Jurisdictional Delineation Report

Federal Boulevard Chollas Creek De-Channelization & Trail Project
City of San Diego, San Diego County, California

Prepared for:

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EXECUTIVE SUMMARY

The Federal Boulevard Chollas Creek De-Channelization & Trail Project (Project) in San Diego, California was surveyed for jurisdictional wetlands and waters of the United States, of the State of California, and City of San Diego jurisdiction in April and May of 2020. The intent of delineation was to define existing jurisdiction found within the Project boundary.

The purpose of this jurisdictional delineation is to describe the extent of local, state and federal jurisdiction within the project limits the purpose of satisfying the requirements of the California Environmental Quality Act (CEQA) and procuring environmental permits.

Chollas Creek is the principal jurisdictional drainage that fall within the Project limits. One small tributary is also found within the survey area, but will not be directly affect by the Project. Both are concrete-lined. They are regulated by the Army Corps of Engineers (ACOE) under Section 404 of the Clean Water Act (CWA) following the 2020 ACOE Navigable Waters Protection Rule, the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and the Porter Cologne Act, and the California Department of Fish and Wildlife (CDFW) under Section 1600 of the California Fish and Game Code. It is also regulated by the City of San Diego (City). Chollas Creek is intermittent in nature. Chollas Creek extends for 1,885 linear feet and ACOE/RWQCB jurisdiction totals 1.52 acres; City of San Diego Wetlands also totals 1.52 acres; and CDFW jurisdiction totals 2.26 acres within the Project footprint. The Project is outside the Coastal Zone.

The Project intends to remove the concrete within Chollas Creek along 1,885 linear feet and restore it to a naturalized form. Post-restoration, Chollas Creek will be wider and rock-lined with four ungrouted natural rock and one concrete grade control structures. Approximately 0.73 acre of the north bank revegetated with native plants. Post-restoration, the City Wetland/ACOE/RWQCB jurisdiction will be 2.11 acres and CDFW jurisdiction will be 2.84 acres.

1.0 INTRODUCTION

On April 15 and May 11, 2020, Trestles Environmental Corporation (Trestles) conducted a routine-level delineation of jurisdictional waters and wetlands within a portion of Chollas Creek and an unnamed tributary to Chollas Creek relating to the study area associated with the Federal Blvd Chollas Creek Restoration & Trail Project (Project) in San Diego, California. One of the principal goals of the proposed project is to restore Chollas Creek.

The purpose of this jurisdictional delineation is to identify the extend of local, federal and state wetlands and waters within and adjacent to the Project boundaries to support the resource-agency permitting process under Sections 401 and 404 of the Clean Water Act (CWA), Section 13260 of the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and Section 1602 of the California Fish and Game Code.

Section 404 of the CWA covers Waters of the United States (WoUS) as well as federal wetlands and is regulated by the U.S. Army Corps of Engineers (ACOE). Under Section 401 of the CWA, the Regional Water Quality Control Board (RWQCB) regulate at the state level all activities that are regulated at the federal level by the ACOE. The RWQCB/State Water Resources Control Board (SWRCB) also regulate activities affecting non-federal waters and wetlands (e.g., non-federally regulated features) under the Porter-Cologne Act. Section 1600 of the California Fish and Game Code is regulated by the California Department of Fish and Wildlife (CDFW) and covers aquatic features, which may include lakes or streambeds with a defined bed and bank, plus any adjacent riparian vegetation. The City of San Diego Municipal Code Chapter 11.2.1.18 regulates City defined wetlands. If a proposed project could affect waters or wetlands, the project limits must be evaluated to determine the presence of jurisdictional waters. Permits for the proposed activity must be sought from each applicable resource agency. Details regarding each of these resource agencies as well as their regulatory authority, jurisdiction, permits, and regulatory processes are provided in Chapter 2, “Summary of Regulations.”

The information and results presented herein document the investigation, best professional judgment and conclusions of Trestles. It is correct and complete to the best of our knowledge. However, all jurisdictional determinations should be considered preliminary until reviewed and approved by the regulatory agencies.

1.1 Location

The Project is located within the Fairmount Park neighborhood of City Heights in the Mid-City Community Planning area in the City of San Diego, San Diego County, California. As shown in Figure 1, Project Location, and Figure 2, Vicinity Map, the Project is located north of State Route (SR) 94, east of Interstate-15 and Home Avenue, south of Federal Boulevard, and west of Interstate 805. It is in an urban setting surrounded by freeways and roads on all sides, with a City of San Diego Police Department canine facility and a shooting range to the north immediately across Federal Boulevard.

The Project is situated within the United States Geological Survey (USGS) 7.5' series National City Quadrangle, San Diego County, Section 5, Township 17 S, Range 5 West. NAD83 Long/Lat is: -117.1058, 32.7196.

1.2 Directions to the Project

The nearest physical address, located across the street from the Project, is 4088 Federal Boulevard, San Diego California 92105 (San Diego Police Department Revolver Club). From I-15 heading south, exit I-805 South towards SR-94 East. Take exit 13B towards Home Avenue. Turn right onto Home Avenue and travel for 0.6 mile. Turn left on Federal Boulevard, and Project begins immediately on the right.

1.3 Project Background

The Project is located within the Fairmount Park neighborhood of City Heights in the Mid-City Community Planning area. City Heights was identified in the City of San Diego's Chollas Creek Enhancement Program (2002) to benefit from habitat restoration and the development of a trail system to improve water quality and quality of life.

In 2017, Groundwork San Diego obtained a Prop. 1 Disadvantaged Community Involvement (DACI) Grant from the California Department of Water Resources Integrated Regional Water Management (IRWM) Program. Part of this grant was to study the feasibility of removing concrete along the identified 2,100 linear feet of Chollas Creek. The grant included hydrology/hydraulic modeling, which indicated that it was possible to remove the concrete without causing downstream changes to the hydrology or impacts to downstream structures. As part of this grant, stakeholders including the City of San Diego and Caltrans (property owners), and the Resource Agencies were consulted, biological impacts were initially assessed and 60% design engineering drawings were developed. Two subsequent grants were awarded that covers current permit approvals, final engineering and landscape design, construction costs and three years of post-construction monitoring.

