VALLEY SANITARY DISTRICT'S SEWER SIPHON REPLACEMENT

CROSSING THE COACHELLA VALLEY STORMWATER CHANNEL AT WESTWARD HO DRIVE

CITY OF INDIO, RIVERSIDE COUNTY, CALIFORNIA

Biological Resources Report

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August 2022

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The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.

Travis J. McGill
Director

Thomas J. McGill, Ph.D.
Managing Director

August 2022

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EXHIBITS

APPENDIX

Section 1 Introduction

This report contains the findings of ELMT Consulting's (ELMT) biological resources report including a Coachella Valley Multiple Species Habitat Conservation plan (CVMSHCP) Consistency Analysis for Valley Sanitary District's Sewer Siphon Replacement Project crossing the Coachella Valley Stormwater Channel at Westward Ho Update (project site or site) located in the City of Indio, Riverside County, California. ELMT biologist Jacob Lloyd Davies conducted a field survey and evaluated the condition of the habitat within the project site on June 16, 2022. In addition, the habitats associated with the Coachella Valley Stormwater Channel (CVSC) adjacent to the project site were surveyed for potential indirect impacts to special-status biological resources associated with project implementation.

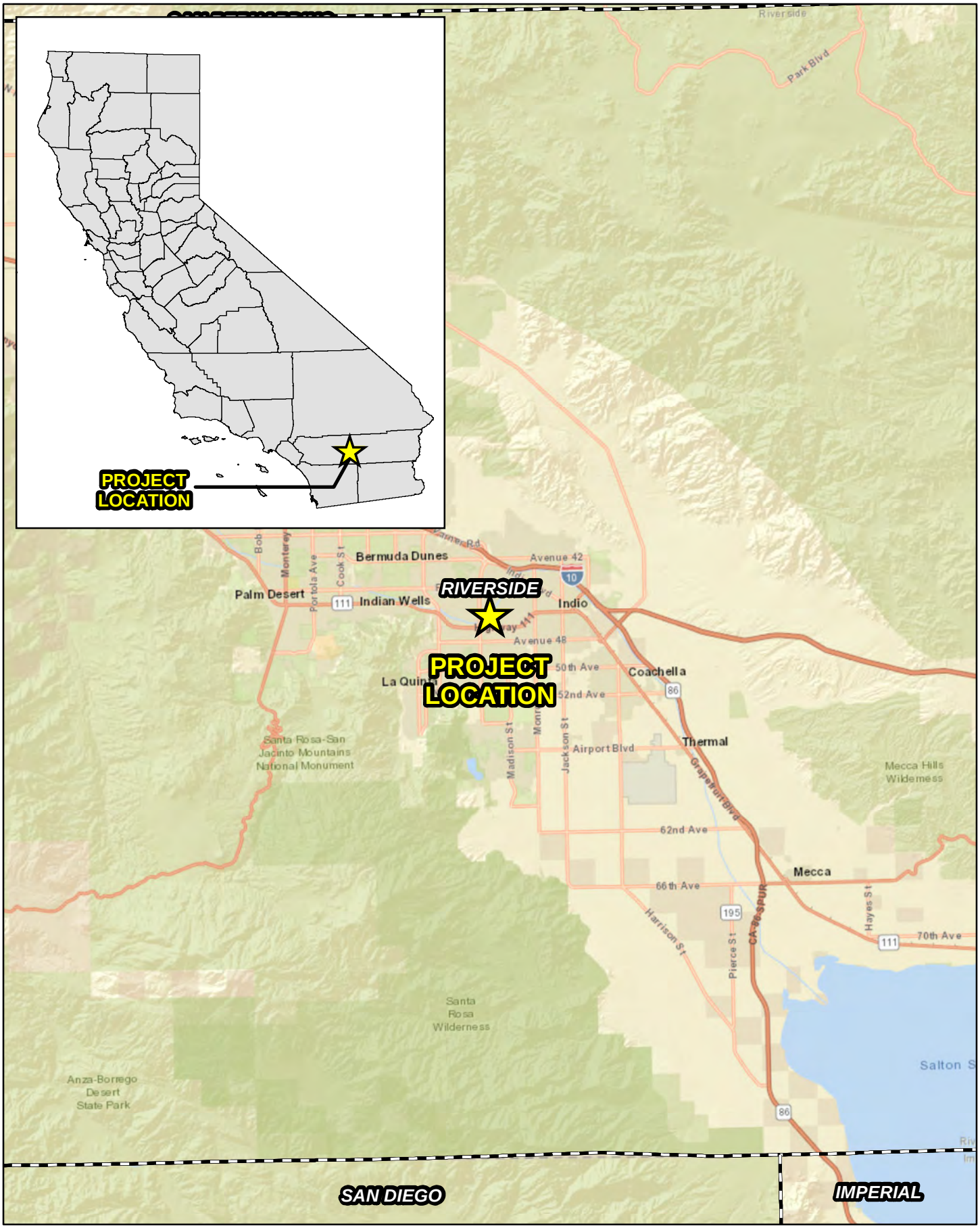
Special attention was given to the suitability of the project site to support burrowing owl (*Athene cunicularia*) and other special-status plant and wildlife species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), and other electronic databases as potentially occurring in the general vicinity of the project. Additionally, the report also addresses resources protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (FGC), federal Clean Water Act (CWA) regulated by the United States Army Corps of Engineers (Corps) and Regional Water Quality Control Board (Regional Board) respectively, and Section 1602 of the FGC administered by CDFW.

1.1 PROJECT LOCATION

The project site is generally located south of Interstate 10, north of State Route 111, east of State Route 74, and west of State Route 86 in the City of Indio, Riverside County, California (Exhibit 1, *Regional Vicinity*). The project site is depicted on the Laquinta quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series within Sections 21 and 28 of Township 5 South, Range 7 East (Exhibit 2, *Site Vicinity*). The project site is located at the eastern terminus of Westward Ho Drive at its intersection with Meadow Lake Drive, and the western terminus of Avenue 46 at Shields Road, and is bisected by the Coachella Valle Stormwater Channel (refer to Exhibit 3, *Project Site*).

1.2 PROJECT DESCRIPTION

In February 2019, the Valley Sanitary District (VSD) experienced a major rain storm event that exposed the existing 12-inch diameter sewer siphon pipeline (also known as Avenue 46 Channel Siphon) crossing the Coachella Valley Stormwater Channel (CSWC) at Westward-Ho in Indio, California. The exposed sewer siphon was undermined as a result of the storm event. It was then determined by VSD the existing sewer siphon should be replaced with a deeper buried pipeline that would be safe from future storm erosion. The proposed project includes the replacement of the existing sewer pipeline using horizontal directional drilling (HDD) under the CVSC.



VSD SEWER SIPHON REPLACEMENT AT WESTARD HO
BIOLOGICAL RESOURCES REPORT

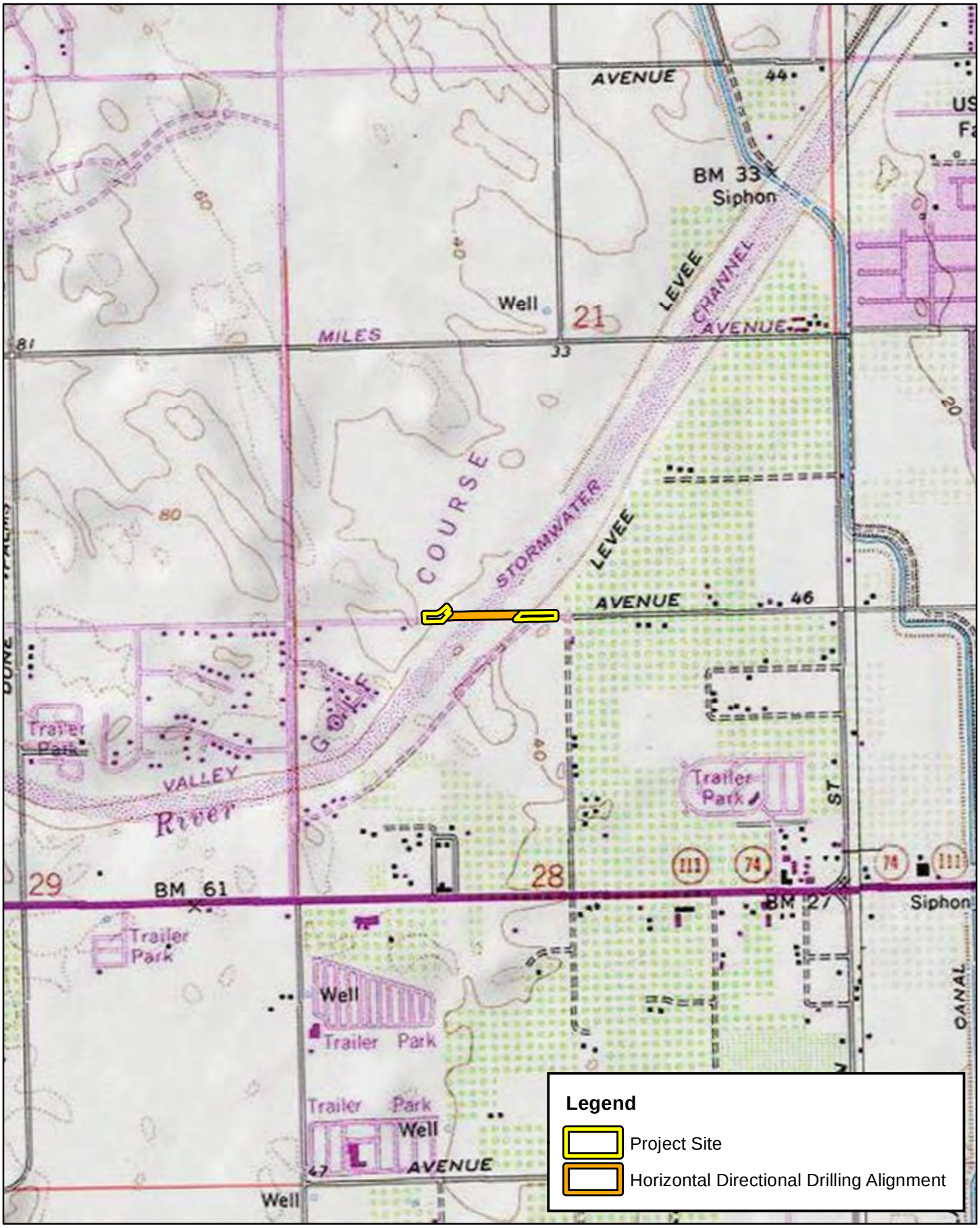
Regional Vicinity

ELMT CONSULTING

0 2.5 5 10 Miles

Source: World Street Map, Riverside County

Exhibit 1



VSD SEWER SIPHON REPLACEMENT AT WESTARD HO
BIOLOGICAL RESOURCES REPORT

ELMT CONSULTING

0 1,000 2,000 4,000 Feet

Source: USA Topographic Map, Riverside County

Site Vicinity

Exhibit 2

VSD SEWER SIPHON REPLACEMENT AT WESTARD HO
BIOLOGICAL RESOURCES REPORT

Project Site

ELMT CONSULTING

0 62.5 125 250 Feet

Source: ESRI Aerial Imagery, Riverside County

Exhibit 3

Section 2 Methodology

A thorough literature review and records search was conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site. In addition, a general habitat assessment and field investigation of the project site was conducted and provided information about the existing conditions on the project site and the potential for special-status biological resources to occur.

2.1 LITERATURE REVIEW

Prior to conducting the field investigation, a literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the CDFW's CNDDB Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

Literature detailing biological resources previously observed in the vicinity of the project site and historical land uses were reviewed to understand the extent of disturbances to the habitats on-site. Standard field guides and texts on special-status and non-special-status biological resources were reviewed for habitat requirements, as well as the following resources:

- Google Earth Pro historic aerial imagery (1996-2021);
- CDFW 2012 Staff Report on Burrowing Owl Mitigation;
- Coachella Valley Multiple Species Habitat Conservation Plan:
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey; and
- USFWS Critical Habitat designations for Threatened and Endangered Species.

The literature review provided a baseline from which to inventory the biological resources potentially occurring on the project site. Additional recorded occurrences of these species found on or near the project site were derived from database queries. The CNDDB ArcGIS database was used, in conjunction with ArcGIS software, to locate the nearest occurrence and determine the distance from the project site.

2.2 FIELD INVESTIGATION

ELMT biologist Jacob Lloyd Davies inventoried and evaluated the extent and conditions of the plant communities found within the boundaries of the project site, and within 500 feet of the project site within the CVSC on June 16, 2022. Plant communities identified on aerial photographs during the literature review were verified by walking meandering transects through the plant communities and along boundaries between plant communities. The plant communities were evaluated for their potential to support special-status plant and wildlife species. In addition, field staff identified any natural

corridors and linkages that may support the movement of wildlife through the area. Special attention was given to special-status habitats and/or undeveloped areas, which have higher potentials to support special-status plant and wildlife species.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities, and presence of potential jurisdictional drainage and/or wetland features were noted.

2.3 SOIL SERIES ASSESSMENT

On-site and adjoining soils were researched prior to the field visit using the USDA NRCS Soil Survey for Riverside County, California. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes the project site has undergone.

2.4 PLANT COMMUNITIES

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were classified in accordance with Sawyer, Keeler-Wolf and Evens (2009), CDFW (2003), and Holland (1986), delineated on an aerial photograph, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community in acres.

2.5 PLANTS

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less-familiar plants were photographed in the field and identified in the laboratory using taxonomical guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

2.6 WILDLIFE

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides were used to assist with identification of species during surveys included The Sibley Field Guide to the Birds of Western North America (Sibley 2003) for birds, A Field Guide to Western Reptiles and Amphibians (Stebbins 2003) for herpetofauna, and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are fairly well standardized, scientific names are provided immediately following common names in this report (first reference only).

2.7 JURISDICTIONAL DRAINAGES AND WETLANDS

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect potential natural drainage features, ponded areas, or water bodies that may be considered riparian/riverine habitat and/or fall under the jurisdiction of the United State Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction.

Section 3 Existing Conditions

3.1 LOCAL CLIMATE

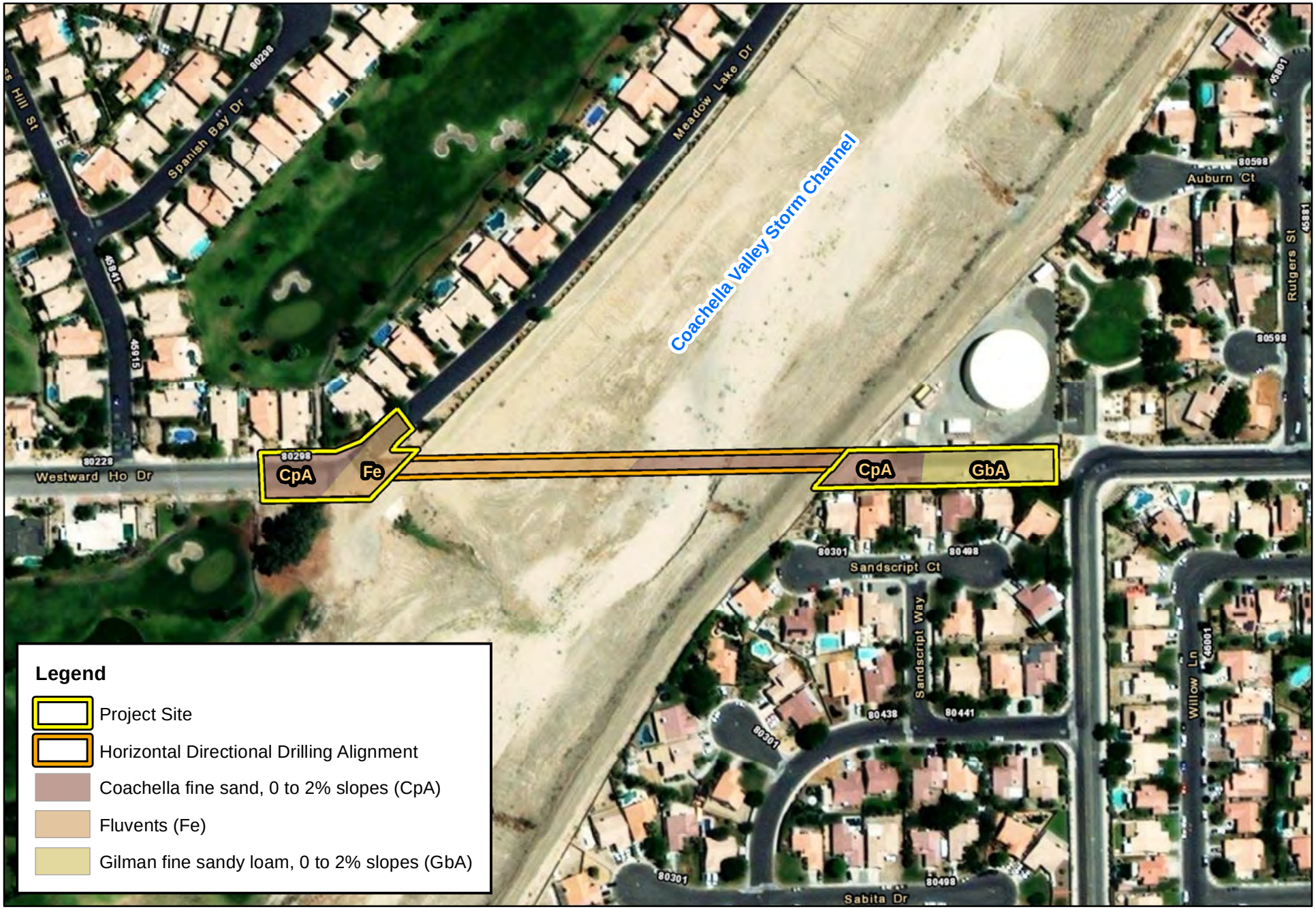
Riverside County features a somewhat cooler version of a Mediterranean climate, or semi-arid climate, with warm, sunny, dry summers and cool, rainy, mild winters. Relative to other areas in Southern California, winters are colder with frost and with chilly to cold morning temperatures common. Climatological data obtained for the City of Indio indicates the annual precipitation averages 3.44 inches per year. Almost all of the precipitation in the form of rain occurs in the months between December and March, with hardly any occurring between the months of October and March. The wettest month is February, with a monthly average total precipitation of 0.64 inches, and the driest months is June, with a monthly average total precipitation of 0.01 inches. The average maximum and minimum temperatures are 89.5- and 62.1-degrees Fahrenheit (° F) respectively with July (monthly average high 107.3° F) being the hottest month and December (monthly average low 44.2° F) being the coldest. The temperature during the site visit was in the low 90s ° F with no cloud cover overhead.

