

## **Initial Study/Environmental Assessment**

Phase II and Phase III Sewer Collection  
System Project

Hi-Desert Water District

Yucca Valley, CA

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Prepared for:

**Hi-Desert Water District**  
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April 2020

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- Appendix A – Air Quality Impact Study
- Appendix B – Biological Resources Assessment
- Appendix C – Cultural Resources Assessment
- Appendix D – Energy Analysis
- Appendix E – Greenhouse Gas Emissions Analysis
- Appendix F - Response to Comments (Reserved)

## 1 INTRODUCTION

The Hi-Desert Water District (HDWD) is proposing to construct approximately 64 miles of PVC sewer pipeline, 1,300 manholes and three lift stations facilities in various areas of its service territory for the purpose of decreasing the reliance on septic systems in their service territory. Pipelines are planned to be between 8 inch and 12 inch in diameter and will connect to its existing system. Funding is being provided in part by the Bureau of Reclamation.

### 1.1 Background

The HDWD was originally formed in 1962 and grew as a result of the acquisition of various smaller districts and the formation of many assessment districts, primarily on the mesa. Currently, the HDWD has more than 10,000 active service connections. With a total service area of 57-square miles, the District operates 16 storage tanks, 13 wells, and maintains over 297 miles of pipeline. It provides potable water services to the Town of Yucca Valley and a portion of the unincorporated area of San Bernardino County (see Figures 1 and 2).

In 2007, the California State Water Resources Control Board (State Water Board) adopted a resolution identifying the Town of Yucca Valley as a top priority for eliminating the use of septic systems. In 2011, the Colorado River Basin Regional Water Quality Control Board (CRBRWQCB) amended its Basin Plan to prohibit discharge from septic systems in Yucca Valley.

In 2009, the HDWD adopted a Wastewater Master Plan (Master Plan), prepared by consultant Montgomery Watson Harza (MWH), for the Town of Yucca Valley. which identifies that the District will own and operate a proposed wastewater collection and treatment system in accordance with the Master Plan. As a result, the District developed a Wastewater Reclamation Project to design, construct, and operate a wastewater collection and treatment system, and remove septic systems within its service area and connect customers to its municipal wastewater collection and treatment system

Phase 1 of the plan consisted of several wastewater treatment systems and pipelines in primarily the core or mostly developed, contiguous areas of Yucca Valley. Construction began in 2017 and is anticipated to be completed in December 2019.

The HDWD is currently planning for the construction of Phases II and III which is primarily the only sewer pipelines for the residential areas that are outside of the core, contiguous area of Yucca Valley over the next 10 years. Phases II and III are identified in the HDWD Sewer Master Plan as *Proposed Alignments Included in Master Plan*, *Proposed Alignments Not Included in Master Plan*, and *Deferred Alignments Included in Master Plan* (refer to Sewer Master Plan, Figure 2 - Sewer Master Plan Alignments vs Phase II & III Proposed/Deferred Alignments, and Figure 3A in this document). HDWD's current plans do not include the Phase II and III alignments identified on the Sewer Master Plan Figure 2 as the *Deferred Alignments Not Included in Master Plan*. Figures 3A and 3B in this document depict the current proposed Project. Figures 4 through 14 provide a closer view of the planned alignment areas.

### 1.2 Purpose of Environmental Assessment

The proposed Project/Action is a discretionary action under the California Environmental Quality Act (CEQA) Guidelines Section 15378 identifies a Project as an activity that is undertaken by a public agency and/or where the activity would be supported in whole or in part through public grants or loans. The High Desert Water District is proposing to utilize funding from the California Department of Water Resources' (DWR) Integrated Regional Water Management (IRWM) Grant Program for the Proposition 1 Disadvantaged Community Involvement Program.

Additionally, funding may be sought through the State Clean Water State Revolving Fund (CWSRF) program. The CWSRF program is a partnership United States Environmental Protection Agency (USEPA) that provides communities a permanent, independent source of low-cost financing for a wide range of water quality infrastructure projects.

The State Water Board, DWR, Division of Financial Assistance administers both the IRWM and CWSRF programs. Due to the federal nexus with USEPA for CWSRF funding, federal laws and regulations (e.g. federal cross-cutters) apply to all projects pursuing CWSRF financing. Under the CWSRF Program, the Division under the State Water Board uses the CEQA document plus the federal cross-cutting documentation in place of a National Environmental Policy Act (NEPA) document in what is termed “CEQA-Plus” documentation. The State Board does not complete a NEPA review process, but rather completes the “NEPA-like” process of CEQA-Plus.

The CEQA-Plus MND is where the Initial Study is prepared both in accordance with the California Code of Regulations, Title 14, Article 5 and Article 7 as well as federal regulations, specifically, *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act* (40 CFR Sections 1500–1508) issued by the Council on Environmental Quality (CEQ) (1970, as amended), the *Environmental Review Guide for Special Appropriation Grants* (EPA 2008), and the *Environmental Review Process Guidelines for State Revolving Fund Applicants* (SWRCB 2004).

A “CEQA-Plus” environmental document contains information pertaining to both State and federally-designated endangered species, cultural resource protection, conformity with applicable air management plans, and other federal executive orders and federal regulations. This document has been prepared to meet the CEQA-Plus requirements for the various funding sources.

## **2 PROJECT PURPOSE AND NEED**

Installation of wastewater system infrastructure is considered essential to HDWD in order to continue meeting public health and safety requirements for water supply within its service area and to meet the water quality objectives of the CRBRWQCB.

The Phase II and Phase III Project is to install approximately 64 miles of wastewater pipeline, 1,300 manholes, and three lift stations in the roadways of the areas outside of the main, contiguous Yucca Valley community.

## **3 PROJECT LOCATION AND SETTING**

Yucca Valley, San Bernardino County is located in the Morongo Basin portion of the Mojave Desert, approximately 70 miles east of the City of San Bernardino (Figure 1). Access to the region is by State Route 62 (SR-62) which extends west to Interstate 10 and east to the Colorado River and the Arizona state line from Yucca Valley. Land uses in the Project region consists of a mix of open space, residential, commercial, and limited industrial uses.

The climate in the Project region is that of a subtropical upland desert with annual precipitation less than 10 inches, averaging 6.44 inches. Temperatures can vary from 0°F in winter to above 110°F in the summer. Mean summer temperature is 88°F and in winter is 49°F. Air quality in the region is good, but during the summer, transported pollutants from the South Coast Air Basin (SoCAB) can cause ozone concentrations to violate federal and state standards on rare occasions. The project area is located within the Mojave Desert Air Basin (MOAB) and the Mojave Desert Air Quality Management District (MDAQMD) manages air quality for this Basin.

The only topographic feature within the Yucca Valley area is an ephemeral desert wash area, vegetated with Joshua tree-creosote scrub, intermixed with Mormon tea. A Joshua tree-creosote bush scrub plant community occurs in the general area, and desert tortoise are also known to inhabit the general area. The subsurface of the Project region is

generally alluvial deposits derived from the Little San Bernardino Mountains to the south. The alluvial fan slopes to the north at a 1-2 percent gradient at a general elevation of approximately 3,300 feet above sea level. The Pinto Mountain fault (considered active) is located about one-quarter mile north of the proposed treatment plant site. No other geologic hazards are known to occur in the project area.

The Phase II and Phase III proposed sewer pipeline alignments (Project areas) generally occur north and south of the main Yucca Valley community. For the purposes of this assessment, the Project areas are described as follows:

**Section 1 – North and South of SR-62, Vicinity of Blue Skies Country Club.** This Project Area contains three main areas. Areas 1 and 2 are north of SR-62 and Area 3 is south of Area 1, south of SR-62. Areas 1 and 2 are generally bounded by SR-62 on the south, the Blue Skies Country Club on the east, Country Club Drive (northeast), and by Ridge Road (westernmost boundary). Within Areas 1 and 2, an east-west ephemeral wash, approximately 85 feet wide, traverses this section, beginning near the golf course, and ends on the desert floor north of the second residential community. A portion of the planned Project alignment requires a new line to traverse behind homes east of Camino Del Cielo Trail adjacent to the country club grounds, across the wash, and connecting to Martinez Trail, south of the country club grounds.

- Area 1 – This moderately dense residential community is generally bounded by Rockaway Avenue on the west, the country club grounds on the east, Country Club Road on the north. The terrain is relatively flat with newer paved roads. Main arterials include the north-south Pinon Road and Camino Del Cielo Trail.
- Area 2 – a residential community located approximately 0.25 mile northwest of Area 1, connected to Area 1 by Pinon Road which turns westerly as it exits the Area 1 area. Area 2 is generally bounded by Ridge Road on the west and Canyon Drive on the east and north. The terrain slopes northwest from Ridge Road, increasing in elevation along Pinon Road.
- Area 3 – south of SR-62. This area is connected by Pinon Drive and is located south of SR-62. It is generally bordered by Pinon Drive on the east, Chaparral Drive on the west, and the ends of two paved streets south of Navajo Drive on the south. Residences in this area are generally clustered near the four main roadways.

**Section 2 – Old Town North (East of Water Canyon).** This Project section comprises mostly of Sunnyslope Drive, between Pioneertown Road on the west and Apache Trail on the east. A portion of the line is also planned for the northern portion of Apache Trail, north to Crestview Drive. The area is primarily sparsely populated by residential use. Most of Sunnyslope Drive is paved, except for near the connecting points at Pioneertown Road and Apache Trail. The segment of Apache Trail between Sunnyslope and Crestview Drive is a dirt road.

**Section 3 – Mid-Town North.** This Project section consists primarily of two residential communities accessed by Sunnyslope Drive (an east-west street). The first area consists only of a few residences north of Sunnyslope Road in the vicinity Grand Avenue (a north-south street). The second area is approximately 0.25 mile to the east, generally bounded by Sage Avenue to the west, Sunnyslope Drive to the south, Crestview Drive on the north and SR-247 on the east. Several north-south streets north of Crestview Drive include but are not limited to Barberry Avenue, Dumosa Avenue and Joshua Lane. The Project section generally contains non-paved roadways, except for Sunnyslope Drive.

**Section 4 – SR-247 between Crestview Drive (south) and Buena Suerte Road (north).** This approximate 0.84-mile section of Hwy 247 is the north-south connector within the Yucca Valley region and connects SR-62 with Interstate 15. The road is owned and operated by Caltrans.

**Section 5 – Western Hills Estates and Shatin Heights.** This Project section is dominated by scattered residences built within hills and rock outcroppings, bisected by SR-247, with main arterials including Farrello Road and Bueno

Suerte Road. West of SR-247, this area includes Castro Road on the south, the northern portion of Panchita Road on the west, and approximately to Cobalt Road on the north. Roads in this community are generally paved. East of SR-247, the Project area generally includes the paved roads of Bueno Suerte Road on the south, Bandera Road on the east, and Concho Way on the north.

**Section 6 – Warren Way and Paxton Road.** This smaller Project section captures scattered residences along an approximately 0.25 mile segment of Paxton Road, a paved road, and north of Warren Way, a non-paved road. This section lies approximately 0.25 mile northeast of the Yucca Valley airport, and an ephemeral wash exists on the eastern terminus of this segment. The terrain is relatively flat.

**Section 7 – Paradise Valley North of Yucca Creek.** This section consists of a rural residential community with primarily unpaved roads. It generally includes a section of Avalon Avenue and Avalon Court, and a second area that is generally bordered by Nelson Avenue on the south, Yucca Mesa Road (paved), on the east, Carmelita Avenue on the west, and the vicinity of Linda Lee Drive and Hide Lane on the north. Conceptual Project plans identify that this community will be connected to the system by Yucca Mesa Road, south to Barron Drive. An ephemeral wash, approximately 160 feet wide, exists under Yucca Mesa Road, between approximately Nelson Avenue and Barron Drive.

**Section 8 – Upper Sky Harbor.** This section is within the southerneasternmost Project area. It is generally bordered by San Andreas Road on the north, Carmelita Circle on the south, Black Rock Canyon Road and Joshua Lane on the west, and Carmelita Circle and Hermosa Avenue on the east. The terrain is relative flat, and the area has many Joshua trees. The area is moderately populated with existing residences. All of the roads are paved, except for short segments along San Marino Drive and Santa Barbara Drive west of Joshua Lane.

**Section 9 – Sky Harbor.** This Project area is generally bounded by San Andres Road on the south, Paloma Avenue on the east, Warren Vista Avenue and Kaiulni Road on the west, and Joshua Drive on the north. This section would be connected to the wastewater system by a segment to be installed in Palomar Avenue between approximately Onaga Trail on the north and Joshua Drive on the south. This community has a higher density of residences than the other Project areas and mostly paved roads; however, Kaiulni Road is unpaved, and few residences exist along Palomar Avenue.

**Section 10 – Communities South of Onaga Trail.** This Section contains four main areas:

- Copper Hills I (portion) contains a mobile home park and scattered, larger homes, one with recreational uses, such as tennis courts. This area is bounded on the north by Mountain View Trail, on the east by Valley Vista Avenue, on the south by the end of Valley Vista Avenue, and on the west by Elata Avenue. This area has paved roads, although the pavement is in poor condition.
- Copper Hills II – a densely populated, newer subdivision near the Joshua Springs Calvary Chapel. The northern boundary is approximately Joshua Lane and Golden Bee Drive, western boundary is approximately Seeleta Avenue, the southern boundary is approximately San Andreas Avenue (although does not include infrastructure in San Andreas Avenue at this time), and the eastern boundary is approximately Nagels Street to Kingston Avenue. All areas except for the segment along Nagels Avenue are newer, paved roads.
- Alta Loma, Storey Park and Yucca Valley High School - densely populated, located northwesterly of Copper Hills II, and is connected to Copper Hills II by Joshua Lane, a north-south paved road. It is generally bounded on the north by Onaga Trail, generally on the west by Church Street and a western portion of Joshua Lane, and on the south by Kismet Road. This area includes Joshua Lane, from Onaga Trail on the north, to Golden Bee Drive in Copper Hills II, as well as an area between the Yucca Valley High School ballfields and High School Flood Control Channel.

**Section 11 – Juniper Terrace.** Juniper Terrace – moderately populated area, west of Story Park, with few paved roads. It is bordered generally by Mountain View Trail on the north, Acoma Trail on the east, Golden Bee Drive on the south (not connected to Storey Park), and Jemeza Trail on the west. This area will be connected to the system by Kickapoo Trail (a partially-paved north-south street), between Santa Fe Trail on the north to Mountain View Trail on the south.

## 4 PROJECT COMPONENTS

In general, the Project includes construction of 64 miles of wastewater pipeline, and 1,300 manholes and 3 lift stations. Due to the fact these areas are generally outside of the main, contiguous community of Yucca Valley, construction within these areas would likely occur in smaller increments, over 10 to 20 years, to allow for time to design for terrain differences and lift stations that would be needed to connect these outer areas to the main system. Other design considerations for these areas are whether the lines will be gravity flow or forced main. These decisions depend on the amount of flow and terrain.

Construction of the areas would likely begin in a fall season, and end the following fall or summer season, depending on the scope of work.

In general, pipeline installation includes trenching to approximately 10 feet below surface to the desired width for the pipeline. The pipeline would be placed, and the trench would be partially backfilled with gravel, as well as the native soil previously excavated.

Manholes will be installed at the same time as the mainline piping, using the same open cut trench. The lift stations will be standard manholes with inset pumps, to force wastewater uphill and into other parts of the gravity system. All lift stations will be connected to permanent electrical power with a hook up for a temporary generator connection.

Project construction will require the use of heavy equipment. While the final types and numbers of construction equipment will be determined by the construction contractor, the type of equipment to be utilized may include:

- Excavator
- Trencher
- Pavement Ripper
- Asphalt Truck
- Pavement Roller
- Concrete Trucks
- Hand tools such as jack hammers, ditch diggers

## 5 PROJECT ALTERNATIVES

### No Action Alternative

Under the No Action Alternative, the Proposed Action would not be undertaken. No facility upgrades would be made and public health and safety may be compromised due to increased potential for overflows and equipment breakdowns.

## 6 PURPOSE OF THIS INITIAL STUDY/ENVIRONMENTAL ASSESSMENT

The proposed Project/Action is a discretionary action under the California Environmental Quality Act (CEQA) Guidelines Section 15378 identifies a Project as an activity that is undertaken by a public agency and/or where the activity would be supported in whole or in part through public grants or loans.

The HDWD is proposing obtain several funding sources for the Project including a low-interest loan/grant through the Proposition 1 Disadvantaged Community Involvement Program (DAC). The DAC program provides communities a permanent, independent source of low-cost financing for a wide range of water quality infrastructure projects. Proposition 1, Chapter 7 Regional Water Security, Climate and Drought Preparedness (Water Code § 79740 – 79748) funding is intended to improve regional water self-reliance security and adapt to the effects on water supply arising out of climate change. Activities funded under the IRWM Grant Program regardless of funding source must be in compliance with the California Environmental Quality Act (CEQA) (Public Resources Code §21000 et seq.).

The HDWD may also be seeking a low-interest loan through the State Clean Water State Revolving Fund (CWSRF) program to fund the Phase II and III pipeline construction. The CWSRF program is a partnership United States Environmental Protection Agency (USEPA) that provides communities a permanent, independent source of low-cost financing for a wide range of water quality infrastructure projects.

The State Water Board, Division of Financial Assistance administers the CWSRF program. Due to the federal nexus with USEPA, federal laws and regulations (e.g. federal cross-cutters) apply to all projects pursuing CWSRF financing. Under the CWSRF Program, the Division under the State Water Board uses the CEQA document plus the “federal cross-cutting documentation” in place of a National Environmental Policy Act (NEPA) document in what is termed “CEQA-Plus” documentation. The State Board does not complete a NEPA review process, but rather completes the “NEPA-like” process of CEQA-Plus.

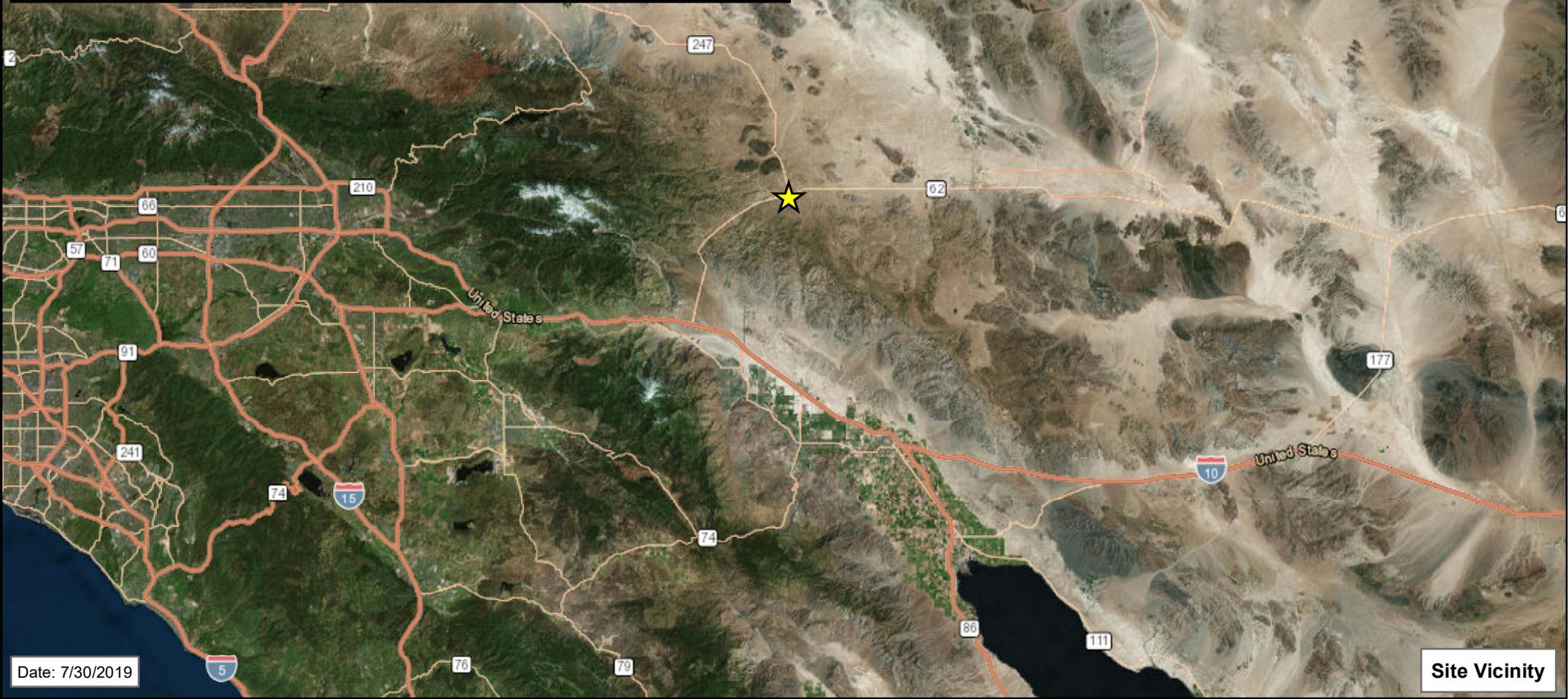
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A “CEQA-Plus” environmental document contains information pertaining to both State and federally-designated endangered species, cultural resource protection, conformity with applicable air management plans, and other federal executive orders and federal regulations.



**Legend**

★ Site Vicinity



Date: 7/30/2019

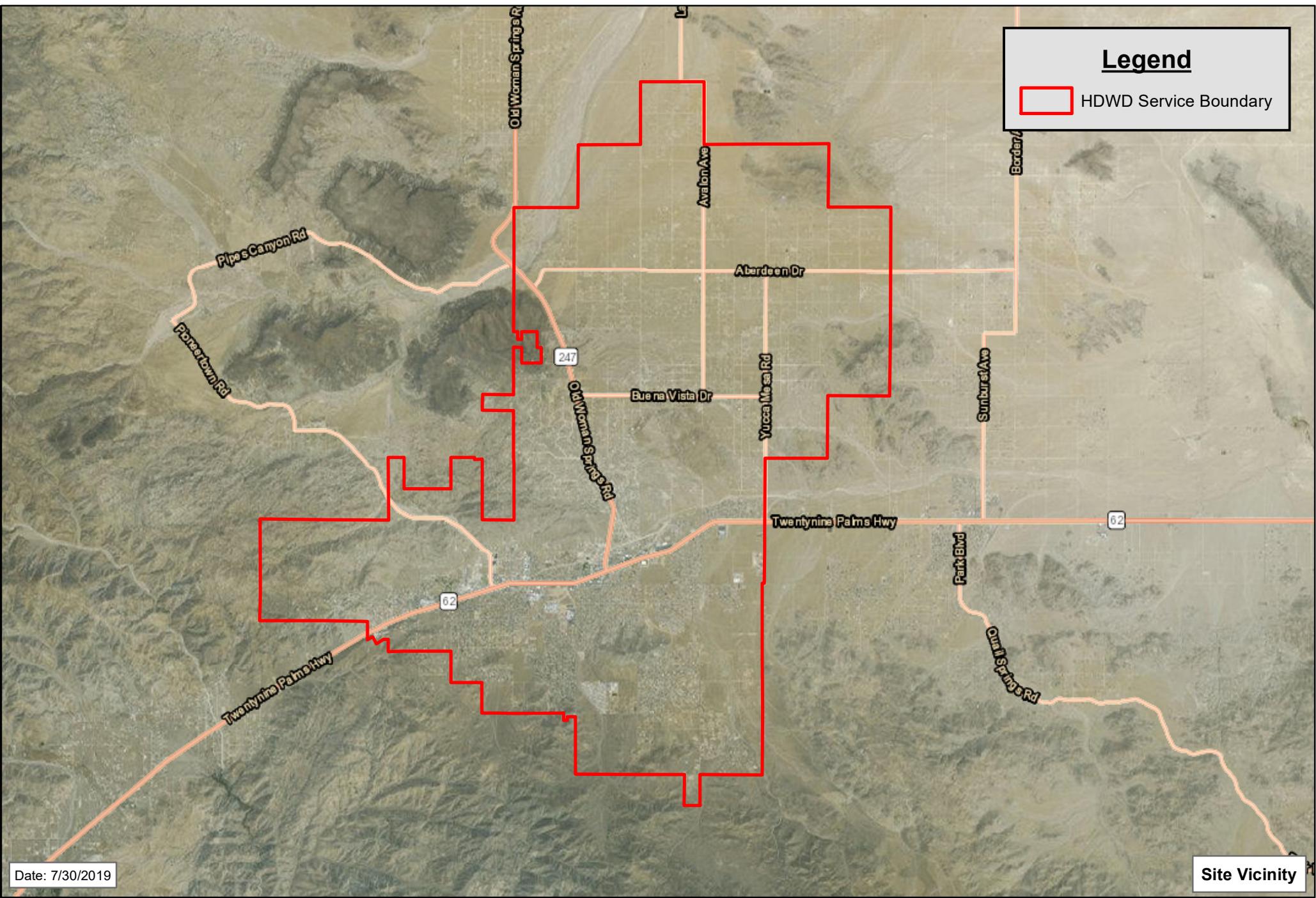


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**Figure 1 - Regional Overview  
 Site Vicinity**

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



Date: 7/30/2019

Site Vicinity

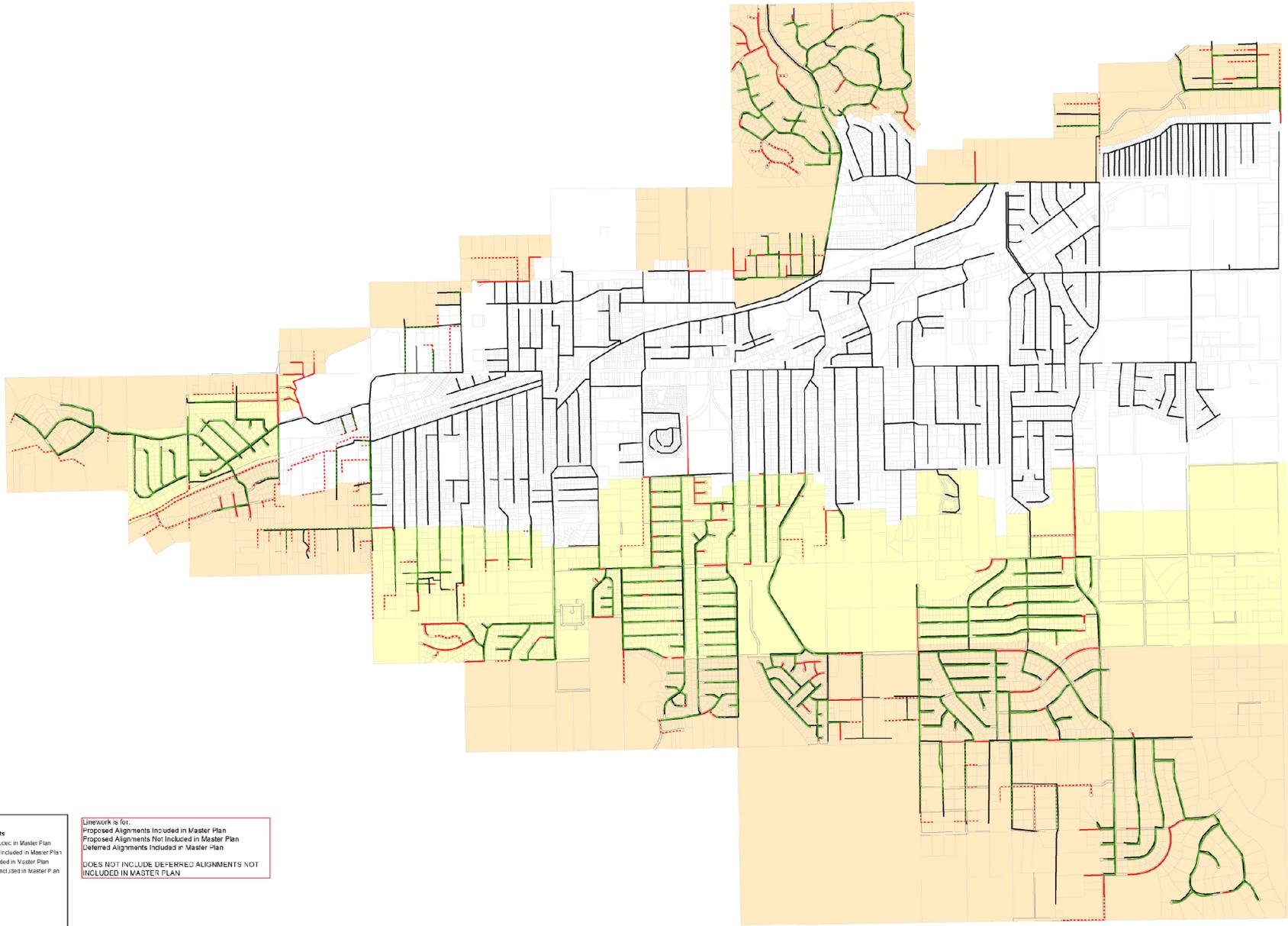


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**Figure 2**  
**Service Boundary Location**

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



- Master Plan Alignments
- Current Phase II & III Alignments**
- Proposed Alignments Included in Master Plan
- Proposed Alignments Not Included in Master Plan
- ..... Deferred Alignments Included in Master Plan
- ..... Deferred Alignments Not Included in Master Plan
- ROW
- Parcels
- Phase**
- II
- III

Linework is for:  
 Proposed Alignments Included in Master Plan  
 Proposed Alignments Not Included in Master Plan  
 Deferred Alignments Included in Master Plan  
 DOES NOT INCLUDE DEFERRED ALIGNMENTS NOT INCLUDED IN MASTER PLAN

**ATKINS** Sewer Master Plan Alignments vs Phase II & III Proposed/Deferred Alignments  
10/20/2020 - 10/19/2021 Phase 2 - Initial Design



0 1.25 2.5 5 7.5 10 Miles

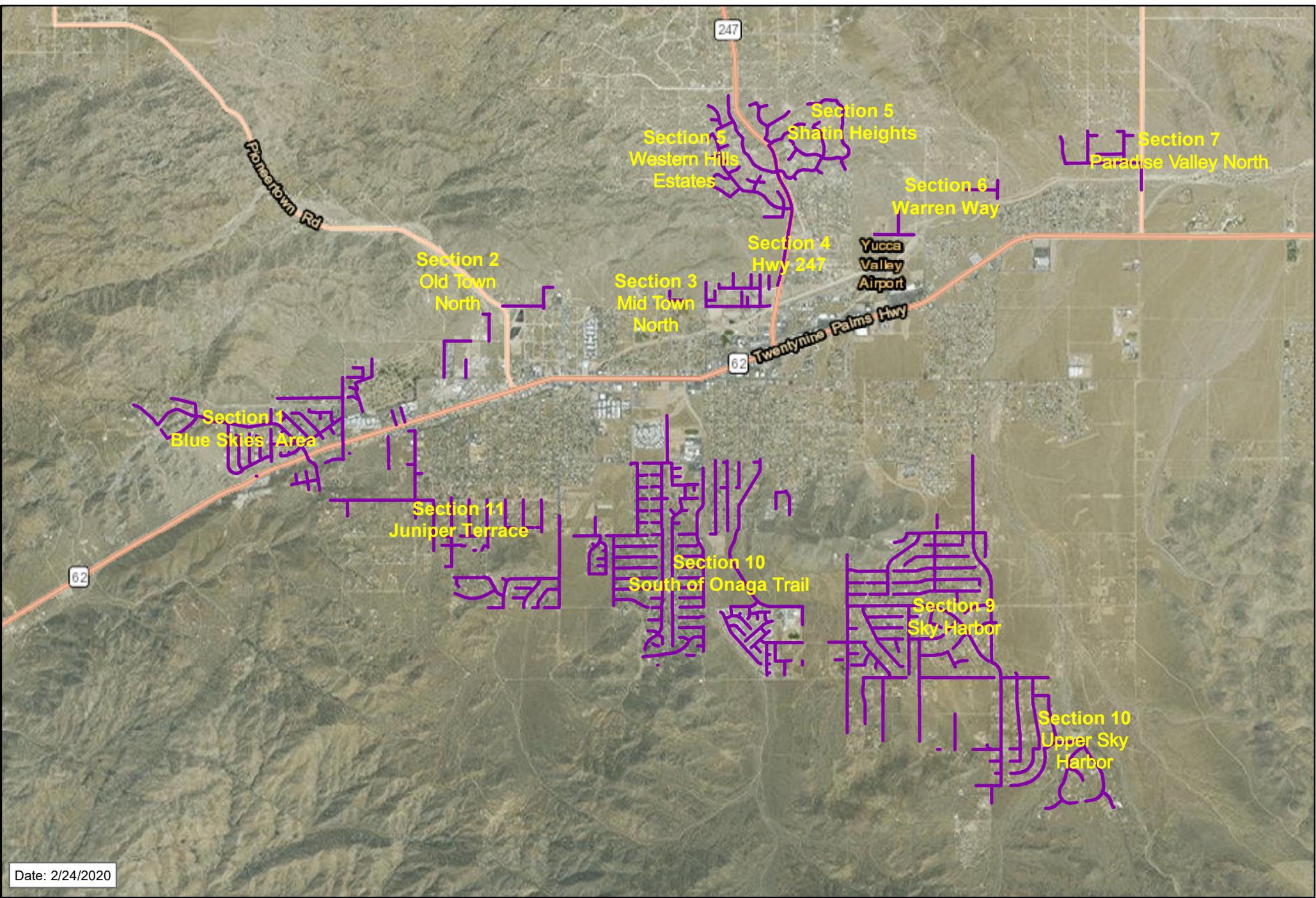
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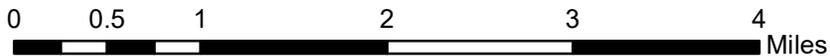
1 inch = 14,034 feet