The project will improve surface water quality and contain high volume surface run-off. The development of the trail segment on the project site will augment recreational spaces and connect communities to the emerging Chollas Creek Watershed Regional Park. The project area was identified in the City of San Diego's Chollas Creek Enhancement Program to benefit from habitat restoration and the development of a trail system to improve water quality and quality of life.

1.4 Project Description

As shown in Figures 3 through 5, the proposed project consists of two main components: (1) the de-channelization (concrete-removal) and widening of 1,885 linear feet of Chollas Creek, and (2) the construction of a 3,100 linear foot trail and landscaping around the trail and on the restored north bank of the Creek.

Chollas-Creek De-Channelization & Restoration

Overall, the proposed Project would remove 2.26 acres of impermeable concrete channel and replace it with 2.84 acres of permeable channel lined with natural stone placed to mimic a natural stream meander during low flow, and capable of containing a 100-year flood during high flows (in the existing condition, Federal Blvd and the police facility on the north side of Federal Blvd would be inundated). Non-native plants on the disturbed north side of the channel would be removed and replaced with native vegetation.

Chollas Creek within the Project limits is currently lined with concrete, extending 50 feet at the top of the concrete and 30 feet in the active channel bottom for the 2,030-foot length, totaling approximately 2.84 acres of hardened channel. The Project would remove concrete on the bottom and sides for 1,885 linear feet and on the channel sides for an additional 145' linear feet (downstream-most reach) and restore it to a more natural condition. Concrete channel would remain for the initial 80 feet from the culvert to just past the I-805 Bridge at the upstream end of the Project. Post restoration acreage of the Creek would be 2.11 acres of City jurisdiction, 2.11 acres of ACOE/RWQCB jurisdiction and 2.84 acres of CDFW (including planted slope and access ramps) and. The restored natural channel would require a larger cross-sectional area than the current concrete channel in order to accommodate flood flows. Following concrete removal, the creek bed would be widened, deepened and lined with natural stone placed to mimic a natural stream meander on the channel bottom. Under existing conditions, the 100-year flood is not contained within the creek and inundates nearby property. This project would reduce flooding and allow for the 100-year flood event to remain within the confines of the creek, with minor overflow at the downstream connection to the existing channel (this overflow is still a reduction of the existing flood condition).

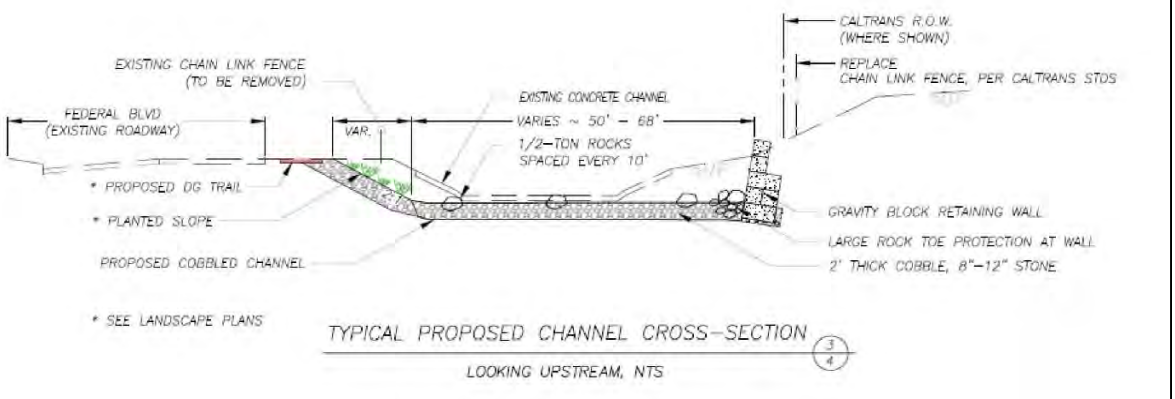
Armorflex

Channel would be similar to this post-restoration condition (Chollas Creek – Lenox Avenue Creek Restoration).

An existing bridge (part of the old Federal Blvd alignment) spans Chollas Creek and is currently used to access the south side of the channel for sewer maintenance. The bridge would be removed and the sewer manhole on the south side of the channel would be removed and

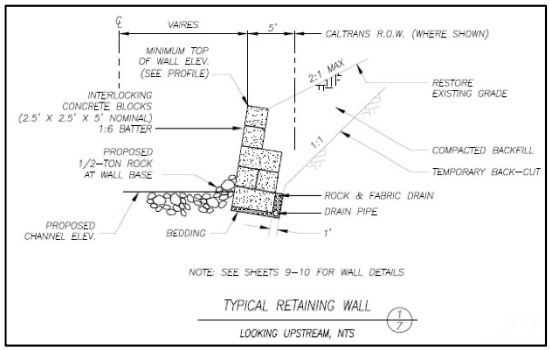
replaced with pipe. Channel access would be maintained through the installation of four access ramps on the north side of the channel, which will be stabilized with armor-flex (or equivalent) and herbaceous vegetation characteristic of Diegan coastal sage scrub. The proposed active channel would have a top width of about 80 feet, with a gentler channel slope to create velocity reduction. Four ungrouted natural-stone drop structures and one concrete drop structure (at the upstream end of the site) would be installed to create the gentle slope between drop structures, and dissipate energy. The largest drop structure at the upstream end of the project would incorporate a concrete spillway. Larger natural stone would be placed intermittently in the channel bottom, combined with the smaller natural stone to create a natural-looking streambed, similar to nearby reaches of Chollas Creek. Natural stone and natural grade control structures would be ungrouted to best mimic the natural streambed function.