3.2 TOPOGRAPHY AND SOILS

The proposed project site is located at an elevation of approximately 40 feet above mean sea level on either side of the CSWC. The CSWC, where the proposed HDD will occur ranges in elevation from 20 to 40 feet above mean sea level. the CVSC slopes gently from the banks to the bottom of the channel, while the banks are relatively flat. Based on the USDA NRCS Soil Survey, the project site is underlain by the following soil units: Coachella fine sand (0 to 2 percent slopes), fluvents, and Gilman fine sandy loam (0 to 2 percent slopes). Refer to Exhibit 4, *Soils*). Onsite soils, within the project footprint, have been heavily compacted and disturbed from existing development. Soils within the CVSC are subject to flooding events and are relatively undisturbed.

3.3 SURROUNDING LAND USES

The project site is located in an area that has undergone a conversion from natural habitats to a mosaic of residential, recreational, commercial, and industrial developments with heavily disturbed/isolated undeveloped parcels spaced throughout. The project site is bordered by existing residential and recreational (golf course) land uses with the CVSC traversing the middle of the project site in a southwest to northeast direction.



VSD SEWER SIPHON REPLACEMENT AT WESTARD HO
BIOLOGICAL RESOURCES REPORT

Soils

ELMT CONSULTING

0 62.5 125 250 Feet

Source: ESRI Aerial Imagery, Soil Survey Geographic Database, Riverside County

Exhibit 4

Section 4 Discussion

4.1 SITE CONDITIONS

The western portion of the project site, at the eastern terminus of Westward Ho Drive is developed and supports paved (asphalt) roadways and areas that support routine disturbance on the bank of the CVSC. The eastern portion of the project site, at the western terminus of venue 46, supports areas that are developed/heavily disturbed in association with the existing VSD facilities. There is loose gravel and existing storage tanks north of the footprint. The CVSC, within the survey area, supports heavily disturbed areas on its banks and an ephemeral low flow channel.

4.2 VEGETATION

The proposed project footprint is composed of developed and undeveloped/vacant areas. No natural plant communities were observed within proposed project footprint. Two (2) land cover types that would be classified as disturbed and developed were observed on-site (Exhibit 5, *Vegetation*). Additionally, a the CVSC, within the survey area, supports heavily disturbed areas on its banks and an ephemeral channel bottom. These land cover types and plant community are described in further detail below.

4.2.1 Disturbed

The disturbed areas on the project site occur on the upper banks of CVSC. These areas have been significantly impacted by routine grading activities. These disturbed areas primarily support non-native weedy/early successional plant species. Plant species observed within the disturbed areas of the site include mouse barley (*Hordeum murinum*), puncture vine (*Tribulus terrestris*), prickly-lettuce (*Lactuca serriola*), annual sunflower (*Helianthus annuus*), and Russian thistle (*Salsola tragus*).

4.2.2 Developed

Developed areas encompass all building/structures, paved, impervious surfaces. Developed areas observed onsite include paved (asphalt roads) and loose gravel areas associated within existing facilities. Vegetation observed within these areas was minimal and consisted of ornamental/landscaped plants associated with onsite development.

4.2.3 Channel Bottom

The bottom portion of the CVSC is subject to ephemeral storm flows and is routinely scoured following storm events. This area is generally devoid of vegetation with the exception of early successional plant species.

4.3 WILDLIFE

Plant communities provide foraging habitat, nesting and denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species observed, expected,

or not expected to occur on-site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather condition in which the survey was conducted. Wildlife observations were based on calls, songs, scat, tracks, burrows, and actual sightings of animals.

4.3.1 Fish

No fish or hydrogeomorphic features (e.g., creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on the project site. The CVSC, which flows through the survey area, is primarily subject to ephemeral water sources, and provides a limited amount of habitat for fish species. No fish are expected to occur within the CVSC within where the HDD will occur. Implementation of the proposed project will not have any direct impacts to the CVSC, and indirect impacts from project implementation are not expected to impact any fish species they may occur in the CVSC when wet.

4.3.2 Amphibians

The CVSC is ephemeral and provides a limited amount of habitat to support common amphibian species such as Baja California tree frog (*Pseudacris hypochondriaca*), and American bullfrog (*Lithobates catesbeianus*) when water is present within the channel. Implementation of the proposed project will not have any direct impacts to the CVSC, and indirect impacts from project implementation are not expected to impact any amphibian species they may occur in the wet portion of the CVSC.

4.3.3 Reptiles

The project site provides minimal habitat to support reptilian species adapted to significant human disturbance and development. The only reptilian species observed during the field investigation was western side-blotched lizard (*Uta stansburiana elegans*). Other common reptile species that have the potential to occur on the project site include Great Basin fence lizard (*Sceloporus occidentalis longipes*), southern alligator lizard (*Elgaria multicarinata*), gopher snake (*Pituophis catenifer*), zebra tail lizard (*Callisaurus draconoides rhodostictus*), and coachwhip (*Coluber flagellum piceus*).

4.3.4 Birds

The project site provides minimal foraging and nesting habitat for a variety of local bird species, especially those adapted to a high degree of routine anthropogenic disturbance. Avian species detected during the field investigation include black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), rock pigeon (*Columbia liva*), northern mockingbird (*Mimus polyglottos*), Brewer's blackbird (*Euphagus cyanocephalus*), greater roadrunner (*Geococcyx californianus*), and Eurasian collard dove (*Streptopelia decaocto*).

4.3.5 Mammals

The project site provides minimal foraging and denning habitat for mammalian species adapted to significant human disturbance and development. However, most mammal species are nocturnal and are difficult to observe during a diurnal field visit. Mammals detected during the field assessment included

desert cottontail (*Sylvilagus audubonii*), Botta's pocket gopher (*Thomomys bottae*), and California ground squirrel (*Otospermophilus beecheyi*). Other mammalian species that have the potential to occur on the project site include opossum (*Didelphis virginiana*), coyote (*Canis latrans*), and racoon (*Procyon lotor*). No bat species are expected to roost on-site due to a lack of suitable roosting habitat (i.e., trees, crevices, abandoned structures) within and surrounding the project site.

4.4 NESTING BIRDS

The project site provides minimal foraging and cover habitat for year-round/seasonal avian residents, migrating songbirds, and raptors that occur in the area. The ornamental vegetation associated with the bordering residential developments and the CVSC provide marginal nesting opportunities for avian species. Further, the open unvegetated areas within the disturbed portions of the CVSC provide suitable nesting opportunity for ground-nesting birds such as killdeer (*Charadrius vociferus*). No actively breeding bird species or birds displaying nesting behaviors were observed during the field investigation.

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). In order to ensure no impacts occur to birds protected under the MBTA, a nesting bird clearance survey is recommended to be conducted prior to any ground disturbance or vegetation removal activities.

4.5 MIGRATORY CORRIDORS AND LINKAGES

Habitat linkages provide links between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages, but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The proposed limits of disturbance will be confined to existing disturbed and/or developed areas, which have removed natural plant communities from the project site. Further, site is surrounded by existing developments, which have eliminated connection to nearby wildlife movement corridors.

The CVSC, that extends northwest to southeast through the middle of the project area, has not been identified in the CVMSHCP as a habitat linkage or migration corridor. Although channelized, the CVSC has the potential to provide local wildlife movement opportunities for a limited variety of wildlife species. However, the project will be confined within the boundaries of existing development, outside of the CVSC. As a result, implementation of the proposed project will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area.

4.6 JURISDICTIONAL AREAS

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge and/or fill materials into "waters of the United States" pursuant to Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and associated plant communities pursuant to Section 1602 of the Fish and Game Code, and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act. A formal jurisdictional delineation of the project site was prepared under separate cover.

CVSC traverses the middle of the project stie from a northwest to southeast direction. This drainage feature is an ephemeral feature and only flows during storm events. No riparian vegetation was observed along the drainage feature within the proposed alignment. The CVSC, within the survey area, would fall under the regulatory authority of the Corps, Regional Board, and CDFW. Based on the proposed design, a Horizontal Direction Drilling (HDD) method will be used to install the pipeline under the CVSC, which would not result in any jurisdictional impacts and regulatory approvals would not be required. Best Management Practices (BMPs) will be used to ensure no indirect impacts to the drainage feature will occur during installation.

4.7 SPECIAL-STATUS BIOLOGICAL RESOURCES

The CNDDB was queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the La Quinta USGS 7.5-minute quadrangle. A search of published records of these species was conducted within this quadrangle using the CDFW's CNDDB Rarefind 5 online software and CNDDB Quickview Tool. The CNPS Inventory of Rare and Endangered Vascular Plants of California supplied information regarding the distribution and habitats of vascular plants in the vicinity of the project site.

The literature search identified sixteen (16) special-status plant species and twenty-three (23) special-status wildlife species, and one (1) special-status plant community as having potential to occur within the La Quinta quadrangle. Special-status plant and wildlife species were evaluated for their potential to occur within the project boundaries based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the project site are presented in Appendix C, *Potentially Occurring Special-Status Biological Resources*, and discussed below.

4.7.1 Special-Status Plants

Sixteen (16) special-status plant species have been recorded in the CNDDB and CNPS in the La Quinta quadrangle (refer to Appendix C). No special-status plant species were observed on-site during the field investigation. The project site consists of heavily disturbed and developed land that have been subject to a variety of anthropogenic disturbances. These disturbances have reduced, if not eliminated, the ability of the project site to provide suitable habitat for special-status plant species. Based on habitat requirements for the identified special-status species, and known distributions, it was determined that

the project site does not have potential to support any of the special-status species documented as occurring within the vicinity of the project site and all are presumed absent.

4.7.2 Special-Status Wildlife

Twenty-three (23) special-status wildlife species have been reported in the La Quinta quadrangle (refer to Appendix C). No special-status wildlife species were observed on-site. Based on habitat requirements for the identified special-status wildlife species, and known distributions, it was determined that the project site has a low potential to provide suitable habitat for burrowing owl (*Athene cunicularia*) and western yellow bat (*Lasiurus xanthinus*). All other special-status species are presumed to be absent from the project site. With implementation of a pre-construction burrowing owl and nesting bird clearance survey, no impacts to special-status species are expected to occur.

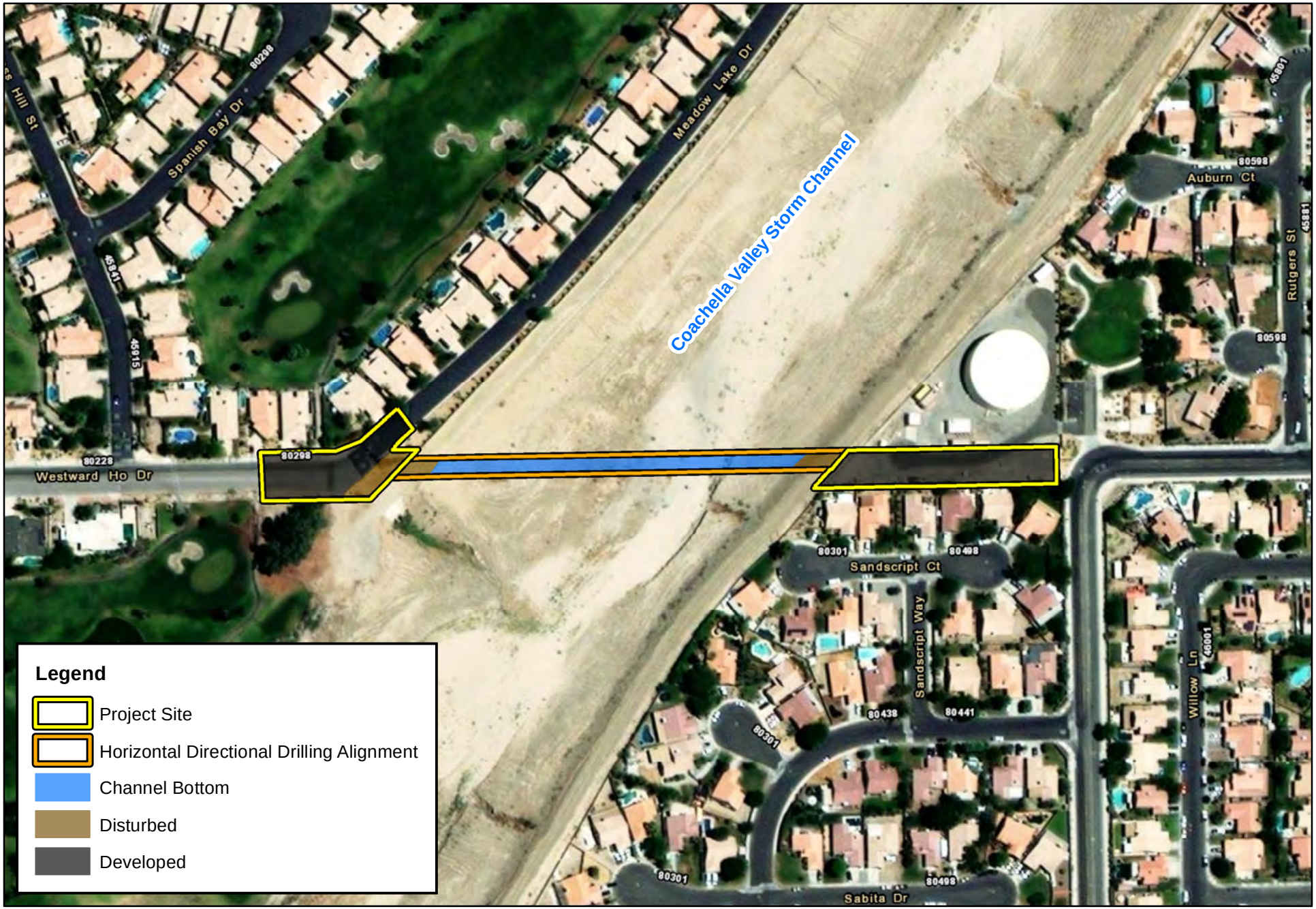
4.7.3 Special-Status Wildlife

According to the CNDDB, one (1) special-status plant community has been reported in the La Quinta USGS 7.5-minute quadrangle: Desert Fan Palm Oasis Woodland. No special-status plant communities were observed onsite.

4.8 CRITICAL HABITAT

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located within federally designated Critical Habitat (Exhibit 6, *Critical Habitat*). The closest federally designated Critical Habitat is located approximately 3.7 miles southwest of the site for Peninsular bighorn sheep (*Ovis canadensis nelsoni*), and 4.8 miles for northwest of the project stie for Coachella Valley milkvetch (*Astragalus lentiginosus var. coachellae*), and Coachella Valley fringe-toed lizard (*Uma inornata*). Therefore, implementation of the proposed project will not result in any impacts or adverse modification to designated Critical Habitat.



VSD SEWER SIPHON REPLACEMENT AT WESTARD HO
BIOLOGICAL RESOURCES REPORT

Vegetation

ELMT CONSULTING

0 62.5 125 250 Feet

Source: ESRI Aerial Imagery, Riverside County

Exhibit 5

VSD SEWER SIPHON REPLACEMENT AT WESTARD HO
BIOLOGICAL RESOURCES REPORT

ELMT CONSULTING

0 0.5 1 2 Miles

Source: ESRI Aerial Imagery, USFWS Critical Habitat, Riverside County

Critical Habitat

Exhibit 6

Section 5 Coachella Valley MSHCP Consistency Analyis

The project site is not located within any of the CVMSHCP designated conservation areas; the closest conservation area is the Santa Rosa and San Jacinto Mountains Conservation Area Conservation Area located approximately 2.4 miles southwest of the project site (Exhibit 7, *CVMSHCP Conservation Areas*).

5.1 COVERED ACTIVITIES OUTSIDE CONSERVATION AREAS

The proposed project was reviewed to determine consistency with the CVMSHCP. Geographic Information System (GIS) software was utilized to map the project site in relation to the CVMSHCP including conservation areas, corridors and linkages, and sand transport areas. The CVMSHCP requires that local permittees comply with various protective measures for covered species, communities, essential ecological processes, and biological corridors. In addition, certain projects may be subject to local development mitigation fees, a Joint Project Review Process, or other conservation or implementation measures.

The proposed project is not listed as a planned "Covered Activity" under the published CVMSHCP but is still considered to be a current Covered Activity pursuant to Section 7.1 of the CVMSHCP. According to Section 7.1 of the CVMSHCP, take authorization will be provided for certain activities that take place outside of Conservation Areas including *"Public facility construction, operations (not including groundwater withdrawal), and maintenance and safety activities by the Permittees for existing and future facilities, including both on and off site activities. Such facilities include, but are not limited to, publicly maintained roads and rights-of-way; materials pits; maintenance yards; flood control facilities; landfills, transfer stations, and other solid waste related facilities, including those for the processing of organic materials; public buildings; water development, production, storage, treatment, and transmission facilities; sewage treatment and transmission facilities; reclaimed water storage and transmission facilities; public parks; substations and electric transmission facilities; and other public utility facilities providing services essential to the health, safety, and welfare of the public."*

As a Covered Activity located outside designated conservation areas, implementation of the proposed project is expected to be consistent with the applicable avoidance, minimization, and mitigation measures described in Section 4.4 of the CVMSHCP (refer to Appendix D). Since the proposed project is considered a Covered Activity under Section 7.1 of the CVMSHCP, no further avoidance, minimization, and mitigation measures are required, and the project is in compliance with the CVMSHCP.