**Figure 3A**  
**Hi-Desert Water District Sewer Master Plan**

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



Date: 2/24/2020

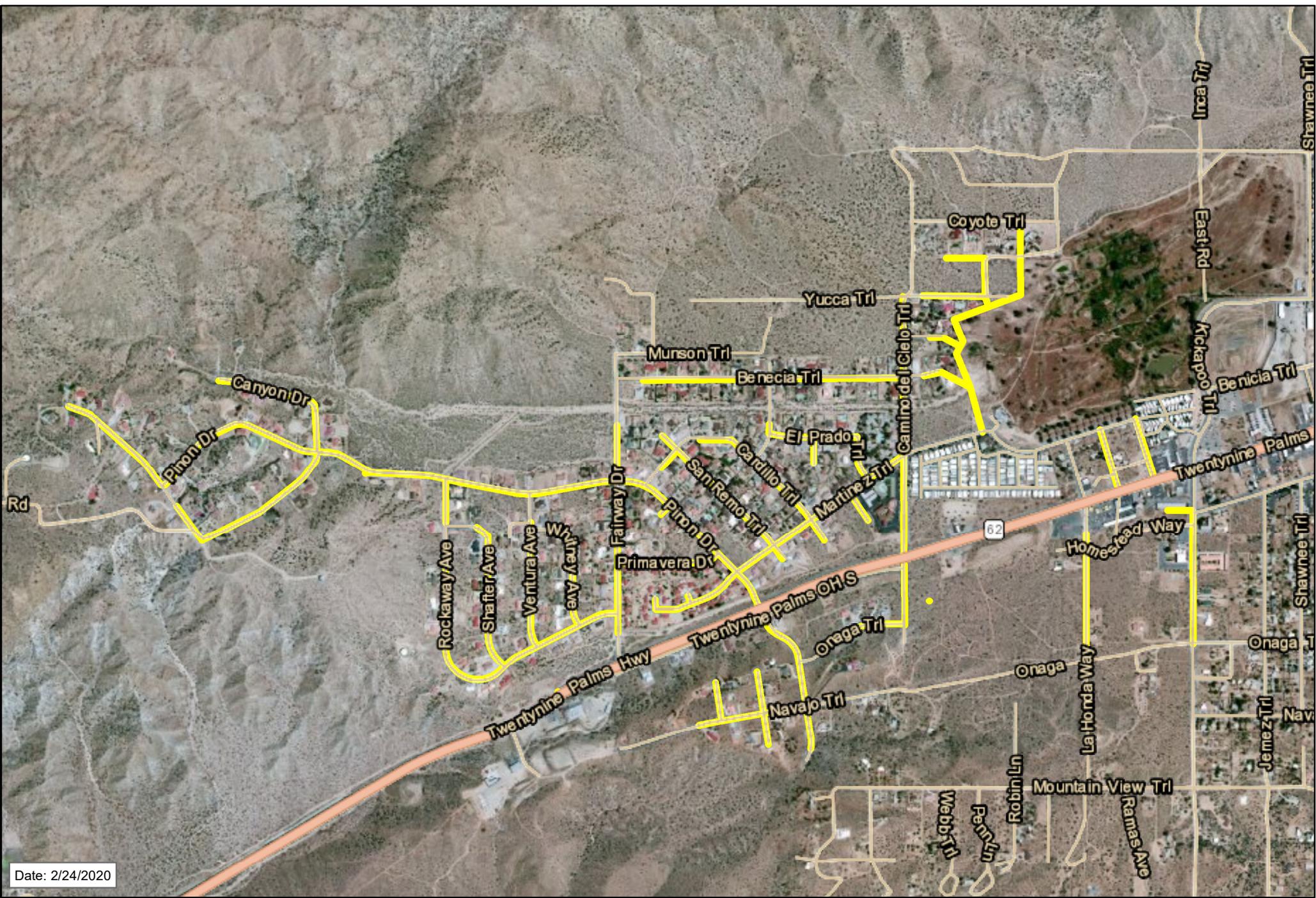


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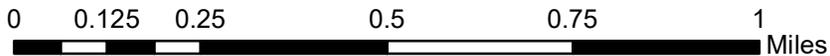


**Figure 3B**  
**Project Areas**

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



Date: 2/24/2020

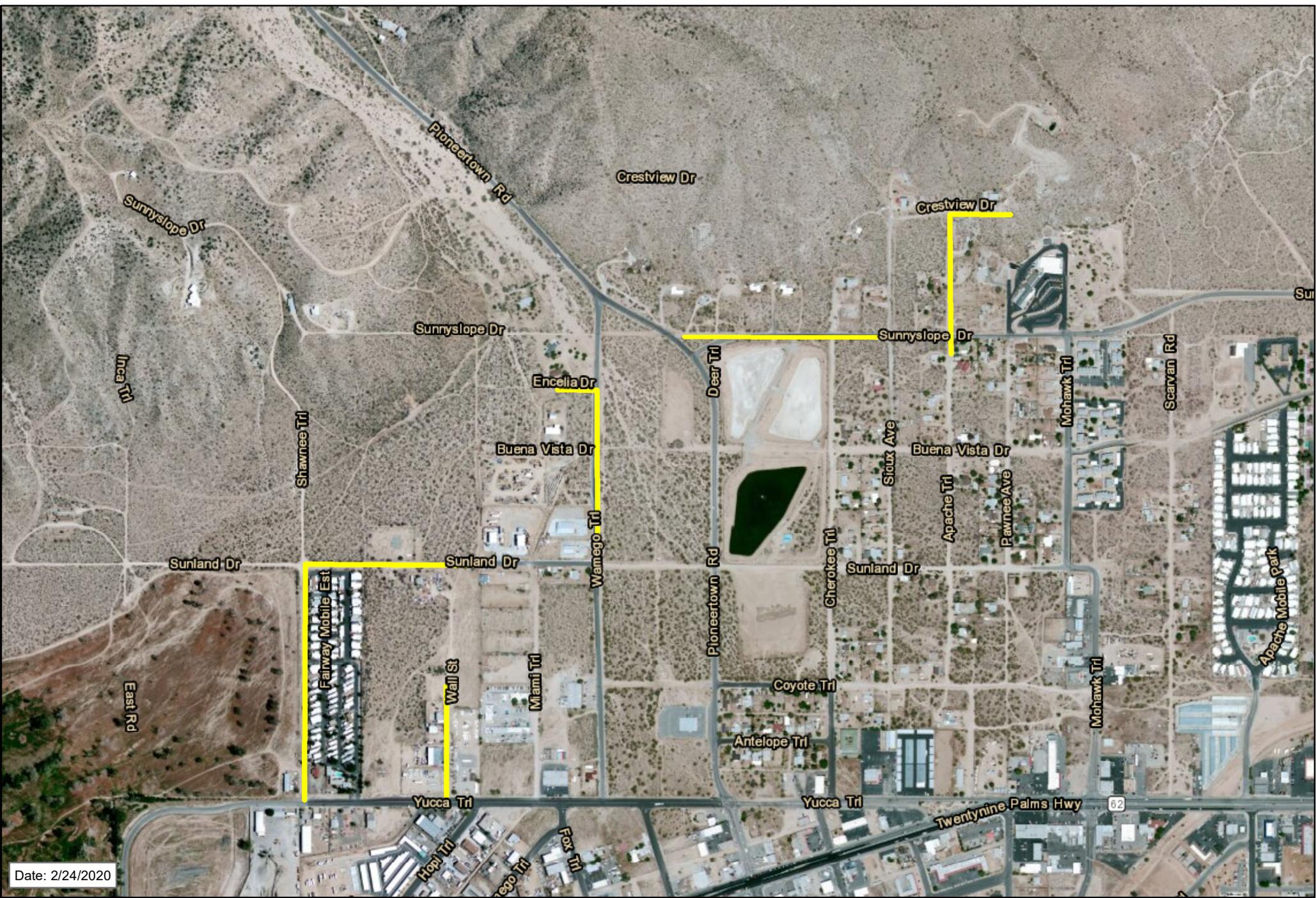


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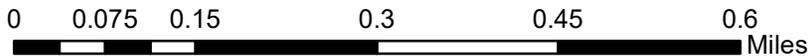


**Figure 4**  
**Section 1 - Blue Skies Area**

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



Date: 2/24/2020

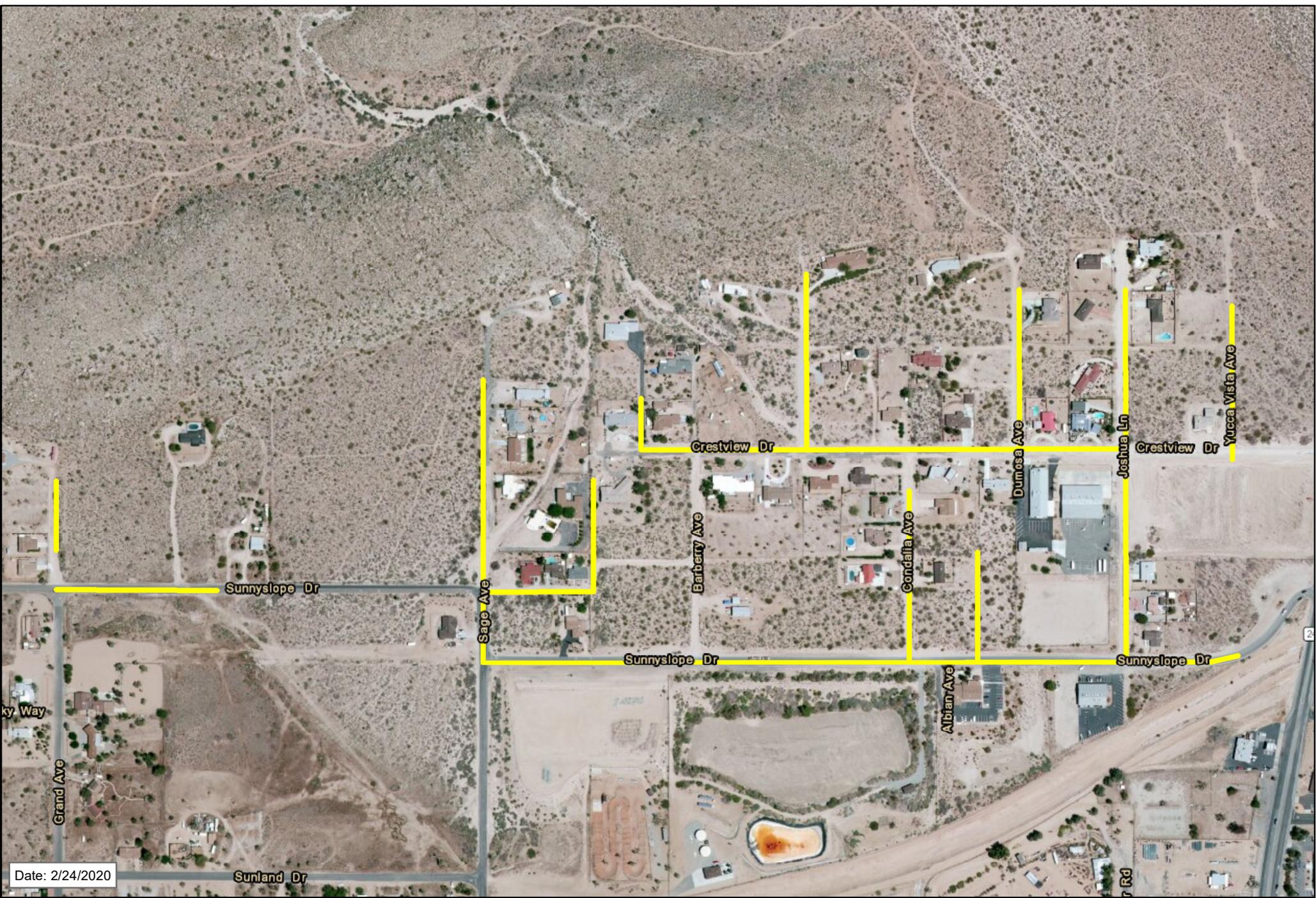


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**Figure 5**  
**Section 2 - Old Town North**

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



Date: 2/24/2020



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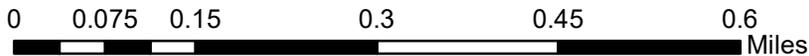


**Figure 6**  
**Section 3 - Mid Town North**

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



Date: 9/10/2019

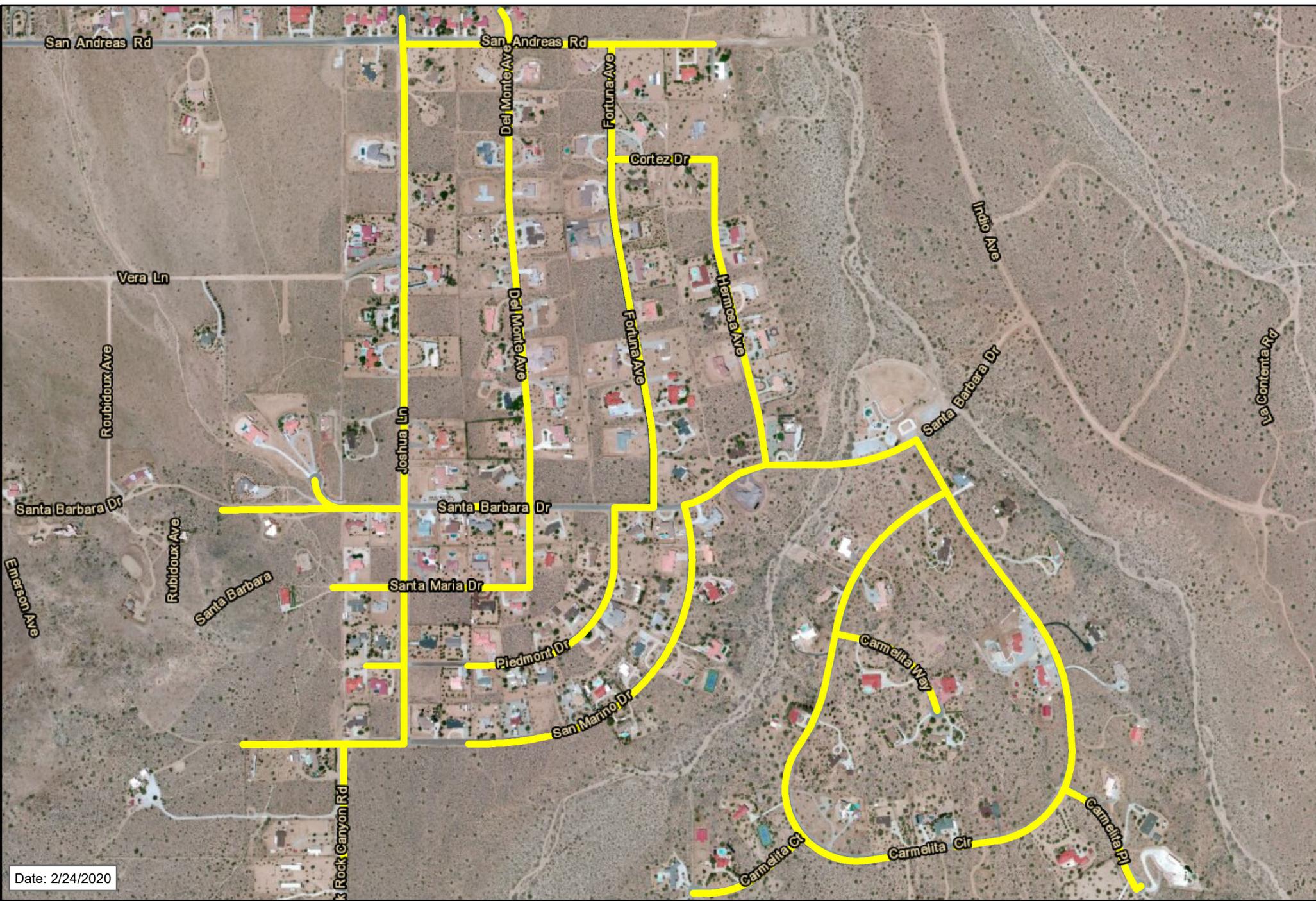


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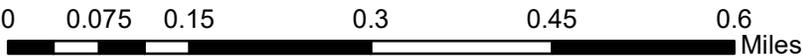


**Figure 7**  
**Section 4 - SR - 247**

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



Date: 2/24/2020



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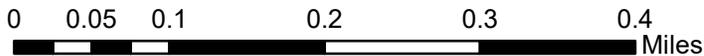


Figure 11  
 Section 8 - Upper Sky Harbor

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



Date: 2/24/2020

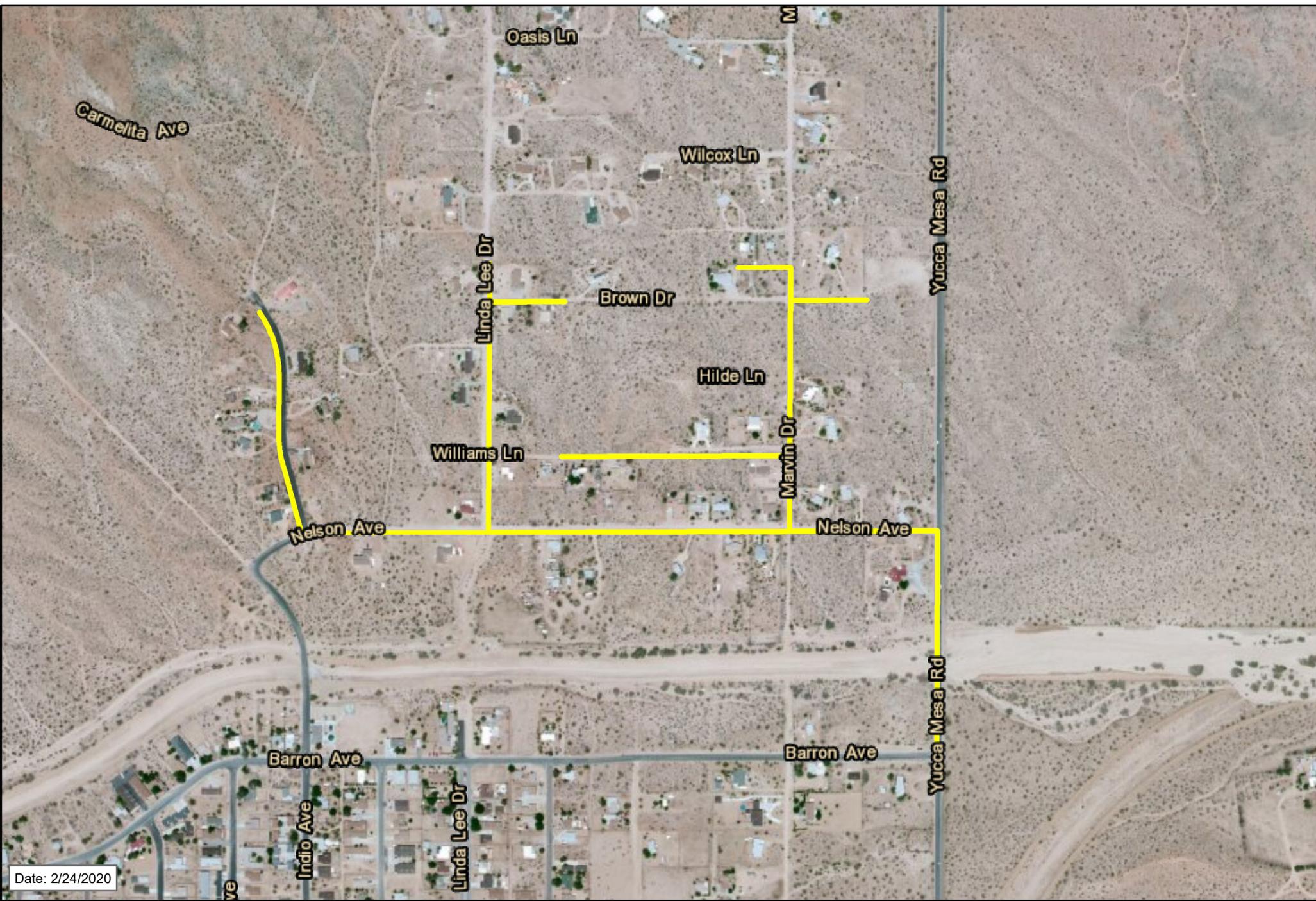


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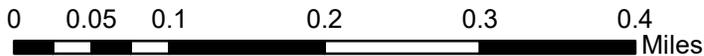


Figure 9  
 Section 6 - Warren Way Area

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



Date: 2/24/2020

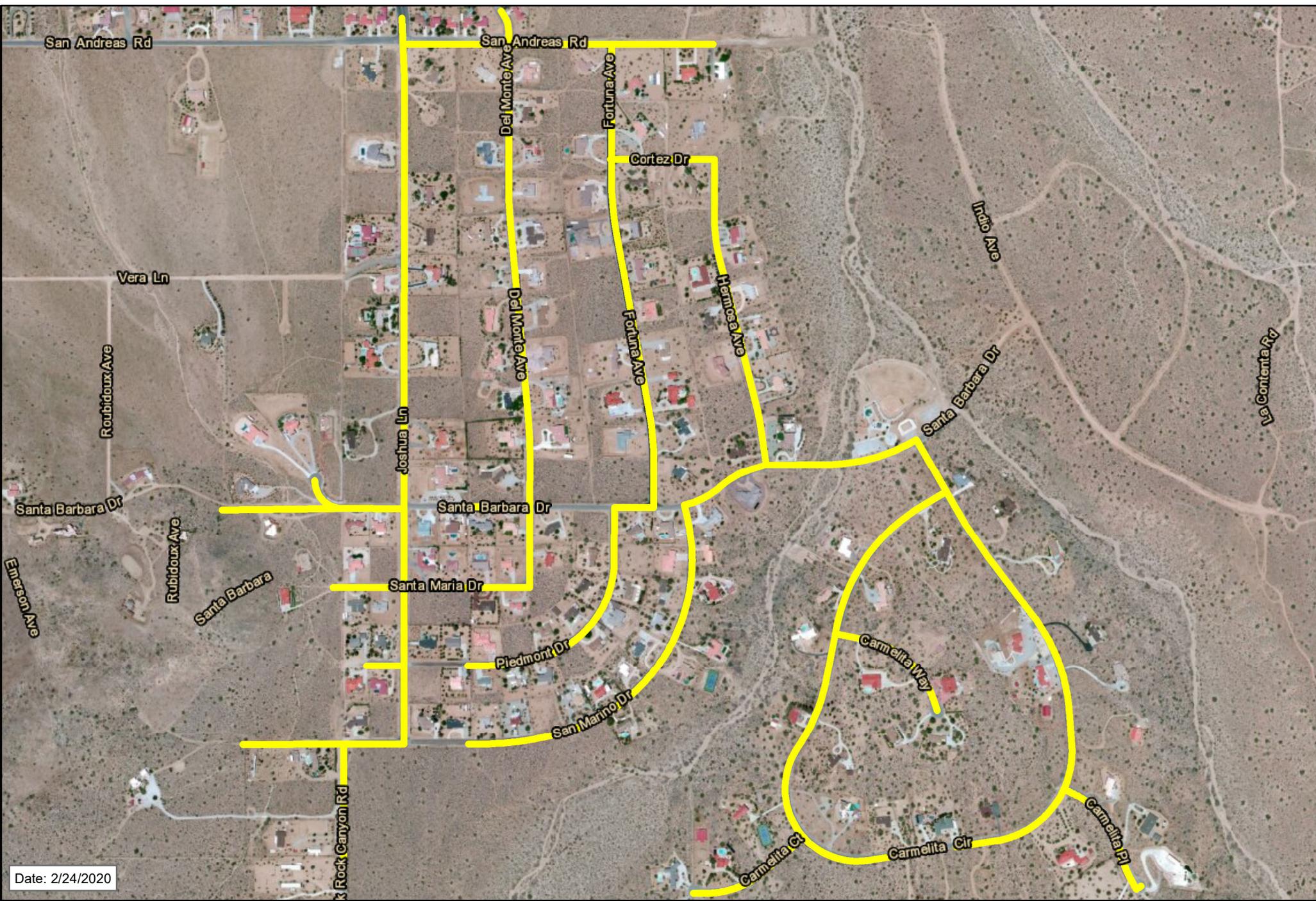


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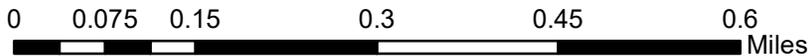


Figure 10  
 Section 7 - Paradise Valley North Area

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



Date: 2/24/2020

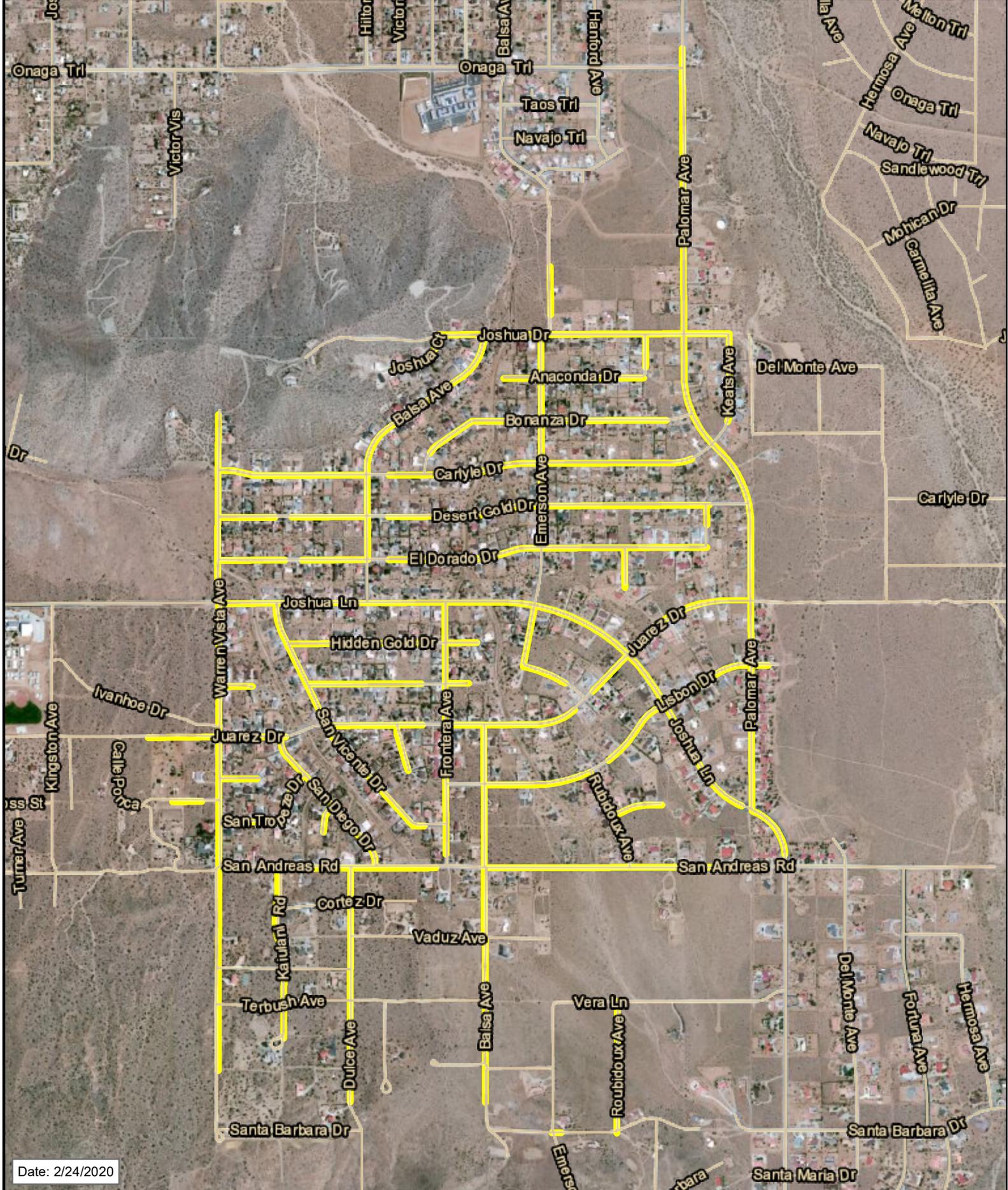


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 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Figure 11  
 Section 8 - Upper Sky Harbor

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



Date: 2/24/2020

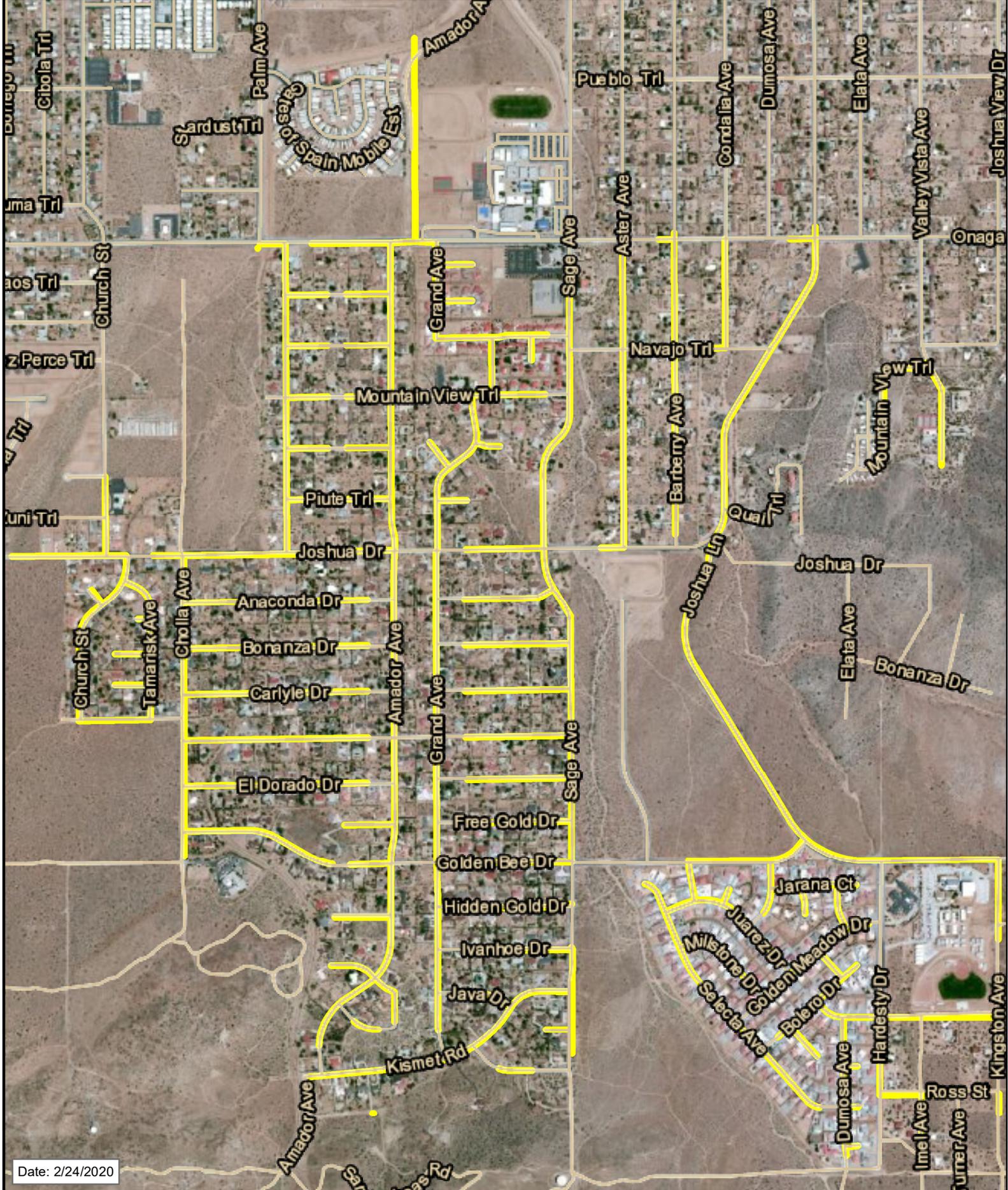


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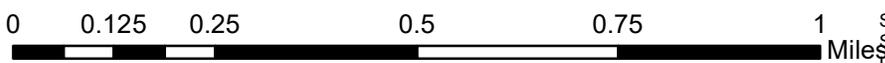


**Figure 12**  
**Section 9 - Sky Harbor**

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



Date: 2/24/2020

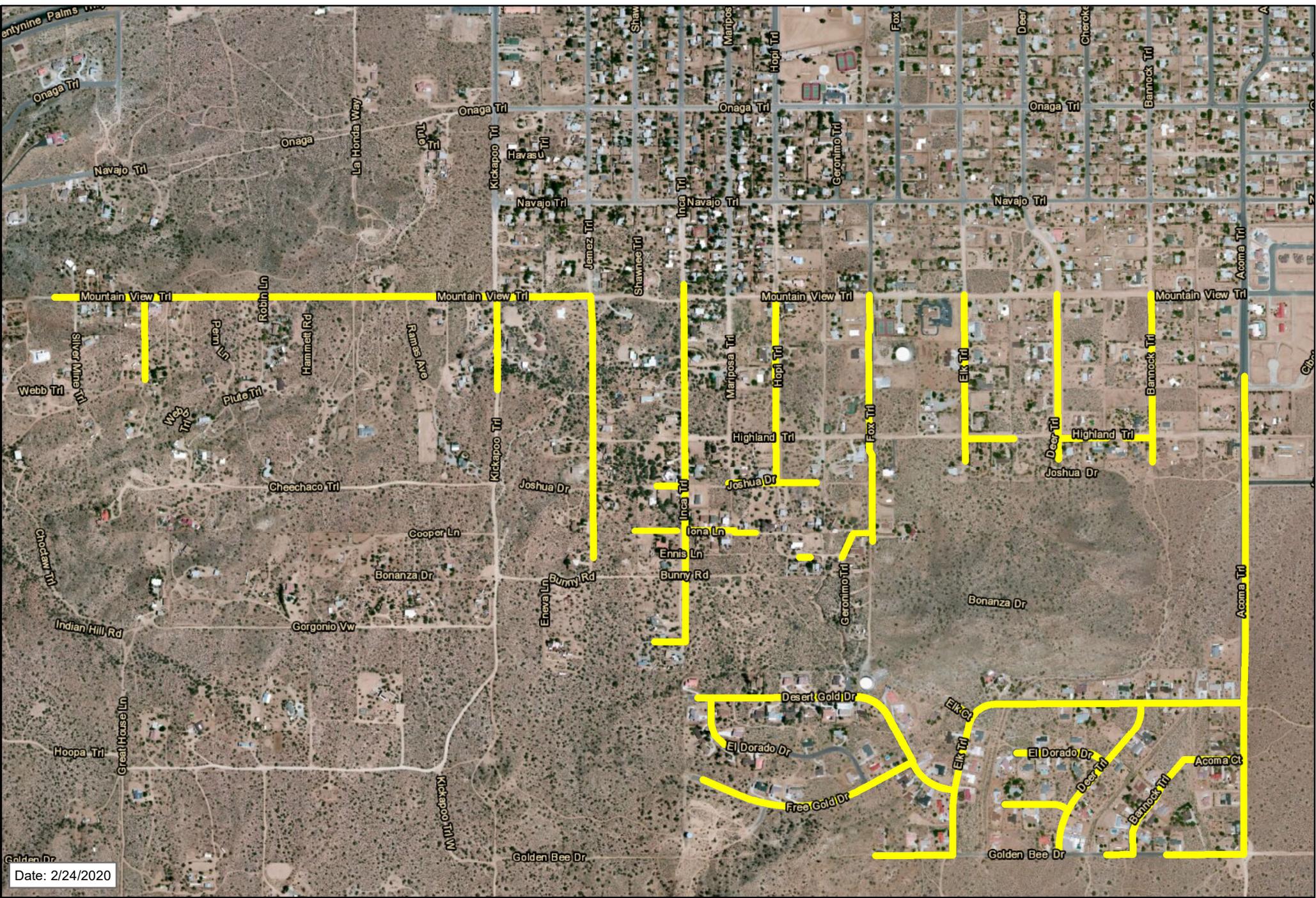


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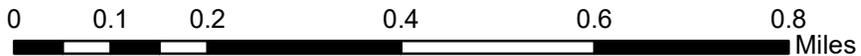


**Figure 13**  
**Section 10 - South of Onaga Trail**

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project



Date: 2/24/2020



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**Figure 14**  
**Section 11 - Juniper Terrace**

Hi-Desert Water District  
 Phase II and Phase III  
 Sewer Collection System Project

## 7 ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Phase II and Phase III Sewer Collection System Project
2. **Lead Agency Name:** High Desert Water District  
**Address:** 55439 29 Palms Hwy, Yucca Valley, California 92284
3. **Contact Person:** Samantha Mena, Construction Project Coordinator  
Email: samantham@hdwd.com  
  
**Phone Number:** Phone (760) 228-6272
4. **Project Location:** Topographic Quad (USGS 7.5"): *Yucca Valley North*. T1N, R5E, Sections 25, 30, 34, 36  
Topographic Quad (USGS 7.5"): *Yucca Valley South*. T1N, R5E, Sections 1, 10, 7, 11, 12, 35, 4 and T1S, R6E, Section 17
6. **General Plan Designation:** Roadways
7. **Zoning:** Same as General Plan Designation
8. **Description of project: (Describe the whole action involved, including but not limited to later phases of the project and any secondary, support, or off-site features necessary for its implementation).**

The Hi-Desert Water District (HDWD) is proposing to construct approximately 64 miles of PVC sewer pipeline, 1,300 manholes and three lift stations facilities in various areas of its service territory. Pipelines are planned to be between 8 inch and 12 inch in diameter and will connect to its existing system.