The natural stone would be placed in the channel bottom and on the north side slope by an excavator to form a riffle type channel to create a natural stream meander. The riffle would also have larger, imported natural stone spaced throughout the bottom to encourage a meandering



Drawing based upon 90% Design. See Engineering Drawings for Further Details

type of flow and to stabilize the creek. The proposed stone in the channel bottom would have a median size of 18-21 inches, with the drop structure stone composed of one to half-ton graded stone. The larger drop structure at the easterly end of project would be made up of one to two-ton stone and a concrete spillway. The channel bottom would be approximately 2 to 3-feet thick comprised of stone, with the intermittent larger natural stone exposed above the channel flowline. Bedding beneath the natural stone will be 6 inches of 2-inch crushed gravel. The north-channel banks would be graded at a 2:1 slope ratio, lined with natural stone and planted with native vegetation.



A new retaining wall of varying heights (6 to 12 feet) would be needed along the along the southern side of the Creek, mostly along the

current City maintenance road situated above the top of channel. The retaining wall structure would be located on City and Caltrans owned property. The adjacent Caltrans SR-94 manufactured slopes would be temporarily disturbed by construction activities as a result of retaining wall construction.

Concrete removed as part of demolition, including removal of the old Federal Boulevard bridge culvert, would be broken with a steel-tracked excavator mounted with a hydraulic concrete breaker. A rubber-tired loader would be used to move broken concrete as needed. An excavator would also be used that would be positioned on the top of the bank outside of the creek channel and its banks. Excavation of the channel would be done using a rubber-wheeled grader. The project earthwork volume, including the removal of the existing concrete channel, is anticipated to be approximately 45,000 cubic yards of excavation.


Staging Area on NW Corner

The proposed staging area for construction equipment and material would be provided at the empty lot located in the northwest corner of the construction site. This area is owned by the City of San Diego, with a Right of Way by the Real Estate Assets Department (READ), managed for use by the Public Utilities Department (PUD) for a monitoring well. A second staging area is proposed on a disturbed area on the east side of the Interstate 805 underpass. As described further below, the northwest staging area would be revegetated with a native tree and shrub plantings in a park-like setting using native sycamores and coast live oak above the channel with an understory of Diegan coastal sage scrub following project construction.

Trail Construction & Landscaping

A second project component includes the construction of a new asphalt trail, ranging from 5 to 12’ wide that extends from the existing sidewalk at Home Avenue to approximately 1,000 feet beyond the I-805 Bridge, just across from the City of San Diego’s Sunshine Berardini Park, where it will connect with the existing sidewalk to the east. This ADA compliant ~3,100 linear foot trail parallels Chollas Creek above the top of bank, mostly at street level, then continues east along Federal Boulevard at street level for the remainder of the reach. The trail is designed to provide access to existing trunk sewer manholes in the vicinity.

Landscaping would include native tree and shrub planting that includes sycamore and coast live oak trees, with an understory of coastal sage scrub adjacent to the entire reach of the constructed trail. All trees would be put on permanent bubbler irrigation systems and maintained by the City, pending City Approval. A landscape plan and habitat restoration plan has been prepared as part of this project.

At the west end of the project, the trail would meander through the triangular READ-managed staging area that is located immediately east of Home Ave. To allow City access to the water monitoring well located in this area, a 50-foot-radius decomposed granite (DG) area would be included around the well, with a fenced DG 15-foot access trail connecting to Federal Blvd. The well would be protected by bollards. Access would also be maintained to the fire hydrant approximately 450 feet east of Home Ave adjacent to Federal Blvd, with DG placed at a minimum of 15 feet to the west and south of the hydrant, and 17 feet to the east (to allow 15 feet for vehicle access). Bollards would be placed around the hydrant for protection. The remaining READ managed area would be planted with native trees and low-growing native vegetation including sycamore and coast live oak trees, with an understory characteristic of coastal sage scrub.

Where the trail is adjacent to the creek, a "wood-crete" fence would be placed between the trail and the creek channel. Where the trail is adjacent to Federal Blvd (beginning just east of the staging area) a 6-inch asphalt curb would be installed along the edge of Federal Blvd, and "No Parking" signs would be installed.

To facilitate pedestrians who wish to cross from the trail to Sunshine-Berardini Field, red curbs will be extended at 200'-300' prior to the crossing area. Landscaping would include native tree and shrub planting adjacent to the constructed trail wherever space allows which would include sycamores and coast live oak trees with an understory characteristic of Diegan coastal sage scrub above the active channel. All trees would be put on permanent bubbler irrigation systems and maintained by the City, pending City Approval. A landscape plan and habitat restoration plan has been prepared as part of this project.

1.5 Adjacent Land Uses

The Project is surrounded entirely by urban development. It is bound to the west by Home Avenue, SR-94 abuts the project to the South, to the north lies Federal Boulevard and to the east more urban development.

