Vendor	8.9700e-003	0.3595	0.0638	9.6000e-004	0.0230	6.4000e-004	0.0237	6.6300e-003	6.1000e-004	7.2400e-003		101.4961	101.4961	7.7100e-003		101.6888
Worker	0.1557	0.0886	1.2126	3.5000e-003	0.3664	2.1600e-003	0.3685	0.0972	1.9900e-003	0.0992		349.0270	349.0270	8.3300e-003		349.2352
Total	**0.1647**	**0.4489**	**1.2765**	**4.4600e-003**	**0.3895**	**2.8000e-003**	**0.3923**	**0.1038**	**2.6000e-003**	**0.1064**		**450.8294**	**450.8294**	**0.0161**		**451.2306**

3.2 Trenching and install - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0122	0.0000	0.0122	1.3200e-003	0.0000	1.3200e-003			0.0000			0.0000
Off-Road	1.5446	15.0087	18.7571	0.0264		0.8684	0.8684		0.7989	0.7989		2,556.5000	2,556.5000	0.8268		2,577.1706
Total	**1.5446**	**15.0087**	**18.7571**	**0.0264**	**0.0122**	**0.8684**	**0.8806**	**1.3200e-003**	**0.7989**	**0.8002**		**2,556.5000**	**2,556.5000**	**0.8268**		**2,577.1706**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	7.6000e-004	1.1000e-004	0.0000	2.2000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005		0.3028	0.3028	2.0000e-005		0.3032
Vendor	8.3700e-003	0.3399	0.0593	9.5000e-004	0.0230	5.4000e-004	0.0236	6.6300e-003	5.1000e-004	7.1400e-003		100.6309	100.6309	7.2900e-003		100.8133
Worker	0.1456	0.0797	1.1184	3.3700e-003	0.3664	2.1000e-003	0.3685	0.0972	1.9400e-003	0.0991		336.2741	336.2741	7.4800e-003		336.4610
Total	**0.1540**	**0.4204**	**1.1778**	**4.3200e-003**	**0.3896**	**2.6400e-003**	**0.3923**	**0.1039**	**2.4500e-003**	**0.1063**		**437.2078**	**437.2078**	**0.0148**		**437.5775**

3.2 Trenching and install - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4900e-003	0.0000	5.4900e-003	5.9000e-004	0.0000	5.9000e-004			0.0000			0.0000
Off-Road	1.5446	15.0087	18.7571	0.0264		0.8684	0.8684		0.7989	0.7989	0.0000	2,556.5000	2,556.5000	0.8268		2,577.1706
Total	**1.5446**	**15.0087**	**18.7571**	**0.0264**	**5.4900e-003**	**0.8684**	**0.8739**	**5.9000e-004**	**0.7989**	**0.7995**	**0.0000**	**2,556.5000**	**2,556.5000**	**0.8268**		**2,577.1706**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	7.6000e-004	1.1000e-004	0.0000	2.2000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005		0.3028	0.3028	2.0000e-005		0.3032
Vendor	8.3700e-003	0.3399	0.0593	9.5000e-004	0.0230	5.4000e-004	0.0236	6.6300e-003	5.1000e-004	7.1400e-003		100.6309	100.6309	7.2900e-003		100.8133
Worker	0.1456	0.0797	1.1184	3.3700e-003	0.3664	2.1000e-003	0.3685	0.0972	1.9400e-003	0.0991		336.2741	336.2741	7.4800e-003		336.4610
Total	**0.1540**	**0.4204**	**1.1778**	**4.3200e-003**	**0.3896**	**2.6400e-003**	**0.3923**	**0.1039**	**2.4500e-003**	**0.1063**		**437.2078**	**437.2078**	**0.0148**		**437.5775**

3.3 Resurfacing - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.0212					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0845**	**10.6478**	**11.7756**	**0.0178**		**0.5826**	**0.5826**		**0.5371**	**0.5371**		**1,709.1107**	**1,709.1107**	**0.5417**		**1,722.6524**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	8.3000e-004	1.1000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005		0.3063	0.3063	2.0000e-005		0.3067
Vendor	8.9700e-003	0.3595	0.0638	9.6000e-004	0.0230	6.4000e-004	0.0237	6.6300e-003	6.1000e-004	7.2400e-003		101.4961	101.4961	7.7100e-003		101.6888
Worker	0.1557	0.0886	1.2126	3.5000e-003	0.3664	2.1600e-003	0.3685	0.0972	1.9900e-003	0.0992		349.0270	349.0270	8.3300e-003		349.2352
Total	**0.1647**	**0.4489**	**1.2765**	**4.4600e-003**	**0.3895**	**2.8000e-003**	**0.3923**	**0.1038**	**2.6000e-003**	**0.1064**		**450.8294**	**450.8294**	**0.0161**		**451.2306**

3.3 Resurfacing - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.0212					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0845**	**10.6478**	**11.7756**	**0.0178**		**0.5826**	**0.5826**		**0.5371**	**0.5371**	**0.0000**	**1,709.1107**	**1,709.1107**	**0.5417**		**1,722.6524**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	8.3000e-004	1.1000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005		0.3063	0.3063	2.0000e-005		0.3067
Vendor	8.9700e-003	0.3595	0.0638	9.6000e-004	0.0230	6.4000e-004	0.0237	6.6300e-003	6.1000e-004	7.2400e-003		101.4961	101.4961	7.7100e-003		101.6888
Worker	0.1557	0.0886	1.2126	3.5000e-003	0.3664	2.1600e-003	0.3685	0.0972	1.9900e-003	0.0992		349.0270	349.0270	8.3300e-003		349.2352
Total	**0.1647**	**0.4489**	**1.2765**	**4.4600e-003**	**0.3895**	**2.8000e-003**	**0.3923**	**0.1038**	**2.6000e-003**	**0.1064**		**450.8294**	**450.8294**	**0.0161**		**451.2306**

3.3 Resurfacing - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0212					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9623**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**		**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	7.6000e-004	1.1000e-004	0.0000	2.2000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005		0.3028	0.3028	2.0000e-005		0.3032
Vendor	8.3700e-003	0.3399	0.0593	9.5000e-004	0.0230	5.4000e-004	0.0236	6.6300e-003	5.1000e-004	7.1400e-003		100.6309	100.6309	7.2900e-003		100.8133
Worker	0.1456	0.0797	1.1184	3.3700e-003	0.3664	2.1000e-003	0.3685	0.0972	1.9400e-003	0.0991		336.2741	336.2741	7.4800e-003		336.4610
Total	**0.1540**	**0.4204**	**1.1778**	**4.3200e-003**	**0.3896**	**2.6400e-003**	**0.3923**	**0.1039**	**2.4500e-003**	**0.1063**		**437.2078**	**437.2078**	**0.0148**		**437.5775**

3.3 Resurfacing - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0212					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9623**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**	**0.0000**	**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	7.6000e-004	1.1000e-004	0.0000	2.2000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005		0.3028	0.3028	2.0000e-005		0.3032
Vendor	8.3700e-003	0.3399	0.0593	9.5000e-004	0.0230	5.4000e-004	0.0236	6.6300e-003	5.1000e-004	7.1400e-003		100.6309	100.6309	7.2900e-003		100.8133
Worker	0.1456	0.0797	1.1184	3.3700e-003	0.3664	2.1000e-003	0.3685	0.0972	1.9400e-003	0.0991		336.2741	336.2741	7.4800e-003		336.4610
Total	**0.1540**	**0.4204**	**1.1778**	**4.3200e-003**	**0.3896**	**2.6400e-003**	**0.3923**	**0.1039**	**2.4500e-003**	**0.1063**		**437.2078**	**437.2078**	**0.0148**		**437.5775**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	13.80	6.20	6.20	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0510	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0201	0.0201	5.0000e-005		0.0215
Unmitigated	0.0510	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0201	0.0201	5.0000e-005		0.0215

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0175					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0326					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.7000e-004	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0201	0.0201	5.0000e-005		0.0215
Total	**0.0510**	**9.0000e-005**	**9.4100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0201**	**0.0201**	**5.0000e-005**		**0.0215**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0175					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0326					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.7000e-004	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0201	0.0201	5.0000e-005		0.0215
Total	**0.0510**	**9.0000e-005**	**9.4100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0201**	**0.0201**	**5.0000e-005**		**0.0215**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Valley View SWS Consolidation

Riverside-Salton Sea County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	92.00	1000sqft	2.11	92,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	15			**Operational Year**	2022
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MWhr)	1270.9	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Assumes pipeline trenches 5 feet wide.

Construction Phase - Assumes piping install and resurfacing happens simultaneously somewhere on alignment.

Off-road Equipment - Construction equipment list provided by engineers.

Off-road Equipment -

Grading - Hauling trips captured on trips screen.

Trips and VMT - Trips provided by engineers.

Vehicle Trips -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	6.00	261.00
tblConstructionPhase	NumDays	10.00	261.00
tblConstructionPhase	PhaseEndDate	5/11/2021	3/31/2022
tblConstructionPhase	PhaseEndDate	3/29/2022	3/31/2022
tblConstructionPhase	PhaseStartDate	5/4/2021	4/1/2021
tblConstructionPhase	PhaseStartDate	3/16/2022	4/1/2021
tblGrading	AcresOfGrading	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	23.00	33.00
tblTripsAndVMT	WorkerTripNumber	15.00	33.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.1332	28.3417	32.7980	0.0523	0.7911	1.6182	2.4093	0.2089	1.4899	1.6989	0.0000	5,085.5832	5,085.5832	1.3997	0.0000	5,120.5753
2022	2.8113	25.1790	32.3993	0.0522	0.7914	1.3616	2.1530	0.2090	1.2538	1.4628	0.0000	5,063.2268	5,063.2268	1.3980	0.0000	5,098.1776
Maximum	**3.1332**	**28.3417**	**32.7980**	**0.0523**	**0.7914**	**1.6182**	**2.4093**	**0.2090**	**1.4899**	**1.6989**	**0.0000**	**5,085.5832**	**5,085.5832**	**1.3997**	**0.0000**	**5,120.5753**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.1332	28.3417	32.7980	0.0523	0.7844	1.6182	2.4026	0.2082	1.4899	1.6981	0.0000	5,085.5832	5,085.5832	1.3997	0.0000	5,120.5753
2022	2.8113	25.1790	32.3993	0.0522	0.7847	1.3616	2.1463	0.2083	1.2538	1.4621	0.0000	5,063.2268	5,063.2268	1.3980	0.0000	5,098.1776
Maximum	**3.1332**	**28.3417**	**32.7980**	**0.0523**	**0.7847**	**1.6182**	**2.4026**	**0.2083**	**1.4899**	**1.6981**	**0.0000**	**5,085.5832**	**5,085.5832**	**1.3997**	**0.0000**	**5,120.5753**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.85**	**0.00**	**0.29**	**0.35**	**0.00**	**0.05**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0510	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0201	0.0201	5.0000e-005		0.0215
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0510**	**9.0000e-005**	**9.4100e-003**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**3.0000e-005**		**0.0201**	**0.0201**	**5.0000e-005**	**0.0000**	**0.0215**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0510	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0201	0.0201	5.0000e-005		0.0215
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0510**	**9.0000e-005**	**9.4100e-003**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**3.0000e-005**		**0.0201**	**0.0201**	**5.0000e-005**	**0.0000**	**0.0215**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching and install	Grading	4/1/2021	3/31/2022	5	261	
2	Resurfacing	Paving	4/1/2021	3/31/2022	5	261	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.11

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching and install	Excavators	1	8.00	158	0.38
Resurfacing	Cement and Mortar Mixers	1	8.00	9	0.56
Trenching and install	Forklifts	1	8.00	89	0.20
Trenching and install	Trenchers	1	8.00	78	0.50
Resurfacing	Pavers	1	8.00	130	0.42
Resurfacing	Rollers	2	8.00	80	0.38
Trenching and install	Rubber Tired Dozers	0	0.00	247	0.40
Trenching and install	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Resurfacing	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Trenching and install	Graders	0	0.00	187	0.41
Resurfacing	Paving Equipment	1	8.00	132	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching and install	9	33.00	4.00	1.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Resurfacing	6	33.00	4.00	1.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Trenching and install - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0122	0.0000	0.0122	1.3200e-003	0.0000	1.3200e-003			0.0000			0.0000
Off-Road	1.7242	16.7976	18.9122	0.0264		1.0300	1.0300		0.9476	0.9476		2,554.8707	2,554.8707	0.8263		2,575.5281
Total	**1.7242**	**16.7976**	**18.9122**	**0.0264**	**0.0122**	**1.0300**	**1.0422**	**1.3200e-003**	**0.9476**	**0.9489**		**2,554.8707**	**2,554.8707**	**0.8263**		**2,575.5281**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	8.4000e-004	1.3000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005		0.2986	0.2986	2.0000e-005		0.2991
Vendor	9.5500e-003	0.3557	0.0759	9.2000e-004	0.0230	6.6000e-004	0.0237	6.6300e-003	6.3000e-004	7.2600e-003		97.3850	97.3850	8.6000e-003		97.6000
Worker	0.1527	0.0916	0.9791	3.1400e-003	0.3664	2.1600e-003	0.3685	0.0972	1.9900e-003	0.0992		313.1174	313.1174	7.2400e-003		313.2984
Total	**0.1623**	**0.4482**	**1.0551**	**4.0600e-003**	**0.3895**	**2.8200e-003**	**0.3923**	**0.1038**	**2.6200e-003**	**0.1064**		**410.8009**	**410.8009**	**0.0159**		**411.1974**

3.2 Trenching and install - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4900e-003	0.0000	5.4900e-003	5.9000e-004	0.0000	5.9000e-004			0.0000			0.0000
Off-Road	1.7242	16.7976	18.9122	0.0264		1.0300	1.0300		0.9476	0.9476	0.0000	2,554.8707	2,554.8707	0.8263		2,575.5281
Total	**1.7242**	**16.7976**	**18.9122**	**0.0264**	**5.4900e-003**	**1.0300**	**1.0355**	**5.9000e-004**	**0.9476**	**0.9482**	**0.0000**	**2,554.8707**	**2,554.8707**	**0.8263**		**2,575.5281**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	8.4000e-004	1.3000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005		0.2986	0.2986	2.0000e-005		0.2991
Vendor	9.5500e-003	0.3557	0.0759	9.2000e-004	0.0230	6.6000e-004	0.0237	6.6300e-003	6.3000e-004	7.2600e-003		97.3850	97.3850	8.6000e-003		97.6000
Worker	0.1527	0.0916	0.9791	3.1400e-003	0.3664	2.1600e-003	0.3685	0.0972	1.9900e-003	0.0992		313.1174	313.1174	7.2400e-003		313.2984
Total	**0.1623**	**0.4482**	**1.0551**	**4.0600e-003**	**0.3895**	**2.8200e-003**	**0.3923**	**0.1038**	**2.6200e-003**	**0.1064**		**410.8009**	**410.8009**	**0.0159**		**411.1974**

3.2 Trenching and install - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0122	0.0000	0.0122	1.3200e-003	0.0000	1.3200e-003			0.0000			0.0000
Off-Road	1.5446	15.0087	18.7571	0.0264		0.8684	0.8684		0.7989	0.7989		2,556.5000	2,556.5000	0.8268		2,577.1706
Total	**1.5446**	**15.0087**	**18.7571**	**0.0264**	**0.0122**	**0.8684**	**0.8806**	**1.3200e-003**	**0.7989**	**0.8002**		**2,556.5000**	**2,556.5000**	**0.8268**		**2,577.1706**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	7.6000e-004	1.2000e-004	0.0000	2.2000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005		0.2951	0.2951	2.0000e-005		0.2956
Vendor	8.9200e-003	0.3359	0.0708	9.2000e-004	0.0230	5.6000e-004	0.0236	6.6300e-003	5.3000e-004	7.1600e-003		96.5317	96.5317	8.1500e-003		96.7354
Worker	0.1433	0.0824	0.9017	3.0300e-003	0.3664	2.1000e-003	0.3685	0.0972	1.9400e-003	0.0991		301.6920	301.6920	6.5100e-003		301.8547
Total	**0.1522**	**0.4191**	**0.9726**	**3.9500e-003**	**0.3896**	**2.6600e-003**	**0.3923**	**0.1039**	**2.4700e-003**	**0.1063**		**398.5188**	**398.5188**	**0.0147**		**398.8857**

3.2 Trenching and install - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4900e-003	0.0000	5.4900e-003	5.9000e-004	0.0000	5.9000e-004			0.0000			0.0000
Off-Road	1.5446	15.0087	18.7571	0.0264		0.8684	0.8684		0.7989	0.7989	0.0000	2,556.5000	2,556.5000	0.8268		2,577.1706
Total	**1.5446**	**15.0087**	**18.7571**	**0.0264**	**5.4900e-003**	**0.8684**	**0.8739**	**5.9000e-004**	**0.7989**	**0.7995**	**0.0000**	**2,556.5000**	**2,556.5000**	**0.8268**		**2,577.1706**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	7.6000e-004	1.2000e-004	0.0000	2.2000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005		0.2951	0.2951	2.0000e-005		0.2956
Vendor	8.9200e-003	0.3359	0.0708	9.2000e-004	0.0230	5.6000e-004	0.0236	6.6300e-003	5.3000e-004	7.1600e-003		96.5317	96.5317	8.1500e-003		96.7354
Worker	0.1433	0.0824	0.9017	3.0300e-003	0.3664	2.1000e-003	0.3685	0.0972	1.9400e-003	0.0991		301.6920	301.6920	6.5100e-003		301.8547
Total	**0.1522**	**0.4191**	**0.9726**	**3.9500e-003**	**0.3896**	**2.6600e-003**	**0.3923**	**0.1039**	**2.4700e-003**	**0.1063**		**398.5188**	**398.5188**	**0.0147**		**398.8857**

3.3 Resurfacing - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.0212					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0845**	**10.6478**	**11.7756**	**0.0178**		**0.5826**	**0.5826**		**0.5371**	**0.5371**		**1,709.1107**	**1,709.1107**	**0.5417**		**1,722.6524**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	8.4000e-004	1.3000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005		0.2986	0.2986	2.0000e-005		0.2991
Vendor	9.5500e-003	0.3557	0.0759	9.2000e-004	0.0230	6.6000e-004	0.0237	6.6300e-003	6.3000e-004	7.2600e-003		97.3850	97.3850	8.6000e-003		97.6000
Worker	0.1527	0.0916	0.9791	3.1400e-003	0.3664	2.1600e-003	0.3685	0.0972	1.9900e-003	0.0992		313.1174	313.1174	7.2400e-003		313.2984
Total	**0.1623**	**0.4482**	**1.0551**	**4.0600e-003**	**0.3895**	**2.8200e-003**	**0.3923**	**0.1038**	**2.6200e-003**	**0.1064**		**410.8009**	**410.8009**	**0.0159**		**411.1974**

3.3 Resurfacing - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.0212					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0845**	**10.6478**	**11.7756**	**0.0178**		**0.5826**	**0.5826**		**0.5371**	**0.5371**	**0.0000**	**1,709.1107**	**1,709.1107**	**0.5417**		**1,722.6524**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	8.4000e-004	1.3000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005		0.2986	0.2986	2.0000e-005		0.2991
Vendor	9.5500e-003	0.3557	0.0759	9.2000e-004	0.0230	6.6000e-004	0.0237	6.6300e-003	6.3000e-004	7.2600e-003		97.3850	97.3850	8.6000e-003		97.6000
Worker	0.1527	0.0916	0.9791	3.1400e-003	0.3664	2.1600e-003	0.3685	0.0972	1.9900e-003	0.0992		313.1174	313.1174	7.2400e-003		313.2984
Total	**0.1623**	**0.4482**	**1.0551**	**4.0600e-003**	**0.3895**	**2.8200e-003**	**0.3923**	**0.1038**	**2.6200e-003**	**0.1064**		**410.8009**	**410.8009**	**0.0159**		**411.1974**

3.3 Resurfacing - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0212					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9623**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**		**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	7.6000e-004	1.2000e-004	0.0000	2.2000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005		0.2951	0.2951	2.0000e-005		0.2956
Vendor	8.9200e-003	0.3359	0.0708	9.2000e-004	0.0230	5.6000e-004	0.0236	6.6300e-003	5.3000e-004	7.1600e-003		96.5317	96.5317	8.1500e-003		96.7354
Worker	0.1433	0.0824	0.9017	3.0300e-003	0.3664	2.1000e-003	0.3685	0.0972	1.9400e-003	0.0991		301.6920	301.6920	6.5100e-003		301.8547
Total	**0.1522**	**0.4191**	**0.9726**	**3.9500e-003**	**0.3896**	**2.6600e-003**	**0.3923**	**0.1039**	**2.4700e-003**	**0.1063**		**398.5188**	**398.5188**	**0.0147**		**398.8857**

3.3 Resurfacing - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0212					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9623**	**9.3322**	**11.6970**	**0.0179**		**0.4879**	**0.4879**		**0.4500**	**0.4500**	**0.0000**	**1,709.6892**	**1,709.6892**	**0.5419**		**1,723.2356**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-005	7.6000e-004	1.2000e-004	0.0000	2.2000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005		0.2951	0.2951	2.0000e-005		0.2956
Vendor	8.9200e-003	0.3359	0.0708	9.2000e-004	0.0230	5.6000e-004	0.0236	6.6300e-003	5.3000e-004	7.1600e-003		96.5317	96.5317	8.1500e-003		96.7354
Worker	0.1433	0.0824	0.9017	3.0300e-003	0.3664	2.1000e-003	0.3685	0.0972	1.9400e-003	0.0991		301.6920	301.6920	6.5100e-003		301.8547
Total	**0.1522**	**0.4191**	**0.9726**	**3.9500e-003**	**0.3896**	**2.6600e-003**	**0.3923**	**0.1039**	**2.4700e-003**	**0.1063**		**398.5188**	**398.5188**	**0.0147**		**398.8857**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	13.80	6.20	6.20	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0510	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0201	0.0201	5.0000e-005		0.0215
Unmitigated	0.0510	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0201	0.0201	5.0000e-005		0.0215

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0175					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0326					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.7000e-004	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0201	0.0201	5.0000e-005		0.0215
Total	**0.0510**	**9.0000e-005**	**9.4100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0201**	**0.0201**	**5.0000e-005**		**0.0215**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0175					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0326					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.7000e-004	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0201	0.0201	5.0000e-005		0.0215
Total	**0.0510**	**9.0000e-005**	**9.4100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0201**	**0.0201**	**5.0000e-005**		**0.0215**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Valley View SWS Consolidation

Riverside-Salton Sea County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	92.00	1000sqft	2.11	92,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	15			**Operational Year**	2022
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MWhr)	1270.9	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Assumes pipeline trenches 5 feet wide.

Construction Phase - Assumes piping install and resurfacing happens simultaneously somewhere on alignment.

Off-road Equipment - Construction equipment list provided by engineers.

Off-road Equipment -

Grading - Hauling trips captured on trips screen.

Trips and VMT - Trips provided by engineers.

Vehicle Trips -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	6.00	261.00
tblConstructionPhase	NumDays	10.00	261.00
tblConstructionPhase	PhaseEndDate	5/11/2021	3/31/2022
tblConstructionPhase	PhaseEndDate	3/29/2022	3/31/2022
tblConstructionPhase	PhaseStartDate	5/4/2021	4/1/2021
tblConstructionPhase	PhaseStartDate	3/16/2022	4/1/2021
tblGrading	AcresOfGrading	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	23.00	33.00
tblTripsAndVMT	WorkerTripNumber	15.00	33.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.3062	2.7934	3.2399	5.1800e-003	0.0771	0.1594	0.2364	0.0203	0.1468	0.1671	0.0000	456.3035	456.3035	0.1250	0.0000	459.4291
2022	0.0892	0.8063	1.0396	1.6700e-003	0.0261	0.0436	0.0697	6.7200e-003	0.0401	0.0468	0.0000	147.5742	147.5742	0.0406	0.0000	148.5884
Maximum	**0.3062**	**2.7934**	**3.2399**	**5.1800e-003**	**0.0771**	**0.1594**	**0.2364**	**0.0203**	**0.1468**	**0.1671**	**0.0000**	**456.3035**	**456.3035**	**0.1250**	**0.0000**	**459.4291**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.3062	2.7934	3.2399	5.1800e-003	0.0762	0.1594	0.2356	0.0202	0.1468	0.1670	0.0000	456.3030	456.3030	0.1250	0.0000	459.4287
2022	0.0892	0.8063	1.0396	1.6700e-003	0.0252	0.0436	0.0688	6.6200e-003	0.0401	0.0467	0.0000	147.5741	147.5741	0.0406	0.0000	148.5883
Maximum	**0.3062**	**2.7934**	**3.2399**	**5.1800e-003**	**0.0762**	**0.1594**	**0.2356**	**0.0202**	**0.1468**	**0.1670**	**0.0000**	**456.3030**	**456.3030**	**0.1250**	**0.0000**	**459.4287**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**1.70**	**0.00**	**0.57**	**0.70**	**0.00**	**0.09**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**4-1-2021**	**6-30-2021**	1.0231	1.0231
2	**7-1-2021**	**9-30-2021**	1.0344	1.0344
3	**10-1-2021**	**12-31-2021**	1.0342	1.0342
4	**1-1-2022**	**3-31-2022**	0.8997	0.8997
		Highest	1.0344	1.0344

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	9.2200e-003	1.0000e-005	8.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6400e-003	1.6400e-003	0.0000	0.0000	1.7500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.2200e-003**	**1.0000e-005**	**8.5000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.6400e-003**	**1.6400e-003**	**0.0000**	**0.0000**	**1.7500e-003**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	9.2200e-003	1.0000e-005	8.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6400e-003	1.6400e-003	0.0000	0.0000	1.7500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.2200e-003**	**1.0000e-005**	**8.5000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.6400e-003**	**1.6400e-003**	**0.0000**	**0.0000**	**1.7500e-003**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching and install	Grading	4/1/2021	3/31/2022	5	261	
2	Resurfacing	Paving	4/1/2021	3/31/2022	5	261	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.11

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching and install	Excavators	1	8.00	158	0.38
Resurfacing	Cement and Mortar Mixers	1	8.00	9	0.56
Trenching and install	Forklifts	1	8.00	89	0.20
Trenching and install	Trenchers	1	8.00	78	0.50
Resurfacing	Pavers	1	8.00	130	0.42
Resurfacing	Rollers	2	8.00	80	0.38
Trenching and install	Rubber Tired Dozers	0	0.00	247	0.40
Trenching and install	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Resurfacing	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Trenching and install	Graders	0	0.00	187	0.41
Resurfacing	Paving Equipment	1	8.00	132	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching and install	9	33.00	4.00	1.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Resurfacing	6	33.00	4.00	1.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Trenching and install - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5900e-003	0.0000	1.5900e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1698	1.6546	1.8629	2.6000e-003		0.1015	0.1015		0.0933	0.0933	0.0000	228.2974	228.2974	0.0738	0.0000	230.1433
Total	**0.1698**	**1.6546**	**1.8629**	**2.6000e-003**	**1.5900e-003**	**0.1015**	**0.1030**	**1.7000e-004**	**0.0933**	**0.0935**	**0.0000**	**228.2974**	**228.2974**	**0.0738**	**0.0000**	**230.1433**

3.2 Trenching and install - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	8.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0271	0.0271	0.0000	0.0000	0.0271
Vendor	9.0000e-004	0.0356	6.8500e-003	9.0000e-005	2.2400e-003	6.0000e-005	2.3000e-003	6.5000e-004	6.0000e-005	7.1000e-004	0.0000	8.9152	8.9152	7.2000e-004	0.0000	8.9333
Worker	0.0139	9.3300e-003	0.1017	3.2000e-004	0.0355	2.1000e-004	0.0357	9.4200e-003	2.0000e-004	9.6200e-003	0.0000	28.6997	28.6997	6.7000e-004	0.0000	28.7164
Total	**0.0148**	**0.0450**	**0.1086**	**4.1000e-004**	**0.0377**	**2.7000e-004**	**0.0380**	**0.0101**	**2.6000e-004**	**0.0103**	**0.0000**	**37.6420**	**37.6420**	**1.3900e-003**	**0.0000**	**37.6768**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.2000e-004	0.0000	7.2000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1698	1.6546	1.8629	2.6000e-003		0.1015	0.1015		0.0933	0.0933	0.0000	228.2971	228.2971	0.0738	0.0000	230.1430
Total	**0.1698**	**1.6546**	**1.8629**	**2.6000e-003**	**7.2000e-004**	**0.1015**	**0.1022**	**8.0000e-005**	**0.0933**	**0.0934**	**0.0000**	**228.2971**	**228.2971**	**0.0738**	**0.0000**	**230.1430**

3.2 Trenching and install - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	8.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0271	0.0271	0.0000	0.0000	0.0271
Vendor	9.0000e-004	0.0356	6.8500e-003	9.0000e-005	2.2400e-003	6.0000e-005	2.3000e-003	6.5000e-004	6.0000e-005	7.1000e-004	0.0000	8.9152	8.9152	7.2000e-004	0.0000	8.9333
Worker	0.0139	9.3300e-003	0.1017	3.2000e-004	0.0355	2.1000e-004	0.0357	9.4200e-003	2.0000e-004	9.6200e-003	0.0000	28.6997	28.6997	6.7000e-004	0.0000	28.7164
Total	**0.0148**	**0.0450**	**0.1086**	**4.1000e-004**	**0.0377**	**2.7000e-004**	**0.0380**	**0.0101**	**2.6000e-004**	**0.0103**	**0.0000**	**37.6420**	**37.6420**	**1.3900e-003**	**0.0000**	**37.6768**

3.2 Trenching and install - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5900e-003	0.0000	1.5900e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0494	0.4803	0.6002	8.4000e-004		0.0278	0.0278		0.0256	0.0256	0.0000	74.2150	74.2150	0.0240	0.0000	74.8150
Total	**0.0494**	**0.4803**	**0.6002**	**8.4000e-004**	**1.5900e-003**	**0.0278**	**0.0294**	**1.7000e-004**	**0.0256**	**0.0257**	**0.0000**	**74.2150**	**74.2150**	**0.0240**	**0.0000**	**74.8150**

3.2 Trenching and install - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	8.7000e-003	8.7000e-003	0.0000	0.0000	8.7100e-003
Vendor	2.7000e-004	0.0109	2.0700e-003	3.0000e-005	7.3000e-004	2.0000e-005	7.4000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8713	2.8713	2.2000e-004	0.0000	2.8769
Worker	4.2200e-003	2.7300e-003	0.0304	1.0000e-004	0.0115	7.0000e-005	0.0116	3.0600e-003	6.0000e-005	3.1200e-003	0.0000	8.9835	8.9835	2.0000e-004	0.0000	8.9884
Total	**4.4900e-003**	**0.0137**	**0.0325**	**1.3000e-004**	**0.0123**	**9.0000e-005**	**0.0124**	**3.2700e-003**	**8.0000e-005**	**3.3500e-003**	**0.0000**	**11.8636**	**11.8636**	**4.2000e-004**	**0.0000**	**11.8740**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.2000e-004	0.0000	7.2000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0494	0.4803	0.6002	8.4000e-004		0.0278	0.0278		0.0256	0.0256	0.0000	74.2149	74.2149	0.0240	0.0000	74.8150
Total	**0.0494**	**0.4803**	**0.6002**	**8.4000e-004**	**7.2000e-004**	**0.0278**	**0.0285**	**8.0000e-005**	**0.0256**	**0.0257**	**0.0000**	**74.2149**	**74.2149**	**0.0240**	**0.0000**	**74.8150**

3.2 Trenching and install - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	8.7000e-003	8.7000e-003	0.0000	0.0000	8.7100e-003
Vendor	2.7000e-004	0.0109	2.0700e-003	3.0000e-005	7.3000e-004	2.0000e-005	7.4000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8713	2.8713	2.2000e-004	0.0000	2.8769
Worker	4.2200e-003	2.7300e-003	0.0304	1.0000e-004	0.0115	7.0000e-005	0.0116	3.0600e-003	6.0000e-005	3.1200e-003	0.0000	8.9835	8.9835	2.0000e-004	0.0000	8.9884
Total	**4.4900e-003**	**0.0137**	**0.0325**	**1.3000e-004**	**0.0123**	**9.0000e-005**	**0.0124**	**3.2700e-003**	**8.0000e-005**	**3.3500e-003**	**0.0000**	**11.8636**	**11.8636**	**4.2000e-004**	**0.0000**	**11.8740**

3.3 Resurfacing - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1047	1.0488	1.1599	1.7600e-003		0.0574	0.0574		0.0529	0.0529	0.0000	152.7222	152.7222	0.0484	0.0000	153.9323
Paving	2.0900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1068**	**1.0488**	**1.1599**	**1.7600e-003**		**0.0574**	**0.0574**		**0.0529**	**0.0529**	**0.0000**	**152.7222**	**152.7222**	**0.0484**	**0.0000**	**153.9323**

3.3 Resurfacing - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	8.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0271	0.0271	0.0000	0.0000	0.0271
Vendor	9.0000e-004	0.0356	6.8500e-003	9.0000e-005	2.2400e-003	6.0000e-005	2.3000e-003	6.5000e-004	6.0000e-005	7.1000e-004	0.0000	8.9152	8.9152	7.2000e-004	0.0000	8.9333
Worker	0.0139	9.3300e-003	0.1017	3.2000e-004	0.0355	2.1000e-004	0.0357	9.4200e-003	2.0000e-004	9.6200e-003	0.0000	28.6997	28.6997	6.7000e-004	0.0000	28.7164
Total	**0.0148**	**0.0450**	**0.1086**	**4.1000e-004**	**0.0377**	**2.7000e-004**	**0.0380**	**0.0101**	**2.6000e-004**	**0.0103**	**0.0000**	**37.6420**	**37.6420**	**1.3900e-003**	**0.0000**	**37.6768**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1047	1.0488	1.1599	1.7600e-003		0.0574	0.0574		0.0529	0.0529	0.0000	152.7220	152.7220	0.0484	0.0000	153.9321
Paving	2.0900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1068**	**1.0488**	**1.1599**	**1.7600e-003**		**0.0574**	**0.0574**		**0.0529**	**0.0529**	**0.0000**	**152.7220**	**152.7220**	**0.0484**	**0.0000**	**153.9321**

3.3 Resurfacing - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	8.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0271	0.0271	0.0000	0.0000	0.0271
Vendor	9.0000e-004	0.0356	6.8500e-003	9.0000e-005	2.2400e-003	6.0000e-005	2.3000e-003	6.5000e-004	6.0000e-005	7.1000e-004	0.0000	8.9152	8.9152	7.2000e-004	0.0000	8.9333
Worker	0.0139	9.3300e-003	0.1017	3.2000e-004	0.0355	2.1000e-004	0.0357	9.4200e-003	2.0000e-004	9.6200e-003	0.0000	28.6997	28.6997	6.7000e-004	0.0000	28.7164
Total	**0.0148**	**0.0450**	**0.1086**	**4.1000e-004**	**0.0377**	**2.7000e-004**	**0.0380**	**0.0101**	**2.6000e-004**	**0.0103**	**0.0000**	**37.6420**	**37.6420**	**1.3900e-003**	**0.0000**	**37.6768**

3.3 Resurfacing - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0301	0.2986	0.3743	5.7000e-004		0.0156	0.0156		0.0144	0.0144	0.0000	49.6321	49.6321	0.0157	0.0000	50.0254
Paving	6.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0308**	**0.2986**	**0.3743**	**5.7000e-004**		**0.0156**	**0.0156**		**0.0144**	**0.0144**	**0.0000**	**49.6321**	**49.6321**	**0.0157**	**0.0000**	**50.0254**

3.3 Resurfacing - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	8.7000e-003	8.7000e-003	0.0000	0.0000	8.7100e-003
Vendor	2.7000e-004	0.0109	2.0700e-003	3.0000e-005	7.3000e-004	2.0000e-005	7.4000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8713	2.8713	2.2000e-004	0.0000	2.8769
Worker	4.2200e-003	2.7300e-003	0.0304	1.0000e-004	0.0115	7.0000e-005	0.0116	3.0600e-003	6.0000e-005	3.1200e-003	0.0000	8.9835	8.9835	2.0000e-004	0.0000	8.9884
Total	**4.4900e-003**	**0.0137**	**0.0325**	**1.3000e-004**	**0.0123**	**9.0000e-005**	**0.0124**	**3.2700e-003**	**8.0000e-005**	**3.3500e-003**	**0.0000**	**11.8636**	**11.8636**	**4.2000e-004**	**0.0000**	**11.8740**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0301	0.2986	0.3743	5.7000e-004		0.0156	0.0156		0.0144	0.0144	0.0000	49.6321	49.6321	0.0157	0.0000	50.0253
Paving	6.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0308**	**0.2986**	**0.3743**	**5.7000e-004**		**0.0156**	**0.0156**		**0.0144**	**0.0144**	**0.0000**	**49.6321**	**49.6321**	**0.0157**	**0.0000**	**50.0253**

3.3 Resurfacing - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	8.7000e-003	8.7000e-003	0.0000	0.0000	8.7100e-003
Vendor	2.7000e-004	0.0109	2.0700e-003	3.0000e-005	7.3000e-004	2.0000e-005	7.4000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8713	2.8713	2.2000e-004	0.0000	2.8769
Worker	4.2200e-003	2.7300e-003	0.0304	1.0000e-004	0.0115	7.0000e-005	0.0116	3.0600e-003	6.0000e-005	3.1200e-003	0.0000	8.9835	8.9835	2.0000e-004	0.0000	8.9884
Total	**4.4900e-003**	**0.0137**	**0.0325**	**1.3000e-004**	**0.0123**	**9.0000e-005**	**0.0124**	**3.2700e-003**	**8.0000e-005**	**3.3500e-003**	**0.0000**	**11.8636**	**11.8636**	**4.2000e-004**	**0.0000**	**11.8740**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	13.80	6.20	6.20	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	9.2200e-003	1.0000e-005	8.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6400e-003	1.6400e-003	0.0000	0.0000	1.7500e-003
Unmitigated	9.2200e-003	1.0000e-005	8.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6400e-003	1.6400e-003	0.0000	0.0000	1.7500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.2000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.9500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6400e-003	1.6400e-003	0.0000	0.0000	1.7500e-003
Total	**9.2300e-003**	**1.0000e-005**	**8.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6400e-003**	**1.6400e-003**	**0.0000**	**0.0000**	**1.7500e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.2000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.9500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6400e-003	1.6400e-003	0.0000	0.0000	1.7500e-003
Total	**9.2300e-003**	**1.0000e-005**	**8.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6400e-003**	**1.6400e-003**	**0.0000**	**0.0000**	**1.7500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B: BIOLOGICAL RESOURCES TECHNICAL STUDY

Saint Anthony's and Valley View Water Systems Consolidation Project

Biological Resources Technical Study

prepared for

Woodard & Curran
24422 Avenida de la Carlota, Suite 180
Laguna Hills, CA 92653

prepared with the assistance of

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

July 2019

Rincon Consultants, Inc.
Environmental Scientists Planners Engineers
www.rinconconsultants.com

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Figures

Appendices

1 Introduction

Rincon Consultants, Inc. (Rincon) prepared this Biological Resources Technical Study (BRTS) to document the current existing conditions and evaluate the potential for project-related impacts to biological resources during the consolidation of separate small water systems (SWS) for two site locations: 1) the Saint Anthony's site and 2) Valley View site. The project is part of the East Coachella Valley Water Supply Project (ECVWSP). Coachella Valley Water District (CVWD) is the project's responsible lead agency. The project is located near the towns of Thermal and Mecca in unincorporated Riverside County, California.

1.1 Project Location

The project consists of two locations east of the Peninsular Ranges in the central and southern portions of the Coachella Valley: the Saint Anthony's site is located near the town of Mecca and the Valley View site is located in Thermal, both in unincorporated Riverside County, California (Figure 1). The proposed project locations lie within the boundaries of the Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan (CVMSHCP); however, they are not in an identified conservation area.

The Saint Anthony's site is depicted on Township 7S, Range 8E, Sections 9-16 of the U.S. Geological Survey *Valerie, CA* 7.5-minute topographic quadrangle and Township 7S, Range 9E, Sections 7, 8, 18, and 17 of the U.S. Geological Survey *Mecca*, CA 7.5-minute topographic quadrangle, San Bernardino Baseline and Meridian. It is located approximately 2.5 miles south of the junction of State Route (SR) 86 and SR-111 near the town of Mecca. Specifically, the project site is along 66th Avenue between Hammond Road to the east and Martinez Road to the west. A portion of the project site extends along Lincoln Street between 66th Avenue and 68th Avenue. Agriculture and open space are the dominant land uses adjacent to the project site.

The Valley View site is depicted on Township 6S, Range 8E, Sections 14, 15, 22, and 23 of the U.S. Geological Survey *Indio* and *Thermal Canyon*, CA 7.5-minute topographic quadrangles, San Bernardino Baseline and Meridian. It is directly west of SR-111 in the town of Thermal. Specifically, the project site is along Desert Cactus Drive, Fillmore Street, Airport Boulevard and Soto Street bounded by Pierce Street to the east and Orange Street to the west. Agriculture and residential land uses dominate the areas adjacent to the project site. SR- 86 bisects a portion of the project site.

The Saint Anthony's site and the Valley View site are collectively referred to as the "project site."

1.2 Project Description

The proposed project involves the consolidation of independent SWSs into CVWD's potable water system through the installation of new pipeline infrastructure. The consolidation will occur at two locations as described above: the Saint Anthony's site and the Valley View site (Figure 2).

The St. Anthony's site consists of three privately owned SWSs: Manuela Garcia Water, Saint Anthony Mobile Home Park (MHP), and Seferino Huerta. The existing potable water supply for the three

SWSs consists of local groundwater supplied by privately owned groundwater wells. The Manuela Garcia SWS serves a small mobile home park with a total of 14 service connections. The Saint Anthony MHP is a community water system that serves approximately 95 mobile homes. The Seferino Huerta SWS is a mobile home park that has 13 service connections. New infrastructure for the proposed project would consist of the following:

- A 30-inch diameter pipeline (Phase 1B and Phase 2 pipeline extensions) totaling approximately 22,000 feet (4.2 miles) in length that runs along to adjacent to Avenue 66
- A 12-inch diameter pipeline measuring approximately 4,500 feet in length along Lincoln Street
- 460 feet of 1-inch, 2-inch and 4-inch diameter service laterals connecting to the Avenue 66 Phase 2 pipeline and 12-inch diameter water pipeline along Lincoln Street and extending to the property boundary of each SWS, as well as 2-inch diameter pipelines on the MHP properties to complete service to the existing SWSs
- 60 feet of 6-inch diameter fire service that would connect to the Avenue 66 pipeline and 12-inch Lincoln Street pipeline and extend to fire hydrants or backflow preventers to provide fire service to each SWS
- Modifications to the existing on-site SWSs may include removal of some existing infrastructure (e.g., tanks, pipelines, connections) and specifically abandonment of the wells.

The Valley View site consists of nine privately owned SWSs: Campos MHP, De Leon Ranch, Desert View MHP, Luciano Valenzuela, Magdaleno Lopez, Meza's Ranch, Soto Water, Valley View MHP, and Vista Norte Estates. The existing potable water supply for the nine SWSs consists of local groundwater supplied by privately owned groundwater wells. The Campos MHP SWS serves a small mobile home park with a total of 14 service connections. The De Leon Ranch SWS serves a labor camp with 13 dwellings. The Desert View MHP is a community water system serving a mobile home park with 22 service connections. The Luciano Valenzuela SWS serves a mobile home park with 13 connections. The Magdaleno Lopez SWS serves six residential connections. The Meza's Ranch SWS is a new community water system serving a main residence and 7 mobile homes. The Soto Water SWS has eight service connections. The Valley View MHP is a community water system serving a mobile home park with 42 service connections. The Vista Norte Estates SWS is comprised of 13 service connections. New infrastructure for the Valley View portion of the project would consist of the following:

- 30-inch diameter water main along Airport Boulevard, totaling 5,400 linear feet, connecting to the existing 18-inch diameter water main on Pierce Street.

- 12-inch diameter water mains in Soto Street, Fillmore Street, 55th Avenue, and Desert Cactus Drive, totally 9,100 linear feet, connecting to the 30-inch water main along Airport Boulevard.

- One-inch and two-inch diameter service laterals totaling 1,100 linear feet. These would connect to the proposed 30-inch and 12-inch diameter water mains in Airport Boulevard, Soto Street, Avenue 55, and Desert Cactus Drive and would extend to the property boundaries of each SWS.