9. **Surrounding land uses and setting (Briefly describe the project's surroundings)**

The pipelines and lift station facilities will be constructed entirely within road rights-of-way throughout various areas of the community. Some of the roads are paved, others are not. Surrounding land uses are a mix of vacant and residential.

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

- Department of Water Resources.

*Lead Agency Discretionary Actions:*

Discretionary actions that may be taken by the Lead Agency include, but are not limited to, the following:

- Award contracts for construction
- Purchase property or easements

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.?**

On September 4, 2019, the District mailed letters and a copy of the Cultural Report to the following in accordance with AB52:

1. Morongo Band of Mission Indians;
2. San Manuel Band of Mission Indians; and
3. Twenty-Nine Palms Band of Mission Indians

Responses were received via email in November 2019 from:

1. Morongo Band of Mission Indians; and
2. San Manuel Band of Mission Indians

The District emailed information to the tribes along with the proposed mitigation measures. Both tribes responded via email that they were in agreement with the mitigation measures, and the consultation was concluded.

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

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

The Proposed Project could potentially affect (“Potentially Significant” or “Less than Significant with Mitigation Incorporated”) the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor and identifies where mitigation measures would be necessary to reduce all impacts to less than significant.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agricultural / Forest Resources	<input type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input checked="" type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Energy
<input checked="" type="checkbox"/>	Geology / Soils	<input type="checkbox"/>	Greenhouse Gas Emissions	<input checked="" type="checkbox"/>	Hazards / Hazardous Materials
<input type="checkbox"/>	Hydrology / Water Quality	<input type="checkbox"/>	Land Use / Planning	<input type="checkbox"/>	Mineral Resources
<input type="checkbox"/>	Noise	<input type="checkbox"/>	Population / Housing	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Recreation	<input checked="" type="checkbox"/>	Transportation	<input checked="" type="checkbox"/>	Tribal Cultural Resources
<input type="checkbox"/>	Utilities / Service Systems	<input checked="" type="checkbox"/>	Wildfire	<input type="checkbox"/>	Mandatory Findings of Significance

**DETERMINATION** (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	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.
	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	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.
	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.

\_\_\_\_\_  
Jericho Systems, Inc.  
Prepared by

\_\_\_\_\_  
4/10/2020  
Date

\_\_\_\_\_  
  
Signature

\_\_\_\_\_  
4/10/2020  
Date

## EVALUATING ENVIRONMENTAL IMPACTS:

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>I. AESTHETICS:</b> Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a 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?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

**SUBSTANTIATION:** (Check  if project is located within a view-shed of any Scenic Route listed in the General Plan.

**Environmental Setting**

Yucca Valley, San Bernardino County is located in the Morongo Basin portion of the Mojave Desert, approximately 70 miles east of the City of San Bernardino (Figure 1). Access to the region is by State Route 62 (SR-62) which extends west to Interstate 10 and east to the Colorado River and the Arizona state line from Yucca Valley. Yucca Valley is also accessed from the north by State Route 247 (SR-247). The SR-62 and SR-247 are designated as "eligible" for official Scenic Highway designation. Additionally, the Town of Yucca Valley has designated some local routes as Scenic Roadways.

The terrain in Yucca Valley is generally characterized by the low-lying plains of the valley floor at 3,000 feet above sea level, gradually leading to small hills, and framed by steep hillsides up to 4,000 feet above sea level to the north and south. This undulation provides spectacular views of the valley floor and dramatic desert landscapes, making the hillsides an asset to the community. The desert background consists of typical Joshua Tree woodland and creosote bush scrub alluvial fan areas with varying levels of human disturbance depending on proximity to the Yucca Valley urban corridor along SR 62.

Land uses in the Project region consists of a mix of open space, residential, commercial, and limited industrial uses. The most extensively developed area of Yucca Valley lies along SR-62, which generally coincides with the axis of the central valley. With a few exceptions, existing commercial and industrial uses are generally within one-half mile of the SR-62 corridor and concentrated in the Old Town and Mid-Town areas

Night lighting occurs throughout the project area. Individual residences have exterior night lighting on the outskirts of the town and a combination of street lights and individual residential lighting occurs within the various urban areas of the town.

The Phase II and Phase III Project is to install approximately 64 miles of wastewater pipeline, 1,300 manholes, and three lift stations under the roadways of the areas outside of the main, contiguous Yucca Valley community. Some of the roadways are paved, and others are not.

### **Impact Analysis**

a) *Have a substantial adverse effect on a scenic vista?*

**Less Than Significant Impact.** The CEQA Guidelines do not provide a definition of what constitutes a “scenic vista” or “scenic resource” or a reference as to from what vantage point(s) the scenic vista and/or resource, if any, should be observed. However, a scenic vista can generally be defined as a viewpoint from a public vantage that provides expansive views of a highly-valued landscape for the benefit of the general public. Common examples include undeveloped hillsides, ridgelines, and open space areas that provide a unifying visual backdrop to a developed area. Scenic resources are those landscape patterns and features that are visually or aesthetically pleasing and that contribute affirmatively to the definition of a distinct community or region such as trees, rock outcroppings, and historic buildings.

Many of the Project areas offer views of the desert floor and of the various hilly features within the area.

Construction will occur within roadways and may temporarily disrupt views. However, all project components will be placed underground, and the roadways restored. Therefore, impacts are temporary and less than significant.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

**Less Than Significant Impact.** The Department of Transportation (Caltrans) manages the State Scenic Highway Program, provides guidance, and assists local government agencies, community organizations, and citizens with the process to officially designate scenic highways. SR-247 is designated as an eligible scenic highway by Caltrans, between SR-62 and I-15 in Barstow. The collection system is planned to be installed within an approximate 0.8-mile segment of SR-247, between Crestview Drive (south) and Buena Suerte Road (north). Views of the roadway in this area are of sparsely populated areas, hilly terrain and desert floor. Construction will occur within roadways and may temporarily disrupt views. However, all project components will be placed underground, and the roadways restored. No scenic resources, such as historical buildings, trees, or rock outcropping, would be removed as part of the proposed project. Therefore, impacts are temporary and less than significant.

c) *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a 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?*

**Less Than Significant Impact.** The Project is located within a rural area. The sewer collection system pipelines will be placed below ground surface and therefore has no potential to degrade the existing visual character of pipeline alignments. Construction will occur within roadways and may temporarily disrupt views. However, all project components will be placed underground, and the roadways restored. Therefore, impacts are temporary and less than significant.

d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

**Less Than Significant.** Night lighting occurs throughout the project area. Individual residences have exterior night lighting on the outskirts of the town and a combination of street lights and individual residential lighting occurs within the various urban areas of the Project area. Construction activities would only occur during daylight, therefore, the construction associated with the proposed Project would not cause the emission of light beyond existing circumstances in that area. There is a less than significant impact.

**Mitigation Measures:**

No mitigation measures are required.

**Impact Conclusions:**

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<p><b>II. AGRICULTURE AND FORESTRY RESOURCES:</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
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?				X
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				X
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))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
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?				X

**SUBSTANTIATION:** (Check  if project is located in the Important Farmlands Overlay):

**Environmental Setting**

The Project site occurs within the existing facility situated within an urban desert area.

**Impact Analysis**

- 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?*

**No Impact.** The Project alignments are not identified within the survey limits of California Department of Conservation, Farmland Mapping and Monitoring Important Farmland Finder. No land under Williamson Act Contract occurs at the Project alignment and no impacts will occur.

*b) Conflict with existing zoning for agricultural use or a Williamson Act contract?*

**No Impact.** None of the land on or near the Project alignment is currently under agricultural production, nor are any parcels under a Williamson Act contract. Therefore, no impact is anticipated from the proposed Project.

*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))?*

**No Impact.** Forest land is defined in Public Resources Code section 12220(g) as “land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.” No timberland or lands zoned Timberland Production as defined above are within the Project site, nor is the Project located in an area zoned for forest land or timber production. Therefore, the Project will not impact the ability of land’s ability to support 10 percent native tree cover of any species; thus, no forest lands will be reclassified as non-forest lands under Public Resources Code Section 12220(g). Therefore, there will be no impacts under this criterion.

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

**No Impact.** As mentioned above, the disturbances associated with the Project activities would not impact the lands’ ability to support 10-percent native tree cover of any species, and thus no forest lands as defined in Public Resources Code Section 12220(g) would be lost. In addition, no such lands would be converted to non-forest use as a result of the project construction and operations activities. Therefore, there will be no impacts under this criterion.

*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?*

**No Impact.** The construction and operation of the proposed Project do not involve other changes in the existing environment that could result in the conversion of farmland to non-agricultural use or forest land to non-forest land use. Therefore, there will be no impacts to this criterion.

**Mitigation Measures:**

No mitigation measures are required.

**Impact Conclusions:**

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>III. AIR QUALITY:</b> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
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?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?)			X	

**SUBSTANTIATION:** (Discuss conformity with the South Coast Air Quality Management Plan, if applicable):

**Environmental Setting**

A technical study of the Project’s potential Air Quality impacts was prepared and is contained in Appendix A.

Air pollutants are regulated at the national, State, and air basin level; each agency has a different level of regulatory responsibility. The United States Environmental Protection Agency (EPA) regulates at the national level. The California Air Resources Board (CARB) regulates at the State level. The Mojave Desert Air Quality Management District (MDAQMD) regulates at the air basin level.

The EPA is responsible for global, international, and interstate air pollution issues and policies. EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance for air pollution programs, and sets National Air Quality Standards, also known as federal standards. There are seven common air pollutants, called criteria pollutants, which were identified from the provisions of the Clean Air Act of 1970.

- Ozone
- Nitrogen Dioxide
- Lead
- Particulate Matter (PM10 and PM2.5)
- Carbon Monoxide
- Particulate Matter
- Sulfur Dioxide

The federal standards were set to protect public health, including that of sensitive individuals; thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants.

Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health.

Each state prepares State Implementation Plans (SIP) that describes existing air quality conditions and measures that will be followed to attain and maintain federal standards. The SIP for California is administered by CARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. The California SIP incorporates individual federal attainment plans for regional air districts—air district prepares their federal attainment plan, which sent to CARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms. See <http://www.arb.ca.gov/research/aaqs/aaqs.htm> for additional information on criteria pollutants and air quality standards.

The federal and state ambient air quality standards are summarized in Table 1, *Ambient Air Quality Standards*, and can also be found at <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.

**Table 1  
Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards <sup>1</sup>		National Standards <sup>2</sup>		
		Concentrations <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>
Ozone (O <sub>3</sub> )	1-Hour	0.09 ppm	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.070 ppm		0.070 ppm (147 µg/m <sup>3</sup> )		
Respirable Particulate Matter (PM <sub>10</sub> ) <sup>8</sup>	24-Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µ/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		--		
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>8</sup>	24-Hour	--	--	35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	12 µg/m <sup>3</sup>		
Carbon Monoxide (CO)	1-Hour	20 ppm (23 µg/m <sup>3</sup> )	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 µg/m <sup>3</sup> )	--	Non-Dispersive Infrared Photometry (NDIR)
	8-Hour	9.0 ppm (10 µg/m <sup>3</sup> )		9 ppm (10 µg/m <sup>3</sup> )	--	
	8-Hour (Lake Tahoe)	6 ppm (7 µg/m <sup>3</sup> )		--	--	
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>9</sup>	1-Hour	0.18 ppm (339 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	100 ppb (188 µg/m <sup>3</sup> )	--	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (357 µg/m <sup>3</sup> )		0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard	
Sulfur Dioxide (SO <sub>2</sub> ) <sup>10</sup>	1-Hour	0.25 ppm (655 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	75 ppb (196 µg/m <sup>3</sup> )	--	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3-Hour	--		--	0.5 ppm (1300 mg/m <sup>3</sup> )	
	24-Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (for certain areas) <sup>10</sup>	--	
	Annual Arithmetic Mean	--		0.14 ppm (for certain areas) <sup>10</sup>	--	
Lead <sup>11,12</sup>	30 Day Average	1.5 µg/m <sup>3</sup>	Atomic Absorption	--	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Calendar Qtr	--		1.5 µg/m <sup>3</sup> (for certain areas) <sup>12</sup>		
	Rolling 3-Month Average	--		0.15 µg/m <sup>3</sup>		
Visibility Reducing Particles <sup>13</sup>	8-Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24-Hour	25 µg/m <sup>3</sup>	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence			
Vinyl Chloride <sup>11</sup>	24-Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography			

Notes:

- California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above  $150 \mu\text{g}/\text{m}^3$  is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of  $25^\circ\text{C}$  and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of  $25^\circ\text{C}$  and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On December 14, 2012, the national annual PM2.5 primary standard was lowered from  $15 \mu\text{g}/\text{m}^3$  to  $12.0 \mu\text{g}/\text{m}^3$ . The existing national 24-hour PM2.5 standards (primary and secondary) were retained at  $35 \mu\text{g}/\text{m}^3$ , as was the annual secondary standard of  $15 \mu\text{g}/\text{m}^3$ . The existing 24-hour PM10 standards (primary and secondary) of  $150 \mu\text{g}/\text{m}^3$  also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
9. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
10. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.  
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
11. CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
12. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ( $1.5 \mu\text{g}/\text{m}^3$  as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
13. In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NOX. NOX is a collective term that includes all forms of nitrogen oxides (NO, NO2, NO3) which are emitted as byproducts of the combustion process.

### *MDAB Attainment*

Currently, the NAAQS and CAAQS are exceeded in most parts of the MDAB. The NAAQS, the Project region within the MDAB is in nonattainment for O3 (8-hour) and PM10. For the CAAQS, the Project region within the MDAB is in nonattainment for O3 (1-hour and 8-hour) and PM10. In response, the MDAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

### **Environmental Setting**

The Mojave Desert Air Basin (MDAB) is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains within the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due

to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north; air masses pushed onshore in Southern California by differential heating are channeled through the MDAB.

The MDAQMD monitors levels of various criteria pollutants at six permanent monitoring stations throughout the air district. The attainment status for the seven common air pollutants in the MDAB is identified in Table 2.

**Table 2**  
**Attainment Status of Criteria Pollutants in the MDAB**

Criteria Pollutant	State Designation	Federal Designation
O3 – 1-hour standard	Nonattainment	--
O3 – 8-hour standard	Nonattainment	Nonattainment
PM10	Nonattainment	Nonattainment
PM2.5	Attainment	Unclassifiable/Attainment
CO	Attainment	Unclassifiable/Attainment
NO2	Attainment	Unclassifiable/Attainment
SO2	Unclassifiable/Attainment	Unclassifiable/Attainment
Pb	Attainment	Unclassifiable/Attainment

Relative to the Project site, the nearest long-term air quality monitoring site for O3, CO, NO2, PM10, and PM2.5 was obtained from the South Coast Air Quality Management District (SCAQMD) Coachella Valley monitoring station. It should be noted that the nearest MDAQMD monitoring station is the located in Twentynine Palms, approximately 18.5 miles east of the site. For purposes of this analysis, data from the SCAQMD Coachella Valley monitoring station was used as it is the nearest long-term air quality monitoring station, located 16.99 miles southwest of the Project site in Palm Springs.

The most recent three (3) years of data available is shown on Table 3, and identifies the number of days ambient air quality standards were exceeded for the study area, which is was considered to be representative of the local air quality at the Project site (8). It should be noted that data for CO is not available for 2016 through 2018. Additionally, data for SO2 has been omitted as attainment is regularly met in the Mojave Desert Air Basin and few monitoring stations measure SO2 concentrations. It should be noted that Table 3 is provided for informational purposes.

**Table 3**  
**Project Area Air Quality Monitoring Summary 2016-2018**

POLLUTANT	STANDARD	YEAR		
		2016	2017	2018
O <sub>3</sub>				
Maximum Federal 1-Hour Concentration (ppm)		0.103	0.113	0.111
Maximum Federal 8-Hour Concentration (ppm)		0.092	0.097	0.099
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	6	18	11
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	48	57	56
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	3.1	1.0	1.1
Maximum Federal 8-Hour Concentration	> 20 ppm	1.5	0.5	0.8
NO <sub>2</sub>				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.043	0.043	0.043
Annual Average		6.0	6.5	6.8
PM <sub>10</sub>				
Maximum Federal 24-Hour Concentration (µg/m <sup>3</sup> )	> 150 µg/m <sup>3</sup>	113	93	117
Annual Federal Arithmetic Mean (µg/m <sup>3</sup> )		20.8	21.0	21.0
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m <sup>3</sup>	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m <sup>3</sup>	6	7	7
PM <sub>2.5</sub>				
Maximum Federal 24-Hour Concentration (µg/m <sup>3</sup> )	> 35 µg/m <sup>3</sup>	14.71	14.50	30.20
Annual Federal Arithmetic Mean (µg/m <sup>3</sup> )	> 12 µg/m <sup>3</sup>	5.53	6.05	6.02
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m <sup>3</sup>	0	0	0

µg/m<sup>3</sup> = Microgram per Cubic Meter

Source: Data for O<sub>3</sub>, CO, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> was obtained from SCAQMD Air Quality Data Tables.

The MDAQMD has developed regional significance thresholds for regulated pollutants, shown below in Table 4. The MDAQMD's *Guidelines* indicate that any projects in the MDAB with daily regional emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

**Table 4**  
**Maximum Regional Daily Emissions Thresholds**

<b>Pollutant</b>	<b>Daily Threshold (lbs./day)</b>
CO	548 lbs/day
NO <sub>x</sub>	137 lbs/day
VOC	137 lbs/day
SO <sub>x</sub>	137 lbs/day
PM <sub>10</sub>	82 lbs/day
PM <sub>2.5</sub>	65 lbs/day

Note: lbs/day – pounds per day

### **Air Quality Analysis Assumptions**

#### ***California Emissions Estimator Model™ Employed to Estimate AQ Emissions***

Land uses such as the Project affect air quality through construction-source and operational-source emissions.

On October 17, 2017, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model (CalEEMod) v2016.3.2. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO<sub>x</sub>, SO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (18). Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for construction activity is provided in Appendix A.

Construction activities associated with the Project will result in emissions of VOCs, NO<sub>x</sub>, SO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. Construction related emissions are expected from earthwork (excavation, compaction, soil import/export, slope grading and filling), delivery of structural materials, and pouring of concrete and paving activities.

#### **Grading Activities**

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions”. Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. Based on information provided by the Project applicant, earthwork activities are expected to balance on site and no import or export of soils would be required.

#### **Construction Worker Vehicle Trips**

Construction emissions for construction worker vehicles traveling to and from the Project site, as well as vendor trips (construction materials delivered to the Project site) were estimated based on information from CalEEMod defaults.

### Construction Duration

Construction is expected to occur in 2020 and will last for a duration of approximately one (1) year. For purposes of analysis, construction is expected to commence in January 2020 and will last through January 2021. Construction duration utilized in the analysis represents a “worst-case” analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.

### Construction Equipment

While the final types and numbers of construction equipment will be determined by the construction contractor, Table 5 lists the type of equipment anticipated to be utilized.

**Table 5  
Construction Equipment**

<b>Equipment</b>	<b>Amount</b>
Cement and Mortar Mixers	3
Dumpers/Tenders	10
Excavators	1
Generator Sets	1
Off-Highway Trucks	3
Other Construction Equip.	1
Pavers	1
Rollers	1
Rubber Tired Dozers	1
Tractors/Loaders/Backhoes	1

It should be noted that site specific construction fleet may vary due to specific project needs at the time of construction. As a conservative measure, the construction equipment was modeled under the assumption that each equipment would operate for up to 8 hours per day during an approximate 12-month construction period (19).

The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA Guidelines. The duration of construction activity was based on information provided by the Project applicant and the 2021 opening year.

### Construction Emissions Summary

#### *Impacts without Mitigation*

CalEEMod calculates maximum daily emissions for summer and winter periods. The estimated maximum daily construction emissions without mitigation are summarized on Table 6. Detailed construction model outputs are presented in Appendix 3.1 of the Air Quality Study in Appendix A. Under the assumed scenarios, emissions

resulting from the Project construction will not exceed criteria pollutant thresholds established by the MDAQMD for emissions of any criteria pollutant and impacts would be less than significant.

**Table 6  
Overall Construction Emissions Summary (Without Mitigation)**

Year	Emissions (lbs/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Summer						
2020	6.51	59.70	41.32	0.10	10.26	6.06
2021	6.06	53.59	40.20	0.10	9.96	5.78
Winter						
2020	6.51	59.71	40.98	0.10	10.26	6.06
2021	6.06	53.60	39.88	0.10	9.96	5.78
<b>Maximum Daily Emissions</b>	<b>6.51</b>	<b>59.71</b>	<b>41.32</b>	<b>0.10</b>	<b>10.26</b>	<b>6.06</b>
MDAQMD Regional Threshold	137	137	548	1377	82	65
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Source: CalEEMod construction-source (unmitigated) emissions are presented in Appendix 3.1 of Appendix A.

**Operational Emissions Summary**

Long-term air quality impacts occur from mobile source emission generated from Project-related traffic and from stationary source emissions generated from natural gas. The proposed Project primarily involves construction activity. For on-going operations, mobile emissions would be generated by the motor vehicles traveling to and from the Project sites during on-going maintenance. However, the Project would generate a nominal number of traffic trips for periodic maintenance and inspections and would not result in any substantive new long-term emissions sources. Stationary area source emissions are typically generated by the consumption of natural gas for space and water heating devices and the use of consumer products. As this Project involves construction of 64 miles of wastewater pipeline, and 1,300 manholes and 3 lift stations, heating and consumer products would not be used. Stationary energy emissions would result from energy consumption associated with the proposed Project. All operational equipment associated with the Project would be electrically powered and would not directly generate air emissions.

The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment. As Project operations would not exceed MDAQMD thresholds, the Project would not violate an air quality standard or contribute to an existing violation. Therefore, Project operations would not result in a cumulatively considerable net increase of any criteria pollutant and impacts would be less than significant.

## **Impact Analysis**

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

**Less Than Significant Impact.** CEQA requires a discussion of any inconsistencies between a proposed project and applicable general plans and regional plans (CEQA Guidelines Section 15125). The applicable air quality plan is the Western Mojave Desert Air Quality Management District's 2016 Air Quality Management Plan (AQMP). The AQMP is a regional blueprint for achieving air quality standards and healthful air. Conflicts with the AQMP would arise if Project activities result in a substantial increase in employment or population that was not previously adopted and/or approved in a General Plan. Large population or employment increases could affect transportation control strategies, which are among the most important in the air quality plan, since transportation is a major contributor to particulates and ozone for which the Mojave Desert Air Basin is not in attainment.

The Project would conform to local land use plans, comply with all applicable all MDAQMD Rules and Regulations, and would not have the potential to increase the frequency or severity of a violation in NAAQS and CAAQS. On this basis, the Project is considered to consistent with the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert. The Project is therefore considered to be consistent with the AQMP.

The Project does not propose activities that would change population or employment levels within the air basin, the Project would not conflict with or obstruct implementation of the applicable air quality plan. The Project would implement measures to control air emissions during material handling. Therefore, the proposed Project would not conflict with the MDAQMD's AQMP. A less than significant impact is identified, and no mitigation measures are proposed.

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?*

**Less Than Significant Impact.** The proposed construction would require earthmoving, material removal, and other activities such as removal of plants and /or other organics.

The project's construction activities were screened for emission generation using information from CalEEMod defaults. As shown in Table 6 construction emissions would not exceed MDAQMD thresholds. Less than significant impacts are anticipated.

c) *Expose sensitive receptors to substantial pollutant concentrations?*

**Less Than Significant Impact.** The potential impact of Project-generated air pollutant emissions at sensitive receptors has also been considered. Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, childcare centers, and athletic facilities can also be considered as sensitive receptors. The nearest sensitive receptor is a residential community located adjacent to the Project site east of Mesa View Drive.

As per the MDAQMD's *Guidelines*, the following project types located within a specified distance to an existing or planned sensitive receptor land use must be evaluated to determine exposure of substantial pollutant concentrations to sensitive receptors.

- Any industrial project within 1,000 feet;
- A distribution center (40 or more trucks per day) within 1,000 feet;
- A major transportation project (50,000 or more vehicles per day) within 1,000 feet;
- A dry cleaner using perchloroethylene within 500 feet;

- A gasoline dispensing facility within 300 feet.

The proposed Project's land uses do not include the above uses. As such, no analysis for sensitive receptors is required. Additionally, results of the regional analysis indicate that the Project will not exceed the MDAQMD significance thresholds during construction or operations. Therefore, sensitive receptors would not be subject to a significant air quality impact during Project construction and operational activities.

The proposed Project would not result in a CO "hotspot" as a result of Project related traffic during ongoing operations, nor would the Project result in a significant adverse health impact as discussed Appendix A. Thus, a less than significant impact to sensitive receptors during operational activity is expected.

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

**Less Than Significant Impact.** The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The Project does not propose or require land uses that would be substantive sources of objectionable odors. Potential temporary and intermittent odors may result from construction equipment exhaust, the application of asphalt and architectural coatings. Temporary and intermittent construction-source emissions are controlled through existing requirements and industry Best Management Practices (BMPs) addressing proper storage of and application construction materials.

Over the life of the Project, odors may result from storage of municipal solid waste pending its transport to area landfills. Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations.

The proposed Project would also be required to comply with MDAQMD Rule 402. Rule 402 provides that "[a] person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property." Based on the preceding, the potential for the Project to create objectionable odors affecting a substantial number of people is considered less-than-significant.

### **Mitigation Measures:**

No mitigation measures are required.

### **Impact Conclusions:**

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>IV. BIOLOGICAL RESOURCES:</b> Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
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		X		
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?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		
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?				X

**SUBSTANTIATION:** ( Check if project is located in the Biological Resources Overlay or Contains habitat for any species listed in the California Natural Diversity Database):

A biological resources assessment was prepared by Jericho Systems in September 2019 and is provided in Appendix B.

**Regulatory Setting**

***Federal Endangered Species Act (ESA)***

The USFWS administers the federal ESA of 1973. The ESA provides a legal mechanism for listing species as either threatened or endangered, and a process of protection for those species listed. Section 9 of the ESA prohibits "take" of threatened or endangered species. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. "Take" can include adverse modification of habitats used by a threatened or endangered species during any portion of its life history. Under the regulations of the ESA,

the USFWS may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act. Take authorization can be obtained under Section 7 or Section 10 of the act.

No federally listed species were observed during the field survey nor are any expected to occur. No impact to federally protected species or habitats will result from implementation of the proposed Project.

### ***California Endangered Species Act (CESA)***

#### *Wildlife and Birds*

The CDFW administers the State CESA. The State of California considers an endangered species one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is one present in such small numbers throughout its range that it is likely to become an endangered species soon, in the absence of special protection or management. And a rare species is one present in such small numbers throughout its range that it may become endangered if its present environment worsens. Rare species applies to California native plants. Further, all raptors and their nests are protected under Section 3503.5 of the California Fish and Game Code (FGC). Species of Special Concern (SSC) is an informal designation used by CDFW for some declining wildlife species that are not proposed for listing as threatened or endangered. This designation does not provide legal protection but signifies that these species are recognized as sensitive by CDFW.

#### *Special Status Plants*

The California Native Plant Society (CNPS) Plant Ranking System ranges from presumed extinct species, California Rare Plant Rank (CRPR) 1A to limited distribution species now on a watch list (CRPR 4).

### ***Migratory Bird Treaty Act (MBTA)***

The federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C 703-711) provides protection for nesting birds that are both residents and migrants whether or not they are considered sensitive by resource agencies. The MBTA prohibits take of nearly all native birds. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under federal law. The USFWS, in coordination with the CDFW administers the MBTA. CDFW's authoritative nexus to MBTA is provided in FGC Sections 3503.5 which protects all birds of prey and their nests and FGC Section 3800 which protects all non-game birds that occur naturally in the State.

### **Environmental Setting**

Yucca Valley, San Bernardino County is located in the Morongo Basin portion of the Mojave Desert, approximately 70 miles east of the City of San Bernardino Figure 1). Access to the region is by State Route 62 (SR-62) which extends west to Interstate 10 and east to the Colorado River and the Arizona state line from Yucca Valley. Land uses in the Project region consists of a mix of open space, residential, commercial, and limited industrial uses.

The only topographic feature within the Yucca Valley area is an ephemeral desert wash area, vegetated with Joshua tree-creosote scrub, intermixed with Mormon tea. A Joshua tree-creosote woodland plant community occurs in the valley bottom and lower slopes and Joshua tree-juniper woodland at the higher elevations on the north and southeast margins of the project area. Desert tortoise are also known to inhabit the general area. The subsurface of the Project region is generally alluvial deposits derived from the Little San Bernardino Mountains to the south. The alluvial fan slopes to the north and southeast at a 1-2 percent gradient with an elevation range of 3,110 to 3945 feet

above sea level . The Pinto Mountain fault (considered active) is located about one-quarter mile north of the treatment plant site. No other geologic hazards are known to occur in the project area.

#### *Watershed*

The Project alignment lies within the Southern Mojave Watershed (HUC8) which encompasses a land area of roughly 8,867 square miles. The watershed is located in east Riverside and southeastern San Bernardino Counties and borders Mojave Watershed to the north, Whitewater to the west, Salton Sea Watershed to the southwest, and the Imperial Reservoir Watershed to the southeast. There are no major streams or other water bodies in this area of the watershed.

#### *Bioregion*

The Project lies in the geographically based ecological classification known the Eastern Mojave Basins and Eastern Mojave low ranges and footslopes ecoregions. The goal of regional ecological classifications is to reduce variability based on spatial covariance in climate, geology, topography, climax vegetation, hydrology, and soils. This ecoregion includes broad basins and scattered mountains that generally are low, warm, and dry. This area is a creosote bush-dominated shrub community, comprised mainly of creosote bush, white bursage, Joshua tree and other yuccas, and black brush. The alkali flats will show saltbush, saltgrass, alkali sacaton, and iodine bush, while the mountain areas will have sagebrush, juniper, and singleleaf pinyon. At high elevations, some ponderosa pine, white fir, limber pine, and bristlecone pine can be found.

#### *Climate*

The climate in the Project region is that of a subtropical upland desert with annual precipitation less than 10 inches, averaging 6.44 inches. Temperatures can vary from 0°F in winter to above 110°F in the summer. Mean summer temperature is 88°F and in winter is 49°F. Air quality in the region is good, but during the summer, transported pollutants from the South Coast Air Basin (SoCAB) can cause ozone concentrations to violate federal and state standards on rare occasions. The project area is located within the Mojave Desert Air Basin (MOAB) and the Mojave Desert Air Quality Management District (MDAQMD) manages air quality for this Basin.