1.6 Field Delineator Contact Information

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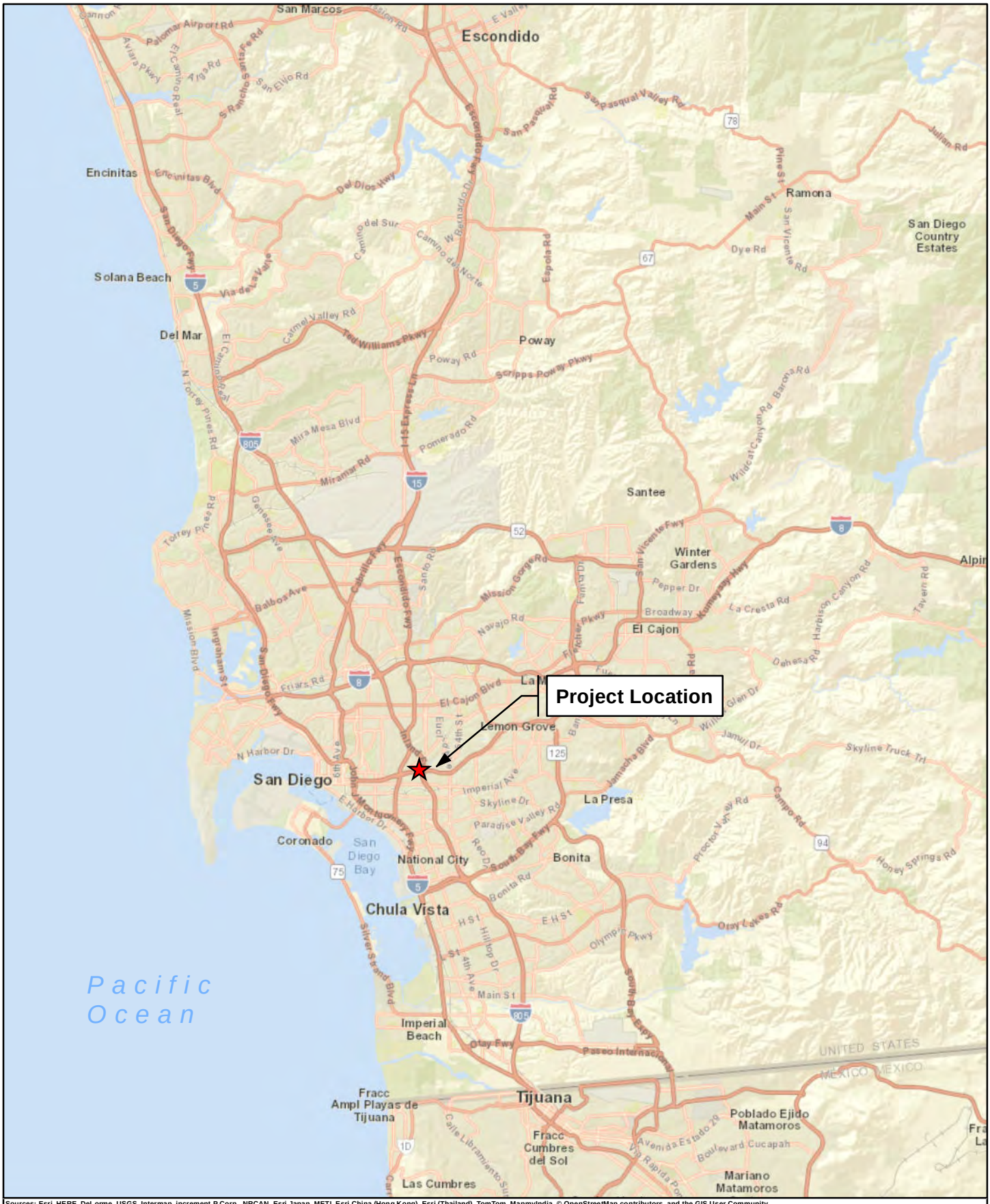
Julie@TrestlesEC.net