5.2 CVMSHCP LAND USE ADJACENCY GUIDELINES

The purpose of Land Use Adjacency Guidelines is to avoid or minimize indirect effects from Development adjacent to or within the Conservation Areas. Adjacent means sharing a common

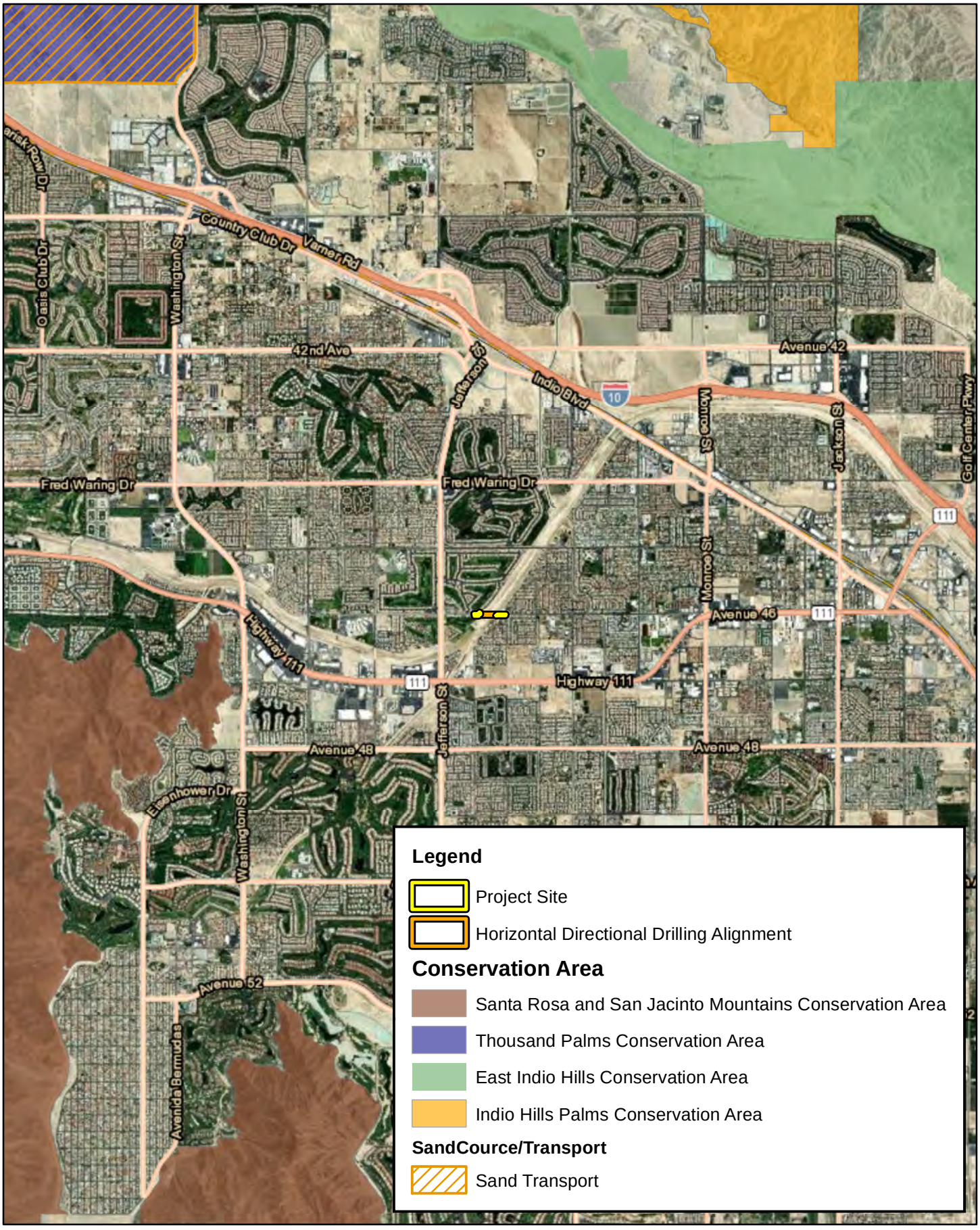
boundary with any parcel in a Conservation Area. Such indirect effects are commonly referred to as edge effects, and may include noise, lighting, drainage, intrusion of people, and the introduction of non-native plants and non-native predators such as dogs and cats.

The proposed project is not located within or adjacent to any CVMSHCP Conservation Areas. Therefore, the CVMSHCP Land Use Adjacency Guidelines do not apply to implementation of the proposed project.

5.3 CVMSHCP COVERED SPECIES

The CVMSHCP identifies modeled habitat for Palm Springs pocket mouse (*Perognathus longimembris bangsi*) within the CSVC; therefore, extra time was taken to evaluate the habitat within the CVSC during the field investigation. Palm Springs pocket mouse is not federally or State listed as threatened or endangered.

Based on the results of the field investigation, the project site consists of heavily disturbed and developed land that have been subject to a variety of anthropogenic disturbances. These disturbances have reduced, if not eliminated, the ability of the project site to provide suitable habitat for Palm Springs pocket mouse. As a result, the project site does not support suitable habitat for this species, and no impacts to CVMSHCP Covered Species are expected to occur from project implementation.



VSD SEWER SIPHON REPLACEMENT AT WESTARD HO
BIOLOGICAL RESOURCES REPORT

CVMSHCP Conservation Areas

ELMT CONSULTING

0 0.5 1 2 Miles

Source: ESRI Aerial Imagery, CVMSHCP, Riverside County

Exhibit 7

Section 6 Conclusion and Recommendations

Based on the literature review and field survey, implementation of the project will have no significant impacts on federally or State listed species known to occur in the general vicinity of the project site. Additionally, the project will have no effect on designated Critical Habitat because none exists within the area. No further surveys are recommended. With completion of the recommendations provided below, no impacts to year-round, seasonal, or special-status avian residents or special-status species will occur from implementation of the proposed project. The CVSC traverses the project site that will fall under the regulatory authority of the Corps, Regional Board, and CDFW. Any impacts to this feature will require regulatory approvals to be obtained. However, the proposed project will use a HDD method to install the pipeline under the drainage and no impacts are expected to occur.

Special-Status Plant Species

Based on habitat requirements for specific species and the availability and quality of habitats on-site, it was determined that the project site does not have potential to support any of the special-status plant species documented as occurring within the vicinity of the site and all are presumed absent. Therefore, no impacts to special-status plant species are expected to occur due to project implementation.

Special-Status Wildlife Species

Based on habitat requirements for the identified special-status wildlife species, and known distributions, it was determined that the project site and survey area have a low potential to provide suitable habitat for burrowing owl and western yellow bat. All other special-status species are presumed to be absent from the project site. With implementation of a pre-construction burrowing owl and nesting bird clearance survey, no impacts to special-status species are expected to occur.

Riparian Habitat and Special-Status Natural Communities

The CVSC will fall under the regulatory authority of the Corps, Regional Board, and CDFW. All activities related to project implementation will be confined to disturbed/developed areas outside the bank of the CVSC. No direct impacts to the CVSC are expected to occur. The project stie will utilize HDD under the CVSC, and as a result, impacts to Corps, Regional Board, or CDFW jurisdiction will not occur and regulatory approvals will not be required.

No special-status natural communities were observed within the boundaries of the project site or CVSC with the survey area. Therefore, no special-status natural communities will be impacted by project implementation.

Wildlife Corridors and Linkages

The project is confined to existing disturbed and/or developed areas, which have eliminated connection to nearby wildlife movement corridors. The CVSC has the potential to provide local wildlife movement opportunities for a limited variety of wildlife species. The project is expected to be confined within the boundaries of existing development and the CVSC is not expected to be impacted. As a result,

implementation of the proposed project will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area.

Migratory Bird Treaty Act and CDFW Fish and Game Code Compliance

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a 300-foot buffer around the active nest. For listed and raptor species, this buffer should be expanded to 500 feet. A biological monitor should be present to delineate the boundaries of the buffer area and monitor the active nest to ensure that nesting behavior is not adversely affected by construction activities. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Additionally, although focused surveys for burrowing owl are not recommended, it is recommended that a pre-construction burrowing owl clearance survey be conducted prior to any ground disturbance or vegetation removal activities to ensure that burrowing owls remain absent and impacts do not occur to any occupied burrows that may be located on or within 500 feet of the project site.

CVMSHCP Compliance

As a Covered Activity located outside designated conservation areas, construction of the proposed project is expected to implement the applicable avoidance, minimization, and mitigation measures described in Section 4.4 of the CVMSHCP (refer to Appendix D). With implementation of applicable avoidance and minimization measures, as well as payment of the CVMSHCP local development mitigation fee, the proposed project would be fully consistent with the biological goals and objectives of the CVMSHCP.

Section 7 References

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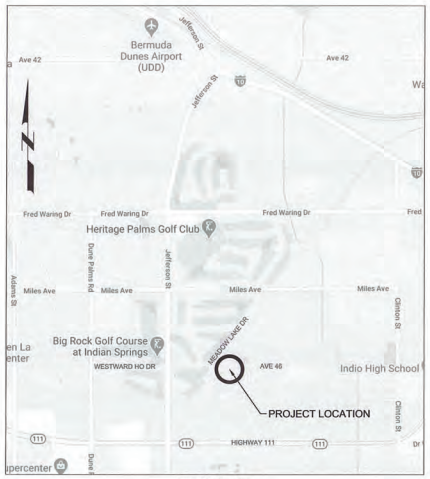
Appendix A Site Plans

VSD

VALLEY SANITARY DISTRICT

VSD SEWER SIPHON REPLACEMENT CROSSING
THE COACHELLA VALLEY STORMWATER CHANNEL AT WESTWARD HO DESIGN



VICINITY MAP
NO SCALE

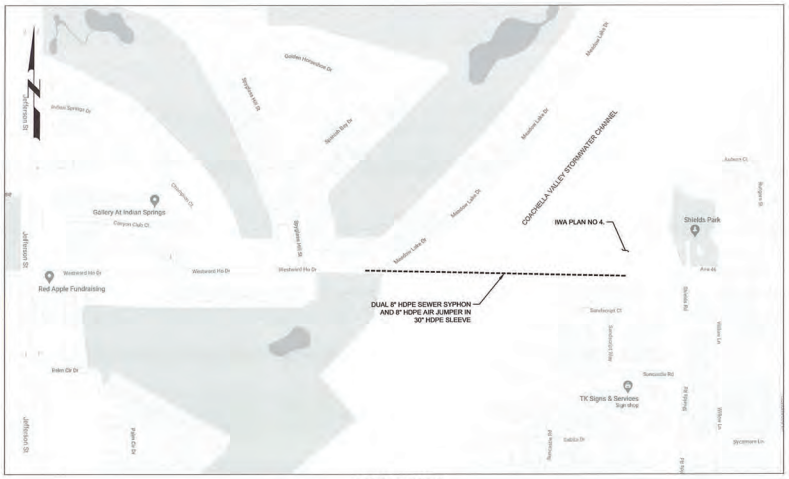
BOARD OF DIRECTORS

DIRECTORS:
- SCOTT SEAR, *PRESIDENT*
- DENNIS COLEMAN, *VICE PRESIDENT*
- DEBRA CANERO, *SECRETARY / TREASURER*
- MIKE DURAN, *DIRECTOR*
- WILLIAM TEAGUE, *DIRECTOR*

GENERAL MANAGER:
- BEVERLI A. MARSHALL

APPROVED: 3/17/22

RON BUCHWALD — DATE
ENGINEERING SERVICES MANAGER



LOCATION MAP
NO SCALE

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UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

INFORMATION ONLY

CONTRACTOR:						DRAWN BY: ATTILA SIMON	DESIGNER'S SEAL: REGISTERED PROFESSIONAL ENGINEER — CORNELIUS J. GANTNEY — NO. 34674 — CIVIL — STATE OF CALIFORNIA
INSPECTOR:						PREPARED FOR: VSD	
DATE COMPLETED:						PROJECT No.: 11022D.10	
AS BUILT COMP. DATE:						SCALE: AS_SHOWN	
CONSTRUCTION RECORD	BY: ENGINEER	DATE	REVISIONS	APP'D	DATE		
BENCHMARK: SEE SHEET G-03	BASIS OF BEARING: SEE SHEET G-03						

ENGINEER: CORNELIUS J. GANTNEY — NAME — DATE
R.C.E. No. 34674
NAME OF FIRM: CAROLLO ENGINEERS, INC.
FIRM ADDRESS: 707 WILSHIRE BLVD, SUITE 3920
LOS ANGELES, CA 90017
TELEPHONE # (213) 279-3311 FAX # (213) 572-0361

APPROVER'S SEAL: REGISTERED PROFESSIONAL ENGINEER — RONALD E. BUCHWALD — No. 53121 — Exp. 6/30/23 — CIVIL — STATE OF CALIFORNIA

APPROVED BY:
NAME: RONALD E. BUCHWALD
TITLE: ENGINEERING SERVICES MANAGER
RCE No. C 53121
DATE: 3/17/22

TELEPHONE (760) 238-5400 FAX (800) 750 - 2280
VSD
45-500 VAN BUREN, INDIO, CA 92201
www.valley-sanitary.org

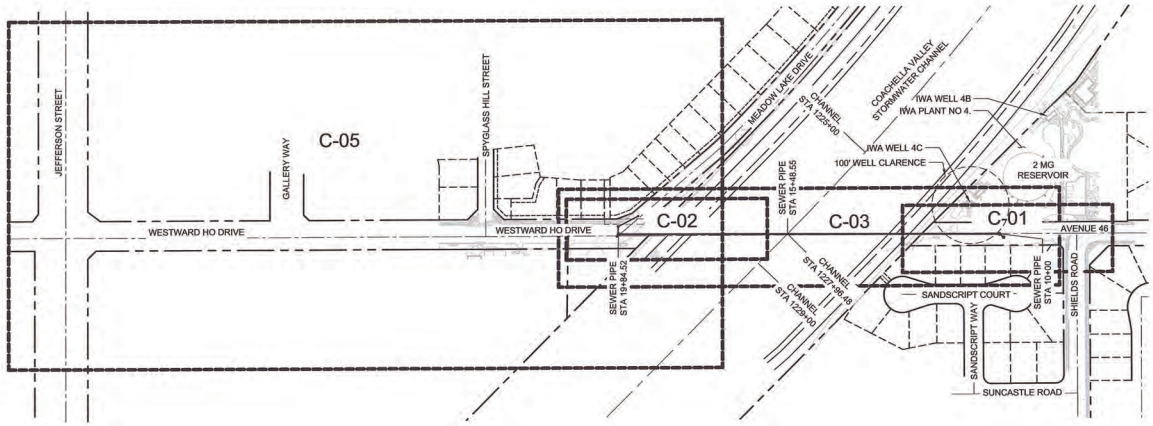
CITY OF INDIO
VSD SEWER SIPHON REPLACEMENT CROSSING THE COACHELLA STORMWATER CHANNEL AT WESTWARD HO DESIGN
COVER SHEET
SITE ADDRESS:

I.P. No.
SHEET No. G-01
01 OF 12 SHEETS
CITY FILE No.

48231

Plot Date: 3/16/2022 4:45 PM
FILE NAME: 11022D10G3_01.DWG
PROJECT NO. 11022D10
LAST SAVED BY: SSAUCEDO

KEY MAP



DRAWING INDEX

NO. OF SHEETS	SHEET NO.	REV.	SHEET TITLE
1.	G-01		COVER SHEET
2.	G-02		DRAWING INDEX AND KEY MAP
3.	G-03		ABBREVIATIONS AND CIVIL NOTES
4.	C-01		SEWER SYPHON PLAN AND PROFILE 1 STA 9+85.89 TO 12+50
5.	C-02		SEWER SYPHON PLAN AND PROFILE 1 STA 16+00 TO 19+95.39
6.	C-03		HORIZONTAL DIRECTIONAL DRILLING PROFILE STA 9+46.16 TO 20+76.81
7.	C-04		HDD PULL-BACK LAYDOWN AREA
8.	GC-01		MANHOLE DETAILS - 1
9.	GC-02		MANHOLE DETAILS - 2
10.	GC-03		MANHOLE DETAILS AND TRENCHLESS DETAILS - 3
11.	GC-04		VALLEY SANITARY DISTRICT STANDARD DETAILS
12.	GC-05		CITY OF INDIO STANDARD PLANS

INFORMATION ONLY

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CONTRACTOR:				DRAWN BY: ATTILA SIMON	DESIGNER'S SEAL: REGISTERED PROFESSIONAL ENGINEER CORNELIUS J. GANTNEY NO. 34674 CIVIL STATE OF CALIFORNIA
INSPECTOR:				PREPARED FOR: VSD	
DATE COMPLETED:				PROJECT No.: 11022D.10	
AS BUILT COMP. DATE:				SCALE: AS_SHOWN	
	BY	DATE			
CONSTRUCTION RECORD	ENGINEER		REVISIONS	APP'D	DATE
BENCHMARK: SEE SHEET G-03	BASIS OF BEARING: SEE SHEET G-03				

ENGINEER:
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DATE: 3/17/22

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VSD
45-500 VAN BUREN, INDIO, CA 92201
www.valley-sanitary.org

CITY OF INDIO
VSD SEWER SIPHON REPLACEMENT CROSSING THE COACHELLA STORMWATER CHANNEL AT WESTWARD HO DESIGN
DRAWING INDEX AND KEY MAP
SITE ADDRESS:

I.P. No.
SHEET No. G-02
02 OF 12 SHEETS
CITY FILE No.