#### *General Habitat*

The Jericho September 2019 biological survey identified that vegetation within the broad Project areas are best categorized as Joshua tree woodland (*Yucca brevifolia* woodland alliance) (Sawyer, Keeler-Wolf, 2018), with diverse species including Joshua tree, creosote bush (*Larrea tridentate*), brittlebush (*Encelia farinosa*), burrow weed (*Ambrosia dumosa*), burrobrush (*Ambrosia salsola*), several species of cholla (*Cylindropuntia* spp.), juniper (*Juniperus californica*), several species in the genus *Ericameria*, and California buckwheat (*Eriogonum fasciculatum*) All species observed were within or adjacent to the proposed alignments. There are Joshua trees outside of but adjacent to the road shoulder edges.

#### *General Wildlife*

The Jericho September 2019 biological survey also identified that general wildlife species observed or otherwise detected on site during the surveys included droppings from a species of Leporidae [black-tailed jackrabbit (*Lepus californicus*) and desert cottontail (*Sylvilagus audubonii*)] were found on site. Identification of mammals within the project area was generally determined by physical evidence rather than direct visual identification. This is because 1) many of the mammal species that potentially occur onsite are nocturnal and would not have been active during the survey and 2) no mammal trapping was performed. Only common desert species accustomed to urban environments are expected to occur within the project area such as coyote (*Canis latrans*), bobcat (*Lynx rufus*), pocket mouse (*Chaetodipus* sp). No mammal species were observed during the site visit.

### *Nesting Birds*

The federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C 703-711) provides protection for nesting birds that are both residents and migrants whether or not they are considered sensitive by resource agencies. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered a take under federal law. The USFWS, in coordination with the CDFW administers the MBTA. CDFW’s authoritative nexus to MBTA is provided in FGC Sections 3503.5 which protects all birds of prey and their nests and FGC Section 3800 which protects all non-game birds that occur naturally in the State.

Vegetation suitable for nesting birds does exist within and adjacent to the Project areas. Most birds are protected by the MBTA. In general, impacts to all bird species (common and special status). Avian species observed or otherwise detected on site during the surveys included house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), common raven (*Corvus corax*), and northern mockingbird (*Mimus polyglottos*).

### *Critical Habitat*

There is no critical habitat for any species within any of the 10 Project areas.

### *Sensitive Wildlife and Birds*

The database search identified 11 potentially sensitive birds, 17 plants, three insects, nine mammals, and five reptiles. Of these, the following State and/or federally sensitive species were identified to have a moderate potential to exist within the Project areas.

**Table 7**  
**Summary of Sensitive Species with Moderate Potential to Occur**

<b>Birds:</b>	
<b>Common Name</b>	<b>Scientific Name</b>
Burrowing Owl	<i>(Athene cunicularia)</i>
Prairie Falcon	<i>(Falco mexicanus)</i>
Le Conte's thrasher	<i>(Toxostoma lecontei)</i>
<b>Plants:</b>	
triple-ribbed milk-vetch	<i>(Astragalus tricarinatus)</i>
<b>Mammals:</b>	
Desert tortoise	<i>(Gopherus agassizii)</i>

### Desert Tortoise

The desert tortoise (DT) is a State- and federally listed threatened species. Throughout its range, it is threatened by habitat loss, domestic grazing, predation, collections, and increased mortality rates. The desert tortoise is typically found in creosote bush scrub. They are most often found on level or sloped ground where the substrate is firm but not too rocky. Tortoise burrows are typically found at the base of shrubs, in the sides of washes and in hillsides. Because a single tortoise may have many burrows distributed throughout its home range, it is not possible to predict exact numbers of individuals on a site based upon burrow numbers.

Desert tortoise are documented to occur approximately 2.75 miles northwest of the Project site. There are no desert tortoise occurrences documented on site or directly adjacent to it. Per the USFWS desert tortoise Critical Habitat

overlay, the project site is not within any USFWS designated desert tortoise Critical Habitat. Furthermore, the project site is not within a BLM designated Desert Wildlife Management Area (USFWS 2011). Therefore, the habitat surrounding the site would be characterized as Category 3 Habitat, per the BLM categorization of desert tortoise habitat on public lands.

The result of the field survey was that no evidence of desert tortoise was found in the survey area. Therefore, desert tortoise are considered currently absent within or adjacent to the various Project limits.

### Burrowing Owl

The burrowing owl (BUOW) is a ground dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The BUOW is heavily dependent upon the presence of mammal burrows, with ground squirrel burrows being a common choice, in its habitat to provide shelter from predators, inclement weather and to provide a nesting place (Coulombe 1971). They are also known to make use of human-created structures, such as cement culverts and pipes, for burrows.

The result of the survey was that no evidence of BUOW was found in the survey area. No BUOW individuals or sign including pellets, feathers or white wash were observed. Per the definition provided in the *2012 CDFG Staff Report on Burrowing Owl Mitigation*, “Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey.”

### *Sensitive Plants*

Seventeen special status plant species (CNPS Rank between 1A, 1B, 2A, and 2B, which are considered threatened and/or endangered) were identified in the database searches (Appendix B). Most have no historical occurrences within the Project areas and, based on the results of the field survey, have a low probability of occurring. Of those, four species described below have a moderate potential to occur within all of the 11 Project areas where there are dirt roads or where native habitat is directly adjacent to an alignment where there is presence of potentially suitable habitat.

- San Bernardino milk-vetch (*Astragalus bernardinus*) – CNPS Rank 1B.2 is found in Joshua tree woodland, pinyon and juniper woodland habitat. The species has a disjunct with occurrences in the new york and Ivanpah mountains and on the desert slopes of the San Bernardino and Little San Bernardino Mountains. It is a perennial herb, often twining among sagebrush. Plants are slender and sparsely leafy, reaching 1/2m in height. Flowers are pale lilac and purple and open between April and June. The species has no state or federal status but is categorized as 1B.2 by CNPS. There are four historical collections (1914-1957) on the north side of Yucca Valley area near the top of the Highway 247 grade and the airport with the exact locations unknown. The species has a moderate probability of occurring within the project area as suitable habitat occurs in all native vegetation impact areas. Springtime surveys are recommended prior to ground disturbing activity in vegetation impact areas where work will occur within the road shoulder, but not in areas of paved roads.
- Little San Bernardino Mtns. Linanthus (*Linanthus maculatus ssp. maculatus*) – CNPS Rank 1B.2, a dicot, is an annual herb that is native to California, and is endemic (limited) to California. It occurs in dunes, Sonoran desert scrub, Mojavean desert scrub, Joshua tree woodland habitat. at desert foot of the tansverse and peninsular ranges from Johnson Valley in the north to Anza Borrego State park in the south. It reaches 1-3cm in stature with small white flowers that are open from March through May. There is one occurrences of this species within the broad perimeter of the project vicinity and numerous occurrences locally. The species has a moderate probability of occurring within the project area as suitable habitat occurs in all native

vegetation impact areas. Springtime surveys are recommended prior to ground disturbing activity in vegetation impact areas where work will occur within the road shoulder, but not in areas of paved roads.

- Robison's monardella (*Monardella robisonii*), CNPS Rank 1B.3, is found in Desert scrub, Pinyon and juniper woodland and on rocky desert slopes, often among granitic boulders. The species has a disjunct population with occurrences in the Granite Mountains, Sheephole wilderness and on the desert slopes of the San Bernardino and Little San Bernardino Mountains. It is a subshrub to shrubreaching a height up to ½m. Stems appear gray with long-spreading hairs. Flowers are pale rose to pale blue. Flowers are open between June and September. The species has no state or federal status but is categorized as 1B.3 by CNPS. There is one known occurrence of this species within the broad perimeter of the project on the north side of Yucca Valley area believed near the top of the Highway 247 grade but exact location is unknown. The species has a moderate probability of occurring within the project area as suitable habitat occurs in all native vegetation impact areas. Springtime surveys are recommended prior to ground disturbing activity in vegetation impact areas where work will occur within the road shoulder, but not in areas of paved roads.
- Latimer's woodland-gilia (*Saltugilia latimeri*), CNPS Rank 1B.2, is found throughout the Mojave desert in Mojavean desert scrub, pinyon woodland and juniper woodland habitats. It is an annual species reaching 5–30cm in height. Flowers are pink to lavender with darker purple in the throat. Pollen is sky blue. Flowers are open March through June. There are known no occurrences of this species within the broad perimeter of the project, but it has been identified locally. The species has a moderate probability of occurring within the project area as suitable habitat occurs in all native vegetation impact areas. Springtime surveys are recommended prior to ground disturbing activity in vegetation impact areas where work will occur within the road shoulder, but not in areas of paved roads.

### *Regionally Protected Plants and Habitat*

A number of desert plants are protected under specific sections of the Codes of Regulations for the Town of Yucca Valley and County of San Bernardino. For the Town of Yucca Valley specifically,

- All species of the genus *Prosopis* (mesquites) with stems two (2) inches or greater in diameter or six (6) feet or greater in height.
- All species of yuccas. Those commonly found in Yucca Valley:
  - Mohave Yucca (*Yucca schidigera*)
  - Our Lord's Candle (*Yucca whipplei*)
- Creosote Rings, ten (10) feet or greater in diameter.
- All Joshua Trees.

There are numerous Joshua Trees and Yuccas within the Project areas. Joshua Trees have the potential to be impacted by the Project depending on construction envelope and staging areas.

### **Impact Analysis**

- 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?*

**Less Than Significant Impact With Mitigation Incorporated.** The proposed Project will not affect State or federally listed endangered, threatened species because there is only marginal habitat to support these species within, adjacent to, or in the broader vicinity of the Project areas. In addition, the proposed Project will not adversely affect Critical Habitat as none exists within the Project area.

However, because there is a moderate potential for impacts to some listed species such as desert tortoise, burrowing owl and some sensitive plants, **Mitigation Measures BIO-1** through **BIO-4** located at the end of this section, are incorporated to reduce potential impacts. With the incorporation of these mitigation measures, the impact will be less than significant.

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

**Less Than Significant Impact.** While there is the potential for the Projects to cross a number of natural washes, there are no riparian habitat or other sensitive natural communities identified in any local or regional plans or regulations by the California Department of Fish and Wildlife or US Fish and Wildlife Service in any of the Project areas. The Jericho September 2019 biological survey identified that vegetation within the broad Project areas are best categorized as Joshua tree woodland. This natural community is not protected or sensitive by local, State or Federal plans.

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*

**Less Than Significant Impact.** While there is the potential for the Projects to cross a number of natural washes, there were no wetlands or wetland vegetation or federally-protected wetlands in any of the Project areas. However, because these Projects will occur over time, **Mitigation Measure BIO-5** located at the end of this section, is incorporated to ensure less than significant impacts throughout the life of the Project. With the incorporation of this mitigation measure, the impact will be less than significant.

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?*

**Less Than Significant Impact With Mitigation Incorporated.** There are no established native resident or migratory wildlife corridors or wildlife nursery sites. However, vegetation bordering and within the Project area has the potential to support nesting birds and migratory birds protected under the MBTA. Therefore, to reduce potential impacts to nesting birds **Mitigation Measure BIO-2** is recommended. Mitigation measures are at the end of this section.

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

**Less Than Significant Impact With Mitigation Incorporated.** Joshua tree and Yucca are protected under specific sections of the Codes of Regulations for the Town of Yucca Valley and County of San Bernardino. If the Joshua trees on site cannot be avoided, a Relocation-Protected Plant Plan is required to be prepared and approved by the City prior to construction.

There are numerous Joshua Trees and Yuccas within the Project areas. Joshua Trees have the potential to be impacted here depending on construction envelope and staging areas. Therefore, to avoid and reduce impacts to Joshua Trees and Yuccas, **Mitigation Measure BIO-6**, located at the end of this section, is incorporated. With the incorporation of this mitigation measure, the impact will be less than significant.

- 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?*

**No Impact.** None of the Project alignments are within any Habitat Conservation Plan or Natural Community Conservation Plan or other approved local, regional or state plan. Therefore, there is no impact.

**Mitigation Measures:**

- BIO-1** A qualified biologist shall develop a Worker Environmental Awareness Program (WEAP) that will include information on general and special status species within the project area, identification of these species and their habitats, techniques being implemented during construction to avoid impacts to species, consequences of killing or injuring an individual of a listed species, and reporting procedures when encountering listed or sensitive species. Construction crews, foremen, and other personnel potentially working on site will attend this education program and place their name on a sign-in sheet. This briefing shall include provisions of any requirements required for the project. MWA and its contractor shall implement Worker Environmental Awareness Program training on the first day of work and periodically throughout construction as needed.
- BIO-2** Bird nesting season generally extends from February 1 through September 15 in southern California and specifically, April 15 through August 31 for migratory passerine birds. In general, Projects should be constructed outside of this time to avoid impacts to nesting birds. If a Project cannot be constructed outside of nesting season, the project site shall be surveyed for nesting birds by a qualified avian biologist within three (3) days prior to initiating the construction activities. If active nests are found during the pre-construction nesting bird surveys, a Nesting Bird Plan (NBP) will be prepared and implemented. At a minimum, the NBP will include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. The NBP will include a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be determined by the biologist, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist has determined the young birds have successfully fledged and a monitoring report has been submitted reviewed and approved by the HDWD.
- BIO-3** Preconstruction surveys for burrowing owl and desert tortoise should be conducted at least 30 days prior to ground disturbance for each Project.
- BIO-4** Pre-construction springtime botanical surveys are recommended in the following areas for the Latimer's woodland-gilia, San Bernardino milk-vetch, Little San Bernardino Mtns. Linanthus, and Robison's monardella.
- Section 1 – Blue Skies Area
    - Alignment behind houses and adjacent to golf course between Martinez Trail and Country Club Road.
    - Alignment along Quemada Trail between Yucca Trail and Country Club Road.

- Section 2 – Old Town North
  - Alignment along Apache Trail and in undisturbed area to the north.
- Section 3 – Mid-Town North
  - Four Alignments along north of Crest view Drive 1) Sage Road, 2) Barberry Avenue, 3) Dumosa Avenue and 4) Joshua Lane.
  - Two alignments that cross open areas 1) north of the jog in Sunnyslope road between Sage Road and Barberry Avenue and 2) alignment north of Sunnyslop between Condalia Avenue and Joshua Lane.
- Section 4 – State Route 241
  - Entire alignment along Highway 247.
- Section 5 – Western Hills Estates and Shatin Hills
  - Alignment along San Rafael Drive southeast of Oakwood Drive.
  - Alignment along Farrelo Road between Nogales Court and Pinto Court.
  - Alignment along Mirlo Lane off Mirlo Road southwest of Mirlo Court.
  - Alignment along Concho Way off Bandera Road.
- Section 6 – Warren Way
  - Alignment along Berkely Drive north of Paxton Road.
- Section 7 – Paradise Valley North
  - Four alignments along 1) North-South portion of Linda Lee Drive, 2) East-West portion of Linda Lee Drive, 3) Marvin Road and 3) Nelson Avenue.
  - Four open areas 1) undisturbed area of Williams lane between Linda Lee Drive and Marvin Drive, 2) alignment extending from the terminus of Nelson Avenue to Yucca Mesa Road, 3) East-West alignment north of hide Lane west of Marvin Drive and 4) East-West alignment due east of Hide Lane across Marvin Drive.
- Section 8 – Upper Sky Harbor
  - Alignment along Black Rock Canyon Road north of San Marino Drive.
  - Two in open areas 1) east west alignment west of the intersection of Black Rock Canyon Road and San Marino Drive and open area west of terminus Santa Barbara Drive.
- Section 9 – Sky Harbor
  - Alignments along Kaiulani Road south of South of San Andreas Road 2) alignment along San Andreas Road between Kaiulani Road and Frontera Avenue, and 3) Alignment along Balsa Avenue between San Andreas Road and Cortez Drive.

- Section 10 – South of Onaga Trail
  - Alignment along Elata Avenue
  - Alignments 1) along Nagles Road between Elata Ave and Kingston Avenue, 2) along Ross Court between Elata Avenue and Imel Street and 3) along Imel Street South of Ross Court.
  
- Section 11 – Juniper Terrace Area
  - Alignment along Jemenez Trail
  - Alignment along Inca Trail from Joshua Drive to terminus of Inca Trail
  - Alignment along Iona Lane East of Mariposa Trail.
  - Alignment along Fox Trail south of Highland Trail.
  - Alignment along Highland Trail east of Elk Trail to midway between Deer Trail and Bannock Trail.
  - Alignment along Deer trail between Mountainview Trail and Highland Trail.
  - Alignment along Bannock Trail south of Mountainview Trail

**BIO-5** For projects where a drainage crossing is required, once a Project has been designed, the HDWD will perform a jurisdictional waters delineation and obtain all applicable State and federal permitting based on the design to address project impacts.

**BIO-6** All Projects should be designed to avoid sensitive and/or protected desert plants as per the City of Yucca Valley and the County of San Bernardino. This includes equipment staging and storage areas. In the event said sensitive desert plants cannot be avoided, the HDWD shall conduct and/or prepare a Native Plant Survey and Relocation Plan in accordance with Ordinance No. 140 of the Town of Yucca Valley to be approved by the Town of Yucca Valley as part of the pre-construction planning. The survey should first identify all Joshua Trees and other native vegetation as recognized by the Town ordinance and assess their type and health. The HDWD should then work to find solutions to avoid these resources; if the resources cannot be avoided, HDWD will develop a relocation plan and obtain permits through applicable entities.

### **Impact Conclusions:**

No significant adverse effects are anticipated with the inclusion of the above mitigation measures.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>V. CULTURAL RESOURCES:</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

**SUBSTANTIATION:** (Check if project is located in the Cultural  Resources overlays or cite results of cultural resource review)

Cultural Resources for the HDWD’s Phases I, II, and III wastewater system infrastructure plan have been studied over the past several years:

- Encarnación, 2009. Historical/Archaeological Resources Survey Report: Yucca Valley Water System Infrastructure Improvements, Town of Yucca Valley, San Bernardino County, California. (On file with the HDWD).
- Encarnación. 2011. Identification and Evaluation of Historic Properties: Yucca Valley Wastewater System Infrastructure Improvements, Town of Yucca Valley, San Bernardino County, California. (On file with the HDWD)
- CRM Tech. 2019. Identification and Evaluation of Historic Properties: Yucca Pipeline Project (Phases II and III), Town of Yucca Valley, San Bernardino County, California.

The CRM Tech 2019 report is attached as Appendix C. For the 2019 effort, CRM Tech’s research included the following activities:

- Records search at the South Central Coastal Information Center (SCCIC), California State University, Fullerton.
- Geoarchaeological analysis to assess the APE’s potential for the deposition and preservation of subsurface cultural deposits from the prehistoric period, which cannot be detected through a standard surface archaeological survey.
- Historical background research for this study.
- Field surveys.

## **Regulatory Setting**

### *Section 106 of the National Historic Preservation Act*

Section 106 of the National Historic Preservation Act mandates that federal agencies take into account the effects of their undertakings on historic properties and seek ways to avoid, minimize, or mitigate any adverse effects on such properties (36 CFR 800.1(a)). “Historic properties,” as defined by the Advisory Council on Historic Preservation, include “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior” (36 CFR 800.16(l)). The eligibility for inclusion in the National Register is determined by applying the following criteria, developed by the National Park Service as per provision of the National Historic Preservation Act:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) that are associated with the lives of persons significant in our past; or
- (c) that embody the distinctive characteristics of a type, period, or method of construction, 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; or
- (d) that have yielded, or may be likely to yield, information important in prehistory or history. (36 CFR 60.4)

### *California Environmental Quality Act*

CEQA establishes that a project that may cause a substantial adverse change in the significance of a “historical resource” is a project that may have a significant effect on the environment (PRC §21084.1). “Substantial adverse change,” according to PRC §5020.1(q), “means demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired.”

More specifically, CEQA guidelines state that the term “historical resources” applies to any such resources listed in or determined to be eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the lead agency (Title 14 CCR §15064.5(a)(1)-(3)). Regarding the proper criteria of historical significance, CEQA guidelines mandate that “generally a resource shall be considered by the lead agency to be ‘historically significant’ if the resource meets the criteria for listing on the California Register of Historical Resources” (Title 14 CCR §15064.5(a)(3)). A resource may be listed in the California Register 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 in our past.
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

## **Environmental Setting**

In the vicinity of present-day Yucca Valley, the first notable cultural feature to appear was a trail that traversed essentially the same route as today’s Twentynine Palms Highway (State Route 62). The trail was reportedly blazed by Powell (Paulino or Pauline) Weaver, a colorful early pioneer who settled near present-day Banning in the mid-

1840s, but it was likely based on an ancient Native American trail. The first non-Native people to settle in the Morongo basin were miners and cattle ranchers in the late 19th century, followed by homesteaders in the early 20th century (CRM Tech, 2019).

One of the early cattle ranchers was Mark “Chuck” Warren, who settled in the area with his family in the early 1880s and leased extensive acreage around present-day Yucca Valley from the U.S. government to graze his herds (Long n.d.). A well that Warren dug some two miles northeast of the present-day Yucca Valley town center, known aptly as Warren’s Well, and the house he built nearby soon became a popular stop on Weaver’s Trail, and “the center of life in the area for many years” (CRM Tech, 2019).

By 1945, the small community that gradually emerged around Warren’s Well had gathered enough population to warrant the establishment of a post office named Yucca Valley (CRM Tech, 2019), but the town was not incorporated until 1991. Today, Yucca Valley has a total population of more than 20,000, scattered over an area of approximately 40 square miles. Despite the accelerated growth in recent decades, the Town of Yucca Valley, as the official name adopted upon its incorporation implies, still retains much of its rural characteristics (CRM Tech, 2019).

### *Results – Historical Resources*

According to SCCIC records, at least 20 previous cultural resource studies in the past have included various portions of the Area of Potential Effect (APE), (CRM Tech, 2019). Many of these studies were linear surveys for similar infrastructure projects, including those for the original HDWD Wastewater Master Plan, and the majority of them are now more than 20 years old. Despite these survey efforts, no cultural resources were previously identified within the current APE, although two linear sites from the historic period were recorded as lying in close proximity (CRM Tech, 2019). Outside APE but within a one-mile radius, SCCIC records show at least 85 other studies covering various tracts of land and linear features (CRM Tech, 2019), resulting in the identification of 21 additional sites, including a “pending” site, and five isolates—i.e., localities with fewer than three artifacts—within the scope of the records search (CRM Tech, 2019).

Among these previously identified cultural resources, eight of the sites and two of the isolates were prehistoric—i.e., Native American - in origin. The sites consisted mainly of scattered lithic and ceramic artifacts, such as projectile points, blades, cores, flakes, pottery sherds, and groundstone tools, but also included a stone quarry and a bedrock milling feature with a single slick. The isolates included a lithic core and pottery sherds. The other sites and isolates dated to the historic period. Among the sites were ranch complexes, refuse scatters, roads, a folk art sculpture, a U.S. General Land Office survey marker, and the site of the Yucca Valley School. The isolates from the historic period were predominantly metal cans (CRM Tech, 2019).

The two linear sites in close proximity to the APE, 36-010716 and 36-025902, represent Old Woman Springs Road and Pioneertown Road, respectively. Dating originally to the late 19th century, the route of Old Woman Springs Road has been largely usurped by present-day State Route 247 (CRM Tech, 2019), which traverses by the western end of a short segment of the project alignment along Buena Suerte Road (CRM Tech, 2019). Pioneertown Road dates at least to the early 1930s and remains in use today, traversing by the western end of another segment of the project alignment along Sunnyslope Drive (CRM Tech, 2019). When first recorded in 2013, Pioneertown Road was found not to be historically significant. None of the other sites or isolates was located in the immediate vicinity of the APE.

### *Results - Archaeological Resources*

CRM Tech’s 2019 study of the surface soils in the APE determined that they are composed of older igneous rock and alluvial sediments as well as some Holocene-age alluvium. The Yucca Valley has no naturally occurring waterway, and seasonal rainfall and flooding would have been the only water sources prehistorically. Although the

area could have been utilized for gathering Joshua tree blossoms and leaves, creosote for medicine, and grasses for food and basketry materials, the lack of water would have limited the amount of mesquite available, the primary source of food in the desert surroundings.

In light of its lack of a reliable water source, the APE would not have been considered a favorable setting for long-term settlement in prehistoric times. Furthermore, the ground surface in the APE has been greatly disturbed by the construction and maintenance of roads and the associated underground utility lines. Consequently, the subsurface sediments within the vertical extent of the APE are considered to be relatively low in sensitivity for potentially significant archaeological deposits of prehistoric or early historic origin.

### **Impact Analysis**

a) *Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?*

**Less Than Significant Impact with Mitigation Incorporated.** The CRM Tech 2019 study concluded that no “historic properties” or “historical resources” as defined by either Section 106 or CEQA are present within the APE. However, in the event an unanticipated resource is discovered, implementation of **Mitigation Measure CUL-1** is incorporated to ensure any potential impact will be less than significant. Mitigation measures are located at the end of this section.

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

**Less Than Significant Impact with Mitigation Incorporated.** The CRM Tech 2019 study concluded that the subsurface sediments in the APE appear to be relatively low in archaeological sensitivity. Therefore, there will be no change in an archaeological resource. However, in the event an unanticipated resource is discovered, implementation of **Mitigation Measure CUL-1** is incorporated to ensure any potential impact will be less than significant. Mitigation measures are located at the end of this section.

c) *Disturb any human remains, including those interred outside of formal cemeteries?*

**Less Than Significant Impact With Mitigation Incorporated.** There are no known human remains within the vicinity of the project site, and no conditions exist that suggest human remains are likely to be found on the project site. It is not anticipated that implementation of the project would disturb human remains, including those interred outside of formal cemeteries. However, ground-disturbing activities, such as grading or excavation, have the potential to disturb human remains. If human remains are found, those remains would require proper treatment, in accordance with applicable laws. The Native American Graves Protection and Repatriation Act (NAGPRA) includes provisions for unclaimed and culturally unidentifiable Native American cultural items, intentional and inadvertent discovery of Native American cultural items on federal and tribal lands, and penalties for noncompliance and illegal trafficking. State of California Public Resources Health and Safety Code Section 7050.5-7055 describes the general provisions regarding human remains, including the requirements if any human remains are accidentally discovered during excavation of a site. As required by state law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission and consultation with the individual identified by the Native American Heritage Commission to be the “most likely descendant.” If human remains are found during excavation, excavation must stop in the vicinity of the find and any area that is reasonably suspected to overlie adjacent remains until the County Coroner has been called out by local law enforcement, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains.

**Mitigation Measure CUL-2** would ensure the proper management of human remains if encountered on the project site. With the implementation of **Mitigation Measure CUL-2**, impacts would be less than significant. Mitigation measures are at the end of this section.

**Mitigation Measures:**

- CUL-1** In the event that evidence of archaeological resources are unearthed during construction activities, all work within 50 feet of the discovery should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. No disturbance shall occur in the vicinity of the find until the site is evaluated by the archaeologist and the find is recorded or treated per the recommendations of the qualified archaeologist.
  
- CUL-2** In the event that human remains are discovered, there shall be no disposition of such human remains, other than in accordance with the procedures and requirements set forth in California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. These code provisions require notification of the County Coroner and the Native American Heritage Commission, who in turn must notify those persons believed to be most likely descended from the deceased Native American for appropriate disposition of the remains. Excavation or disturbance may continue in other areas of the project site that are not reasonably suspected to overlie adjacent remains or archaeological resources.

**Impact Conclusions:**

No significant adverse effects are anticipated with the inclusion of the above mitigation measures.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>VI. ENERGY:</b> Would the project:				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

**Environmental Setting**

An energy analysis was performed for the Project by Urban Crossroads and is located in Appendix D. The purpose of the analysis was to ensure that energy implication is considered by the as the lead agency, and to quantify anticipated energy usage associated with construction of the proposed Project, determine if the usage amounts are efficient, typical, or wasteful for the land use type, and to emphasize avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

**Regulatory Setting**

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. Federal requirements and programs are generally related to the consumption of energy by vehicles. These include the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) to promote the development of intermodal transportation systems; and the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) enacted in 1998, that ties transportation decisions and land use decisions in order to improve the environment.

Transportation projects developed as part of the intermodal transportation systems proposed in the region are the responsibility of the Southern California Association of Governments (SCAG) through its 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS provides objectives for meeting emissions reduction targets set forth by the California Air Resources Board (CARB) to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. The intent is to reduce the vehicles miles traveled thus resulting in lower GHG emissions and a reduction in the amount of fossil fuels used in the region.

The State’s Regulations include the following:

*California Energy Commission*

The California Energy Commission is responsible for preparing the State Energy Plan in order to assist regional and local agencies with improvements to transportation systems that would result in reduced traffic congestion, improved air quality, and an increase in the efficiency of fuel supplies. The intent is to ultimately reduce vehicle miles traveled and increase the use of alternatives to cars including mass transit, and safer bicycles and pedestrian access.

### *California Energy Code*

Title 24, Part 6 of the California Code of Regulations which is also referred to as the California Energy Code, enacted in 1978 sets forth the energy efficiency standards for residential and nonresidential buildings that are updated approximately every three years. The latest update took effect in January 2017.

### *Integrated Energy Policy Report*

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the California Energy Commission to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code § 25301a). The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2018 Integrated Energy Policy Report (2018 IEPR) was adopted February 20, 2019, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2018 IEPR focuses on a variety of topics such as including the environmental performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios, and the California Energy Demand Forecast.

### *State of California Energy Plan*

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

## **Assessment Methodology and Results**

### *Methodology*

Information from the CalEEMod 2016.3.2 outputs for the Air Quality Impact Analysis (Appendix A) (AQIA) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands.

### *Estimated Construction Energy Usage*

The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed Project. Based on the 2017 National Construction Estimator, the typical power cost per 1,000 square feet of construction per month is estimated to be \$2.32. The Project plans to develop approximately 4,055,040 square feet of area (pipelines) over the course of 12 months. Based on Table \_\_\_\_, the total power cost of the on-site electricity usage during the construction of the proposed Project is estimated to be approximately \$112,892.31. Additionally, as of July 26, 2019, SCE's general service rate schedule (GS-1) for general uses are \$0.08 per kilowatt hour (kWh) of electricity. As shown on Table

9, the total electricity usage from on-site Project construction related activities is estimated to be approximately 1,411,154 kWh.

**Table 8**  
**Project Construction Power Cost**

<b>Power Cost</b> (per 1,000 SF of construction area per month)	<b>Total Construction Area Size</b> (1,000 SF)	<b>Construction Duration</b> (months)	<b>Project Construction Power Cost</b>
\$2.32	4,055.040	12	\$112,892.31
<b><i>TOTAL PROJECT CONSTRUCTION POWER COST</i></b>			<b><i>\$112,892.31</i></b>

**Table 9**  
**Project Construction Electricity Usage**

<b>Cost per kWh</b>	<b>Project Construction Electricity Usage (kWh)</b>
\$0.08	1,411,154
<b><i>TOTAL PROJECT CONSTRUCTION ELECTRICITY</i></b>	<b><i>1,411,154</i></b>

<sup>1</sup>Assumes the Project will be under the GS-1 General Industrial service rate under SCE

*Construction Equipment Fuel Estimates*

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction.

Eight-hour daily use of all equipment is assumed. The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower-hour per gallon (hp-hr/gal), obtained from California Air Resources Board (CARB) 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines. For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered which is standard practice consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the Cities and region.

As presented in Table 10, Project construction activities would consume an estimated 114,594 gallons of diesel fuel. Project construction would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

**Table 10**  
**Construction Fuel Estimates**

Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Cement and Mortar Mixers	9	3	8	0.56	121	1,707
Cranes	231	1	8	0.29	536	7,561
Dumpers/Tenders	16	10	8	0.38	486	6,862
Excavators	158	1	8	0.38	480	6,776
Generator Sets	84	1	8	0.74	497	7,016
Off-Highway Trucks	402	3	8	0.38	3,666	51,724
Other Construction Equipment	172	1	8	0.42	578	8,153
Pavers	130	1	8	0.42	437	6,162
Rollers	80	1	8	0.38	243	3,431
Rubber Tired Dozers	247	1	8	0.40	790	11,151
Tractors/Loaders/Backhoes	97	1	8	0.37	287	4,051
<b>CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)</b>						<b>114,594</b>

*Construction Worker Fuel Estimates*

It is assumed that all construction worker trips are from light duty autos (LDA) along area roadways. With respect to estimated VMT, the construction worker trips would generate an estimated 236,520 VMT (22). Data regarding Project related construction worker trips were based on CalEEMod 2016.3.2 model defaults utilized within the AQIA.

Vehicle fuel efficiencies for LDA were estimated using information generated within the 2014 version of the Emissions FACTor model (EMFAC) developed by the CARB. EMFAC 2014 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the ARB to project changes in future emissions from on-road mobile sources. EMFAC 2014 was run for the LDA vehicle class within the California sub-area for a 2021 calendar year.

As generated by EMFAC 2014, an aggregated fuel economy of LDAs ranging from model year 1974 to model year 2021 are estimated to have a fuel efficiency of 31.28 miles per gallon (mpg). Table 11 provides an estimated annual fuel consumption resulting from the Project generated by LDAs related to construction worker trips. Based on Table 11, it is estimated that 7,562 gallons of fuel will be consumed related to construction worker trips during full construction of the proposed Project. Project construction worker trips would represent a “single-event” gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose.