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Figure 1

Regional Map

Federal Boulevard Chollas Creek Restoration and Trail Project

N

1 inch = 5 miles

0 2.5 5 Miles

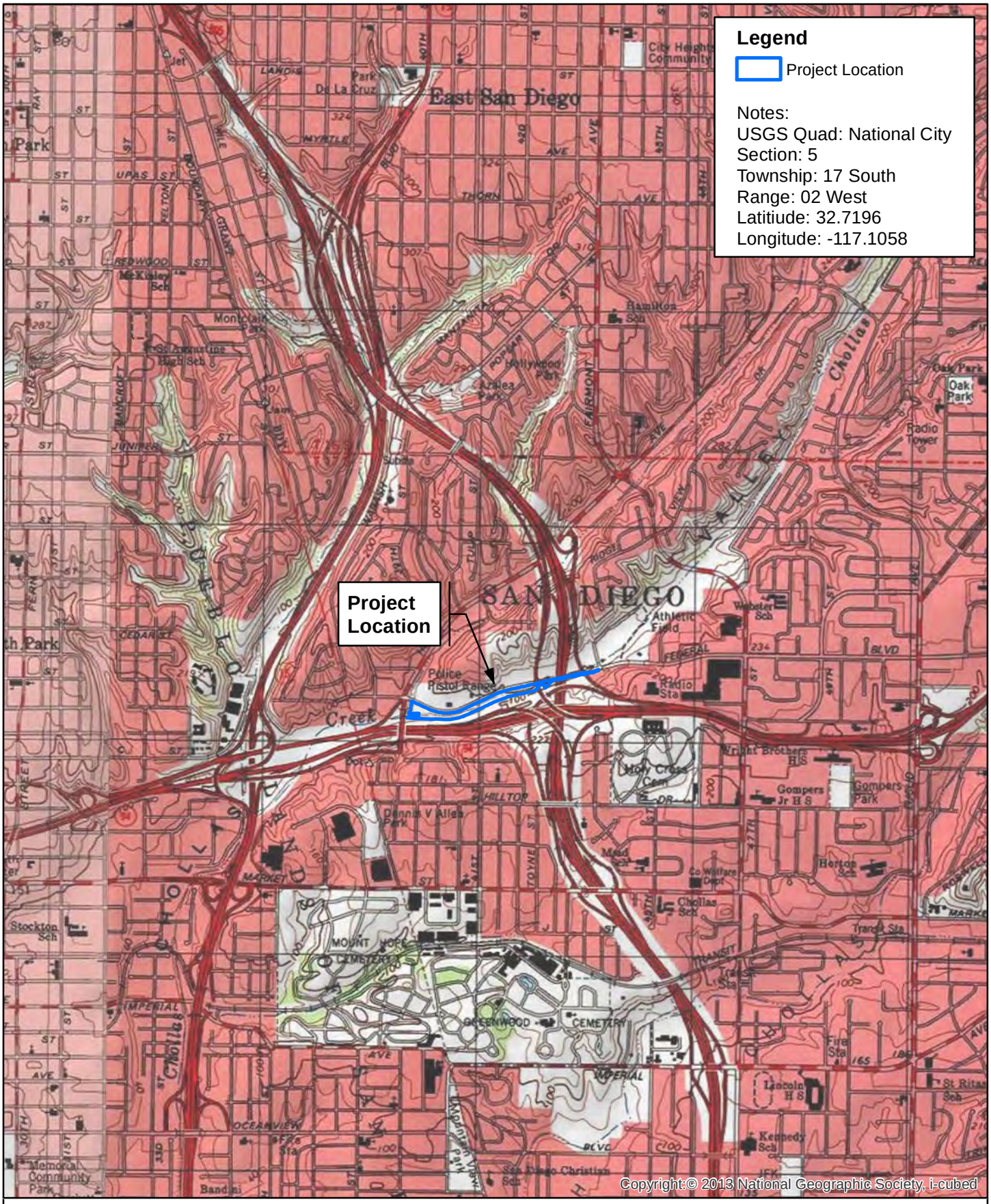


Figure 2

USGS Site Location Map

Federal Boulevard Chollas Creek Restoration and Trail Project

Trestles

N

1 inch = 2,000 feet

0 1,000 2,000 Feet

Aerial Photo: Nearmap 2021

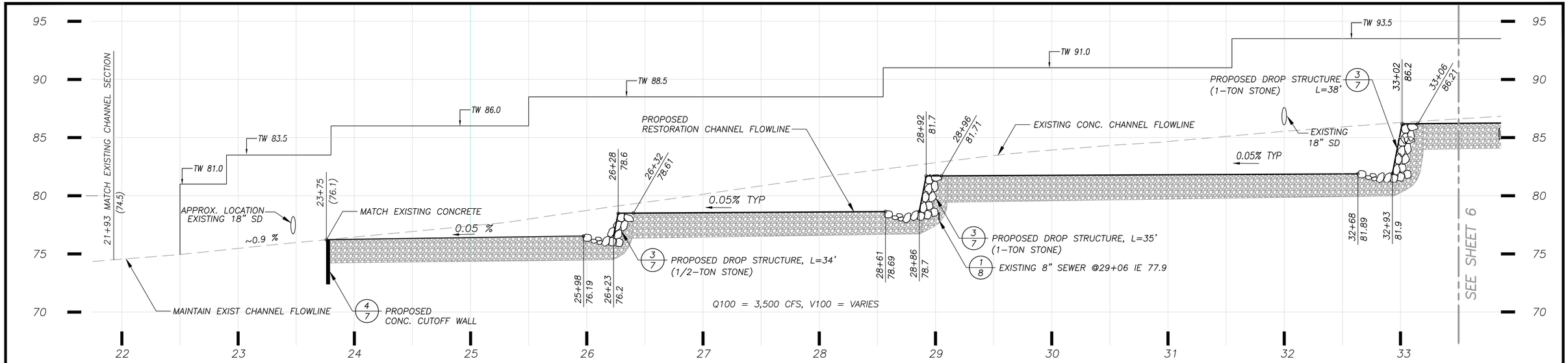
TTG ENVIRONMENTAL

0 200 Feet

Figure 3

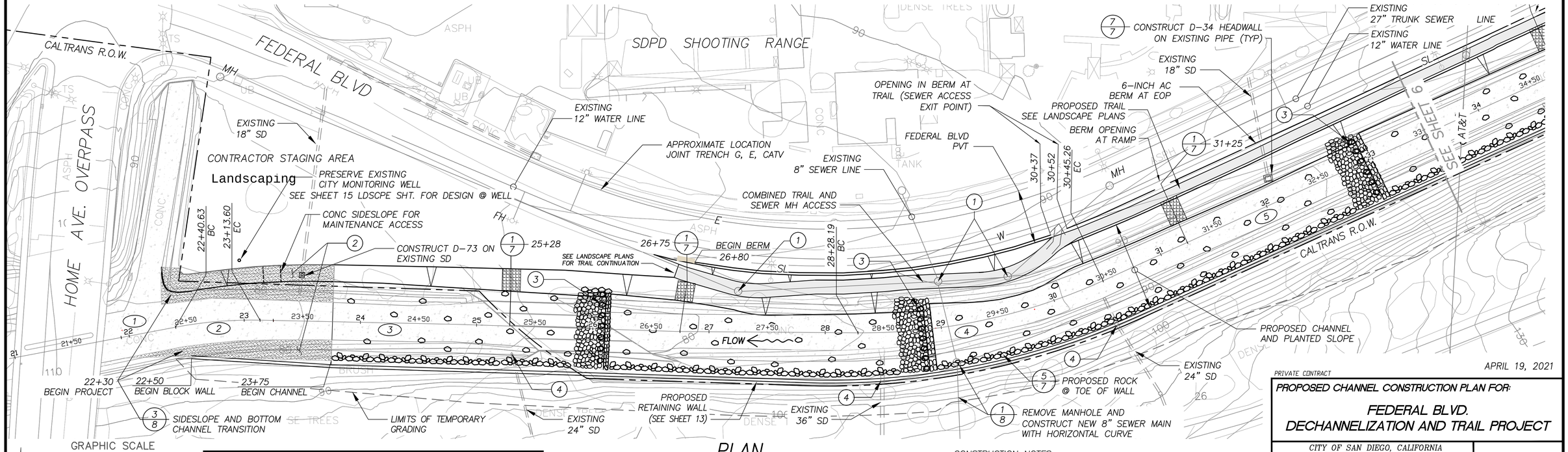
Federal Boulevard De-Channelization &Trail Project

Site Plan



PROFILE

HORIZ. 1"= 40'
VERT. 1" = 4'



PLAN

1" = 40'

GRAPHIC SCALE
40 0 20 40
4 0 2 4
(IN FEET)

N

TORY R. WALKER ENGINEERING
122 Civic Center Drive, Suite 206 Vista, CA 92084

Channel Centerline Data			
Data Symbol	Delta or Bearing	Length (FT)	Radius (FT)
1	Δ = 11° 56' 45"	47.63	-
2	N 79° 16' 51" E	72.79	350
3	N 88° 09' 17" W	514.59	-
4	24° 52' 27"	217.07	500
5	N 65° 34' 15" E	541.82	-

Figure 4. Project Plan - Downstream

TORY R. WALKER R.C.E. NO. 45005 EXP. 03-31-2022 DATE

CONSTRUCTION NOTES:

1. LOWER SEWER MH RIM TO MATCH TRAIL PER STD M-02
2. PROPOSED CONCRETE SIDE WALLS AND CHANNEL BOTTOM (560-C-3250 CONCRETE, 12" THICK) SEE DETAIL SHEET 8
3. PLACE ROW OF 2-TON ROCK ALONG DROP STRUCTURE TOE SPACED ~3-FT APART (TYP)
4. CUT STORM DRAIN AT OUTER FACE OF WALL. CAST-IN-PLACE CUSTOM FILLET HEADWALL TO BE FORMED AND CONSTRUCTED CONCURRENT WITH BLOCK PLACEMENT.