48232

Plot Date: 3/16/2022 4:08 PM
FILE NAME: I:\11022D\103_02.DWG
PROJECT NO. 11022D.10
LAST SAVED BY: SSANCHEZ

NOTES

GENERAL NOTES:

1. VSD APPROVAL OF THE PLANS DOES NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS OR OMISSIONS DISCOVERED DURING OR AFTER CONSTRUCTION. IN ADDITION, APPROVAL OF THIS PLAN BY VSD DOES NOT CONSTITUTE A REPRESENTATION OF THE ACCURACY OF THE LOCATION OF AND/OR THE EXISTENCE / NON-EXISTENCE OF ANY UNDERGROUND FACILITY WITHIN THE LIMITS OF THIS PROJECT.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SHALL CONFORM TO THE CONTRACT DOCUMENTS UNLESS OTHERWISE NOTED.
3. ALL PLAN SHEET REVISIONS SHALL BE APPROVED BY VSD IN WRITING PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL HAVE A COPY OF THE PROJECT SPECIFICATIONS ON THE JOBSITE AT ALL TIMES.
5. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT AS REQUIRED BY STATE LAW. ALL UTILITY CROSSINGS SHALL BE POTHOLED PRIOR TO THE START OF ALL EXCAVATION OPERATIONS.
6. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING A COMPLETE RECORD OF ALL CHANGES TO THE PLANS AND SHALL MAKE SUCH RECORD AVAILABLE TO VSD AS ANY TIME DURING THE COURSE OF CONSTRUCTION AND TO THE APPLICANT'S ENGINEER AT THE COMPLETION OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE RECORD DRAWINGS TO VSD FOR REVIEW AND APPROVAL PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. THE RECORD DRAWINGS SHALL BE PROVIDED TO VSD IN A DIGITAL PDF AND BOND COPIES.
7. THE CONTRACTOR SHALL SUBMIT TO VSD A MATERIALS AND COMPACTION REPORT PREPARED BY A LICENSED SOILS ENGINEER WHICH CERTIFIES THAT THE TRENCH BACKFILL WAS COMPACTED AS DIRECTED BY THE SOILS ENGINEER IN ACCORDANCE WITH THE ONSITE SOILS CONDITIONS, VSD STANDARDS SPECIFICATIONS AND DAILY COMPACTION REPORTS, DOCUMENTING ADEQUATE AND PROPER COMPACTION.
8. THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR AFTER THE DATE OF FINAL ACCEPTANCE BY VSD AND SHALL REPAIR AND/OR REPLACE ANY WORK THAT MAY PROVE DEFECTIVE IN WORKMANSHIP AND/OR MATERIALS WITHIN THE ONE YEAR PERIOD WITHOUT EXPENSE WHATSOEVER TO VSD. DURING THIS WARRANTY PERIOD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DISCHARGES OR OVERFLOWS.
9. PRIOR TO THE START OF CONSTRUCTION:
   - THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS REPRESENTING ALL MATERIALS NOTED IN THE PLANS TO VSD FOR REVIEW AND ACCEPTANCE. WORK SHALL NOT COMMENCE UNTIL SUCH SUBMITTALS ARE ACCEPTED BY VSD.
   - NO WORK SHALL COMMENCE UNTIL ALL PERMITS HAVE BEEN OBTAINED FROM THE JURISDICTIONAL CITY(IES), COUNTY AND/OR OTHER PERMITTING AGENCIES.
   - THE CONTRACTOR SHALL PROVIDE THE DISTRICT WITH A COPY OF THEIR VALID OSHA TRENCHING PERMIT PRIOR TO BEGINNING ANY SEWER WORK.
10. GRAVITY SEWER PIPE MATERIAL SHALL BE HDPE DIPS DR-11 PE4710. OTHER PIPE MATERIALS MAY BE ALLOWED FOLLOWING APPROVAL BY VSD.
11. OSHA SAFETY ORDERS AND OSHA CONFINED SPACE ENTRY REQUIREMENTS SHALL BE FOLLOWED AT ALL TIMES WITHOUT EXCEPTION.
12. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL LOCAL, STATE AND FEDERAL SAFETY REGULATIONS INCLUDING BUT NOT LIMITED TO, TRENCH SAFETY AND CONFINED SPACE ENTRY.
13. POLYMER PRECAST CONCRETE MANHOLES PER SECTION 33_05_51.02 - POLYMER PRECAST CONCRETE MANHOLES. THE FLOW CHANNEL SHALL BE FACTORY CAST MONOLITHICALLY AN PLACED ON TOP OF PRECAST MANHOLE BASE AND SEALED IN ACCORDANCE WITH THE MANUFACTRIER'S RECOMMENDATIONS.
14. THE LOCATION OF ANY AND ALL UNDERGROUND UTILITIES MAY OR MAY NOT BE SHOWN ON THESE PLANS INCLUDING WATER SERVICES AND SEWER LATERALS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH THE JOBSITE AND UNDERGROUND UTILITIES. THE CONTRACTOR SHALL AT HIS OWN EXPENSE AND COST CONSTRUCT ALL IMPROVEMENTS IN SUCH A MANNER AS WILL PROTECT ALL UNDERGROUND UTILITIES. THE VALLEY SANITARY DISTRICT AND ENGINEER SHALL NOT BE RESPONSIBLE FOR DAMAGE TO UNDERGROUND UTILITIES.
15. THE CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTATION. IF ANY SURVEY MONUMENTS ARE DISTURBED OR DESTROYED DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL RETAIN A LICENSED SURVEYOR TO RE ESTABLISH AND RECORD THE MONUMENT CHANGE PER STATE LAW, VSD AND THE LOCAL GOVERNING AGENCY SHALL BE SUPPLIED WITH COPIES OF ALL RECORD SURVEY DOCUMENTS.
16. CONNECTIONS TO EXISTING SEWER PIPE OR MANHOLES SHALL BE DONE IN THE DIRECT SUPERVISION OF THE VSD INSPECTOR. NEW SEWER SHALL NOT BE CONNECTED OR ALLOWED TO FLOW TO EXISTING SEWER UNTIL THE INSTALLATION HAS BEEN APPROVED BY VSD.
17. ALL SERVICE LATERALS SHALL BE LOCATED AT RIGHT ANGLES TO THE SEWER MAIN UNLESS OTHERWISE SHOWN AS APPROVED BY VSD ON THE PLANS.
18. LOCATING TAPE SHALL BE BURIED OVER EACH LATERAL AND SANITARY SEWER MAIN. TAPE SHALL BE PLACED IN THE TRENCH A MINIMUM OF TWO FEET ABOVE THE TOP OF THE PIPE.
19. ALL PIPE SHALL BE HANDLED AND INSTALLED SO AS TO PROTECT THE PIPE, JOINTS, LINING AND COATING AT ALL TIMES. THE PIPE SHALL BE CAREFULLY BEDDED TO PROVIDE CONTINUOUS BEARING AND PREVENT UNEVEN SETTLEMENT. PIPE SHALL BE PROTECTED AGAINST FLOTATION AT ALL TIMES. OPEN ENDS OF THE PIPE SHALL BE SEALED AT ALL TIMES WHEN CONSTRUCTION IS NOT IN PROGRESS.
20. ALL SEWER MAINLINE AND LATERAL PIPES SHALL BE IN PLACE AND SHALL HAVE FINAL APPROVAL BY VSD PRIOR TO PAVING.
21. FOR PLACEMENT OF ALL CONCRETE AND AGGREGATE MATERIALS, THE CONTRACTOR SHALL PROVIDE VSD WITH THE MIX DESIGN, PRIOR TO PLACEMENT OF THE MATERIALS AND DELIVERY TICKETS, AT THE TIME OF PLACEMENT.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE TO PIPE OR MANHOLES INCURRED WHILE EXCAVATING, BACKFILLING AND COMPACTING
23. DUST SHALL BE CONTROLLED BY WATERING OR APPROVED METHODS.
24. ACCESS FOR FIRE AND OTHER EMERGENCY VEHICLES SHALL BE MAINTAINED TO THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
25. ALL SEWER MAINLINE AND LATERAL PIPES SHALL BE MANDRELED AND AIR TESTED, PER THE "GREENBOOK" SPECIFICATIONS, AT THE APPLICANT/CONTRACTOR'S EXPENSE, PRIOR TO FINAL ACCEPTANCE BY VSD. VSD WILL REQUIRE TELEVISED INSPECTION AT THE CONTRACTOR'S EXPENSE UNLESS OTHERWISE DIRECTED.
26. ALL OPEN EXCAVATIONS SHALL BE PROTECTED EITHER BY PLATES OR FENCING DURING NON-WORKING HOURS. THE MAXIMUM LENGTH OF TRENCH THAT CAN REMAIN UNCOVERED FOR GREATER THAN 8 HOURS SHALL COMPLY WITH THE MORE RESTRICTIVE REQUIREMENTS OF THE ENCROACHMENT PERMITS FROM THE CITIES OF LA QUINTA AND INDIO.
27. ALL SEWER MANHOLE FRAMES AND COVERS SHALL BE LEFT 6" BELOW SUBGRADE. SEWER CONTRACTOR SHALL RAISE THE FRAMES AND COVERS TO FINISH GRADE UPON COMPLETION OF SURFACING AS PER VALLEY SANITARY DISTRICT STANDARD DRAWING. MANHOLE COVERS SHALL BE CLEANED OF ALL DEBRIS. COVERS SHALL HAVE A BITOMASTIC SEALER APPLIED TO THE SURFACE OF THE MANHOLE FRAME AND COVER.
28. THE CONTRACTOR SHALL SUBMIT A PLAN TO VSD FOR REVIEW AND APPROVAL BY THE OWNER AND VSD FOR ANY CONNECTION/DISCONNECTION TO ANY EXISTING FACILITIES TO THIS PROJECT. UPON APPROVAL OF THE PLAN, A 48 HOUR MINIMUM NOTIFICATION IS REQUIRED BEFORE ANY WORK ON THE CONNECTION/DISCONNECTION OF THE EXISTING FACILITY IS REQUIRED.
29. HIGH PRESSURE GAS LINES ARE KNOWN TO EXIST WITHIN THE PROJECT AREA. CONTRACTOR TO COORDINATE SAFETY PROCEDURES WITH THE GAS COMPANY AND FIELD VERIFY LOCATIONS PRIOR TO CONSTRUCTION. GAS COMPANY MAY REQUIRE ON-SITE INSPECTOR. ALL COSTS OF COORDINATION AND INSPECTION FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
30. ALL CONCRETE SURFACES INSIDE THE SEWER MANHOLES SHALL BE COATED WITH AN APPROVED SEWAGE RESISTANT COATING PER THE PROJECT SPECIFICATIONS SECTION 09_96_01 - HIGH - PERFORMANCE COATINGS.
31. ALL WORK ON THE IWA (INDIO WATER AUTHORITY) WATER MAIN SHALL BE IN ACCORDANCE WITH IWA'S SPECIFICATIONS AND STANDARDS.
32. THE CONTRACTOR SHALL PROVIDE A WATER MAIN RELOCATION PLAN TO THE IWA FOR REVIEW AND APPROVAL PRIOR TO ANY WATER MAIN WORK.
33. CONTRACTOR SHALL NOTIFY IWA INSPECTOR AT (760) 972-7419 TWO WEEKS IN ADVANCE AND 24 HOURS BEFORE WORK STARTS ON SSMH2, SHEET C-01, SSMH3, SHEET C-03 AND ANY OTHER AREA THAT WILL EXPOSE IWA'S WATER MAINS.
34. AN AGREEMENT FOR THE USE, ACCESS AND SECURITY OF IWA'S PLANT 4 SITE MUST BE APPROVED PRIOR TO STARTING CONSTRUCTION.
35. CONTRACTOR TO INSTALL A FULL PIECE OF DUCTILE IRON PIPELINE AT ALL CROSSINGS EXPOSING IWA ASBESTOS CEMENT WATER MAIN. PLEASE REFER TO IWA STANDARDS FOR SIZE AND LIST OF MATERIALS

BENCHMARK:

ELEVATIONS SHOWN HEREON ARE BASED UPON CITY OF INDIO BENCHMARK BM 30J8, ELEVATION 36.82 FEET (NAVD 88).

DESCRIPTION:

BRASS DISK SET IN CONCRETE STAMPED "LS 3018", DOWN 0.5'IN CAPPED MONUMENT WELL AT THE INTERSECTION OF SHIELDS ROAD, JASMINE LANE, AND MOONSHADOW DIRVE.

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA STATE PLANE COORDINATE SYSTEM CSS 83, ZONE 06 BASED UPON GPS OBSERVATIONS AS DERIVED FROM NGS OPUS SOLUTION RTH A REFERENCE FRAME OF NAD 83 (2011) (EPOCH 2010.0000) IGS08 (EPOCH 2014.9253), AT THE BASE STATION 30. ALL BEARINGS SHOWN ON THIS MAP ARE GRID, ALL DISTANCES SHOWN ARE GROUND DISTANCES UNLESS SPECIFIED OTHERMSE. GRID DISTANCES MAY BE OBTAINED BY MULTIPLYING THE GROUND DISTANCE BY A COMBINATION FACTOR OF 0.99997855. CALCULATIONS ARE MADE AT BASE STATION 30 WITH THE COORDINATES OF NORTH: 2,205,805.102 SFT (SURVEY FEET) EAST: 6,556,026.005 SFT USING AN ELEVATION OF 62.041 AFT (NAVD 88). THE RESULTING GRID COORDINATE AT BASE STATION 30 IS HELD FIXED AS THE GROUND COORDINATE AND THE ORIGIN OF THE SCALING GRID TO GROUND. THE GRID BEARING OF NORTH 04°08'10" EAST IS HELD FIXED BETWEEN BASE STATION 50 AND BASE STA10N 99. THE CONVERGENCE ANGLE AS CALCULATE AT BASE STATION 30 IS (–) 00°00'37". THE ELEVATION DATUM FOR THIS SURVEY IS BASED ON NAVD 1988 PER NATIONAL GEODETIC SURVEY BENCH MARK: 3018 (PID AH9133) = 59.02 SFT NAVD 1988. THE ELEVATION WAS CONVERTED TO NGVD 1929 DATUM USING THE NGV VERTCOM CONVERSION PROGRAM. THE NETWORK WAS MEASURED BY GPS OBSERVATIONS AND DIFFERENTIAL LEVELS.

CONTROL POINTS

CP#	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP4	2203673.11'	6558581.91'	54.32'	FD MAGNETIC NAIL
CP13	2203652.44'	6557525.38'	46.97'	SET 60D
CP19	2203744.85'	6558627.89'	54.97'	SET SCBD X
CP20	2203931.02'	6557731.47'	41.17'	SET M/SH
CP2051	2203698.17'	6558244.42'	37.39'	SET 60D
CP2052	2203707.71'	6558331.55'	36.61	SET MAGNETIC NAIL/S
CP2053	2203714.12'	6558483.99'	34.73'	SET MAGNETIC NAIL/S
CP2054	2203940.89'	6558514.19'	56.33'	SET CONCRETE NAIL/S

MONUMENT NOTES

MON.#	DESCRIPTION
MI002	FD COPERWELD FLUSH, IN LIEU OF 1/2" BRASS RAD CAP STAMPED "R.C.E. 13191". PER TRACT MAP NO. 20962, M.B. 301/24-28

POTHOLE TABLE

NO.	N	E	DEPTH (FT)	DESCRIPTION
1	2 203 683	6 557 461	1.4	1-IN PVC CONDUIT
1A	2 203 689	6 557 483	3.4	2 - 4-IN PVC CONDUITS
2	2 203 689	6 557 445	3.7	8-IN PVC WATER PIPELINE
3	2 203 688	6 557 401	0.5	6" AC PVMT TO TOP OF CEMENT SLURRY, 3.0' TO BOTTOM
3A	2 203 689	6 557 404	3.7	2 - 4-IN PVC CONDUITS
4	2 203 680	6 558 280	3.9	16-IN CML&C STEEL WATER PIPELINE
4A	2 203 680	6 558 280	5.3	2-IN PVC CONDUIT
5	2 203 668	6 558 410	5	2-IN PVC CONDUIT
8	2 203 679	6 557 355	10.2	4-IN PVC SEWER
8A	2 203 680	6 557 355	9.1	2-IN PVC CONDUIT
8B	2 203 680	6 557 355	3.3	10-IN DUCTILE IRON WATER
9	2 203 658	6 557 409	5	2-IN PVC CONDUIT

NOTE: POTHOLE NUMBERS CORRELATE TO POTHOLING NUMBERS FROM POTHOLE LOG.