- One-inch and two-inch diameter on-property pipelines, totaling 1,500 feet to complete service to the existing SWSs. These pipelines would connect the 1-inch and 2-inch diameter laterals to the existing potable distribution system at each SWS.
- 6-inch diameter piping, totaling 2,300 feet, connecting from the proposed water mains to fire hydrants or backflow preventors to provide fire service to each SWS. Fire hydrants would be located in accordance with CVWD and Riverside County Fire Department standards.
- Modifications to the existing on-site SWSs may include removal of some existing infrastructure (e.g., tanks, pipelines, connections) and specifically demolition of the wells.

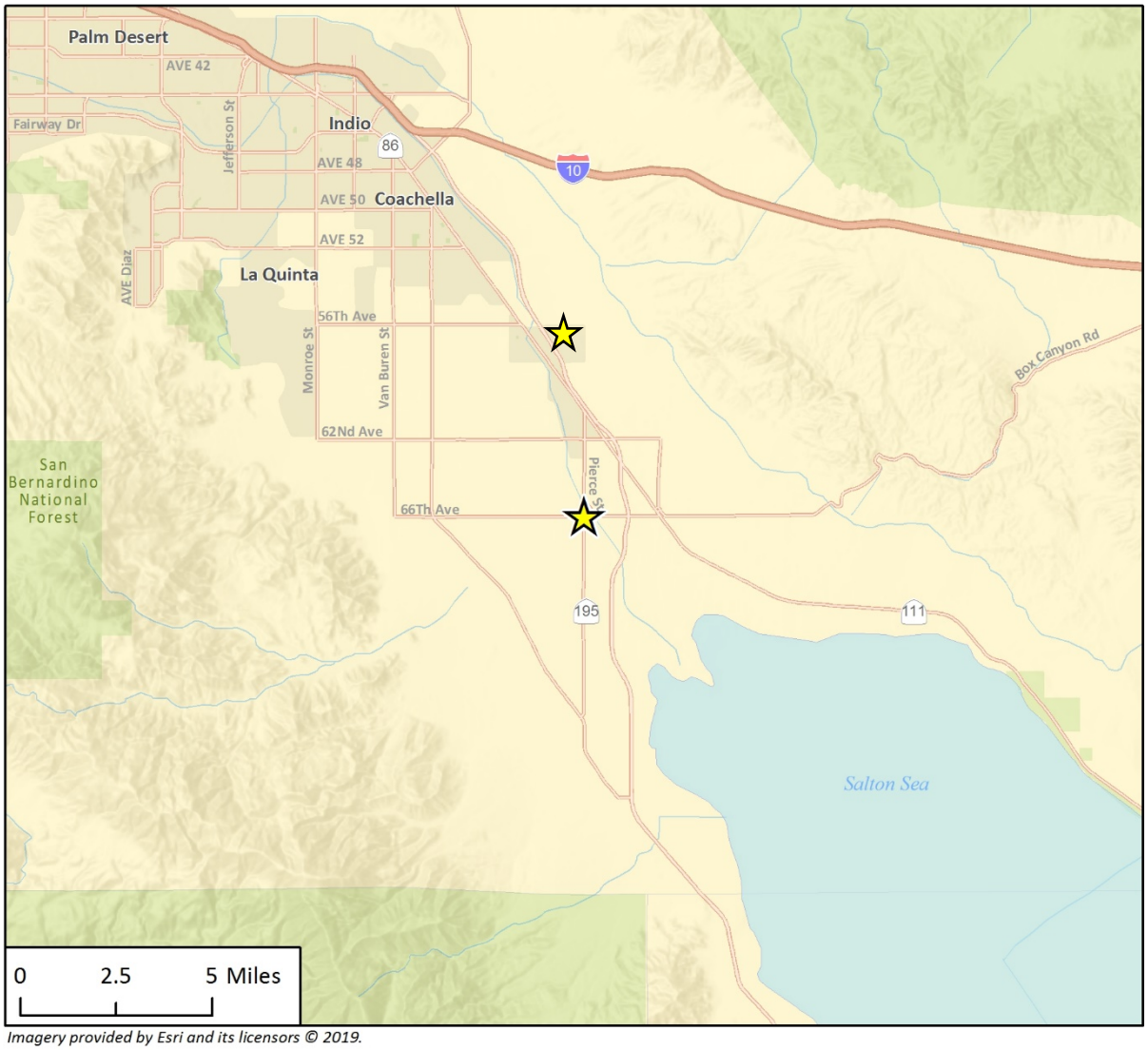
Along much of the alignment, trench excavation would be used for the installation of the pipeline. A backhoe, excavator, or trencher would be used to dig trenches for pipe installation. In general, the pipelines would be installed at depths of 5-6 feet below ground surface with a width of 3-5 feet. Service laterals will be installed at depths of approximately 5 feet, with a width of 3-4 feet. The water pipelines at both locations would be installed within existing County of Riverside roadway rights of way and SWS properties. Construction is anticipated to last 12 months. Disturbance activities would occur on existing dirt 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.

CVWD also proposes constructing an approximately 2,500-foot-long pipeline segment west of Desert Cactus Drive. The proposed pipeline section will be located north of Airport Boulevard and will cross under the Whitewater River/Coachella Valley Stormwater Channel and Highway 111 to connect with an existing CVWD water main. This pipeline segment is not a part of the proposed project at this time. Therefore, this segment is not included in the current BRTR and will be analyzed at a later date as part of a separate CEQA-Plus review.

1.3 Area of Potential Effects

The project Area of Potential Effects (APE) generally depicts all areas expected to be affected by the proposed project, including construction staging areas. For this study, the APE includes the project disturbance footprint associated with the installation of the water pipeline. The project site must additionally be considered as a three-dimensional space and includes any ground disturbance associated with the project. As such, the APE also includes a 50-foot buffer (25 feet on either side of the pipeline) to address potential indirect project effects such as noise and dust. The location of the APE is depicted in Figure 3.

Figure 1 Regional Project Location



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Project Location

N

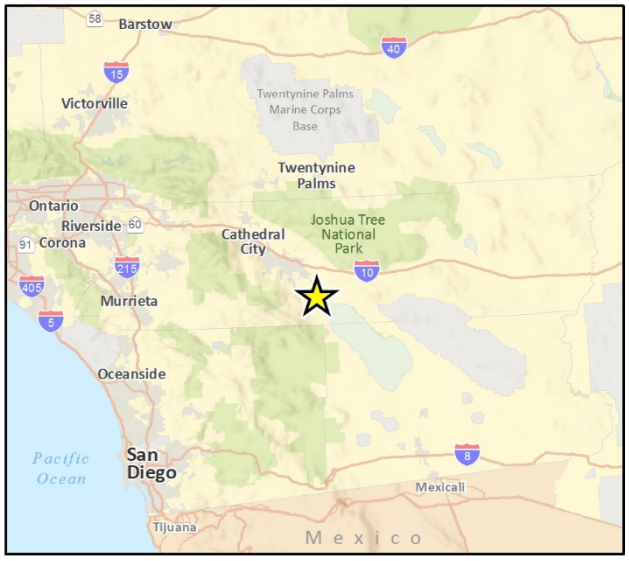
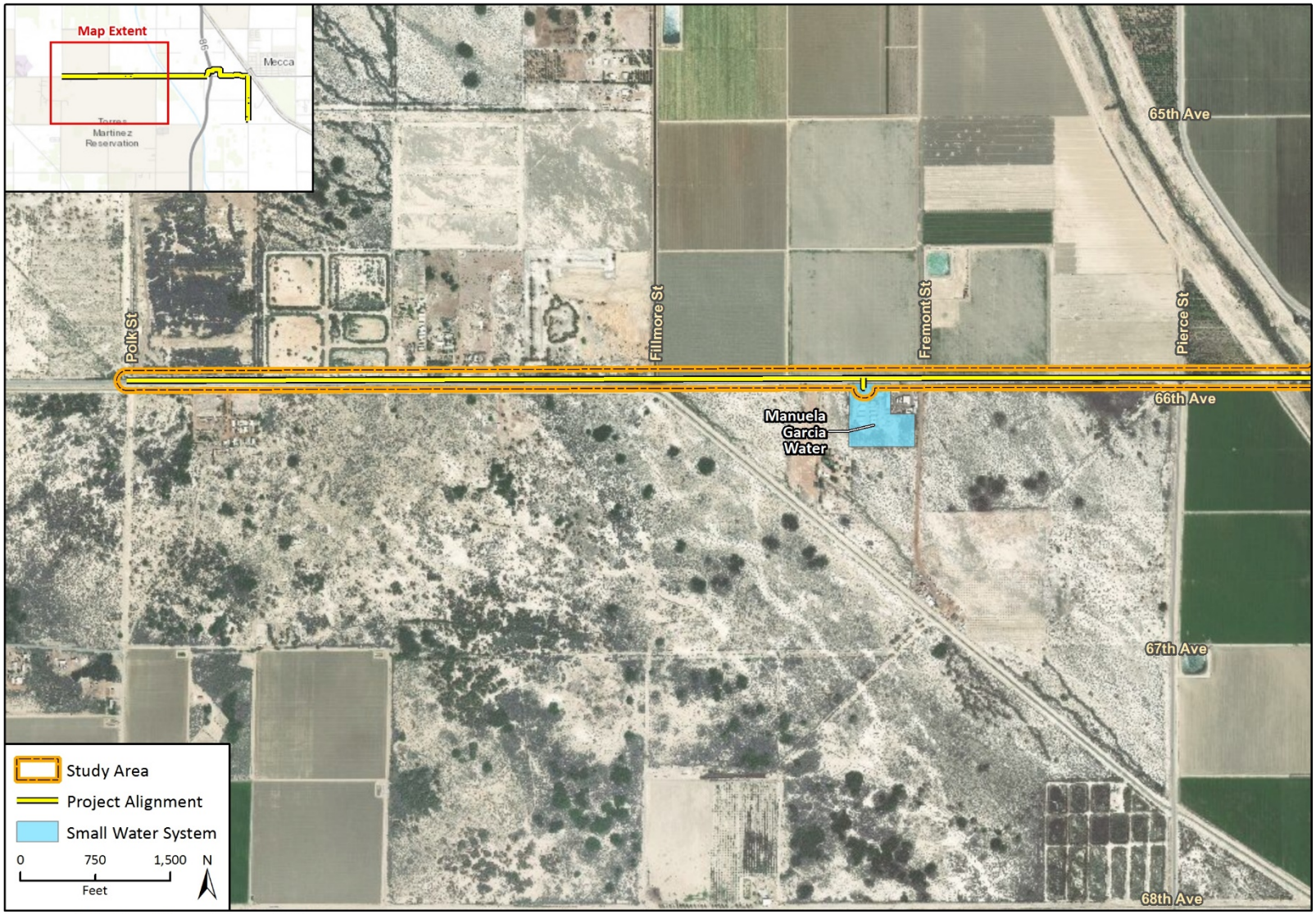


Figure 2a St. Anthony's Site – Project Overview



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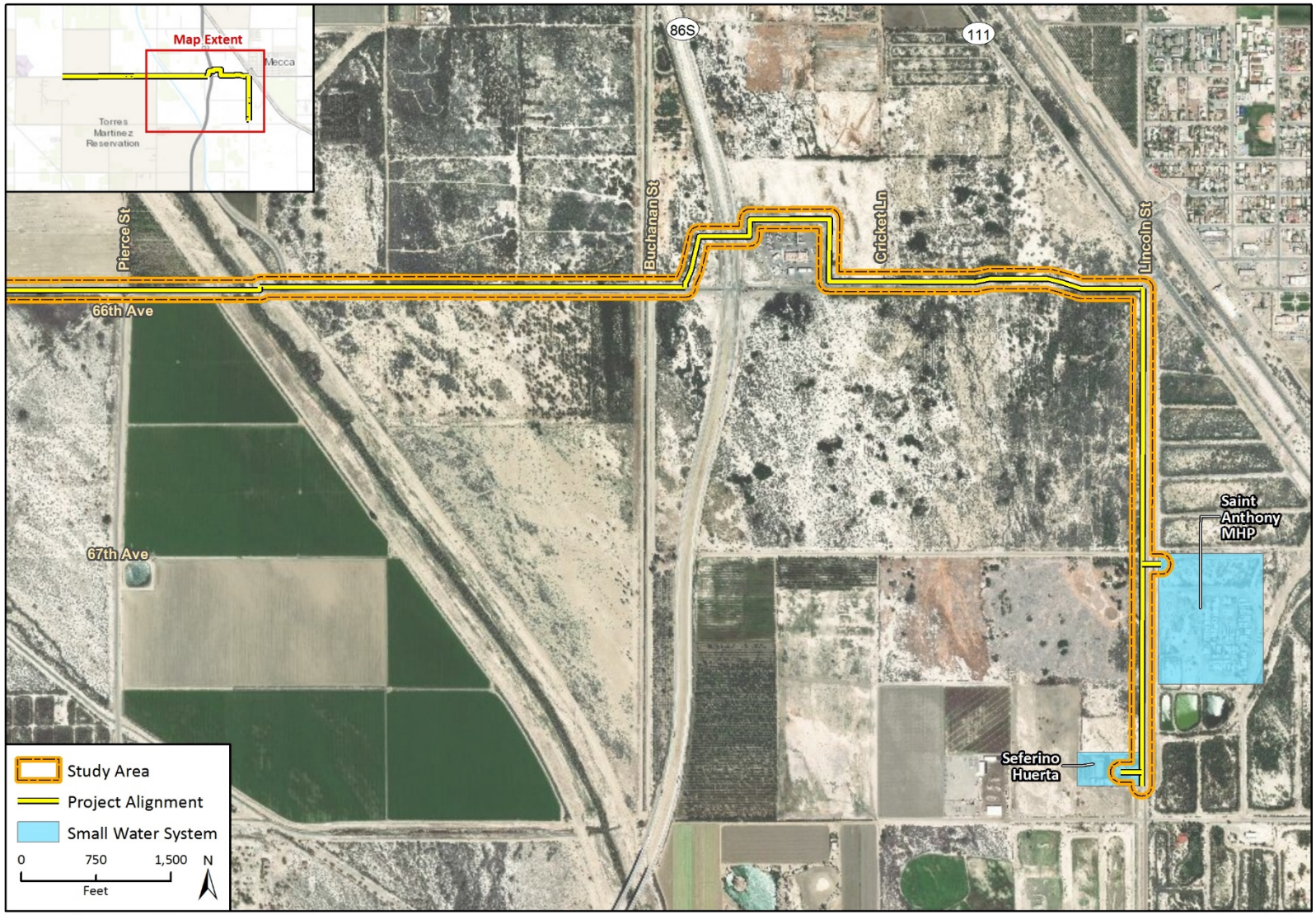
Additional data provided by CVWD 2019.

Fig 2a Project Location - St Anthony

Figure 3b St. Anthony's Site – Project Overview



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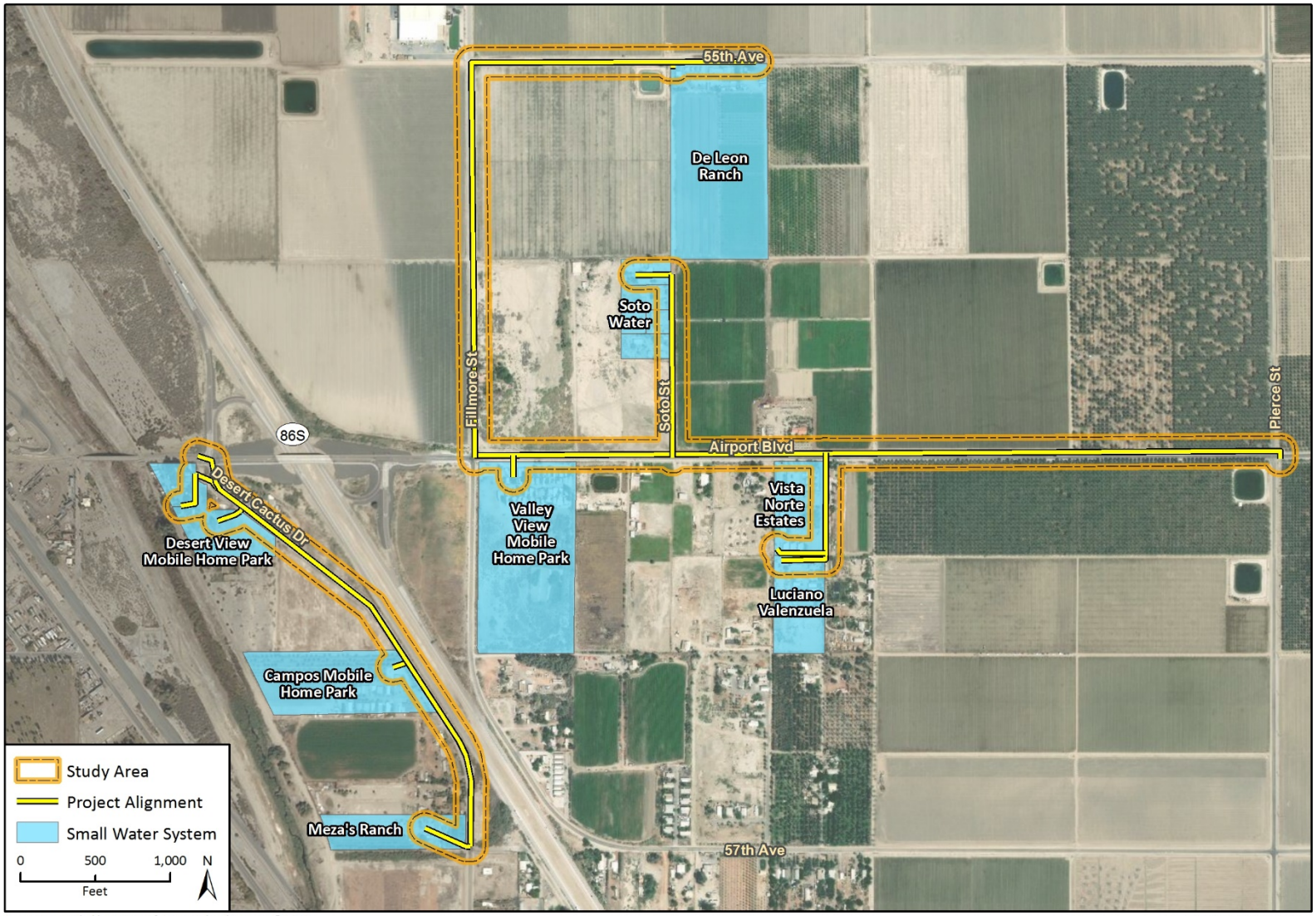
Additional data provided by CVWD 2019.

Fig 2b Project Location - St Anthony

Figure 2c Valley View Site – Project Overview



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Additional data provided by CVWD 2019.

Fig 2 Project Location - Valley View

Figure 3a St. Anthony's Site - Area of Potential Effects

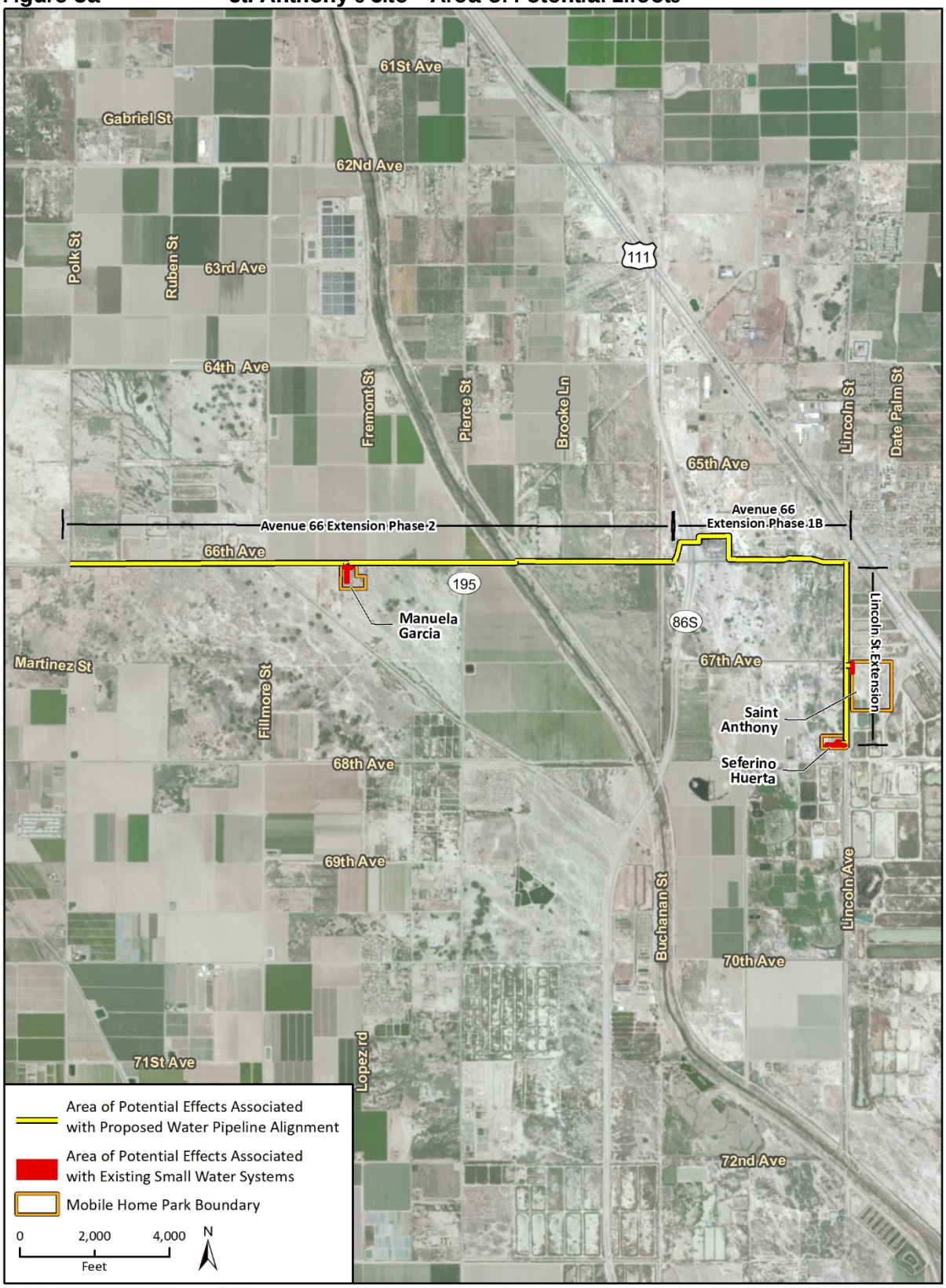

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Fig 2 Project Location St Anthony_Aerial

Figure 3b Valley View Site - Area of Potential Effects

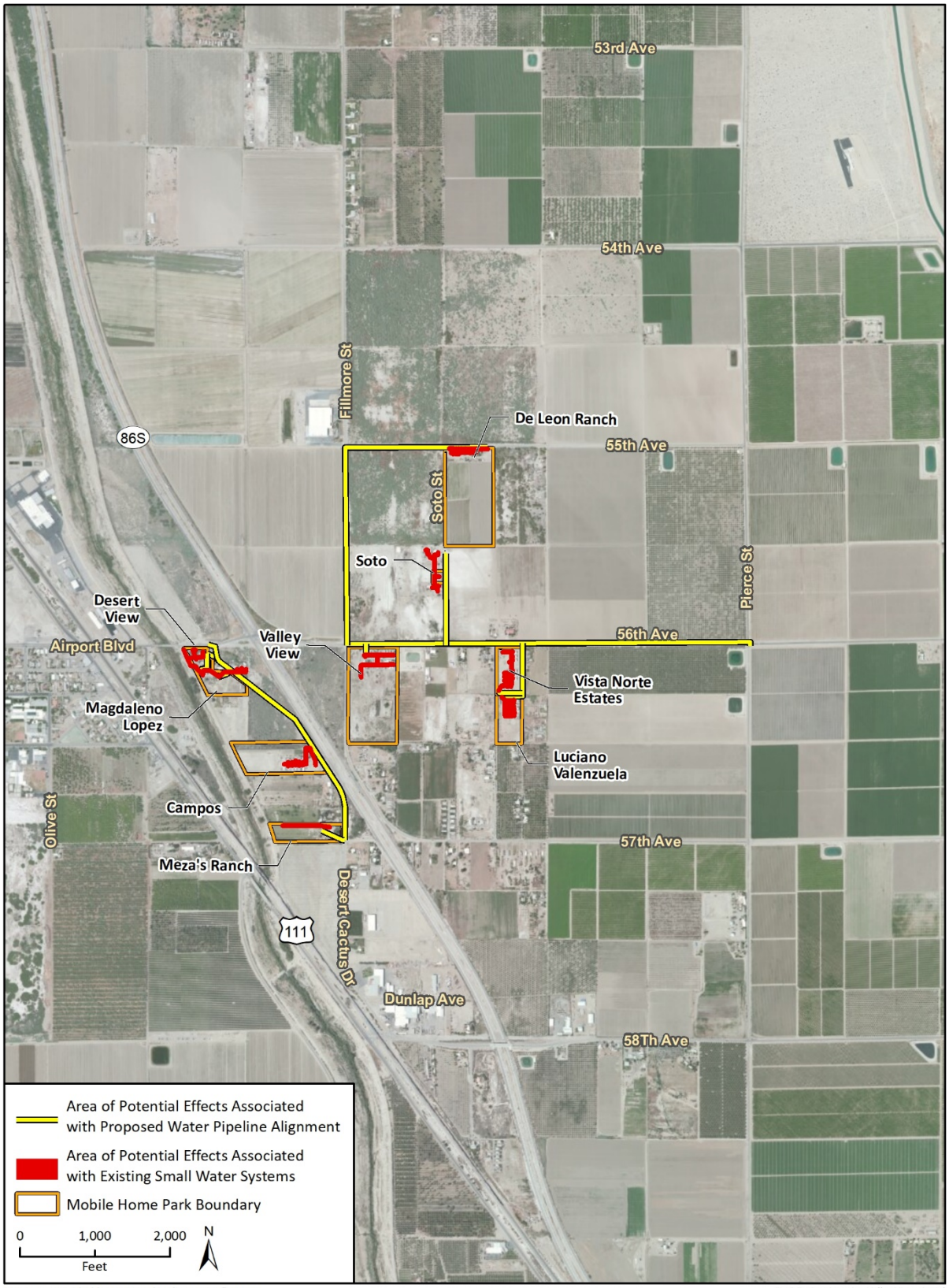

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Fig 2 Project Location Valley View_Aerial

2 Methodology

2.1 Regulatory Setting

This section provides a general summary of the applicable federal and state regulations related to biological resources that could occur within the project site and immediate vicinity. Regulated or sensitive biological resources considered and evaluated in this BRTS include special status plant and wildlife species, other nesting birds and raptors, sensitive plant communities, potentially jurisdictional waters and wetlands, wildlife movement corridors, and locally protected resources, such as protected trees.

Coachella Valley Water District is the responsible lead agency for this project under the California Environmental Quality Act (CEQA).

2.1.1 Environmental Statutes

For the purposes of this BRTS, potential project-related impacts to biological resources were analyzed on the basis of the following regulatory statutes and guiding documents:

- **California Environmental Quality Act (CEQA).** Requires environmental review prior to approval of discretionary projects, and requires significant impacts to be mitigated if feasible.
- **Federal Endangered Species Act (ESA) and California Endangered Species Act (CESA).** These laws prohibit the unauthorized take of federally and state-listed threatened and endangered species.
- **Federal Clean Water Act (CWA) and Porter-Cologne Water Quality Control Act.** These laws prohibit unauthorized discharges of pollutants, including fill material for construction, into jurisdictional waters of the United States and waters of the State.
- **California Fish and Game Code (CFGC) Sections 1600 et seq.** These sections of the CFGC set forth the Lake/ Streambed Alteration Agreement program, through which the California Department of Fish and Wildlife (CDFW) regulates activities that would divert, obstruct, or alter streambeds.
- **Migratory Bird Treaty Act (MBTA) and CFGC Section 3503.** These laws prohibit the destruction of birds, including their eggs, nests, and nestlings.
- **Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP).** The project site lies within the boundary of CVMSHCP, which is an adopted, regional plan with the overall goal to enhance and maintain biological diversity and ecosystem processes while allowing future economic growth.

2.1.2 Guidelines for Determining CEQA Significance

The following threshold criteria, as defined within the CEQA Guidelines, Appendix G – Initial Study Checklist, are used as the basis to evaluate potential environmental effects. Centered on these criteria, a proposed project would have a significant effect on biological resources if it would:

a) Have substantial adverse effects, 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 US 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.

2.2 Database and Literature Review

Prior to conducting the biological field survey for this BRTS, Rincon reviewed a variety of literature sources to obtain baseline information about the biological resources with potential to occur at the project site and in the surrounding areas. The literature review included information from standard biological reference materials and regionally applicable regulatory guiding documents including (but not limited to) the following: Baldwin et al., 2012; and Sawyer et al., 2009. Rincon also conducted queries of several relevant scientific databases that provide information about occurrences of sensitive biological resources: the California Department of Fish and Wildlife (CDFW; formerly the California Department of Fish and Game) California Natural Diversity Data Base (CNDDB) (California Department of Fish and Wildlife, 2019) and Biogeographic Information and Observation System (California Department of Fish and Wildlife, 2019); the U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal (U.S. Fish and Wildlife Service, 2019a) and Information, Planning, and Conservation (IPaC) System Query (U.S. Fish and Wildlife Service, 2019b); National Wetlands Inventory (NWI) (United States Department of the Interior, Fish and Wildlife Service 2019); the United States Department of Agriculture, Natural Resource Conservation Service (NRCS) Web Soil Survey (Natural Resources Conservation Service, 2019); and the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California (California Native Plant Society, 2019). The queries included the *Mecca, Indio, Thermal Canyon, and Valerie* California USGS 7.5-minute topographic quadrangles and the other eight USGS quadrangles that surround each of them (*Cottonwood Basin, Mortmar, Rabbit Peak, Oasis, Salton, Myoma, West Berdoo Canyon, Rockhouse Canyon, La Quinta, Martinez Mountain*, and *Clark Lane NE*).

Rincon compiled a complete list of special status species previously documented within a five-mile radius of the project site from the CNDDB query and those species reported from the USFWS-IPaC query (Appendix A). Then an analysis to determine which of these special status species have the potential to occur within the project site was conducted. The habitat requirements for each regionally occurring special status species were assessed and compared to the type and quality of habitats observed on-site during the biological field survey. Conclusions regarding which special status species have the potential to occur on-site were based not only on background research and literature review previously mentioned; but also on the data collected in the field during the site

survey. Several regionally occurring special status species were eliminated due to lack of suitable habitat within the project site, range in elevation, and/or geographic distribution. Special status species determined to have the potential to occur within the project site; as well as the results of the field survey efforts are discussed in Section 4. Special status species that were determined not to have potential to occur within the project site are not discussed further in this BRTS

2.3 Focused Biological Field Survey

Rincon Senior Biologist, Megan Minter conducted the biological field survey for this BRTS on February 12, 2019. The survey was conducted from 9:00 am to 2:00 pm. The temperature ranged from 55°F to 62°F. The wind was calm and the cloud cover was minimal.

During the field survey an inventory of all plant species observed was compiled, the existing vegetation communities were further classified, and the general site conditions were documented. Plant species nomenclature and taxonomy followed The Jepson Manual: Vascular Plants of California, second edition (Baldwin et al., 2012). The vegetation classification used for this analysis is based on Sawyer et al. (2009) but it has been modified as needed to most accurately describe the existing vegetation communities on-site.

The field survey consisted of a biologist walking and driving the extent of the Study Area, documenting the condition of the habitats on-site, and recording the plants and animals observed within and adjacent to the new pipeline alignments and connection areas within a 100-foot buffer (Study Area). Inaccessible private property was surveyed using binoculars. Evidence of human disturbance was noted and photographs of notable features were taken. Avian species were identified using the Sibley Guide to Birds (Sibley 2000).

3 Existing Conditions

This section summarizes the results of the focused biological field survey effort and provides further analysis of the data collected in the field. Discussions regarding the general environmental setting, vegetation communities present, plant and wildlife species observed, special status species issues, and other biological resource constraints on-site are presented below. Representative photographs of the project site are provided in Appendix B and a complete list of all the plant and wildlife species observed on-site during the biological field survey is presented as Appendix C.

3.1 Topography and Soils

The project site is located in central Riverside County, within the Coachella Valley (Figure 1). The Coachella Valley is a desert valley that is bounded by the Little San Bernardino Mountains and Joshua Tree National Park in the east, San Jacinto Mountains and Santa Rosa Mountains to the west and southwest, the Salton Sea to the southeast, and San Gorgonio Mountain to the north. The site elevation ranges from 40 to 58 meters (130 to 190 feet) below mean sea level.

Based on the most recent soil survey for Riverside County (NRCS Web Soil Survey) the Study Area contains five mapped soil types listed below and shown on Figure 4:

- Coachella fine sand, 0 to 2 percent slopes
- Gilman fine sandy loam, 0 to 2 percent slopes
- Gilman silt loam, 0 to 2 percent slopes
- Indio very fine sandy loam
- Salton silty clay loam

The Coachella, Gilman, Indio and Salton series consist of fine, mostly well drained alkaline soils formed from recent alluvium. These soils are used primarily for growing citrus fruits, grapes, alfalfa, dates and truck crops under irrigation. Natural vegetation typically includes ephemeral grasses and forbs, and a sparse cover of bursage, creosote bush, saltbush, mesquite and other desert shrubs and weeds. None of these soils are considered hydric.

These soil units are from the USDA NRCS Soil Survey of Riverside County, California, which was conducted on a broader scale than this study and did not necessarily include on-site observations. The physical characteristics of the soil unit, as described above, are general and not necessarily indicative of characteristics actually present on the property.

3.2 Land Cover and Vegetation

The project site is within the lower Colorado desert which is a subdivision of the Sonoran Desert Region (DSon) geographic subdivision of California. The DSon subdivision is a component of the larger Desert Province (D) geographic region, which occurs within the even larger California Floristic Province (Baldwin et al., 2012). The majority of the proposed project alignment is within developed urban and agricultural areas. The land and vegetation cover is shown overlain on aerial imagery in Figure 5 below. The land cover and vegetation types described below were observed within the Study Area.

3.2.1 Tamarisk Scrub

The tamarisk scrub habitat type on the project site corresponds to the Tamarix spp. semi-natural shrubland stands more recently described by Sawyer et al. (2009). Tamarisk scrub is dominated by the non-native and highly-invasive tamarisk (*Tamarix* spp.). This weedy plant community is usually a monoculture of tamarisk that has supplanted native wetland plant species. Tamarisk usually invades following disturbance. Within the Study Area, this plant community typically occurs in washes and areas subject to runoff from irrigation waters.

3.2.2 Disturbed/Ruderal

Disturbed/ruderal habitat consists of areas that have been physically disturbed and are no longer recognizable as a native or naturalized vegetation association, but continue to retain a soil substrate. Within the Study Area, this habitat type is dominated by Russian thistle (*Salsola tragus*), a variety of thistles from the Centaurea, Cynara, and Carduus genera, mustards (*Brassica* spp., *Hirschfeldia incana*, *Sisymbrium* spp.), and non-native grasses *(Bromus* spp., *Schimus* spp.).

3.2.3 Agriculture

Agricultural areas within the Study Area include active farmland supporting a variety of crops including dates and lettuce. Agricultural areas also include pastureland and fallow cropland. These areas are usually tilled/disked regularly, irrigated, and are subject to regular planting and harvesting.

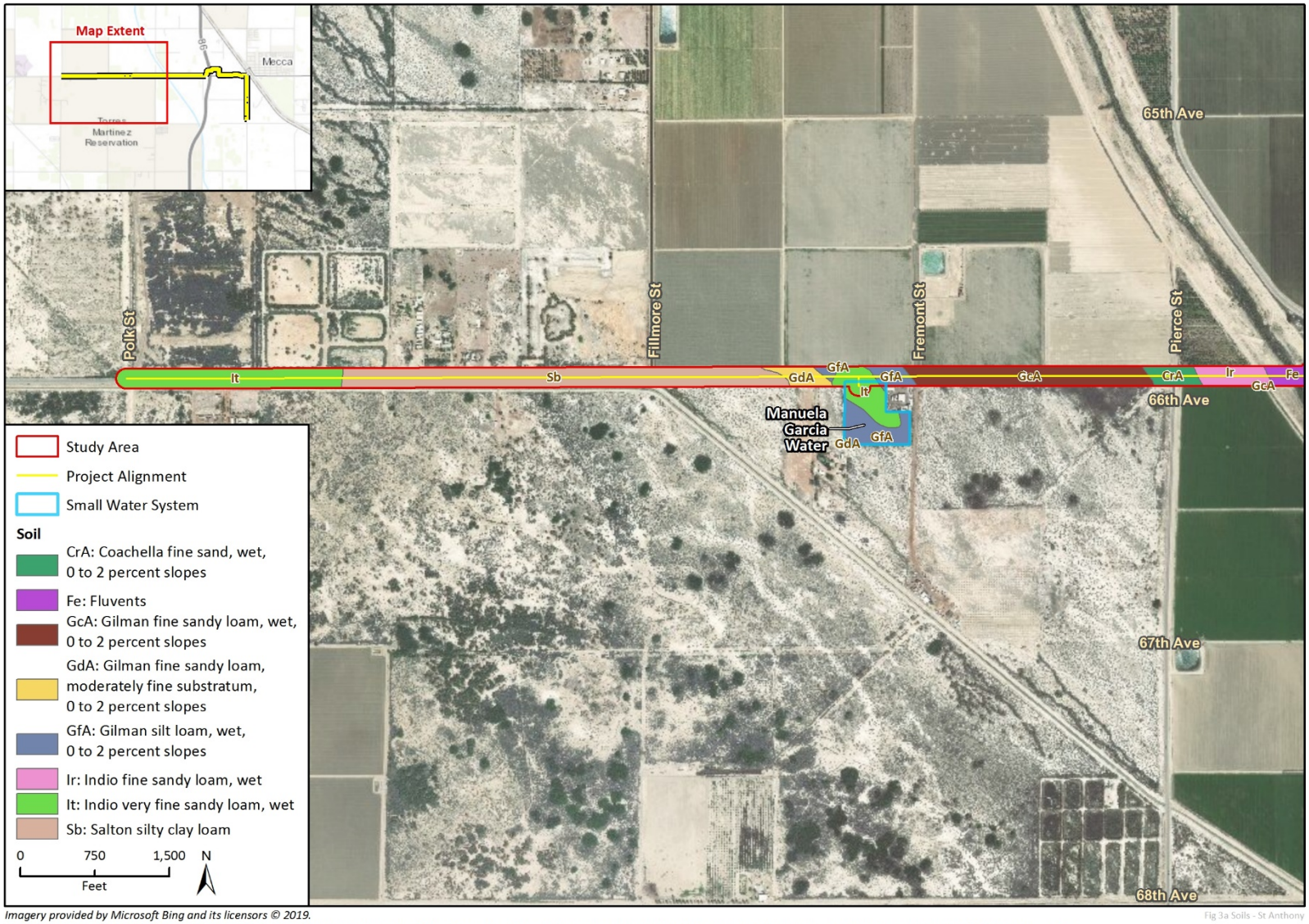
3.2.4 Developed

Developed areas within the Study Area include mobile home parks, paved and dirt roads, and other buildings and paved areas. Mobile home parks within the Study Area contain ornamental trees and shrubs such as eucalyptus (*Eucalyptus* spp.), palm trees (*Washingtonia* spp*., Phoenix dactylifera*) and oleander (*Nerium oleander*).

3.3 General Wildlife

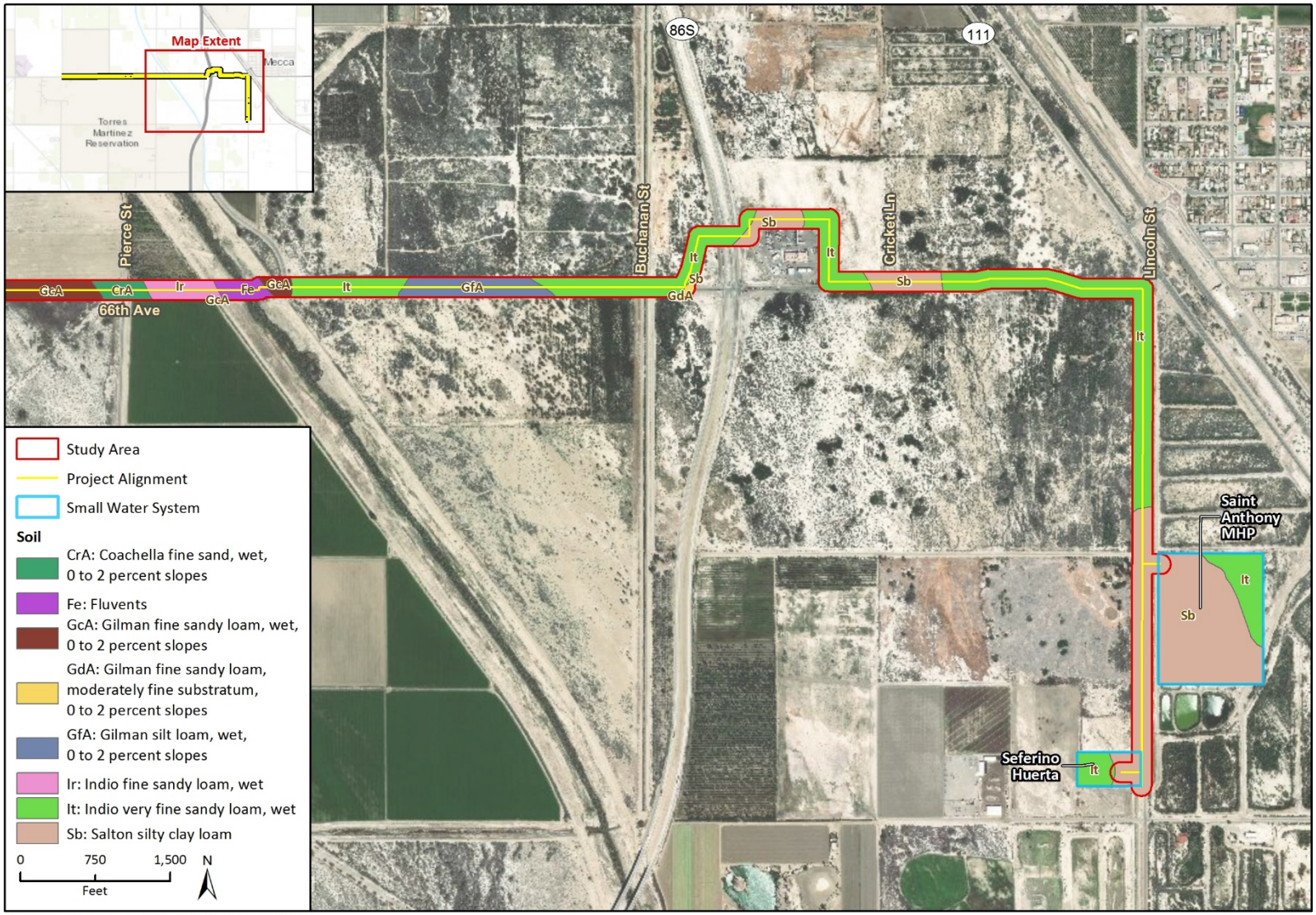
The Study Area and surrounding areas provide habitat suitable for wildlife species that commonly occur in southern California suburban areas. Wildlife observed on or adjacent to the site included bird species such as American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), snowy egret (*Egretta thula*), northern mockingbird (*Mimus polyglottos*), and common raven (*Corvus corax*). Coyote (*Canis latrans*) scat as well as some lizard and small animal burrows were observed within disturbed/ruderal areas within the Study Area.

Figure 4a St. Anthony's Site – Soils



Imagery provided by Microsoft Bing and its licensors © 2019.
Additional data provided by CVWD 2019. Soils data provided by Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database 2019.