APRIL 19, 2021

PRIVATE CONTRACT

PROPOSED CHANNEL CONSTRUCTION PLAN FOR:

FEDERAL BLVD. DECHANNELIZATION AND TRAIL PROJECT

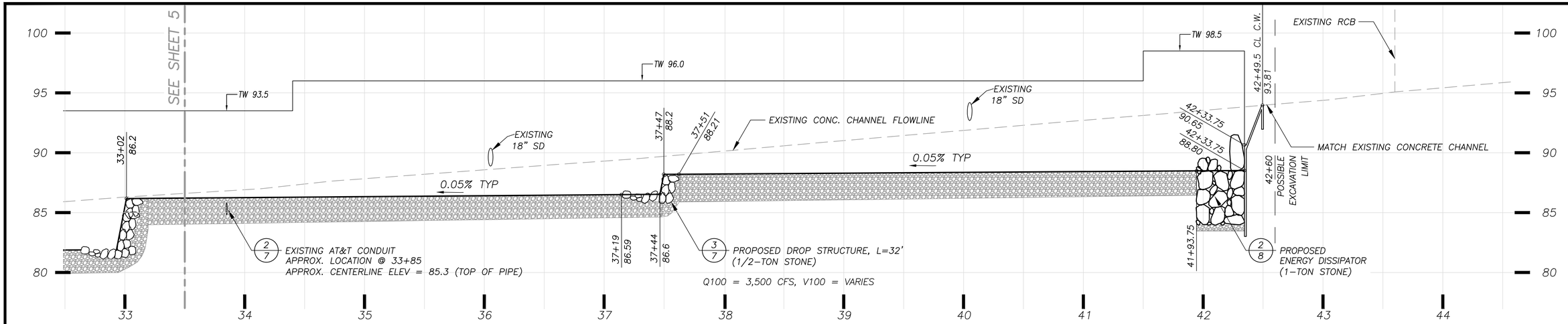
CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT
SHEET 5 OF 22 SHEETS

FOR CITY ENGINEER _____ DATE _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	XXX			
AS-BUILTS				

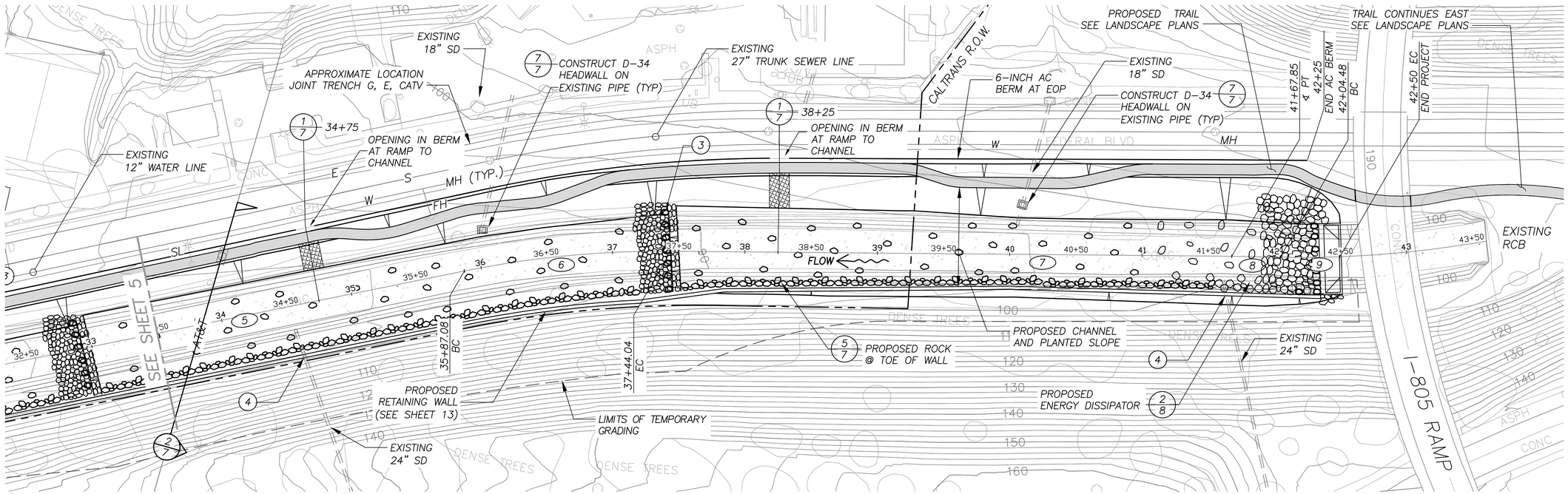
CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

PROJECT NO. _____
V.T.M. _____
1843-6297
NAD83 COORDINATES
194-1725
LAMBERT COORDINATES
XXXXX-5-D



PROFILE

HORIZ. 1"= 40'
VERT. 1" = 4'



PLAN

1" = 40'

Channel Centerline Data			
Data Symbol	Delta or Bearing	Length (FT)	Radius (FT)
5	N 65° 34' 15"	541.82	-
6	Δ = 11° 59' 26"	156.96	750
7	N 77° 33' 41"	423.21	-
8	N 78° 10' 13"	35.05	-
9	Δ = 03° 13' 27"	45.02	300

N

GRAPHIC SCALE
40 0 20 40
4 0 2 4
(IN FEET)

Figure 5. Project Plan - Upstream

CONSTRUCTION NOTES:

(3) PLACE ROW OF 2-TON ROCK ALONG DROP STRUCTURE TOE SPACED ~3-FT APART (TYP)

(4) CUT STORM DRAIN AT OUTER FACE OF WALL. CAST-IN-PLACE CUSTOM FILLET HEADWALL TO BE FORMED AND CONSTRUCTED CONCURRENT WITH BLOCK PLACEMENT.