LIST OF STANDARD DETAILS

VALLEY SANITARY DISTRICT STANDARD PLANS USED

PIPE BEDDING & TRENCH BACKFILL	S-5
REINFORCED PRECAST CONCRETE MANHOLE	S-8
STANDARD MANHOLE FRAME & COVER TYPE "A"	S-10
STANDARD MANHOLE FRAME & COVER TYPE "B"	S-11
MANHOLE COLLAR IN ARTERIAL AND NON-ARTERIAL STREETS	S-12
MANHOLE COLLAR OUT OF PAVEMENT	S-13
SEWER MANHOLE MARKER POST	S-19

INDIO WATER AUTHORITY

TRUST AND ANCHOR BLOCKS	709 A

CITY OF INDIO STANDARD PLANS USED

STREET STRUCTURAL SECTION DESIGN REQUIREMENTS	NO: 171
TRENCH REPAIR DETAIL	NO: 172
SPECIAL NOTES FOR TRENCH REPAIR	NO: 172
RECESSED TRENCH PLATE DETAIL	NO: 174
MONUMENT DETAILS AND STANDARDS	NO: 512

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

STANDARD TEMPORARY PIPE SUPPORT	S - a - 222

ABBREVIATIONS

STANDARD ABBREVIATIONS:

DESCRIPTION	ABBREVIATION
AC	ASPHALT CONCRETE
ACP	ASBESTOS CEMENT PIPE
APN	ASSESSORS PARCEL NUMBER
CB	CATCH BASIN
CL, C/L	CENTERLINE
COMM	COMMUNICATION
CONC	CONCRETE
CVWD	COACHELLA VALLEY WATER DISTRICT
C&G	CURB AND GUTTER
DIA	DIAMETER
DW, W	DOMESTIC WATER
E	EAST, EASTING
E/CL	EAST OF CENTERLINE
EL	ELECTRICAL (UNDERGOUND), ELEVATION
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX, EXIST	EXISTING
EG	EXISTING GRADE
FG	FINISHED GRADE
FOC	FIBER OPTIC CONDUIT
FRON	FRONTEER
FS	FINISHED SURFACE
FF	FINISHED FLOOR
FL	FLOW LINE
FUT	FUTURE
GB	GRADE BREAK
HDD	HORIZONTAL DIRECTIONAL DRILL
HDPE	HIGH DENSITY POLYETHLYNE PIPE
HP	HIGH POINT
INV	INVERT
IWA	INDIO WATER AUTHORITY
KV	KILOVOLT
LP	LOW POINT
MH	MANHOLE
N	NORT, NORTHING
N/CL	NORTH OF CENTERLINE
NW/CL	NORHTWEST OF CENTERLINE
PH	POTHOLE
PIG	POINT OF INTERSECTION GUTTER
PVC	POLYVINYL CHLORIDE
PCC	PORTLAND CEMENT CONCRETE
PP	POWER POLE
PL	PROPERTY LINE
PROP	PROPOSED
PROJ	PROJECTED STATION FROM MH3
PUE	PUBLIC UTILITY EASEMENT
RCP	REINFORCED CONCRETE PIPE
R/W, ROW	RIGHT OF WAY
RW	RECYCLED WATER
S/CL	SOUTH OF CENTERLINE
SCG	SOUTHERN CALIFORNIA GAS COMPANY
SD	STORM DRAIN
S/CL	SOUTH OF CENTERLINE
SE/CL	SOUTHEAST OF CENTERLINE
SMH	SEWER MANHOLE
SSMH	SANITARY SEWER MANHOLE
SS, SWR	SANITARY SEWER
STA	STATION
VER	TELEPHONE BOX
TCO	TOP OF CLEAN OUT
TC	TOP OF CURB
TP	TOP OF PAVEMENT
VLT	VAULT
VCP	VITRIFIED CLAY PIPE
VSD	VALLEY SANITARY DISTRICT
W/CL	WEST OF CENTERLINE
WM	WATER METER
WV	WATER VALVE

LEGEND:

NEW AC PAVEMENT

GRIND AND OVERLAY AX PAVEMENT

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INSPECTOR:				PREPARED FOR	VSD
DATE COMPLETED:				PROJECT No.	11022D.10
AS BUILT COMP. DATE:				SCALE	AS_SHOWN
	BY	DATE	REVISIONS	APP'D	DATE
CONSTRUCTION RECORD	ENGINEER				
BENCHMARK: SEE SHEET G-03	BASIS OF BEARING		SEE SHEET G-03.		

DESIGNER'S SEAL — REGISTERED PROFESSIONAL ENGINEER, CORNELIUS J. GANTNEY, NO. 34674, CIVIL, STATE OF CALIFORNIA

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FIRM ADDRESS: 707 WILSHIRE BLVD, SUITE 3920
LOS ANGELES, CA 90017
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APPROVER'S SEAL — REGISTERED PROFESSIONAL ENGINEER, RONALD E. BUCHWALD, No. 53121, Exp. 6/30/23, CIVIL, STATE OF CALIFORNIA

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DATE: 3/17/22

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www.valley-sanitary.org

CITY OF INDIO
VSD SEWER SIPHON REPLACEMENT CROSSING THE COACHELLA STORMWATER CHANNEL AT WESTWARD HO DESIGN
ABBREVIATIONS AND CIVIL NOTES
SITE ADDRESS:

I.P. No.
SHEET No. G-03
03 OF 12 SHEETS
CITY FILE No.

48233

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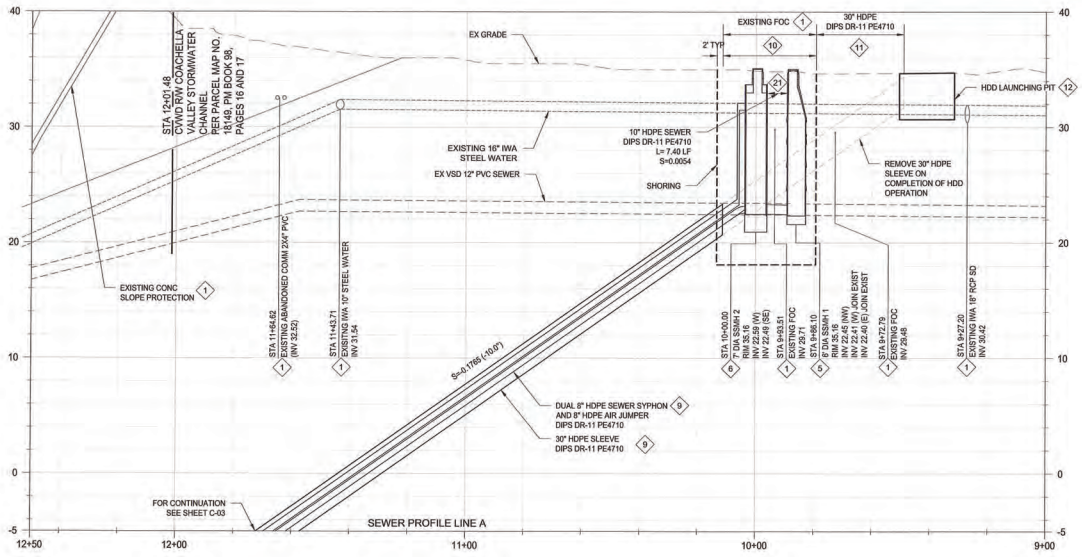
FILE NAME: 11022D10G_03.DWG
PROJECT NO.11022D10
LAST SAVED BY: ASIMON



HORIZONTAL SCALE: 1" = 20'

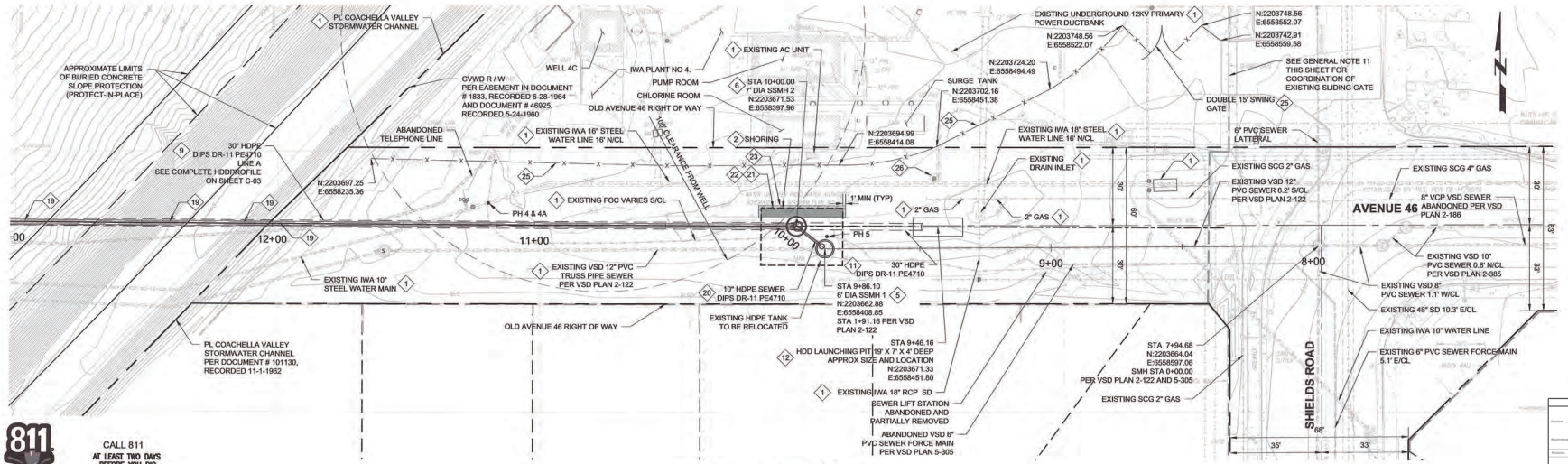
VERTICAL SCALE: 1" =5'

GENERAL NOTES:

1. ALL WORK IN WESTWARD HO DRIVE AND MEADOW LAKE DRIVE SHALL CONFORM TO THE CITY OF INDIO'S AND CITY OF LA QUINTA'S ENCROACHMENT PERMITS.
2. DO NOT BLOCK ACCESS TO MEADOW LAKE DRIVE WITHOUT PERMISSION FROM THE LOCAL HOMEOWNER'S ASSOCIATION AND COORDINATION WITH THE LOCAL SECURITY GUARDS.
3. THE CONTRACTOR SHALL PROVIDE TRAFFIC FLAGMEN AS NECESSARY TO ALLOW LOCAL TRAFFIC TO CONTINUE TO ACCESS MEADOW LAKE DRIVE. MAINTAIN ONE LANE MINIMUM FOR TRAFFIC TO ACCESS THE AUTOMATIC CONTROL GATES.
4. RESTORE THE EXISTING GATE LOOP DETECTOR SYSTEM IF DAMAGED FOR AUTOMATIC USE DURING NON-WORK HOURS.
5. THE EXISTING GOLF CART PATH SHALL REMAIN OPEN AND ACCESSIBLE AT ALL TIMES.
6. ALL WORK WITHIN THE CHANNEL SUCH AS HDD MONITORING SHALL CONFORM TO THE CVWD ENCROACHMENT PERMIT.
7. ALL WORK NEAR THE EXISTING COMMUNICATION CONDUITS SHALL BE IN THE PRESENCE OF THE FRONTIER COMMUNICATION REPRESENTATIVE.
8. CONTRACTOR SHALL PROVIDE SEWER BY-PASSING AS NEEDED FOR CONNECTIONS TO EXISTING SEWERS. THE CONTRACTOR SHALL SUBMIT A BY-PASS PLAN FOR REVIEW AND APPROVAL PRIOR TO ANY WORK ON THE EXISTING SEWERS.
9. ALL WORK ON THE HDPE PIPELINES SHALL ALLOW THE PIPE TO ACCLIMATE FOR 1 DAY (MINIMUM) TO NORMALIZE ANY AMBIENT TEMPERATURE EXPANSION OR CONTRACTION IN PLACE PRIOR TO BACKFILLING AND/OR SLURRY ENCASEMENT OR CONNECTING TO CONCRETE MANHOLES. CONTRACTOR SHALL CONSULT FOR THE MANUFACTURER'S RECOMMENDATIONS FOR ITS SELECTED PRODUCTS.
10. SEE GENERAL NOTES 33 AND 34 ON SHEET G-03 FOR WORK IN PLANT NO. 4.
11. COORDINATE WITH IWA FOR ACCESS TO PLANT NO. 4'S SLIDING GATE FOR WORK HOURS AND SHARED ACCESS.

CONSTRUCTION NOTES

1. PROTECT EXISTING FEATURE.
2. SAWCUT, REMOVE AND REPLACE EXISTING ASPHALT CONCRETE PAVEMENT PER CITY OF INDIO STANDARD PLAN NO. 172.
5. CONSTRUCT SEWER MANHOLE PER DETAIL 1 SHEET GC-01.
6. CONSTRUCT SEWER MANHOLE PER DETAIL 2 SHEET GC-01.
9. CONSTRUCT HDD SLEEVE AND CARRIER PIPE PER DETAIL 6 SHEET GC-03.
10. SAWCUT AND REMOVE THE INSTALLED 30" HDPE CASING SEGMENT PRIOR TO INSTALLATION ON MANHOLES.
11. REMOVE 30" HDPE UPON COMPLETION OF HDD INSTALLATION.
12. BACKFILL LAUNCHING/RECEIVING PIT UPON COMPLETION OF CONSTRUCTION AND RESTORE TO ORIGINAL CONDITION PER CITY OF INDIO STANDARD PLAN 172.
19. PROVIDE SEWER MARKER PER VSD STANDARD DETAIL S-19.
20. CONSTRUCT PIPE TRENCH AND BEDDING BACKFILL PER VSD STANDARD DETAIL S-5
21. SAWCUT EXISTING ASPHALT PAVING AND CONSTRUCT ROADWAY BEDDING, BACKFILL AND TRENCH COVER PLATES PER CITY OF INDIO STANDARD PLANS 171, 172 AND 174.
22. CONSTRUCT 4-INCHES ASPHALTIC CONCRETE PAVEMENT ON 6-INCHES OF CLASS 2 AGGREGATE BASE PER CITY OF INDIO STANDARD PLANS 171, 172, AND 174.
23. GRIND PLANE AND OVERLAY 1.5-INCHES ASPHALTIC CONCRETE PAVEMENT PER CITY OF INDIO STANDARD PLANS 172 AND 174.
25. PROVIDE 6-8 FOOT TEMPORARY CHAIN LINK FENCE AND GATE WITH LOCK FOR IWA ACCESS. PROVIDE LAYOUT PLAN WITH DETAILS FOR APPROVAL PRIOR TO ANY WORK ON THE IWA PLANT NO. 4 SITE.
26. PROVIDE IWA STAFF ACCESS TO VALVE AT ALL TIMES.



HORIZONTAL SCALE: 1" = 20'

CVWD DRAWING APPROVAL

TH 03-24-2022

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INSPECTOR:						PREPARED FOR: VSD	
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AS BUILT COMP. DATE:						SCALE: AS_SHOWN	
CONSTRUCTION RECORD	BY	DATE	REVISIONS	APP'D	DATE		
BENCHMARK: SEE SHEET G-03	ENGINEER		BASIS OF BEARING: SEE SHEET G-03				

REGISTERED PROFESSIONAL ENGINEER CORNELIUS J. GANTNEY No. 3674 CIVIL STATE OF CALIFORNIA

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CORNELIUS J. GANTNEY
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R.C.E. No. 34674
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REGISTERED PROFESSIONAL ENGINEER RONALD E. BUCHWALD No. 53121 Exp. 6/30/23 CIVIL STATE OF CALIFORNIA

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TITLE: ENGINEERING SERVICES MANAGER
RCE No. C 53121
DATE: 3/17/22

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VSD
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www.valley-sanitary.org

CITY OF INDIO
VSD SEWER SIPHON REPLACEMENT CROSSING THE COACHELLA STORMWATER CHANNEL AT WESTWARD HO DESIGN
SEWER SYPHON PLAN AND PROFILE 1 STA 9+85.89 TO 12+50
SITE ADDRESS:

I.P. No.
SHEET No. C-01
04 OF 12 SHEETS
CITY FILE No.

48234

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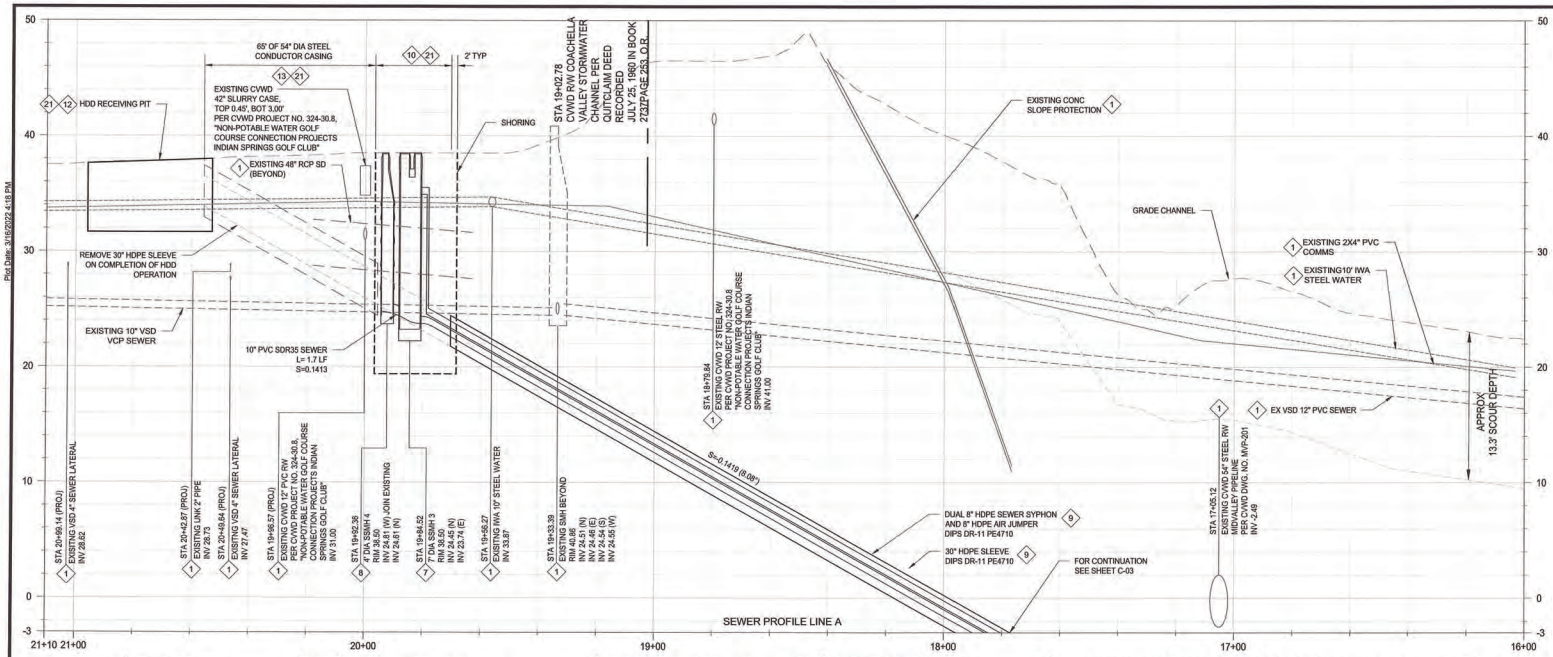
PROJECT NO.11022D10
LAST SAVED BY: ASIMON



GENERAL NOTES:

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10. CONTRACTOR TO INSTALL A FULL PIECE OF DUCTILE IRON PIPELINE AT ALL CROSSINGS EXPOSING IWA ASBESTOS CEMENT WATER MAIN. PLEASE REFER TO IWA STANDARDS FOR SIZE AND LIST OF MATERIALS.