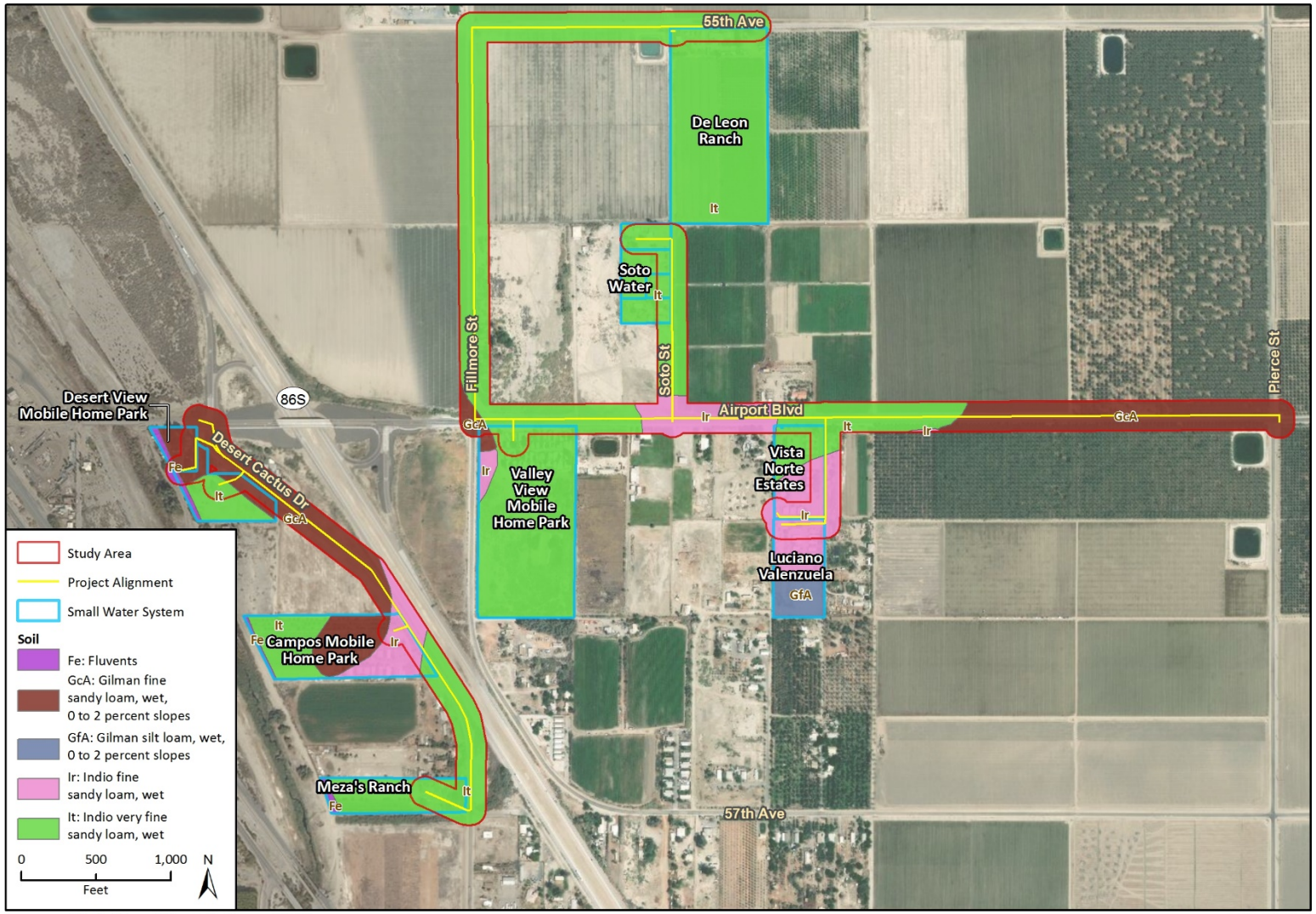
Figure 4b St. Anthony's Site – Soils



Imagery provided by Microsoft Bing and its licensors © 2019.
Additional data provided by CVWD 2019. Soils data provided by Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database 2019.

Fig 3b Soils - St Anthony

Figure 4c Valley View Site – Soils



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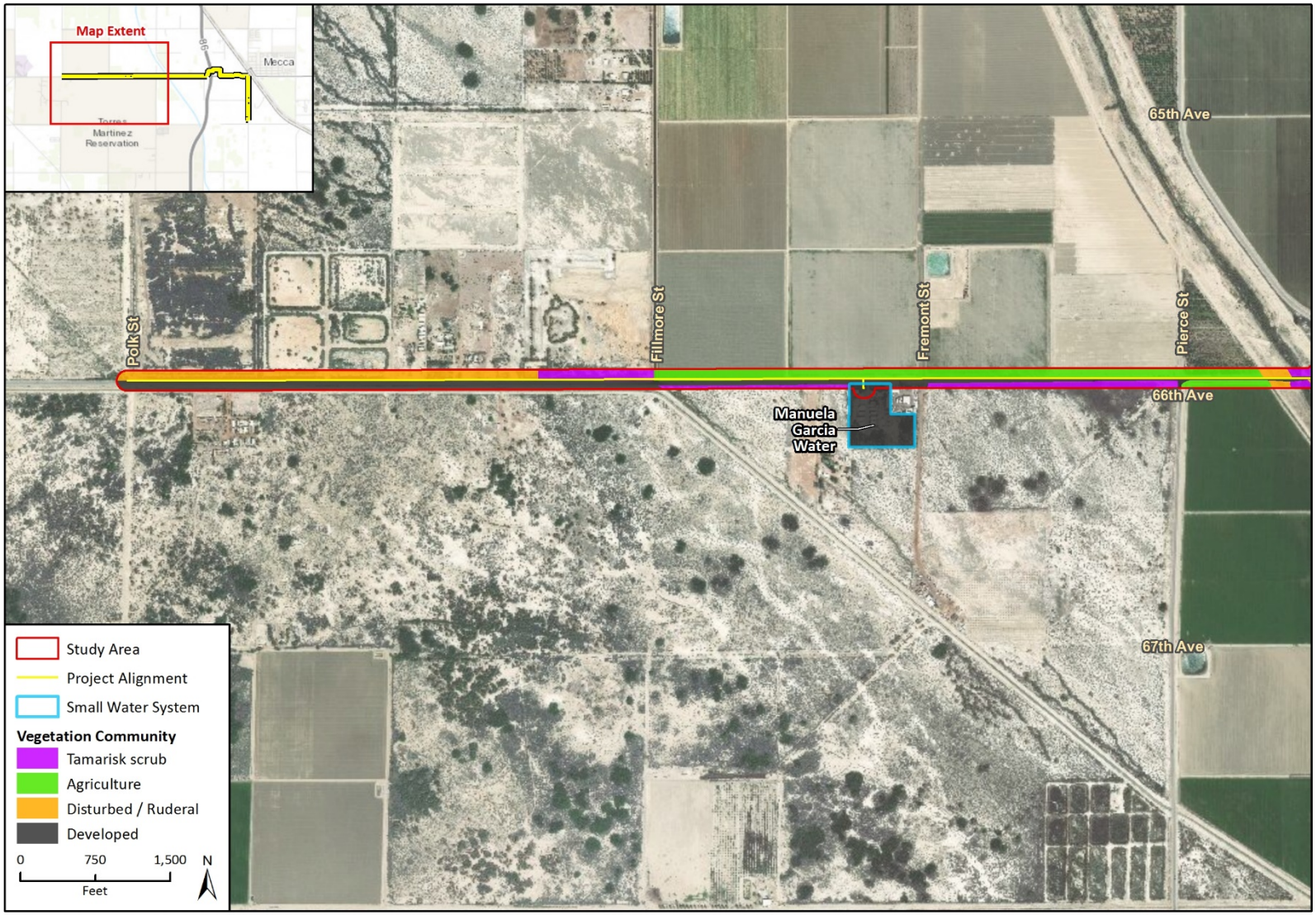
Additional data provided by CVWD 2019. Soils data provided by Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database 2019.

Fig 3 Soils - Valley View

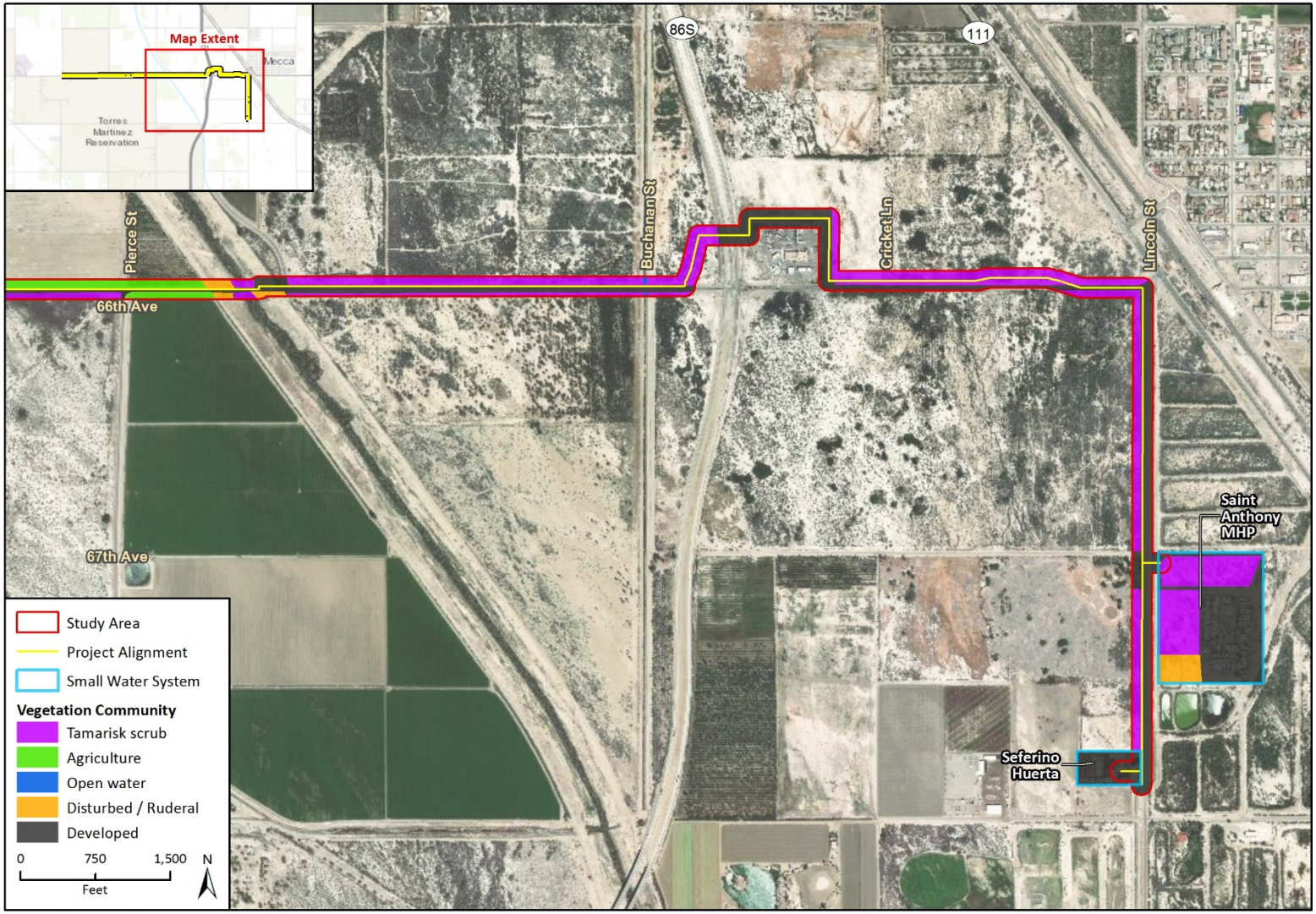
Figure 5a St. Anthony's Site – Vegetation



Imagery provided by Microsoft Bing and its licensors © 2019.
Additional data provided by CVWD 2019.

Fig 4a Vegetation Communities - St Anthony

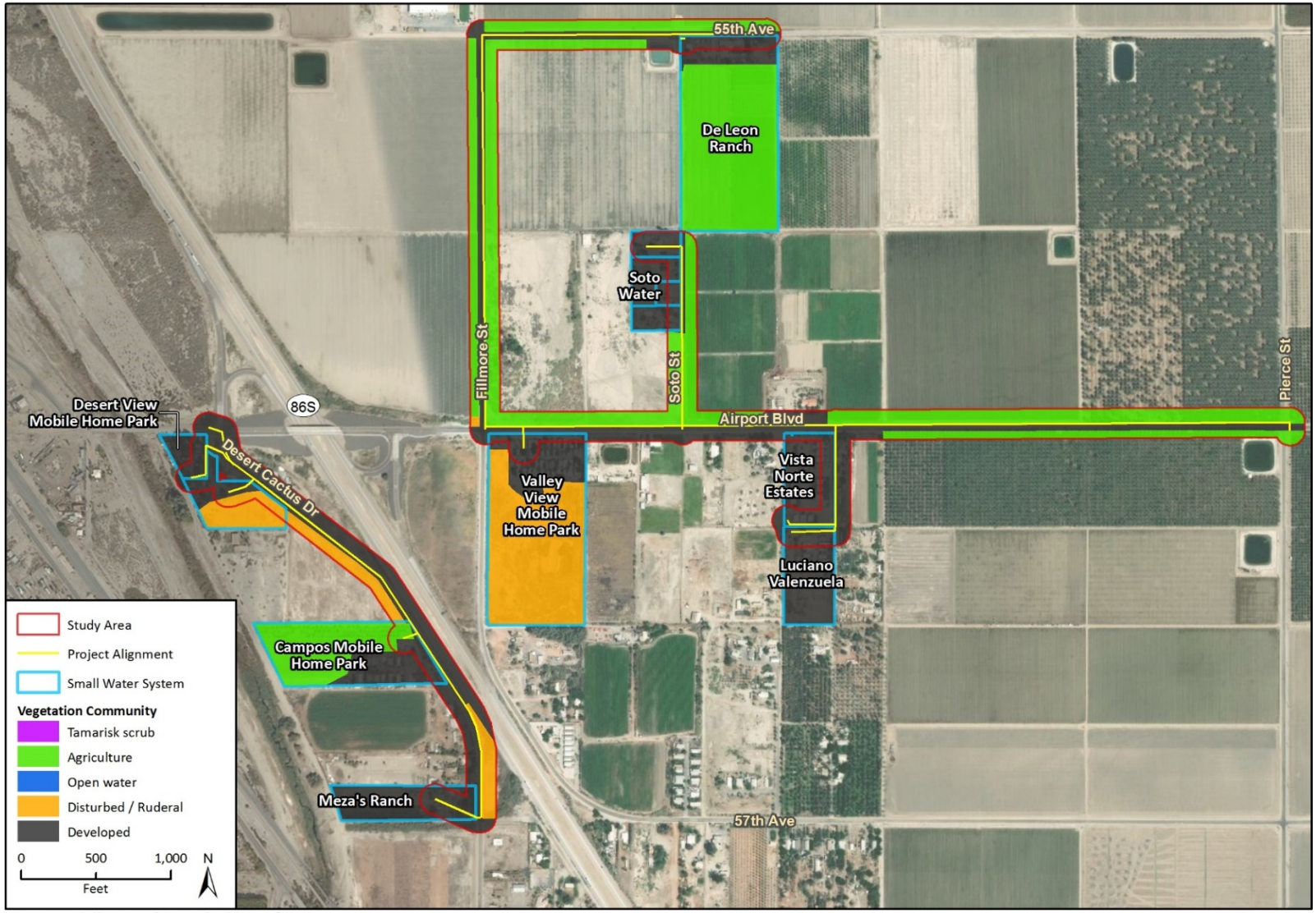
Figure 5b **St. Anthony's Site – Vegetation**



Imagery provided by Microsoft Bing and its licensors © 2019.
Additional data provided by CVWD 2019.

Fig 4b Vegetation Communities - St Anthony

Figure 5c Valley View Site – Vegetation



Imagery provided by Microsoft Bing and its licensors © 2019.
Additional data provided by CVWD 2019.

Fig 4 Vegetation Communities - Valley View

4 Sensitive Biological Resources

This section discusses the general presence or potential for special status biological resources to occur within the project site. 'Potential to occur' is based on the presence or absence of suitable habitat for each special status species reported in the scientific database queries that were conducted for the proposed project. Several scientific databases were queried, multiple sources of pertinent scientific literature were reviewed, and the technical expertise of Rincon's staff was utilized to determine the habitat requirements, ecology, and distribution of the special status plant species potentially affected by the proposed project. All occurrences of special status species, sensitive vegetation communities, and USFWS designated critical habitats that have been reported by the resource agencies within a five-mile radius of the project site were plotted on a map using geographic information system (GIS) software. As discussed in Section 2.2, an analysis was conducted to determine which of the regionally occurring special status species have potential to occur within the project site (Appendix A). The potential for each special status species to occur in the Study Area was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last 5 years).

Plant or animal taxa may be considered "sensitive" or as having "special-status" due to declining populations, vulnerability to habitat change, or because they have restricted ranges. Some are listed as threatened or endangered by the USFWS by the CDFW, or both and are protected by the federal and state ESAs. Others have been identified as sensitive or as special status species by the USFWS, the CDFW, or by private conservation organizations, including the CNPS. Unlisted species of special concern do not have formal state or federal status.

For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS and National Marine Fisheries Service (NMFS) under the ESA; those listed or candidates for listing as Rare, Threatened, or Endangered by the CDFW under the CESA or Native Plant Protection Act; those recognized as Species of Special Concern (SSC) by the CDFW; and plants occurring on lists 1 and 2 of the CNPS California Rare Plant Rank (CRPR) system, per the following definitions:

- **Rank 1A** = Plants presumed extinct in California;
- **Rank 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- **Rank 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened);
- **Rank 1B.3** = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened or no current threats known);
- **Rank 2** = Rare, threatened or endangered in California, but more common elsewhere.

In addition, special-status species are ranked globally (G) and subnationally (S) 1 through 3 based on NatureServe's (2010) methodologies:

- **G1 or S1** - Critically Imperiled Globally or State-wide
- **G2 or S2** - Imperiled Globally or State-wide
- **G3 or S3** - Vulnerable to extirpation or extinction Globally or State-wide

Plant communities are also considered special-status biological resources if they have limited distributions, have high value for sensitive wildlife, contain special-status species, or are particularly susceptible to disturbance. The CDFW ranks special-status communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDB.

4.1 Special Status Plant Species

Rincon biologists determined that the Study Area does not contain suitable habitat for any special status plant species (Appendix A). While 27 special status plant species have been previously documented within a five-mile radius by the CNDDB, the project site does not contain suitable habitat for any of these species based on a variety of factors, including: the disturbance history of the site, lack of suitable soils, inappropriate hydrologic conditions, absence of appropriate vegetation communities, or being outside the elevation range of the species.

4.2 Special Status Wildlife Species

Rincon evaluated 26 wildlife species for their potential to occur within the project site (Appendix A). The assessment of the potential for these species to occur is based upon the presence of suitable habitat as identified during surveys and existing knowledge of species occurrences and distributions in the region. The site was determined to contain marginally suitable habitat for western yellow bat (*Lasiurus xanthinus*) and western mastiff bat (*Eumops perotis californicus*). Accordingly, these species have moderate potential to occur within the project site. Western yellow and western mastiff bat could roost in trees adjacent to the project site. No special status wildlife species were observed within the Study Area during the survey effort.

The project site provides general nesting bird habitat. Nesting birds are protected by the MBTA and the FGC 3503 and 3503.5. The Study Area provides suitable nesting habitat for numerous species of birds common in the area and nesting birds are likely to be present within the project limits during the nesting season.

4.3 Critical Habitat and Wild and Scenic Rivers

The Study Area is not within any federally designated critical habitat areas nor within or adjacent to any federally designated Wild and Scenic Rivers.

4.4 Sensitive Plant Communities

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDB. Similar to special-status plant and wildlife species, vegetation alliances are ranked 1 through 5 based on NatureServe's (2010) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive.

According to the CNDDB, no sensitive plant communities are tracked within a five-mile radius the project site.

4.5 Jurisdictional Waters and Wetlands

Areas potentially subject to United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW jurisdiction were assessed during the literature review and field visit. The Study Area contains the Coachella Valley Stormwater Channel (CVSC) and its connecting irrigation channels, which are potentially subject to USACE, RWQCB, and CDFW jurisdiction. The CVSC is a previously developed, unlined downstream extension of the Whitewater River constructed as a drainageway for agricultural irrigation return, treated wastewater, and storm runoff. The CVSC is a direct tributary to the Salton Sea and is considered and maintained as a vegetated flood control channel within the Study Area. Within the Study Area, the CVSC contains dense tamarisk scrub. Other small connecting channels are unvegetated.

4.6 Wildlife Movement

Wildlife movement and habitat fragmentation are important issues in assessing impacts to wildlife. Habitat fragmentation occurs when a proposed action results in a single, unified habitat area being divided into two or more areas in such a way that the division isolates the two new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or from one habitat type to another, as in the fragmentation of habitats within and around “checkerboard” residential development. Habitat fragmentation also can occur when a portion of one or more habitats is converted into another habitat, as when annual burning converts scrub habitats to grassland habitats.

The proposed project footprint is located within previously developed and routinely managed areas that offer little to no value to wildlife movement. These areas are subject to frequent human disturbance that do not provide linkage to wildlife habitat.

4.7 Local Policies and Tree Protection

Riverside County Ordinance 559 protects oak (*Quercus*) woodlands and requires a permit for removal of any native trees on parcels greater than one-half acre in size and above 5,000 feet in elevation. No trees within the Study Area meet these criteria.

4.8 Conservation Plans

The project site is within the CVMSHCP area (Figure 6). The CVMSHCP is a comprehensive, multi-jurisdictional habitat conservation plan focusing on the conservation of species and their associated habitats in the Coachella Valley region of Riverside County. The overall goal of the CVMSHCP is to maintain and enhance biological diversity and ecosystem processes within the region while allowing for future economic growth (CVAG 2007).

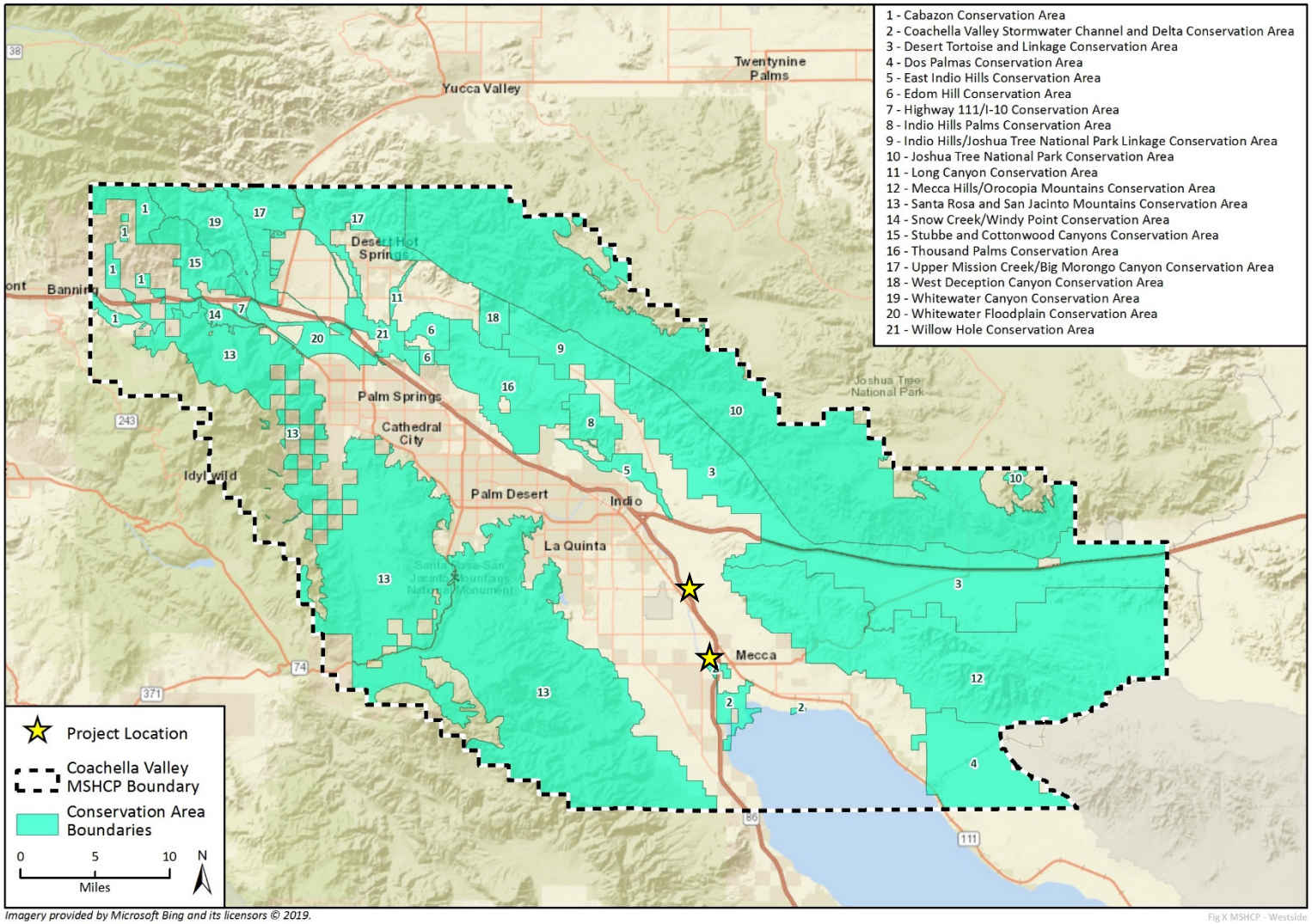
The CVMSHCP covers 27 sensitive plant and wildlife species (CVMSHCP covered species) as well as 27 natural communities and includes 21 conservation areas. Covered species include both listed and non-listed species that are conserved by the CVMSHCP. The overall provisions for the plan are subdivided according to specific resource conservation goals that have been organized according to geographic areas defined as Conservation Areas. These areas are identified as Core, Essential, or Other Conserved Habitat for sensitive plant, invertebrate, amphibian, reptile, bird, and mammal species, Essential Ecological Process Areas, and Biological Corridors and Linkages.

Each Conservation Area has specific Conservation Objectives that must be satisfied. The CVMSHCP received final approval on October 1, 2008. The approval of the CVMSHCP and execution of the Implementing Agreement (IA) provides signatories to the Plan coverage for take during covered activities in concurrence with the appropriate wildlife agency.

The project site occurs within the planning boundary of the CVMSHCP and a small portion of the St. Anthony's site lies within the Coachella Valley Stormwater Channel and Delta CVMSHCP Conservation Area boundary. The portion of the site within the Conservation Area is the fenced interior of the Seferino Huerta Mobile Home Park. Additional portions of the St. Anthony's project along 66th Avenue and Lincoln Street are directly adjacent to the Coachella Valley Stormwater Channel and Delta CVMSHCP Conservation Area.

The purpose of CVMSHCP Land Use Adjacency Guidelines is to avoid or minimize indirect effects from development adjacent to or within the Conservation Areas. In this context, "adjacent" means to share a common boundary with any parcel in a designated Conservation Area. Indirect effects include noise, lighting, drainage, intrusion of people, and the introduction of nonnative plants and nonnative predators such as dogs and cats. The St. Anthony's project site occurs partially within and adjacent to the Coachella Valley Stormwater Channel and Delta CVMSHCP Conservation Area.

Figure 6 CVMSHCP Conservation Areas



5 Impact Analysis and Mitigation Measures

This section discusses the possible adverse impacts to biological resources that may occur from implementation of the proposed project and suggests appropriate mitigation measures that would reduce those impacts to less than significant levels. The criteria used to evaluate potential project-related impacts to biological resources are presented in Section 2.1.2.

5.1 Special Status Plant Species

Rincon biologists determined that the Study Area does not contain suitable habitat for any special status plant species (Appendix A). While 29 special status plant species have been previously documented within a five-mile radius by the CNDDB and a fifteen-quad radius by the CNPS, the project site does not contain suitable habitat for these species based on a variety of factors, including: the disturbance history of the site, lack of suitable soils, inappropriate hydrologic conditions, or absence of appropriate vegetation communities. Due to the absence of potential impacts, no measures are recommended.

5.2 Special Status Wildlife Species

No special-status wildlife species were observed within the Study Area. Two bat species, the western yellow bat and western mastiff bat, were determined to have moderate potential to occur roosting in trees within the Study Area (Appendix A). Project impacts are limited to previously-disturbed areas with high human activity. With the implementation of the mitigation measures listed below, the proposed project does not have the potential to result in direct or indirect impacts to special-status wildlife species.

Mitigation Measure BIO-1: Roosting Bats Impact Avoidance and Minimization

A qualified biologist shall conduct a pre-construction survey for roosting bats at least two weeks prior to, but not more than 30 days prior to, the start of construction. The survey shall include all trees, bridges, and structures suitable for roosting by the western yellow bat and western mastiff bat. The pre-construction survey shall be conducted within the disturbance footprint and a 100-foot buffer with inaccessible areas (i.e. private lands) surveyed with binoculars, as feasible.

If active bat roosts are present onsite, a buffer zone of 100 feet shall be established around the roosts that excludes construction activities or other disturbances. Tree removal activities shall occur only during periods when bats are not roosting in those trees proposed to be removed, as determined by a qualified biologist. If active maternity roosts or non-breeding bat hibernacula are found in trees scheduled to be removed, removal activities will be conducted during a season when young are not present.

Mitigation Measure BIO-2: Burrowing Owl Impact Avoidance and Minimization

To avoid potential impacts to western burrowing owl (*Athene cunicularia*), a pre-construction clearance survey for burrowing owl (BUOW) shall be conducted no more than fourteen (14) days prior to initiation of construction activities. The BUOW 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 BUOW and their habitat.

If burrowing owls are found within the Study 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 CDFW and CVCC and monitored at the discretion of a qualified biologist. The buffer zone will be clearly marked with flagging and/or construction fencing.

5.3 Nesting Birds

Nesting bird habitat is present within and adjacent to the Study Area, particularly within landscape trees. Nesting bird species are protected by the MBTA and the FGC 3503 and FGC 3503.5. If initial ground disturbance and vegetation/tree trimming or removal is required during the nesting bird season, the project may impact nesting birds through increased injury or mortality or disruption of normal adult behaviors resulting in the abandonment or harm to eggs and nestlings. Construction occurring within the vicinity of nesting birds may also indirectly impact individuals with construction noise and dust. Measures necessary for compliance with FGC 3503 and FGC 3503.5 and the MBTA are provided below.

Mitigation Measure BIO-3: Nesting Birds

Project-related activities should 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), then no more than three days prior to initiation of ground disturbance and/or vegetation removal, a nesting bird and raptor pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer (300-for 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.

5.4 Sensitive Vegetation Communities

No sensitive vegetation communities were observed within or adjacent to the Study Area. Furthermore, project impacts are limited to previously-disturbed areas with high human activity. Therefore, the proposed project does not have the potential to result in direct or indirect impacts to sensitive vegetation communities. Due to the absence of potential impacts, no measures are recommended.

5.5 Jurisdictional Waters and Wetlands

The Study Area contains the CVSC and its connecting irrigation channels, which are potentially subject to USACE, RWQCB, and CDFW jurisdiction. The CVSC connects directly to the Salton Sea, which is considered a Traditionally Navigable Water by the USCACE. Impacts to jurisdictional waters have been avoided during the project design process. The project will avoid impacts to jurisdictional waters via horizontal directional drilling (HDD) or jack and bore pipeline installation. As part of the project design, a Stormwater Pollution Prevention Plan (SWPPP) that includes Best Management Practices (BMPs) will be developed to ensure that no indirect impacts occur to jurisdictional resources.

5.6 Wildlife Movement

The proposed project footprint is located within previously developed and routinely managed areas that offer little to no value to wildlife movement. The proposed project is not anticipated to have an incremental effect on localized and urban adapted wildlife movement or create habitat fragmentation in the region, nor is it anticipated to have significant impact on regional wildlife movement. Direct impacts to wildlife movement as a result of project implementation would be less than significant. No additional lighting is proposed, and no nocturnal noise generating activities are proposed. Therefore, indirect wildlife movement impacts would be less than significant. Due to the absence of potential impacts, no measures are recommended.

5.7 Local Policies and Tree Protection

The proposed project is not expected to conflict with any local policies or ordinances. In addition, no protected trees are proposed for removal.

5.8 Adopted or Approved Plans

As discussed in Section 4.8, a small portion of the St. Anthony's site lies within the Coachella Valley Stormwater Channel and Delta CVMSHCP Conservation Area boundary. The portion of the project within the Conservation Area is the fenced interior of the Seferino Huerta Mobile Home Park. Additional portions of the St. Anthony's project along 66th Avenue and Lincoln Street are directly adjacent to the Coachella Valley Stormwater Channel and Delta CVMSHCP Conservation Area.

As outlined in the CVMSHCP Section 7.3, the proposed project is a considered a covered activity and will comply with applicable avoidance, minimization and mitigation measures outlined in Section 4.4 of the CVMSHCP regarding species and habitat conservation (See Mitigation Measure BIO-3 below). The proposed project will also implement the Section 4.5 Land Use Adjacency Guidelines where applicable to avoid and minimize indirect effects to this conservation area (CVAG 2007). These guidelines include measures regarding drainage, toxics, lighting, noise, invasive species, barriers, and grading/land development. With the implementation of these guidelines and mitigation measures, the proposed project would avoid direct and indirect impacts to this CVMSHCP Conservation Areas and will not conflict with the CVMSHCP Conservation Objectives.

Mitigation Measure BIO-4: CVMSHCP Surveys

Prior to construction, CVWD will coordinate with Coachella Valley Association of Governments (CVAG) or Coachella Valley Conservation Commission (CVCC) on specific burrowing owl and Crissal Thrasher survey requirements of the CVMSHCP that should be implemented for the portion of Seferino Huerta mobile home park located within the Coachella Valley Stormwater Channel and Delta Conservation Area. CVWD will implement any surveys determined to be required by CVAG or the CVCC to ensure compliance with the CVMSHCP.

6 Limitations, Assumptions, and User Reliance

This BRTS has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. Botanical field surveys for the presence or absence of certain taxa have been conducted as part of this assessment but were limited by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. Our botanical and biological field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from review of specified database and literature sources and one site visit. Standard data sources relied upon during the completion of this report, such as the CNDDB, may vary with regard to accuracy and completeness. In particular, the CNDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon considers the data sources reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Furthermore, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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List of Preparers

Rincon Consultants, Inc.

Field Survey/Primary Author

Megan Minter, Senior Biologist

Technical Review

Steven J. Hongola, Principal/Senior Ecologist

Graphics

Jon Montgomery, GIS Analyst

Appendix A

Regionally Occurring Special Status Species

Regionally Occurring Special Status Species

Scientific Name Common Name	Status Fed/State ESA CRPR,CDFW G-Rank/S-Rank	Habitat Requirements	Potential for Occurrence/Basis for Determination
Plants			
Abronia villosa var. *aurita* chaparral sand-verbena	None/None G5T2? / S2 1B.1	Chaparral, coastal scrub, desert dunes. Sandy areas. -60-1570 m. annual herb. Blooms (Jan)Mar-Sep	**Low Potential.** Suitable habitat (sandy soils) present in unpaved areas. Nearest known population is over 2 miles east of St. Anthony's site. Disturbance history of project site limits the possibility of occurrence.
Ambrosia monogyra singlewhorl burrobrush	None/None G5 / S2 2B.2	Chaparral, Sonoran desert scrub. Sandy soils. 5-475 m. perennial shrub. Blooms Aug-Nov	**Low Potential.** Suitable habitat (sandy soils) present in small areas on site and in adjacent areas. However, most recently documented population occurrence near town of Mecca was documented in 1922. Disturbance history of project site limits the possibility of occurrence.
Astragalus bernardinus San Bernardino milk-vetch	None/None G3 / S3 1B.2	Joshua tree woodland, pinyon and juniper woodland. Granitic or carbonate substrates. 275-2286 m. perennial herb. Blooms Apr-Jun	**Not Expected.** No suitable habitat (Joshua tree woodland) present.
Astragalus lentiginosus var. *coachellae* Coachella Valley milk-vetch	Endangered/ None G5T1 / S1 1B.2	Sonoran desert scrub, desert dunes. Sandy flats, washes, outwash fans, sometimes on dunes. 35-695 m. annual / perennial herb. Blooms Feb-May	**Not Expected.** Site is outside of the species known elevation range. Nearest known population is over 3 miles east of St. Anthony's site.
Astragalus sabulonum gravel milk-vetch	None/None G4G5 / S2 2B.2	Desert dunes, Mojavean desert scrub, Sonoran desert scrub. Sandy or gravelly flats, washes, and roadsides. -60-885 m. annual / perennial herb. Blooms Feb-Jun	**Low Potential.** Suitable habitat (sandy or gravelly flats and roadsides) present in small areas on site and in adjacent areas. Nearest known occurrence is over 2.5 miles east of St. Anthony's site.
Astragalus tricarinatus triple-ribbed milk-vetch	Endangered/ None G2 / S2 1B.2	Joshua tree woodland, Sonoran desert scrub. Hot, rocky slopes in canyons and along edge of boulder-strewn desert washes, with Larrea and Encelia. 455-1525 m. perennial herb. Blooms Feb-May	**Not Expected.** No suitable habitat (Joshua tree woodland) present. Site is outside of the species known elevation range.
Ayenia compacta California ayenia	None/None G4 / S3 2B.3	Mojavean desert scrub, Sonoran desert scrub. Sandy and gravelly washes in the desert; dry desert canyons. 60-1830 m. perennial herb. Blooms Mar-Apr	**Not Expected.** No suitable habitat (sandy or gravelly washes) present.
Bursera microphylla little-leaf elephant tree	None/None G4 / S2 2B.3	Sonoran desert scrub. Hillsides and washes and on canyon sides in California; rocky sites. 195-610 m. perennial deciduous tree. Blooms Jun-Jul	**Not Expected.** No suitable habitat (hillsides and washes) present. Site is outside of the species known elevation range.
Chylismia arenaria sand evening-primrose	None/None G4? / S2S3 2B.2	Sonoran desert scrub. Sandy or rocky sites. -70-915 m. annual / perennial herb. Blooms Nov-May	**Not Expected.** Site is outside of the species known elevation range and the nearest known population occurrence is more than 5 miles to

Scientific Name Common Name	Status Fed/State ESA CRPR,CDFW G-Rank/S-Rank	Habitat Requirements	Potential for Occurrence/Basis for Determination
			the southwest of the project site and was observed in 1924.
Coryphantha alversonii Alverson's foxtail cactus	None/None G3 / S3 4.3	Mojavean desert scrub, Sonoran desert scrub. Sandy or rocky habitat; sites from gravelly slopes and dissected alluvial fans. Granite substrate. 75-1525 m. perennial stem succulent. Blooms Apr-Jun	**Not Expected.** No suitable habitat (granite substrates) present.
Ditaxis claryana glandular ditaxis	None/None G3G4 / S2 2B.2	Mojavean desert scrub, Sonoran desert scrub. In dry washes and on rocky hillsides. Sandy soils. 0-465 m. perennial herb. Blooms Oct ,Dec, Jan, Feb, Mar	**Not Expected.** No suitable habitat (dry washes or rocky hillsides) present.
Ditaxis serrata var. *californica* California ditaxis	None/None G5T3T4 / S2? 3.2	Sonoran desert scrub. On sandy washes and alluvial fans of the foothills and lower desert slopes. 30-1000 m. perennial herb. Blooms Mar-Dec	**Not Expected.** Limited potential habitat is present within the sandy, unpaved portions of the site. The nearest known population occurrence of the species is more than 5 miles to the east of the St. Anthony's site.
Eschscholzia androuxii Joshua Tree poppy	None/None G3 / S3 4.3	Joshua tree woodland, Mojavean desert scrub. Desert washes, flats, and slopes. Sandy, gravelly, and/or rocky soils. 585-1685 m. annual herb. Blooms Feb-May (Jun)	**Not Expected.** Site is outside of the species known elevation range.
Jaffueliobryum raui Rau's jaffueliobryum moss	None/None G4? / S2? 2B.3	Alpine dwarf scrub, chaparral, Mojavean desert scrub, Sonoran desert scrub. Dry openings, rock crevices, carbonate. 490-2100 m. moss.	**Not Expected.** No suitable habitat (rock crevices or openings) present and site is outside of the species known elevation range.
Jaffueliobryum wrightii Wright's jaffueliobryum moss	None/None G4G5 / S2? 2B.3	Alpine dwarf scrub, pinyon and juniper woodland, Mojavean desert scrub. Dry openings, rock crevices, carbonate. 160-2500 m. moss.	**Not Expected.** No suitable habitat (rock crevices or openings) present and site is outside of the species known elevation range.
Leptosiphon floribundus ssp. hallii Santa Rosa Mountains leptosiphon	None/None G4T1T2 / S1S2 1B.3	Sonoran desert scrub, pinyon and juniper woodland. Desert canyons. 1000-2000 m. perennial herb. Blooms May-Jul(Nov)	**Not Expected.** No suitable habitat (pinyon and juniper woodland) present.
Lycium torreyi Torrey's box-thorn	None/None G4G5 / S3 4.2	Mojavean desert scrub, Sonoran desert scrub. Sandy, rocky, washes, streambanks, desert valleys. -50-1220 m. perennial shrub. Blooms (Jan-Feb)Mar-Jun(Sep-Nov)	**Not Expected.** No suitable habitat (washes, streambanks, desert valleys) present. No known populations occur within 5 miles of project site.
Mentzelia tridentata creamy blazing star	None/None G3 / S3 1B.3	Mojavean desert scrub. 545-1100 m. annual herb. Blooms Mar-May	**Not Expected.** Site is outside of the species known elevation range.
Nemacaulis denudata var. *gracilis* slender cottonheads	None/None G3G4T3? / S2 2B.2	Coastal dunes, desert dunes, Sonoran desert scrub. In dunes or sand. -50-400 m. annual herb. Blooms (Mar) Apr-May	**Not Expected.** No suitable habitat (dunes) present.
Petalonyx linearis narrow-leaf sandpaper-plant	None/None G4 / S3? 2B.3	Mojavean desert scrub, Sonoran desert scrub. Sandy or rocky canyons. -30-1090	**Not Expected.** No suitable habitat (sandy/rocky canyons) present.

Scientific Name Common Name	Status Fed/State ESA CRPR,CDFW G-Rank/S-Rank	Habitat Requirements	Potential for Occurrence/Basis for Determination
		m. perennial shrub. Blooms (Jan-Feb)Mar-May(Jun-Dec)	
Phaseolus filiformis slender-stem bean	None/None G5 / S1 2B.1	Sonoran desert scrub. Gravelly washes bordered by creosote bush-dominated rocky slopes. annual herb. Blooms Apr	**Not Expected.** No suitable habitat (gravelly washes) present.
Saltugilia latimeri Latimer's woodland-gilia	None/None G3 / S3 1B.2	Chaparral, Mojavean desert scrub, pinyon and juniper woodland. Rocky or sandy substrate; sometimes in washes, sometimes limestone. 120-2200 m. annual herb. Blooms Mar-Jun	**Not Expected.** Site is outside of the species known elevation range. No suitable habitat (chaparral, Mojavean desert scrub, woodlands) present.
Salvia greatae Orocopia sage	None/None G2G3 / S2S3 1B.3	Mojavean desert scrub, Sonoran desert scrub. Broad alluvial bajadas and fans adjacent to desert washes in gravelly or rocky soil, rocky slopes of canyons. -45-675 m. perennial evergreen shrub. Blooms Mar-Apr	**Not Expected.** No suitable habitat (desert scrub) present. No known populations have been recorded within 5 miles of the project site.
Senna covesii Cove's cassia	None/None G5 / S3 2B.2	Sonoran desert scrub. Dry, sandy desert washes, slopes. 255-1295 m. perennial herb. Blooms Mar-Jun(Aug)	**Not Expected.** No suitable habitat (Sonaran desert scrub) present. No known populations have been recorded within 5 miles of the project site.
Wislizenia refracta ssp. *palmeri* Palmer's jackass clover	None/None G5T3T5 / S1 2B.2	Chenopod scrub, Sonoran desert scrub, Sonoran thorn woodland, desert dunes, desert wash. Known from desert basins, dunes, washes and benches of sand field ecotones where upland desert scrubs, typically creosote bush scrub or palo verde, transition to halophytic scrub or mesquite. 125-175 m. perennial deciduous shrub. Blooms Jan-Dec	**Not Expected.** No suitable habitat (dunes or washes) present.
Wislizenia refracta ssp. *refracta* jackass-clover	None/None G5T5? / S1 2B.2	Playas, desert dunes, Mojavean desert scrub, Sonoran desert scrub. Sandy washes, roadsides, alkaline flats. 380-1160 m. annual herb. Blooms Apr-Nov	**Not Expected.** Site is outside of the species known elevation range.
Xylorhiza cognata Mecca-aster	None/None G2 / S2 1B.2	Sonoran desert scrub. Steep canyon slopes, in sandstone and clay. 20-305 m. perennial herb. Blooms Jan-Jun	**Not Expected.** No suitable habitat (steep canyon slopes) present.
Insects			
Oliarces clara cheeseweed owlfly (cheeseweed moth lacewing)	None/None G1G3 / S2	Inhabits the lower Colorado River drainage. Found under rocks or in flight over streams. Larrea tridentata is the suspected larval host.	**Not Expected.** No suitable aquatic present on or adjacent to the project site.
Fish			
Cyprinodon macularius desert pupfish	Endangered/ Endangered G1 / S1	Desert ponds, springs, marshes and streams in Southern California. Can live in salinities from freshwater to 68 ppt; can withstand temps from 9 - 45 C and dissolved oxygen levels down to 0.1 ppm.	**Not Expected.** No suitable aquatic present on or adjacent to the project site.