TORY R. WALKER ENGINEERING
122 Civic Center Drive, Suite 206 Vista, CA 92084

TORY R. WALKER R.C.E. NO. 45005 EXP. 03-31-2022 DATE

PRIVATE CONTRACT

APRIL 5, 2021

PROPOSED CHANNEL CONSTRUCTION PLAN FOR:

FEDERAL BLVD. DECHANNELIZATION AND TRAIL PROJECT

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT
SHEET 6 OF 22 SHEETS

PROJECT NO.

FOR CITY ENGINEER DATE

V.T.M.

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	XXX			
AS-BUILTS				

1843-6297
NAD83 COORDINATES

194-1725
LAMBERT COORDINATES

CONTRACTOR DATE STARTED

INSPECTOR DATE COMPLETED

XXXXX-6-D

2.0 SUMMARY OF REGULATIONS

There are four primary agencies that regulate activities within creeks, wetlands and riparian areas in the City of San Diego. The U.S. Army Corps of Engineers Regulatory Program regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA).

The State Water Resources Control Board (SWRCB), administered by the San Diego Regional Water Quality Control Board regulates activities pursuant to Section 401 of the Federal CWA and the California Porter-Cologne Water Quality Control Act of 1969 (California Water Code).

The CDFW regulates activities within streambeds, lakes, and wetlands pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code.

The City of San Diego regulates activities pursuant to San Diego Municipal Code (SDMC) Chapter 143.0110 and Biology Guidelines 2018.

Any project that involves disrupting or otherwise working within a creek, wetland or riparian area may require permits from the City, ACOE, RWQCB and/or the CDFW before any work can commence.

The ACOE will not issue its authorization until the RWQCB completes the Section 401 permit. Application to the CDFW for a 1600 Agreement and the RWQCB for a Section 401 permit both require submittal of a valid California Environmental Quality Act (CEQA) document, with the City being the lead agency. A site development permit from the City would be required.

2.1 Waters of the US

The Army Corps of Engineers and the Environmental Protection Agency (EPA) have issued a set of guidance documents detailing the process for determining Clean Water Act (CWA) jurisdiction over waters of the U.S. under the 2020 ACOE Navigable Waters Protection Rule (2020 Rule). This supersedes all previous court decisions and rules. The EPA and ACOE issued this Rule in January of 2020 and is in full effect at the time of this report preparation and is utilized for determining the jurisdiction over waters of the United States under the CWA. The complete set of guidance documents, summarized as key points below, were used to collect relevant data for evaluation to determine ACOE jurisdiction over the project limits.

The 2020 Rule redefines “Waters of the United States” (WoUS) so that it includes only four simple categories of jurisdictional waters and provides clear exclusions for many water features that traditionally have not been regulated. The significant nexus test is no longer in effect.

These four categories protect the nation’s navigable waters and the core perennial and intermittent tributary systems that flow into those waters.

(1) Territorial seas and traditional navigable waters (TNWs) [Category (a)(1)]

The 2020 Rule regulates territorial seas and traditional navigable waters include large rivers and lakes and tidally-influenced waterbodies used in interstate or foreign commerce.

(2) Tributaries [Category (a)(2)]

The 2020 Rule regulates tributaries include perennial and intermittent rivers and streams that contribute surface flow to traditional navigable waters in a typical year. These tributaries must have perennial or intermittent flow. Ephemeral drainages are no longer regulated under the 2020 Rule.

Tributaries can connect to a traditional navigable water or territorial sea in a typical year either directly or through other WoUS, through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).

Ditches are to be considered tributaries only where they satisfy the flow conditions of the perennial and intermittent tributary definition and either were constructed in or relocate a tributary or were constructed in an adjacent wetland and contribute perennial or intermittent flow to a traditional navigable water in a typical year.

(3) Lakes, ponds, and impoundments of jurisdictional waters [Category (a)(3)]

Lakes, ponds, and impoundments of jurisdictional waters are jurisdictional where they contribute surface water flow to a traditional navigable water or territorial sea in a typical year either directly or through other WoUS through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways) or through natural features (including debris piles and boulder fields).

Lakes, ponds, and impoundments of jurisdictional waters are also jurisdictional where they are flooded by a WoUS in a typical year.

(4) Adjacent wetlands [Category (a)(4)]

Wetlands that physically touch other jurisdictional waters are “adjacent wetlands”. This includes marshland habitats in tidal estuaries.

Wetlands separated from a WoUS by only a natural berm, bank or dune are also “adjacent.”

Wetlands inundated by flooding from a WoUS in a typical year are “adjacent.”

> Wetlands that are physically separated from a jurisdictional water by an artificial dike, barrier, or similar artificial structure are “adjacent” so long as that structure allows for a direct hydrologic surface connection between the wetlands and the jurisdictional water in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.
>
> An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

The ACOE generally takes jurisdiction within rivers and streams to the "ordinary high water mark (OHWM)," determined by erosion, the deposition of vegetation or debris, and changes in vegetation or soil characteristics..

The 2020 also outlines what are not WoUS. The following waters/features are not jurisdictional under the 2020 Rule:

- Waterbodies that are not included in the four categories of WoUS listed above.
- Groundwater, including groundwater drained through subsurface drainage systems, such as drains in agricultural lands.
- Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools.
- Diffuse stormwater run-off and directional sheet flow over upland.
- Many farm and roadside ditches.
- Prior converted cropland retains its longstanding exclusion, but is defined for the first time in the 2020 Rule. The agencies are clarifying that this exclusion will cease to apply when cropland is abandoned (i.e., not used for, or in support of, agricultural purposes in the immediately preceding five years) and has reverted to wetlands.
- Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease.
- Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters.
- Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel.
- Stormwater control features excavated or constructed in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off.
- Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention and infiltration basins and ponds, that are constructed in upland or in non-jurisdictional waters
- Waste treatment systems have been excluded from the definition of WoUS since 1979 and will continue to be excluded under the 2020 Rule.