CONSTRUCTION NOTES

1. PROTECT EXISTING FEATURE.
2. SAWCUT, REMOVE AND REPLACE EXISTING ASPHALT CONCRETE PAVEMENT PER CITY OF INDIO STANDARD PLAN NO. 172.
7. CONSTRUCT SEWER MANHOLE PER DETAIL 3 SHEET GC-02.
8. CONSTRUCT SEWER MANHOLE PER DETAIL 3 SHEET GC-02.
9. CONSTRUCT HDD SLEEVE AND CARRIER PIPE PER DETAIL 6 SHEET GC-03.
10. SAWCUT AND REMOVE THE INSTALLED 30" HDPE CASING SEGMENT PRIOR TO INSTALLATION ON MANHOLES.
12. BACKFILL LAUNCHING/RECEIVING PIT UPON COMPLETION OF CONSTRUCTION AND RESTORE TO ORIGINAL CONDITION.
13. REMOVE 60" CONDUCTOR STEEL CASING AND 30" HDPE UPON COMPLETION OF HDD INSTALLATION. STABILIZE AND BACKFILL PER SECTION 33_05_07.14.
15. PROVIDE 60" (MAXIMUM) STEEL SUPPLEMENTAL (CONDUCTOR) CASING SEE SPECIFICATIONS SECTION 30_05_07 - HORIZONTAL DIRECTIONAL DRILLING.
16. CONSTRUCT SEWER MANHOLE PER DETAIL 4 SHEET GC-03.
17. CONSTRUCT SEWER MANHOLE PER DETAIL 5 SHEET GC-03.
18. REESTABLISH TYPE 1 SURVEY MONUMENT PER CITY OF INDIO STANDARD PLAN 512.
19. PROVIDE SEWER MARKER PER VSD STANDARD DETAIL S-19.
21. SAWCUT EXISTING ASPHALT PAVING AND CONSTRUCT ROADWAY BEDDING, BACKFILL AND TRENCH COVER PLATES PER CITY OF INDIO STANDARD PLANS 171, 172 AND 174.
24. RELOCATE EXITING 10" IWA WATER MAIN PER DETAIL 3 SHEET GC-02.

C.V.W.D. DRAWING APPROVAL

Checked	TH	DATE 03-24-2022
Recommended		DWG. No. 48235
Revisions		DATE / APPR.

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CONSTRUCTION RECORD	BY	DATE	REVISIONS	APP'D	DATE	
BENCHMARK: SEE SHEET G-03	BASIS OF BEARING: SEE SHEET G-03					

DESIGNER'S SEAL: REGISTERED PROFESSIONAL ENGINEER, CORNELIUS J. GANTNEY, No. 34674, CIVIL, STATE OF CALIFORNIA

ENGINEER: CORNELIUS J. GANTNEY
NAME / DATE
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DATE: 3/17/22

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CITY OF INDIO
VSD SEWER SIPHON REPLACEMENT CROSSING THE COACHELLA STORMWATER CHANNEL AT WESTWARD HO DESIGN
SEWER SYPHON PLAN AND PROFILE 1 STA 16+00 TO 19+95.39
SITE ADDRESS:

I.P. No.
SHEET No. C-02
05 OF 12 SHEETS
CITY FILE No.

48235

Plot Date: 3/16/2022 4:48 PM
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PROJECT NO.11022D10
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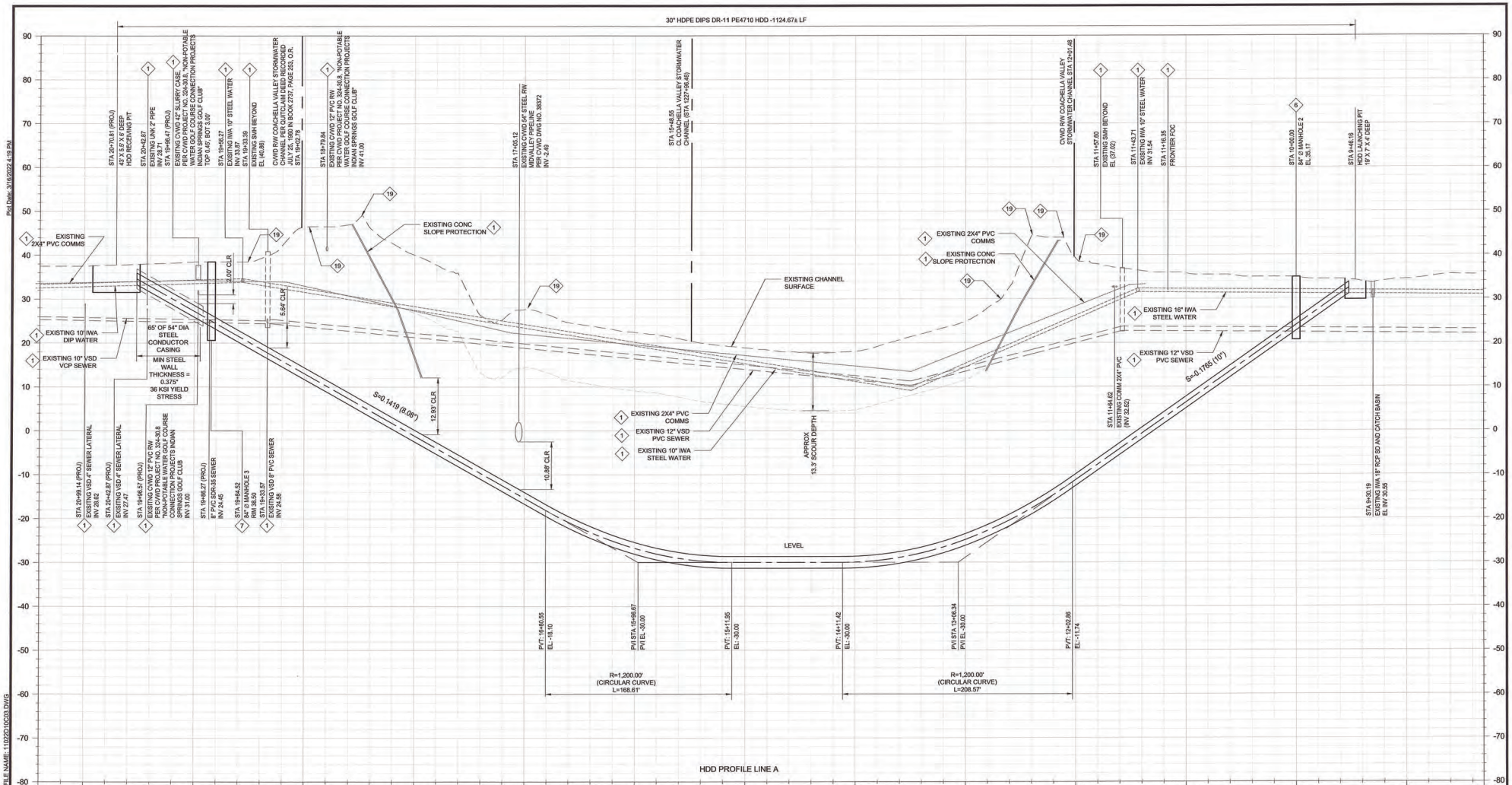
CITY OF INDIO
CITY OF LA QUINTA



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PROJECT NO. 11022D10

LAST SAVED BY: ASHNOW

GENERAL NOTES:

SEE GENERAL NOTES ON SHEETS C01-C02

CONSTRUCTION NOTES

SEE CONSTRUCTION NOTES ON SHEETS C01-C02

C.V.W.D. DRAWING APPROVAL

TH 03-24-2022

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VERTICAL SCALE: 1"=10'

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INSPECTOR:				PREPARED FOR	VSD
DATE COMPLETED:				PROJECT No.	11022D.10
AS BUILT COMP. DATE:				SCALE	AS_SHOWN
	BY	DATE	REVISIONS	APP'D	DATE
CONSTRUCTION RECORD	ENGINEER				
BENCHMARK: SEE SHEET G-03	BASIS OF BEARING		SEE SHEET G-03		

DESIGNER'S SEAL

REGISTERED PROFESSIONAL ENGINEER CORNELIUS J. GANTNEY NO. 34674 CIVIL STATE OF CALIFORNIA

ENGINEER:

CORNELIUS J. GANTNEY

NAME DATE

R.C.E. No. 34674

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LOS ANGELES, CA 90017

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TITLE: ENGINEERING SERVICES MANAGER

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CITY OF INDIO

VSD SEWER SIPHON REPLACEMENT CROSSING THE COACHELLA STORMWATER CHANNEL AT WESTWARD HO DESIGN

HORIZONTAL DIRECTIONAL DRILLING PROFILE STA 9+46.16 TO 20+76.81

SITE ADDRESS:

I.P. No.

SHEET No. C-03

06 OF 12 SHEETS

CITY FILE No.

48236

Plot Date: 3/16/2022 2:21 PM

FILE NAME: 11022D10C04.DWG

PROJECT NO.11022D.10

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INSPECTOR:				PREPARED FOR	VSD
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AS BUILT COMP. DATE:				SCALE	AS_SHOWN
CONSTRUCTION RECORD	ENGINEER	REVISIONS	APP'D DATE		
BENCHMARK: SEE SHEET G-03	BASIS OF BEARING: SEE SHEET G-03				

DESIGNER'S SEAL

REGISTERED PROFESSIONAL ENGINEER — CORNELIUS J. GANTNEY — NO. 34674 — CIVIL — STATE OF CALIFORNIA

ENGINEER:
CORNELIUS J. GANTNEY
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R.C.E. No. 34674
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APPROVER'S SEAL

REGISTERED PROFESSIONAL ENGINEER — RONALD E. BUCHWALD — No. 53121 — Exp. 6/30/23 — CIVIL — STATE OF CALIFORNIA

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RCE No. C 53121
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CITY OF INDIO

VSD SEWER SIPHON REPLACEMENT CROSSING THE COACHELLA STORMWATER CHANNEL AT WESTWARD HO DESIGN

HDD PULL-BACK LAYDOWN AREA

SITE ADDRESS:

I.P. No.

SHEET No. **C-04**
07 OF 12 SHEETS

CITY FILE No.

48237

Appendix B Site Photographs

Photograph 1: From the western limits of the project site looking east along Westward Ho Drive.

Photograph 2: Looking northeast across the intersection of Westward Ho Drive and Meadow Lake Drive.

Photograph 3: From the top of the eastern edge of the Coachella Valley Stormwater Channel looking west along the proposed horizontal drilling alignment.

Photograph 4: From the base of the western edge of the Coachella Valley Stormwater Channel looking east along the proposed horizontal drilling alignment.

Photograph 5: From the eastern edge of the Coachella Valley Stormwater Channel looking west across the existing Valley Sanitary District facility.

Photograph 6: From the eastern limits of the project site looking west along the existing Valley Sanitary District facility.

Photograph 7: Looking southwest across the adjacent portion of the Coachella Valley Stormwater Channel that occurs south of the proposed horizontal drilling alignment.

Photograph 8: Looking north across the adjacent portion of the Coachella Valley Stormwater Channel that occurs north of the proposed horizontal drilling alignment.