Scientific Name Common Name	Status Fed/State ESA CRPR,CDFW G-Rank/S-Rank	Habitat Requirements	Potential for Occurrence/Basis for Determination
Xyrauchen texanus razorback sucker	Endangered/ Endangered G1 / S1S2 FP	Found in the Colorado River bordering California. Adapted for swimming in swift currents but also need quiet waters. Spawn in areas of sand/gravel/rocks in shallow water.	**Not Expected.** No suitable aquatic present on or adjacent to the project site.
Amphibians			
Scaphiopus couchii Couch's spadefoot	None/None G5 / S2 SSC	Temporary desert rain pools that last at least 7 days, with water temps > 15 C, and with subterranean refuge sites close by. An insect food base, especially termites, must be available.	**Not Expected.** No suitable habitat (desert hardpans) present.
Reptiles			
Gopherus agassizii desert tortoise	Threatened/ Threatened G3 / S2S3	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. Require friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.	**Not Expected.** Required desert scrub habitat is not present in project area.
Phrynosoma mcallii flat-tailed horned lizard	None/None G3 / S2 SSC	Restricted to desert washes and desert flats in central Riverside, eastern San Diego, and Imperial counties. Critical habitat element is fine sand, into which lizards burrow to avoid temperature extremes; requires vegetative cover and ants.	**Not Expected.** Species is highly dependent on sand dunes, which are absent from the project site.
Uma inornata Coachella Valley fringe-toed lizard	Threatened/ Endangered G1Q / S1	Limited to sandy areas in the Coachella Valley, Riverside County. Requires fine, loose, windblown sand (for burrowing), interspersed with hardpan and widely-spaced desert shrubs.	**Not Expected.** Species is highly dependent on sand dunes, which are absent from the project site..
Birds			
Athene cunicularia burrowing owl	None/None G4 / S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**Low Potential.** Some elements of suitable habitat exist in the unpaved portions of the site, particularly along irrigation levees. The most recent occurrence (within last 15 years) was recorded more than 3 miles southeast of St. Anthony's project site.
Falco mexicanus prairie falcon	None/None G5 / S4 WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	**Not Expected.** Elements of suitable habitat required for nesting are not present.
Gelochelidon nilotica gull-billed tern	None/None G5 / S1 SSC	Only known breeding colonies at San Diego Bay and the Salton Sea. Nests on low, sandy islets. Known to feed on fishes at mouth of Colorado River and on grasshoppers in alfalfa fields.	**Not Expected.** Elements of suitable habitat required for nesting are not present.
Icteria virens yellow-breasted chat	None/None G5 / S3 SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in	**Not Expected.** Elements of suitable habitat required for nesting are not present.

Scientific Name Common Name	Status Fed/State ESA CRPR,CDFW G-Rank/S-Rank	Habitat Requirements	Potential for Occurrence/Basis for Determination
		low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	
Plegadis chihi white-faced ibis	None/None G5 / S3S4 WL	Shallow freshwater marsh. Dense tule thickets for nesting, interspersed with areas of shallow water for foraging.	**Not Expected.** Elements of suitable habitat required for nesting are not present.
Polioptila melanura black-tailed gnatcatcher	None/None G5 / S3S4 WL	Primarily inhabits wooded desert wash habitats; also occurs in desert scrub habitat, especially in winter. Nests in desert washes containing mesquite, palo verde, ironwood, acacia; absent from areas where salt cedar introduced.	**Low Potential.** Elements of suitable habitat required for nesting are not present. Salt cedar has been introduced throughout the project area.
Pyrocephalus rubinus vermilion flycatcher	None/None G5 / S2S3 SSC	During nesting, inhabits desert riparian adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas. Nest in cottonwood, willow, mesquite, and other large desert riparian trees.	**Low Potential.** Small amounts of marginal nesting habitat is present in riparian areas near the project area.
Rallus obsoletus yumanensis Yuma Ridgway's rail	Endangered/ Threatened G5T3 / S1S2 FP	Nests in freshwater marshes along the Colorado River and along the south and east ends of the Salton Sea. Prefers stands of cattails and tules dissected by narrow channels of flowing water; principle food is crayfish.	**Low Potential.** Small amounts of marginal nesting habitat is present in riparian areas near the project area.
Rynchops niger black skimmer	None/None G5 / S2 SSC	Nests on gravel bars, low islets, and sandy beaches, in unvegetated sites. Nesting colonies usually less than 200 pairs.	**Not Expected.** Elements of suitable habitat required for nesting are not present.
Toxostoma crissale Crissal thrasher	None/None G5 / S3 SSC	Resident of southeastern deserts in desert riparian and desert wash habitats. Nests in dense vegetation along streams/washes; mesquite, screwbean mesquite, ironwood, catclaw, acacia, arrowweed, willow.	**Not Expected.** Elements of suitable habitat required for nesting are not present.
Toxostoma lecontei Le Conte's thrasher	None/None G4 / S3 SSC	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	**Not Expected.** Elements of suitable habitat required for nesting are not present.
Mammals			
Corynorhinus townsendii Townsend's big-eared bat	None/None G3G4 / S2 SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	**Not Expected.** Required habitat for roosting not present in project area. Human disturbance is prevalent throughout the project site.
Euderma maculatum spotted bat	None/None G4 / S3 SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds	**Not Expected.** Required habitat for roosting not present in project area.

Scientific Name Common Name	Status Fed/State ESA CRPR,CDFW G-Rank/S-Rank	Habitat Requirements	Potential for Occurrence/Basis for Determination
		almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	
Eumops perotis californicus western mastiff bat	None/None G5T4 / S3S4 SSC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	**Moderate Potential.** Suitable roosting trees are scattered throughout the project area.
Lasiurus xanthinus western yellow bat	None/None G5 / S3 SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	**Moderate Potential.** Suitable roosting trees are scattered throughout the project area.
Neotoma albigula venusta Colorado Valley woodrat	None/None G5T3T4 / S1S2	Low-lying desert areas in southeastern California. Closely associated with beaver-tail cactus & mesquite. Intolerant of cold temps. Eats mainly succulent plants. Distribution influenced by abundance of nest building material.	**Not Expected.** Little habitat for this species exists in the project area. An occurrence was recorded within 2 miles of St. Anthony's site in 1908.
Perognathus longimembris bangsi Palm Springs pocket mouse	None/None G5T2 / S2 SSC	Desert riparian, desert scrub, desert wash and sagebrush habitats. Most common in creosote-dominated desert scrub. Rarely found on rocky sites. Occurs in all canopy coverage classes.	**Low potential.** Marginal habitat and canopy coverage may exist in the unpaved portions of the project site.
Taxidea taxus American badger	None/None G5 / S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Not Expected.** Required habitat not present in project area.
Xerospermophilus tereticaudus chlorus Palm Springs round-tailed ground squirrel	None/None G5T2Q / S2 SSC	Restricted to the Coachella Valley. Prefers desert succulent scrub, desert wash, desert scrub, alkali scrub, and levees. Prefers open, flat, grassy areas in fine-textured, sandy soil. Density correlated with winter rainfall.	**Low potential.** Marginal habitat and canopy coverage may exist in the unpaved portions of the project site. Last known occurrence was recorded within 2 miles of St. Anthony's site in 1938.

Regional Vicinity refers to within a 5-mile radius of site.

BCC = USFWS Bird of Conservation Concern
FC = Federal Candidate Species
FE = Federally Endangered
FP = CDFW Fully Protected
FT = Federally Threatened
SE = State Endangered
ST = State Threatened
SR = State Rare
SSC = CDFW Species of Special Concern

G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDB RareFind 5

CRPR (CNPS California Rare Plant Rank):
1A=Presumed Extinct in California
1B=Rare, Threatened, or Endangered in California and elsewhere
2=Rare, Threatened, or Endangered in California, but more common elsewhere
3=Need more information (a Review List)
4=Plants of Limited Distribution (a Watch List)
CRPR Threat Code Extension
.1=Seriously endangered in California (> 80% of occurrences threatened/high degree and immediacy of threat)
.2=Fairly endangered in California (20-80% occurrences threatened)
.3=Not very endangered in California (<20% of occurrences threatened)

Appendix B

Representative Site Photographs

Photograph 1. View of connection point for Saint Anthony MHP at the St. Anthony's Site, facing north.

Photograph 2. View of connection point for Seferino Huerta at the St. Anthony's Site, facing west.

Photograph 3. View of Coachella Valley Stormwater Channel crossing 66th Avenue within the Study Area, facing northwest.

Photograph 4. View of connection point at Manuela Garcia Water at the St. Anthony's Site, facing southwest.

Photograph 5. View of connection point at Desert View Mobile Home Park at the Valley View Site, facing northwest.

Photograph 6. View of connection point at Campos Mobile Home Park at the Valley View Site, facing west.

Photograph 7. View of connection point at Meza's Ranch at the Valley View Site, facing west.

Photograph 8. View of connection point at Valley View Mobile Home Park at the Valley View Site, facing northwest.

Photograph 9. View of connection point at Vista Norte Estates and Luciano Valenzuela at the Valley View Site, facing northwest.

Photograph 10. View of connection point at Soto Water at the Valley View Site, facing south.

Photograph 11. View of connection point at DeLeon Ranch at the Valley View Site, facing southeast.

Appendix C

Plant and Wildlife Species Observed On-site

Plant and Wildlife Species Observed On-site

Scientific Name	Common Name	Origin
Plants		
Acacia spp.	acacia	Non-native
Agave spp.	agave	Non-native
Ambrosia dumosa	burrobush	Native
Atriplex canescens	fourwing saltbush	Native
Brassica tournefortii	Asian mustard	Non-native
Cryptantha sp.	cryptantha	Native
Encelia actoni	Acton encelia	Native
Eucalyptus sp.	Eucalyptus	Non-native
Hirschfeldia incana	short podded mustard	Non-native
Malva parviflora	cheeseweed	Non-native
Medicago polymorpha	bur clover	Non-native
Mentzelia sp.	blazing star	Native
Nerium oleander	oleander	Non-native
Pennisetum setaceum	fountain grass	Non-native
Polygonum lalathifolium	knotweed	Non-native
Salsola tragus	Russian thistle	Non-native
Schinus molle	pepper tree	Non-native
Schismus arabicus	Arabian schismus	Non-native
Sisymbrium irio	London rocket	Non-native
Tamarix sp.	tamarisk	Non-native
Washingtonia robusta	Mexican fan palm	Non-native
Yucca spp.	yucca	Non-native
Wildlife		
Birds		
Calypte anna	Anna's hummingbird	Native
Corvus brachyrhynchos	American crow	Native
Egretta thula	Snowy egret	Native
Haemorhous mexicanus	house finch	Native
Larus occidentalis	western gull	Native
Mimus polyglottos	northern mockingbird	Native
Sturnella neglecta	western meadowlark	Native
Zenaida macroura	mourning dove	Native
Mammals		
Canis latrans	coyote	Native

Appendix D

Resumes

Megan Minter

SENIOR BIOLOGIST

Ms. Minter is a biologist and wetland specialist that has worked in environmental consulting for 10 years. She has a strong scientific and regulatory background. Her experience includes numerous biological resource assessments, wetland delineations, conducting focused protocol surveys pursuant to the USFWS and various NCCPs/HCPs, preparing technical sections in compliance with CEQA and NEPA requirements, and acquiring Federal and State environmental permits including Clean Water Act Section 404, 401, and California Department of Fish and Game Section 1602 agreements. Ms. Minter has extensive experience preparing CEQA/NEPA compliant documents in support of the attainment of various permits and approvals for a variety of projects in southern California. This includes the production of biological technical reports for EIR/EIS, MNDs, CUPs, and other CEQA documents. Ms. Minter's background includes extensive service to energy utilities, solar developers, pipeline groups, cities, as well as residential and commercial land developers throughout Southern California. Ms. Minter's compliance monitoring experience includes both large-scale infrastructure projects and smaller projects within sensitive habitats.

EDUCATION

M.S., Wildlife and Fisheries Resources, West Virginia University

B.S., Fisheries Sciences, Virginia Polytechnic Institute and State University

CERTIFICATIONS/ REGISTRATIONS

California Rapid Assessment Method Trained

Desert Tortoise Council Introduction to Desert Tortoises and Field Techniques

OSHA 10-hr Construction Safety and Health

EXPERIENCE

Rincon Consultants, Inc. (2018 – present)

Environmental Intelligence, LLC (2013—2018)

GAI Consultants (2010 – 2013)

PROJECT EXPERIENCE

- El Casco Systems Project; SCE; Riverside County, CA (2013-2018): Conducted restoration monitoring for the 15-acre El Casco Substation. Responsibilities included biological monitoring of work near least Bell's vireo habitat, pre-activity surveys for sensitive resources including least Bell's vireo, rare plant counts, assisting botanists with vegetation cover analysis, soil sampling, and weed abatement planning.
- On-Call Biological Services; Metropolitan Water District of Southern California, Los Angeles, San Bernardino, and Riverside Counties, CA (2016-2017): Assisted with project management of small permitting projects on Metropolitan Water District properties; conducted jurisdictional delineations; prepared 404, 401, and 1602 permit application; advised on proper permitting route for maintenance and improvements projects; conducted surveys for least Bell's vireo within suitable habitat; conducted rare plant surveys.
- Lakeview Substation; SCE; San Bernardino County, CA (2014-2015): Assisted with project management, served as lead monitor on site daily, conducted nesting bird surveys, provided guidance on nesting deterrents, conducted preconstruction protocol surveys and sweeps, and coordinated with contractors, regulatory agencies and project personnel.
- Montebello Hills Oil Field; Plains Exploration; Los Angeles County, CA (2013-2018): performed monitoring of construction and ongoing oil field maintenance for coastal California gnatcatcher, coastal cactus wren, least Bell's vireo, and coastal sage scrub vegetation communities. Participated in breeding surveys for California gnatcatcher and coastal cactus wren, in coastal sage scrub vegetation communities on the active oil field site.

PROJECT EXPERIENCE CONT'D

- Longboat Solar; Duke Energy; San Bernardino County, CA (2014-2017): Assisted with project management; served as lead monitor on site daily; coordinated with contractors, regulatory agencies, and tribal representatives; and conducted pre-construction protocol surveys and sweeps. Also conducted a jurisdictional delineation of the 350-acre project and assisted with the preparation of 401 and 1602 permit applications for impacts to jurisdictional waters.
- Sullivan Canyon L3003 & L407 Pipeline and Right of Way Maintenance Project; Southern California Gas Company (SoCalGas); Los Angeles, CA (2018-2019): Performed a jurisdictional delineation and biological resources assessment along a 4.5-mile section of pipeline, provided project management, completed technical reports, and prepared 404, 401, and 1602 permit applications.
- Vidor 5 Well Abandonment Project; SoCalGas; Los Angeles, CA (2019): Performed a jurisdictional delineation and biological resources assessment at Vidor 5 well location within Ballona Wetlands Ecological Reserve.
- SL 41-23A, Murrieta Creek Pipeline Removal; SoCalGas; Temecula, CA (2018-2019): Performed a jurisdictional delineation and biological resources assessment along the SL 41-23A pipeline crossing Murrieta Creek and advised on project design in order to avoid sensitive resources.
- Major Projects Support, Line 2000 Colorado River HDD Project; SoCalGas; Riverside County, CA (2018): Performed a jurisdictional delineation and biological resources assessment along the L2000 Pipeline Colorado River span.
- On-Call Biological Services; Southern California Edison (SCE); Los Angeles, Orange, San Bernardino, Riverside, and San Diego Counties, CA (2016-2018): Provided project management, quality control, habitat assessments for deteriorated pole replacement, jurisdictional waters delineation, reporting, and acquisition of CWA 401 and 404, and Fish and Game Code LSAA, monitored vegetation management, and conducted pre-construction surveys for sensitive resources.
- On-Call Biological Services; Metropolitan Water District of Southern California, Los Angeles, San Bernardino, and Riverside Counties, CA (2016-2017): Assisted with project management of small permitting projects on Metropolitan Water District properties, conducted jurisdictional delineations; prepared 404, 401, and 1602 permit application, advised on proper permitting route for maintenance and improvements projects.
- Lugo-Victorville Transmission Line Remedial Action Scheme Project; SCE; San Bernardino County, CA (2017-2018): conducted a jurisdictional delineation, mapped vegetation, assisted with minimization of impacts, and prepared 401 and 1602 permit applications along the 84-mile linear project. Supported the Mojave National Preserve's (MNP) review of the client's Special Use Permit application, and the BLM's review of the client's Right of Way grant application.
- Hilltop and Euclid Mixed Use Development; Birdseye Planning; San Diego County, CA (2018): Prepared permit application packages for the acquisition of CWA 401 and 404 permits and Fish and Game Code LSAA.
- Tropico Solar Project; EDF Renewable Energy; Kern County, CA (2014-2018): Conducted a jurisdictional waters delineation, vegetation mapping, and habitat assessments for sensitive plant and wildlife species for a 215-acre solar project in natural lands.
- Magunden-Springville #1 & #2 220-kV; SCE; Kern and Tulare Counties, CA (2015-2016): Conducted a jurisdictional delineation of the 52-mile linear Project. Also prepared the Waters and Wetlands delineation report and assisted with the preparation of 401 and 1602 permit applications for impacts to jurisdictional waters.
- Valentine Solar Project; EDF Renewable Energy; Kern County, CA (2014-2018): Conducted a jurisdictional waters delineation, vegetation mapping, and habitat assessments for sensitive plant and wildlife species for a 2,000-acre solar project in natural lands.
- West Coyote Hills; Chevron; Orange County, CA (2017-2018): Conducted vegetation mapping, jurisdictional delineation, and preconstruction special-status species surveys. Monitored environmental sampling within sensitive habitats.

- Catalina Solar 2; EDF Renewable Energy; Kern County, CA (2014-2017): Assisted with a jurisdictional delineation of the 760-acre Project and assisted with the preparation of 401 and 1602 permit applications for impacts to jurisdictional waters. Served as a biological monitor and coordinated with biologists to ensure all Project components remain in full regulatory compliance.
- Pacific Wind Drainage Impact Mitigation Plan; EDF Renewable Energy; Kern County, CA (2013-2018): Assisted with the preparation and administration of a mitigation plan for impacts to jurisdictional waters, directed landscape crews and irrigation specialists in preparation of mitigation site, coordinated with contractors and agencies, conducted a jurisdictional delineation of the site, and annually assessed and reported vegetative cover in support of restoration efforts.
- Catalina Solar Drainage Impact Mitigation Plan; EDF Renewable Energy; Kern County, CA (2013-2018): Assisted with the preparation and administration of a mitigation plan for impacts to jurisdictional waters, directed landscape crews and irrigation specialists in preparation of mitigation site, coordinated with contractors and agencies, conducted a jurisdictional delineation of the site, and annually assessed and reported vegetative cover in support of restoration efforts.
- Sycamore to Peñasquitos Transmission Line Improvements Project; San Diego County, CA (2013-2014): Conducted a jurisdictional delineation of the 30-mile linear Project. Also prepared the Waters and Wetlands delineation report and assisted with the preparation of 401, 404, and 1602 permit applications for impacts to jurisdictional waters.
- Water Valley Project; SCE; San Bernardino County, CA (2013-2014): Served as a combined role biological and environmental monitor for a large linear utility project. Duties included providing biological and environmental compliance monitoring for the project elements. Also completed clearance and sweep surveys for desert tortoise, burrowing owl, desert kit fox, American badger, nesting birds, and rare plants.
- College Park; Lennar and Standard Pacific Homes; San Bernardino County, CA (2013-2018): Managed and performed breeding and clearance surveys for burrowing owl, nesting birds, and raptors as well as mitigation site monitoring. Also monitored and documented avoidance of burrowing owl and nesting bird compliance.
- Butterfield; Pardee Homes; Riverside County, CA (2013-2017): Conducted annual protocol burrowing owl surveys on a 2,000-acre site comprised of grasslands, grazed lands, and sandy washes. Marked and mapped the active burrowing owl burrows and suitable burrows using GPS and GIS.
- Eastside Water Treatment Facility; Lennar and Standard Pacific Homes; San Bernardino County, CA (2014): Completed pre-construction surveys for special-status species and nesting birds, set up work buffers, and monitored impacts to special-status resources.
- Tournament Hills; Pardee Homes; Riverside County, CA (2013): Assisted under qualified biologists during protocol level surveys for least Bell's vireo using acoustical and visual detections to locate the species and mapped locations using GPS and GIS.

APPENDIX C: CULTURAL RESOURCES ASSESSMENT AND AB52 CONSULTATION LETTER

East Coachella Valley Water Supply Project

Valley View Mobile Home Park Water Consolidation Project

Coachella Valley Water District

Cultural Resources Assessment Report

prepared for
Woodard & Curran
10509 Vista Sorrento Parkway, Suite 205
San Diego, California 92121
Contact: Rosalyn Prickett, Project Manager

prepared with the assistance of
Rincon Consultants, Inc.
301 9th Street, Suite 109
Redlands, California 92374

July 2019

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

Please cite this report as follows:

Porras, Lindsay and Tiffany Clark

2019 *East Coachella Valley Water Supply Project, Valley View Small Water System Project, Community of Thermal, Riverside County, California*. Rincon Consultants Project No. 18-06790. Report on file at the Eastern Information Center, University of California, Riverside.

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Executive Summary

Woodard & Curran retained Rincon Consultants, Inc. (Rincon) to perform a cultural resources assessment for the Valley View Mobile Home Park Water Consolidation Project (project) near the community of Thermal, Riverside County, California. The project involves the consolidation of nine independent small water systems (SWSs) into Coachella Valley Water District's potable water system (part of the East Coachella Valley Water Supply Project). The purpose of this report is to document the tasks Rincon conducted; specifically, a cultural resources records search, Native American outreach, local historic group consultation, historical imagery review, and a field survey. This study has been completed in accordance with the requirements of a California Environmental Quality Act (CEQA)-Plus investigation, which includes an evaluation of project impacts under CEQA, Section 106 of the National Historic Preservation Act (NHPA), and the National Environmental Policy Act in case a federal nexus is established during the project (i.e., federal funding and/or permitting).

The records search identified 26 previously recorded cultural resources within 0.5 mile of the project Area of Potential Effects (APE). Most of these resources date to the historic period and consist of buildings, railroads, water conveyances systems, roads, transmission lines, and isolated artifacts. Four prehistoric archaeological resources, all of which consist of single ceramic sherds, were also recorded in the project vicinity. None of these previously recorded cultural resources are located within the APE.

A search of the Sacred Lands File at the Native American Heritage Commission returned negative results. Rincon subsequently conducted outreach efforts with local Native American groups to obtain information on known Native American resources located in the APE or vicinity. As of April 5, 2019, a total of 12 responses have been received.

An intensive pedestrian survey of the proposed pipeline alignments and existing SWSs identified no cultural resources within the APE. The lack of surface evidence of archaeological remains does not preclude their subsurface existence. However, results of the record search indicate no substantial prehistoric or historic period archaeological remains are present within the project vicinity. These findings are consistent with earlier studies conducted in the area that indicate this portion of the Coachella Valley contains very few historical and prehistoric archaeological resources. Given these findings, the project APE does not appear to be highly sensitive for buried archaeological remains.

Based on the results of the records search, Native American outreach, local historic group consultation, and field survey, no cultural resources were identified in the project's APE that will be impacted or adversely affected by the project. Therefore, Rincon recommends a finding of ***no impact to historical and archaeological resources*** under CEQA and ***no effect to historic properties*** under Section 106 of NHPA. No further cultural resources work is recommended for the project.

Rincon presents the following recommendation in case of unanticipated discovery of cultural resources during project development. The project is also required to adhere to regulations regarding the unanticipated discovery of human remains, detailed below.

Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) should be contacted immediately to evaluate the find. If the discovery proves to be significant under NHPA and/or CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any significant impacts.

Human Remains

If human remains are found, regulations outlined in the State of California Health and Safety Code Section 7050.5 state no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of being granted access and provide recommendations as to the treatment of the remains to the landowner.

1 Introduction

Woodard & Curran retained Rincon Consultants, Inc. (Rincon) to perform a cultural resources assessment for the Valley View Mobile Home Park Water Consolidation Project (project) near the community of Thermal, Riverside County, California. The purpose of this report is to document the tasks Rincon conducted; specifically, a cultural resources records search, Native American outreach, historical imagery review, local historic group consultation, and a field survey. Rincon understands the project requires review by the State Water Resources Control Board and may be completed using federal funding. Therefore, the cultural resources study was completed in accordance with California Environmental Quality Act (CEQA)-Plus standards for compliance with CEQA, the National Environmental Policy Act, and Section 106 of the National Historic Preservation Act (NHPA).

1.1 Project Location

The project site is situated east of the community of Thermal in unincorporated Riverside County, California. More specifically, it is in Township 6 south, Range 8 east, sections 13, 14, 15, 22, 23, and 24 of the United States Geological Survey *Indio, CA* and *Thermal Canyon, CA* 7.5-minute topographic quadrangles (Figure 1). The project site is in a rural setting consisting of a mixture of agricultural and undeveloped lands. The elevation of the project area averages 81 to 127 feet below mean sea level.

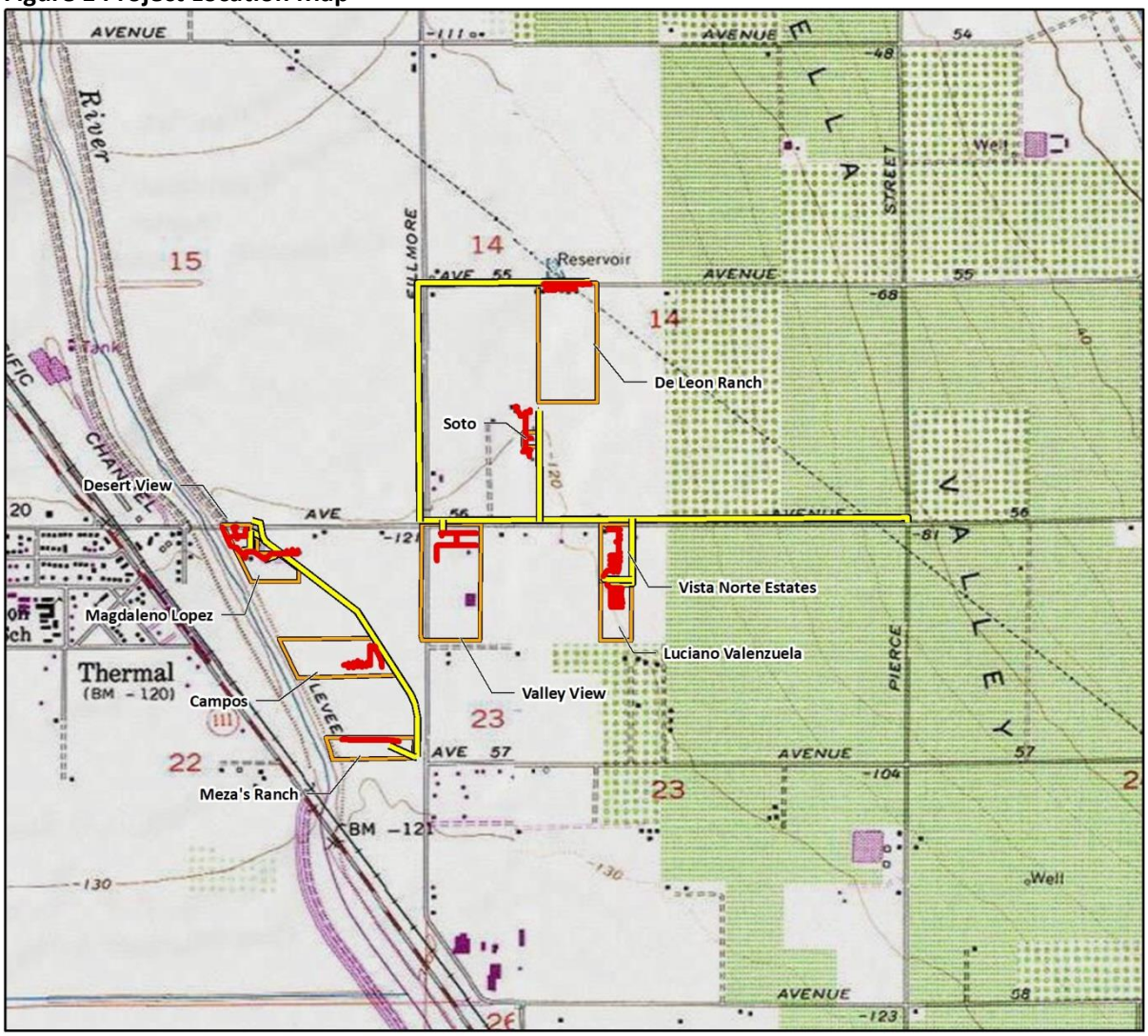
1.2 Project Description

The Coachella Valley Water District (CVWD) proposes infrastructural improvements to nine privately owned mobile home park (MHP) Small Water Systems (SWSs) situated east of Highway 111 and the Whitewater River/Coachella Valley Stormwater Channel (Figure 1). The MHPs include Campos MHP, De Leon Ranch, Desert View MHP, Luciano Valenzuela MHP, Magdaleno Lopez, Meza's Ranch, Soto Water, Valley View MHP, and Vista Norte Estates. The existing potable water supply for the nine SWSs consists of local groundwater, which has been shown to contain elevated concentrations of arsenic and other hazardous constituents. The proposed project would consolidate the nine SWSs into the existing CVWD potable water system and increase the reliability of the water supply to communities considered to be disadvantaged. The proposed project is part of the larger East Coachella Valley Water Supply Project, and may receive funding under the Drinking Water State Revolving Fund, a source administered by the State Water Resources Control Board supported by funds from United States Environmental Protection Agency and/or the United States Department of Agriculture Rural Development Program.

Proposed project system components consist of the following:

- A 30-inch diameter water main along Airport Boulevard, totaling 5,400 linear feet, connecting to the existing 18-inch diameter water main on Pierce Street.
- 12-inch diameter water mains in Soto Street, Fillmore Street, 55th Avenue, and Desert Cactus Drive totaling 9,100 linear feet, connecting to the 30-inch water main along Airport Boulevard.
- One-inch and two-inch diameter service laterals totally 1,100 linear feet. These would connect to the proposed 30-inch and 12-inch diameter water mains in Airport Boulevard, Soto Street, Avenue 55, and Desert Cactus Drive and would extend to the property boundaries of each SWS.

Figure 1 Project Location Map



Imagery provided by National Geographic Society, Esri and its licensors © 2019. Indio, Thermal Canyon Quadrangles. T06S R08E S14,22,23. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may havechanged since the original topographic map was assembled.

Area of Potential Effects Associated with Proposed Water Pipeline Alignment

Area of Potential Effects Associated with Existing Small Water Systems

Mobile Home Park Boundary

0 1,000 2,000 Feet

N

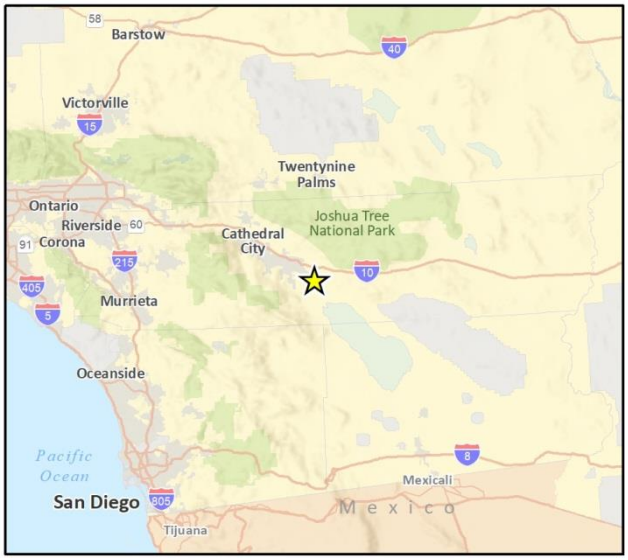


Fig 1 Project Location Valley View_Topo

- One-inch and two-inch diameter on-property pipelines, totaling 1,500 feet to complete service to the existing SWSs. These pipelines would connect the one-inch and two-inch diameter laterals to the existing potable distribution system at each SWS.
- Six-inch diameter piping, totaling 2,300 feet, connecting from the proposed water mains to fire hydrants or backflow preventors to provide fire service to each SWS. Fire hydrants would be located in accordance with CVWD and Riverside County Fire Department standards.
- Modifications to the existing on-site SWSs may include removal of some existing infrastructure (e.g., tanks, pipelines, connections) and specifically demolition of the wells.

Along much of the alignment, trench excavation would be used for the installation of the pipeline. A backhoe, excavator, or trencher would be used to dig trenches for pipe installation. In general, the pipelines would be installed at depths of 5-6 feet below ground surface with a width of 3-5 feet. Service laterals will be installed at depths of approximately 5 feet, with a width of 3-4 feet.

CVWD also proposes constructing an approximately 2,500-foot-long pipeline segment west of Desert Cactus Drive. The proposed pipeline section will be located north of Airport Boulevard and will cross under the Whitewater River/Coachella Valley Stormwater Channel and Highway 111 to connect with an existing CVWD water main. This pipeline segment is not included in the current cultural resource assessment and will be analyzed at a later date as part of a separate CEQA-Plus review.

1.3 Area of Potential Effects

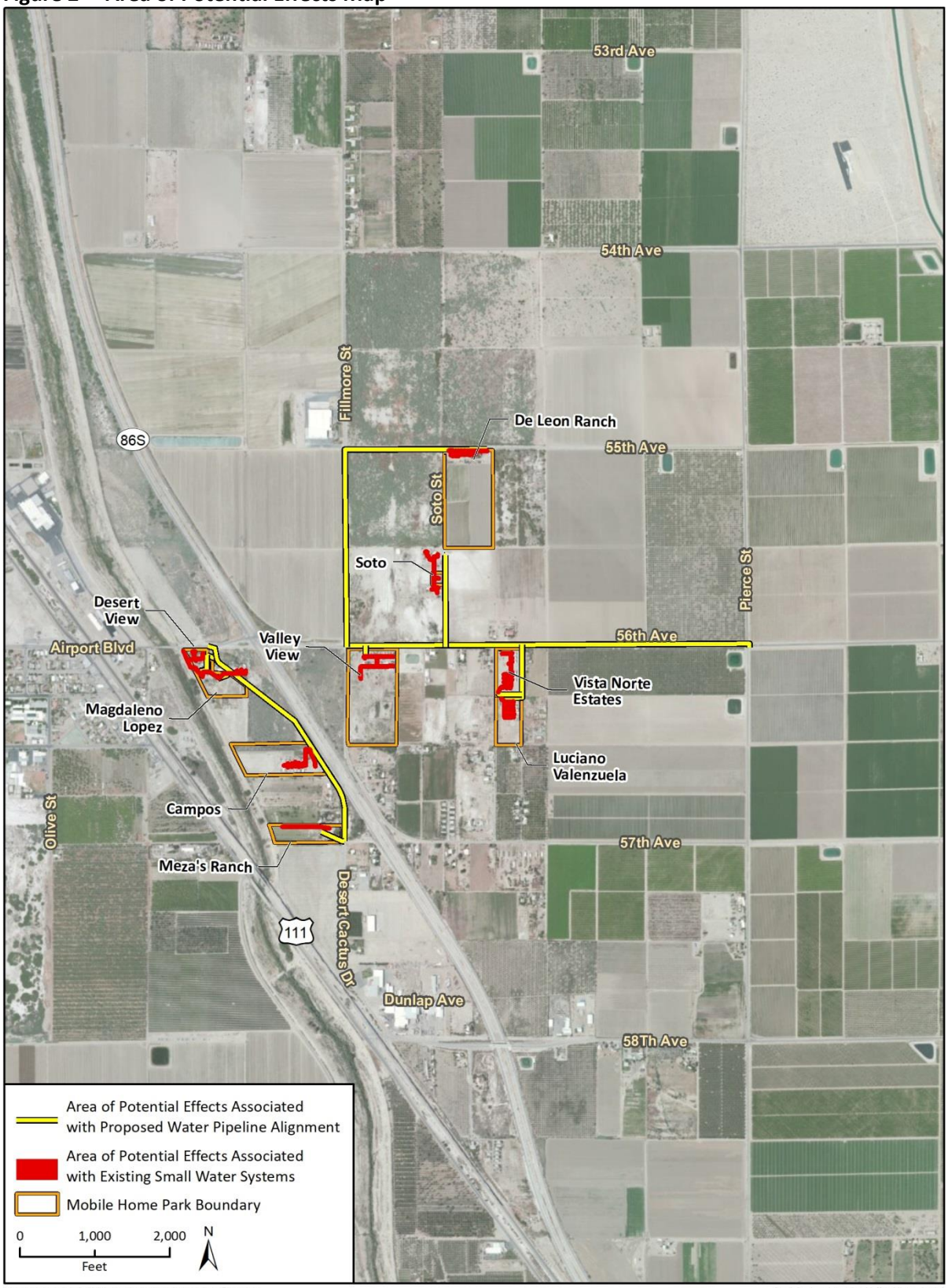
36 Code of Federal Regulations (CFR) 800.16(d) defines a project Area of Potential Effects (APE) as the "geographic area or areas within which a project may directly or indirectly cause changes in the character or use of historic properties if any such property exists." The APE generally depicts all areas expected to be affected by the proposed project, including construction staging areas. For this study, the APE includes the project disturbance footprint associated with the installation of the water pipeline, along with a 10-foot-wide buffer on either side of the alignment. The APE also includes the existing SWSs. Due to the more limited nature of expected disturbance associated with modifications to the existing SWSs, these portions of the APE include a 3-foot-wide surrounding buffer. As shown in Figure 2, much of the horizontal APE lies within the County of Riverside roadway right-of-way along Airport Boulevard/56th Avenue, Fillmore Street, 55th Avenue, Soto Street, and Desert Cactus Drive with smaller portions of the APE extending into the nine MHPs. In total, the horizontal APE encompasses approximately 8.9 acres.

The APE must also be considered as a three-dimensional space and includes any ground disturbance associated with the project. The vertical depth of the APE is not expected to exceed six feet below ground surface, consistent with the maximum depth necessary to install the water pipeline. Because most of the project elements will be subterranean, no indirect effects (i.e., visual, auditory, or atmospheric) are anticipated for the project.

1.4 Project Personnel

Rincon Archaeologist and Principal Investigator Tiffany Clark, PhD, Registered Professional Archaeologist (RPA) provided management oversight for this cultural resources study. Dr. Clark meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology (National Park Service 1983). Archaeologist Tricia Dodds, MA, RPA, completed the records search for the project. Staff archaeologist Lindsay Porras, MA, RPA, assisted with the

Figure 2 Area of Potential Effects Map



Imagery provided by ESRI and its licensors © 2019.

Fig 2 Project Location Valley View_Aerial

Native American outreach and local historic group consultation, performed the field survey, and assisted in the preparation of this report (Appendix A). Geographic Information Systems Analysts Erik Holtz and Jon Montgomery prepared the figures found in this report. Senior Technical Editor April Durham, PhD, and Principal Jennifer Haddow, PhD, reviewed this report for quality control.

2 Regulatory Setting

This section includes a discussion of the applicable federal, state, and local laws, ordinances, regulations, and standards governing cultural resources, to which the proposed project should adhere before and during implementation.

2.1 CEQA-Plus Studies

A CEQA-Plus study includes compliance with federal and state regulations, in the event a federal nexus is established during the course of project execution. A federal nexus may be established if federal funding and/or permitting is obtained or required for the project. Compliance with both regulations allows the lead agency to apply the results of this technical study to both levels of regulation should a nexus be established later.

2.2 Federal

2.2.1 National Historic Preservation Act

The proposed project is considered a federal undertaking due to the potential for federal funding; it is, therefore, subject to Section 106 of NHPA, which applies when a project, activity, or program is funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including projects carried out by or on behalf of a federal agency; those carried out with federal financial assistance; and those requiring a federal permit, license, or approval. Cultural resources are considered during federal undertakings chiefly under Section 106 of NHPA of 1966 (as amended) and through one of its implementing regulations, 36 CFR 800 (Protection of Historic Properties), and the National Environmental Policy Act. Properties of traditional, religious, and cultural importance to Native Americans are considered under Section 101 (d)(6)(A) and Section 106 (36 CFR 800.3-800.10) of NHPA. Other federal laws governing cultural resources include the Archaeological Data Preservation Act of 1974, the American Indian Religious Freedom Act of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1989, among others.

Section 106 of NHPA (16 United States Code 470f) requires federal agencies to take into account the effects of their undertakings on historic properties and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings (36 CFR 800.1). Under Section 106, the significance is assessed of any adversely affected historic property and mitigation measures are proposed to resolve the adverse effects to an acceptable level. Historic properties are those significant cultural resources listed in or are eligible for listing in the National Register of Historic Properties (NRHP). Generally, districts, sites, buildings, structures, and object that possess integrity are eligible for inclusion on the NRHP if they meet the following the criteria (36 CFR 60.4):

a. Are associated with events that have made a significant contribution to the broad patterns of our history
b. Are associated with the lives of persons significant in our past

c. Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction
d. Have yielded, or may be likely to yield, information important in prehistory or history

Ordinarily, cemeteries, birthplaces, or graves of historic figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; and properties that are primarily commemorative in nature are not considered eligible for NRHP listing, unless they satisfy certain conditions. In general, a resource must be 50 years of age to be considered for the NRHP, unless it satisfies a standard of exceptional importance.

2.3 State

2.3.1 California Environmental Quality Act

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1) or tribal cultural resources (PRC Section 21074[a][1][A]-[B]). A historical resource is a resource listed, or determined to be eligible for listing in the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or an object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be *historically significant* (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered *historically significant* if it meets any of the following criteria:

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

Generally, a cultural resource must be at least 50 years of age to be considered for listing on the CRHR. Resources that have achieved significance within the past 50 years may also be eligible for inclusion in the CRHR, provided that enough time has lapsed to obtain a scholarly perspective on the events or individuals associated with the resource (Office of Historic Preservation n.d.:3).

If it can be demonstrated that a project will cause damage to a *unique archaeological resource*, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b]).

PRC Section 21083.2(g) defines a *unique archaeological resource* as an artifact, object, or site about which it can be demonstrated clearly that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information

2) Has a special and particular quality such as being the oldest of its type or the best available example of its type
3) Is directly associated with a scientifically recognized important prehistoric or historic event or person

California Assembly Bill 52 (AB 52) was enacted July 1, 2015; it expands CEQA by defining a new resource category called *tribal cultural resources* (TCR). AB 52 establishes "a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a TCR, when feasible (PRC Section 21084.3).

PRC Section 21074(a)(1)(A) and (B) defines TCRs as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

1) Listed or eligible for listing in the CRHR, or in a local register of historical resources, as defined in PRC Section 5020.1(k)
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 PRC 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe

AB 52 also establishes a formal consultation process for California tribes regarding TCRs. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those requesting notice of projects proposed within the jurisdiction of the lead agency. The consultation process for a project must take place prior to the adoption of a negative declaration or mitigation negative declaration or the certification of an environmental impact report.