**Table 11**  
**Construction Worker Fuel Consumption Estimates**

<b>Worker Trips / Day</b>	<b>Trip Length (miles)</b>	<b>Vehicle Miles Traveled</b>	<b>Average Vehicle Fuel Economy (mpg)</b>	<b>Estimated Fuel Consumption (gallons)</b>
60	10.8	236,520	31.28	7,562
<b>TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION</b>				<b>7,562</b>

*Construction Energy Efficiency Measures*

The equipment used for Project construction would conform to CARB regulations and California emissions standards. There are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

The Project would utilize construction contractors which practice compliance with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additionally, certain incidental construction-source energy efficiencies would likely accrue through implementation of California regulations and best available control measures (BACM). More specifically, California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. To this end, “grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling.” In this manner, construction equipment operators are informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Indirectly, construction energy efficiencies and energy conservation would be achieved for the proposed development through energy efficiencies realized from bulk purchase, transport and use of construction materials.

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. At this time, an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared.

In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

*Operational Energy Usage*

Energy consumption in support of or related to Project operations would primarily include facilities energy demands (energy consumed by operations and site maintenance activities).

Project operations and Project site maintenance activities would result in the consumption of a negligible amount of electricity for the Project's 3 lift stations and a negligible amount of gasoline for motor vehicles traveling to and from the Project sites during on-going maintenance. Electricity would be supplied to the Project by SCE.

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards.

It should also be noted that the Project would not result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure because it would be served by the existing electric utility lines in the Project vicinity.

### **Impact Analysis**

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

#### **Less Than Significant Impact.**

##### **Construction**

The estimated power cost of on-site electricity usage during the construction of the proposed Project is assumed to be around \$112,892.31. Additionally, based on the assumed power cost, it is estimated that the total electricity usage during construction is calculated to be around 1,411,154 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 114,594 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Best available control measures inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Construction worker trips for construction of the proposed Project would result in the estimated fuel consumption of 7,562 gallons of fuel. Diesel fuel would be supplied by City and regional commercial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved through the use of bulk purchases, transport and use of construction materials. The 2018 IEPR released by the California Energy Commission has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements (19). As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

### Operations

Electricity would be supplied by SCE. The Project proposes to construct 3 lift stations that will ultimately reflect contemporary energy efficient/energy conserving designs and operational programs. Uses proposed by the Project are not inherently energy intensive, and the Project energy demands in total would be comparable to, or less than, other projects of similar scale and configuration.

As supported by analyses, Project construction would not result in the inefficient, wasteful or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservation goals within the State of California.

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

**Less Than Significant Impact.** The Project includes construction activity and associated improvements and would not result in the inefficient, wasteful, or unnecessary consumption of energy. In fact, improving the pipelines would result in a more efficient process and consequently reduce a wasteful use of energy. Further, the Project would not cause or result in the need for additional energy producing facilities or energy delivery systems.

### Mitigation Measures:

No mitigation measures are required.

### Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>VII. GEOLOGY AND SOILS:</b> Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:		X		
<ul style="list-style-type: none"> <li>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.</li> </ul>			X	
<ul style="list-style-type: none"> <li>Strong seismic ground shaking?</li> </ul>			X	
<ul style="list-style-type: none"> <li>Seismic-related ground failure, including liquefaction?</li> </ul>			X	
<ul style="list-style-type: none"> <li>Landslides?</li> </ul>			X	
b) Result in substantial soil erosion or the loss of topsoil?		X		
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- site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

**SUBSTANTIATION:** ( Check if project is located in the Geologic Hazards Overlay District):

**Environmental Setting**

The Town of Yucca Valley is within two different geological provinces, or areas have their own unique physical characteristics. The northern part of the Town, generally north of SR-62, lies within the Mojave Desert Province, an arid region of alluvial fans, desert plains, dry lakebeds, and scattered mountain ranges. In contrast, the southern part of the Town reaches up the north flank of the Little San Bernardino Mountains, a moderately high range that is the southernmost extension of the Transverse Ranges Province (The Planning Center, August 2013).

Mountains and hills in and near Yucca Valley are composed of rocks that have been sheared and intensely fractured under the strain of tectonic movement. The down-dropped blocks form deep basins that are filled with overlapping alluvial fans. Yucca Valley overlies two such basins: the Warren Valley Groundwater Basin underlies the main valley and gently sloping terrain to the south; the southwestern edge of the Copper Mountain Groundwater Basin

underlies the northern part of the Town, with the Sawtooth Mountains, the Pinto Mountain fault zone, and the Bartlett Mountains forming a barrier between the two basins (The Planning Center, August 2013)).

### Soils

In the Yucca Valley area, surface geologic units consisting predominantly of unconsolidated or semiconsolidated sand, silt, and gravel overlie bedrock in the area. The youngest sediments are water-laid alluvium deposited in active or recently active gullies, washes, and floodplains. Gently sloping areas in the southern and northern parts of the Town consist of older, slightly elevated alluvial fan sediments that have been dissected by the active washes and gullies. Erosional remnants of very old fans are present in isolated areas, where they form deeply incised hills, such as Burnt Mountain (The Planning Center, August 2013).

In the Project areas north of SR-62, Project area soils are predominately older alluvium (Qoa) or quartz monzonite (Mqm). In the Project areas south of SR-62 most soils are generally older alluvium (Qoa), (Figure VII-1).

- Older alluvial fan deposits (Qoa) - are Pleistocene age (ranging from about 11,000 to 1 million years old) and generally consist of massive to crudely stratified sand and pebble-cobble gravel eroded from bedrock exposed in the adjacent hills and mountains. Deposits closer to the mountains are typically coarse grained, transitioning to finer-grained sediments (silty sand) downslope, near the valley axis. Layers of clay, sandy clay and gravelly clay are present throughout the sedimentary sequence. The oldest deposits are commonly tilted, folded, and/or faulted near the major active fault zones.
- Quartz monzonite (Mqm) - the predominant mineral assemblage is a light-colored, massive, medium- to coarse-grained rock composed mainly of quartz and feldspars, termed quartz monzonite. Most of these rocks crystallized from magmas that were emplaced over a period of time ranging between about 65 million and 225 million years ago, during the latter part of the Mesozoic Era. These rocks form hills in the easternmost end of the Sawtooth Mountains and the western part of the Bartlett Mountains. Generally, they are commonly referred to as “granitic,” and generally have large grains that can easily be seen without magnification. They often have a spotted appearance and have somewhat variable mineral compositions.

In the Project areas of Mid Town North and SR-247, soils have been identified as predominately young alluvium (Qya), which is Holocene in age and may be up to about 100 feet thick. It is made primarily of sediments deposited by water in washes, on small fans emanating from canyons within the local hills and mountains, and on floodplains on the valley floor. Young alluvium has no soil development on the surface and is typically reworked by floodwaters or buried by new sediment during storms.

The Yucca Valley General Plan has also identified the potential for paleontological resources (Figure VII-2).

### Faults

The Southern California region is seismically active, with the north-south San Andreas Fault dividing the state. The San Andreas Fault is the sliding boundary between the Pacific Plate and the North American Plate. It slices California in two from Cape Mendocino to the Mexican border. San Diego, Los Angeles and Big Sur are on the Pacific Plate. San Francisco, Sacramento and the Sierra Nevada are on the North American Plate. The southern portion of the San Andreas fault is now divided into ten sections. The Yucca Valley area is near three of the southern sections of the San Andreas Fault: approximately 21.5 miles from the San Bernardino South section, 11 miles from the San Gorgonio-Garnet Hill segment, and 22 miles from the Coachella segment.

The Alquist-Priolo Earthquake Fault Zoning Act (California Public Resources Code Sections 2621 et seq.) was signed into law in 1972 to mitigate the hazard of fault rupture by prohibiting structures for human occupancy across the trace of an active fault. This state law was passed in direct response to the 1971 San Fernando earthquake, which

caused extensive surface fault ruptures that damaged numerous homes, commercial buildings and other structures. The act requires the State Geologist to delineate "Earthquake Fault Zones" along faults that are "sufficiently active" and "well defined," that is they show evidence of surface displacement within the last 11,500 years (Holocene Epoch) along one or more of their segments (sufficiently active) and are clearly detectable by a trained geologist as a physical feature at or just below the ground surface (well defined).

There are several Alquist-Priolo Earthquake Fault Zones mapped through the Town of Yucca Valley and through the Project sections (Figure VII-3). These faults have the ability to produce between a 6.5 and 7.2 earthquake.

*Pinto Mountain Fault Zone:* This east-west trending fault has been mapped north of SR-62, primarily near the Project areas of Paradise Valley North, Warren Way, Mid Town North, Old Town North and the Blue Skies Country Club. The Pinto Mountain fault is a prominent fault zone that bounds the north side of the Little San Bernardino Mountains and extends in a westerly direction through the heart of Yucca Valley and on to the Morongo Valley, where it is known as the Morongo Valley fault. The fault zone is at least 45 miles long and possibly as many as 56 miles long, ending at its west end against the San Andreas fault. Recent studies show that this fault has ruptured repeatedly in the last 14,000 years, with at least four surface-rupturing earthquakes within the past about-9,400 years. Rupture of the Pinto Mountain fault is considered the worst-case scenario for Yucca Valley.

*Burnt Mountain Fault Zone.* This north-south fault zone is in the vicinity of the Copper Hills I and Copper Hills II Project areas. The Burnt Mountain fault, as with several other faults in the region, was unknown prior to late June 1992, when a 3.7-mile length of this fault ruptured at the ground surface, probably during a large aftershock of the Landers earthquake, with about 2.4 inches of right-lateral offset. The Burnt Mountain fault was later mapped with a total length of about 13 miles. Based on their location, the Burnt Mountain and Eureka Peak faults are thought to be important structures that are accommodating the transfer of strain from the San Andreas fault system to the Eastern California Shear Zone.

*Eureka Peak Fault Zone.* This north-south fault zone is located primarily within the Sky Harbor and Upper Sky Harbor Project areas. This 12-mile-long fault was "discovered" when it broke the ground surface during the 1992 Landers earthquake sequence, in part as a result of a large aftershock. Although the maximum surface offset measured on the 6.8-mile long section of the fault that ruptured was only 8 inches, and therefore considerably less than the 6- to 9-foot offsets measured elsewhere, this small amount of offset allowed geologists to map the fault and discover the nearby Burnt Mountain fault. Creepmeters installed along the fault following the Landers earthquake suggest that the fault slipped about 12 cm (4.7 inches) immediately following the main earthquake sequence and that it has since continued to slip.

### Landslides

Seismically induced landslides and rock falls may occur in areas with steep slopes that contain unconsolidated young alluvial deposits or artificial fills. The Yucca Valley General Plan (The Planning Center, August 2013) does not identify any landslide areas in the Phase II and Phase III Project areas.

### Liquefaction

Liquefaction is the phenomenon in which loosely deposited granular soils and non-plastic silts located below the water table undergo rapid loss of shear strength when subjected to strong earthquake-induced ground shaking. Ground shaking of sufficient duration results in the loss of grain-to-grain contact due to a rapid rise in pore water pressure, and causes the soil to behave as a fluid for a short period of time. Liquefaction is known generally to occur in saturated or near saturated cohesionless soils at depths shallower than 50 feet. Factors known to influence liquefaction potential include composition and thickness of soil layers, grain size, relative density, groundwater level, degree of saturation, and both intensity and duration of ground shaking.

The Project areas are not historically known to have water-saturated sediments within about 15 meters (50 feet) of the surface, and as a result, the hazard of liquefaction occurring in the alluvial sediments underlying the valley portion of the study area is currently considered low to very low. Unchecked groundwater recharge in the area could increase liquefaction susceptibility in the future. However, personnel from both the USGS and the HDWD are aware of this issue, and as reclaimed water is recharged into some of the subbasins in the area, they will reportedly monitor and maintain groundwater levels below the critical 50-foot depth to avoid developing susceptibility to liquefaction. The types of ground failure typically associated with liquefaction are explained below.

The Yucca Valley General Plan (The Planning Center, August 2013) identifies that primarily the communities north of SR-62 have low susceptibility to liquefaction (except for the hillside communities of Western Hills Estates and Shatin Heights and the hillside community west of the Blue Skies Country Club which have no liquefaction susceptibility identified). The General Plan defines “low” susceptibility as “areas underlain by course-grained Holocene age sediments, groundwater depth greater than 100 feet or unknown.”

The areas of “very low” susceptibility are defined in the Yucca Valley General Plan (The Planning Center, August 2013) in the Project areas south of SR-65, defined as “areas underlain by course-grained Pleistocene age sediments, groundwater depth greater than 100 feet or unknown.”

### **Impact Analysis**

a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- *Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*
- *Strong seismic ground shaking?*
- *Seismic related ground failure, including liquefaction?*
- *Landslides?*

**Less Than Significant Impact With Mitigation Incorporated.** The Southern California region is seismically active, with the north-south San Andreas Fault dividing the state. The Yucca Valley area is near three of the southern sections of the San Andreas Fault: approximately 21.5 miles from the San Bernardino South section, 11 miles from the San Gorgonio-Garnet Hill segment, and 22 miles from the Coachella segment.

Phase II and Phase III pipelines will, or are highly likely to, cross several faults or be placed within Alquist Priolo Earthquake Fault Zones in the Project areas of:

Pinto Mountain Fault Zone: Paradise Valley North, Warren Way, Mid Town North, Old Town North and the Blue Skies Country Club,

Burnt Mountain Fault Zone: Copper Hills I and Copper Hills II

Eureka Peak Fault Zone: Sky Harbor and Upper Sky Harbor.

Therefore, to ensure that the pipelines do not rupture or cause substantial adverse effects, **Mitigation Measure GEO-1** is required. Mitigation measures are located at the end of this section.

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

**Less Than Significant Impact With Mitigation Incorporated.** In the Yucca Valley area, surface geologic units consisting predominantly of unconsolidated or semiconsolidated sand, silt, and gravel overlies bedrock in the area. During construction, the construction/installation of the sewer collection system facilities have a potential to cause soil erosion. Any erosion and sedimentation that may occur due to excavation and grading activities will be controlled through the use of appropriate use of best management practices (BMPs) for wind and water erosion and subsequent sedimentation from the areas disturbed by construction and installation activities. **Mitigation Measure GEO-2** identifies the typical performance standards that must be met by these BMPs. Therefore, potential erosion impacts related to installing the proposed facilities will not cause any significant adverse erosion or sedimentation impacts with the implementation of this mitigation measure.

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-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

**Less Than Significant Impact.** The sewer collection system facilities will be installed throughout Yucca Valley, but rock fall or unstable landforms have not been identified in the Project areas. And, because the pipelines will be placed underground, the potential rockfall hazard is minimal and does not require mitigation. The pump stations are located on the valley floor and are not exposed to significant rockfall or other hazard. Therefore, there is a less than significant impact.

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

**Less Than Significant Impact.** Expansive soils are considered those that contain a significant amount of clay and are subject to swelling as a response to changes in water content. Soils with a high content of expansive material can form cracks in drier seasons, and impact building loads. In the Project areas expansive soils are not considered a hazard because the soils contain little clay. Therefore, there is a less than significant impact.

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

**No Impact.** The proposed project is the construction and installation of wastewater transmission infrastructure. The project does not include installation or operation of any proposed septic tanks, so there can be no adverse impacts regarding this issue. Note that as part of implementing the proposed project, the existing septic tanks will be pumped to remove any residual wastewater or related by products and then either demolished or filled to prevent future damage from collapse. None of the Project activities propose or involve the use of septic tanks or alternative wastewater disposal systems. Therefore, there is no impact.

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

**Less Than Significant Impact With Mitigation.** There are no unique geological features that have been identified in the Project alignments. Paleontological resources may occur within the soils found within the Project alignments,

especially in the following areas where a moderate potential for resources exist has been identified by the Yucca Valley General Plan:

- Blue Skies Country Club
- Paradise Valley North
- Juniper Terrace
- Storey Park
- Alta Loma
- Copper Hills I
- Copper Hills II
- Sky Harbor
- Upper Sky Harbor

To accommodate any unanticipated resources **Mitigation Measure GEO-3** is required for all Project areas:

**Mitigation Measures:**

**GEO-1** Any pipelines crossing the Alquist-Priolo Special Studies Zones for the Pinto Mountain, Eureka Peak, and Burt Mountain Faults could be subject to damage due to ground rupture associated with these faults. Any construction of facilities in or pipelines crossing this zone is required to have detailed structural engineering studies to ensure designs that can safely accommodate the anticipated ground movement(s), or to be immediately repairable following a seismic event along any of the three faults.

**GEO-2** The contractor will provide to the HDWD an Erosion Control Report (ECR) that will identify the Best Management Practices (BMPs) for managing any excavated or stockpiled materials. The BMPs may include but not be limited to the following:

- Prevent mud and debris from entering roadways, including the main entry road by providing trackout measures.
- Locate stockpiles away from drainage courses, drain inlets or concentrated flows of storm water.
- For wind erosion control, apply water or other dust palliative to stockpiles. Smaller stockpiles may be covered as an alternative.
- Place bagged materials on pallets under cover.
- During the rainy season, non-active soil stockpiles will be covered with heavy plastic and the stockpile contained within a temporary perimeter sediment barrier, such as berms, dikes, silt fences, or sandbag barriers. A soil stabilization measure may be used in lieu of cover.
- During the non-rainy season prior to the onset of rain, the stockpile should either be covered or protect them with temporary perimeter sediment barriers.
- Year-round, active soil stockpiles will be protected with temporary linear sediment barriers prior to the onset of rain.
- Pipelines placed within unpaved roadways will be graded and watered at least once per day, or as often as necessary to control dust.
- Trenches will remain open for as short a time as possible.
- The Plan will identify proper compaction for all pipelines and lift station facilities.

**GEO-3** **Paleontological Resources.** The HDWD staff and/or its contractor performing the work will be required to receive a Worker Environmental Awareness Training that will train

workers on various environmental subjects including the potential for paleontological resources.

Additionally, any substantial excavations (i.e. over 5 feet in depth) in the proposed Project areas identified as “moderate” in the General Plan should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Also, sediment samples should be collected and processed during construction to determine the small fossil potential in the proposed Project area. Any fossils recovered during implementation of this mitigation measure should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations. The areas for monitoring and sediment samples include but are not limited to:

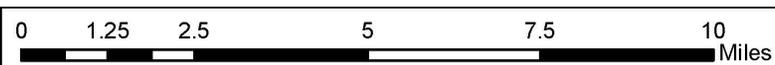
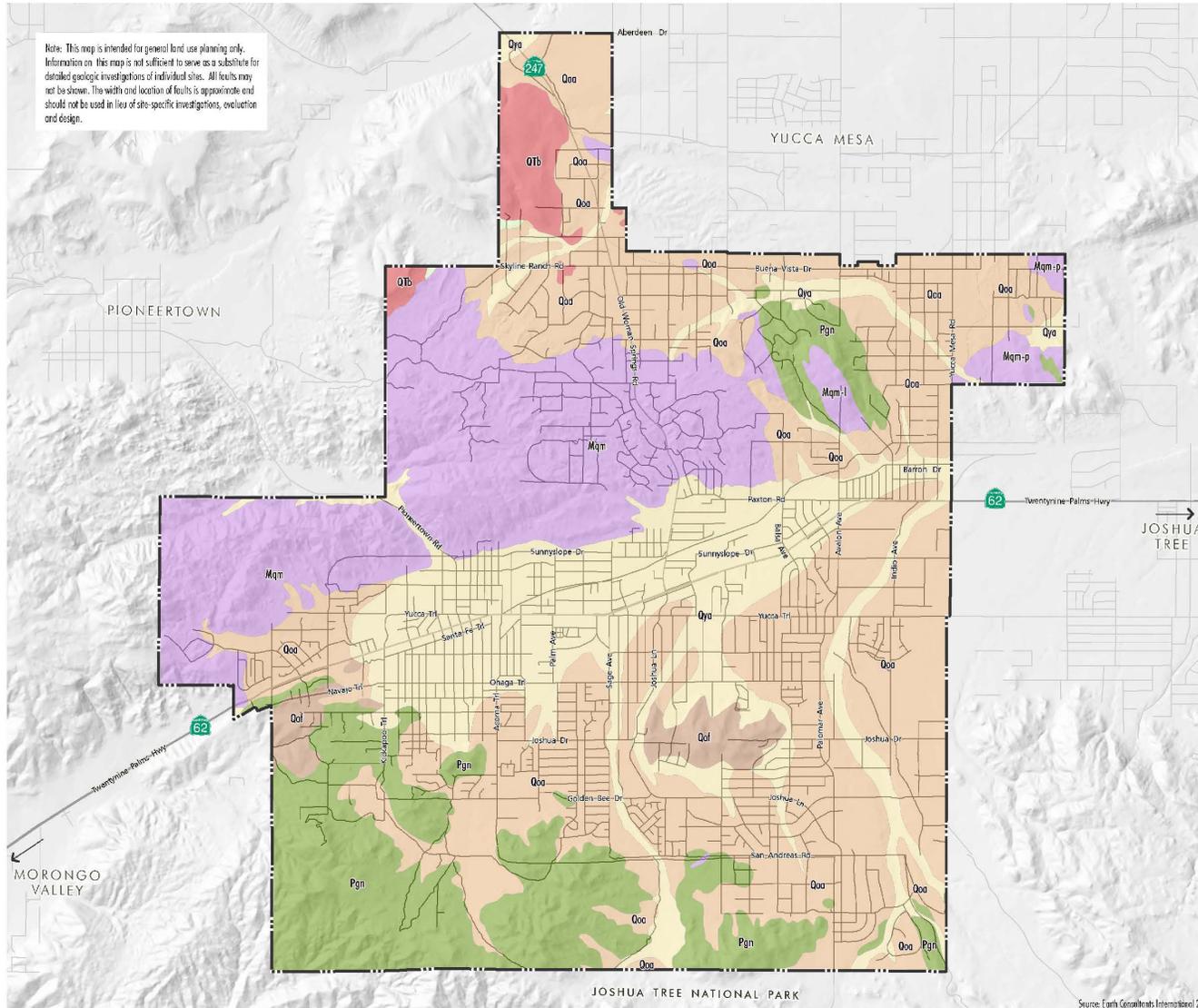
- Blue Skies Country Club
- Paradise Valley North
- Juniper Terrace
- Storey Park
- Alta Loma
- Copper Hills I
- Copper Hills II
- Sky Harbor
- Upper Sky Harbor

**Impact Conclusions:**

No significant adverse effects are anticipated with the inclusion of the above mitigation measures.

## 5.5 - GEOLOGY AND SOILS

Figure 5.5-1  
GEOLOGIC MAP

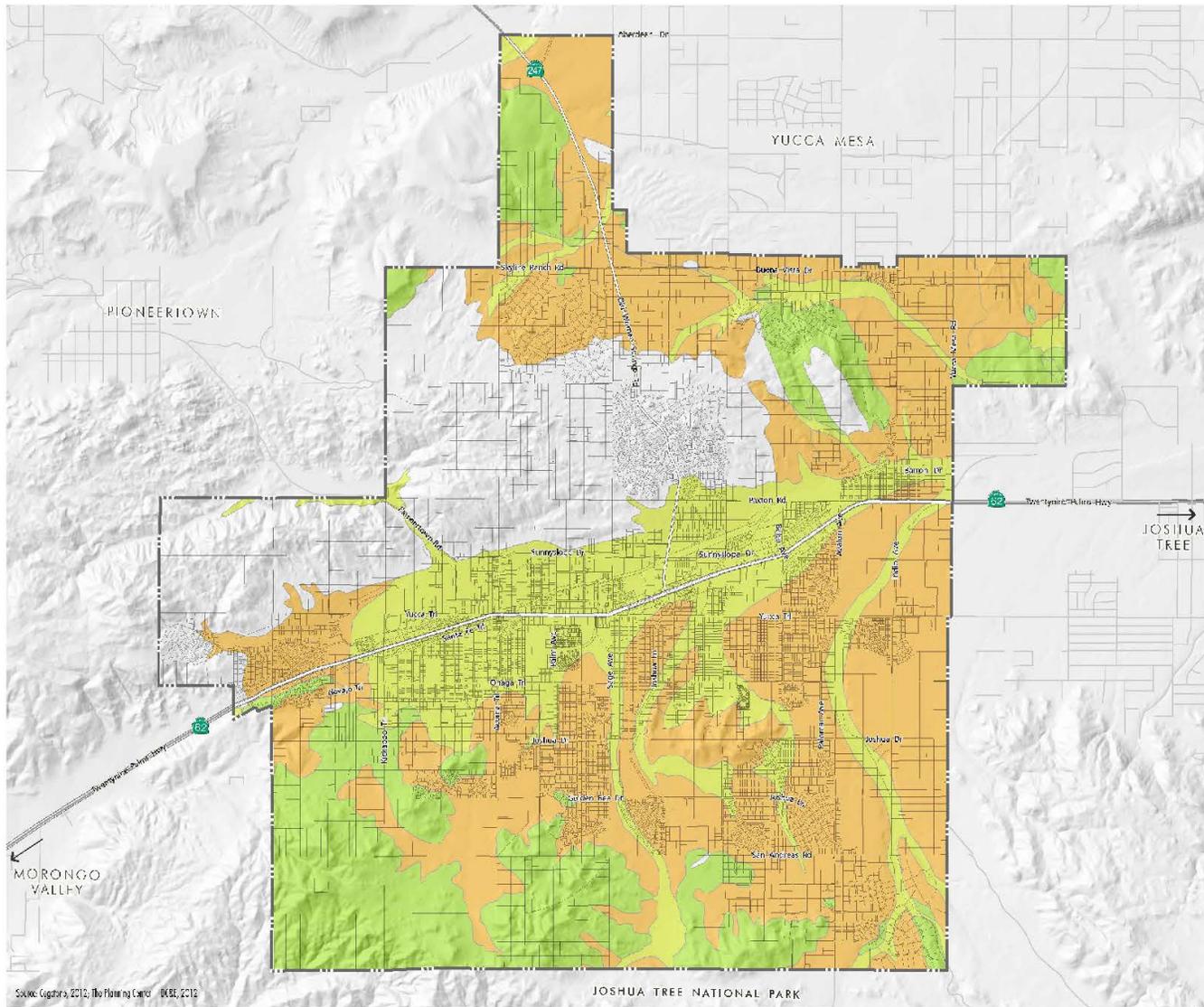


Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors  
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



### Figure VII-1 Soils

Phase II and Phase III  
Sewer Collection System Project

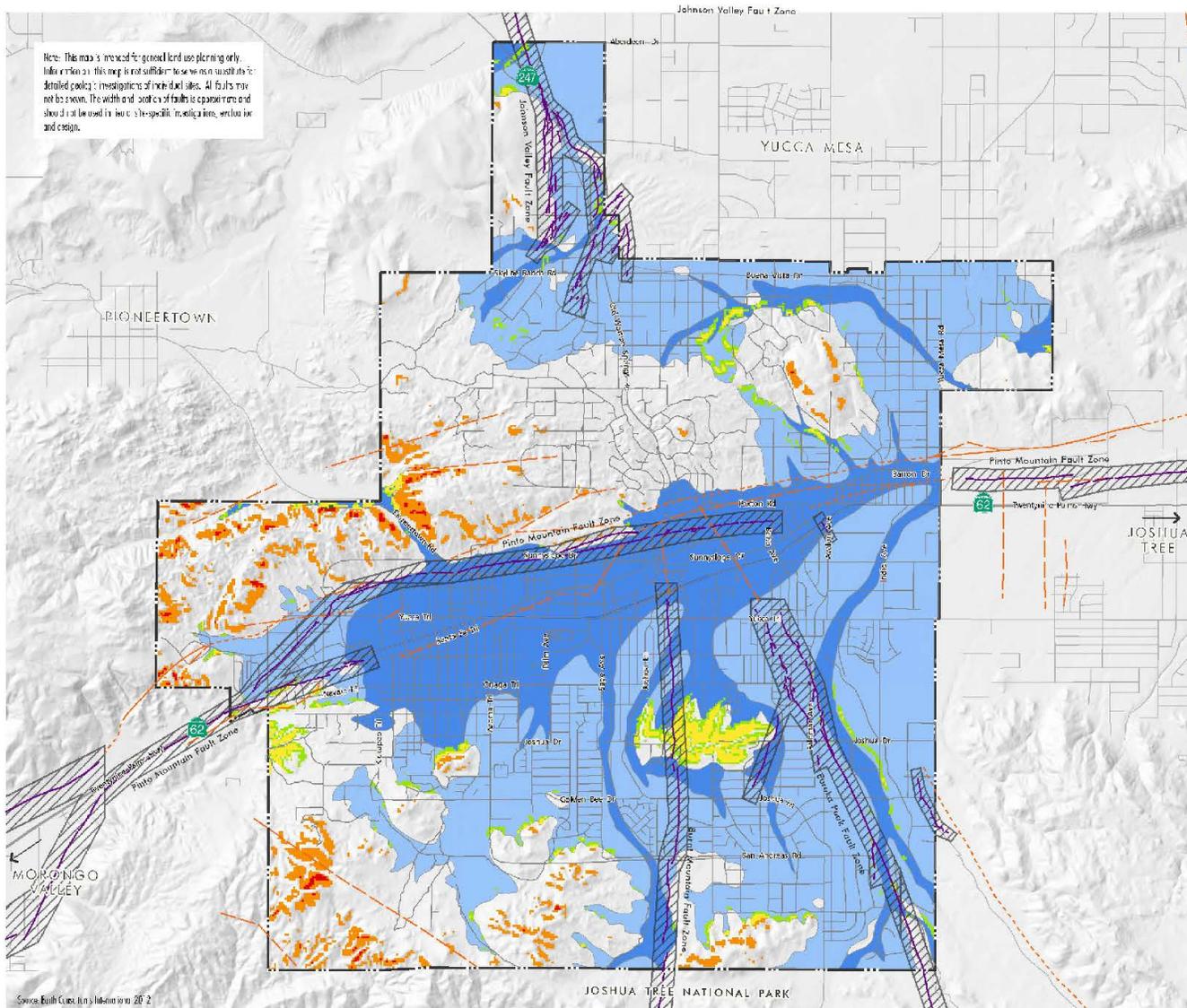


**PALEONTOLOGICAL RESOURCES SENSITIVITY MAP**

- Potential Fossil Yield
- Very Low
  - Low
  - Moderate
- Town Limits

Source: Cogburn, 2012; The Planning Council, DCBE, 2012

<p>0 1.25 2.5 5 7.5 10 Miles</p>	<p>Service Layer Credits:</p>		
		<p><b>Figure VII-2 Paleo Sensitivity</b></p>	<p>Phase II and Phase III Sewer Collection System Project</p>



0    1.25    2.5    5    7.5    10					Miles	Service Layer Credits:
 						
<b>Figure VII-3</b>				Phase II and Phase III		
<b>Seismic Hazards</b>				Sewer Collection System Project		

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>VIII. GREENHOUSE GAS EMISSIONS:</b> Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

An greenhouse gas emissions analysis was performed for the Project by Urban Crossroads and is located in Appendix E. The purpose of the analysis was to ensure that energy implication is considered by the as the lead agency, and to quantify anticipated energy usage associated with construction of the proposed Project, determine if the usage amounts are efficient, typical, or wasteful for the land use type, and to emphasize avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

**Regulatory Setting**

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. Federal requirements and programs are generally related to the consumption of energy by vehicles. These include the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) to promote the development of intermodal transportation systems; and the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) enacted in 1998, that ties transportation decisions and land use decisions in order to improve the environment.

Transportation projects developed as part of the intermodal transportation systems proposed in the region are the responsibility of the Southern California Association of Governments (SCAG) through its 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS provides objectives for meeting emissions reduction targets set forth by the California Air Resources Board (CARB) to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. The intent is to reduce the vehicles miles traveled thus resulting in lower GHG emissions and a reduction in the amount of fossil fuels used in the region.

The State’s Regulations include the following:

*California Energy Commission*

The California Energy Commission is responsible for preparing the State Energy Plan in order to assist regional and local agencies with improvements to transportation systems that would result in reduced traffic congestion, improved air quality, and an increase in the efficiency of fuel supplies. The intent is to ultimately reduce vehicle miles traveled and increase the use of alternatives to cars including mass transit, and safer bicycles and pedestrian access.

### *California Energy Code*

Title 24, Part 6 of the California Code of Regulations which is also referred to as the California Energy Code, enacted in 1978 sets forth the energy efficiency standards for residential and nonresidential buildings that are updated approximately every three years. The latest update took effect in January 2017.

### *Integrated Energy Policy Report*

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the California Energy Commission to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code § 25301a). The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2018 Integrated Energy Policy Report (2018 IEPR) was adopted February 20, 2019, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2018 IEPR focuses on a variety of topics such as including the environmental performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios, and the California Energy Demand Forecast.

### *State of California Energy Plan*

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

### **Environmental Setting**

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHG), play a critical role in the Earth's radiation amount by trapping infrared radiation emitted from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), ozone, water vapor, nitrous oxide (N<sub>2</sub>O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate.

Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses.

Transportation is responsible for 41 percent of the State's greenhouse gas emissions, followed by electricity generation. Emissions of CO<sub>2</sub> and nitrous oxide (NO<sub>x</sub>) are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO<sub>2</sub>, where

CO<sub>2</sub> is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean. Table 12, *Description of Greenhouse Gases*, provides a description of each of the greenhouse gases and their global warming potential.

**Table 12**  
**Description of Greenhouse Gases**

GHG	Description and Physical Properties	Sources
Nitrous oxide	Nitrous oxide (N <sub>2</sub> O), also known as laughing gas is a colorless gas. It has a lifetime of 114 years. Its global warming potential is 298	Microbial processes in soil and water, fuel combustion, and industrial processes. In addition to agricultural sources, some industrial processes (nylon production, nitric acid production) also emit N <sub>2</sub> O.
Methane	Methane (CH <sub>4</sub> ) is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 28-36.	A natural source of CH <sub>4</sub> is from the decay of organic matter. Methane is extracted from geological deposits (natural gas fields). Other sources are from the decay of organic material in landfills, fermentation of manure, and cattle farming.
Carbon dioxide	Carbon dioxide (CO <sub>2</sub> ) is an odorless, colorless, natural greenhouse gas. Carbon dioxide's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960.	Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
Chlorofluorocarbons	CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). They are gases formed synthetically by replacing all hydrogen atoms in methane or methane with chlorine and/or fluorine atoms. Global warming potentials range from 3,800 to 8,100.	Chlorofluorocarbons were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone, therefore their production was stopped as required by the Montreal Protocol.
Hydrofluorocarbons	Hydrofluorocarbons (HFCs) are a group of greenhouse gases containing carbon, chlorine, and at least one hydrogen atom. Global warming potentials range from 140 to 14,800.	Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.
Sulfur hexafluoride	Sulfur hexafluoride (SF <sub>6</sub> ) is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential, 22,800.	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

So

## **Greenhouse Gas Project Modeling**

### *Methodology*

On October 17, 2017, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model™ (CalEEMod) v2016.3.2. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO<sub>x</sub>, SO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod™ has been used for this Project to determine GHG emissions.