Appendix C Potentially Occurring Special-Status Biological Resources

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
SPECIAL-STATUS WILDLIFE SPECIES				
Antrozous pallidus pallid bat	Fed: None CA: SSC CVMSHCP: Not Covered	Locally common species of low elevation in California. Occurs in grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting, but will also roost in caves, crevices, mines, hollow trees, and buildings.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Aquila chrysaetos golden eagle	Fed: None CA: FP; WL CVMSHCP: Not Covered	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Athene cunicularia burrowing owl	Fed: None CA: SSC CVMSHCP: Covered	Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	No	**Low** CVSC provides line-of-sight opportunities favored by burrowing owls; no suitable burrows (>4 inches in diameter) were observed within the project footprint. No burrowing owls or sign were observed.
Chaetodipus fallax pallidus pallid San Diego pocket mouse	Fed: None CA: SSC CVMSHCP: Not Covered	Common resident of sandy herbaceous areas, usually in association with rocks or course gravel in southwestern California. Occurs mainly in arid coastal and desert border areas. Habitats include coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Crotalus ruber red-diamond rattlesnake	Fed: None CA: SSC CVMSHCP: Not Covered	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Cyprinodon macularius desert pupfish	Fed: **END** CA: **END** CVMSHCP: Covered	In California, this species historically occurred in several springs, seeps and slow-moving streams in the Salton Sink Basin, as well as in backwaters and sloughs along the lower Colorado River. Now relegated to remnants of their former habitats, which generally are too harsh for most introduced species to exist.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Dinacoma caseyi Casey's June beetle	Fed: **END** CA: None CVMSHCP: Not Covered	All *Dinacoma* populations are associated with alluvial sediments occurring in or contiguous with bases of desert alluvial fans, and the broad, gently sloping, depositional surfaces at the base of the Santa Rosa mountain ranges in the dry Coachella valley region. Most commonly associated with the Carsitas series soil.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Falco mexicanus prairie falcon	Fed: None CA: WL CVMSHCP: Not Covered	Commonly occur in arid and semiarid shrubland and grassland community types. Also occasionally found in open parklands within coniferous forests. During the breeding season, they are found commonly in foothills and mountains which provide cliffs and escarpments suitable for nest sites.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Gopherus agassizii desert tortoise	USFWS: **THR** CDFW: **THR** CVMSHCP: Covered	Widely distributed in the Mojave, Sonoran, and Colorado deserts from below sea level to 7,220 feet. Most common in desert scrub, desert wash, and Joshua tree habitats, but occurs in almost every desert habitat except those on the most precipitous slopes.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Lasiurus xanthinus western yellow bat	Fed: None CA: SSC CVMSHCP: Not Covered	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	**Low** Limited foraging habitat is present within and surrounding the project site. Surrounding ornamental landscaping and nearby golf course communities provide minimal roosting opportunities.
Macrobaenetes valgum Coachella giant sand treader cricket	Fed: None CA: None CVMSHCP: Covered	Nocturnal and moisture sensitive insects. Emergence occurs with winter rains and appear at maximum densities in January-February. Can be detected via their characteristic delta-shaped burrow excavations.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Nyctinomops femorosaccus pocketed free-tailed bat	Fed: None CA: SSC CVMSHCP: Covered	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis. Roosts in caves, tunnels, mines, and rock crevices, usually in large colonies.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Oliarces clara cheeseweed owlfly	Fed: None CA: None CVMSHCP: Not Covered	Occur on or near bajadas, adults aggregate at local high topographic features to mate. Larvae are associated with the roots of creosote bushes.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
***Ovis canadensis nelsoni* pop. 2** Peninsular bighorn sheep DPS	Fed: **END** CA: **THR**; FP CVMSHCP: Covered	Preferred habitat is near mountainous terrain above the desert floor that is visually open, as well as steep and rocky. Most Mojave Desert mountain ranges satisfy these requirements well. Surface water is another element that is considered important to population health. Found mainly in the Peninsular Ranges.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Perognathus longimembris bangsi Palm Springs pocket mouse	Fed: None CA: SSC CVMSHCP: Covered	Inhabits areas having flat to gently sloping topography, sparse to moderate vegetative cover, and loosely packed or sandy soils on slopes ranging from 0% to approximately 15%. Remaining habitat in the Coachella Valley and environs is about 142,000 acres.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Phrynosoma mcallii flat-tailed horned lizard	Fed: None CA: SSC CVMSHCP: Covered	Typical habitat is sandy desert hardpan or gravel flats with scattered sparse vegetation of low species diversity. Most common in areas with high density of harvester ants and fine windblown sand, but rarely occurs on dunes.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Polioptila melanura black-tailed gnatcatcher	Fed: None CA: WL CVMSHCP: Not Covered	In Mojave, Great Basin, Colorado and Sonoran desert communities, prefers nesting and foraging in densely lined arroyos and washes dominated by creosote bush and salt bush with scattered bursage, burrowed, ocotillo, saguaro, barrel cactus, nipple cactus, and prickly pear and cholla.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Pyrocephalus rubinus vermilion flycatcher	Fed: None CA: SSC CVMSHCP: Not Covered	Occupies desert riparian habitat, particularly cottonwoods, willows, mesquite, and other large desert riparian trees, in habitat adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas where it can forage.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Toxostoma crissale Crissal thrasher	Fed: None CA: SSC CVMSHCP: Covered	Year round resident in California. Occupies a relatively large variety of desert riparian and scrub habitats from below sea level to over 6,000 feet. The common factor, regardless of habitat type and species of shrub, is dense, low scrubby vegetation. Primarily occupies riparian scrub or woodland at lower elevations.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Toxostoma lecontei Le Conte's thrasher	Fed: None CA: SSC CVMSHCP: Covered	An uncommon to rare, local resident in southern California deserts from southern Mono Co. south to the Mexican border, and in western and southern San Joaquin Valley. Occurs primarily in open desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats; also occurs in Joshua tree habitat with scattered shrubs.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Uma inornata Coachella Valley fringe-toed lizard	Fed: **THR** CA: **END** CVMSHCP: Covered	Sparsely-vegetated arid areas with fine wind-blown sand, including dunes, washes, and flats with sandy hummocks formed around the bases of vegetation. Needs fine, loose sand for burrowing.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Vireo bellii pusillus least Bell's vireo	Fed: **END** CA: **END** CVMSHCP: Covered	Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Xerospermophilus tereticaudus chlorus Coachella Valley round-tailed ground squirrel	Fed: None CA: SSC CVMSHCP: Covered	Inhabits sandy arid regions of Lower Sonoran Life Zone. Its scrub and wash habitats include mesquite and creosote dominated sand dunes, creosote bush scrub, creosote palo verde and saltbush/alkali scrub.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
SPECIAL-STATUS PLANT SPECIES				
Abronia villosa* var. *aurita chaparral sand-verbena	Fed: None CA: None CNPS: 1B.1 CVMSHCP: Not Covered	Found on the coastal side of the southern California mountains in chaparral and coastal sage scrub plant communities in areas of full sun and sandy soils. Found at elevations ranging from 262 to 5,249 feet. Blooming period is from January to September.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Astragalus lentiginosus* var. *borreganus Borrego milk-vetch	Fed: None CA: None CNPS: 4.3 CVMSHCP: Not Covered	Grows in sandy soils within Mojavean desert scrub and Sonoran desert scrub. Found at elevations ranging from 98 to 1,050 feet in elevation. Blooming period is from February to May.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Astragalus lentiginosus* var. *coachellae Coachella Valley milk-vetch	Fed: **END** CA: None CNPS: 1B.2 CVMSHCP: Covered	Preferred habitat includes desert dunes and sandy Sonoran desert scrub. Found at elevations ranging from 131 to 2,149 feet in elevation. Blooming period is from February to May.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Astragalus preussii* var. *laxiflorus Lancaster milk-vetch	Fed: None CA: None CNPS: 1B.1 CVMSHCP: Not Covered	Occurs on alkaline clay flats, gravelly or sandy washes, and along draws in gullied badlands. Found at elevations up to 2,379 feet. Blooming period is from March to May.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Chorizanthe leptotheca Peninsular spineflower	Fed: None CA: None CNPS: 4.2 CVMSHCP: Not Covered	Found in granitic soils within chaparral, coast scrub, and lower montane coniferous forest habitats. Found at elevations ranging from 984 to 6,234 feet. Blooming period is from May to August.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Ditaxis claryana glandular ditaxis	Fed: None CA: None CNPS: 2B.2 CVMSHCP: Not Covered	Found in sandy soils in dry washes and rocky hillsides within Mojavean and Sonoran desert scrub. Occurs at elevations ranging from 0 to 1,525 feet. Blooming period is October and December through March.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Ditaxis serrata* var. *californica California ditaxis	Fed: None CA: None CNPS: 3.2 CVMSHCP: Not Covered	Found in Sonoran desert scrub. Occurs at elevations ranging from 98 to 3,281 feet. Blooming period is from March to December.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Horsfordia alata pink velvet-mallow	Fed: None CA: None CNPS: 4.3 CVMSHCP: Not Covered	Occurs in rocky Sonoran desert scrub. Found at elevations ranging from 328 to 1,640 feet. Blooming period is from February to December.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Johnstonella costata ribbed cryptantha	Fed: None CA: None CNPS: 4.3 CVMSHCP: Not Covered	Preferred habitat includes desert dunes, Mojavean desert scrub, and Sonoran desert scrub habitats on sandy soil. Found at elevations ranging from 197 to 1,640 feet. Blooming period is from February to May.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Johnstonella holoptera winged cryptantha	Fed: None CA: None CNPS: 4.3 CVMSHCP: Not Covered	Found in Mojavean desert scrub and Sonoran desert scrub habitats. Found at elevations ranging from 328 to 5,545 feet. Blooming period is from March to April.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Marina orcuttii* var. *orcuttii California marina	Fed: None CA: None CNPS: 1B.3 CVMSHCP: Not Covered	Occurs in rocky soils in chaparral, pinyon-juniper woodland, and Sonoran desert scrub. Found at elevations ranging from 3,444 to 3,805 feet. Blooming period is from May to October.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Matelea parvifolia spear-leaf matelea	Fed: None CA: None CNPS: 2B.3 CVMSHCP: Not Covered	Occurs in rocky soils in Mojavean and Sonoran desert scrub. Found at elevations ranging from 1,443 to 3,593 feet. Blooming period is typically March to May and can last through July.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Nemacaulis denudata* var. *gracilis slender cottonheads	Fed: None CA: None CNPS: 2B.2 CVMSHCP: Not Covered	Occurs in coastal dunes, desert dunes, and Sonoran desert scrub habitats. Found at elevations ranging from 164 to 1,312 feet. Blooming period is from March to May.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Pseudorontium cyathiferum Deep Canyon snapdragon	Fed: None CA: None CNPS: 2B.3 CVMSHCP: Not Covered	Occurs in rocky Sonoran desert scrub. Found at elevations ranging from 0 to 2,624 feet. Blooming period is from February to April.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Selaginella eremophila desert spike-moss	Fed: None CA: None CNPS: 2B.2 CVMSHCP: Not Covered	Found in chaparral and Sonoran desert scrub habitats within gravelly or rocky soil. Found at elevations ranging from 656 to 2,953 feet. Blooming period is from May to July.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Stemodia durantifolia purple stemodia	Fed: None CA: None CNPS: 2B.1 CVMSHCP: Not Covered	Occurs in Sonoran desert scrub habitats. Found at elevations ranging from 591 to 984 feet. Blooming period is from January to December.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
CDFW SENSITIVE HABITATS				
Desert Fan Palm Oasis Woodland	CDFW Sensitive Habitat	Rare plant community that is one of the most unusual biological resources located within the Coachella Valley. Found within canyons and along the San Andreas Fault Zone, where water occurs naturally. Generally characterized by open to dense groves of native desert fan palms, which are the most massive native palm in North America, growing more than 66 feet.	No	**Absent**.

U.S. Fish and Wildlife Service (Fed) - Federal
END – Federal Endangered
THR – Federal Threatened

California Department of Fish and Wildlife (CA) - California
END – California Endangered
THR – California Threatened
FP – California Fully Protected
SSC – California Species of Special Concern
WL – California Watch List

California Native Plant Society (CNPS)
California Rare Plant Rank
1B Plants Rare, Threatened, or Endangered in California and Elsewhere
2B Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
3 More Information Needed
4 Plants of Limited Distribution – A Watch List

Threat Ranks
0.1- Seriously threatened in California
0.2- Moderately threatened in California
0.3- Not very threatened in California

Appendix D CVMSHCP Avoidance, Minimization, and Mitigation Measures

4.4 Required Avoidance, Minimization, and Mitigation Measures

This section describes certain avoidance, minimization, and mitigation requirements for Covered Activities within the Conservation Area, in addition to Conservation Area specific measures described in the Conservation Area subsections in Section 4.3. The measures described in this section do not apply to single-family homes, emergency response activities, and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot. To assist Permittees with implementation of these measures, CVCC will maintain maps of modeled Habitat and a natural communities map and will provide them to each of the Permittees. CVCC will also maintain a list of Acceptable Biologists who may be used to conduct surveys for specified Covered Species identified in this section. Any Permittee may submit the names of biologists for inclusion in the initial list of Acceptable Biologists. The list shall be updated at least annually. CVCC will develop procedures for individual biologists to submit their name for inclusion on the list. Individuals conducting survey activities for listed endangered or threatened species or species for which a state or federal protocol exists must have the appropriate permit (i.e., in accordance with the federal Endangered Species Act, Section 10(a)(1)(A), or state Endangered Species Act, California Fish and Game Code, Section 2081(a)) to conduct such surveys. Annually, or whenever the list is revised, CVCC shall submit the list to the Wildlife Agencies for review. The Wildlife Agencies shall have thirty (30) days to provide input on the qualifications of any biologists on the list. If the Wildlife Agencies have not responded within thirty days (30) of receipt of the list from CVCC, the biologists on the list shall be deemed acceptable.

In the event that a survey of a parcel is required pursuant to the MSHCP, it will be conducted by an Acceptable Biologist. The survey shall be conducted in the appropriate season, in accordance with established accepted protocols if they exist. Within one (1) year of Permit issuance, the Wildlife Agencies and the MPA, in consultation with CVCC, shall develop survey protocols for those species for which a protocol is required. CVCC will maintain a list of accepted survey protocols. For those species for which protocols do not exist at the time surveys are needed, the Acceptable Biologist shall use a survey protocol generally accepted by biologists familiar with the species. Survey results shall be documented in both mapped and text form and shall be presented for review by the appropriate Permittee and CVCC. Wildlife Agencies' concurrence or acceptance of the surveys and/or the results contained therein is not required by the MSHCP.

Biological Corridors. Specific roads in Conservation Areas, where culverts or undercrossings are required to maintain Biological Corridors, are delineated in the Section 4.3 subsections on individual Conservation Areas.

Burrowing Owl. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities other than levees, berms, dikes, and similar features that are known to contain burrowing owl burrows. O&M of

roads is not subject to this requirement. For other projects that are subject to CEQA, the Permittees will require burrowing owl surveys in the Conservation Areas using an accepted protocol (as determined by the CVCC in coordination with the Permittees and the Wildlife Agencies). Prior to Development, the construction area and adjacent areas within 500 feet of the Development site, or to the edge of the property if less than 500 feet, will be surveyed by an Acceptable Biologist for burrows that could be used by burrowing owl. If a burrow is located, the biologist will determine if an owl is present in the burrow. If the burrow is determined to be occupied, the burrow will be flagged and a 160-foot buffer during the non-breeding season and a 250-foot buffer during the breeding season, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the burrow. The buffer will be staked and flagged. No Development or O&M activities will be permitted within the buffer until the young are no longer dependent on the burrow.

If the burrow is unoccupied, the burrow will be made inaccessible to owls, and the Covered Activity may proceed. If either a nesting or escape burrow is occupied, owls shall be relocated pursuant to accepted Wildlife Agency protocols. A burrow is assumed occupied if records indicate that, based on surveys conducted following protocol, at least one burrowing owl has been observed occupying a burrow on site during the past three years. If there are no records for the site, surveys must be conducted to determine, prior to construction, if burrowing owls are present. Determination of the appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the Wildlife Agencies. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the Wildlife Agencies.

Within one (1) year of Permit issuance, CVCC will cooperate with County Flood Control, CVWD and IID to conduct an inventory of levees, berms, dikes, and similar features in the Plan Area maintained by those Permittees. Burrowing owl burrow locations will be mapped and each of these Permittees will incorporate the information into its O&M practices to avoid impacts to the burrowing owl to the maximum extent Feasible. CVCC in cooperation with County Flood Control, CVWD, and IID will prepare a manual for maintenance staff, educating them about the burrowing owl and appropriate actions to take when owls are encountered to avoid impacts to the maximum extent Feasible. The manual will be submitted to the Wildlife Agencies for review and comment within two (2) years of Permit issuance. In conjunction with the Monitoring Program, the maps of the burrowing owl locations along the above-described levees, berms, dikes, and similar features will be periodically updated.

Covered Riparian Bird Species. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot. Riparian Habitat here refers to the following natural communities: southern arroyo willow riparian forest, Sonoran cottonwood-willow riparian forest, desert fan palm oasis woodland, and southern sycamore-alder riparian woodland in the Cabazon, Stubbe and Cottonwood Canyons,

Whitewater Canyon, Upper Mission Creek/Big Morongo Canyon, Thousand Palms, Indio Hills Palms, Joshua Tree National Park, Mecca Hills and Orocopia Mountains, Dos Palmas, Coachella Valley Stormwater Channel and Delta, and Santa Rosa and San Jacinto Mountains Conservation Areas. Covered Activities, including O&M of facilities and construction of permitted new projects, in riparian Habitat will be conducted to the maximum extent Feasible outside of the March 15 – September 15 nesting season for least Bell's vireo, and the May 1 – September 15 nesting season for southwestern willow flycatcher, summer tanager, yellow warbler, and yellow-breasted chat. If Covered Activities must occur during the nesting season, surveys shall be conducted to determine if any active nests are present. If active nests are identified, the Covered Activity shall not be conducted within 200 feet of an active nest. If surveys conducted during the nesting season document that Covered nesting riparian bird Species are not present, the Covered Activity may proceed.

Crissal Thrasher. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. In modeled crissal thrasher Habitat in the Willow Hole, Thousand Palms, Indio Hills Palms, East Indio Hills, Dos Palmas, and Coachella Valley Stormwater Channel and Delta Conservation Areas, surveys will be conducted by an Acceptable Biologist prior to the start of construction activities during the nesting season, January 15 – June 15, to determine if active nest sites for this species occur on the construction site and/or within 500 feet of the construction site, or to the edge of the property boundary if less than 500 feet. If nesting crissal thrashers are found, a 500-foot buffer, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the nest site. The buffer will be staked and flagged. No construction activities will be permitted within the buffer during the breeding season of January 15 – June 15 or until the young have fledged.

Desert tortoise. This measure does not apply to single-family residences and any non-commercial accessory uses and structures, including but not limited to second units on an existing legal lot, or to O&M of Covered Activities for Permittee infrastructure facilities. Within Conservation Areas, the Permittees will require surveys for desert tortoise for Development in modeled desert tortoise Habitat. Prior to Development, an Acceptable Biologist will conduct a presence/absence survey of the Development area and adjacent areas within 200 feet of the Development area, or to the property boundary if less than 200 feet and permission from the adjacent landowner cannot be obtained, for fresh sign of desert tortoise, including live tortoises, tortoise remains, burrows, tracks, scat, or egg shells. The presence/absence survey must be conducted during the window between February 15 and October 31. Presence/absence surveys require 100% coverage of the survey area. If no sign is found, a clearance survey is not required. A presence/absence survey is valid for 90 days or indefinitely if tortoise-proof fencing is installed around the Development site.

If fresh sign is located, the Development area must be fenced with tortoise-proof fencing and a clearance survey conducted during the clearance window. Desert tortoise clearance surveys shall be conducted during the clearance window from February 15 to

June 15 and September 1 to October 31 or in accordance with the most recent Wildlife Agency protocols. Clearance surveys must cover 100% of the Development area. A clearance survey must be conducted during different tortoise activity periods (morning and afternoon). All tortoises encountered will be moved from the Development site to a specified location. Prior to issuance of the Permits, CVCC will either use the *Permit Statement Pertaining to High Temperatures for Handling Desert Tortoises* and *Guidelines for Handling Desert Tortoises During Construction Projects*, revised July 1999, or develop a similar protocol for relocation and monitoring of desert tortoise, to be reviewed and approved by the Wildlife Agencies. Thereafter, the protocol will be revised as needed based on the results of monitoring and other information that becomes available.

For O&M activities in the Conservation Areas, the Permittees shall ensure that personnel conducting such activities are instructed to be alert for the presence of desert tortoise. If a tortoise is spotted, activities adjacent to the tortoise's location will be halted and the tortoise will be allowed to move away from the activity area. If the tortoise is not moving, it will be relocated by an Acceptable Biologist to nearby suitable Habitat and placed in the shade of a shrub. To the maximum extent Feasible, O&M activities will avoid the period from February 15 and October 31.

Utility development protocols have been developed to avoid or minimize potential adverse impacts to the desert tortoise in the Conservation Areas from utility and road right-of-way projects, such as the installation and maintenance of water, sewer, and electric lines and roadway maintenance. The objectives of these protocols are to provide reliable and consistent direction on utility development within the Conservation Areas. Two utility development protocols, inactive and active season, provide specific direction on site preparation and construction phases of utility projects in the Conservation Areas. The protocols include steps to be followed during the desert tortoise active and/or inactive season. The inactive season protocol must be used for utility maintenance or development within the November 1 to February 14 time frame; the active season protocol must be used for utility maintenance or development within the February 15 to October 31 time frame. Deviations from these time frames must be presented to the RMOC.

Inactive Season Protocol. This protocol is applicable to pre-construction and construction phases of utility Covered Activity projects occurring between November 1 and February 14. These protocols apply only to the site preparation and construction phases of projects. The project proponent must follow the eight pre-construction protocol requirements listed below.

1. A person from the entity contracting the construction shall act as the contact person with the representative of the appropriate RMUC. He/she will be responsible for overseeing compliance with the protective stipulations as stated in this protocol.
2. Prior to any construction activity within the Conservation Areas, the contact person will meet with the representative of the appropriate RMUC to review the

plans for the project. The representative of the appropriate RMUC will review alignment, pole spacing, clearing limits, burrow locations, and other specific project plans which have the potential to affect the desert tortoise. He or she may recommend modifications to the contact person to further avoid or minimize potential impacts to desert tortoise.

3. The construction area shall be clearly fenced, marked, or flagged at the outer boundaries to define the limits of construction activities. The construction right-of-way shall normally not exceed 50 feet in width for standard pipeline corridors, access roads and transmission corridors, and shall be minimized to the maximum extent Feasible. Existing access roads shall be used when available, and rights-of-way for new and existing access roads shall not exceed 20 feet in width unless topographic obstacles require greater road width. Other construction areas including well sites, storage tank sites, substation sites, turnarounds, and laydown/staging sites which require larger areas will be determined in the pre-construction phase. All construction workers shall be instructed that their activities shall be confined to locations within the fenced, flagged, or marked areas.

4. An Acceptable Biologist shall conduct pre-construction clearance surveys of all areas potentially disturbed by the proposed project. Any winter burrows discovered in the Conservation Areas during the pre-construction survey shall be avoided or mitigated. The survey shall be submitted to the representative of the appropriate RMUC as part of plan review.

5. All site mitigation criteria shall be determined in the pre-construction phase, including but not limited to seeding, barrier fences, leveling, and laydown/staging areas, and will be reviewed by the representative of the appropriate RMUC prior to implementation.