3 Natural and Cultural Setting

3.1 Natural Setting

The project APE is in the central portion of the Coachella Valley, a region extending approximately 40 miles southeast from the San Bernardino Mountains to the northern shore of the Salton Sea. Averaging 15 miles wide, the valley is bounded on the west by the San Jacinto and Santa Rosa Mountains and on the north and east by the Little San Bernardino Mountains. The San Andreas Fault runs along the northeastern edge of the valley, from the Chocolate Mountains in the south to the Little San Bernardino Mountains in the north. The Whitewater River/Coachella Valley Stormwater Channel runs immediately west of the project APE, eventually draining into the Salton Sea.

Geological data indicate the project APE is characterized by Holocene valley fill which are composed of sands and clay (Dibblee 2008). The soils present consist of both Gilman and Indio series. Gilman is associated with fluvial sediments with Indio associated with lacustrine sediments. According to Mirro (2012:29), the presence of both of these sediments is "suggestive of the former pathways of the Whitewater River as a migrating wash through the valley interfingering with lake sediments."

3.2 Cultural Setting

The Colorado Desert is a distinct geographical region with its own cultural and natural history, but it is embedded in a larger context that includes the Mojave Desert to the north and the Sonoran Desert to the east. The prehistoric period of these desert regions should be viewed in light of drastic climatic events which have reshaped the ecological setting of the region through time. The Salton Sink, also known as the Salton Trough, represents the Colorado Desert ecological setting of the Cahuilla. This desert stretched from the Coachella Valley in the north to Mexico in the south. Prehistorically, the region was lush, fed by overflows of ancient Lake Cahuilla. Present-day environmental conditions can be viewed as one of many alternating periods of lush and dry climates that have occurred through time. Moratto (2004:18) explains this topic thoroughly in the following:

> *Each lacrustal period was followed by centuries when the river did not flow into the region but instead deposited sediments across its southern end. The waters of Lake Cahuilla then evaporated, leaving the desert and Salton Sea. As one might expect, the vicissitudes of ancient Lake Cahuilla strongly affected the course of prehistory in the Colorado Desert.*

Several chronological sequences have been proposed by archaeologists to describe cultural change within southern California (Jones and Klar 2007; Moratto 2004). However, no cultural chronology for the Colorado Desert is currently available. Since the project APE is in a transitional zone between the Mojave and Colorado Deserts and these two regions were occupied traditionally by the same cultural groups, the next sections will follow the cultural chronology drafted by Sutton et al. (2007) for the Mojave Desert with descriptions focused on the unique cultural history of the Colorado Desert (Table 1).

3.2.1 Pleistocene Period (ca. Pre-12,000 to 10,000 Calibrated Before Present [cal BP])

The climate of the Pleistocene period in the Colorado Desert is generally characterized as cool and wet (Sutton et al. 2007:231). During this time, the Colorado Desert featured several pluvial lakes. The presence of lakes indicates an environment with plentiful food and water resources suitable for early human habitation, especially as compared to the harsher desert environment now present. Solid evidence of pre-Clovis (ca. before 11,500 cal BP) archaeological sites in the Colorado Desert remains scarce, but it is possible such occupation occurred and sites with reliable early dates may be found, as has happened elsewhere in the Americas.

Table 1 Cultural Chronology for the Mojave Desert

Approximate Date Range	Temporal Period	Cultural Complex	Previously Known As
Pre – 12,000 cal BP*	Late Pleistocene	Pre-Clovis	Early Man Pre-Projectile Point
12,000 – 10,000 cal BP	Terminal Pleistocene	Paleoindian	Clovis Big Game Hunting Tradition
10,000 – 8000 cal BP	Early Holocene	Lake Mojave	Western Pluvial Lakes Tradition San Dieguito Complex
9000 – 4000 cal BP	Middle Holocene	Pinto Deadman Lake	Little Lake N/A
4000 – 1600 cal BP	Late Holocene	Gypsum	Newberry
1600 – 850 cal BP		Rose Spring	Saratoga Springs I Haiwee
850 cal BP – Historic		Late Prehistoric	Shoshonean Marana Protohistoric

*cal BP refers to Before Present dates derived by radiocarbon dating, "calibrated" to the year 1950, the year used as the "modern carbon" reference point.

Source: Sutton et al. 2007:236

The Clovis Complex is the earliest and only Paleoindian cultural complex widely accepted in the region (Sutton et al. 2007:233-234). Dating to approximately 11,500 cal BP, this complex is defined by large lanceolate-shaped bifaces with fluting, prepared to thin and flatten the base of the artifact for hafting. Other tools associated with the Clovis Complex include large side scrapers, blades derived from prepared cores, and a mixture of expedient flaked tools (Justice 2002:73). Paleo-Indian populations associated with fluted point technology consisted of small, mobile groups who hunted and gathered near permanent sources of water such as pluvial lakes. The tools associated with these populations are found most commonly in the drainage basins of the pluvial lakes (Sutton et al. 2007:234).

Fluted points have been interpreted as tools used for hunting Pleistocene megafauna due to their clear association with megafaunal remains in the Great Plains and Southwest, but most fluted points found in California have lacked corroborating Pleistocene radiocarbon dates (Arnold et al. 2004). One exception appeared during excavations at China Lake in the early 1970s, where fluted points associated with burned remains of extinct megafauna were uncovered (Davis 1975). As Davis and Panlaqui (1978:31) note, the sites at China Lake demonstrate Paleo-Indians exploited many available resources, not just megafauna.

Evidence of terminal Pleistocene and early Holocene habitation in the Mojave Desert has remained sparse until recently, but evidence of habitation in the Colorado Desert at this time is all but absent. Evidence of late Pleistocene occupation in the Mojave was identified on the southern slopes of the Tehachapi Mountains, near Cottonwood Creek, in the form of a basal fragment of a fluted Clovis projectile point (Glennan 1971, 1987).

3.2.2 Early Holocene (10,000 to 8000 cal BP)

The onset of the early Holocene was marked by warmer temperatures, reduced precipitation, and the eventual drying up of the Pleistocene pluvial lakes. These changes are believed to have caused an irregular distribution of resources available to the early Holocene inhabitants (Sutton et al. 2007:237). In the Mojave Desert Region, the Lake Mojave Complex emerged at this time. This complex reflects an increasingly diversified subsistence strategy which was necessary for successful adaptation to climatic changes.

Primarily heavy, stemmed projectile points attributable to the Great Basin Stemmed series, such as Lake Mojave and Silver Lake, identify the Lake Mojave Complex. Other Lake Mojave Complex tools include bifaces, steep-edged unifaces, crescents, and occasional cobble-core tools with infrequent ground stone implements (Justice 2002:91). Settlement organization components include extensive residential accumulations, workshops, and small camps containing a handful of formed tools (Sutton et al. 2007: 237). Basgall and Overly (2004) have found evidence of occupation near Pleistocene China Lake and Fort Irwin yielding radiocarbon dates from 9500-8000 cal BP

While earlier research presumed a dependence on lacustrine subsistence strategies, recent studies have found Lake Mojave Complex sites in other contexts (e.g., Basgall 2005; Basgall and Jurich 2006; Giambastiani and Berg 2008:14). Sutton et al. (2007:237) stated the Lake Mojave assemblages included tools “consistent with long-term curation and transport.” The presence of exotic lithic materials and marine shell beads in Lake Mojave Complex assemblages further supports the assertion these people were highly mobile and possibly traded with groups over long distances.

Evidence is scant for Early Holocene occupation of the Colorado Desert. Scattered occurrences of large projectile points similar to Pinto and Elko forms have been reported in the region (Schaefer and Laylander 2007), but likely date to the Middle and Late Holocene.

3.2.3 Middle Holocene (9000 to 4000 cal BP)

The middle Holocene climate was generally more arid than the preceding or subsequent periods with multiple oscillations between wetter and drier conditions. The desiccation of the lakes and marshes of the Pleistocene and early Holocene required the region’s inhabitants to rely on streams and springs for water, resulting in lower occupational densities (Aikens 1978; Basgall 2000; Cleland and Spaulding 1992; Sutton 1996; Warren 1984). Average temperatures and aridity increased, peaking between 8000 and 6000 cal BP. Settlement patterns adapted, including a shift to upland settings where sources of water still existed and changes in tool assemblage content and diversity marked the emergence of the Pinto Complex (Sutton 1996).

Campbell and Campbell defined the Pinto Complex based on their work at the Pinto Basin site (1935), but it has a wider distribution throughout the southern California Desert Region than previous complexes. During the latter part of the Early Holocene, archaeological data indicate the Pinto Complex overlaps the Lake Mojave Complex (Sutton et al. 2007:237). The Pinto Complex reflects shifts in subsistence patterns and adaptation to the shrinking of the Pleistocene lakes, including a greater emphasis on the exploitation of plants, with the continued pursuit of artiodactyls

and smaller game. The broad distribution of this complex implies a high degree of residential mobility. The hallmarks of the Pinto Complex tool assemblage include concave base and bifurcate base projectile points with strong basal ears and more gradual shoulders (Zyniecki 2003:12). Other diagnostic artifacts of this complex include domed and keeled scrapers, large and small leaf-shaped bifaces, core/cobble tools, large metates and milling slabs, and shaped and unshaped handstones.

Near the end of the middle Holocene the climate became increasingly hotter and more arid. Very few sites date to the period between 5000 and 4000 cal BP. This suggests populations were very low. It is possible some areas were abandoned during this hot period (Sutton et al. 2007:241). In the Colorado Desert specifically, archaeological evidence dating to this time is limited, supporting the notion an arid and drought-ridden environment may have resulted in a migration out of the area (Hayden 1976). Others argue the lack of archaeological evidence at this time may be a result of environmental processes that buried prehistoric resources (Weide 1976).

3.2.4 Late Holocene (4000 cal BP to European Contact)

The climate of the late Holocene was similar to current conditions; cooler and moister than the middle Holocene, but not as cool and moist as the early Holocene. The climate remained highly variable with periods that included the Mojave lakes refilling to levels of earlier high stands, contrasted with at least two major droughts, circa 1124 to 904 cal BP, and circa 807 to 660 cal BP (Stine 1994). A cooler and wetter period occurred between 550 and 100 cal BP (Cleland and Spaulding 1992:4). These climatic changes at the onset of the late Holocene once again resulted in modified subsistence strategies and correlating tool kits of three progressive cultural complexes: Gypsum Complex, Rose Spring Complex, and Late Prehistoric Complex (or period).

Dart-point size projectile points including notched or eared (Elko), concave base (Humboldt), and small-stemmed (Gypsum) types characterized the projectile points of the Gypsum Complex. In addition to these diagnostic points, Gypsum Complex sites included leaf-shaped points, rectangular-based knives, flake scrapers, drills, and occasionally, large scraper planes, choppers, and hammerstones (Warren 1984:416). Manos and milling stones were common and the mortar and pestle were introduced during this period. Other artifacts found at Gypsum Complex sites include split-twig animal figurines, *Olivella* shell beads, and *Haliotis spp.* beads and ornaments, which are indicative of trade with people from the southern California coast and southern Great Basin. The inhabitants of the Mojave Desert exported high-quality, locally available cryptocrystalline materials such as obsidian, chalcedony, and chert for the production of stone tools in exchange for exotic materials.

By 1750 cal BP, a slightly cooler climate appears to have provided for increased population, based on a higher frequency of archaeological sites. The Rose Spring Complex was present from approximately 1815 to 915 cal BP, with regional temporal variations known as the Saratoga Springs, Haiwee, or Amargosa periods (Sutton 1996; Sutton et al. 2007:236). The smaller Rose Spring projectile points replaced the dart-size points of previous complexes and heralded the introduction of the bow and arrow (Yohe 1998). The bow and arrow provided its user a way to fire multiple projectiles rapidly during hunting or warfare and from a position of relative security compared to the atlatl or spear. This technological innovation appears to correspond with the onset of the Numic expansion westward to the coast, which some researchers believe started from southeastern California (Bettinger and Baumhoff 1982; Grayson 1993). Bedrock milling features supplement portable milling stones in villages and ancillary sites within the California deserts.

The Late Prehistoric period (circa 900–250 cal BP) corresponds to the introduction of ceramic artifacts in the region as well as replacement of Rose Spring projectile points with even smaller Desert Side-notched points and Cottonwood series points. Use of mortar and pestle became more widespread during this period and evidence of food storage facilities becomes increasingly common in the archaeological record. In the central Mojave Desert, the Mojave River became a primary focus of occupation, and trade networks increased along the Mojave River and over the San Gabriel Mountains (Sutton 1996).

Archeological evidence left by highly mobile hunter-gatherers in the Mojave Desert during the Late Sparse scatters of flaked stone, ground stone, and ceramic artifacts, and features such as hearths, rock rings, and trails are typical of the Prehistoric period. Several important Late Holocene sites are` documented in the northern Coachella Valley (Love and Dahdul 2002) and are characterized by clay-lined features, cremations, hearths, milling equipment, shell beads, Coso obsidian bifaces and debitage, and wonderstone debitage. Settlement appears to have been more sustained than previously known for this area at this time.

3.3 Ethnographic Context

Like their neighbors the Luiseño and Juaneño to west, and the Cupeño to the south, the Cahuilla speak a Cupan language, which is part of the Takic linguistic subfamily of the Uto-Aztecan language family. It is thought the Cahuilla migrated to southern California approximately 2,000 to 3,000 years ago, most likely from the southern Sierra Nevada mountain ranges of east-central California with other Takic speaking social groups (Moratto 2004:559).

Cahuilla social organization was hierarchical and contained three primary levels (Bean 1978:580). The highest level was the cultural nationality, encompassing everyone speaking a common language. The next level included the two patrimoieties of the Wildcats (*tuktum*) and the Coyotes (*'istam*). Every clan of the Cahuilla was in one of these moieties. The lowest level consisted of the numerous political-ritual-corporate units called sibs, or a patrilineal clan (Bean 1978:580).

Cahuilla villages were usually located in canyons or on alluvial fans near a source of accessible water. Each lineage group maintained their own houses (*kish*) and granaries, and constructed ramadas for work and cooking. Sweat houses and song houses (for non-religious music) were also often present. Each community also had a separate house for the lineage or clan leader. A ceremonial house, or *kíš ʔámnawet*, associated with the clan leader was where major religious ceremonies were held. Houses and ancillary structures were often spaced apart, and a "village" could extend over a mile or two. Each lineage had ownership rights to various resource collecting locations, "including food collecting, hunting, and other areas. Individuals also owned specific areas or resources, e.g., plant foods, hunting areas, mineral collecting places, or sacred spots used only by shamans, healers and the like" (Bean 1990:2).

The Cahuilla hunted a variety of game, including mountain sheep, cottontail, jackrabbit, mice, and wood rats, as well as predators such as mountain lion, coyote, wolf, bobcat, and fox. Various birds were also consumed, including quail, duck, and dove, plus various types of reptiles, amphibians, and insects. The Cahuilla employed a wide variety of tools and implements to gather and collect food resources. For the hunt, these included the bow and arrow, traps, nets, slings and blinds for hunting land mammals and birds, and nets for fishing. The throwing stick was used commonly to bring down rabbits and hares, but when communal hunts were organized for these animals, the Cahuilla often utilized clubs and very large nets.

Foodstuffs were processed using a variety of tools, including portable stone mortars, bedrock mortars and pestles, basket hopper mortars, manos and metates, bedrock grinding slicks, hammerstones and anvils, and many others. Food was consumed from a number of woven and carved wood vessels and pottery vessels. The ground meal and unprocessed hard seeds were stored in large finely woven baskets, and the unprocessed mesquite beans were stored in large granaries woven of willow branches and raised off the ground on platforms to keep it from vermin. Pottery vessels were made by the Cahuilla, and traded from the Yuman-speaking groups across the Colorado River and to the south.

The Cahuilla had adopted limited agricultural practices by the time Euro-Americans traveled into their territory. Bean (1978:578) has suggested their "proto-agricultural techniques and a marginal agriculture" consisting of beans, squash and corn may have been adopted from the Colorado River groups to the east. Certainly, by the time of the first Romero Expedition in 1823-24, they were observed growing corn, pumpkins, and beans in small gardens localized around springs in the Thermal area of the Coachella Valley (Bean and Mason 1962:104). The introduction of European plants such as barley and other grain crops suggest an interaction with the missions or local Mexican rancheros. Despite the increasing use and diversity of crops, no evidence indicates this small-scale agriculture was anything more than a supplement to Cahuilla subsistence, and it apparently did not alter social organization.

By 1819, several Spanish mission outposts, known as *assistencias*, were established near Cahuilla territory at San Bernardino and San Jacinto. Cahuilla interaction with Europeans at this time was not as intense as it was for native groups living along the coast. This was likely due to the local topography and lack of water, which made the area less attractive to colonists. By the 1820s, European interaction increased as mission ranchos were established in the region and local Cahuilla were employed to work on them.

The Bradshaw Trail was established in 1862 and was the first major east-west stage and freight route through the Coachella Valley. Traversing the San Gorgonio Pass, the trail connected gold mines on the Colorado River with the coast. Bradshaw based his trail on the Cocomaricopa Trail, with maps and guidance provided by local Native Americans. Journals by early travelers along the Bradshaw Trail told of encountering Cahuilla villages and walk-in wells during their journey through the Coachella Valley. The continued influx of immigrants into the region introduced the Cahuilla to European diseases. The single worst recorded event was a smallpox epidemic in 1862-63. By 1891, only 1,160 Cahuilla remained within what was left of their territory, down from an aboriginal population of 6,000–10,000 (Bean 1978:583-584). By 1974, approximately 900 people claimed Cahuilla descent, most of who resided on reservations.

Between 1875 and 1891, the United States established ten reservations for the Cahuilla within their traditional territory. These reservations include: Agua Caliente, Augustine, Cabazon, Cahuilla, Los Coyotes, Morongo, Ramona, Santa Rosa, Soboba, and Torres Martinez (Bean 1978:585). Four of the reservations are shared with other groups, including the Chemehuevi, Cupeño, and Serrano.

3.4 History

The post-contact history of California is generally divided into three epochs: the Spanish period (1769–1822), the Mexican period (1822–1848), and the American period (1848–present). Each of these periods is described briefly below.

3.4.1 Spanish Period (1769–1822)

In 1542, Juan Rodriguez Cabrillo led the first European expedition to observe what is now southern California. For more than 200 years, Cabrillo and other Spanish, Portuguese, British, and Russian explorers sailed the Alta (upper) California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003). Gaspar de Portolá and Franciscan Friar Junípero Serra established the first Spanish settlement in Alta California at Mission San Diego de Alcalá in 1769. This was the first of 21 missions erected by the Spanish between 1769 and 1823.

During this period, Spain also deeded ranchos to prominent citizens and soldiers, though very few in comparison to the following Mexican Period. To manage and expand herds of cattle on these large ranchos, colonists enlisted the labor of the surrounding Native American population (Engelhardt 1927a). The missions were responsible for administrating the local people as well as converting the population to Christianity (Engelhardt 1927b). Inevitably, this increased local population density and contact with diseases brought by Europeans greatly reduced the Native American population (McCawley 1996).

Friar Francisco Garcés and his group of explorers traveled through the area circa 1771, coming from the Colorado River (Hoover et al. 2002:321). Friar Garcés traveled as far as the Pacific coast along an ancient trade route, known as the Mojave Trail. The purpose of this expedition and the establishment of a Spanish trade route across the Colorado Desert were to further the Crown's missionization, trade, colonizing, and outpost development (Bannon 1974; Pourade 1971). This early expedition allowed for future undertakings by Captain Juan Batista de Anza in 1774. Garcés named the present-day Mojave River, the Arroyo de los Mártires (Stream of the Martyrs). The river was later renamed Rio de las Animas (River of Souls) by Friar Joaquín Pasqual Nuez, who accompanied the 1819 expedition of Lieutenant Gabriel Moraga.

3.4.2 Mexican Period (1822–1848)

The Mexican period commenced when news of the success of the Mexican Revolution (1810-1821) against the Spanish crown reached California in 1822. This period saw extensive interior land grant development as well as exploration west of the Sierra Nevada Mountains by American fur trappers. The California missions declined in power and ultimately were secularized in 1834. The hallmark of the Mexican period was large ranchos deeded to prominent Mexican citizens, frequently soldiers, by the governor. These ranchos became important economic and social centers. About 15 land grants (ranchos) were in Riverside County.

The Mexican Army passed through the region via the San Gorgonio Pass and along the eastern edge of the Salton Sink in 1825, but found the route to be impractical (Hoyt 1987). The Yuma to San Diego route was favored and ran along the southern Salton Sink and Imperial Valley. This route would later be utilized by U.S. Army Lieutenant Colonel W.H. Emory in 1846, by General Kearny for his 1847 expedition, and by the Mormon Battalion in 1848, establishing a wagon road (Pourade 1971).

3.4.3 American Period (1848–Present)

The American Period officially began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for the conquered territory, including California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. The discovery of gold in northern California in 1848 led to the California Gold Rush, though the first significant

California gold was discovered in Placerita Canyon near the San Fernando Mission in 1842 (Guinn 1977). In 1850, California was admitted to the Union as the 31st state.

Immigrants populated the region by way of wagon roads, the Southern Pacific railroad (Indio, CA to Yuma, AZ), the Bradshaw Trail, and stage routes. Southern California remained dominated by cattle ranches in the early American period, though droughts and increasing population resulted in farming and more urban professions increasingly supplanting ranching through the late nineteenth century. Toward the end of the nineteenth century and into the twentieth century, agricultural entrepreneurs became interested in the Imperial and Coachella Valleys, leading to large-scale irrigation projects such as the Boulder, Hoover, and Imperial dams, the All American Canal System and the Colorado River Aqueduct (Loftus 2016). By 1853, the population of California exceeded 300,000.

Local History

The paucity of water in many areas of the Colorado Desert discouraged farming, and agricultural development only flourished when water was imported in significant quantities. Because of the relatively high water table in the Coachella Valley, the agricultural industry began to develop prior to the importation of water by means of drilling artesian wells. Beginning in the first decade of the twentieth century, Coachella Valley farmers planted extensive acreage in date, fig, and grape crops. Towns that developed with the agricultural growth include Thermal, Mecca, Indio, and Coachella. Because of the extensive farming efforts, the water table in the Coachella Valley was seriously depleted, stimulating the formation of CVWD to promote conservation and replenish the groundwater basin.

Following passage of the Boulder Canyon Project Act of 1928, the waters of the Colorado River were harnessed for the development of agriculture in Imperial and Coachella valleys. CVWD cooperated with the Imperial Irrigation District to develop the All-American Canal and the Coachella Valley extension. Branching off from the All-American Canal, the Old Coachella Canal extends approximately 125 miles north to the northern Coachella Valley, bringing the first imported irrigation water to the valley in 1949 (Nordland 1978).

The community of Thermal was originally established as a railroad camp in 1910 for employees of the Southern California Railroad. In the following decades, a small cluster of commercial, public, and residential buildings was constructed along 56th Avenue (later renamed Airport Boulevard) at its intersection with State Route 111. With the introduction of canal irrigation in the 1930s, the Coachella Valley experienced rapid agricultural development. Aerial imagery indicates that much of the area around Thermal was under cultivation by the early 1940s (NETRonline 2019).

In 1942, an airfield was established two miles southeast of the community of Thermal. Known as the Thermal Ground Support Base or Thermal Army Air Field, the facility provided air support for the Desert Training Center during World War II (California Military Department 2018). Following the war, the air station was converted to a municipal airport for civilian use.

4 Background and Methods

4.1 Cultural Resources Records Search

4.1.1 California Historical Resources Information Center

On January 17, 2019, Rincon conducted a search of the California Historical Resources Information System at the Eastern Information Center at the University of California, Riverside. The search was conducted to identify any previously recorded cultural resources and previously conducted cultural resources studies within the APE and a 0.5-mile radius surrounding it. Rincon also reviewed the NRHP, the CRHR, and the California State Historic Resources Inventory list. A summary of these results follows. California Department of Parks and Recreation records, a report list, and maps are included in Appendix B (Confidential).

The records search found 14 previously identified cultural resource studies completed within 0.5 mile of the project APE between 1992 and 2013 (Table 2). Five of these previous studies (RI-3245, RI-6537, RI-7067, RI-7770, and RI-10406) covered approximately 10 percent of the current project APE; these studies identified no cultural resources in the APE.

Table 2 Previously Conducted Cultural Resources Studies within a 0.5-mile Radius of the APE

Report Number	Author(s)	Year	Title	Relationship to APE
RI-01778	Napton, L. Kyle and E.A. Greathouse	1993	*Cultural Resource Investigations of the Proposed Indio to Salton Light Guide System Project, AT&T Fiber Optic Route, 46.2 Miles in Riverside and Imperial Counties, California*	Outside
RI-01924	Dominici, Debra A.	1992	*Negative Archaeological Survey Report – Sixth Addendum*	Outside
RI-03245	Van Horn, David, Laurie White, and Robert White	1990	*Cultural Resources Sensitivity Overview for the Coachella Valley Enterprise Zone*	Within
RI-06528	Tang, Bai, Michael Hogan, Deirdre Encarnacion, and Daniel Ballester	2006	*Historical/Archaeological Resources Survey Report, Maravilla Specific Plan Environmental Impact Report, in and near the City of Coachella, Riverside County, California*	Outside
RI-06531	Tang, Bai, Michael Hogan, Deirdre Encarnacion, and Daniel Ballester	2006	*Historical/Archaeological Resources Survey Report, Maravilla Specific Plan Environmental Impact Report, in and near the City of Coachella, Riverside County, California*	Outside
RI-06537	Tang, Bai, Michael Hogan, Deidre Encarnacion, and Daniel Ballester	2006	*Historical/Archaeological Resources Survey Report, Rancho Coachella Vineyard Specific Plan, in and near the City of Coachella, Riverside County, California*	Within

Report Number	Author(s)	Year	Title	Relationship to APE
RI-06539	Tang, Bai, Michael Hogan, Deidre Encarnacion, and Daniel Ballester	2005	*Historical/Archaeological Resources Survey Report Assessor Parcel Nos. 763-360-010 and -011, near the City of Coachella, Riverside County, California*	Outside
RI-06615	Tang, Bai, Michael Hogan, Deidre Encarnacion, and Daniel Ballester	2006	*Historical/Archaeological Resources Survey Report: Thermal Street, Water, and Sewer Improvements, near the Community of Thermal, Riverside County, California*	Outside
RI-07067	Hogan, Michael	2006	*Letter Report: Supplemental Archaeological Survey and Subsurface Testing, Rancho Coachella Vineyard Specific Plan, City of Coachella, Riverside County, California*	Within
RI-07493	Dennison, Elizabeth	2007	*Phase I Archaeological Assessment of Approximately Two Miles for the Pierce Street Transmission Water Main near the City of Coachella, Unincorporated Riverside County, California*	Outside
RI-07770	Formica, Tracy H.	2007	*Class III Cultural Resources Survey of the Airport Boulevard Water Transmission Pipeline Project Corridor for the Coachella Valley Water District, Thermal, Riverside County, California (ARPA Permit No. LC-CA-07-11P)*	Within
RI-07856	Robinson, Lynn	2007	*Archaeological Clearance Survey Form (Close Select Trails at Hall of Honors)*	Outside
RI-09627	Gust, Sherri and Molly Valasik	2013	*Coachella Valley Unified School District Community Education Support Complex Cultural Resources Assessment, Thermal Area of Riverside County, California*	Outside
RI-10406	Mirro, Michael	2012	*Archaeological Sensitivity Model for the Whitewater River Storm Channel, Riverside County, California*	Within

Source: Eastern Information Center January 2019

Within a 0.5-mile radius of the project APE, 26 cultural resources have been documented (Table 3). These include ten historic period buildings located in the community of Thermal, eight historic period structures (Union Pacific Railway, Coachella Valley Stormwater Channel, transmission lines, a road segment, and four asphalt driveways), one historic period archaeological site (road remnant), four prehistoric isolated artifacts (single ceramic sherds), and three historic period isolated artifacts (single glass bottle fragments). None of these known cultural resources are in the project APE, but five resources, including historic period transmission lines (P-33-020764), a historic period road remnant (P-33-020750), two historic period isolated artifacts (P-33-024735 and P-33-024736), and a prehistoric isolated ceramic sherd (P-33-024737) have been recorded adjacent to the APE (i.e., less than 500 feet).

Table 3 Previously Identified Cultural Resources within a 0.5-mile Radius of the APE

Resource Number	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Status	Relationship to APE[1]
P-33-005637	Historic building	"Bud" Martin House	Millard Wright 1983	NRHP and CRHR status not known; locally listed	Outside
P-33-005638	Historic building	Coachella Valley High School	Harmon 1983	NRHP and CRHR status not known; locally listed	Outside
P-33-005639	Historic building	John Kelly House	Harmon 1983	NRHP and CRHR status not known; locally listed	Outside
P-33-005640	Historic building	Single-family residence	Warner 1983	Not evaluated for NRHP; ineligible for CRHR or local listing	Outside
P-33-005641	Historic building	Dick Wood House	Harmer 1983	Not evaluated for NRHP or CRHR	Outside
P-33-005642	Historic building	Mrs. Saxmon's Boarding House	Wright 1983	Not evaluated for NRHP or CRHR	Outside
P-33-005643	Historic building	Alderman House	Harmon 1983	NRHP and CRHR status not known; locally listed	Outside
P-33-005646	Historic building	Triple AAA Water Company	Wright 1983	NRHP and CRHR status not known; locally listed	Outside
P-33-009498; CA-RIV-6381H	Historic Structure	Union Pacific Railroad	Baurley and Sanka 2015	Recommended ineligible for listing on the NRHP and CRHR	Outside
P-33-011223	Historic building	Single-family residence	Di Lorio & J. Brock 2002	Not evaluated for NRHP or CRHR	Outside
P-33-014812	Historic building	Single-family residence	White 2005	Ineligible for listing on the NRHP and CRHR	Outside
P-33-014959	Prehistoric isolated artifact	Single ceramic sherd	Ballester 2006	Not evaluated for NRHP or CRHR	Outside
P-33-014960	Prehistoric isolated artifact	Single ceramic sherd	Ballester 2006	Not evaluated for NRHP or CRHR	Outside
P-33-014961	Prehistoric isolated artifact	Single ceramic sherd	Ballester 2006	Not evaluated for NRHP or CRHR	Outside
P-33-017259; CA-RIV-10847	Historic Structure	Coachella Valley Stormwater Channel	Moslek 2017	Ineligible for NRHP and CRHR	Outside
P-33-019860	Historic site	Remnant of an abandoned road	Lichtenstein 2011	Not evaluated for NRHP or CRHR	Adjacent

Resource Number	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Status	Relationship to APE[1]
P-33-020750/ CA-RIV-10672	Historic structure	Road segment	Smallwood 2014	Ineligible for NRHP and CRHR	Outside
P-33-020764/ CA-RIV-10686	Historic structure	Transmission Line	Stanton 2012	Not evaluated for NRHP or CRHR	Adjacent
P-33-020921/ CA-RIV-10846	Historic structure	Asphalt Driveway	Stanton 2012	Not evaluated for NRHP or CRHR	Outside
P-33-020926	Historic structure	Asphalt Driveway	Stanton 2012	Not evaluated for NRHP or CRHR	Outside
P-33-020927	Historic structure	Asphalt Driveway	Stanton 2012	Not evaluated for NRHP or CRHR	Outside
P-33-020928	Historic structure	Asphalt Driveway	Stanton 2012	Not evaluated for NRHP or CRHR	Outside
P-33-024735	Historic isolated artifact	Glass bottle	Goodmann and Ballester 2015	Ineligible for NRHP and CRHR	Adjacent
P-33-024736	Historic isolated artifact	Glass bottle base	Goodmann and Ballester 2015	Ineligible for NRHP and CRHR	Adjacent
P-33-024737	Prehistoric isolated artifact	Ceramic sherd	Goodmann and Ballester 2015	Ineligible for NRHP and CRHR	Adjacent
P-33-024738	Historic isolated artifact	Glass bottle fragment	Goodmann and Ballester 2015	Ineligible for NRHP and CRHR	Outside

[1]Adjacent resources are located within 500 feet of the project APE.
Source: Eastern Information Center January 2019

4.2 Native American Outreach

Rincon contacted the Native American Heritage Commission (NAHC) on January 15, 2019 to request a Sacred Lands File search of the APE and a 0.5-mile radius surrounding it. As part of this request, Rincon asked the NAHC to provide a list of Native American groups and/or individuals culturally affiliated with the area who may have knowledge of cultural resources in the APE. The NAHC responded on January 22, 2019, stating the results of the Sacred Lands File search were negative (see Appendix C). The NAHC provided a list of 19 Native American contacts who may have knowledge of cultural resources of Native American origin at the project site. Rincon prepared and mailed letters to each of these groups on January 22, 2019. Appendix C provides an example of the letter sent to the Native American contacts.

On February 20 and 22, 2019, Rincon followed up with the Native American contacts who had not replied. Twelve responses were received from this outreach effort. A summary of each response follows and Appendix C provides copies of all non-confidential Native American outreach correspondence, including a summary table.

On January 28, 2019, Rincon received a letter from Travis Armstrong, Tribal Historic Preservation Office (THPO) for the Morongo Band of Mission Indians, who stated the Tribe has no additional information to provide at this time. He indicated the Morongo Band of Mission Indians would defer to other tribes in the area when the lead agency initiates formal consultation for the project.

On January 29, 2019, Rincon received a letter from Judy Stapp, Director of Cultural Affairs for the Cabazon Band of Mission Indians. The letter stated the Tribe does not have specific archival information on the site and the project is outside of its current reservation boundaries.

On January 30, 2019, Rincon received a letter from Lacy Padilla, Archaeological Technician for the Agua Caliente Band of Cahuilla Indians THPO. The letter stated the project is not in the boundaries of the Tribe's reservation, but is in the Tribe's Traditional Use Area. She deferred to the Augustine Band of Cahuilla Indians and Torres Martinez Desert Cahuilla Indians, stating that this letter concluded the Tribe's consultation efforts for the project.

On February 8, 2019, Rincon received a letter from Sarah Bliss, Cultural Resources Manager, of the Twenty-Nine Palms Band of Mission Indians. She stated that though the THPO is not aware of specific cultural resources in the project area, the project is in the Chemehuevi Traditional Use Area and may have impacts to cultural resources that concern the Tribe. The THPO requests the completed report from the lead agency for evaluation.

On February 20, 2019, Amanda Vance, Chairperson of the Augustine Band of Cahuilla Indians, responded in a letter stating the Tribe did not have any specific information on cultural resources in the project area. She encouraged Rincon contact other Tribes in the area for information and to contract with a monitor qualified in Native American cultural resources identification for on-site ground disturbance.

On February 20, 2019, Rincon spoke on the phone with Bobby Ray, the Cultural Director for the Cahuilla Band of Indians. He stated he had no specific knowledge of cultural resources in the area. He deferred to Torres Martinez Desert Cahuilla Indians.

On February 20, 2019, Rincon had a phone call with Joseph Ontiveros, the Cultural Director for the Soboba Band of Luiseño Indians. Mr. Ontiveros stated the Tribe would defer to Torres Martinez Desert Cahuilla Indians.

On February 22, 2019, Rincon spoke on the phone with Steven Estrada, Chairperson for the Santa Rosa Band of Mission Indians. Mr. Estrada stated the Tribe would defer further consultation and any monitoring efforts to Torres Martinez Band of Cahuilla Indians.

On February 22, 2019, Rincon spoke on the phone with Charles Wood, Chairperson for the Chemehuevi Indian Reservation. Mr. Wood stated the Tribe did not have any specific information or concerns and would like to defer to tribes closer to the project area.

On February 22, 2019, Rincon corresponded with Michael Mirelez, Cultural Resource Coordinator for the Torres Martinez Desert Cahuilla Indians. Mr. Mirelez stated that although the project is outside of the Tribe's reservation, it is in their Traditional Use Area. The Tribe has concerns regarding inadvertent discoveries. Mr. Mirelez requested copies of all cultural reports, formal government-to-government consultation, and Tribal monitoring during all initial ground-disturbing activities, including survey and testing.

On February 26, 2019, Rincon received an email from Dorothy Willis of the Los Coyotes Band of Mission Indians. Ms. Willis stated that she had discussed the project with Jacob Norte, the Tribe's Environmental Programs Director, and he had no comments on the project.

In a letter dated March 6, 2019, the Colorado River Indian Tribe's (CRIT) THPO requested that all prehistoric cultural resources, including both known and yet-to-be-discovered sites, be avoided. If avoidance of the site is infeasible, then the THPO requested the resources be left *in situ* or reburied in a nearby area after consultation. In addition, they requested the CRIT THPO be notified within 48 hours of discovering any human remains or objects subject to provision of the Native American Graves Protection and Repatriation Act, or cultural resources such as sites, trials, and artifacts.

4.3 Local Historic Group Consultation

Rincon contacted the Riverside County Historical Commission, the Palm Springs Historical Society, the Coachella Valley Archaeological Society, the Coachella Valley Historical Society, and the Historic Society of Palm Desert, to request information regarding historical resources in the proposed project APE. Rincon prepared and mailed letters to each of these groups on January 22, 2019; follow-up phone calls were conducted on February 15 and 22, 2019 (Appendix D).

Two responses were received from the historical society consultation. In a phone call on February 15, 2019, Harry Quinn of the Historical Society of Palm Desert stated the project site is located in an area with the potential for prehistoric period and historic period archaeological remains. Mr. Quinn provided a historical overview of the area stating that Mecca was known originally as "Walters" which was frequented by miners and wagon parties traveling through the area. In addition, the area was used during the late nineteenth and early twentieth century for ranching and may contain historic period archaeological deposits. On February 15, 2019, Renee Brown of the Palm Springs Historical Society stated that their organization is specific to the Palm Springs area and, therefore, did not have specific information regarding the project APE. Appendix D provides a summary of the historical group consultation efforts.

4.4 Historical Imagery Review

A review of historical maps and aerial photographs of the APE indicates a northwest-southeast road, parallel to the Whitewater River, intersected the project APE as early as 1856 (Bureau of Land Management 2019). Although no evidence of this road is on the 1944 United States Geological Survey *Coachella, CA* 15-minute topographic quadrangle, this latter map depicts several roadways in the project APE, including Airport Boulevard and Fillmore Street. Other features present on the 1944 map include the Coachella Valley Stormwater Channel and the Union Pacific Railroad. A 1953 aerial photograph shows the area surrounding the project APE is characterized primarily by undeveloped desert scrubland and agricultural fields (NETRonline 2019). Structures and/or buildings are present by 1953 in the vicinity of the Desert View, Magdaleno Lopez, and Soto MHP properties. By 1972, structures and/or buildings are also present in the vicinity of the Valley View and De Leon Ranch MHPs. The areas around the remaining four MHPs (Campos, Luciano Valenzuela, Meza's Ranch, and Vista Norte Estates) all appear to have been developed after 1972.

5 Field Survey

5.1 Methods

On February 12 and 13, 2019, and April 18, 2019, Rincon Staff Archaeologist Lindsay Porras performed a cultural resources field survey of the APE. Developed portions of the pipeline alignment along Airport Boulevard/56th Avenue, Fillmore Street, 55th Avenue, Soto Street, and Desert Cactus Drive were surveyed via a windshield survey. A pedestrian survey was conducted for those portions of the APE that were not located within the paved roadway. The pedestrian survey was conducted by walking a series of transects spaced at no more than 10 meters (33 feet) apart within portions of the APE with exposed ground surfaces.

Ms. Porras examined the APE for evidence of artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discolorations that might indicate the presence of cultural midden, soil depressions, and features indicative of the former presence of structures of buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances such as burrows and road cuts were also visually inspected. Field notes of survey conditions and observations were recorded using Rincon field forms and a digital camera. Copies of the original field notes and photographs are maintained at the Rincon Redlands office.

5.2 Results

Results of the field survey indicate that large portions of the APE are developed with pavement covering much of the proposed pipeline alignment. Although some of the shoulder areas along Airport Boulevard/56th Avenue, Fillmore Street, 55th Avenue, Soto Street, and Desert Cactus Drive have been treated with gravel, areas of exposed ground surface were noted in the APE (Figure 3). Ground visibility in these areas was excellent (close to 100 percent). In the MHPs, exposed ground was visible within portions of the APE located in open areas and along unpaved residential access roads. Ornamental plantings, landscaping, and residential structures obscured visibility in these latter areas (reduced to 10 to 60 percent) (Figure 4).

An examination of areas of exposed ground surface indicates native sediments throughout the APE consist of loosely consolidated sand. Surficial sediments appear to have extensively disturbed by road construction and maintenance activities, as well as the development of the MHPs.

The field survey identified no archaeological resources or historic-age buildings or structures within the APE.

Figure 3 View of Airport Boulevard at Soto Street, Facing West

Figure 4 Overview of Meza's Ranch MHP, Facing West

6 Findings and Recommendations

The results of the cultural resources records search, Native American and historical society outreach, historical imagery review, and field survey identified no cultural resources within the APE. The lack of surface evidence of archaeological remains does not preclude their subsurface existence. However, results of the records search indicate that no substantial prehistoric or historic period archaeological remains are present within a 0.5-mile radius of the project APE. These findings are consistent with the archaeological sensitivity study of the Whitewater River conducted by Mirro (2012:30), who noted very few historical and prehistoric resources had been documented along this stretch of the river's course. He speculates that due to the alkalinity of the groundwater in this area of the valley, the native vegetation may have been of little interest to prehistoric and ethnohistoric Native American groups. These environmental conditions may have resulted in less intensive use of the area compared to other portions of the Coachella Valley. Regardless of the specific reason, these results suggest that the project APE is not highly sensitive for buried archaeological remains.

Rincon recommends a finding of ***no impact to historical resources*** under CEQA and ***no effect to historic properties*** under Section 106 of NHPA. Rincon presents the following recommendation in case of unanticipated discovery of cultural resources during project development. The project is also required to adhere to regulations regarding the unanticipated discovery of human remains, detailed below.

6.1 Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) should be contacted immediately to evaluate the find. If the discovery proves to be significant under NHPA and/or CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any significant impacts.

6.2 Human Remains

If human remains are found, regulations outlined in the State of California Health and Safety Code Section 7050.5 state no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of being granted access and provide recommendations as to the treatment of the remains to the landowner.

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Appendix A

Resumes

Tiffany C. Clark, PhD, RPA

SENIOR ARCHAEOLOGIST/PRINCIPAL INVESTIGATOR

Tiffany Clark is a Senior Archaeologist/Project Manager with Rincon Consultants. She has over 20 years of experience in cultural resource management in California, Arizona, and New Mexico. Her professional experience includes all phases of survey, excavation, laboratory analysis, research design, report preparation, construction monitoring, Native American consultation, and project management. She has prepared numerous technical reports and environmental documents for compliance with the National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), and Section 106 and 110 of the National Historic Preservation Act (NHPA). Dr. Clark is a member of the Register of Professional Archaeologists and exceeds the Secretary of Interior's Professional Qualifications Standards in Archaeology.