### *Construction Emissions*

Construction activities associated with the Project would result in emissions of CO<sub>2</sub> and CH<sub>4</sub> from construction activities. The report *Air Quality Impact Analysis Report* (Appendix A) contains detailed information regarding construction activity.

As shown in Table 13, the Project will result in approximately 764.39 MTCO<sub>2</sub>e per year from construction activities.

**Table 13  
Project GHG Emissions**

Emission Source	Emissions (MT/yr)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total CO <sub>2</sub> E
Annual construction-related emissions	50.61	0.01	0.00	50.96
<b>Total Annual CO<sub>2</sub>E (All Sources)</b>	<b>50.96</b>			
<b>Total CO<sub>2</sub>E (15-year Construction Period)</b>	<b>764.39</b>			

Source: CalEEMod model output, See Appendix 3.1 in Appendix A for detailed model outputs.

*Operational Emissions*

In terms of operational GHG emissions, the proposed Project involves construction of 64 miles of wastewater pipeline, and 1,300 manholes and 3 lift stations. The proposed Project does not include any substantive new stationary or mobile sources of emissions, and therefore, by its very nature, will not generate quantifiable GHG emissions from Project operations. While it is anticipated that the Project would require intermittent maintenance to be, such maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis. Therefore, there is no significant operational impact.

**Impact Analysis**

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

**Less Than Significant Impact.** The HDWD has not adopted a numeric significance threshold for determining significant impacts associated with GHG emissions. As such thresholds established by the MDAQMD are utilized.

On May 13, 2010, the EPA finalized the GHG Tailoring Rule. The Tailoring Rule sets major source emissions thresholds that define when federal operating permits under PSD or Title V are required. The Tailoring Rule establishes a threshold of 100,000 tpy or 90,719 MT/yr of GHGs from new sources above which sources are considered major sources requiring a federal operating permit.

As such, the MDAQMD has adopted a significance threshold for GHGs of 100,000 tpy and is thus applied to this project. More specifically, 100,000 tpy of GHG emissions from a single facility constitutes major sources that require a federal operating permit. Similarly, the MDAQMDs NO<sub>x</sub> significance threshold of 25 tons/year is equal to the major source threshold applicable to areas designated severe non-attainment for ozone. As such, use of the EPA's determination of whether a Project is a major source and consequently establishing a threshold based on that is supported by substantial evidence.

The annual GHG emissions associated with the operation of the proposed Project are estimated to be 764.39 MTCO<sub>2</sub>e per year as summarized in Table 13. As such, the proposed Project would result in a less than significant impact with respect to GHG emissions.

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

**Less Than Significant Impact.** As discussed above, the Project involves construction activity and does not propose a trip-generating land use or facilities that would generate any substantive amount of on-going GHG emissions. As presented in Table 13, the project's short-term GHG emissions are below the 90,719 MT/yr screening threshold. As concluded in VIII(a) above, the proposed Project would not generate a significant amount of GHG emissions. Therefore, the proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Impacts are less than significant in this regard.

**Mitigation Measures:**

No mitigation measures are required.

**Impact Conclusions:**

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>IX. HAZARDS AND HAZARDOUS MATERIALS:</b> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
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?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
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?				X
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 for people residing or working in the project area?			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?		X		

**Environmental Setting**

The section was developed by reviewing general and comprehensive plans, county and city websites, querying Federal and State databases, and evaluating aerial imagery.

**Regulatory Setting**

Hazardous materials and hazardous wastes are heavily regulated by a range of federal, State and local agencies. One of the primary hazardous materials regulatory agencies is the California Environmental Protection Agency (EPA) Department of Toxic Substances Control (DTSC). DTSC is authorized by the U.S. EPA to enforce and implement federal hazardous materials laws and regulations.

Federal and State hazardous materials regulations require all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials to obtain a hazardous materials permit and submit a business plan to its local Certified Unified Program Agency (CUPA). The CUPA also ensures local compliance

with all applicable hazardous materials regulations. For the Town of Yucca Valley, the CUPA is the San Bernardino County Fire Department, Hazardous Materials Division which also manages the following hazardous waste programs:

- Hazardous Materials Release Response Plans and Inventory
- California Accidental Release Program
- Underground Storage Tanks
- Aboveground Petroleum Storage Act/Spill Prevention, Control, and Countermeasure Plan
- Hazardous Waste Generation and Onsite Treatment
- Hazardous Materials Management Plans and Inventory

#### *Hazardous Waste Sites Near the Project Area*

State and Federal databases were reviewed to identify hazardous waste facilities including Federal Superfund sites, State Response sites, Voluntary Cleanup sites, School Cleanup sites, Permitted Operating sites, Corrective Action sites, and Tiered Permit sites within or adjacent to the Project. The database search revealed that there were no sites of concern within the Project area.

#### *Yucca Valley Airport*

The Yucca Valley Airport, located approximately 0.25 mile north of SR-65, just east of SR-247 is a public use general aviation facility leased and operated by the Yucca Valley Airport District for aircraft storage, maintenance, use, and training. The airport is unique in that homes with attached and detached hangars are located on the property for the convenience of residents with privately owned aircraft. The Airport Land Use Commission (ALUC), which provide policy guidance and planning in the vicinity of the airport, established several zones:

Within the ALUCP's planning area, there are three "safety review areas" that each reflect a particular level and type of aviation-related hazard or risk (The Planning Center, August 2013):

- **Safety Review Area 1:** those areas at either end of a runway, outside the airport boundaries, that correspond with the FAA-designated runway protection zone. This area is designed to provide protection to people and property on the ground and to provide protection to airborne aircraft. It includes a "runway object free area" and a "runway protection zone" where obstructions to aircraft operations are prohibited.
- **Safety Review Area 2:** those areas within the adopted 65 CNEL (community noise equivalency level) noise contours. This area also provides protection to both people on the ground and aircraft operations. It includes an "obstacle free zone", a three-dimensional volume of airspace centered above the runway. Objects are prohibited in this area so that aircraft can transition from ground to airborne or airborne to ground without risk of impact with other entities.
- **Safety Review Area 3:** the area within one mile of the outer boundaries of the airport ownership. This area provides protection to people, property, and aircraft. It is designed to provide aircraft with sterile maneuvering airspace within the immediate vicinity of the airport.

Only four project areas are within Safety Review Area 3: Warren Way, SR-247, Mid Town North and Old Town North.

### *Fire Hazard Zones*

A wildland fire is an uncontrolled fire in areas of little or no development, but these fires can quickly spread to the urban/wildland interface where development meets expanses of vegetative fuels. The expansive open space areas in and surrounding the Project areas are susceptible to destructive wildland fires, often exacerbated by dry weather and Santa Ana winds (The Planning Center, August 2013).

Areas of Yucca Valley designated as having the highest risk for wildland fires are the hills between SR-62 and Pioneer town to the northwest of the Town according to the Town of Yucca Valley's Fire Safety Overlay map. The California Fire Authority has designated Yucca Valley a "community at risk" given that it has and is adjacent to federally regulated lands with a high wildland fire hazard.

### **Impact Analysis**

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

**Less Than Significant Impact With Mitigation Incorporated.** Project construction would involve the use of heavy equipment, which would contain fuels, oils, lubricants, solvents, and various other possible contaminants. Temporary storage tanks necessary to store fuel and/or other flammable or combustible liquids required on the Project Site during construction would be regulated through the applicable federal, State, and local regulations as overseen by agencies such as the State Department of Health Services and San Bernardino County. Therefore, impacts related to construction hazards are considered less than significant with mitigation incorporated.

The Proposed Project would involve the removal of existing asphalt. Asphalt is not currently regulated as a hazardous material, but potential contaminants in the asphalt binder require off-site disposal restrictions imposed by the State of California Integrated Waste Management Board. The asphalt removed may be ground on-site and reused in the road base material. Or, the asphalt may be hauled for disposal. Implementation of **Mitigation Measure HAZ – 1** would ensure that all asphalt removed from the Proposed Project would be disposed of in accordance with current regulations at a permitted facility. Mitigation measures are located at the end of this section.

- 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?*

**Less Than Significant Impact With Mitigation Incorporated.** The potential exists for localized spills of petroleum-based products or other chemicals during construction. These spills could expose construction workers and the public to hazardous materials either directly, at the site of the spill, or indirectly, by introducing these substances into stormwater runoff. Construction workers are trained to handle general construction-related spills. However, implementation of **Mitigation Measure HAZ-2** will also help reduce impacts from construction spills. Therefore, the impact is less than significant.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

**Less Than Significant Impact.** There are several schools within one-quarter mile of several of the Project alignments including Mid Town North, Alta Loma and Copper Hills III. The proposed Project does not involve transporting or emitting acutely hazardous materials that could result in a danger to any schools. Therefore, there is a less than significant impact.

- 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?*

**No Impact.** None of the Project alignments are located on or near sites that are included on a list of hazardous materials sites. Database sources reported 10 Leaking Underground Storage Tank (LUST) sites within Yucca Valley, with the majority of them gas stations along SR-62, and all have been reported cleaned. A Circle K site, also closed, is identified as along SR-247 but south of the Proposed pipeline alignment. Therefore, there is no impact.

- 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 for people residing or working in the project area?*

**Less Than Significant Impact.** Several Project alignments are located within Safety Review Area 3, or the area within one mile of the outer boundaries of the airport ownership. All of the other Project alignments are not located near the Yucca Valley Airport. The Project is to place underground wastewater transmission facilities and will not impact the operations of the airport, nor would the Project result in a safety hazard for people or working in the Project areas. Therefore, there is a less than significant impact.

- f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

**Less Than Significant Impact.** The Project alignments are within existing roadways. The contractor will provide traffic control during all aspects of the project, and installation of the pipelines will not impede emergency services or emergency evacuation routes. Therefore, there is a less than significant impact.

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

**Less Than Significant Impact With Mitigation Incorporated.** The Project alignments are located throughout the less urbanized areas of Yucca Valley. Portions of the Project areas north of SR-62 are identified as within the Town's Fire Safety Overlay District for a very high fire risk. And though there is a low risk of a fire from construction of the new components, **Mitigation Measure HAZ-3** is incorporated to ensure the potential risk is less than significant. Mitigation measures are located at the end of this section.

**Mitigation Measures:**

- HAZ – 1** All asphalt requiring removal from the Project Site shall be disposed of in accordance with current regulatory standards
- HAZ – 2** A hazardous spill prevention plan shall be prepared by the Applicant and submitted to the HDWD for approval to minimize the likelihood of a spill shall be prepared prior to construction. The plan shall state the actions that would be required if a spill occurs to prevent contamination of surface waters and provide for cleanup of the spill. The plan shall follow Federal, state, and local safety guidelines and standards to avoid increased exposure to these pollutants.

**HAZ-3** During construction, all staging areas, welding areas, or areas slated for construction using spark-producing equipment will be cleared of dried vegetation or other material that could ignite. Spark arresting equipment shall be in good working order. The HDWD shall require all vehicles and crews working at the project site to have access to functional fire extinguishers at all times. In addition, construction crews are required to have a spotter during welding activities to look out for potentially dangerous situations, including accidental sparks. The contractor also shall provide a safety plan for the implementation of additional protocols when the National Weather Service issues a Red Flag Warning. Such protocols should address smoking and fire rules, storage and parking areas, use of gasoline-powered tools, use of spark arresters on construction equipment, road closures, use of a fire guard, fire suppression tools, fire suppression equipment, and training requirements.

**Impact Conclusion:**

No significant adverse effects are anticipated with the inclusion of the above mitigation measures.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>X. HYDROLOGY AND WATER QUALITY:</b> Would the project:				
a) Violate any water quality standards or waste discharge requirements?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
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:		X		
<ul style="list-style-type: none"> <li>result in substantial erosion or siltation onsite or offsite;</li> </ul>			X	
<ul style="list-style-type: none"> <li>substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on or offsite;</li> </ul>			X	
<ul style="list-style-type: none"> <li>create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or</li> </ul>			X	
<ul style="list-style-type: none"> <li>impede or redirect flood flows?</li> </ul>			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation??			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

**Environmental Setting**

The HDWD provides municipal water to a 57-square-mile area, including much of the Town of Yucca Valley and some unincorporated surrounding area. The HDWD currently has four main sources of water supply - groundwater from Warren Valley Basin, groundwater from Reche/Ames/Means Valley Groundwater Basin, septic system and irrigation return flows to groundwater, and State Water Project (SWP) imports via the Mojave Water Agency (MWA) to recharge the Warren Valley Basin. The HDWD operates within its Urban Water Management Plan (UWMP) to ensure adequate water service to its customers.

Partially treated wastewater, or septage, in septic tanks was identified as the primary source of nitrate to the groundwater system in 2003 by the US Geological Survey. The detected amount of nitrate in the District’s groundwater, 12.8 parts per million (ppm), is well within the US Environmental Protection Agency’s maximum contaminant level of 45 ppm. However, the CRBRWQCB concluded that concentrations of nitrate in the Warren

Valley Basin may be inconsistent with their water quality objectives. In 2007, the California State Water Resources Control Board (State Water Board) adopted a resolution identifying the Town of Yucca Valley as a top priority for eliminating the use of septic systems. In 2011, the CRBRWQCB amended its Basin Plan to prohibit discharge from septic systems in Yucca Valley (The Planning Center, August 2013).

In 2009, the HDWD adopted a Wastewater Master Plan (Master Plan), prepared by consultant Montgomery Watson Harza (MWH), for the Town of Yucca Valley. which identifies that the HDWD will own and operate a proposed wastewater collection and treatment system in accordance with the Master Plan. As a result, the District developed a Wastewater Reclamation Project to design, construct, and operate a wastewater collection and treatment system, and remove septic systems within its service area and connect customers to its municipal wastewater collection and treatment system

Phase 1 of the plan consisted of several wastewater treatment systems and pipelines in primarily the core or mostly developed, contiguous areas of Yucca Valley. Construction began in 2017 and is anticipated to be completed in December 2019.

The HDWD is currently planning for the construction of Phases II and III which is primarily the only sewer pipelines for the residential areas that are outside of the core, contiguous area of Yucca Valley. Phases II and III are identified in the Sewer Master Plan (Figure 2 - Sewer Master Plan Alignments vs Phase II & III Proposed/Deferred Alignments) as *Proposed Alignments Included in Master Plan*, *Proposed Alignments Not Included in Master Plan*, and *Preferred Alignments Included in Master Plan*. HDWD's current plans do not include the Phase II and III alignments identified on Figure 2 as the *Deferred Alignments Not Included in Master Plan*.

### **Impact Analysis**

a) *Violate any water quality standards or waste discharge requirements?*

**Less Than Significant Impact With Mitigation Incorporated.** The project impacts are anticipated to include:

#### **Construction**

Potential short-term surface water quality impacts related to Project construction activities include runoff of loose soils and/or construction wastes and fuels that could potentially percolate into the ground. Because the construction disturbance for the pipelines are anticipated to be less than 1 acre for each segment, the contractor will not need to comply with Construction General Permit Order 2009-0009-DWQ by preparing a SWPPP. Therefore, to ensure that the construction related impacts remain at a level of less than significant, **Mitigation Measure GEO-2**, previously required, will also reduce potential impacts to this criterion.

Because the Project will include the removal of pavement, **Mitigation Measure HAZ-1**, previously required, will also reduce impacts to less than significant.

#### **Operations**

The Project proposes to construct wastewater pipelines in existing streets and easements for the purpose of reducing the area's reliance on septic systems, in compliance with the CRBRWQCB amended Basin Plan to prohibit discharge from septic systems in Yucca Valley. Therefore, there is a less than significant impact.

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

**Less Than Significant Impact.** The Project would not result in an increased demand for or use of groundwater. The Project will utilize a small amount of water for dust control during construction. The HDWD has capacity and the rights to supply this small amount.

- 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:*
- *result in substantial erosion or siltation onsite or offsite;*
  - *substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on or offsite;*
  - *create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
  - *impede or redirect flood flows?*

**Less Than Significant Impact With Mitigation Incorporated.** The Project will install pipelines in existing roadways and easements. Some of these roadways cross ephemeral drainages. However, the pipelines are anticipated to be within the existing roadbed and is not anticipated to alter these drainages. Any alteration to these drainages would require compliance with the California Streambed Alteration Agreement program and the Clean Water Act. Compliance would require obtaining permits from the applicable agencies. Therefore, while there is a less than significant impact, **Mitigation Measure BIO-5**, previously incorporated, will also ensure there is less than significant impact to this criterion.

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

**Less Than Significant Impact.** The Project will install pipelines in existing roadways and easements. Some of these roadways cross ephemeral drainages that have been identified by FEMA as potential flood hazards. However, the pipelines are anticipated to be within the existing roadbed and is not anticipated to alter these drainages. The infrastructure will be installed underground, and not anticipated to be impacted by potential flooding. Therefore, the impact is less than significant.

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

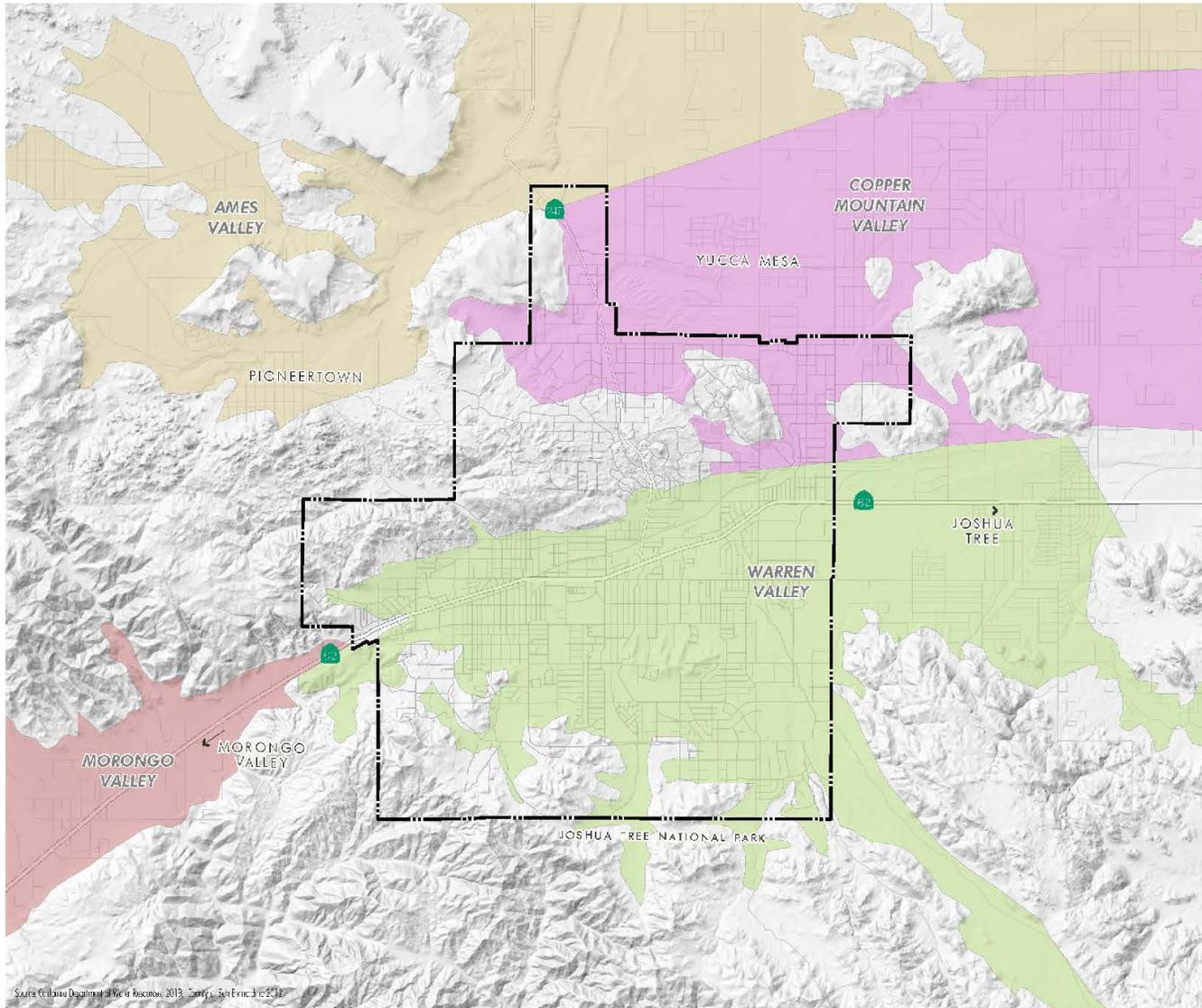
**Less Than Significant Impact.** The HDWD proposes to install wastewater pipelines to reduce the area's reliance on septic systems which have been determined to be impacting the groundwater. The project is in compliance with the CRBRWQCB Basin Plan. Therefore, the Project will not conflict or obstruct implementation of any water quality control plan or sustainable groundwater management plan. The impact is less than significant.

**Mitigation Measures:**

Mitigation measures previously incorporated will also reduce impacts to hydrological resources. These measures include: **GEO-2, HAZ-1, and BIO-5.**

**Impact Conclusions:**

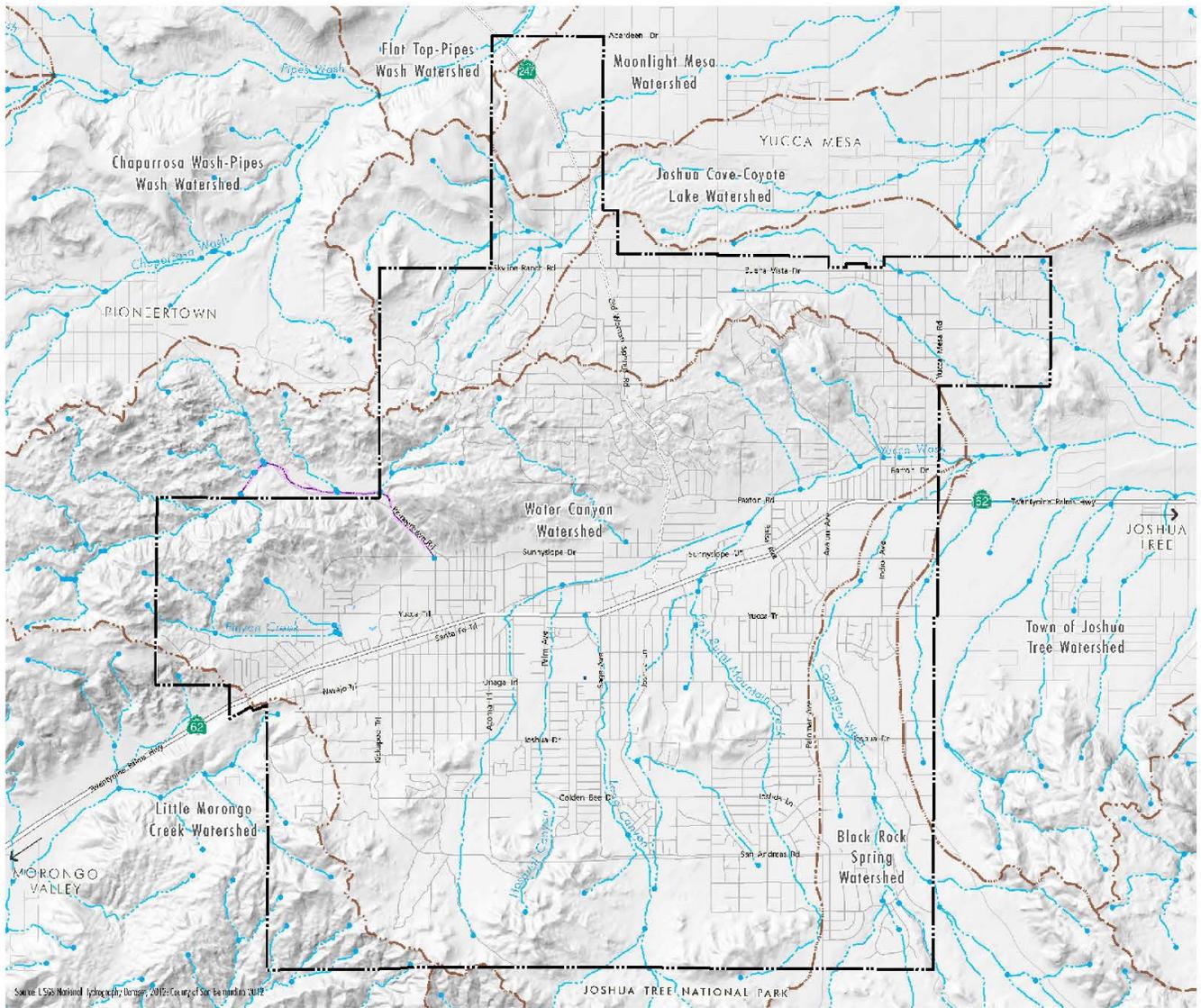
No significant adverse impacts are identified or anticipated with the incorporation of mitigation measures.



**GROUNDWATER BASINS**

- AMES VALLEY
- COPPER MOUNTAIN VALLEY
- MORONGO VALLEY
- WARREN VALLEY
- Town Limits

<p>0 1.25 2.5 5 7.5 10 Miles</p>	<p>Service Layer Credits:</p>		
		<p><b>Figure X-1 Groundwater Basins</b></p>	<p>Phase II and Phase III Sewer Collection System Project</p>



**WATERSHEDS AND STREAMS**

- Hydrologic Junction
- Stream / Gully
- Artificial Path
- Wash
- Lake / Pond
- Reservoir
- USGS 811 Watershed Boundaries
- ▭ Town Limits

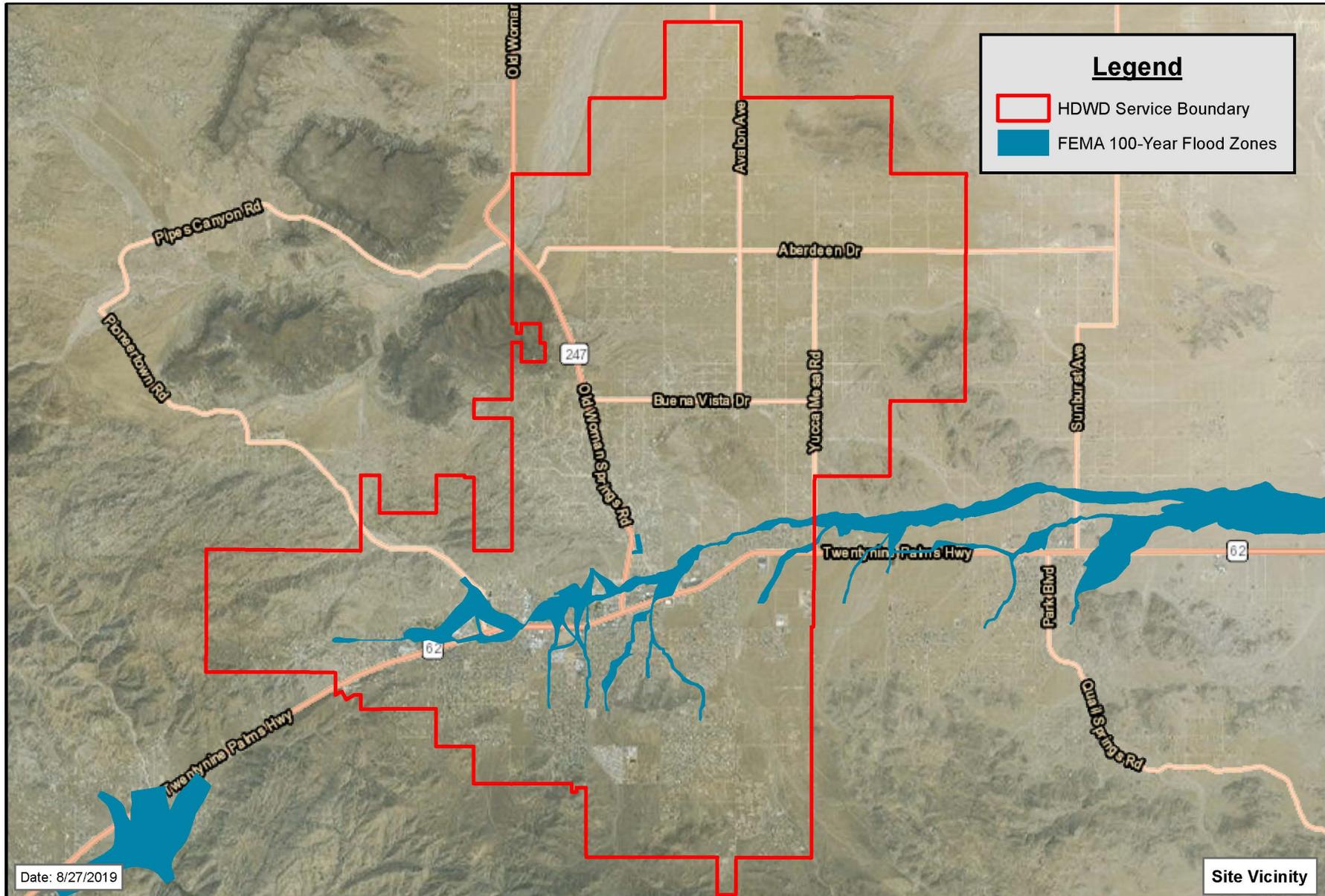


Service Layer Credits:



**Figure X-2  
Watershed Overlay**

Phase II and Phase III  
Sewer Collection System Project



### FEMA 100 Year Flood Zones

Phase II and Phase III  
Sewer Collection System Project

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>XI. LAND USE AND PLANNING:</b> Would the project:				
a) Physically divide an established community?				X
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?				X

**Environmental Setting**

The proposed Project lies within various areas of the Town of Yucca Valley in San Bernardino County. The Project is designed to install municipal wastewater transmission to the communities so residences and businesses can remove septic tanks to improve groundwater conditions.

The wastewater pipelines will be installed underground, following the road alignments and/or within easements through private property. The planned alignments occur in areas zoned for residential, varying from 1 dwelling unit per acre up to 5 dwelling units per acre. All construction will follow the Town of Yucca Valley General Plan and Development Code, and there will be no changes to Land Use as a result of the Project. Some roads are paved and others are not paved.

**Impact Analysis**

a) *Physically divide an established community?*

**No Impact.** The installation of the sewer collection system involves placing sewer pipelines below the ground surface, and no change in the above-ground use will occur. Therefore, the Project will not divide the community, and there will be no impact.

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?*

**No Impact.** The proposed Project will follow all Development Code Ordinances in the Town of Yucca Valley

**Mitigation Measures:**

No mitigation measures are required.

**Impact Conclusions:**

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>XII. MINERAL RESOURCES:</b> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
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?				X

**Environmental Setting**

Mineral extraction is an important component of San Bernardino County’s economy.

The State of California Department of Conservation classifies areas of important minerals:

MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists.

MRZ-3: Areas containing mineral deposits, the significance of which cannot be evaluated from available data.

MRZ-4: Areas of no known mineral occurrences where geologic information does not rule out the presence or absence of significant mineral resources.

Neither the Department of Conservation or the Town General Plan has identified any important mineral resources in the Yucca Valley area, and no assignment of MRZ-1 or MRZ-4 has been made in any of the Yucca Valley area or the Project areas.

**Impact Analysis**

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?*

**No Impact.** The Project occurs within the Yucca Valley region, which has not been identified as having important mineral resources of value to the region or state. Therefore, there is no impact.

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?*

**No Impact.** The Project occurs within the Yucca Valley region, which has not been identified by the State or Town General Plan as having important mineral resources of value to the region or state. Therefore, there is no impact.

**Mitigation Measures:**

No mitigation measures are required.

**Impact Conclusion:**

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>XIII. NOISE:</b> Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
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?			X	

**Environmental Setting**

***Noise Fundamentals***

Noise is generally described as unwanted sound. Sound is a physical disturbance in a medium, such as air, that is capable of being detected by the human ear. Sound waves in air are caused by variations in pressure above and below the static value of atmospheric pressure. The unit of sound pressure ratio to the faintest sound detectable to a person with normal hearing is called a decibel (dB) on a logarithmic scale. The “pitch” (high or low) of the sound is a description of the frequency, which is measured in Hertz (Hz). Most common environmental sounds are a composite of frequencies. A normal human ear can usually detect sounds within frequencies from 20 to 20,000 Hz. However, humans are most sensitive to frequencies in the range of 500 to 4,000 Hz.

Certain frequencies are given more “weight” during assessment because human hearing is not equally sensitive to all frequencies of sound. The A-weighted decibel (dBA) scale corresponds to the sensitivity range for human hearing. Noise levels capable of being heard by humans are measured in dBA. A noise level change of 3 dBA or less is barely perceptible to average human hearing. However, a 5 dBA change in noise level is clearly noticeable. A 10 dBA change is perceived as a doubling or halving of noise loudness, while a 20 dBA change is considered a “dramatic change” in loudness.

Sound from a source spreads out as it travels away from the source, and the sound pressure level diminishes with distance. Individual sound sources are considered “point sources” when the distance from the source is large compared to the size of the source (e.g., construction equipment, and turbines). Sound from a point source radiates hemispherically, which yields a 6 dB sound level reduction for each doubling of the distance from the source. If the sound source is long in one dimension, the source is considered a “line source,” (i.e., roadways and railroads). Sound from a line source radiates cylindrically, which typically yields a 3 dB sound level reduction for each doubling of the distance from the source.