6. A worker education program shall be implemented prior to the onset of each construction project. All construction employees shall be required to read an educational brochure prepared by the representative of the appropriate RMUC and/or the RMOC and attend a tortoise education class prior to the onset of construction or site entry. The class will describe the sensitive species which may be found in the area, the purpose of the MSHCP Reserve System, and the appropriate measures to take upon discovery of a sensitive species. It will also cover construction techniques to minimize potential adverse impacts.

7. All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the supervision of an Acceptable Biologist.

8. If there are unresolvable conflicts between the representative of the appropriate RMUC and the contact person, then the matter will be arbitrated by the RMOC and, if necessary, by CVCC.

The following terms are established to protect the desert tortoise during utility-related construction activities in the Conservation Areas and are to be conducted by an Acceptable Biologist.

- An Acceptable Biologist shall oversee construction activities to ensure compliance with the protective stipulations for the desert tortoise.
- Desert tortoises found above ground inside the project area during construction shall be moved by an Acceptable Biologist out of harm's way and placed in a winter den (at a distance no greater than 250 feet). If a winter den cannot be located, the USFWS or CDFG shall determine appropriate action with respect to the tortoise. Tortoises found above ground shall be turned over to the Acceptable Biologist
- No handling of tortoises will occur when the air temperature at 15 centimeters above ground exceeds 90 degrees Fahrenheit.
- Desert tortoise burrows shall be avoided to the maximum extent Feasible. An Acceptable Biologist shall excavate any burrows which cannot be avoided and will be disturbed by construction. Burrow excavation shall be conducted with the use of hand tools only, unless the Acceptable Biologist determines that the burrow is unoccupied immediately prior to burrow destruction.
- Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- For electrical transmission line and road construction projects, only burrows within the right-of-way shall be excavated. Burrows outside the right-of-way, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the right-of-way. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- Tortoises in the Conservation Areas are not to be removed from burrows until appropriate action is determined by USFWS or CDFG with respect to the tortoise. The response shall be carried out within 72 hours.
- Blasting is not permissible within 100 feet of an occupied tortoise burrow.

During construction, contractors will comply with the mitigation and minimization measures contained within this protocol. These measures are:

- All trenches, pits, or other excavations shall be inspected for tortoises by an Acceptable Biologist prior to filling.
- All pipes and culverts stored within desert tortoise Habitat shall have both ends capped to prevent entry by desert tortoises. During construction, all open ended pipeline segments that are welded in place shall be capped during periods of

construction inactivity to prevent entry by desert tortoises.

- Topsoil removed during trenching shall be re-spread on the pipeline construction area following compaction of the backfill. The area shall be restored as determined during the environmental review.
- All test pump water will be routed to the nearest wash or natural drainage. The route will be surveyed by an Acceptable Biologist. If tortoises are found in the drainage area the Acceptable Biologist will remove the tortoises.
- Powerlines associated with water development, such as to provide power for pumps, should be buried underground adjacent to the pipe. All above ground structures deemed to be necessary shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds, and shall adhere to the electrical distribution protocol which follows.
- In order to perform routine O&M of the water systems such as wells, pumps, water lines and storage tanks, etc., employees are to be trained in the area of desert tortoise education. This training will be performed on a regular basis by an Acceptable Biologist for those personnel not previously trained. The training will include at a minimum the following: identification of tortoises, burrows, and other sign; and instructions on installing tortoise barrier fencing. During the course of basic O&M, desert tortoise will be avoided. Untrained employees shall not perform maintenance operations within the reserve.
- All disturbance areas around poles or concrete pads will be reduced to a size just large enough for the construction activity.
- Areas disturbed around poles or construction pads will be restored as determined during the pre-construction process.
- Poles or other above ground structures necessary for electrical distribution development shall be minimized as much as possible. All above ground structures shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds.
- In order to perform routine O&M of the electrical distribution systems such as transmission lines and poles, substations, etc., employees are to be trained in the area of desert tortoise education. This training will be performed on a regular basis by a qualified biologist for those personnel not previously trained. The training will include at a minimum the following: identification of tortoises, burrows, and other sign; and instructions on installing tortoise barrier fencing. During the course of basic O&M, desert tortoise will be avoided. Untrained employees shall not perform maintenance operations within the non-Take areas.
- All trash and food items shall be promptly contained and removed daily from the project site to reduce the attractiveness of the area to common ravens and other desert tortoise predators.
- Construction activities which occur between dusk and dawn shall be limited to areas which have already been cleared of desert tortoises by the Acceptable Biologist and graded or located in a fenced right-of-way. Construction activities

shall not be permitted between dusk and dawn in areas not previously graded.

Active Season Protocol. This protocol is applicable to pre-construction and construction phases of utility development projects occurring between February 15 and November 1. It is identical to the Inactive Season Protocol with the following additions:

- Work areas shall be inspected for desert tortoises within 24 hours of the onset of construction. To facilitate implementation of this condition, burrow inspection and excavation may begin no more than seven (7) days in advance of construction activities, as long as a final check for desert tortoises is conducted at the time of construction.
- All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the overall supervision of an Acceptable Biologist. Any hazards to tortoises created by this activity, such as drill holes, open trenches, pits, other excavations, or any steep-sided depressions, shall be checked three times a day for desert tortoises. These hazards shall be eliminated each day prior to the work crew leaving the site, which may include installing a barrier that will preclude entry by tortoises. Open trenches, pits or other excavations will be backfilled within 72 hours, whenever possible. A 3:1 slope shall be left at the end of every open trench to allow trapped desert tortoises to escape. Trenches not backfilled within 72 hours shall have a barrier installed around them to preclude entry by desert tortoises. All trenches, pits, or other excavations shall be inspected for tortoises by a biological monitor trained and approved by the Acceptable Biologist prior to filling.
- If a desert tortoise is found, the biological monitor shall notify the Acceptable Biologist who will remove the animal as soon as possible.
- Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. The barrier fence shall be at least 20 feet long and shall be installed to direct the tortoise leaving the burrow away from the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of the biological monitor.
- If blasting is necessary for construction, all tortoises shall be removed from burrows within 100 feet of the blast area.

Disposition of Sick, Injured, or Dead Specimens. Upon locating dead, injured, or sick desert tortoises under any utility or road project, initial notification by the contact representative or Acceptable Biologist must be made to the USFWS or CDFG within three (3) working days of its finding. Written notification must be made within five (5) calendar days with the following information: date; time; location of the carcass; photograph of the carcass; and any other pertinent information. Care must be taken in handling sick or injured animals to ensure effective treatment and care. Injured animals shall be taken care of by the Acceptable Biologist or an appropriately trained

veterinarian. Should any treated tortoises survive, USFWS or CDFG should be contacted regarding the final disposition of the animals.

Fluvial Sand Transport. Activities, including O&M of facilities and construction of permitted new projects, in fluvial sand transport areas in the Cabazon, Stubbe and Cottonwood Canyons, Snow Creek/Windy Point, Whitewater Canyon, Whitewater Floodplain, Upper Mission Creek/Big Morongo Canyon, Mission Creek/Morongo Wash, Willow Hole, Long Canyon, Edom Hill, Thousand Palms, West Deception Canyon, and Indio Hills/Joshua Tree National Park Linkage Conservation Areas will be conducted in a manner to maintain the fluvial sand transport capacity of the system.

Le Conte's Thrasher. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. In modeled Le Conte's thrasher Habitat in all the Conservation Areas, during the nesting season, January 15 - June 15, prior to the start of construction activities, surveys will be conducted by an Acceptable Biologist on the construction site and within 500 feet of the construction site, or to the property boundary if less than 500 feet. If nesting Le Conte's thrashers are found, a 500 foot buffer, or to the property boundary if less than 500 feet, will be established around the nest site. The buffer will be staked and flagged. No construction will be permitted within the buffer during the breeding season of January 15 - June 15 or until the young have fledged.

Mesquite Hummocks and Mesquite Bosque Natural Communities. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. Construction activities in the Cabazon, Willow Hole, Thousand Palms, Indio Hills Palms, East Indio Hills, Dos Palmas, Coachella Valley Stormwater Channel and Delta, and Santa Rosa and San Jacinto Mountains Conservation Areas will avoid mesquite hummocks and mesquite bosque to the maximum extent Feasible.

Peninsular Bighorn Sheep Habitat. Completion of Covered Activities in Peninsular bighorn sheep Habitat in the Cabazon, Snow Creek/Windy Point, and Santa Rosa and San Jacinto Mountains Conservation Areas will be conducted outside of the January 1 - June 30 lambing season unless otherwise authorized through a Minor Amendment to the Plan with concurrence from the Wildlife Agencies. O&M of Covered Activities, including but not limited to refinishing the inside of water storage tanks, shall be scheduled to avoid the lambing season, but may extend into the January 1 – June 30 period if necessary to complete the activity, upon concurrence with the Wildlife Agencies.

For new projects in the above listed Conservation Areas, no toxic or invasive plant species may be used for landscaping. For existing public infrastructure facilities which have landscaping in Peninsular bighorn sheep Habitat in the Cabazon, Snow Creek/Windy Point, and Santa Rosa and San Jacinto Mountains Conservation Areas, the

Permittees who have such facilities will, with respect to those facilities, develop and implement a plan and schedule to remove or prevent access to oleander and any other plants known to be toxic to Peninsular bighorn sheep. The plan and schedule will be prepared within one (1) year of Permit issuance.

Triple-ribbed milkvetch. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. It is understood that O&M for infrastructure developed as part of a private development approved in compliance with the MSHCP that is later transferred to a public entity is included as a Covered Activity. For Covered Activities within modeled triple-ribbed milkvetch Habitat in the Whitewater Canyon, Whitewater Floodplain, Upper Mission Creek/Big Morongo Canyon, and Santa Rosa and San Jacinto Mountains Conservation Areas, surveys by an Acceptable Biologist will be required for activities during the growing and flowering period from February 1 - May 15. Any occurrences of the species will be flagged and public infrastructure projects shall avoid impacts to the plants to the maximum extent Feasible. In particular, known occurrences on a map maintained by CVCC shall not be disturbed.

Palm Springs Pocket Mouse. To avoid impacts to the Palm Springs pocket mouse and its habitat in the Upper Mission Creek/Big Morongo Canyon and Willow Hole Conservation Areas, Flood Control-related construction activities will comply with the following avoidance and minimization measures.

- **Clearing**: For construction that would involve disturbance to Palm Springs pocket mouse habitat, activity should be phased to the extent feasible and practicable so that suitable habitat islands are no farther than 300 feet apart at any given time to allow pocket mice to disperse between habitat patches across non-suitable habitat (i.e., unvegetated and/or compacted soils). Prior to project construction, a biological monitor familiar with this species should assist construction crews in planning access routes to avoid impacts to occupied habitat as much as feasible (i.e., placement of preferred routes on project plans and incorporation of methods to avoid as much suitable habitat/soil disturbance as possible). Furthermore, during construction activities, the biological monitor will ensure that connected, naturally vegetated areas with sandy soils and typical native vegetation remain intact to the extent feasible and practicable. Finally, construction that involves clearing of habitat should be avoided during the peak breeding season (approximately March to May), and activity should be limited as much as possible during the rest of the breeding season (January to February and June to August).
- **Revegetation**: Clearing of native vegetation (e.g., creosote, rabbitbrush, burrobush, cheesebush) should be followed by revegetation, including natural reestablishment and other means, resulting in habitat types of equal or superior biological value for Palm Springs pocket mouse.
- **Trapping/Holding**: All trapping activity should be conducted in accordance with accepted protocols and by a qualified biologist who possesses a Memorandum of

Understanding with CDFG for live-trapping of heteromyid species in Southern California.

- **Translocation**: Should translocation between distinct population groups be necessary, as determined through the Adaptive Management and Monitoring Program, activity should be conducted by a qualified biologist who possesses a Memorandum of Understanding with CDFG for live-trapping of heteromyid species in Southern California. Trapping and subsequent translocation activity should be conducted in accordance with accepted protocols. Translocation programs should be coordinated by or conducted by the CVCC and/or RMOC to determine the appropriate trapping, holding, marking, and handling methods and potential translocation sites.

Little San Bernardino Mountains Linanthus. This measure does not apply to single-family residences and any non-commercial accessory uses and structures, including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. To avoid and minimize impacts to this species as much as possible, the following avoidance and minimization effort shall occur:

- **Salvage**: Salvage of top soil and/or seeds should occur prior to ground disturbance in accordance with Section 6.6.1. Salvage should be conducted by or in cooperation with the CVCC.

Appendix E Regulations

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Regulations

Endangered Species Act of 1973

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (ESA). Section 9 of the ESA prohibits "take" of threatened or endangered species. "Take" under the ESA is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the ESA, the United States Fish and Wildlife Service (USFWS) may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an ESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) makes it unlawful to pursue, capture, kill, possess, or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered "take." This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

State Regulations

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines "endangered" and "rare" species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

California Endangered Species Act (CESA)

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in "take" of individuals (defined in CESA as; "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the

absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

Fish and Game Code

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Native Plant Protection Act

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

California Native Plant Society Rare and Endangered Plant Species

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

California Rare Plant Rank

1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere

1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

2A- Plants Presumed Extirpated in California, But More Common Elsewhere

2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3- Plants about Which More Information is Needed - A Review List

4- Plants of Limited Distribution - A Watch List

Threat Ranks

.1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Local Policies

Coachella Valley MSHCP

A Multiple Species Habitat Conservation Plan (Plan) was prepared for the entire Coachella Valley and surrounding mountains to address current and potential future state and federal Endangered Species Act issues in the Plan Area. A Memorandum of Understanding ("Planning Agreement") was developed to govern the preparation of the Plan. In late 1995 and early 1996, under the auspices of CVAG, the cities of Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, and Rancho Mirage; County of Riverside (County); U.S. Fish and Wildlife Service (USFWS); California Department of Fish and Game (CDFG); Bureau of Land Management (BLM); U.S. Forest Service (USFS); and National Park Service (NPS) signed the Planning Agreement to initiate the planning effort. Subsequently, Caltrans, Coachella Valley Water District (CVWD), Imperial Irrigation District (IID), Riverside County Flood Control and Water Conservation District (County Flood Control), Riverside County Regional Park and Open Space District (County Parks), Riverside County Waste Resources Management District (County Waste), California Department of Parks and Recreation (State Parks), and CVMC decided to participate in the Plan.

The Plan balances environmental protection and economic development objectives in the Plan Area and simplifies compliance with endangered species related laws. The Plan is intended to satisfy the legal requirements for the issuance of Permits that will allow the Take of species covered by the Plan in the course of otherwise lawful activities. The Plan will, to the maximum extent practicable, minimize and mitigate the impacts of the Taking and provide for Conservation of the Covered Species.

The Conservation Plan includes the establishment of an MSHCP Reserve System, setting Conservation Objectives to ensure the Conservation of the Covered Species and conserved natural communities in the MSHCP Reserve System, provisions for management of the MSHCP Reserve System, and a Monitoring Program, and Adaptive Management. The MSHCP Reserve System will be established from lands within

21 Conservation Areas. Because some Take Authorization is provided under the Plan for Development in Conservation Areas, the actual MSHCP Reserve System will be somewhat smaller than the total acres in the Conservation Areas. When assembled, the Reserve System will provide for the Conservation of the Covered Species in the Plan Area.

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

Federal Regulations

Section 404 of the Clean Water Act

Since 1972, the Corps and U.S. Environmental Protection Agency (EPA) have jointly regulated the filling of "waters of the U.S.," including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define "fill material" to include any "material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States." Examples include, but are not limited to, sand, rock, clay, construction debris, wood chips, and "materials used to create any structure or infrastructure in the waters of the United States." In order to further define the scope of waters protected under the CWA, the Corps and EPA published the Clean Water Rule on June 29, 2015. Pursuant to the Clean Water Rule, the term "*waters of the United States*" is defined as follows:

(i) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

(ii) All interstate waters, including interstate wetlands[1].

(iii) The territorial seas.

(iv) All impoundments of waters otherwise defined as waters of the United States under the definition.

(v) All tributaries[2] of waters identified in paragraphs (i) through (iii) mentioned above.

(vi) All waters adjacent[3] to a water identified in paragraphs (i) through (v) mentioned above, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

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1 The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

2 The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (iv) mentioned above), to a water identified in paragraphs (i) through (iii) mentioned above, that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark.

3 The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (i) through (v) mentioned above, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like.

(vii) All prairie potholes, Carolina bays and Delmarva bays, Pocosins, western vernals pools, Texas coastal prairie wetlands, where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (i) through (iii) meantioned above.

(viii) All waters located within the 100-year floodplain of a water identified in paragraphs (i) through (iii) mentioned above and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (i) through (v) mentioned above, where they are determined on a case-specific basis to have a significant nexus to a waters identified in paragraphs (i) through (iii) mentioned above.

The following features are not defined as "waters of the United States" even when they meet the terms of paragraphs (iv) through (viii) mentioned above:

(i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.

(ii) Prior converted cropland.

(iii) The following ditches:

(A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
(B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
(C) Ditches that do not flow, either directly or through another water, into a water of the United States as identified in paragraphs (i) through (iii) of the previous section.

(iv) The following features:

(A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;
(B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
(C) Artificial reflecting pools or swimming pools created in dry land;
(D) Small ornamental waters created in dry land;
(E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
(F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of a tributary, non-wetland swales, and lawfully constructed grassed waterways; and
(G) Puddles.

(v) Groundwater, including groundwater drained through subsurface drainage systems.

(vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

Section 401 of the Clean Water Act

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

State Regulations

Fish and Game Code

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

(1) substantially obstruct or divert the natural flow of a river, stream, or lake;
(2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
(3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

Porter Cologne Act

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state's authority over isolated and insignificant waters. Generally, any

person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although "waste" is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.