EDUCATION

Ph.D., Anthropology, Arizona State University, Tempe 2003

M.A., Anthropology (emphasis Bioarchaeology), Arizona State University, Tempe 1997

B.A., Biology, Occidental College, 1992

CERTIFICATIONS/ REGISTRATIONS

Register of Professional Archaeologists (ID#989197)

California BLM Permit, Principal Investigator, Statewide

EXPERIENCE

Rincon Consultants, Inc. (April 2018 – present)

Applied EarthWorks, Inc. (2013-April 2018)

Sapphos Environmental (2011-2013)

Cotsen Institute of Archaeology, University of California, Los Angeles (2008-2009)

Desert Archaeology, Inc. (2000-2007)

PROJECT EXPERIENCE

TRANSPORTATION PROJECTS

- San Bernardino County Transportation Authority (SBCTA) – Interstate 10 Eastbound Truck Climbing Lane Improvement Project, San Bernardino and Riverside Counties, California (2017-2018)
- City of Coachella and California Department of Transportation, District 8 – State Route 86/Avenue 50 New Interchange Project, City of Coachella, Riverside County, California (2015–2018)
- San Bernardino County Transportation Authority (SBCTA) – Interstate 215 / University Parkway Interchange Project, City of San Bernardino, San Bernardino County, California (2017-2018)
- City of Riverside – Sidewalk Improvement Projects, City of Riverside, Riverside County, California (2016-2017)
- California Department of Transportation, District 8 – On-Call Cultural Resources Services, San Bernardino and Riverside Counties, California (2013-2018)
- California Department of Transportation, Interstate-10 Corridor Project, Los Angeles and San Bernardino Counties, California (2014-2016)
- County of Inyo and City of Bishop – ATV Adventure Trails of the Eastern Sierra Program, Inyo County, California (2013-2014)

INFRASTRUCTURE PROJECTS

- City of Pasadena Water and Power – Azusa Hydroelectric Project, City of Azusa, Los Angeles County, California (2016-2018)
- Metropolitan Water District – Orange County Distribution System Infrastructure Protection Program, Orange, Riverside, and San Bernardino Counties, California (2016-2017)
- California Energy Commission – Amended Carlsbad Energy Center Project, City of Carlsbad, San Diego County, California (2015)
- Los Angeles World Airport – Los Angeles International Airport Runway 6L-24R Safety Area and Associated Improvements Project, Los Angeles County, California (2012-2013)

PROJECT EXPERIENCE, CONT'D

- Salt River Project – Palo Verde to Pinal West 500kV Transmission Line, Maricopa and Pinal Counties, Arizona (2006-2007)
- Salt River Project – Browning to Dinosaur 500/230kV Transmission Line, Pinal County, Arizona (2006-2007)
- Salt River Project – Pinal West-Browning 230/500kV Transmission Line, Maricopa and Pinal Counties, Arizona (2006-2007)
- Salt River Project – Damage Assessment of AZ T:9:5 (ASM), Maricopa County, Arizona (2007)
- Salt River Project – Dinosaur to Hunt 12/69KV Transmission Line, Maricopa County, Arizona (2006-2007)
- City of Phoenix – Phoenix Sky Harbor International Airport Runway Expansion Project, City of Phoenix, Maricopa County, Arizona (2000-2004)

DEVELOPMENT PROJECTS

- City of Los Angeles Department of Public Works and Bureau of Engineering – Sixth Street Park, Arts, River & Connectivity Improvements Project, City of Los Angeles, Los Angeles County, California (2017-2018)
- California Army National Guard – Los Alamitos Joint Forces Training Base Buried Site Testing Program, Orange County, California (2017-2018)
- Hillwood Investment Properties – Sycamore Canyon Business Park Buildings 1 and 2, City of Riverside, Riverside County, California (2016-2018)
- Terra Verde Group – Tapestry Specific Plan Project, City of Hesperia, San Bernardino County, California (2013-2018)
- California Department of Conservation – Analysis of Oil and Gas Well Stimulation Treatments in California Environmental Impact Report, California (Statewide) (2014-2015)
- Avalon Wind, LLC – Avalon Wind Energy Project, Kern County, California (2011-2013)
- enXco – Catalina Renewable Energy Project, Kern County, California (2011-2013)

EDUCATION

M.A., Applied Archaeology, California State University San Bernardino (2017)

B.A. Anthropology, University of Nevada Reno (2004)

Archaeological Field School, University of Nevada Reno (2003)

CERTIFICATIONS/ REGISTRATIONS

Registered Professional Archaeologist (ID 17082)

Society for California Archaeology

EXPERIENCE

Rincon Consultants, Inc. (2017 –present)

Cogstone Resource Management, Inc. (2009–2017)

Pechanga Band of Luiseño Indians Cultural Resources Intern (2016)

Statistical Research, Inc. (2008; 2010)

Garcia and Associates (2008)

Tetra Tech EC, Inc. (2008)

University of Nevada, Reno (2003–2004)

Lindsay Porras, MA, RPA

ASSOCIATE ARCHAEOLOGIST

Lindsay Porras is an Associate Archaeologist with Rincon Consultants. Ms. Porras is a qualified archaeologist and cross-trained paleontologist with over nine years of professional and academic experience in research, field, and laboratory procedures throughout Southern California. Her experience includes research, technical report preparation within the framework of the NHPA and CEQA, survey, site evaluation, and mitigation through data recovery and monitoring. Ms. Porras has considerable experience working independently as well as part of productive teams and has acted as field lead on multiple CRM projects in Southern California. Ms. Porras completed her M. A. in Applied Archaeology from California State University, San Bernardino, which included the completion of a master's thesis involving comparative analysis of late prehistoric resource use in the Salton Basin of the Colorado Desert. Ms. Porras has presented the results of her master's thesis to academic audiences including the annual 2017 conference of the Society for California Archaeology. Ms. Porras is a Registered Professional Archaeologist 17082 and a member of the Society for California Archaeology

PROJECT EXPERIENCE

Associate Archaeologist and Field Director: Riverside University Health Services (RUHS), Riverside County, CA 2018. Conducted archaeological monitoring spot checks of ground disturbing construction activities associated with RUHS expansion and upgrades.

Associate Archaeologist and Field Director: Downtown Perris Training Center, Riverside County, CA 2018. Performed a cultural resources records search and pedestrian survey of two parcels in downtown Perris, CA. *Client: City of Perris (3 days)*

Associate Archaeologist and Field Director: Archaeological Monitoring for Street Widening at 32151 Del Obispo Street, Orange County, CA 2017-2018.. Conducted archaeological monitoring and co-authored a letter report summarizing the results and recommendations of the cultural resources monitoring effort during ground disturbing activities associated with potholing for utilities and trenching for pipeline relocation for the road widening of Del Obispo Street in San Juan Capistrano, CA. *Client: SoCalGas (1 week.)*

Associate Archaeologist: El Horno Street Project, Orange County, CA 2018. Co-authored a letter report summarizing the results and recommendations of the cultural resources monitoring efforts associated with pipeline repairs in the City of San Juan Capistrano, CA. *Client: SoCalGas (1 week*)

Associate Archaeologist: Archaeological Monitoring for Line 3000, San Bernardino County, CA 2017-2018. Associate Archaeologist. Co-authored a letter report summarizing the results and recommendations of the cultural resources monitoring effort for multiple pipeline repairs within the right-of-way of Line 3000 on Bureau of Land Management managed land near Needles, CA. Completed DPR forms associated with the recordation of a historic site. *Client: SoCalGas, Bureau of Land Management. (1 month)*

PROJECT EXPERIENCE

Associate Archaeologist: 1530 West Cameron, Los Angeles County, CA 2018. Performed a cultural resources records search, Native American scoping, and summarized the results in the cultural resources section of the Initial Study Mitigated Negative Declaration. *Client: City of West Covina, CA. (1 month)*

Associate Archaeologist: 780-808 Francesca Drive Residential Project, Los Angeles County, CA 2018. Conducted a cultural resources records search and initiated a Sacred Lands File (SLF) search through the Native American Heritage Commission. Prepared draft consultation letters and instructions and provided them to the City for use in consultation in accordance with SB 18 and AB 52. C*lient: City of Walnut, CA. (2 weeks)*

Associate Archaeologist: SL 42 46-Inch relocate and Replacement Project, Orange County, CA 2018. Co-authored a letter report summarizing the results of archaeological and Native American monitoring efforts associated with the relocation of pipeline prior to the larger San Diego Freeway (Interstate 405 [I-405] Improvement Project. *Client: The Southern California Gas Company, City of Seal Beach, CA. (2 weeks)*

Associate Archaeologist: Tentative Tract 5961 Voelker Subdivision, Ventura County, CA 2018. Performed a cultural resources records search, prepared draft consultation letters and instruction for meaningful consultation in accordance with SB 18 and AB 52 and provided them to the City of use in government to government consultation.

Associate Archaeologist: Moorpark Rail Depot, Ventura County, CA 2018. Performed a cultural resources records search of the project site and vicinity and initiated a Sacred Lands File (SLF) search through the Native American Heritage Commission. Prepared draft consultation letters and instructions and provided them to the City for use in consultation in accordance with AB 52. *Client: City of Moorpark, CA (1 month)*

Associate Archaeologist and Field Director: Perris Valley Pipeline Extension, Riverside County, CA 2018. Performed a cultural resources records search and pedestrian survey. *Client: Metropolitan Water District of Southern California, City of Perris, CA. (1 week)*

Associate Archaeologist and Field Director: Nuevo Road Bridge Crossing, Riverside County, CA 2018. Performed a cultural resources records search, Native American scoping, a pedestrian survey, recordation of historic resources, and co-authored a technical report summarizing the results and recommendations. *Client: City of Perris, CA. (3 months)*

Associate Archaeologist and Field Director: Alabassi Commercial Center, Riverside County, CA 2018. Performed archaeological and paleontological monitoring during ground disturbing activities associated with construction of a commercial center. *Client: Alabassi Construction, City of Perris, CA. (3 days)*

Associate Archaeologist and Field Director: Trumble Road Open Pit Restoration Project, Riverside County, CA 2018. Performed a cultural resources records search of the project site and conducted an archaeological walk through of the 9-acre project site. *Client: North Pacific Developments, Inc., City of Menifee, CA. (1 week)*

Associate Archaeologist and Field Director: Proposed Perris Mobile Home Park, Riverside County, CA 2018. Performed a cultural resources records search, initial Native American scoping, a pedestrian survey, and co-authored a technical report summarizing the results and recommendations. *Client: Maria Jimenez; City of Perris, CA. (1 month)*

Associate Archaeologist: Cabazon Solar Energy Center Project, unincorporated Riverside County, CA 2018. Performed a cultural resources records search and initiated a Sacred Lands File (SLF) search through the Native American Heritage Commission and summarized the results in a cultural resources constraints analysis. *Client: Cabazon Solar Energy Center, LLC, Cabazon, CA. (1 week*)

Associate Archaeologist and Field Director: Rice Construction Coachella Brands, Riverside County, CA 2018. Provided a proposal for scope of work associated with a cultural resources site assessment, conducted a pedestrian survey, and summarized the results and recommendations in a letter report. *Client: Rice Construction, Inc., City of Coachella, CA. (1 week)*

Associate Archaeologist and Field Director: New Non-Potable Water Connections, Riverside County, CA 2017-2018. Conducted a cultural resources records search, Native American consultation, a pedestrian survey, and co-authored a

technical report summarizing the results and recommendations. *Client: Coachella Valley Water District, City of Palm Desert, CA. (6 months)*

Associate Archaeologist: Palos Verdes Reservoir Upgrades Project, Los Angeles County, 2017. Co-authored a letter report summarizing the results and recommendations s of the cultural resources monitoring effort in a Negative Findings Memorandum for the Palos Verdes Reservoir Upgrades in the City of Rolling Hills Estates in Los Angeles County. *Client: Metropolitan Water District of Southern California. (1 week)*

Associate Archaeologist and Field Director: Coachella Brands Project, Riverside County, CA 2017. Performed a cultural resources records search, initial Native American scoping, a p pedestrian survey, and co-authored a technical report summarizing the results and recommendations. *Client: Coachella Brands Inc., City of Coachella, CA. (1 month)*

Associate Archaeologist and Field Director: Wyndham Hill Project, Riverside County, CA 2017. Performed a cultural resources records search, initial Native American scoping, a pedestrian survey, and co-authored a technical report summarizing the results and recommendations. *Client: Jim and Debbie Guthrie; City of Riverside, CA. (6 weeks)*

Associate Archaeologist and Field Director: Goddard School Project, San Bernardino County, CA 2017. Performed a cultural resources records search, initial Native American scoping, a pedestrian survey, and co-authored a technical report summarizing the results and recommendations. *Client: City of Chino Hills, CA. (1 month)*

Associate Archaeologist and Field Director: Sierra Altas Project KKG, Euclid and 8th San Bernardino County, CA 2017. Performed archaeological and paleontological monitoring and regular spot checks of ground disturbing activities associated with construction activities. *Client: City of Upland, CA. (3 months)*

Volunteer Archaeological Crew Member: The Agua Santa Project: Socio-Political Development on the California Channel Islands, Santa Cruz Island, Ventura County, CA, 2016. Participated in site survey and mapping using a Trimble Global Positioning System (GPS), performed archaeological excavations for the collection of contextual and chronological data suitable for AMS dating, processed column samples using flotation methods for the collection of small and fragile material, and maintained detailed field notes. Work conducted as part of the academic research directed by Dr. Amy Gusick, Director of the Applied Archaeology Graduate Program at California State University San Bernardino (CSUSB). Funded by the Department of Anthropology at CSUSB. *(1 week)*

Cultural Resources Intern: Pechanga Band of Luiseño Indians, Riverside County, CA, 2016: Reviewed reports for proposed projects; assisted ongoing research through academic literature review; sorted and identified artifacts for curation using *Past Perfect* electronic cataloging procedures (9 months).

Lead Archaeological Field Technician: Chuckwalla Guest Ranch Project, Riverside County, CA, 2016. Performed archaeological survey, assessment and recording of historical archaeological features associated with the area's use as the Desert Training Center during World War II. Client: Chuckwalla Raceway. (1 week)

Lead Archaeological and Paleontological Monitor: Perris Valley Line, Metrolink, Riverside County Transportation Commission, Riverside County, CA, 2013-2016. Conducted paleontological and archaeological monitoring for construction of four new stations, upgrading associated track and utility relocations for the 24-mile extension of the Metrolink 91 Line to extend the Metrolink connection from Riverside through Moreno Valley to Perris. *Client: Subcontractor to HDR Engineering. (12+ months)*

Lead Archaeological/ Paleontological Monitor: Sentinel Power Plant, Southern California Edison, Riverside County, CA, 2013. Performed archaeological and paleontological monitoring services during ground disturbing activities north of the City of Palm Springs. *Client: Southern California Edison. (2 weeks)*

Lead Archaeological Monitor: Devers-Mirage 115-KV System Split Project, Southern California Edison, Riverside County, CA, 2011. Performed cultural resources mitigation monitoring during ground disturbing activities for electrical systems upgrade in Cathedral City, Indian Wells, Palm Desert, Palm Springs, Rancho Mirage, Thousand Palms and unincorporated Riverside County. *Client: Southern California Edison. (1 week)*

Lead Archaeological and Paleontological Monitor: Fogarty Substation, Southern California Edison, Riverside County, CA, 2010-2011. Performed cultural paleontological resources mitigation monitoring during ground disturbing activities

in Lake Elsinore. Independently recovered fossils in the field and attended daily construction meetings. *Client Southern California Edison. (7 months)*

Lead Archaeological/Paleontological Monitor: Equinox DSP Rush Project, Southern California Edison, Riverside County, CA, 2011. Performed cultural resources mitigation monitoring during ground disturbing activities during ground disturbing activities associated with construction of a power pole line near Menifee. *Client: Southern California Edison. (3 weeks)*

Lead Archaeological/Paleontological Monitor: Doble 33-kV Transmission Line Emergency Repair, Southern California Edison, San Bernardino National Forest, CA, 2011. Independently performed emergency, on-call archaeological and paleontological monitoring of ground disturbing activities in the San Bernardino National Forest. *Client: Southern California Edison. (1 week)*

Archaeological/Paleontological Monitor: Daggett II, Southern California Edison, San Bernardino County, CA, 2011. Performed archaeological, and paleontological, monitoring during ground disturbing activities for the 225-acre Human External Cargo Helicopter Training Facilities Project in Daggett. *Client: Southern California Edison. (1 week)*

Lead Archaeological Field Technician: Leatherneck Substation Project, Southern California Edison, San Bernardino County, CA, 2012. Independently performed an intensive cultural resources survey of pulling stations near Twenty-Nine Palms. *Client: Southern California Edison. (1 week)*

Lead Archaeological Field Technician: Falcon Ridge Substation and Transmission Lines, Southern California Edison, San Bernardino County, CA, 2010. Performed archaeological survey, assessment and recording of historical archaeological features on 287 acres in Fontana and Rialto. *Client: Southern California Edison. (2 weeks)*

Lead Archaeological and Paleontological Monitor: Tehachapi Renewable Transmission Project, Segments 1- 3, Southern California Edison, Los Angeles and Kern Counties, CA, 2008-2009. Independently performed paleontological monitoring during ground disturbing activities and attended daily safety meetings. Performed supplemental surveys and site recordation. *Client: Southern California Edison. (10 months)*

Archaeological Crew Member: Playa Vista Archaeological and Historical Project, Los Angeles County, CA, (2008). Sorted and cataloged archaeological artifacts for curation and repatriation. *(3 months).*

Senior Archaeological Field Technician: San Bernardino National Forest (SBNF) near Big Bear, CA, San Bernardino County, CA, (2008). Conducted pedestrian survey of controlled burn areas; identified and recorded historic and prehistoric cultural resources using standardized forms; photographed cultural resources and maintained detailed field notes. *Client: San Bernardino National Forest*. *(2 weeks)*

Senior Field Technician: Genesis Solar Project, near Ford Dry Lake, CA, Riverside County, CA, (2007). Conducted intensive pedestrian survey; identified and recorded cultural resources using standardized forms. *Client: Genesis Solar.* (*2 weeks)*

Undergraduate Research Assistant for Dr. Catherine Fowler: Department of Anthropology, University of Nevada Reno, NV, (2003-2004). Compiled an ethno-botanical database using university and online resources; facilitated database sharing between university professors; digitized hand written field notes. *Client: University of Nevada Reno (8 months)*

PUBLICATIONS/PRESENTATIONS

- Presenter at the Society for California Archaeology 2017 Annual Meeting; Symposium 9; *Environmental Diversity and Resource Use in the Salton Basin*
- Porras, Lindsay A.,

  2017 Environmental Diversity and Resource Use in the Salton Basin Of The Colorado Desert" Electronic Theses, Projects, and Dissertations. 526.
  http://scholarworks.lib.csusb.edu/etd/526

Appendix B

Record Search Results (Confidential)

rincon

Valley View

Record Search Resources Proximity Sheet

Project Name: CVWD E CV, 18-06290

Resource Number	Within Project Site	Adjacent to Project Site	Outside of Project Site
33-14812		✓	
14960			✓
14959			✓
14961			✓
19860		✓	
5641			✓
5699			✓
5642			✓
5640			✓
5646			✓
~~[illegible]~~			✓
5638			✓
5643			✓
5637			✓
5639			✓
11223 — 11223			
17259			✓

Pg. 1 of 2

rincon

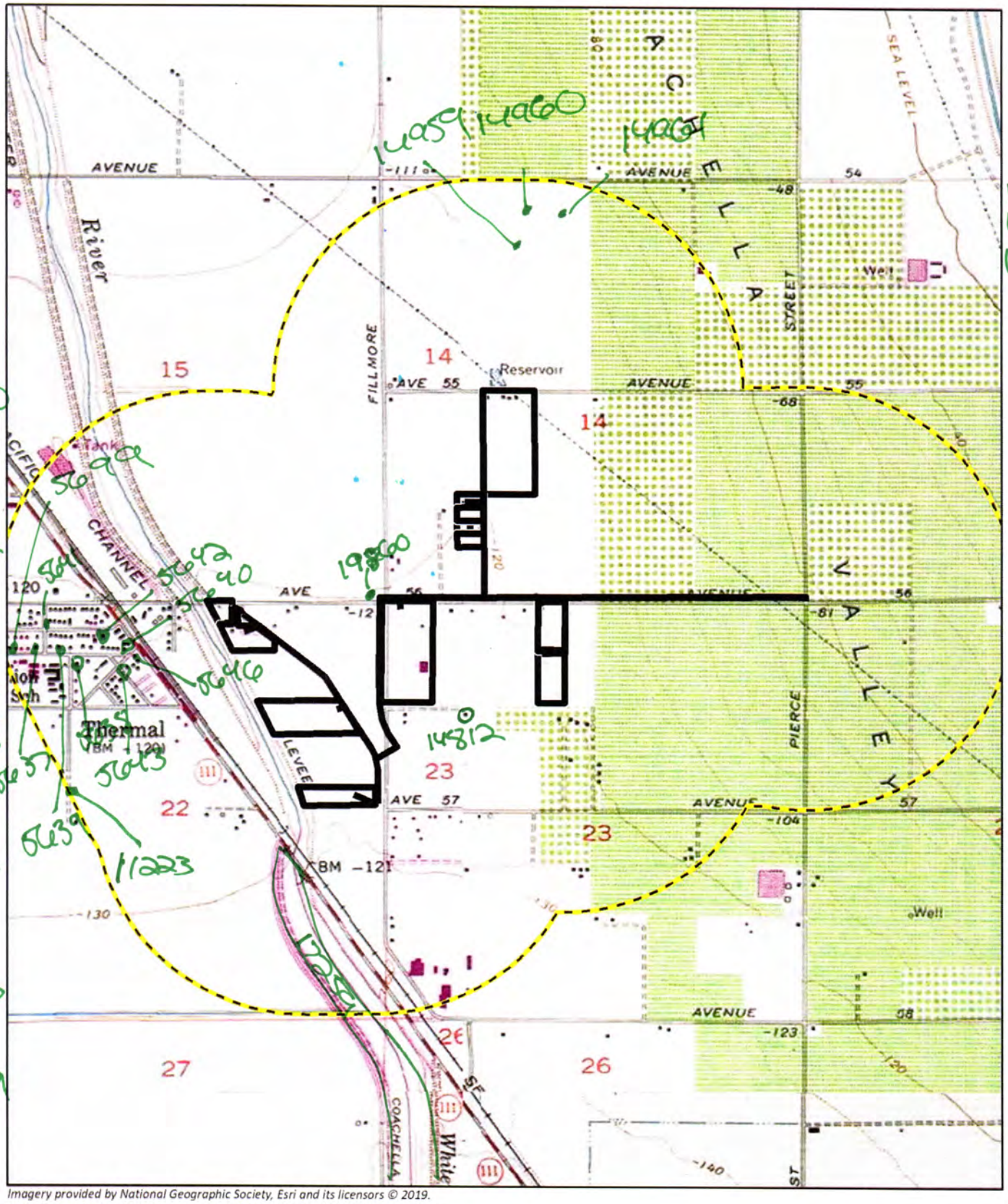
Valley View

Record Search Resources Proximity Sheet

Project Name: CVWD, FCV 18-060790

Resource Number	Within Project Site	Adjacent to Project Site	Outside of Project Site
9498			✓
247736			✓
20926 10852			✓
20927 10853			✓
20928 10854			✓
20921 10846			✓
20750 10672			✓
017259 10847			✓
24737		✓	
24735	✓		
24738	✓		
207641 106986		✓	

pg. 2 of 2



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Resources
Pg 1 of 2

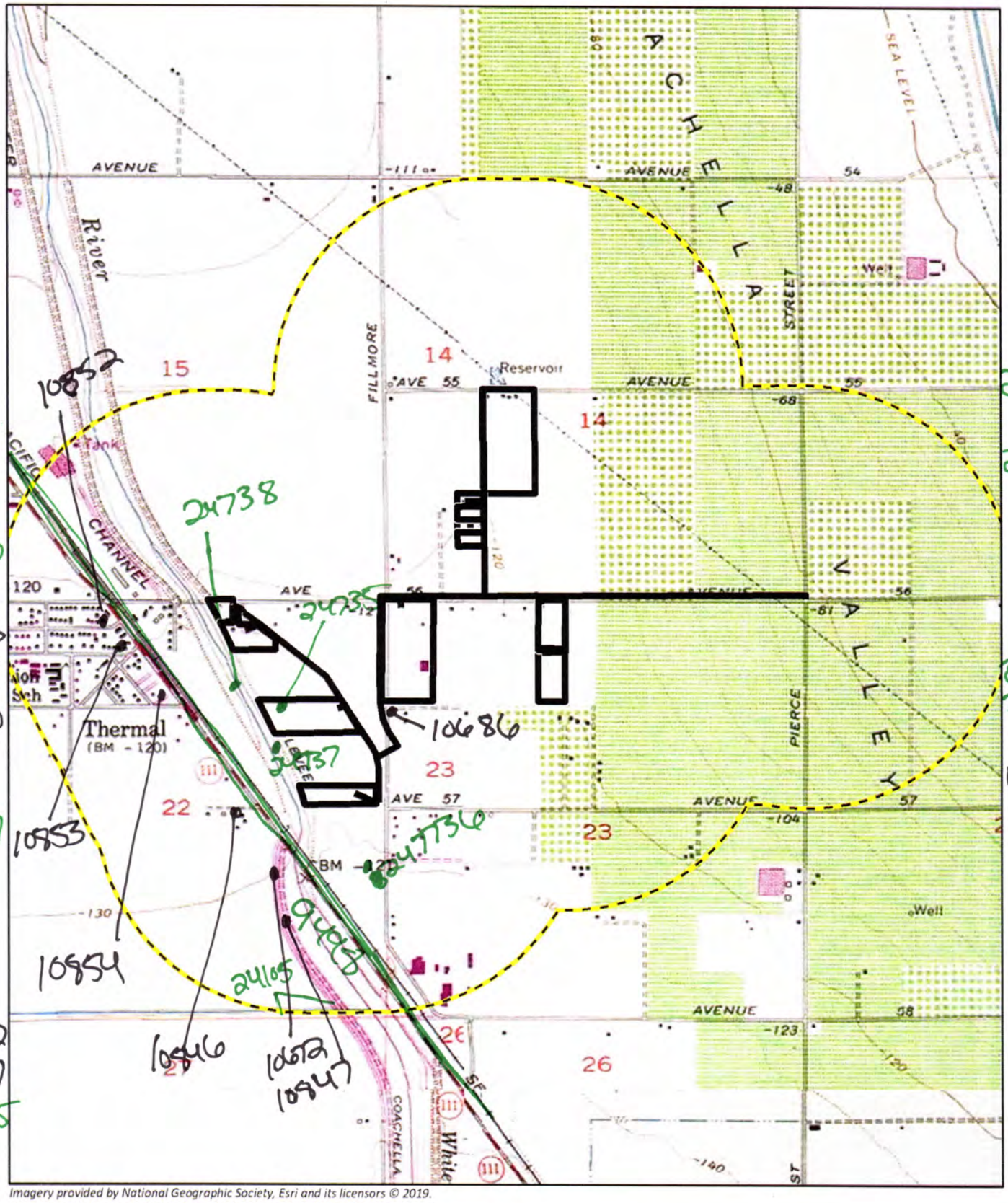
Area of Potential Effects

Half-Mile Buffer

N

0 1,000 2,000

Feet



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Resources

Area of Potential Effects

Half-Mile Buffer

N

0 1,000 2,000

Feet

pg 2 of 2

Highlighted Resources are Located within the Valley View SWS Record Search Area

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-33-001292	CA-RIV-001292	National Register - Martinez Historical District; National Register - Martinez Indian Agency	Site	Prehistoric, Historic	AH04; AP15	1972 (Thomas F. King, Riverside County Historical Commision); 1972 (T. F. King); 1973 (John H. Michael, History Preservation Section, California Department of Parks and Recreation); 1999 (Andrew R. Pigniolo, Tierra Environmetal Services)	RI-00661, RI-01373, RI-01374, RI-05064, RI-08325, RI-09064
P-33-003438	CA-RIV-003438	Other - SRI-14188; Other - Mecca Station; Other - MCI Site #1		Historic		1988 (Apple, R.M., T. Wahoff, K. Norwood, Dames & Moore); 1990 (Van Horn, D., Archaeological Associates Ltd.); 1999 (Ashkar, S., M. Avina, J. Doty, E. Prendergast); 2008 (Bouscaren, C., J. Coats, Applied EarthWorks, Inc.); 2012 (Scott Kremkau, SRI)	RI-02350, RI-03245, RI-04430, RI-07586, RI-08434
P-33-005636			Site	Historic		1982 (P. Young, Riv. Co. Historical Comm.)	
P-33-005637		Other - "Bud" Martin House	Building	Historic		1983 (M. Wright, Riv. Co. Historical Comm.)	
P-33-005638		Other - Thermal Hotel; Other - Coachella Valley High School	Building	Historic		1983 (G. Harmon, Riv. Co. Historical Comm.)	
P-33-005639		Other - John Kelly House	Building	Historic		1983 (G. Harmon, Riv. Co. Historical Comm.)	
P-33-005640			Building	Historic		1983 (J. Warner, Riv. Co. Historical Comm.)	
P-33-005641		Other - Dick Wood Home	Building	Historic		1983 (G. Harmer, Riv. Co. Historical Comm.)	
P-33-005642			Building	Historic		1983 (M. Wright, Riv. Co. Historical Comm.)	
P-33-005643			Building	Historic		1983 (G. Harmon, Riv. Co. Historical Comm.)	
P-33-005646		Other - Triple AAA Water Company	Building	Historic		1983 (M. Wright, Riv. Co. Historical Comm.)	

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-33-005699		Other - Date Industry Birthplace; PHI - Riv-043		Historic		1973 (Point of Historical Interest Form, Sacramento, CA); 1983 (Cecelia Foulkes, Riverside County Historical Commission, Riverside, CA); 2009 (Joan George, Applied Earthworks, Hemet, CA)	RI-08194
P-33-009462	CA-RIV-006377	Other - TM-S-1	Site	Prehistoric, Historic	AH04; AP15	1999 (Andrew R. Pigniolo, Tierra Environmental Services)	RI-01374
P-33-009498	CA-RIV-006381H	Other - Union Pacific Railroad, Southern Pacific Railroad; Resource Name - C-Los Angeles-A-1	Structure	Historic	HP39	1999 (Ashkar, S., Jones & Stokes); 2005 (Taniguchi, Christeen, Galvin & Associates); 2009 (Wilson, S. and K. Chimel, ICF Jones & Stokes); 2012 (Scott Kremkau, SRI)	RI-04427, RI-04430, RI-04771, RI-05452, RI-06258, RI-06259, RI-06583, RI-06615, RI-06707, RI-07288, RI-07586, RI-07770, RI-07802, RI-07970, RI-08012, RI-08374, RI-08491, RI-08538, RI-08581, RI-08844, RI-08861, RI-09151, RI-09167, RI-09734, RI-10435
P-33-011223		Other - Berger House	Building	Historic	HP02	2002 (C. Di Iorie, J. Brok, Achaeological Advisory Group)	RI-04553
P-33-014739		Resource Name - Kohl Ranch 082705-01	Object	Historic	AH04	2005 (O'Neil, Stephen and Jason Miller, SWCA Environmental Consultants)	RI-05064
P-33-014812				Historic		2005 (White, Laura S., Archaeological Associates)	
P-33-014959			Other	Prehistoric			RI-06537, RI-07067
P-33-014960			Other	Prehistoric			RI-06537, RI-07067
P-33-014961			Other	Prehistoric			RI-06537, RI-07067

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-33-017259	CA-RIV-010847	Voided - 33-017913; Other - Coachella Valley Stormwater Channel; Other - CRM TECH 2265-1; Other - AE-1376T25-1H; Other - SRI-14202; Other - AE-1376T27-1H; Other - AE-3208-1H; Other - Coachella Valley Stormwater Channel (Map Reference No.3);	Structure	Historic	AH06; AH07; HP06; HP11; HP11; HP20; HP37	2008 (D. Ballester, CRM TECH); 2009 (D. McDougall, Applied Earthworks); 2012 (P. Stanton, Statistical Research, Inc); 2012 (C. Inoway, Applied Earthworks); 2016 (Josh Smallwood, Applied EarthWorks, Inc.)	RI-07929, RI-08324, RI-08721, RI-09850, RI-10476
P-33-017371	CA-RIV-009027	Other - Stake 8 Site	Site	Prehistoric	AP02; AP03	2008 (Brock, J., ARCHAEOGROUP); 2010 (M. Mirro and John J. Eddy, Applied EarthWorks, Inc.)	RI-07950, RI-08325, RI-08819
P-33-017372		Other - 081110 Isolate 1	Other	Prehistoric	AP03	2008 (Brock, J., ARCHAEOGROUP)	RI-07950, RI-08325
P-33-017761		Other - AE-MVE-ISO-1	Other	Prehistoric	AP16	2009 (D. McDougall and B. Gothar, Applied EarthWorks, Inc.)	RI-08325
P-33-019860		Other - AE-1376-T30-2H		Historic		2011 (B. Lichtenstein, Applied Earthworks)	
P-33-020028	CA-RIV-010172	Other - AE-1376T35-1H	Structure	Historic	HP37	2011 (J. Eddy, Applied Earthworks, Inc.)	RI-08966
P-33-020750	CA-RIV-010672	Other - SRI-12519	Structure	Historic	HP37	2012 (Patrick Stanton, Statistical Research, Inc.); 2014 (Josh Smallwood, Applied Earth Works, Inc.)	
P-33-020764	CA-RIV-010686	Other - SRI-5801		Historic		2012 (Patrick Stanton, Statistical Research, Inc.)	
P-33-020837	CA-RIV-010761	Other - SRI-5713	Site	Historic	AH07; HP37	2012 (Patrick Stanton, Statistical Research, Inc.)	
P-33-020839	CA-RIV-010763	Other - SRI-12483	Site	Historic	AH07; HP37	2012 (Patrick Stanton, Statistical Research, Inc.)	
P-33-020844	CA-RIV-010768	Other - SRI-14214		Historic		2012 (Patrick Stanton, Statistical Research, Inc.)	RI-09855
P-33-020845	CA-RIV-010769	Other - SRI-2939		Historic		2012 (Patrick Stanton, Statistical Research, Inc.)	
P-33-020919	CA-RIV-010844	Other - SRI-14191	Site	Historic	AH16; HP39	2012 (Patrick Stanton, Statistical Research, Inc.)	

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-33-020920	CA-RIV-010845	Other - SRI-14192	Site	Historic	AH07; HP37	2012 (Patrick Stanton, Statistical Research, Inc.)	
P-33-020921	CA-RIV-010846	Other - SRI-14198		Historic		2012 (Patrick Stanton, Statistical Research, Inc.)	
P-33-020926	CA-RIV-010852	Other - SRI-16149		Historic		2012 (Patrick Stanton, Statistical Research, Inc.)	
P-33-020927	CA-RIV-010853	Other - SRI-16155		Historic		2012 (Patrick Stanton, Statistical Research, Inc.)	
P-33-020928	CA-RIV-010854	Other - SRI-16157		Historic		2012 (Patrick Stanton, Statistical Research, Inc.)	
P-33-024735		Other - CRM Tech 2965-9 Iso	Other	Historic	AH16	(12/1/2015, John Goodman II, Daniel Ballester)	
P-33-024736		Other - CRM Tech 2965-8 Iso	Other	Historic	AH16	2015 (John Goodman II, Daniel Ballester, CRM Tech)	
P-33-024737		Other - CRM Tech 2965-7 Iso	Other	Prehistoric	AP16	2015 (John Goodman II, Daniel Ballester, CRM Tech)	
P-33-024738		Other - CRM Tech 2965-6 Iso	Other	Historic	AH16	2015 (John Goodman II, Daniel Ballester, CRM Tech)	
P-33-026685	CA-RIV-012576	Other - Edna Cast Date Farm Complex;	Site	Historic	AH02; AH03	2016 (Amy Dunay, Dokken Engineering)	

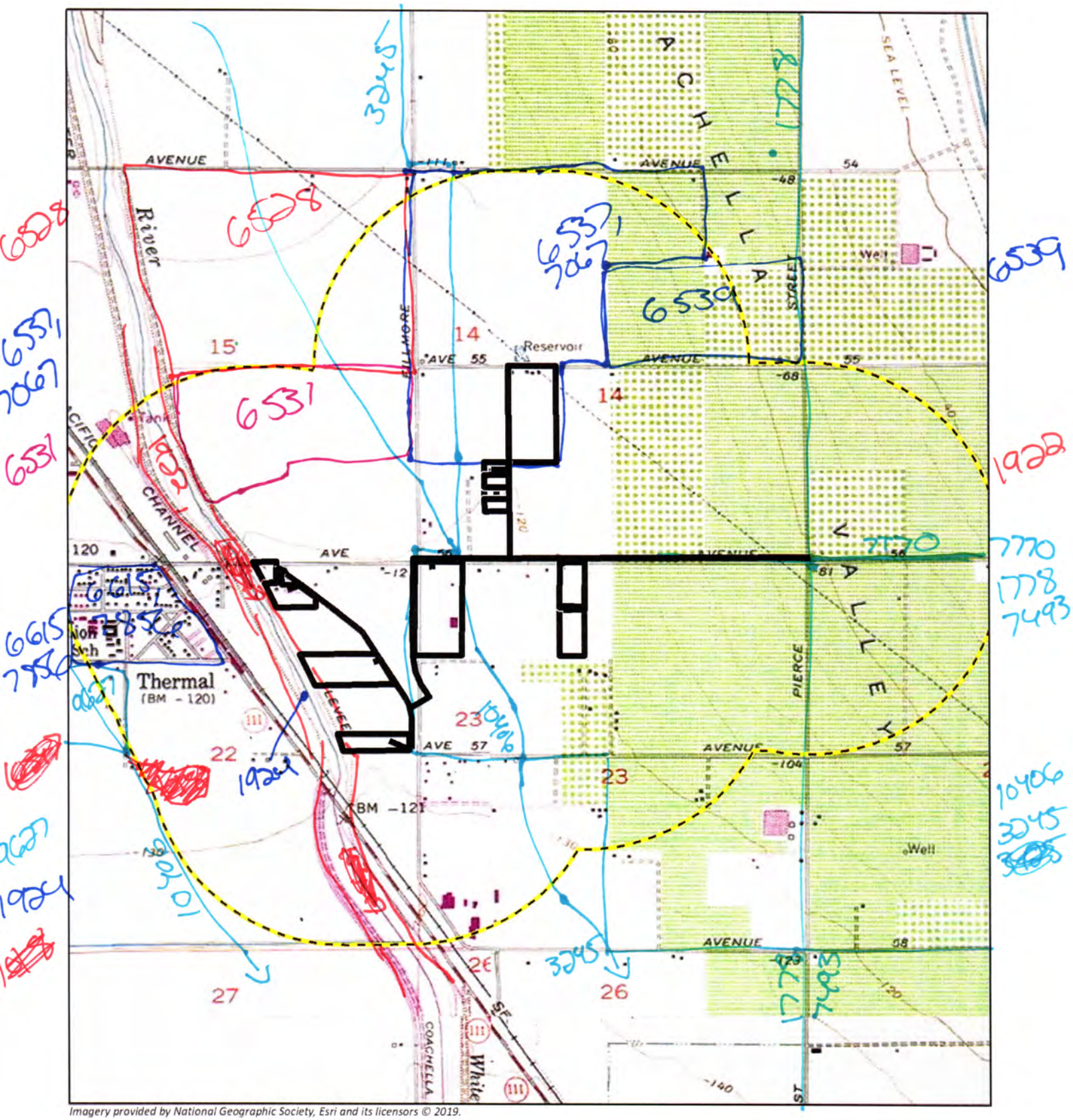
rincon

Valley View

Record Search Report Proximity Sheet

Project Name: CVWD F CV , 18-06790

Report Number	Within Project Site	Adjacent to Project Site	Outside of Project Site
6539			✓
6537	✓		
7067	✓		
7770	✓		
1778		✓	
7493		✓	
10406	✓		
3245	✓		
~~10347~~	✓		
6528			✓
6531			✓
1922		✓	
6615			✓
7856			✓
9627			✓
1924		✓	
~~6158~~			✓