**Table 14**  
**Land Use Compatibility for Community Noise Environments**  
**Town of Yucca Valley**

**Table N-1**  
**Land Use Compatibility for Community Noise Environments**

Land Uses	CNEL (dba)						
	55	60	65	70	75	80	85
Residential—low density single-family, duplexes, mobile homes	Normally acceptable	Normally acceptable	Normally acceptable	Normally acceptable	Conditionally acceptable	Normally unacceptable	Clearly unacceptable
Residential—multifamily	Conditionally acceptable	Normally unacceptable	Clearly unacceptable				
Transient lodging, motels, hotels	Normally acceptable	Normally acceptable	Normally acceptable	Normally acceptable	Conditionally acceptable	Normally unacceptable	Clearly unacceptable
Schools, libraries, churches, hospitals, nursing homes	Conditionally acceptable	Normally unacceptable	Clearly unacceptable				
Auditoriums, concert halls, amphitheaters	Normally unacceptable	Clearly unacceptable	Clearly unacceptable				
Sports arena, outdoor spectator sports	Normally unacceptable	Normally unacceptable	Normally unacceptable	Normally unacceptable	Clearly unacceptable	Clearly unacceptable	Clearly unacceptable
Playgrounds, neighborhood parks	Normally acceptable	Normally acceptable	Normally acceptable	Normally acceptable	Conditionally acceptable	Normally unacceptable	Clearly unacceptable
Golf courses, riding stables, water recreation, cemeteries	Conditionally acceptable	Normally unacceptable	Clearly unacceptable				
Office buildings, businesses, commercial and professional	Normally acceptable	Normally acceptable	Normally acceptable	Normally acceptable	Conditionally acceptable	Normally unacceptable	Clearly unacceptable
Industrial, manufacturing, utilities, agricultural	Conditionally acceptable	Normally unacceptable	Clearly unacceptable				

	Normally acceptable. Specified land use is satisfactory based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
	Conditionally acceptable. New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
	Normally unacceptable. New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise reduction features included in the design.
	Clearly unacceptable. New construction or development should generally not be undertaken.

The metrics for evaluating the community noise environment are based on measurements of the noise levels over a period of time. These metrics are used in order to characterize and evaluate the cumulative noise impacts. The Community Noise Equivalent Level (CNEL) represents a 24-hour A-weighted sound level average from midnight to midnight, where sound levels during the evening hours of 7:00 p.m. to 10:00 p.m. have an added 5 dB weighting, and nighttime hours of 10:00 p.m. to 7:00 a.m. have an added 10 dB weighting. Table 14 identifies typical acceptable and unacceptable noise levels.

The Town of Yucca Valley for the most part enjoys levels below 60 CNEL, with major roadways such as SR-247 and SR-62, as well as several other major roadways that exceed the 60 CNEL.

Noise standards typically apply to permanent activities. The recommended noise exposure levels are established for permanent noise sources and receptors where noise can be generated over a 24-hour period with penalties applied for permanent noise generated during the night time hours. Construction related noise is short-term and generally considered a nuisance. Construction noise is temporary and generally not of sufficient magnitude that is considered health threatening. Table 15 identifies typical construction noise levels.

**Table 15**  
**Typical Construction Equipment Noise Levels**

<b>Equipment</b>	<b>Noise Level (dBA) at 50 feet</b>
Backhoe	80
Concrete mixer	85
Pump truck	82
Crane, Mobile	85
Dozer	85
Excavator	85
Generator	82
Grader	85
Main lift	85
Loader	80
Paver	85
Roller	85
Scraper	85
Trucks	80-84

Source: FHWA 2009

***Ground Borne Vibration Fundamentals***

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable.

Sources of vibration the Project may generate would typically include geotech drill rigs, excavators, dump trucks, backhoes, and other general construction equipment. According to the FTA guidelines, a vibration level (VdB) of 65 VdB is the threshold of perceptibility for humans. The FTA guidelines also state that, for a significant impact to occur, vibration levels must exceed 80 VdB during infrequent events (FTA 2006). Based on the approach set forth in the FTA guidelines, (Table 15) this analysis adopts a threshold of significance of 80 VdB for groundborne vibration impacts.

**Table 16**  
**Vibration Sources for Typical Construction Equipment**

<b>Equipment</b>	<b>Vibration Level at 25 feet (VdB)</b>
Large bulldozer	87
Caisson drilling	87
Loaded Trucks	86
Jackhammer	79
Small bulldozer	58

Source: FTA, 2011

**Impact Analysis**

a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

**Less Than Significant Impact.** The Project alignments will be installed in roadways, mainly in the residential areas. .

b) *Generation of excessive groundborne vibration or groundborne noise levels?*

**Less Than Significant Impact.** Sources of vibration can include geotechnical drill rigs, excavators, dump trucks, backhoes, and other general construction equipment. According to the Federal Transportation Administration (FTA) guidelines, a vibration level of 65 decibel notation (VdB) is the threshold of perceptibility for humans. The FTA guidelines also state that, for a significant impact to occur, vibration levels must exceed 80 VdB during infrequent events (FTA 2006). Based on the approach set forth in the FTA guidelines, this analysis adopts a threshold of significance of 80 VdB for groundborne vibration impacts.

Is anticipated that the proposed Project would not involve pile-driving activities typically associated with ground-borne vibration. The nearest sensitive receptors include residences that would be located between 25 and 50 feet from the roadways. Some noise or vibration may occur during excavation for the pipelines and lift stations. However, given the rural nature and low density of the residential areas where the pipeline and lift stations will be installed, as well as the temporary nature of the vibration, a less than significant impact is anticipated.

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?*

**Less Than Significant Impact.** The Yucca Valley Airport, located approximately 0.25 mile north of SR-65, just east of SR-247 is a public use general aviation facility leased and operated by the Yucca Valley Airport District for aircraft storage, maintenance, use, and training. Only four Project areas are located within 1 mile of the airport’s outer boundary ownership: Warren Way, SR-247, Mid Town North and Old Town North. While these areas experience routine noise from the airport, Project activities to install the pipelines and lift stations will be temporary routine construction noise, and therefore, will be less than significant.

**Mitigation Measures:**

No mitigation measures are required.

**Impact Conclusion:**

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>XIV. POPULATION AND HOUSING:</b> Would the project:				
a) Induce substantial 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)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X

**Environmental Setting**

The Town’s population was 16,403 in 1990 and increased to 16,865 persons in 2000. The 2010 Census reported the population of the Town as 20,700, an increase of 22.7 percent over 10 years. The California Department of Finance further estimates Yucca Valley’s population at 20,916 in 2012, an increase of 1 percent since 2010. The Census estimated that there were 6,949 households in 2000, with a 16 percent increase to 8,274 households in 2010. The Project will install wastewater transmission lines to phase out the use of septic systems by residential and commercial sectors in an effort to improve groundwater quality as the area continues to grow.

**Impact Analysis**

a) *Induce substantial 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)?*

**Less Than Significant Impact.** The Project involves construction and installation of wastewater treatment facilities, which are intended to improve the quality of regional groundwater supplies through the removal of septic tanks. It is intended only to provide services for existing and planned development. The type and density of development in the District’s service area is controlled by land use designations established by the Town of Yucca Valley. As such, this project is considered growth-accommodating, not growth-inducing, in that it will help provide sewer service to development that is approved or allowed by the Town of Yucca Valley.

b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

**No Impact.** The Project involves wastewater transmission pipelines and infrastructure in existing roadways. The Project would not result in displacement of residential land uses; therefore, no impact would occur.

**Mitigation Measures:**

No mitigation measures are required.

**Impact Conclusions:**

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>XV. PUBLIC SERVICES:</b>				
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?			X	
Police protection?			X	
Schools?				X
Recreation/Parks?				X
Other public facilities?				X

**Environmental Setting**

The 2010 Census reported the population of the Town as 20,700, an increase of 22.7 percent over 10 years. The California Department of Finance further estimates Yucca Valley’s population at 20,916 in 2012, an increase of 1 percent since 2010.

Currently, the HDWD has more than 10,000 active service connections. With a total service area of 57-square miles, the District operates 16 storage tanks, 13 wells, and maintains over 297 miles of pipeline. It provides potable water services to the Town of Yucca Valley and a portion of the unincorporated area of San Bernardino County.

Fire and Police Services are provided for the entire area by the County of San Bernardino.

**Impact Analysis**

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, Recreation/Parks, or Other Public Facilities.*

**Less Than Significant Impact.** The Proposed project may utilize public services of Fire and Police in the event of an emergency such as a worker injury or theft. However, the needs of the proposed Project can be handled with the existing public services and not result in the need for any of the public service facilities to expand facilities. The proposed Project will not utilize schools or public parks, nor will the proposed Project increase the need for these facilities in a manner that would exceed existing capacity.

Additionally, existing traffic within construction areas accommodated during project construction pursuant to a Traffic Control Plan to be prepared by the contractor. The Project is not expected to require a complete closure of any roadway. The proposed Traffic Control Plan may have potential to temporarily impact fire and/or police protection emergency service response times during construction. However, the Project would not result in

significant threats of deterioration to the existing levels of service at public service facilities nor the need to build additional public service facilities. A less than significant impact to public services would occur as a result of the Project.

**Mitigation Measures:**

No mitigation measures are required.

**Impact Conclusion:**

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>XVI. RECREATION:</b>				
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?				X
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?				X

**Environmental Setting**

The Town of Yucca Valley manages a combination of Town-owned parkland, leased parkland, and land on patent from the U.S. Bureau of Land Management (BLM). Cumulatively, Yucca Valley’s neighborhood parks, managed open space, and undeveloped parkland total 262 acres. Approximately 180 of these acres are designated public parks and open space (The Planning Center, August 2013). The Project will install wastewater transmission lines to phase out the use of septic systems by residential and commercial sectors of the portions of Yucca Valley that lie beyond the core, populated area along SR-62 in an effort to improve groundwater quality as the area continues to grow away from the core area.

**Impact Analysis**

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?*

**No Impact.** The proposed Project is to install public wastewater transmission facilities. The proposed Project does not include the construction of recreational facilities and does not include a housing component that would result in population growth. There are no components of the project that would require the construction or expansion of new parks or recreational facilities, nor would development of the Proposed Project result in residential or commercial land uses generating population growth, facilitating increased use of existing facilities which would cause or accelerate substantial physical deterioration of existing facilities. Therefore, there is no impact.

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?*

**No Impact.** See answer to subsection a), above

**Mitigation Measures:**

No mitigation measures are required.

**Impact Conclusion:**

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>XVII. TRANSPORTATION / TRAFFIC:</b> Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?		X		
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		X		
d) Result in inadequate emergency access?		X		

**Environmental Setting**

The HDWD is proposing to construct approximately 64 miles of PVC sewer pipeline, 1,300 manholes and three lift stations facilities in various areas of its service territory. Pipelines are planned to be between 8 inch and 12 inch in diameter and will connect to its existing system.

With the exception of SR-62, roadways within the Yucca Valley area are two lanes. Some are paved and others are graded all-weather roads.

The efficiency of a roadway is generally determined by assessing the roadway’s capacity, level-of service, and average daily traffic volume. Public agencies typically assign Levels of Service (LOS) of roadways as between “A” and “F” with LOS A representing the best, free flow conditions, and LOS F indicates the worst conditions, and system failure. In general, the following descriptions apply to the qualitative levels described above: “A” – free flow; “B” – reasonably free flow; “C” – stable flow; “D” – approaching unstable flow; “E” – unstable flow; and “F” – forced or breakdown flow (“gridlock”).

The Town of Yucca Valley General Plan policies seek to maintain LOS C or better on all roadways. As part of its General Plan, the Town of Yucca Valley studied various roadways. In general, the roadways throughout the HDWD service territory operate at LOS C or better (The Planning Center, August 2013).

*Public Transit*

Public transportation is provided by Morongo Basin Transit Authority, the regional Public Transit operator between Yucca Valley, 29 Palms Marine Base, with stops at Joshua Tree and Copper Mountain College. The route mainly follows SR-62 and other main streets adjacent to SR-62.

*Bike and Pedestrian Trails*

The Town of Yucca Valley has adopted a Trails Master Plan (adopted March 20, 2005). The trails include riding, pedestrian and bike, multi-use, Class III bike routes and bike lanes.

*Aviation*

Yucca Valley is home to Yucca Valley Airport, a privately-owned public use airport for private aircraft and aircraft maintenance and flight training. The closest airport offering commercial flights is the Palm Springs International Airport, approximately 30 miles south of Yucca Valley. MBTA routes 12 and 15 have a stop at the Palm Springs International Airport (The Planning Center, August 2013).

**Impact Analysis**

- a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

**Less Than Significant Impact With Mitigation Incorporated.** The Project alignments are located on two-lane roadways that have good traffic flow, LOS-C or better. The proposed Project will have the greatest impact during construction where portions of the roadways will be closed for construction of the underground pipelines. Overall, circulation impacts should be minimal. It is anticipated that the Project will not require more than 20 or 30 trips per day by construction personnel.

**Mitigation Measures TRA-1** is recommended to address to reduce potential impacts to traffic flow during construction. Mitigation measures are located at the end of this section.

- b) *Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?*

**Less Than Significant Impact.** Prior to January 2019, traffic impacts were assessed using the LOS methodology. Senate Bill 743 (SB 743, 2013) required that the analysis be examined, and an alternative method adopted. In December 2018, the California Governor's Office of Planning and Research issued revised CEQA Guidelines Section 15064.3(b) which sets forth the criteria for analyzing transportation impacts. Specifically, this section of the Guidelines focuses on assessing land use projects and transportation projects through associated vehicle miles traveled (VMT), and not LOS. Subsection (b)(4) and subsection (c) allows a lead agency to choose the most appropriate method to evaluate VMT, but all agencies must have their methodology adopted by July 1, 2020, in accordance with SB 743.

Subsection (b)(2) states that transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. It further states that to the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.

The Project alignments are not proposed to be constructed within major arterials as identified by the Town's General Plan.

The Project is not considered a transportation project under CEQA Guidelines 15064.3(b)(2) and has no impact on VMT, except for the short-term construction trips by construction workers. Therefore, the Project is consistent with CEQA Guidelines § 15064.3, subdivision (b) and there is a less than significant impact.

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

**Less Than Significant Impact With Mitigation Incorporated.** The Project will place pipelines in roadways and along roadways within private property easements. The pipelines will be trenched, backfilled and restored to their pre-altered condition. There are no design features that would increase hazards.

However, many of the roadways throughout the Project areas are generally two-lanes. Some of the roadways are paved, and others are not. **Mitigation Measures TRA-2** through **Mitigation Measure TRA-4** are recommended to address to reduce potential temporary impacts to road conditions during construction. Mitigation measures are located at the end of this section.

*d) Result in inadequate emergency access?*

**Less Than Significant With Mitigation Incorporated.** The Project will place pipelines in roadways and along roadways within private property easements. Roadways throughout the Project areas are generally two-lanes. **Mitigation Measure TRA-5** is recommended to address to reduce potential impacts to road conditions during construction. Mitigation measures are located at the end of this section.

**Mitigation Measures:**

- TRA-1** The HDWD or its construction contractor will provide adequate traffic management resources, such as protective devices, flag persons, and police assistance for traffic control, to maintain safe traffic flow on local streets affected by pipeline construction at all times.
- TRA-2** The construction contractor will identify traffic hazards created by construction, such as rough road or potholes, freshly paved locations, and minimize total traffic and vehicle speed through such hazards.
- TRA-3** The construction contractor will ensure that traffic safety hazards, such as uncovered or unfilled open trenches, will not be left in roadways during period of time when construction personnel are not present, such as nighttime and weekends.
- TRA-4** The construction contractor will repair all roads adequately after construction to ensure that traffic can move in the same manner as before construction.
- TRA-5** At all times during construction, the contractor will ensure that emergency fire, police or medical vehicles are able to access all adjacent areas. Additionally, construction equipment or activities must not obstruct or hinder traffic that might be generated during an evacuation.

**Impact Conclusion:**

No significant adverse effects are anticipated with the inclusion of the above mitigation measures.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>XVIII. TRIBAL CULTURAL RESOURCES:</b>  Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) 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				X
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				X

**Environmental Setting**

On February 25, 2019, CRM TECH (CRM) submitted a written request to the State of California Native American Heritage Commission (NAHC) for a records search in the commission’s Sacred Lands File. In the meantime, CRM TECH notified the nearby Morongo Band of Mission Indians and Twenty-Nine Palms Band of Mission Indians of the upcoming archaeological fieldwork and invited tribal participation. Following the NAHC’s recommendations and previously established consultation protocol, CRM TECH further contacted a total of five Native American representatives in the region in writing and by telephone between March 6 and 28 for additional information on potential Native American cultural resources in the vicinity. Correspondence between CRM TECH and the Native American representatives is attached to the CRM Tech report (Appendix C).

On March 6, 2019, CRM TECH archaeologist Daniel Ballester carried out the field survey of the APE with the assistance of Sara Bliss, Cultural Resources Manager for the Twenty-Nine Palms Band of Mission Indians. The portions of the APE lying within the rights-of-way of paved roads were surveyed at a reconnaissance level by driving along the project route and visually inspecting the surrounding ground surface for any indication of historical/archaeological remains. The portions in unpaved roads were surveyed at an intensive level by walking two parallel transects spaced five meters (approximately 15 feet) apart along each side of the project centerline. Using these methods, the ground surface in the entire APE was systematically inspected for any evidence of human activities dating to the prehistoric or historic period (i.e., 50 years or older). Other than presence of road pavement, visibility of the native ground surface was generally good to excellent (85-100%).

The result of the field survey was that Yucca Valley has no naturally occurring year-round waterway or any other reliable water source, and seasonal rainfall and flooding would have been the only water sources prehistorically. Although the area could have been utilized for gathering Joshua tree blossoms and leaves, creosote for medicine,

and grasses for food and basketry materials, the lack of water would have limited the amount of mesquite available, the primary source of food in the desert surroundings.

In light of its lack of a reliable water source, the APE would not have been considered a favorable setting for long-term settlement in prehistoric times. Furthermore, the ground surface in the APE has been greatly disturbed by the construction and maintenance of roads and the associated underground utility lines. Consequently, the subsurface sediments within the vertical extent of the APE are considered to be relatively low in sensitivity for potentially significant archaeological deposits of prehistoric or early historic origin.

CRM Tech (CRM) completed a cultural resources records search to identify prehistoric or historic-period resources within one mile of the Project site (CRM, July 2019). Native American input during the study did not identify any sites of traditional cultural value in the vicinity, and no notable cultural features were known to exist in the Project area throughout the historic period. Based on these considerations, the CRM research concluded that no “historic properties,” “historical resources,” or “tribal cultural resources” are present within or adjacent to the Project area.

In compliance with AB 52 regarding consultation with Native American Tribes, the District sent letters to potentially affected tribes describing the proposed Project and its location, and requested a response regarding the potential for impacts to Tribal Cultural Resources to occur. **The District obtained responses from..(HDWD TO ASSIST FINISHING THIS PARAGRAPH)**

### **Impact Analysis**

*a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k),*

**Less Than Significant Impact With Mitigation Incorporated.** There are no resources that have been identified as eligible for listing to the California Register of Historic Places within or near the Project alignment. However, based on tribal consultation and information, **Mitigation Measure TCR-1** and **TCR-2** are included to reduce potential impacts to potential yet unidentified Native American resources.

*b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

**Less Than Significant Impact With Mitigation Incorporated.** There are no resources supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. However, based on tribal consultation and information, **Mitigation Measure TCR-1** and **TCR-2** are included to reduce potential impacts to potential yet unidentified Native American resources.

### **Mitigation Measures:**

**TCR-1** The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in CR-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site. This mitigation

measure does not preclude notification to other tribes or treatment plans in accordance with other tribal entities.

**TCR-2** Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI, and other tribes as applicable, throughout the life of the project.

**Impact Conclusions:**

No significant adverse effects are anticipated with the inclusion of the above mitigation measures.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>XIX. UTILITIES AND SERVICE SYSTEMS:</b> 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?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
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?			X	
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?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

**Environmental Setting**

The HDWD is proposing to construct approximately 64 miles of PVC sewer pipeline, 1,300 manholes and three lift stations facilities in various areas of its service territory. Pipelines are planned to be between 8 inch and 12 inch in diameter and will connect to the HDWD’s existing wastewater system.

*Wastewater Services*

In 2009, the HDWD adopted a Wastewater Master Plan (Master Plan), prepared by consultant Montgomery Watson Harza (MWH), for the Town of Yucca Valley. which identifies that the District will own and operate a proposed wastewater collection and treatment system in accordance with the Master Plan. As a result, the District developed a Wastewater Reclamation Project to design, construct, and operate a wastewater collection and treatment system, and remove septic systems within its service area and connect customers to its municipal wastewater collection and treatment system

Phase 1 of the plan consisted of several wastewater treatment systems and pipelines in primarily the core or mostly developed, contiguous areas of Yucca Valley. Construction began in 2017 and is anticipated to be completed in December 2019.

The HDWD is currently planning for the construction of Phases II and III which is primarily the only sewer pipelines for the residential areas that are outside of the core, contiguous area of Yucca Valley. Phases II and III are identified in the Sewer Master Plan (Figure 2 - Sewer Master Plan Alignments vs Phase II & III Proposed/Deferred Alignments) as *Proposed Alignments Included in Master Plan, Proposed Alignments Not Included in Master Plan,*

and *Preferred Alignments Included in Master Plan*. HDWD's current plans do not include the Phase II and III alignments identified on Figure 2 as the *Deferred Alignments Not Included in Master Plan*.

### *Water Services and Water Quality*

The HDWD provides municipal water to a 57-square-mile area, including much of the Town of Yucca Valley and some unincorporated surrounding area. The HDWD currently has four main sources of water supply - groundwater from Warren Valley Basin, groundwater from Reche/Ames/Means Valley Groundwater Basin, septic system and irrigation return flows to groundwater, and State Water Project (SWP) imports via the Mojave Water Agency (MWA) to recharge the Warren Valley Basin. The HDWD operates within its Urban Water Management Plan (UWMP) to ensure adequate water service to its customers.

Partially treated wastewater, or septage, in septic tanks was identified as the primary source of nitrate to the groundwater system in 2003 by the US Geological Survey. The detected amount of nitrate in the District's groundwater, 12.8 parts per million (ppm), is well within the US Environmental Protection Agency's maximum contaminant level of 45 ppm. However, the CRBRWQCB concluded that concentrations of nitrate in the Warren Valley Basin may be inconsistent with their water quality objectives. In 2007, the California State Water Resources Control Board (State Water Board) adopted a resolution identifying the Town of Yucca Valley as a top priority for eliminating the use of septic systems. In 2011, the CRBRWQCB amended its Basin Plan to prohibit discharge from septic systems in Yucca Valley (The Planning Center, August 2013).

The Town of Yucca Valley maintains the areas network of storm drains.

Southern California Edison (SCE) provides electrical utility service, and the Southern California Gas Company (SCG) provides natural gas.

Solid waste collection within much of the Town is provided by Burrtec Mountain Disposal, a contractor to the County of San Bernardino Solid Waste Management Division of the Department of Public Works. The County of San Bernardino Solid Waste Management Division (SWMD) is responsible for the operation and management of the solid waste disposal system which consists of six regional landfills, eight transfer stations and five community collection centers throughout the County. The closest landfills to the Project site include the Landers Sanitary Landfill.

### **Impact Analysis**

- 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?*

**Less Than Significant Impact.** The HDWD is proposing to construct sewer pipelines throughout its service territory to replace the use of septic systems, consistent with the CRBRWQCB directive. Wastewater services for construction workers will either be serviced by the restrooms that exist at the site, or "porta potties" that will be brought in by contractors. Therefore, there is a less than significant impact.

Stormwater runoff from the pipeline construction during construction will be controlled during construction by use of standard best management practices. Once pipelines are installed below the roadways, no change in stormwater flow is forecast to occur.

The electrical utility needs for the Project will be served by the existing utility grid infrastructure, and there will be no need to add electrical lines. The Project does include additional electrical switches and other mechanical devices on site to control the new equipment. The impact is not significant.

Water will be used for construction, primarily for dust control, and the HDWD has ample rights and supplies to service the Project needs. These impacts are less than significant.

Therefore, the overall impact to this criterion is less than significant.

*b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

**Less Than Significant Impact.** The Project will only require water during construction. No additional water beyond what is currently used for operations is anticipated to be needed once the Project is operational. The HDWD has ample water rights and supplies to support the water needs in the reasonably foreseeable future, during normal dry and multiple dry years. Therefore, the impact is less than significant.

*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?*

**Less Than Significant Impact.** The Project will not require the use of wastewater treatment services beyond providing wastewater for construction workers during construction. Therefore, the impact is less than significant.

*d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

**Less Than Significant Impact.** Construction activities may generate small quantities of solid waste, inert materials, and green waste. All waste would be properly disposed of in accordance with all local statutes and regulations. Therefore, the impact is less than significant.

*e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

**No Impact.** The small quantities of solid waste generated by the Project during construction activities would be handled in accordance with all applicable Federal, State, and local statutes and regulations. No impacts would occur under this criterion.

**Mitigation Measures:**

No mitigation measures are required.

**Impact Conclusion:**

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>XX. WILDFIRE:</b> 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?		X		
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?		X		
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?			X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

**Environmental Setting**

Yucca Valley is in the lower Mojave section of the Southeastern Deserts Bioregion, an area characterized by isolated, steep-sided mountain ranges separated by broad alluvial basins. Lower elevation areas of the region feature desert scrub or are barren of vegetation. The limited amount of vegetation and low surface fuel loads typically hinder the spread of fire. Higher elevations both inside and outside the Town, including areas such as Joshua Tree National Park, feature a variety of vegetation types. Because of the increased diversity of surface fuel and relatively higher loads and continuity of vegetation, the spread of fire in these regions is higher than on the desert floor. This is reflected in the higher number of fires reported historically in Joshua Tree National Park and in the mountains to the northwest, compared with the Yucca Valley area proper. In addition to vegetation, weather also impacts the risk of wildfires in Yucca Valley. Drought conditions that further reduce the low level of precipitation and summer thunderstorms that produce lightning are both factors that increase the likelihood of wildland fires in the community (The Planning Center, August 2013).

According to CAL FIRE data, there have been a few but significant large fires (defined as 300 acres or greater by CAL FIRE and ten acres or greater by the U.S. Forest Service) in the Yucca Valley area between 1910 and 2008 (The Planning Center, August 2013). Most of the fires have occurred outside of the HDWD service area, closest to Upper Sky Harbor in the southeastern area of the HDWD service territory and in the far northwestern portion of the service area, in the community northwest of the Blue Skies Country Club, north of SR-62.

**Impact Analysis**

a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

**Less Than Significant Impact With Mitigation Incorporated.** All construction will occur within existing roadways throughout the Town of Yucca Valley. Most roadways are two lanes; some road are paved and others

are not. **Mitigation Measure TRA-5** will ensure that all construction activities will not impact any emergency response plan or evacuation plan during construction.

b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?*

**Less Than Significant Impact With Mitigation Incorporated.** The Project area is not identified as being within a high fire area as designated by the CalFire. However, some segments of the Project are located in areas where low-lying scrub and ruderal vegetation exists near homes. And though there is a low risk of a fire, sparks from equipment during construction may ignite vegetation in the area of construction during extremely high winds. Therefore, **Mitigation Measure FIRE-1** is incorporated to ensure the potential risk is less than significant. The mitigation measure is located at the end of this section.

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?*

**Less Than Significant Impact.** The pipeline infrastructure will be located in roadways and not require installation or maintenance of fuel breaks, power lines, or other utilities that may exacerbate fire risks. Therefore, there is a less than significant impact to fire risk.

d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

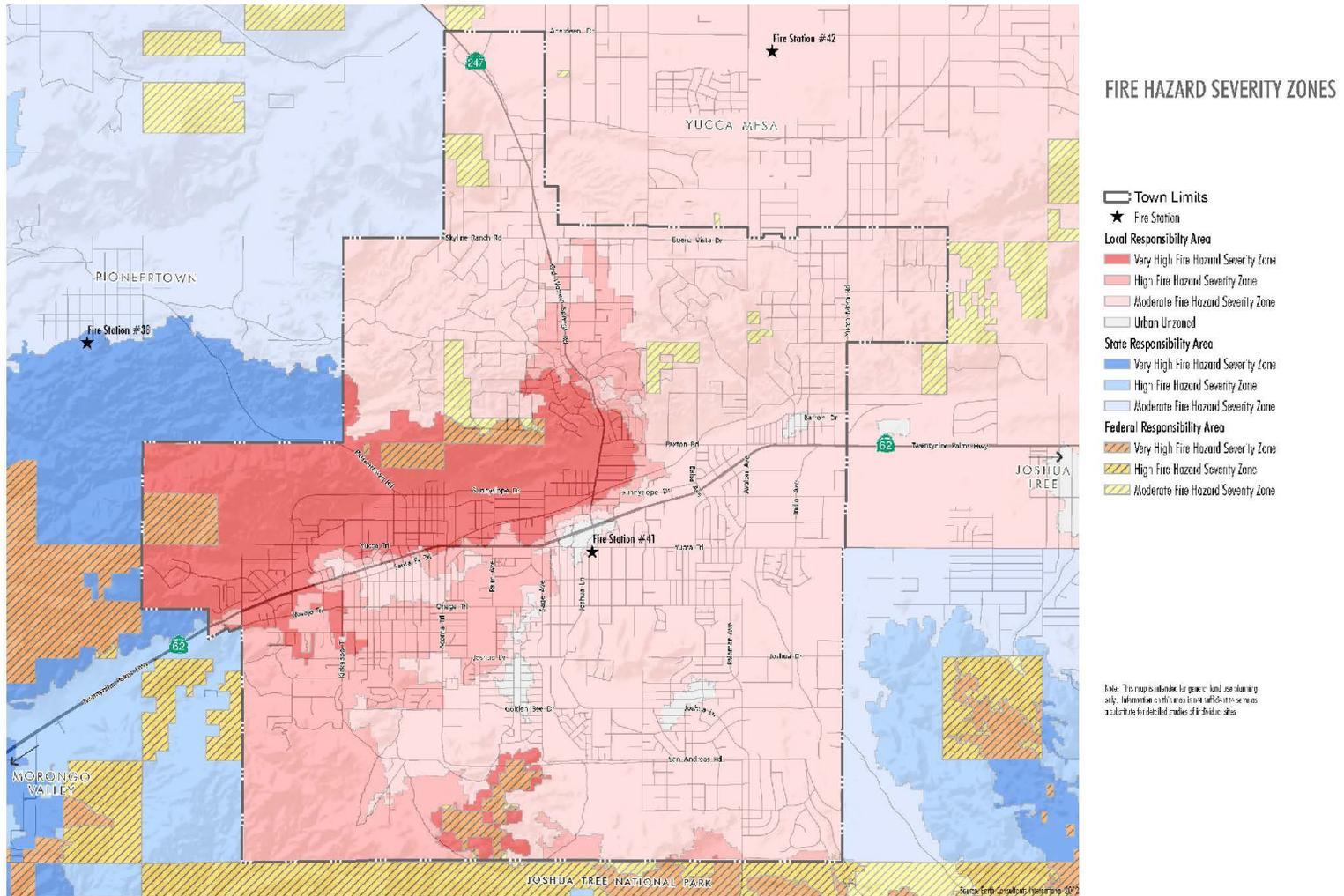
**Less Than Significant Impact.** The new pipeline alignments are not within areas that are subject to downstream flooding or landslides and is not located along the foothills where post-fire instability or drainage changes could impact the Project. Therefore, the impacts are less than significant.

**Mitigation Measures:**

**FIRE-1** During construction, all staging areas, welding areas, or areas slated for construction using spark-producing equipment will be cleared of dried vegetation or other material that could ignite. Spark arresting equipment shall be in good working order. The City of San Bernardino and/or its contractor shall require all vehicles and crews working at the project site to have access to functional fire extinguishers at all times. In addition, construction crews are required to have a spotter during welding activities to look out for potentially dangerous situations, including accidental sparks. The contractor also shall provide a safety plan for the implementation of additional protocols when the National Weather Service issues a Red Flag Warning. Such protocols should address smoking and fire rules, storage and parking areas, use of gasoline-powered tools, use of spark arresters on construction equipment, road closures, use of a fire guard, fire suppression tools, fire suppression equipment, and training requirements.

**Impact Conclusion:**

No significant adverse effects are anticipated with the inclusion of the above mitigation measure.



<p>0 1.25 2.5 5 7.5 10 Miles</p>	<p>Service Layer Credits:</p>		
		<p><b>Figure XX-1</b> <b>Fire Severity Zones</b></p>	<p>Phase II and Phase III Sewer Collection System Project</p>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>XXI. MANDATORY FINDINGS OF SIGNIFICANCE:</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
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)?		X		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

SUBSTANTIATION:

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

The HDWD is proposing to construct approximately 64 miles of PVC sewer pipeline, 1,300 manholes and three lift stations facilities in various areas of its service territory for the purpose of decreasing the reliance on septic systems in their service territory.

Temporary impacts during Project activities are anticipated, but most were found to be less than significant or less than significant with the implementation of mitigation and/or standard best management practices.

A biological resources field survey (Appendix B) concluded that the proposed Project will not affect State or federally listed endangered, threatened species because there is no habitat to support these species within, adjacent to, or in the broader vicinity of the Project area. In addition, the proposed Project will not adversely affect Critical Habitat as none exists within the Project area.

There are no established native resident or migratory wildlife corridors or wildlife nursery sites in the Project area. However, vegetation bordering and within the Project area has the potential to support nesting birds and migratory birds protected under the MBTA. Therefore, to reduce potential impacts to nesting birds a mitigation measure has been recommended.

Mitigation measures are included in this document to address potential impacts and reduce them to a less than significant impact level. With implementation of these measures, no significant adverse impacts to biological resources will result from project implementation.