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Area of Potential Effects

Half-Mile Buffer

N

0 1,000 2,000

Feet

Reports

(9) 1 of 1

Highlighted Reports Area Located within Valley View SWS Record Search Area

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-00584	NADB-R - 1080625; Submitter - 841; Voided - MF-0509	1986	Daniel F. McCarthy	Environmental Impact Evaluation: An Archaeological Assessment of Tentative Parcel 21234, South of Indio in Riverside County, California	Archaeological Research Unit, U.C. Riverside	
RI-00652	NADB-R - 1080703; Other - DACW09-79-M-1034; Submitter - UCRARU #413; Voided - MF-0578	1979	LANDO, RICHARD	Cultural Resources Reconnaissance (Stage II) of Flood Control Alternatives for the Whitewater River Basin, Riverside County, California	ARCHAEOLOGICAL RESEARCH UNIT, U.C. RIVERSIDE	33-009599
RI-00661	NADB-R - 1080713; Voided - MF-0588	1979	L. Kyle Napton and Elizabeth Anne Greathouse	Archaeological Reconnaissance on the Torres-Martinez Indian Reservation, Riverside County, California	California State College, Stanislaus	33-001292
RI-01373	NADB-R - 1081604; Other - PX 8100-1-0251; Voided - MF-1427	1981	AMERICAN PACIFIC ENVIRONMENTAL CONSULTANTS	A CULTURAL RESOURCE SURVEY AND EVALUATION OF THE TORRES-MARTINEZ INDIAN RESERVATION, RIVERSIDE COUNTY, CALIFORNIA	AUTHOR(S)	33-001292, 33-002250, 33-002251
RI-01778	NADB-R - 1084541; Voided - MF-1920	1993	NAPTON, L. KYLE and E.A. GREATHOUSE	CULTURAL RESOURCES INVESTIGATIONS OF THE PROPOSED INDIO TO SALTON LIGHTGUIDE SYSTEM PROJECT, AT & T FIBER OPTIC ROUTE, 46.2 MILES IN RIVERSIDE AND IMPERIAL COUNTIES, CALIFORNIA	CSU STANISLAUS INSTITUTE FOR ARCHAEOLOGICAL RESEARCH	33-000159, 33-005154
RI-01922	NADB-R - 1082315; Voided - MF-2096	1985	DOMINICI, DEBRA	REPORT OF AN ARCHAEOLOGICAL SURVEY FOR THE PROPOSED 86 EXPRESSWAY IN RIVERSIDE COUNTY	CALTRANS DISTRICT 11, SAN DIEGO, CA	33-002978, 33-002979, 33-002980, 33-002981, 33-002982, 33-002983, 33-002984, 33-002985, 33-002986, 33-002987, 33-012724, 33-012725, 33-012726, 33-012727
RI-01923	NADB-R - 1083227; Voided - MF-2096	1989	ROSEN, MARTIN D.	NEGATIVE ARCHAEOLOGICAL SURVEY REPORT-SECOND ADDENDUM.	CALTRANS DISTRICT 11, SAN DIEGO	
RI-01924	NADB-R - 1084159; Voided - MF-2096	1992	DOMINICI, DEBRA A.	NEGATIVE ARCHAEOLOGICAL SURVEY REPORT - SIXTH ADDENDUM	CALTRANS DISTRICT 11, SAN DIEGO	
RI-01936	NADB-R - 1082400; Submitter - 805; Voided - MF-2103	1985	PARR, ROBERT E.	AN ARCHAEOLOGICAL ASSESSMENT OF A PROPOSED WASTEWATER TREATMENT PLANT SITE AND PIPELINE ALIGNMENT, LA QUINTA AREA OF RIVERSIDE COUNTY, CALIFORNIA	ARCHAEOLOGICAL RESEARCH UNIT, U.C. RIVERSIDE	33-001180
RI-02846	NADB-R - 1083449; Voided - MF-3043	1990	WHITE, ROBERT S.	AN ARCHAEOLOGICAL ASSESSMENT OF A 340+ ACRE PARCEL AS SHOWN ON TPM 24750 LOCATED NEAR MECCA, RIVERSIDE COUNTY, CALIFORNIA	ARCHAEOLOGICAL ASSOCIATES, LTD.	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-03245	NADB-R - 1083836; Voided - MF-3477	1990	David M. Van Horn, Laurie S. White, and Robert S. White	Cultural Resources Sensitivity Overview for the Coachella Valley Enterprise Zone	Achaeological Associates, Ltd.	33-000135, 33-000148, 33-000676, 33-000795, 33-001634, 33-001637, 33-002982, 33-002983, 33-002984, 33-002985, 33-002986, 33-002987, 33-003438
RI-03415	NADB-R - 1084078; Voided - MF-3673	1991	ROSEN, MARTIN	NEGATIVE ARCHAEOLOGICAL SURVEY REPORT: FOURTH ADDENDUM, 11-RIV-86, PM R2.9-R22.0, 11208, 179800; VICINITY OF AVENUE 81 TO VICINITY OF DILLON ROAD	CALTRANS DISTRICT 11, RIVERSIDE	
RI-03713	NADB-R - 1084508; Voided - MF-4030	1993	BROCK, JAMES	A CULTURAL RESOURCES ASSESSMENT OF LOTS 7 THROUGH 12, BLOCK 25 OF THE AMENDED MAP OF THE MECCA TOWNSITE, COUNTY OF RIVERSIDE, CALIFORNIA	ARCHAEOLOGICAL ADVISORY GROUP	
RI-04310	NADB-R - 1085577; Voided - MF-4793	2000	WHITE, ROBERT S. and LAURIE S. WHITE	A CULTURAL RESOURCES ASSESSMENT OF THE PROPOSED ARCO TRAVEL CENTER PROJECT (CUP 3309), 37-ACRES LOCATED AT THE NORTHEAST CORNER OF 66TH AVENUE AND HIGHWAY 86 SOUTH, NEAR MECCA, RIVERSIDE COUNTY.	ARCHAEOLOGICAL ASSOCIATES	
RI-05115	NADB-R - 1086477; Submitter - 9989-111	2005	BROWN, JOAN C. and STEPHEN O' NEAL	CULTURAL RESOURCES RECONNAISSANCE OF A 440 ACRE PARCEL FOR THE KOHL RANCH PHASE I PROJECT, RIVERSIDE COUNTY, CALIFORNIA	SWCA ENVIRONMENTAL CONSULTANTS	
RI-05154	NADB-R - 1086517	2004	HUDLOW, SCOTT	A PHASE I CULTURAL RESOURCE SURVEY FOR GLOBAL PREMIERE, MECCA, RIVERSIDE COUNTY, CALIFORNIA	HUDLOW CULTURAL RESOURCE ASSOCIATES	
RI-06229	NADB-R - 1087592; Submitter - CRM TECH Contract #1230	2004	Michael Hogan, Bai "Tom" Tang, Mariam Dahdul, and Daniel Ballester	Historical/Archaeological Resources Survey Report: APNs 749-090-006 and -007, Near the Community of Mecca, Riverside County, California	CRM TECH	
RI-06528	NADB-R - 1087895; Submitter - CRM TECH Contract #1764A	2006	TANG, BAI, MICHAEL HOGAN, DEIRDRE ENCARNACION, and DANIEL BALLESTER	HISTORICAL/AARCHAEOLOGICAL RESOURCES SURVEY REPORT, MARAVILLA SPECIFIC PLAN EIR, IN AND NEAR THE CITY OF COACHELLA, RIVERSIDE COUNTY, CALIFORNIA	CRM TECH. Riverside, CA	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-06531	NADB-R - 1087898; Submitter - CRM TECH Contract #1764A	2006	TANG, BAI, MICHAEL HOGAN, DEIRDRE ENCARNACION, and DANIEL BALLESTER	HISTORICAL/ARCHAEOLOGICAL RESOURCES SURVEY REPORT, MARAVILLA SPECIFIC PLAN EIR, IN AND NEAR THE CITY OF COACHELLA, RIVERSIDE COUNTY , CALIFORNIA	CRM TECH, Riverside, CA	
RI-06537	NADB-R - 1087904; Submitter - CRM TECH Contract #1807A	2006	Bai Tang, Michael, Zachary Hruby, and Daniel Ballester	Historical/Archaeological Resources Survey Report: Rancho Coachella Vineyard Specific Plan, In and near the City of Coachella, Riverside County, California	CRM TECH. Riverside, CA	33-014959, 33-014960, 33-014961
RI-06539	NADB-R - 1087906; Submitter - JOB # 1742A	2005	Bai Tang, Michael Hogan, Deirdre Encarnacion, and Mariam Dahdul	Historical/Archaeological Resources Survey Report: Assessor's Parcel Nos. 763-360-010 and -011, Near the City of Coachella, Riverside County, California	CRM TECH	
RI-06551	NADB-R - 1087918; Submitter - JOB #1803A	2006	Bai Tang, Michael Hogan, Thomas Shackford, and Daniel Ballester	Historical/Archaeological Resources Survey Report: The Vineyard at Oasis Specific Plan, Tentative Tract No. 33956, Near the Community of Mecca, Riverside County, California	CRM TECH	
RI-06553	NADB-R - 1087920; Submitter - CONTRACT #1926A	2006	TANG, BAI, MICHAEL HOGAN, CLARENCE BODMER, THOMAS MELZER, and LAURA H. SHAKER	HISTORICAL/ARCHAEOLOGICAL RESOURCES SURVEY REPORT, BERGER 330 SPECIFIC PLAN, NEAR THE COMMUNITY OF MECCA, RIVERSIDE COUNTY, CALIFORNIA	CRM TECH	
RI-06615	NADB-R - 1087982; Submitter - CRM TECH CONTRACT #1880A	2006	TANG, BAI "TOM", MICHAEL HOGAN, DEIRDRE ENCARNACION, and DANIEL BALLESTER	HISTORICAL/ARCHAEOLOGICAL RESOURCES SURVEY REPORT: THERMAL STREET, WATER, AND SEWER IMPROVEMENTS, NEAR THE COMMUNITY OF THERMAL, RIVERSIDE COUNTY, CALIFORNIA	CRM TECH	33-009498
RI-07067	Submitter - CRM TECH Contract #20347	2006	Hogan, Michael	Letter Report: Supplementary Archaeological Survey and Subsurface Testing, Rancho Coachella Vineyard Specific Plan, City of Coachella, Riverside County, California.	CRM TECH, Riverside, CA	33-014959, 33-014960, 33-014961
RI-07115	Submitter - CRM Contract #1926/2023	2007	Tang, B. Tom	Letter Report: Addendum to Historical/Archaeological/Paleontological Resources Survey: Berger 330 Specific Plan; Mecca Area, Riverside County, California	CRM TECH	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-07319		2006	Bonner, Wayne and Aislin-Kay, Marnie	Cultural Resource Records Search and Site Visit Results for T-Mobile Telecommunications Facility Candidate IE24088A (Mecca), 90-480 66th Avenue, Mecca, Riverside County, California	Michael Brandamn Associates	
RI-07493		2007	Denniston, Elizabeth L.	Phase I Archaeological Assessment of Approximately Two Miles for the Pierce Street Transmission Water Main near the City of Coachella, Unincorporated Riverside County, California	Applied EarthWorks, Inc.	
RI-07586		2008	Denniston, Elizabeth L., Vanessa Mirro, and David D. Earle	Phase I Cultural Resources Assessment of Approximately 4 miles for the Mecca Sewer Force Main Project Near the Community of Mecca, Unincorporated Riverside County, California	Applied EarthWorks, Inc. and Earle and Associates	33-003438, 33-009498
RI-07770		2007	Formica, Tracy H.	CLASS III CULTURAL RESOURCES SURVEY OF THE AIRPORT BOULEVARD WATER TRANSMISSION PIPELINE PROJECT CORRIDOR FOR THE COACHELLA VALLEY WATER DISTRICT, THERMAL, RIVERSIDE COUNTY, CALIFORNIA. (APRA PERMIT NO. LC-CA-07-11P)	Applied EarthWorks, Inc., Hemet, CA	33-000148, 33-005705, 33-009498
RI-07853	Submitter - CRM TECH Contract #1880/2447	2008	Tang, B. Tom	Letter Report: Addendum to Historical/Archaeological/Paleontological Resources Survey Report Thermal Street, Water, and Sewer Improvements In and near the Community of Thermal, Riverside County, California. CRM TECH Contract #1880/2447	CRM TECH, Colton, CA	
RI-07856	Agency Nbr - JOTR 2007 I/Clearance No. 001-2008-JOTR	2007	Robinson, Lynn	Archeological Clearance Survey Form (Close Select Trails at Hall of Horrors)	Joshua Tree National Park	33-000355, 33-000960, 33-001937
RI-07930	Submitter - CRM TECH Contract No. 2246A	2008	CRM TECH	Phase I Historical/Archeological Assessment: Mecca Master Plan (SP377), near the Community of Mecca, Riverside County, California	CRM TECH	33-017254, 33-017255, 33-017256
RI-07950	Submitter - ARCHAEOGROUP Investigation NO: 080405 and 081110	2008	Brock, James	Phase I and Phase II Cultural Resource Assessment for the Off-Site Sewer Line, Mountain View Estates Mobile Home Project, Oasis Area of Unincorporated Riverside County, California	ARCHAEOGROUP	33-017370, 33-017371, 33-017372

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-08201		2009	Diedre Encarnacion, Daniel Ballester, and Laura H. Shaker	Identification and Evaluation of Historical Properties: Plaza La Esperanza Project	CRM TECH, Colton, CA	
RI-08245	Submitter - CRM TECH Contract No. 2362A	2009	Terri Jacquemain, Daniel Ballester, and Larua Hensley Shaker	Phase I Archaeological Assessment: Thermal Service Station LP, Tentative Parcel Map No. 36204, Assessor's Parcel No. 727-100-024/ Case No. CUP03623 Near the Community of Mecca Riverside County, California	CRM TECH, Colton, CA	
RI-08325		2009	Joan George, Vanessa Mirro, and David Earle	Phase I Cultural Resources Assessment for the Mountain View Estates Mobile Home Park Domestic Water and Sewer Project, Unincorporated Riverside County and Torres Martinez Indian Reservation, California.	Applied EarthWorks, Inc. and Earle and Associates	33-001292, 33-017370, 33-017371, 33-017372, 33-017760, 33-017761, 33-017762
RI-08360		2009	Bai "Tom" Tang, Deidre Encarnacion, Daniel Ballester, and Laura H. Shaker	Identification and Evaluation of Historic Properties: Agua Azul Project, Assessor's Parcel No. 749-320-002, Mecca Area, Riverside County, California.	CRM TECH	
RI-08386		2010	Joan George and Vanessa Mirro	Phase I Cultural Resources Assessment for the Lower Valley Irrigation System Expansion Project Near Mecca, Riverside County, California.	Applied EarthWorks, Inc.	33-005707
RI-08434		2010	Josh Smallwood	Letter Report: Cultural Resources Monitoring at Site CA-RIV-3438H (Historical Walters/Mecca Railroad Station) for Construction of the Mecca Sewer Force Main Project near Mecca, Riverside County, California.	Applied EarthWorks, Inc.	33-003438
RI-08494	Other - Cultural Resources Fieldwork Authorization No. 66.24-10-33, Permit CA-08-23; Other - Cultural Resources Fieldwork Authorization No. 66.24-10-33, Permit CA-08-23	2010	Michael Mirro	Letter Report: Cultural resources Survey of seven shot points for the Salton Seismic Imaging Project (SSIP) on Torres Martinez and BLM land.	Applied EarthWorks	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-08497	BLM - CA-670-09-098, 66.24-10-1, and 680-10-10; Other - Cultural Resources Use Fieldwork Authorization No's: CA-670-09-098, 66.24-10-1, and 680-10-10	2010	Michaeol Mirro, Melinda Horne, Dennis P. McDougall, and Joan George	Archaeological Survey Report for the Salton Seismic Imaging Project, Imperial, Riverside, San Bernardino, and San Diego Counties, California	Applied EarthWorks	33-017923
RI-08819		2010	John J. Eddy, Michael Mirro, and David Earle	Geophysical Survey and Phase II Testing and Evaluation of Feature 1 (CA-RIV-9027; 33-017371) within in the Martinez Historical District (NRD 1292): Mountain view Estates Mobile Home Park Domestic Water and Sewer Project	Applied EarthWorks, Inc.; Earle and Associates	33-017371
RI-09111		2014	Bai "Tom" Tang, Deirdre Encarnacion, Harry M. Quinn, and Daniel Ballester	Identification and Evaluation of Historic Properties: San Antonio del Desierto Disadvantaged Communities Sewer Extension, near the Community of Mecca, Riverside County, California	CRM TECH	
RI-09137		2014	Frances Segovia	Addendum to Cultural Resources Survey Results for the Moblie Home Park Paving Project in the Coachella Vallley in Unincorporated Areas of Riverside County: Project Location #1 (LSA Project No. RCT1306A)	LSA Associates	
RI-09139		2014	Frances Segovia	Cultural Resource Suevey Results for the Mobile Home Parks Paving Project in the Coachella Valley in Unincorporated Areas of Riverside County, California (LSA Project No. RCT1306)	LSA Associates Inc	33-023894, 33-023896
RI-09627	Other - Cogstone Project Number: 2426	2013	Sherri Gust and Molly Valasik	Coachella Valley Unified School District Community Education Support Complex Cultural Resources Assessment, Thermal Area of Riverside County, California	Cogstone	
RI-09766		2015	Amy Dunay	Supplemental Historic Property Survey Report for the Avenue 66 Grade Separation Project	Dokken Engineering	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-09992		2014	Vanessa Mirro and Dennis McDougall	Cultural Resources Monitoring for the Mountain View Estates Mobile Home Park Domestic Water and Sewer Project, Unincorporated Riverside County and Torees Martinez Desert Cahuilla Indian Reservation, California	Applied EarthWorks	33-023959, 33-023960
RI-10374	Other - Stormwater Channel Project	2013	Joan George and Venessa Mirro	Phase 1 Cultural Resources Assessment for the Coachella Valley Water District's Whitewater River- Coachella Valley Stormwater Channel Project, Riverside County, California	Applied EarthWorks, Inc.	
RI-10406		2012	Michael Mirro	Archaeological Sensitivity Model for the Whitewater River Stormwater Channel, Riverside County, California	Applied EarthWorks, Inc.	

Appendix C

Native American Consultation

Native American Contact Table
CVWD ECVWSP Project, Valley View Mobile Home Park, 18-06790, Thermal, Riverside County, California

Native American Contact	Tribal Affiliation	Mailing Address	Phone Number	Date and Method of Initial Contact	Date and Method of Follow Up Contact	Results
Jeff Grubbe, Chairperson	Agua Caliente Band of Cahuilla Indians (ACBCI)	5401 Dinah Shore Drive Palm Springs, CA 92264	760-699-6800	1/22/2019; letter	N/A	1/30/2019 Rincon received a letter from Lacy Padilla, Archaeological Technician for the ACBCI Tribal Historic Preservation Office (THPO), stating the project is not located in the boundaries of the ACBCI Reservation but is in the Tribe's Traditional Use Area. ACBCI THPO defers to the Cabazon Band of Mission Indians, the Augustine Band of Cahuilla Indians, and the Torres Martinez, and this letter shall conclude ACBCI's consultation efforts.
Patricia Garcia-Plotkin, Director	Agua Caliente Band of Cahuilla Indians	5401 Dinah Shore Drive Palm Springs, CA, 92264	760-699-6907	1/22/2019; letter	N/A	1/30/2019 Rincon received a letter from Lacy Padilla, Archaeological Technician for the ACBCI Tribal Historic Preservation Office (THPO), stating the project is not located in the boundaries of the ACBCI Reservation but is in the Tribe's Traditional Use Area. ACBCI THPO defers to the Cabazon Band of Mission Indians, the Augustine Band of Cahuilla Indians, and the Torres Martinez, and this letter shall conclude ACBCI's consultation efforts.
Amanda Vance, Chairperson	Augustine Band of Cahuilla Indians	P.O. Box 846 Coachella, Ca 92236	760-398-4722	1/22/2019; letter	2/20/2019; phone	2/20/2019 Ms. Vance responded stating the Tribe did not have any specific information on cultural resources in the project area and encouraged Rincon contact other Tribes in the area for info and to contract with a monitor who is qualified in NA cultural resources identification to be present onsite.
Doug Welmas, Chairperson	Cabazon Band of Mission Indians	84-245 Indio Springs Parkway Indio, CA 92203	760-342-2593	1/22/2019; letter	N/A	1/29/2019 Rincon received a letter from Judy Stapp, Director of Cultural Affairs, stating the Tribe does not have specific archival information on the site and that the project is outside of the Tribe's current reservation boundaries.

Native American Contact	Tribal Affiliation	Mailing Address	Phone Number	Date and Method of Initial Contact	Date and Method of Follow Up Contact	Results
Daniel Salgado, Chairperson	Cahuilla Band of Indians	52701 U.S. Highway 371 Anza, CA 92539	951-763-5549	1/22/2019; letter	2/20/2019; phone call	2/20/2019 Transferred to cultural director Bobby Ray who stated that he did not have any specific knowledge of cultural resources in the area and would like to defer to Torres Martinez.
Charles Wood, Chairperson	Chemehuevi Indian Reservation	P.O. Box 1976 1990 Palo Verde Drive, Havasu Lake, CA, 92363	760-858-4219	1/22/2019; letter	2/20/2019; phone 2/22/2019; phone	2/20/2019 Rincon was unable to leave a voice message with the number provided (no response) 2/22/2019 Mr. Wood stated that the Tribe did not have any specific information or concerns and would like to defer to Tribes closer to the project area.
Dennis Patch, Chairman	Colorado River Indian Tribes	26600 Mojave Road, Parker, AZ, 85344	928-669-9211	1/22/2019; letter	2/20/2019; phone 2/22/2019; phone	2/20/2019 Rincon left a voice message (no response). 2/22/2019 Rincon left a voice message (no response) 3/6/2019 Received letter from the Colorado River Indian Tribe's (CRIT) THPO requested that all prehistoric cultural resources, including both known and yet-to-be-discovered sites, be avoided. If avoidance of the site is infeasible, then the THPO requested the resources be left *in situ* or reburied in a nearby area after consultation. In addition, they requested that the CRIT THPO be notified within 48 hours of discovering any human remains or objects subject to provision of the Native American Graves Protection and Repatriation Act, or cultural resources such as sites, trials, and artifacts.

Native American Contact	Tribal Affiliation	Mailing Address	Phone Number	Date and Method of Initial Contact	Date and Method of Follow Up Contact	Results
Shane Chapparosa, Chairperson	Los Coyotes Band of Mission Indians	P. O. Box 189 Warner Springs, CA, 92086	760-782-0711	1/22/2019 Rincon sent a letter	2/20/2019 phone call 2/22/2019 phone call and email 2/25/2019; email 2/26/2019; email	2/20/2019 Rincon spoke with the receptionist who said Shane Chapparosa is no longer a chairperson and provided the email address for the new Director, Jacob Norte, dwillisloscoyotesepa@gmail.com She requested that Rincon forward a copy of the letter the email address. Rincon sent the letter to the provided address. 2/22/2019 Rincon was unable to leave a voice message; sent a follow-up email to the address provided. 2/26/2019 Rincon received email response from Dorothy Willis, Los Coyotes Environmental, who stated that she had discussed the project with Jacob Norte and he had no comments on the project.
John Perada, Environmental Director	Los Coyotes Band of Mission Indians	P. O. Box 189 Warner Springs, CA, 92086	760-782-0712	1/22/2019; letter	2/20/2019;phone call and email 2/22/2019; phone call 2/25/2019; email 2/26/2019; email	2/20/2019 Rincon spoke with the receptionist who said John Perada is no longer the Environmental Director and provided the email address for the new Director, Jacob Norte, dwillisloscoyotesepa@gmail.com She requested that Rincon forward a copy of the letter the email address. Rincon sent the letter to the provided address. 2/22/2019 Rincon was unable to leave a voice message; sent a follow-up email to the address provided 2/26/2019 Rincon received email response from Dorothy Willis, Los Coyotes Environmental, who stated that she had discussed the project with Jacob Norte and he had no comments on the project.

Native American Contact	Tribal Affiliation	Mailing Address	Phone Number	Date and Method of Initial Contact	Date and Method of Follow Up Contact	Results
Denisa Torres, Cultural Resources Manager	Morongo Band of Mission Indians	12700 Pumarra Rroad Banning, CA, 92220	951-849-8807	1/22/2019; letter	N/A	1/28/2019 Rincon received a letter from Travis Armstrong, Tribal Historic Preservation Officer, who stated that the Tribe has no additional information to provide at this time and will likely defer to other tribes in the area once formal government-to-government consultation is initiated by the lead agency for this project.
Robert Martin, Chairperson	Morongo Band of Mission Indians	12700 Pumarra Road Banning, CA 92220	951-849-8807	1/22/2019; letter	N/A	1/28/2019 Rincon received a letter from Travis Armstrong, Tribal Historic Preservation Officer, who stated that the Tribe has no additional information to provide at this time and will likely defer to other tribes in the area once formal government-to-government consultation is initiated by the lead agency for this project.
Joseph Hamilton	Ramona Band of Cahuilla Mission Indians	P.O. Box 391670 Anza, CA, 92539	951-763-4105	1/22/2019; letter	2/20/2019; phone 2/22/2019; phone	2/20/2019 Rincon spoke with the receptionist who stated that she would like us to forward a copy of the letter to the jgomez@ramona-nsn.gov Rincon sent an email to the provided address. 2/22/2019 Rincon left a voice message (no response).
John Gomez, Environmental Coordinator	Ramona Band of Cahuilla Mission Indians	P. O. Box 391670 Anza, CA, 92539	951-763-4105	1/22/2019 Rincon sent a letter	2/20/2019; phone 2/22/2019; phone and email	2/20/2019 Rincon spoke with the receptionist who stated that she would like us to forward a copy of the letter to the jgomez@ramona-nsn.gov Rincon sent an email to the provided address. 2/22/2019 Rincon left a voice message and sent a follow-up email (no response).
Steven Estrada, Chairperson	Santa Rosa Band of Mission Indians	P.O. Box 391820 Anza, CA 92539	951-659-2700	1/22/2019; letter	2/20/2019; phone 2/22/2019; phone	2/20/2019 Rincon spoke to the receptionist who requested that we send a copy of the letter to sestrada@santarosacahuilla-nsn.gov and also cc: tribal administrator vminopt@santarosacahuilll-nsn.gov Rincon sent an email to the provided addresses 2/22/2019 Rincon left a message and sent a follow-up email 2/22/2019 Mr. Estrada responded stating that the Tribe will defer further consultation and any monitoring efforts to Torres-Martinez

Native American Contact	Tribal Affiliation	Mailing Address	Phone Number	Date and Method of Initial Contact	Date and Method of Follow Up Contact	Results
Scott Cozart, Chairperson	Soboba Band of Luiseño Indians	P.O. Box 487 San Jacinto, CA, 92583	951-654-2765	1/22/2019; letter	2/20/2019; phone	2/20/2019 Rincon left a voice message. 2/20/2019 Mr. Ontiveros replied stating that the Tribe would like to defer to Torres-Martinez.
Joseph Ontiveros, Cultural Resource Department	Soboba Band of Luiseño Indians	P.O. Box 487 San Jacinto, CA, 92583	951-663-5279	1/22/2019; letter	2/20/2019; phone	2/20/2019 Mr. Ontiveros replied stating the Tribe would like to defer to Torres-Martinez.
Michael Mirelez, Cultural Resource Coordinator	Torres-Martinez Desert Cahuilla Indians	P.O. Box 1160 Thermal, CA 92274	760-399-0022	1/22/2019; letter	2/20/2019; phone call 2/22/2019; email	2/20/2019 Rincon spoke with Michael Mirelez who stated he was away from the office and would call back in about an hour. 2/20/2019 Michael Mirelez called back and requested that Rincon send a copy of the letter via email. Rincon sent a copy of the letter to the email address provided. 2/22/2019 Mr. Mirelez replied via email stating that although the project is outside of their reservation, it is within their Tribal Traditional Use Area and the Tribe has a high concern for inadvertent discoveries and request copies of all cultural reports, formal consultation, and Tribal monitoring during all initial ground disturbance including survey and testing.
Darrell Mike, Chairperson	Twenty-Nine Palms Band of Mission Indians	46-200 Harrison Place Coachella, CA 92236	760-863-2444	1/22/2019; letter	N/A	2/8/2019 Rincon received a letter from Sarah Bliss, Cultural Resources Manager, who stated that though the THPO is not aware of specific cultural resources in the project area, the project is in the Chemehuevi Traditional Use Area (TUA) and may have impact to cultural resources that concern the Tribe, and for this reason, the THPO will request the completed cultural report from the Lead Agency when completed (CONFIDENTIAL RESPONSE)
Anthony Madrigal, Tribal Historic Preservation Officer	Twenty-Nine Palms Band of Mission Indians	46-200 Harrison Place Coachella, CA 92236	760-775-3259	1/22/2019; letter	N/A	2/8/2019 Rincon received a letter from Sarah Bliss, Cultural Resources Manager, who stated that though the THPO is not aware of specific cultural resources in the project area, the project is in the Chemehuevi Traditional Use Area (TUA) and may have impact to cultural resources that concern the Tribe, and for this reason, the THPO will request the completed cultural report from the Lead Agency when completed (CONFIDENTIAL RESPONSE)

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd, Suite 100
Sacramento, CA 95814
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Valley View Small Water System Project

County: Riverside County

USGS Quadrangle Name: Thermal Canyon, CA

Township: 6S Range: 8E Section(s): 14, 15, 22, 23, and 24

Company/Firm/Agency: Rincon Consultants, Inc.

Contact Person: Tiffany Clark

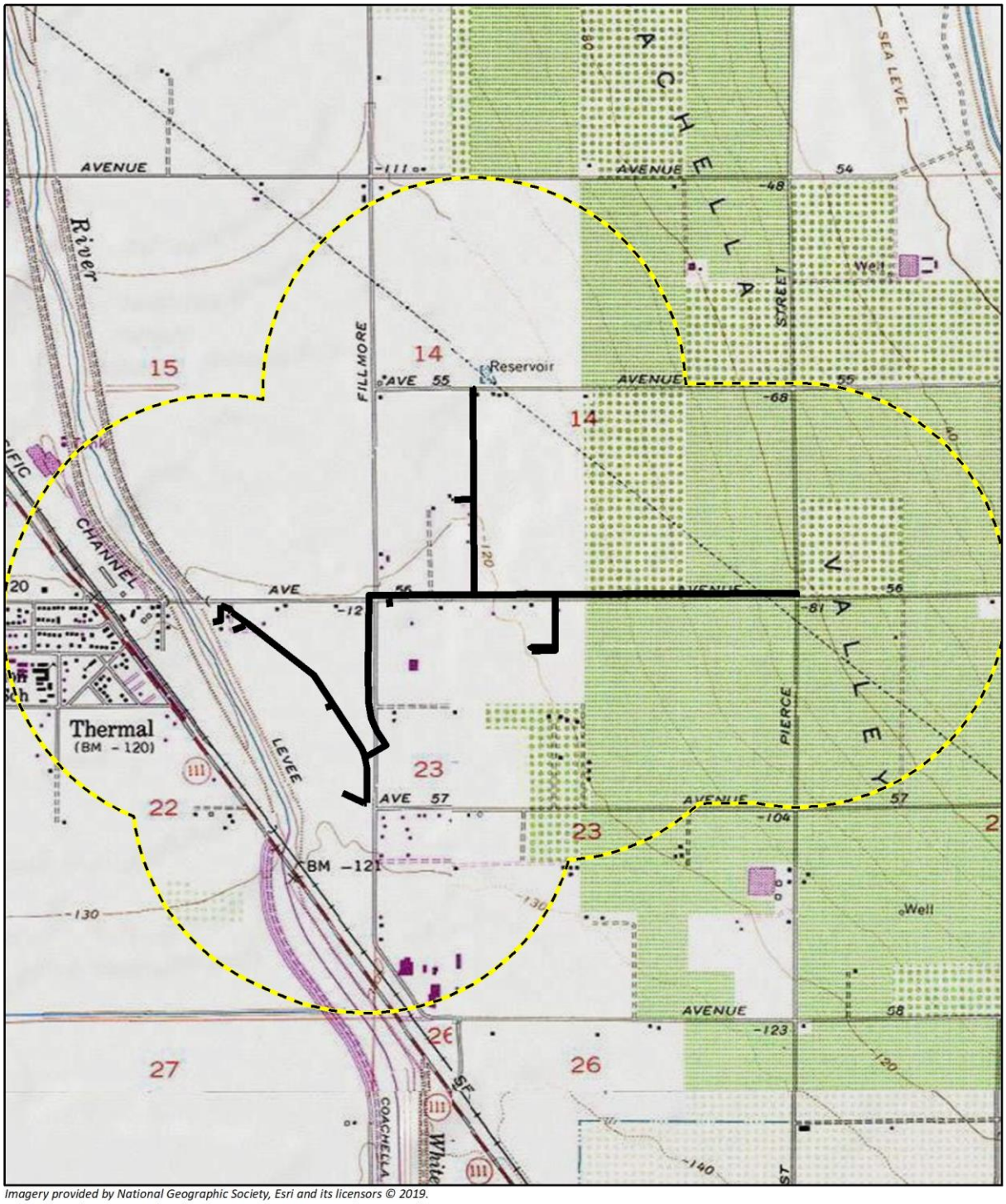
Street Address: 250 East 1st Street, Suite 301

City: Los Angeles, CA Zip: 90012

Phone: (213)357-5105

Email: tclark@rinconconsultants.com

Project Description: The proposed project consists of infrastructural improvements to the small water systems associated with the Valley View mobile home community that includes three mobile home parks near Thermal, California. The project proposes consolidating and connecting the mobile home parks to the Coachella Valley Water District's potable system. A cultural resource study is being undertaken by Rincon Consultants, Inc. There will be ground disturbance associated with the project.



Imagery provided by National Geographic Society, Esri and its licensors © 2019. Indio, Thermal Canyon Quadrangles. T06S R08E S13-15,22-24. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Area of Potential Effects

Half-Mile Buffer

N

0 1,000 2,000

Feet

CRRecords Search Map_ValleyView

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

January 22, 2019

Tiffany Clark
Rincon Consultants

VIA Email to: tclark@rinconconsultants.com

RE: Valley View Small Water Systems Project, Riverside County

Dear Ms. Clark:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: steven.quinn@nahc.ca.gov.

Sincerely,

Steven Quinn
Associate Governmental Program Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Riverside County
1/22/2019

Agua Caliente Band of Cahuilla Indians
Jeff Grubbe, Chairperson
5401 Dinah Shore Drive — Cahuilla
Palm Springs, CA, 92264 — Luiseno
Phone: (760) 699 - 6800
Fax: (760) 699-6919

Agua Caliente Band of Cahuilla Indians
Patricia Garcia-Plotkin, Director
5401 Dinah Shore Drive — Cahuilla
Palm Springs, CA, 92264 — Luiseno
Phone: (760) 699 - 6907
Fax: (760) 699-6924
ACBCI-THPO@aguacaliente.net

Augustine Band of Cahuilla Mission Indians
Amanda Vance, Chairperson
P.O. Box 846 — Cahuilla
Coachella, CA, 92236
Phone: (760) 398 - 4722
Fax: (760) 369-7161
hhaines@augustinetribe.com

Cabazon Band of Mission Indians
Doug Welmas, Chairperson
84-245 Indio Springs Parkway — Cahuilla
Indio, CA, 92203
Phone: (760) 342 - 2593
Fax: (760) 347-7880
jstapp@cabazonindians-nsn.gov

Cahuilla Band of Indians
Daniel Salgado, Chairperson
52701 U.S. Highway 371 — Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 5549
Fax: (951) 763-2808
Chairman@cahuilla.net

Chemehuevi Indian Reservation
Charles Wood, Chairperson
P.O. Box 1976 1990 Palo Verde Drive — Chemehuevi
Havasu Lake, CA, 92363
Phone: (760) 858 - 4219
Fax: (760) 858-5400
chairman@cit-nsn.gov

Colorado River Indian Tribes
Dennis Patch, Chairman
26600 Mojave Road — Chemehuevi
Parker, AZ, 85344 — Mojave
Phone: (928) 669 - 9211
Fax: (928) 669-1925
amanda.barrera@crit-nsn.gov

Los Coyotes Band of Cahuilla and Cupeño Indians
Shane Chapparosa, Chairperson
P.O. Box 189 — Cahuilla
Warner Springs, CA, 92086-0189
Phone: (760) 782 - 0711
Fax: (760) 782-0712
Chapparosa@msn.com

Los Coyotes Band of Cahuilla and Cupeño Indians
John Perada, Environmental Director
P. O. Box 189 — Cahuilla
Warner Springs, CA, 92086
Phone: (760) 782 - 0712
Fax: (760) 782-2730

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Rroad — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Valley View Small Water System Project, Riverside County.

Morongo Band of Mission Indians
Denisa Torres, Cultural Resources Manager
12700 Pumarra Rroad — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

Ramona Band of Cahuilla
John Gomez, Environmental Coordinator
P. O. Box 391670 — Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 4105
Fax: (951) 763-4325
jgomez@ramonatribe.com

Ramona Band of Cahuilla
Joseph Hamilton, Chairperson
P.O. Box 391670 — Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 4105
Fax: (951) 763-4325
admin@ramonatribe.com

Santa Rosa Band of Cahuilla Indians
Steven Estrada, Chairperson
P.O. Box 391820 — Cahuilla
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
mflaxbeard@santarosacahuilla-nsn.gov

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 — Cahuilla
San Jacinto, CA, 92581 — Luiseno
Phone: (951) 663 - 5279
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

Soboba Band of Luiseno Indians
Scott Cozart, Chairperson
P. O. Box 487 — Cahuilla
San Jacinto, CA, 92583 — Luiseno
Phone: (951) 654 - 2765
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

Torres-Martinez Desert Cahuilla Indians
Michael Mirelez, Cultural Resource Coordinator
P.O. Box 1160 — Cahuilla
Thermal, CA, 92274
Phone: (760) 399 - 0022
Fax: (760) 397-8146
mmirelez@tmdci.org

Twenty-Nine Palms Band of Mission Indians
Darrell Mike, Chairperson
46-200 Harrison Place — Chemehuevi
Coachella, CA, 92236
Phone: (760) 863 - 2444
Fax: (760) 863-2449
29chairman@29palmsbomi-nsn.gov

Twenty-Nine Palms Band of Mission Indians
Anthony Madrigal, Tribal Historic Preservation Officer
46-200 Harrison Place — Chemehuevi
Coachella, CA, 92236
Phone: (760) 775 - 3259
amadrigal@29palmsbomi-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Valley View Small Water System Project, Riverside County.

Rincon Consultants, Inc.

3600 Lime Street, Suite 226
Riverside, California 92501

951 782 0061 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

January 22, 2019

Shane Chapparosa, Chairperson
Los Coyotes Band of Cahuilla and Cupeño Indians
P.O. Box 189
Warner Springs, CA 92086-0189

Subject: Cultural Resources Assessment for Valley View Small Water System Project, Near the Community of Thermal, Riverside County, California

Dear Mr. Chapparosa,

Rincon Consultants, Inc. (Rincon) has been retained to conduct a cultural resources assessment for the Valley View Small Water System Project (project). The proposed project involves the infrastructural improvements to eight mobile home parks located near the community of Thermal in Riverside County. (see attached Project Location Map). The existing water systems associated with each of the mobile home parks will be consolidated and connected to the Coachella Valley Water District potable system.

The purpose of this letter is to inquire about your knowledge of potential cultural resources within the vicinity that may be impacted by project development. Rincon contacted the Native American Heritage Commission to request a Sacred Lands File (SLF) search of the project area that was returned with negative results. Additionally, a records search was performed of the California Historical Resources Information System for the project identified only two historic-period cultural resources, both of which consist of isolated glass bottle fragments, within the project Area of Potential Effect. However, we are aware that the results of the SLF and records search are not exhaustive, and that additional cultural resources may exist within the area.

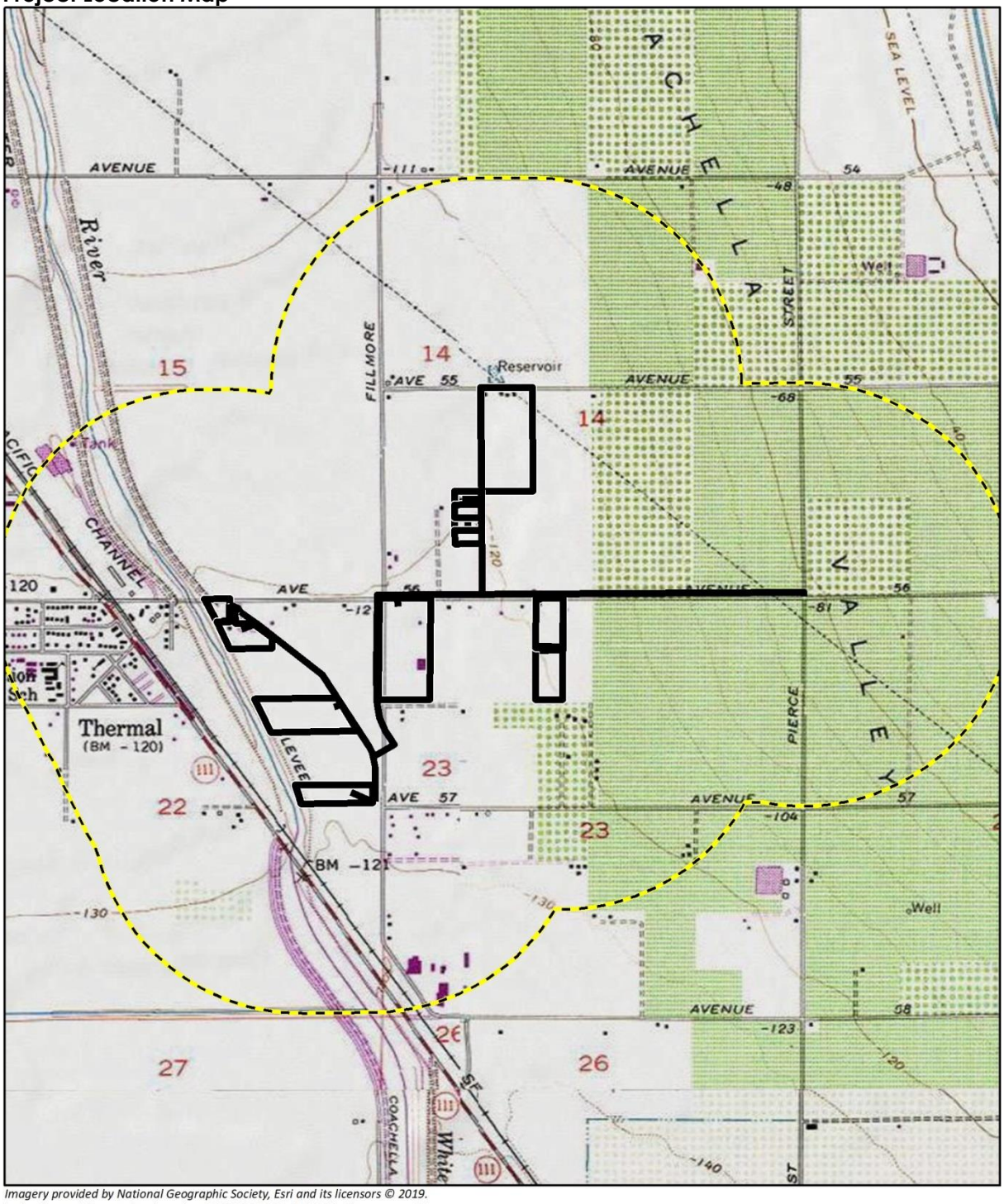
This project may involve federal funding; thus, this cultural resources study is being prepared in conformance with the National Environmental Policy Act and Section 106 of the National Historic Preservation Act (NHPA). Rincon is assisting in the Section 106 consultation effort and we are writing to provide you with an opportunity to be involved in the Section 106 consultation process. If you or your organization has any knowledge or specific concerns regarding cultural resources in the project area, please respond by telephone at (213) 788-4842 extension 149, or by email at tclark@rinconconsultants.com. Please respond within 30 days of receipt of this letter if you are interested in consultation.

Sincerely,
Rincon Consultants, Inc.

Tiffany Clark, PhD, RPA
Senior Archaeologist

Attached: Project Location Map

Project Location Map



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Area of Potential Effects
Half-Mile Buffer

N
0 1,000 2,000
Feet

CRRecords Search Map_ValleyView

AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL HISTORIC PRESERVATION

03-011-2019-001

January 30, 2019

[VIA EMAIL TO:tclark@rinconconsultants.com]
Rincon Consultants, Inc.
Ms. Tiffany Clark
250 East 1st Street, Suite 201
Los Angeles, CA 90012

Re: Valley View Small Water System

Dear Ms. Tiffany Clark,

The Agua Caliente Band of Cahuilla Indians (ACBCI) appreciates your efforts to include the Tribal Historic Preservation Office (THPO) in the Valley View Small Water System project. The project area is not located within the boundaries of the ACBCI Reservation. However, it is within the Tribe's Traditional Use Area. For this reason, the ACBCI THPO requests the following:

*At this time ACBCI defers to the Cabazon Band of Mission Indians. This letter shall conclude our consultation efforts.

*At this time ACBCI defers to the Augustine Band of Cahuilla Indians. This letter shall conclude our consultation efforts.

*At this time ACBCI defers to Torres Martinez. This letter shall conclude our consultation efforts.

Again, the Agua Caliente appreciates your interest in our cultural heritage. If you have questions or require additional information, please call me at (760)699-6956. You may also email me at ACBCI-THPO@aguacaliente.net.

Cordially,

Lacy Padilla
Archaeological Technician
Tribal Historic Preservation Office
AGUA CALIENTE BAND
OF CAHUILLA INDIANS

5401 DINAH SHORE DRIVE, PALM SPRINGS, CA 92264
T 760/699/6800 F 760/699/6924 WWW.AGUACALIENTE-NSN.GOV

AUGUSTINE BAND OF CAHUILLA INDIANS

PO Box 846 84-481 Avenue 54 Coachella CA 92236
Telephone: (760) 398-4722
Fax (760) 369-7161
Tribal Chairperson: Amanda Vance
Tribal Vice-Chairperson: William Vance
Tribal Secretary: Victoria Martin

February 12, 2019

Tiffany Clark
Rincon Consultants, Inc.
3600 Lime Street, Suite 226
Riverside, CA 92501

Re: **Cultural Resources Assessment for Valley View Small Water System Project, Near the Community of Mecca, Riverside County, California**

Dear Ms. Clark-

Thank you for the opportunity to offer input concerning the development of the above-identified project. We appreciate your sensitivity to the cultural resources that may be impacted by your project, and the importance of these cultural resources to the Native American peoples that have occupied the land surrounding the area of your project for thousands of years. Unfortunately, increased development and lack of sensitivity to cultural resources has resulted in many significant cultural resources being destroyed or substantially altered and impacted. Your invitation to consult on this project is greatly appreciated.

At this time we are unaware of specific cultural resources that may be affected by the proposed project. We encourage you to contact other Native American Tribes and individuals within the immediate vicinity of the project site that may have specific information concerning cultural resources that may be located in the area. We also encourage you to contract with a monitor who is qualified in Native American cultural resources identification and who is able to be present on-site full-time during the pre-construction and construction phase of the project. Please notify us immediately should you discover any cultural resources during the development of this project.

Very truly yours,

Victoria Martin

Tribal Secretary

January 29, 2019

Tiffany Clark, PhD, RPA
Senior Archaeologist
Rincon Consultants, Inc.
301 9th Street, Suite 310
Redlands, CA 92374

Re.: Cultural Resources Assessment for Valley View Small Water System Project
Near the Community of Thermal
Riverside County, California

Dear Ms. Clark:

Thank you for contacting the Cabazon Band of Mission Indians concerning cultural resource information relative to the above referenced project.

The project is located outside of the Tribe's current reservation boundaries. The Tribe has no specific archival information on the site indicating that it may be a sacred/religious site or other site of Native American traditional cultural value.

We look forward to continued collaboration in the preservation of cultural resources or areas of traditional cultural importance.

Best regards,

Judy Stapp
Director of Cultural Affairs

COLORADO RIVER INDIAN TRIBES

Tribal Historic Preservation Office

26600 Mohave Road
Parker, Arizona 85344
Telephone: (928)-669-5822 Fax: (928) 669-5843

March 6, 2019

Rincon Consultants, Inc.
Attn: Tiffany Clark
3600 Lime Street, Suite 226
Riverside, CA 92501

RE: Valley View Small Water System Project

Dear Ms. Clark:

The Colorado River Indian Tribes' Tribal Historic Preservation Office ("CRIT THPO") has received your letter dated January 22, 2019, regarding the *Cultural Resources Assessment for Valley View Small Water System Project for the improvements to eight mobile home parks near the Community of Thermal, Riverside County, California.*

As a preliminary matter, the Colorado River Indian Tribes are a federally recognized Indian tribe comprised of over 4,200 members belonging to the Mohave, Chemehuevi, Hopi and Navajo Tribes. The almost 300,000-acre Colorado River Indian Reservation sits astride the Colorado River between Blythe, California and Parker, Arizona. The ancestral homelands of the Tribe's members, however, extend far beyond the Reservation boundaries. Significant portions of public and private lands in California, Arizona and Nevada were occupied by the ancestors of the Colorado River Indian Tribes' Mohave and Chemehuevi members since time immemorial. These landscapes remain imbued with substantial cultural, spiritual and religious significance for the Tribes' current members and future generations. For this reason, we have a strong interest in ensuring that potential cultural resource impacts are adequately considered and mitigated.

In particular, the Colorado River Indian Tribes are concerned about the removal of artifacts from this area and corresponding destruction of the Tribes' footprint on this landscape. As such, the Tribes request that all prehistoric cultural resources, including both known and yet-to-be-discovered sites, be avoided if feasible. If avoidance of the site is infeasible, then the Tribes request that the resources be left in-situ or reburied in a nearby area, after consultation. This language should be incorporated into enforceable mitigation measures.

In addition, we respond as follows:

_____Given the potential impact of the project on important cultural resources, the Colorado River Indian Tribes request in-person government-to-government consultation. Please contact the CRIT THPO to discuss our concerns and schedule a meeting with Tribal Council.