Similarly, no cultural or tribal resources with significant values were found in the project footprint. However, a potential exists to accidentally expose subsurface cultural resources during construction. Contingency mitigation measures are included in this document to address this potential impact and reduce it to a less than significant impact level. With implementation of the cultural resources mitigation measures (including paleontological impacts), no significant adverse impacts to cultural resources will result from project implementation.

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)?*

The Yucca Valley area within the HDWD Project area is not anticipated to experience significant new growth over the life of the Project, and no major developments have been identified that will occur during the same time as the HDWD project. Impacts are not anticipated to be cumulatively considerable. Local roadways operate at or just below free-flow conditions. This Project will not have a cumulative impact even if other projects are on-going in the area. Impacts were identified in the areas of Biological Resources, Cultural Resources, and Geology and Soils, Hazards and Hazardous Materials, and Wildfire. However, mitigation measures have been identified that, when implemented, will result in less than significant impacts.

The analysis of the data provided in this document concludes that implementation of the proposed Project will not result in impacts that are either individually or cumulatively considerable or significant when viewed in relation to past, present or probable future projects.

c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

The proposed Project will not result in any identifiable substantial adverse effects on humans either directly or indirectly. The goal of the proposed Project is to construct sewer pipeline, manholes and three lift stations facilities in various areas of its service territory for the purpose of decreasing the reliance on septic systems in their service territory. Mitigation measures have been identified in areas of geology and soils, hazards and hazardous materials and wildfire, to ensure potential impacts to humans would be less than significant.

## 8 FEDERAL CROSS-CUTTER CRITERIA

The State Water Board, Division of Financial Assistance administers the CWSRF program. Due to the federal nexus with USEPA, federal laws and regulations (e.g. federal cross-cutters) apply to all projects pursuing CWSRF financing. Under the CWSRF Program, the Division under the State Water Board uses the CEQA document plus the federal cross-cutting documentation in place of a National Environmental Policy Act (NEPA) document in what is termed "CEQA-Plus" documentation. The State Board does not complete a NEPA review process, but rather completes the "NEPA-like" process of CEQA-Plus.

This section of the document contains the analysis consistent federal regulations, specifically, *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act* (40 CFR Sections 1500–1508) issued by the Council on Environmental Quality (CEQ) (1970, as amended), the *Environmental Review Guide for*

*Special Appropriation Grants* (EPA 2008), and the *Environmental Review Process Guidelines for State Revolving Fund Applicants* (SWRCB 2004).

## 8.1 Federal Clean Air Act

The Clean Air Act (CAA), 42 U.S.C. §7401 et seq. (1970), is the comprehensive federal law that regulates air emissions from stationary and mobile sources.

For CWSRF program compliance, the following applies:

- *Attainment Areas- If the Project is located in attainment areas for federal criteria pollutants, then the applicant has satisfied the requirements.*
- *Nonattainment/Maintenance Areas- If the Project is located in nonattainment and/or maintenance areas for federal criteria pollutants, the applicant must conduct a Clean Air Act General Conformity Analysis:*
  - *Project conforms: Total emissions are below de minimis levels*
  - *Project does not conform and requires a general conformity determination: Total emissions are above de minimis levels will require the State Water Board to coordinate with the USEPA to develop a general conformity determination and complete a public review/comment process.*

### ***Determination of Effect***

The EPA has established national ambient air quality standards (NAAQS) for six of the most common air pollutants: carbon monoxide, lead, ozone, particulate matter, nitrogen dioxide, and sulfur dioxide which are known as criteria pollutants. The MDAQMD monitors levels of various criteria pollutants throughout the air district.

The California Air Resource Board (CARB) established the California Ambient Air Quality Standards (CAAQS) for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride.

Currently, the NAAQS and CAAQS are exceeded in most parts of the MDAB. In response, the MDAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

The Air Quality Impact Assessment (Appendix A) indicates that emissions resulting from the Project construction will not exceed criteria pollutant thresholds established by the MDAQMD for emissions of any criteria pollutant. Therefore, the MDAB is a non-attainment basin for federal criteria pollutants, but the total emissions are below de minimis levels (Appendix A).

## 8.2 Coastal Barrier Resources Act Resources

The Coastal Barrier Resources Act (CBRA) was passed by Congress in 1982 to encourage conservation of hurricane-prone, biologically rich Coastal Barrier Resources System, which is a collection of undeveloped and ecologically sensitive barrier formations along the Atlantic and Gulf Coasts of the US, and the shore areas of the Great Lakes. CBRA prohibits most new federal expenditures that encourage development or modification of coastal barriers and the adjacent wetlands, marshes, estuaries, inlets and near-shore waters. CBRS boundaries are shown on maps that were originally adopted by Congress and are maintained by the USFWS.

As of 2019, there are no designated Coastal Barrier Resource Systems in California.

### ***Determination of Effect***

There are no designated Coastal Barrier Resource Systems in California, nor does the Project occur within or near any coastal region. Therefore, there is no impact.

## **8.3 Coastal Zone Management Act Resources**

Coastal Zone Management Act was passed by Congress in 1972 and is administered by National Oceanic and Atmospheric Administration, (NOAA). It provides for the management of the nation's coastal resources, including the Great Lakes. The goal is to "preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone."

Federal agencies must ensure that projects in coastal areas are consistent with the state coastal zone management plans approved by the United States Department of Commerce.

For CWSRF program compliance, the following applies:

- *Applicants must consult early with the state Coastal Zone Management Agency (California Coastal Commission, the San Francisco Bay Conservation and Development Commission) to ensure consistency with the state coastal zone management plan, including identifying appropriate project locations, and provide SWRCB with all documentation.*
- *State Water Board required to consult with the California Coastal Commission and/or the San Francisco Bay Conservation and Development Commission, to obtain a consistency determination (if the applicant has not yet completed the process).*

### ***Determination of Effect***

No aspect of the Project occurs within or near a coastal area. There is no impact.

## **8.4 Section 7 of the Federal Endangered Species Act (ESA)**

The USFWS administers the federal ESA of 1973. The ESA provides a legal mechanism for listing species as either threatened or endangered, and a process of protection for those species listed. Section 9 of the ESA prohibits "take" of threatened or endangered species. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. "Take" can include adverse modification of habitats used by a threatened or endangered species during any portion of its life history. Under the regulations of the ESA, the USFWS may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act. Take authorization can be obtained under Section 7 or Section 10 of the act.

For CWSRF Program compliance, the following criteria apply:

***Biological Assessment*** - *Applicant must submit a biological assessment to determine any direct/indirect effects to federally listed (threatened or endangered) species or critical habitat*

- *Required to review current lists of species (less than one year old) expected to be in the project area and type of suitable habitat:*
  - *U.S. Fish and Wildlife Service (USFWS) species list*
  - *California Department of Fish and Wildlife, California Native Diversity Database (CNDDDB)*
  - *California Native Plant Survey*
- *Biological survey (less than one year old) must include:*
  - *Results of site surveys and surrounding area stating if any species were observed*
  - *Identification of designation critical habitat and known species range*
  - *Analysis of potential impact to species*
  - *Determinations for effect on listed species*
  - *Identification of measures to reduce, avoid and minimize impacts*

### ***Determination of Effect***

A Biological Resources Assessment was prepared for this Project (Jericho, September 2019 and is located in Appendix B). Section IV of this document represents the findings and analysis under CEQA.

No federally listed species were observed during the field survey nor are any expected to occur because only marginal habitat exists. **Mitigation Measures BIO-1** and **BIO-3** were identified under CEQA to ensure avoidance and minimization of impacts:

**BIO-1** A qualified biologist shall develop a Worker Environmental Awareness Program (WEAP) that will include information on general and special status species within the project area, identification of these species and their habitats, techniques being implemented during construction to avoid impacts to species, consequences of killing or injuring an individual of a listed species, and reporting procedures when encountering listed or sensitive species. Construction crews, foremen, and other personnel potentially working on site will attend this education program and place their name on a sign-in sheet. This briefing shall include provisions of any requirements required for the project. MWA and its contractor shall implement Worker Environmental Awareness Program training on the first day of work and periodically throughout construction as needed.

**BIO-3** Preconstruction surveys for burrowing owl and desert tortoise should be conducted at least 30 days prior to ground disturbance for each Project.

Therefore, there will be no impact to federally protected species or habitats will result from implementation of the proposed Project.

## **8.5 Environmental Justice**

In July 1964 Congress passed the Civil Rights Act of 1964. Title VI of the Civil Rights Act states that *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."*

In February 1994, President Clinton issued Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." In a separate memorandum, President Clinton identified Title VI as one of several federal laws already in existence that can help "to prevent minority communities and low-income communities from being subject to disproportionately high and adverse environmental effects."

For CWSRF Program compliance, the following criteria apply:

Will the Project:

- *Create new disproportionate impacts on minority, low-income, or indigenous populations;*
- *Exacerbate existing disproportionate impacts on minority, low-income, or indigenous populations; or*
- *Present opportunities to address existing disproportionate impacts on minority, low-income, or indigenous populations that are addressable through the project.*

### ***Determination of Effect***

The Project sites are located within a community that is generally below the economic level of other communities in San Bernardino County, due to having a high percentage of retirees and seasonal residents. However, there are no industries or contaminated sites in or around the project area such that this project would comprise a new hazard and additional hazard to a particular population. The proposed Project will temporarily impact those residents along the pipeline routes, but the Project has no potential to adversely impact any low income or ethnic communities in the long term. The Project itself will be an improvement to area services that will benefit the population.

## **8.6 Farmland Protection Policy Act**

Congress enacted the Farmland Protection Policy Act (FPPA) as a subtitle of the 1981 Farm Bill. The purpose of the law is to “...minimize the extent to which Federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses...” (P.L. 97-98, Sec. 1539-1549; 7 U.S.C. 4201, et seq.). The FPPA also stipulates that federal programs be compatible with state, local and private efforts to protect farmland. For the purposes of the law, federal programs include construction projects—such as highways, airports, dams and federal buildings—sponsored or financed in whole or part by the federal government, and the management of federal lands. The U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS) is charged with oversight of the FPPA.

Federal agencies must consider a project’s effect on agricultural land and take alternative/mitigating measures to ensure valuable farmland is preserved.

Important farmland includes:

- Unique and Prime farmland
- Farmland of local and statewide importance
- Farmland under a Williamson Act Contract (important farmland)

For CWSRF Program compliance, the following criteria apply:

- *Determine if important farmland is located within project area, and if the project will result in a temporary or permanent conversion of important farmland to non-agricultural use.*

- *Notify (via letter) the United States Department of Agriculture, local and state soil conservationist representatives, of the project and proposed measures identified to avoid, minimize, or mitigate farmland impacts.*

### ***Determination of Effect***

There are no farmlands in the Project areas. Therefore, there is no impact.

## **8.7 Flood Plain Management**

Floodplain management is the operation of a community program of preventive and corrective measures to reduce the risk of current and future flooding, resulting in a more resilient community, according to the Federal Emergency Management Agency (FEMA). These measures take a variety of forms, are carried out by multiple stakeholders with a vested interest in responsible floodplain management and generally include requirements for zoning, subdivision or building, building codes and special-purpose floodplain ordinances.

For CWSRF Program compliance, the following criteria apply:

- *Evaluate and determine project location with respect to 100-year floodplain (FEMA maps).*
  - *If project is located in a flood plain, the applicant must prepare:*
    - *A flood plain assessment, including assessing flooding impacts, alternative locations, and measures/design modifications to reduce flooding impacts; and*
    - *And publicly notify reasons for proposing the project in a flood plain.*
- *CWSRF Program staff makes a finding on the Executive Order No. 11988 compliance and must notify FEMA (FEMA may provide additional measures) via letter.*

### ***Determination of Effect***

The Project will install pipelines in existing roadways and easements. Some of these roadways cross ephemeral drainages that have been identified by FEMA as potential flood hazards. However, the pipelines are anticipated to be within the existing roadbed and is not anticipated to alter these drainages. The infrastructure will be installed underground, and not anticipated to be impacted by potential flooding. Therefore, there will be no impact from flood hazards with implementation of the proposed Project.

## **8.8 Section 106 of the National Historic Preservation Act**

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies, to consider the effects of Federally funded projects on historic properties and to afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on such projects prior to the expenditure of any Federal funds.

For CWSRF Program compliance, the following criteria apply:

- *Applicant must submit a Section 106 report including:*

- *Identifying the area of potential effects (APE)*
  - *Current records search (no more than one year old & ½ mile radius)*
  - *Native American consultation*
  - *Draft consultation letter for State Historic Preservation Officer (SHPO)*
- *Cultural Resources Officer for the State Water Board reviews the cultural documents submitted by applicants to see if sufficient information has been provided to support Section 106 findings.*
  - *May initiate Section 106 NHPA consultation with the SHPO if “no effect” finding can not be made*

### ***Determination of Effect***

Cultural Resources for the HDWD’s Phases I, II, and III wastewater system infrastructure plan have been studied over the past several years. The CRM Tech 2019 report is attached as Appendix C. For the 2019 effort, CRM Tech’s research included a literature review and field surveys.

The CRM Tech 2019 study concluded that no “historic properties” or “historical resources” as defined by either Section 106 or CEQA are present within the APE. However, in the event an unanticipated resource is discovered, implementation of mitigation measures are incorporated to ensure any potential impact will be less than significant.

## **8.9 Magnuson-Stevens Fishery Conservation and Management Act**

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) is the primary law governing marine fisheries management in U.S. federal waters. First passed in 1976, the Magnuson-Stevens Act fosters long-term biological and economic sustainability of our nation's marine fisheries out to 200 nautical miles from shore. The goals of the act include: prevent overfishing; rebuild overfished stocks; increase long-term economic and social benefits; use reliable data and sound science; conserve essential fish habitat; ensure a safe and sustainable supply of seafood.

For CWSRF Program compliance, the following criteria apply:

- *Applicants must provide Essential Fish Habitat (EFH) Assessment and maps (from the National Marine Fisheries Service [NMFS]) to identify designated EFH in their project areas and assess if the project will have the potential to adversely impact EFH.*
- *Must consult with NMFS for any adverse impacts to EFH.*
- *If EFH may be adversely impacted, ERU must prepare a letter and enclose any applicable surveys (EFH Assessment) documents for USEPA to initiate EFH consultation with the NMFS.*
- *NMFS must provide concurrence (informally or written) and may provide EFH Conservation recommendations, which will be included as a special condition of the applicant’s CWSRF financing agreement*

### ***Determination of Effect***

The Project does not involve fisheries or occur within 200 nautical miles out from shore. Therefore, there is no impact.

## 8.10 Migratory Bird Treaty Act (MBTA)

The federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C 703-711) provides protection for nesting birds that are both residents and migrants whether or not they are considered sensitive by resource agencies. The MBTA prohibits take of nearly all native birds. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under federal law. The USFWS, in coordination with the CDFW administers the MBTA. CDFW's authoritative nexus to MBTA is provided in FGC Sections 3503.5 which protects all birds of prey and their nests and FGC Section 3800 which protects all non-game birds that occur naturally in the State.

For CWSRF Program compliance, the following criteria apply:

- *Applicants must address potential impacts to migratory, raptor and fully protected species in their Biological Assessment or CEQA document. A survey must be completed to determine the presence of nests and impacts from construction noise, vibration, modification of habitat (tree removal, riparian vegetation) must be addressed.*
- *Must consult with the USFWS (as well as the Department of Fish and Wildlife under Fish and Game codes 3511 and 3513) to identify appropriate measures for mitigating/avoiding impacts to species.*

### ***Determination of Effect***

Vegetation suitable for nesting birds does exist within and adjacent to the Project areas. Most birds are protected by the MBTA. In general, impacts to all bird species (common and special status). Avian species observed or otherwise detected on site during the September 2019 surveys included house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), common raven (*Corvus corax*), and northern mockingbird (*Mimus polyglottos*).

**Mitigation Measure BIO-2** were identified under CEQA to ensure avoidance and minimization of impacts:

- BIO-2** Bird nesting season generally extends from February 1 through September 15 in southern California and specifically, April 15 through August 31 for migratory passerine birds. In general, Projects should be constructed outside of this time to avoid impacts to nesting birds. If a Project cannot be constructed outside of nesting season, the project site shall be surveyed for nesting birds by a qualified avian biologist within three (3) days prior to initiating the construction activities. If active nests are found during the pre-construction nesting bird surveys, a Nesting Bird Plan (NBP) will be prepared and implemented. At a minimum, the NBP will include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. The NBP will include a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be determined by the biologist, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist has determined the young birds have successfully fledged and a monitoring report has been submitted reviewed and approved by the HDWD.

## 8.11 Protection of Wetlands – Executive Order 11990

Protection of Wetlands – Executive Order 11990: The purpose of Executive Order (EO) 11990 is to "minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands". To meet these objectives, the Order requires federal agencies, in planning their actions, to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided. The procedures require the determination of whether or not the proposed project will be in or will affect wetlands. If so, a wetlands assessment must be prepared that describes the alternatives considered. The procedures include a requirement for public review of assessments. The evaluation process follows the same 8 steps as for EO 11988, Floodplain Management.

Wetlands are the at transition between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. In general, wetlands have one or more of the following three attributes: 1) at least periodically, the land supports predominantly hydrophytes; 2) soils are hydric meaning undrained; and 3) the substrate is saturated with water or covered by shallow water at some time during the growing season of each year. Under current guidelines, a jurisdictional wetland under the CWA's Section 404, must display all three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. In California however, a jurisdictional wetland needs to meet only one of these parameters.

For CWSRF Program compliance, the following criteria apply:

- *U.S. Army Corps of Engineers (USACE) has a "no net loss of wetlands" policy. Therefore, applicants must comply by completing and submitting:*
  - *Biological surveys which addresses potential impacts to wetlands*
  - *Potential affects to wetlands requires:*
    - *A Preliminary Wetland Delineation Report*
    - *Field verification report done by the USACE*
    - *Section 401 WQ Certification (Regional Water Board) approval*
    - *USACE Permit application for CWA Section 404 permits (only need 401 if 404 required)*
- *If consultation with the USACE and USFWS is required, CWSRF Program staff must initiate consultation via letter and forward all supporting documentation, including information on alternative sites and measures to reduce or avoid impacts to wetlands, other waters and waters of the US.*

### ***Determination of Effect***

A Biological Resources Assessment was prepared for the site that addressed the potential for waters and wetlands to be present on-site, and is provided in Appendix B. However, no wetlands were found; therefore, there is no impact.

## 8.12 Safe Drinking Water Act, Sole Source Aquifer Protection

EPA defines a sole source aquifer (SSA) as one where:

- The aquifer supplies at least 50 percent of the drinking water for its service area
- There are no reasonably available alternative drinking water sources should the aquifer become contaminated.

The Sole Source Aquifer program enables EPA to designate an aquifer as a sole source of drinking water and establish a review area. EPA then reviews proposed projects that will both:

- Be located within the review area
- Receive federal funding

The review area includes the area overlying the SSA. It may also include the source areas of streams that flow into the SSA's recharge zone. EPA's review is intended to ensure that the projects do not contaminate the SSA.

For CWSRF Program compliance, the following criteria apply:

- *All applicants must determine if the project is located in a USEPA designated sole source aquifer (SSA).*
- *If is located in SSA, the Applicant must provide documentation of surveys done to determine if a project could contaminate a sole source aquifer (normally done in consultation with the Department of Public Health).*
- *In consultation with DPH and USEPA, applicant must identify alternative site(s) or identify adequate mitigation measures. Those measures and/or alternative sites must be integrated into the project design.*

### ***Determination of Effect***

The EPA's Sole Source Aquifer (SSA) Program was established under Section 1424(e) of the Safe Drinking Water Act (SOWA). Since 1977, it has been used by communities to help prevent contamination of groundwater from federally-funded projects. The SSA program allow for EPA environmental review of any project which is financially assisted by federal grants or federal loan guarantees. Although nine sole source aquifers have been designated in California, the Warren Valley Groundwater Basin is not listed among these aquifers as of September 2019.

Groundwater is located several hundred feet beneath the project area of potential impact. The HDWD obtains its water supply entirely from the Warren Valley Groundwater Basin. Although this Basin is the HDWD's sole source of water supply, the aquifer is not designated by the federal EPA as a "sole source aquifer."

## **8.13 Wild and Scenic Rivers Act**

Wild and Scenic Rivers Act. The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is notable for safeguarding the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection. Rivers may be designated either a federal or state agency.

This Act prohibits federal assistance (including financing) for water resource projects that would have a direct and adverse effects on, invade, or unreasonably diminish, the special values of a designated wild and scenic river. The Act also requires consultation with state (California State Parks) and federal authorities (National Park Service, US Forest Service, Bureau of Land Management) with jurisdiction over the rivers in the project area, and evaluate alternatives.

As of 2019, there were 22 water body sections have a wild and scenic river designation in California.

For CWSRF Program compliance, the following criteria apply:

- *Alternatives that will result in adverse effect on the wild and scenic designation of the river, must be eliminated. Applicant must identify other alternatives.*

### ***Determination of Effect***

The Project area is not near or within any of the water bodies that have a wild and scenic river designation. Therefore, there is no impact.

## **9 FINDINGS**

Therefore, based on the findings in this Initial Study, the HDWD, acting as the CEQA lead agency for this proposed project, will process a Mitigated Negative Declaration (MND) as the appropriate CEQA environmental determination for the proposed project. The HDWD will issue a Notice of Intent to Adopt a Mitigated Negative Declaration and circulate the MND package for review for the required 30-day period. Following receipt of comments, the HDWD will compile responses to any comments and prepare a final MND package for consideration by HDWD. Based on the final MND package, the HDWD will consider whether implementation of the proposed project as defined in this document can proceed as determined by the HDWD at the completion of the review process.

If you or your agency comments on this proposed MND, you or your agency will be provided responses to comments and notified of the date of the District's final review and decision. A decision by the HDWD to approve the MND would be based on all of the information available in the whole of the record before the HDWD at the conclusion of the CEQA environmental review process for this proposed project. Completion of the CEQA review process would allow implementation of the proposed project in accordance with any approved mitigation measures and conditions of approval for the project.

## 10 SUMMARY OF MITIGATION MEASURES

The following mitigation measures were identified to reduce impacts to less than significant:

### **BIOLOGICAL RESOURCES**

- BIO-1** A qualified biologist shall develop a Worker Environmental Awareness Program (WEAP) that will include information on general and special status species within the project area, identification of these species and their habitats, techniques being implemented during construction to avoid impacts to species, consequences of killing or injuring an individual of a listed species, and reporting procedures when encountering listed or sensitive species. Construction crews, foremen, and other personnel potentially working on site will attend this education program and place their name on a sign-in sheet. This briefing shall include provisions of any requirements required for the project. MWA and its contractor shall implement Worker Environmental Awareness Program training on the first day of work and periodically throughout construction as needed.
- BIO-2** Bird nesting season generally extends from February 1 through September 15 in southern California and specifically, April 15 through August 31 for migratory passerine birds. In general, Projects should be constructed outside of this time to avoid impacts to nesting birds. If a Project cannot be constructed outside of nesting season, the project site shall be surveyed for nesting birds by a qualified avian biologist within three (3) days prior to initiating the construction activities. If active nests are found during the pre-construction nesting bird surveys, a Nesting Bird Plan (NBP) will be prepared and implemented. At a minimum, the NBP will include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. The NBP will include a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be determined by the biologist, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist has determined the young birds have successfully fledged and a monitoring report has been submitted reviewed and approved by the HDWD.
- BIO-3** Preconstruction surveys for burrowing owl and desert tortoise should be conducted at least 30 days prior to ground disturbance for each Project.
- BIO-4** Pre-construction springtime botanical surveys are recommended in the following areas for the Latimer's woodland-gilia, San Bernardino milk-vetch, Little San Bernardino Mtns. Linanthus, and Robison's monardella.
- Section 1 – Blue Skies Area
    - Alignment behind houses and adjacent to golf course between Martinez Trail and Country Club Road.
    - Alignment along Quemada Trail between Yucca Trail and Country Club Road.
  - Section 2 – Old Town North
    - Alignment along Apache Trail and in undisturbed area to the north.

- Section 3 – Mid-Town North
  - Four Alignments along north of Crest view Drive 1) Sage Road, 2) Barberry Avenue, 3) Dumosa Avenue and 4) Joshua Lane.
  - Two alignments that cross open areas 1) north of the jog in Sunnyslope road between Sage Road and Barberry Avenue and 2) alignment north of Sunnyslop between Condalia Avenue and Joshua Lane.
- Section 4 – State Route 241
  - Entire alignment along Highway 247.
- Section 5 – Western Hills Estates and Shatin Hills
  - Alignment along San Rafael Drive southeast of Oakwood Drive.
  - Alignment along Farrelo Road between Nogales Court and Pinto Court.
  - Alignment along Mirlo Lane off Mirlo Road southwest of Mirlo Court.
  - Alignment along Concho Way off Bandera Road.
- Section 6 – Warren Way
  - Alignment along Berkely Drive north of Paxton Road.
- Section 7 – Paradise Valley North
  - Four alignments along 1) North-South portion of Linda Lee Drive, 2) East-West portion of Linda Lee Drive, 3) Marvin Road and 3) Nelson Avenue.
  - Four open areas 1) undisturbed area of Williams lane between Linda Lee Drive and Marvin Drive, 2) alignment extending from the terminus of Nelson Avenue to Yucca Mesa Road, 3) East-West alignment north of hide Lane west of Marvin Drive and 4) East-West alignment due east of Hide Lane across Marvin Drive.
- Section 8 – Upper Sky Harbor
  - Alignment along Black Rock Canyon Road north of San Marino Drive.
  - Two in open areas 1) east west alignment west of the intersection of Black Rock Canyon Road and San Marino Drive and open area west of terminus Santa Barbara Drive.
- Section 9 – Sky Harbor
  - Alignments along Kaiulani Road south of South of San Andreas Road 2) alignment along San Andreas Road between Kaiulani Road and Frontera Avenue, and 3) Alignment along Balsa Avenue between San Andreas Road and Cortez Drive.
- Section 10 – South of Onaga Trail
  - Alignment along Elata Avenue

- Alignments 1) along Nagles Road between Elata Ave and Kingston Avenue, 2) along Ross Court between Elata Avenue and Imel Street and 3) along Imel Street South of Ross Court.
- Section 11 – Juniper Terrace Area
  - Alignment along Jemenez Trail
  - Alignment along Inca Trail from Joshua Drive to terminus of Inca Trail
  - Alignment along Iona Lane East of Mariposa Trail.
  - Alignment along Fox Trail south of Highland Trail.
  - Alignment along Highland Trail east of Elk Trail to midway between Deer Trail and Bannock Trail.
  - Alignment along Deer trail between Mountainview Trail and Highland Trail.
  - Alignment along Bannock Trail south of Mountainview Trail

**BIO-5** For projects where a drainage crossing is required, once a Project has been designed, the HDWD will perform a jurisdictional waters delineation and obtain all applicable State and federal permitting based on the design to address project impacts.

**BIO-6** All Projects should be designed to avoid sensitive and/or protected desert plants as per the City of Yucca Valley and the County of San Bernardino. This includes equipment staging and storage areas. In the event said sensitive desert plants cannot be avoided, the HDWD shall conduct and/or prepare a Native Plant Survey and Relocation Plan in accordance with Ordinance No. 140 of the Town of Yucca Valley to be approved by the Town of Yucca Valley as part of the pre-construction planning. The survey should first identify all Joshua Trees and other native vegetation as recognized by the Town ordinance and assess their type and health. The HDWD should then work to find solutions to avoid these resources; if the resources cannot be avoided, HDWD will develop a relocation plan and obtain permits through applicable entities.

## CULTURAL RESOURCES

**CUL 1** In the event that evidence of archaeological resources are unearthed during construction activities, all work within 50 feet of the discovery should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. No disturbance shall occur in the vicinity of the find until the site is evaluated by the archaeologist and the find is recorded or treated per the recommendations of the qualified archaeologist.

**CUL-2** In the event that human remains are discovered, there shall be no disposition of such human remains, other than in accordance with the procedures and requirements set forth in California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. These code provisions require notification of the County Coroner and the Native American Heritage Commission, who in turn must notify those persons believed to be most likely descended from the deceased Native American for appropriate disposition of the remains. Excavation or disturbance may continue in other areas of the project site that are not reasonably suspected to overlie adjacent remains or archaeological resources.

## **GEOLOGY AND SOILS**

**GEO-1** Any pipelines crossing the Alquist-Priolo Special Studies Zones for the Pinto Mountain, Eureka Peak, and Burt Mountain Faults could be subject to damage due to ground rupture associated with these faults. Any construction of facilities in or pipelines crossing this zone is required to have detailed structural engineering studies to ensure designs that can safely accommodate the anticipated ground movement(s), or to be immediately repairable following a seismic event along any of the three faults.

**GEO-2** The contractor will provide to the HDWD an Erosion Control Report (ECR) that will identify the Best Management Practices (BMPs) for managing any excavated or stockpiled materials. The BMPs may include but not be limited to the following:

- Prevent mud and debris from entering roadways, including the main entry road by providing trackout measures.
- Locate stockpiles away from drainage courses, drain inlets or concentrated flows of storm water.
- For wind erosion control, apply water or other dust palliative to stockpiles. Smaller stockpiles may be covered as an alternative.
- Place bagged materials on pallets under cover.
- During the rainy season, non-active soil stockpiles will be covered with heavy plastic and the stockpile contained within a temporary perimeter sediment barrier, such as berms, dikes, silt fences, or sandbag barriers. A soil stabilization measure may be used in lieu of cover.
- During the non-rainy season prior to the onset of rain, the stockpile should either be covered or protect them with temporary perimeter sediment barriers.
- Year-round, active soil stockpiles will be protected with temporary linear sediment barriers prior to the onset of rain.
- Pipelines placed within unpaved roadways will be graded and watered at least once per day, or as often as necessary to control dust.
- Trenches will remain open for as short a time as possible.
- The Plan will identify proper compaction for all pipelines and lift station facilities.

**GEO-3 Paleontological Resources.** The HDWD staff and/or its contractor performing the work will be required to receive a Worker Environmental Awareness Training that will train workers on various environmental subjects including the potential for paleontological resources.

Additionally, any substantial excavations (i.e. over 5 feet in depth) in the proposed Project areas identified as “moderate” in the General Plan should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Also, sediment samples should be collected and processed during construction to determine the small fossil potential in the proposed Project area. Any fossils recovered during implementation of this mitigation measure should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations. The areas for monitoring and sediment samples include but are not limited to:

- Blue Skies Country Club
- Paradise Valley North
- Juniper Terrace
- Storey Park

- Alta Loma
- Copper Hills I
- Copper Hills II
- Sky Harbor
- Upper Sky Harbor

## **HAZARDS AND HAZARDOUS MATERIALS**

- HAZ – 1** All asphalt requiring removal from the Project Site shall be disposed of in accordance with current regulatory standards.
- HAZ – 2** A hazardous spill prevention plan shall be prepared by the Applicant and submitted to the HDWD for approval to minimize the likelihood of a spill shall be prepared prior to construction. The plan shall state the actions that would be required if a spill occurs to prevent contamination of surface waters and provide for cleanup of the spill. The plan shall follow Federal, state, and local safety guidelines and standards to avoid increased exposure to these pollutants.
- HAZ-3** During construction, all staging areas, welding areas, or areas slated for construction using spark-producing equipment will be cleared of dried vegetation or other material that could ignite. Spark arresting equipment shall be in good working order. The HDWD shall require all vehicles and crews working at the project site to have access to functional fire extinguishers at all times. In addition, construction crews are required to have a spotter during welding activities to look out for potentially dangerous situations, including accidental sparks. The contractor also shall provide a safety plan for the implementation of additional protocols when the National Weather Service issues a Red Flag Warning. Such protocols should address smoking and fire rules, storage and parking areas, use of gasoline-powered tools, use of spark arresters on construction equipment, road closures, use of a fire guard, fire suppression tools, fire suppression equipment, and training requirements.

## **TRANSPORTATION AND TRAFFIC**

- TRA-1** The HDWD or its construction contractor will provide adequate traffic management resources, such as protective devices, flag persons, and police assistance for traffic control, to maintain safe traffic flow on local streets affected by pipeline construction at all times.
- TRA-2** The construction contractor will identify traffic hazards created by construction, such as rough road or potholes, freshly paved locations, and minimize total traffic and vehicle speed through such hazards.
- TRA-3** The construction contractor will ensure that traffic safety hazards, such as uncovered or unfilled open trenches, will not be left in roadways during period of time when construction personnel are not present, such as nighttime and weekends.
- TRA-4** The construction contractor will repair all roads adequately after construction to ensure that traffic can move in the same manner as before construction.
- TRA-5** At all times during construction, the contractor will ensure that emergency fire, police or medical vehicles are able to access all adjacent areas. Additionally, construction equipment or activities must not obstruct or hinder traffic that might be generated during an evacuation.

## **TRIBAL CULTURAL RESOURCES**

- TCR-1** The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in CR-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site. This mitigation measure does not preclude notification to other tribes or treatment plans in accordance with other tribal entities.
- TCR-2** Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI, and other tribes as applicable, throughout the life of the project.

## **WILDFIRE**

- FIRE-1** During construction, all staging areas, welding areas, or areas slated for construction using spark-producing equipment will be cleared of dried vegetation or other material that could ignite. Spark arresting equipment shall be in good working order. The City of San Bernardino and/or its contractor shall require all vehicles and crews working at the project site to have access to functional fire extinguishers at all times. In addition, construction crews are required to have a spotter during welding activities to look out for potentially dangerous situations, including accidental sparks. The contractor also shall provide a safety plan for the implementation of additional protocols when the National Weather Service issues a Red Flag Warning. Such protocols should address smoking and fire rules, storage and parking areas, use of gasoline-powered tools, use of spark arresters on construction equipment, road closures, use of a fire guard, fire suppression tools, fire suppression equipment, and training requirements.

## 11 REFERENCES

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# APPENDICES