___√___In the event any human remains or objects subject to provision of the Native American Graves Protection and Repatriation Act, or cultural resources such as sites, trails, artifacts are identified during ground disturbance, please contact the CRIT THPO within 48 hours.

_____The Colorado River Indian Tribes request tribal monitoring of any ground disturbing activity as a condition of project approval. The Tribes request notification of any opportunities to provide tribal monitoring for the project.

_____The Colorado River Indian Tribes do not have any specific comment on the proposed project and instead defer to the comments of other affiliated tribes.

Thank you for your consideration. Please contact the undersigned if you have any questions or concerns.

Sincerely,

COLORADO RIVER INDIAN TRIBES
TRIBAL HISTORIC PRESERVATION OFFICE

/s/ Bryan Etsitty, Acting-Director
26600 Mohave Road
Parker, AZ 85344
Phone: (928) 669-5822
E-mail: betsitty@crit-nsn.gov

cc: critthpo@crit-nsn.gov

Tiffany Clark

From: Tribal Historic Preservation Office <thpo@morongo-nsn.gov>
Sent: Monday, January 28, 2019 1:38 PM
To: Tiffany Clark
Subject: Valley View Small Water System Project

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Ms. Clark,

Thank you for your letter regarding the project.

We have no additional information to provide at this time and will likely defer to other tribes in the area once formal government-to-government consultation is initiated by the lead agency for this project.

Thank you for reaching out to our office.

Sincerely,

Travis Armstrong, JD, MA
Tribal Historic Preservation Officer
Morongo Band of Mission Indians
951-755-5259
Email: thpo@morongo-nsn.gov

From:	Steven Estrada
To:	Lindsay Porras
Subject:	Re: Cultural Resources Studies for CVWD St. Anthony and Valley View Water Supply Consolidation Projects
Date:	Friday, February 22, 2019 3:07:16 PM
Attachments:	image001.png

Thank you. We defer further consultation and any monitoring efforts to Torres Martinez.

From: Lindsay Porras <lporras@rinconconsultants.com>
Date: Friday, February 22, 2019 at 1:00 PM
To: Steven Estrada <SEstrada@santarosacahuilla-nsn.gov>
Subject: RE: Cultural Resources Studies for CVWD St. Anthony and Valley View Water Supply Consolidation Projects

Dear Mr. Estrada,

I wanted to follow up to see if you have received the letters for the CVWD East Coachella Valley Water Supply Consolidation Projects for the Saint Anthony and Valley View Mobile Home Parks. Please reach out if you have any questions or comments regarding the proposed projects or if you have information on cultural resources in the project areas. I can be reached at 909-435-0978 or via email at lporras@rinconconsultants.com.

I appreciate your time.
Best,

Lindsay A. Porras, MA, RPA, Associate Archaeologist
Rincon Consultants, Inc.
Environmental Scientists | Planners | Engineers
805-644-4455 x9981
909-362-3706 Mobile
909-435-0978 Direct
rinconconsultants.com

Ranked 2018 "Hot Firm List" by Zweig Group

From: Lindsay Porras
Sent: Wednesday, February 20, 2019 10:39 AM
To: 'sestrada@santarosacahuilla-nsn.gov'

Cc: 'vminopt@santarosacahuilla-nsn.gov'
Subject: Cultural Resources Studies for CVWD St. Anthony and Valley View Water Supply Consolidation Projects

Dear Mr. Estrada,

I have been conducting follow-up phone calls regarding cultural resources studies. I spoke with your receptionist who requested I send copies of the Section 106 letters to this address for your reference. Please reach out at if you have any questions or comments regarding the proposed projects or if you have information on cultural resources in the project areas. I can be reached at 909-435-0978 or via email at lporras@rinconconsultants.com.

I appreciate your time.
Best,

Lindsay A. Porras, MA, RPA, Associate Archaeologist
Rincon Consultants, Inc.
Environmental Scientists | Planners | Engineers
805-644-4455 x9981
909-362-3706 Mobile
909-435-0978 Direct
rinconconsultants.com

Ranked 2018 "Hot Firm List" by Zweig Group

TORRES MARTINEZ DESERT CAHUILLA INDIANS
P.O. Box 1160
Thermal, CA 92274
(760) 397-0300 – FAX (760) 397-8146

MAU - WAL - MAH
SU-KUTT MENYIL

February 22, 2019

Attn: **Lindsay A. Porras, MA, RPA, Associate Archaeologist**
Rincon Consultants, Inc.

Re: Valley View Small Water System Project
Thermal CA Riverside County

Torres Martinez Desert Cahuilla Indians appreciates your concern for cultural resource preservation in your project. We have reviewed the information and found that although the project is located outside the existing reservation, the location does fall within our Tribal Traditional Use Area. Therefore the concern for inadvertent discoveries is high for the Torres Martinez Desert Cahuilla Indians. As a result, we are requesting the following:

Torres Martinez Desert Cahuilla Indians is requesting the following:

- Copies of all Cultural reports
- Formal Government to Government Consultation.
- Tribal Monitoring for all initial ground disturbing activities by a designated tribal monitor from the Torres Martinez Desert Cahuilla Indians. The monitor shall be present during any ground disturbing proceedings including surveys and archaeological testing.

Please feel free contact me at your earliest convenience either by email or phone in order to make arrangements.

Respectfully,

Michael Mirelez
Cultural Resource Coordinator
Torres-Martinez Desert Cahuilla Indians
Office: 760-397-0300 Ext: 1213
Cell:760-399-0022
Email: mmirelez@tmdci.org

Appendix D

Historical Society Consultation

Rincon Consultants, Inc.
301 9th Street, Suite 109
Redlands, California 92374
909 253 0705 OFFICE AND FAX
info@rinconconsultants.com
www.rinconconsultants.com

Historical Society Contact Table

Valley View Small Water System Project, Near the Community of Thermal, Riverside County, California

Historical Society Contact	Address	Phone Number	Contact Attempt	Results
Coachella Valley Historical Society	82616 Miles Ave, Indio, CA 92201	(760) 342 - 6651	Sent letter 1/22/2019 Called 2/15/2019, 2:15 PM Called 2/22/2019, 3:45 PM 2/25/2019 Rincon received a phone call from Sue Karr, Archivist.	2/15/2019 Left detailed message in the archivist's voice box about project and provided contact information 2/22/2019 Left detailed message in the archivist's voice box about project and provided contact information 2/25/2019 Sue Karr, Archivist, called and stated that their organization has no specific information or concerns regarding historical resources. The area is largely comprised of grape and date farms.
Riverside County Historical Commission	4600 Crestmore Road, Riverside, CA 92509-6858	(714) 275-4310 [*number no longer in service*] (951) 955-4346	Sent letter 1/22/2019 Called 2/15/2019, 2:30 PM Called 2/22/2019, 3:45 PM	2/15/2019 Voice recording for number stated that the number is no longer in service; Called Park District Staff who support Historical Commission at (951) 955-4346 and left detailed message about project and provided contact information. 2/22/2019 Spoke with Park District Staff who were unable to connect me

Rincon Consultants, Inc.
301 9th Street, Suite 109
Redlands, California 92374
909 253 0705 OFFICE AND FAX
info@rinconconsultants.com
www.rinconconsultants.com

Historical Society Contact	Address	Phone Number	Contact Attempt	Results
Palm Springs Historical Society	221 South Palm Canyon Drive, Palm Springs, CA 92262	(760) 656-7469	Sent letter 1/22/2019 Called 2/15/2019, 2:30 PM Called 2/15/2019, 2:30 PM	2/15/2019 Left detailed message about project and provided contact information. 2/15/2019 Renee Brown called back and stated that their organization is specific to the Palms Springs area and did not have any specific information to provide regarding the proposed project.
Coachella Valley Archaeological Society	P. O. Box 2344 Palm Springs, CA 92263	(760) 565-1196	Sent letter 1/22/2019 Called 2/15/2019, 2:35 PM Called 2/22/2019, 3:45 PM	2/15/2019 Left detailed message in Britt Wilson's voice box about project and provided contact information 2/22/2019 Left detailed message in Britt Wilson's voice box about project and provided contact information
Historical Society of Palm Desert	P.P.O. Box 77 Palm Desert, CA 92261-0077	(760) 346-6588	Sent letter 1/22/2019 Called 2/15/2019, 2:40 PM	2/15/2019 Transferred to Harry Quinn who stated that the historical society maintains maps that Rincon would need to reference regarding specific historic properties. Mr. Quinn provided an historical overview of the Thermal area stating that Thermal was and is an agricultural area known for artesian wells. The wells influenced agriculture in the area and a number of ranches are in the area. Mr. Quinn suggested Rincon reference soil bulletins that cover the lower Coachella valley for more information about historical water resources and use in the area

Rincon Consultants, Inc.

301 9th Street, Suite 109
Redlands, California 92374

909 253 0705 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

January 22, 2019

Coachella Valley Archaeological Society
P. O. Box 2344
Palm Springs, CA 92263

Subject: Cultural Resources Technical Study for the Valley View Small Water System Project, Near the Community of Thermal, Riverside County, California

Coachella Valley Archaeological Society,

Rincon Consultants, Inc. (Rincon) has been retained by Woodard & Curran to conduct a cultural resources assessment for the Valley View Small Water System Project (Project). The purpose of the Project is to consolidate and connect eight mobile home park water systems to the Coachella Valley Water District's water system to allow for safe, reliable domestic water to small disadvantaged communities. The proposed Project is primarily located within public street right-of-way along Soto and Fillmore streets, Airport Boulevard, and Desert Cactus Drive east of the community of Thermal in Riverside County. As indicated on the attached map, it is situated in Township 6 South, Range 8 East, Sections 13-15, 22-24, of the United States Geological Survey (USGS) *Indio* and *Thermal Canyon CA* 7.5-minute topographic quadrangles.

The purpose of this letter is to inquire about your knowledge of potential historic-period resources within the vicinity that may be impacted by Project development. This Project may involve federal funding; thus, this cultural resources study is being prepared in conformance with the National Environmental Policy Act and Section 106 of the National Historic Preservation Act (NHPA). Rincon is assisting the CVWD with their Section 106 consultation effort, and we are writing to provide you with an opportunity to be involved in the Section 106 consultation process. If you or your organization has any knowledge or specific concerns regarding historic-period resources in the Project area, please respond by telephone at (213) 788-4842 extension 194, or by email at tclarkl@rinconconsultants.com. Please respond within 30 days of receipt of this letter if you are interested in consultation. Thank you for your assistance.

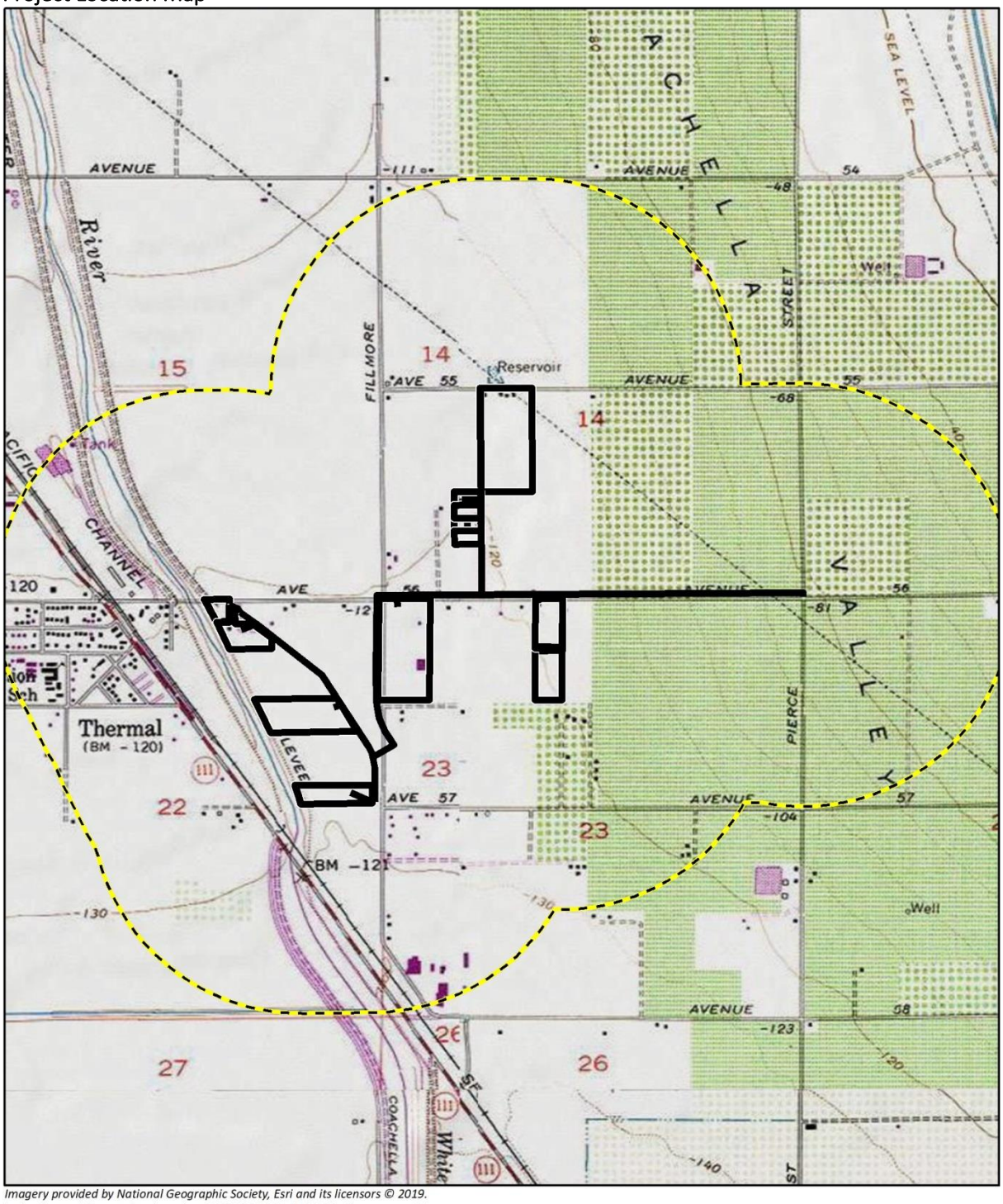
Sincerely,

Rincon Consultants, Inc.

Tiffany Clark, PhD, RPA
Senior Archaeologist/ Project Manager

Attached: Project Location Map

Project Location Map



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Area of Potential Effects
Half-Mile Buffer

N

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Feet

CRRecords Search Map_ValleyView

Rincon Consultants, Inc.

301 9th Street, Suite 109
Redlands, California 92374

909 253 0705 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

January 22, 2019

Coachella Valley Historical Society
82616 Miles Avenue
Indio, CA 92201

Subject: Cultural Resources Technical Study for the Valley View Small Water System Project, Near the Community of Thermal, Riverside County, California

Coachella Valley Historical Society,

Rincon Consultants, Inc. (Rincon) has been retained by Woodard & Curran to conduct a cultural resources assessment for the Valley View Small Water System Project (Project). The purpose of the Project is to consolidate and connect eight mobile home park water systems to the Coachella Valley Water District's water system to allow for safe, reliable domestic water to small disadvantaged communities. The proposed Project is primarily located within public street right-of-way along Soto and Fillmore streets, Airport Boulevard, and Desert Cactus Drive east of the community of Thermal in Riverside County. As indicated on the attached map, it is situated in Township 6 South, Range 8 East, Sections 13-15, 22-24, of the United States Geological Survey (USGS) *Indio* and *Thermal Canyon CA* 7.5-minute topographic quadrangles.

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Rincon Consultants, Inc.

Tiffany Clark, PhD, RPA
Senior Archaeologist/ Project Manager

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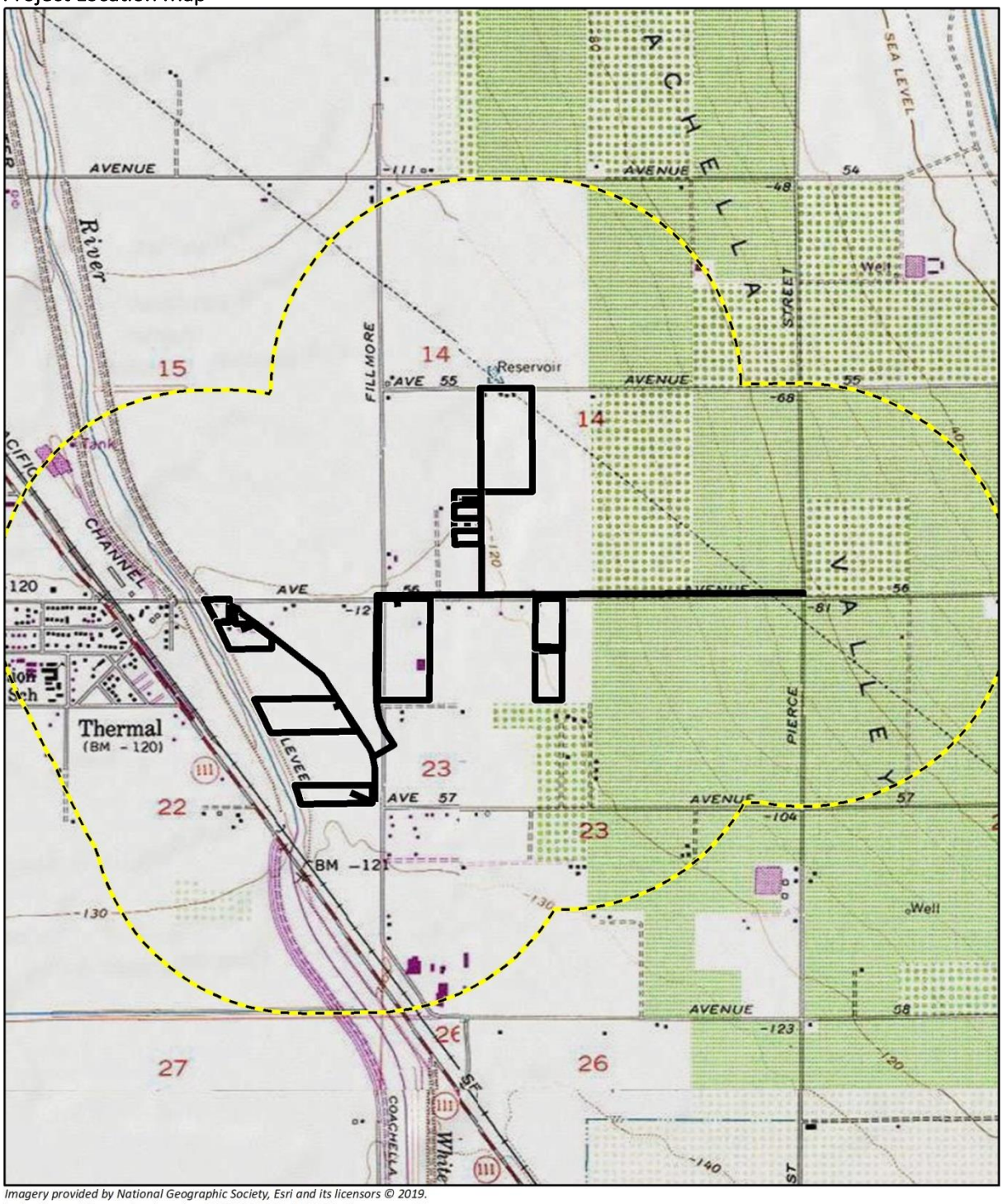

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January 22, 2019

Historical Society of Palm Desert
P.O. Box 77
Palm Desert, CA 92261-0077

Subject: Cultural Resources Technical Study for the Valley View Small Water System Project, Near the Community of Thermal, Riverside County, California

Historical Society of Palm Desert,

Rincon Consultants, Inc. (Rincon) has been retained by Woodard & Curran to conduct a cultural resources assessment for the Valley View Small Water System Project (Project). The purpose of the Project is to consolidate and connect eight mobile home park water systems to the Coachella Valley Water District's water system to allow for safe, reliable domestic water to small disadvantaged communities. The proposed Project is primarily located within public street right-of-way along Soto and Fillmore streets, Airport Boulevard, and Desert Cactus Drive east of the community of Thermal in Riverside County. As indicated on the attached map, it is situated in Township 6 South, Range 8 East, Sections 13-15, 22-24, of the United States Geological Survey (USGS) *Indio* and *Thermal Canyon CA* 7.5-minute topographic quadrangles.

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Rincon Consultants, Inc.

Tiffany Clark, PhD, RPA
Senior Archaeologist/ Project Manager

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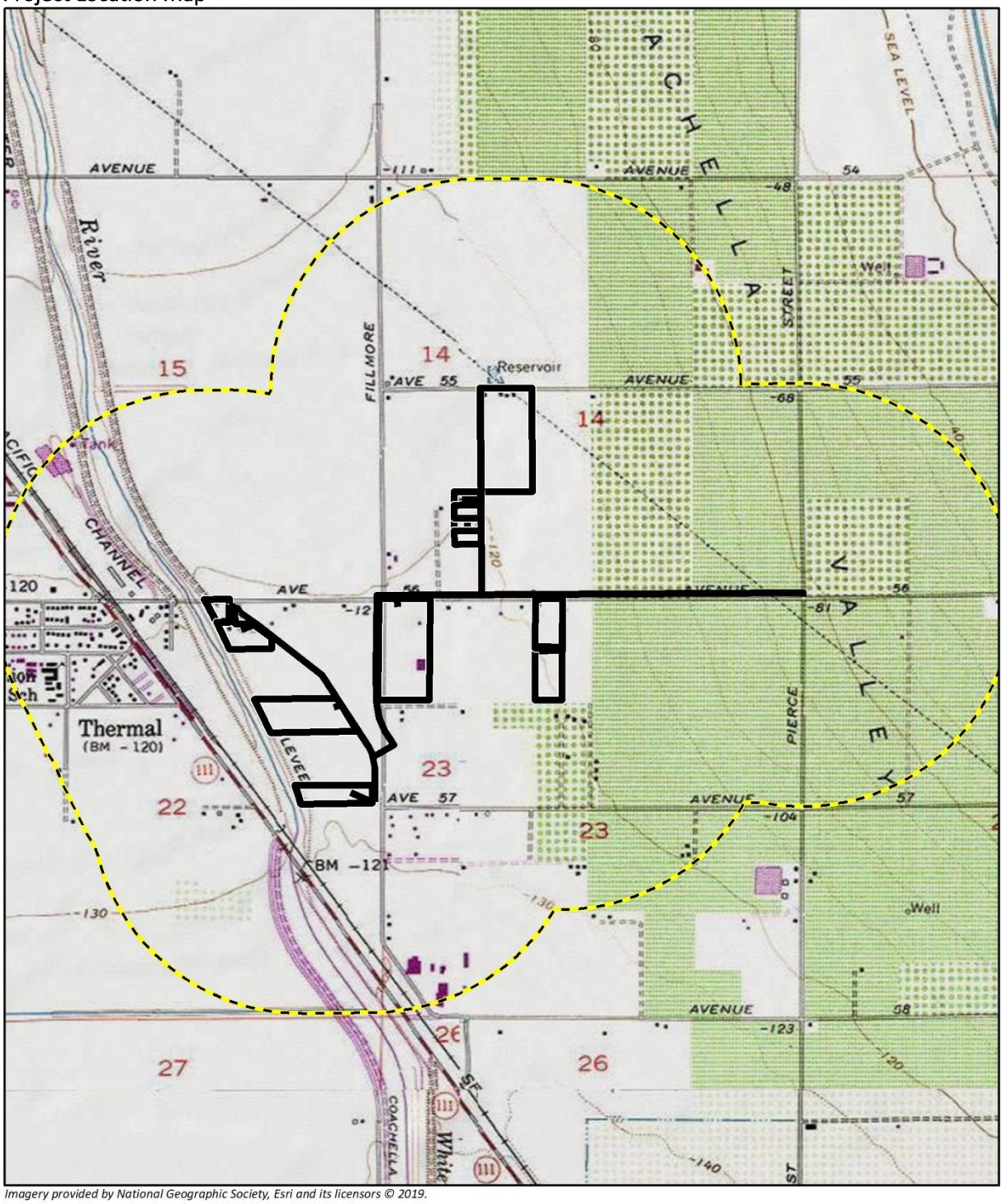

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301 9th Street, Suite 109
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info@rinconconsultants.com
www.rinconconsultants.com

January 22, 2019

Palm Springs Historical Society
221 South Palm Canyon Drive
Palm Springs, CA 92262

Subject: Cultural Resources Technical Study for the Valley View Small Water System Project, Near the Community of Thermal, Riverside County, California

Palm Springs Historical Society,

Rincon Consultants, Inc. (Rincon) has been retained by Woodard & Curran to conduct a cultural resources assessment for the Valley View Small Water System Project (Project). The purpose of the Project is to consolidate and connect eight mobile home park water systems to the Coachella Valley Water District's water system to allow for safe, reliable domestic water to small disadvantaged communities. The proposed Project is primarily located within public street right-of-way along Soto and Fillmore streets, Airport Boulevard, and Desert Cactus Drive east of the community of Thermal in Riverside County. As indicated on the attached map, it is situated in Township 6 South, Range 8 East, Sections 13-15, 22-24, of the United States Geological Survey (USGS) *Indio* and *Thermal Canyon CA* 7.5-minute topographic quadrangles.

The purpose of this letter is to inquire about your knowledge of potential historic-period resources within the vicinity that may be impacted by Project development. This Project may involve federal funding; thus, this cultural resources study is being prepared in conformance with the National Environmental Policy Act and Section 106 of the National Historic Preservation Act (NHPA). Rincon is assisting the CVWD with their Section 106 consultation effort, and we are writing to provide you with an opportunity to be involved in the Section 106 consultation process. If you or your organization has any knowledge or specific concerns regarding historic-period resources in the Project area, please respond by telephone at (213) 788-4842 extension 194, or by email at tclarkl@rinconconsultants.com. Please respond within 30 days of receipt of this letter if you are interested in consultation. Thank you for your assistance.

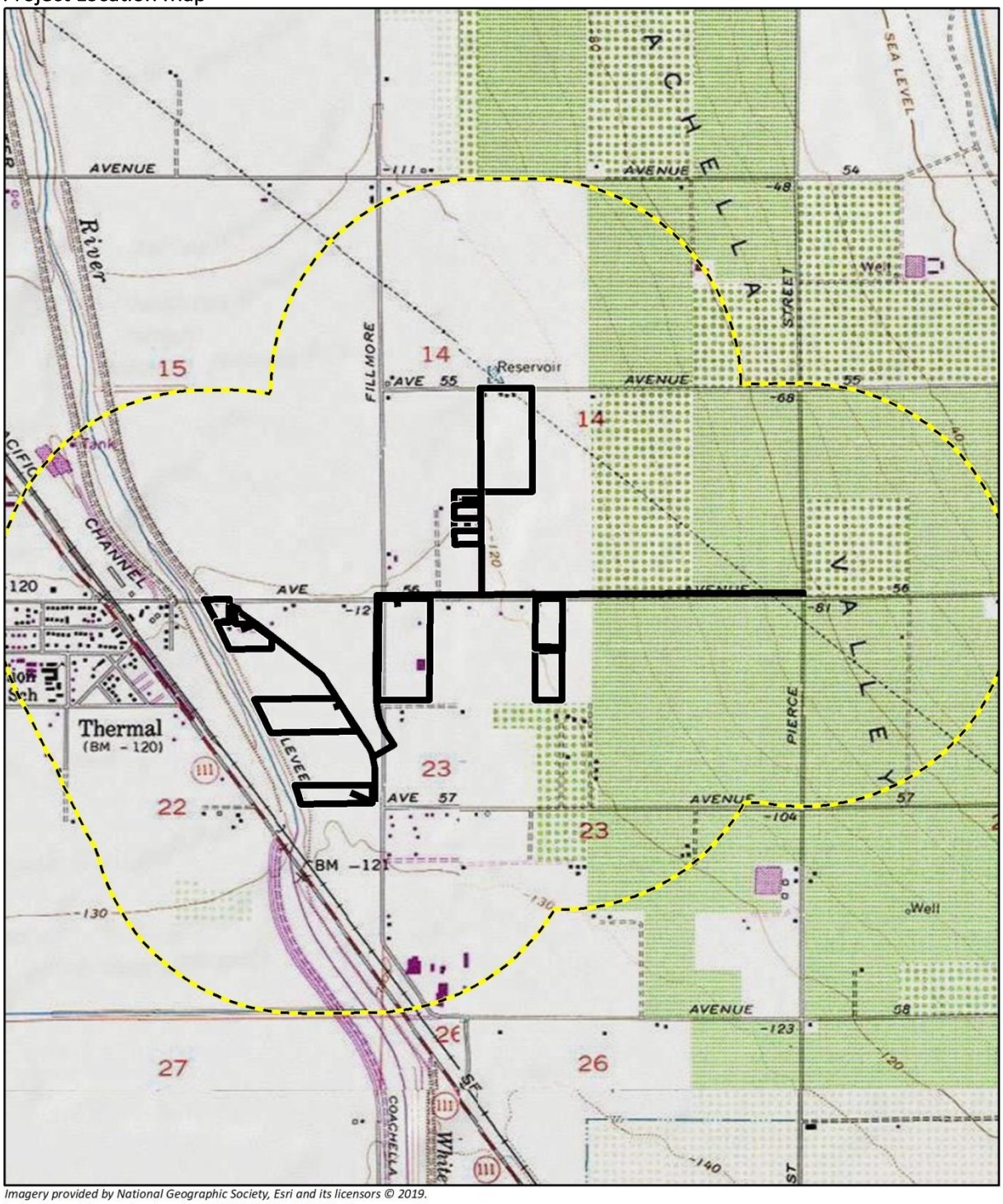
Sincerely,

Rincon Consultants, Inc.

Tiffany Clark, PhD, RPA
Senior Archaeologist/ Project Manager

Attached: Project Location Map

Project Location Map



Imagery provided by National Geographic Society, Esri and its licensors © 2019. Indio, Thermal Canyon Quadrangles. T06S R08E S13-15,22-24. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Area of Potential Effects
Half-Mile Buffer

N

0 1,000 2,000
Feet

CRRecords Search Map_ValleyView

Rincon Consultants, Inc.

301 9th Street, Suite 109
Redlands, California 92374

909 253 0705 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

January 22, 2019

Riverside County Historical Commission
4600 Crestmore Road
Riverside, CA 92509-6858

Subject: Cultural Resources Technical Study for the Valley View Small Water System Project, Near the Community of Thermal, Riverside County, California

Riverside County Historical Commission,

Rincon Consultants, Inc. (Rincon) has been retained by Woodard & Curran to conduct a cultural resources assessment for the Valley View Small Water System Project (Project). The purpose of the Project is to consolidate and connect eight mobile home park water systems to the Coachella Valley Water District's water system to allow for safe, reliable domestic water to small disadvantaged communities. The proposed Project is primarily located within public street right-of-way along Soto and Fillmore streets, Airport Boulevard, and Desert Cactus Drive east of the community of Thermal in Riverside County. As indicated on the attached map, it is situated in Township 6 South, Range 8 East, Sections 13-15, 22-24, of the United States Geological Survey (USGS) *Indio* and *Thermal Canyon CA* 7.5-minute topographic quadrangles.

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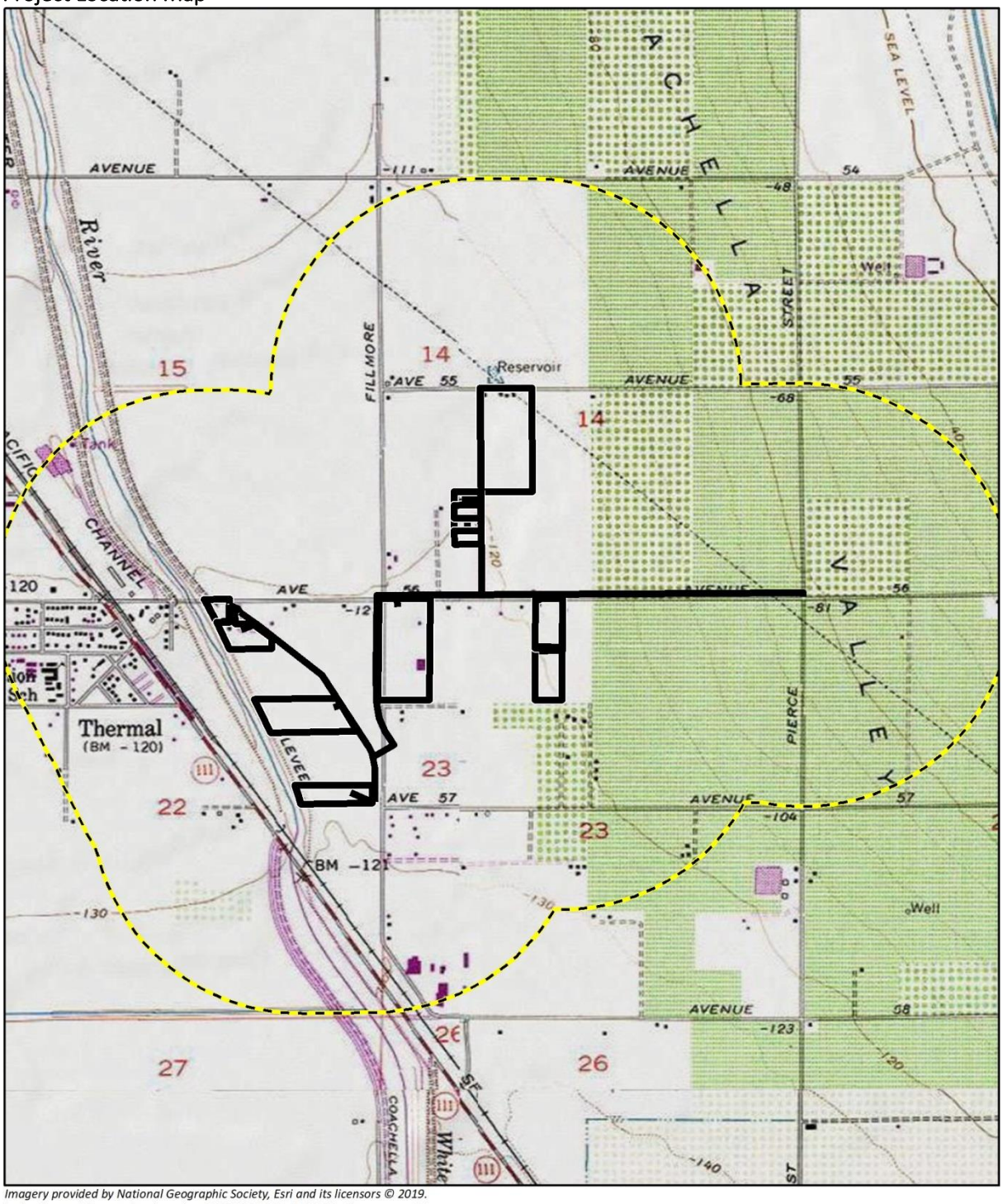

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Area of Potential Effects
Half-Mile Buffer

N

0 1,000 2,000
Feet

CRRecords Search Map_ValleyView

COACHELLA VALLEY WATER DISTRICT
Established in 1918 as a public agency

GENERAL MANAGER
Jim Barrett

ASSISTANT GENERAL MANAGER
Robert Cheng

May 22, 2019

«First_Name»«Last_Name»
«Title»
«Tribe»
«Address»
«City_State_Zip»

Dear «Salutation»«Last_Name»:

Subject: Valley View Mobile Home Park Water Consolidation Project
Formal Notification of Assembly Bill (AB) 52 Consultation regarding Tribal Resources under the California Environmental Quality Act (CEQA) Public Resources Code (PRC) §21080.3.1: AB 52 (Gatto, 2014)

The Coachella Valley Water District (CVWD) is conducting AB52 consultation for the *Valley View Mobile Home Park Water Consolidation Project* (proposed project). Please consider this letter and preliminary project information as the initiation for AB52 Consultation for Tribal Resources under CEQA PRC §21080.3.1; AB 52 (Gatto, 2014).

CVWD's Environmental Services Department staff would like to meet with you at your earliest convenience to discuss the proposed project and AB52 compliance. Please respond within 30 days if you would like to consult on this project.

CVWD understands that Tribal information submitted to our agency shall be kept confidential (PRC §21082.3(c)(1)). The purpose of AB52 consultation is to obtain Tribal expertise on the subject project area (PRC §21080.3.1(a)) via Tribal submittal of comments, information and/or project design measures.

According to the State of California Governor's Office of Planning and Research's *Discussion Draft Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA* report (May 2015), the consultation process shall be considered concluded when either: 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 (PRC §21080.3.2(b)).

Included for your information is a brief description of the proposed project and location (figures enclosed), and lead agency contact person pursuant to PRC §21080.3.1(d).

Brief Description of the Proposed Project and Location: The Valley View Mobile Home Park (MHP) Water Consolidation Project consists of consolidation of nine independent, privately owned small water systems (SWSs) into CVWD's potable water system to improve the reliability and

potential safety of water supply to the SWSs in rural disadvantaged communities (DAC). The SWS include: the Campos MHP, De Leon Ranch, Desert View MHP, Luciano Valenzuela MHP, Magdaleno Lopez, Meza's Ranch, Soto Water, Valley View MHP, and Vista Norte Estates.

The project consists of construction of a new 8-inch diameter water main that would connect to the existing 18-inch diameter water main along Pierce Street where it continues along Airport Boulevard, Soto Street, Fillmore Street and 55th Avenue. It then would connect to the existing 30-inch water main crossing Highway 86 and continue south along Desert Cactus Drive. Additionally, 1-inch and 2-inch diameter service laterals would connect to the new 8-inch diameter water main along Airport Boulevard, Soto Street, 55th Avenue and Desert Cactus Drive and extend to the property boundaries of each SWS. See attached site map. On-property components include pipelines to connect the 1-inch and 2-inch diameter laterals to the existing potable distribution system at each SWS and fire service pipelines. See enclosed map.

Overall, the project would construct approximately 11,000 linear feet of 8-inch pipeline, 1,100 linear feet of 1-inch and 2-inch water service lines, 2,300 linear feet of 6-inch ductile iron pipe (DIP) fire service lines, and 1,500 linear feet of on-property 1-inch and 2-inch diameter pipelines, for a total of approximately 16,000 linear feet of pipeline. It would deliver 118 acre-feet per year (AFY) of potable water to meet a maximum day demand of 72.9 gallons per minute (gpm). CVWD intends to apply for grant funding from California's State Water Resources Control Board's Clean Water State Revolving Fund.

Contact:
If you have any questions regarding the project or content of this letter, please contact Elizabeth Meyerhoff, Environmental Specialist, at (760) 398-2651 extension 2775; or email: Emeyerhoff@cvwd.org

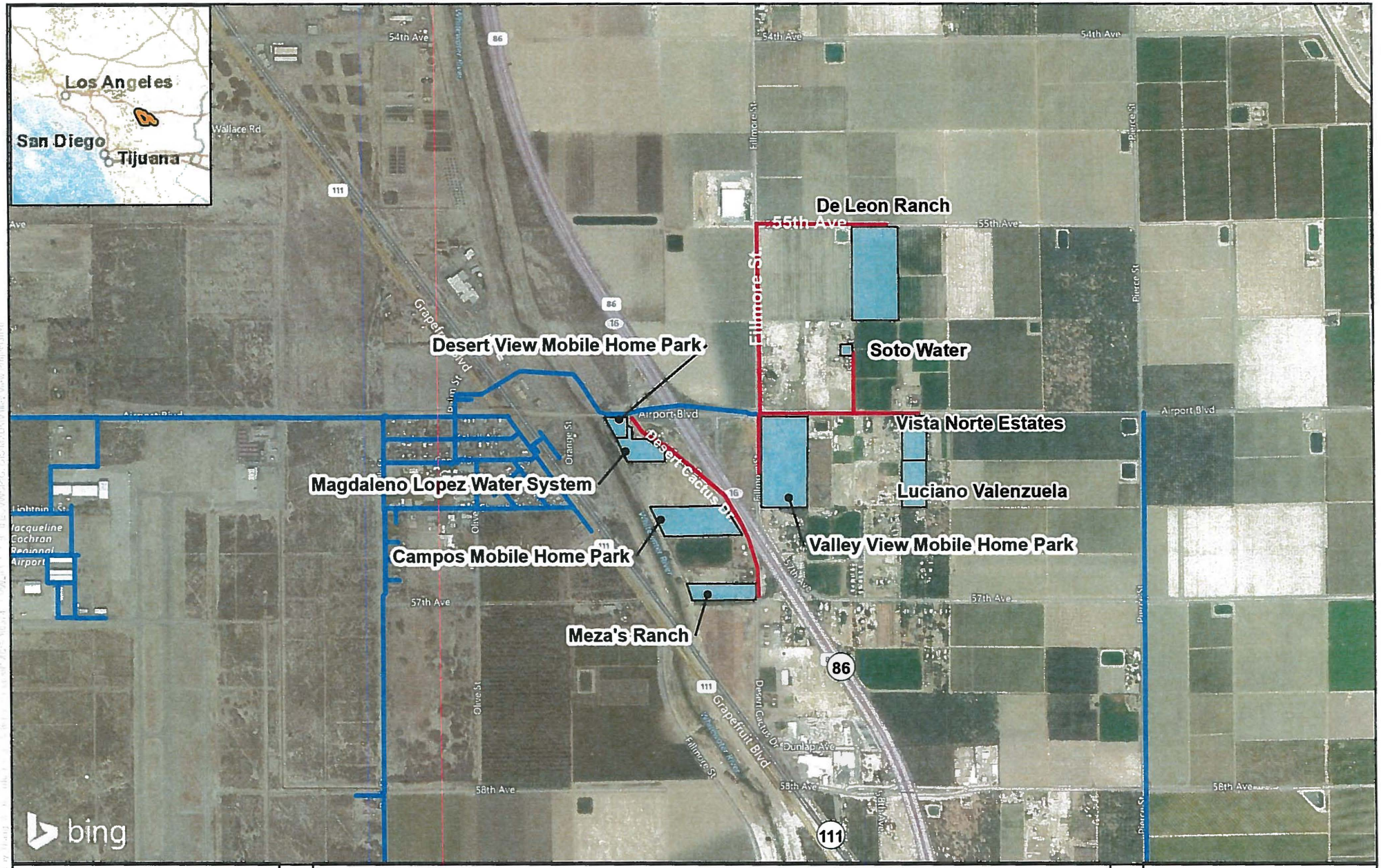
Thank you,

William Patterson
Environmental Supervisor

Enclosures/ 1/as
File No. 0063.42

MAILED
MAY 22 2019
CVWD

Coachella Valley Water District
P.O. Box 1058 Coachella, CA 92236
Phone (760) 398-2651 Fax (760) 398-3711



East Coachella Valley Water Supply Consolidation Project
Valley View MHP Proposed Project

Legend

- Small Water Systems
- Valley View Project
- Existing CVWD Water Mains

0 550 1,100 2,200 Feet

N

WOODARD & CURRAN

Project #: 0011079.00
Map Created: January 2019

ec:

William Patterson
Elizabeth Meyerhoff

WP:em\Env\EnvSvcs\2019\May\AB52 Valley View Mobile Home Park Ltr

List of recipents for AB52 Valley View Mobile Home Park letter dated May 22, 2019

Patricia Garcia-Plotkin
Tribal Historic Preservation Director
Agua Caliente Band of Cahuilla Indians
5401 Dinah Shore Drive
Palm Springs, CA 92264

Amanda Vance
Tribal Chairperson
Augustine Band of Cahuilla Mission Indians
P.O. Box 846
Coachella, CA 92236

Doug Welmas
Tribal Chairperson
Cabazon Band of Mission Indians
84-245 Indio Springs Parkway
Indio, CA 922203-3499

Travis Armstrong
Tribal Historic Preservation Officer
Morongo Band of Mission Indians
12700 Pumarra Road
Banning, CA 92220

Joseph Ontiveros
Cultural Resources Director
Soboba Band of Luiseno Indians
P.O. Box 487
San Jacinto, CA 92581

Mary Resvaloso
Tribal Chairperson
Torres Martinez Desert Cahuilla Indians
P.O. Box 1160
Thermal, CA 92274

Darrell Mike
Tribal Chairman
Twenty-Nine Palms Band of Mission Indians
46-200 Harrison Place
Coachella, CA 92236

Prepared for:
Coachella Valley Water District
75515 Hovley Lane East
Palm Desert, CA 92211
760.398.2651

Woodard & Curran
10509 Vista Sorrento Parkway, Suite 205
San Diego, CA 92121
858.875.7405