2.2 California Department of Fish and Wildlife Jurisdiction

Pursuant to Division 2, Chapter 6, Section 1602 of the Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream, or lake which supports fish or wildlife. A notification of a Lake or Streambed Alteration Agreement must be submitted to CDFW for "any activity" that may substantially change the bed, channel, or bank of any river, stream, or lake." In addition, CDFW has jurisdiction over riparian habitats associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of a stream or lake, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources. The CDFW reviews proposed actions, and if necessary, submits to the applicant a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement (LSAA).

2.3 Regional and State Water Quality Control Board Jurisdiction

The SWRCB together with the local RWQCB are the principal state agency with primary responsibility for the coordination and control of water quality. In San Diego County, the San Diego Regional Water Quality Control Board regulates water quality activities, pursuant to Section 401(a)(1) of the federal CWA as well as the Porter Cologne Water Quality Control Act (Porter-Cologne) (Water Code Section 13260). Section 401 of the CWA specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable water at the point where the discharge originates or will originate. Any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA.

In April 2019, the SWRCB adopted a "State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State" (Procedures). The Procedures consist of four major elements for State-regulated wetlands: 1) a wetland definition; 2) wetland delineation procedures; 3) a framework for determining if a feature that meets the wetland definition is a water of the state; and 4) procedures for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. In adopting the Procedures, the State Water Board directed staff to develop implementation guidance for potential applicants.

2019 New Wetland Definition and Procedures

In 2019, the SWRCB issued "New Wetland Definition and Procedures of 2019" (Procedures) for redefining State "wetlands" was enacted to ensure State waters are protected, clarifying the State definition of a "wetland". In April 21, 2020 the SWRCB issued the "Implementation Guidance for the State Wetland Definition and Procedures for Discharges of Dredged or Fill

Material to Waters of the State" , providing guidance for implementing the 2019 Procedures. The wetland definition and delineation methods set forth in the Procedures apply to wetlands only, and not to non-wetland Waters of the State.

Wetland Waters of the State

The Procedures define an area as wetland as follows - An area is wetland if, under normal circumstances:

(1) The area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;
(2) The duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and
(3) The area's vegetation is dominated by hydrophytes or the area lacks vegetation.

This modified three-parameter definition is similar to the federal definition in that it identifies three wetland characteristics that determine the presence of a wetland: wetland hydrology, hydric soils and hydrophytic vegetation. Unlike the federal definition however, the Procedures' wetland definition allows for the presence of hydric substrates as a criteria for wetland identification (not just wetland soils) and wetland hydrology for an area devoid of vegetation (less than 5% cover) to be considered a wetland. However, if any vegetation is present then the ACOE delineation procedures would apply to the vegetated component (i.e., hydrophytes must dominate). When determining the boundary of wetlands (vegetated or not) applicants can rely on Part II of the 1987 ACOE Manual that provides information that is sufficient to determine wetland boundaries for compliance with the Procedures.

The ACOE definition refers to "saturated soil conditions," whereas the Procedures' definition refers to saturated substrate leading to "anaerobic conditions in the upper substrate" which is a more inclusive term. Both of these descriptions define conditions that would lead to dominance of hydrophytes, if the site is vegetated. The Procedures definition refers to "continuous or recurrent saturation of the upper substrate." Continuous saturation describes hydrological conditions that are perennial or tend to persist for at least twelve months. Recurrent saturation describes hydrological conditions that persist for less than twelve months. Hydrological conditions may be periodic and sustained regularly (i.e., tidewater) or episodic and intermittent, (i.e., vernal pools). In order for the recurrent saturation to support the development of anaerobic conditions, the substrate must become, and remain, saturated for a duration of 14 days during an annual cycle.

Waters of the State

California Code of Regulations, title 23, section 3831(w) states that" *"[a]ll waters of the United States are also 'Waters of the State*.'" The regulation reflects the SWRCB intent to include a broad interpretation of Waters of the US into the definition of Waters of the State. Waters of the State includes features that have been determined by the U.S. EPA or the ACOE to be WoUS in an

approved jurisdictional determination; WoUS identified in an aquatic resource report certified by the ACOE upon which a permitting decision was based; and features that are consistent with any *current or historic* final judicial interpretation of WoUS or any *current or historic* federal regulation defining WoUS Because the interpretation of waters of the U.S. in place at the time section 3831(w) was adopted was broader than any post-Rapanos or post-SWANCC regulatory definitions that incorporated more limitations into the scope of federal jurisdiction, it is consistent with the SWRCB's intent to include both historic and current definitions of Waters of the US into the SWRCB's wetland jurisdictional framework.

A wetland will continue to be protected when it has been regulated in the past as a WoUS regardless of any subsequent changes in federal regulations. The inclusion of both current and historic definitions of WoUS ensures regulatory stability in an area that has otherwise been in flux. Like the other categories of the SWRCB's wetland jurisdictional framework, the status as a WoUS may only be used to establish that a wetland qualifies as a Water of the State. It cannot be used to exclude a wetland from qualifying as a Water of the State. Thus, wetlands that are categorically excluded from qualifying as a WoUS may nevertheless qualify as Waters of the State under another jurisdictional category.

Jurisdictional Framework

The jurisdictional framework is intended to exclude small (less than an acre) artificially-created, temporary features, such as tire ruts or other transient depressions caused by human activity from regulation, while still capturing smaller, naturally-occurring features, such as seasonal wetlands and small vernal pools that may be outside of federal jurisdiction. All artificial wetlands that are less than an acre in size and do not satisfy the criteria listed in section II.2, II.3.a, II.3.b, or II.3.c are not Waters of the State. Note that this jurisdictional framework applies only to features meeting the technical definition of a wetland.

If an aquatic feature does not meet the definition of a wetland, it may nonetheless be a different type of aquatic feature that may still be regulated as a non-wetland Water of the State (e.g., lakes, streams, and ocean waters). The Procedures do not include guidance for jurisdictional determinations for other Waters of the State. Non-wetland Waters of the State typically follow ACOE regulations, however under the 2020 Rule, ephemeral drainages are excluded. No regulatory guidance has been issued by the SWRCB regarding the delineation of ephemeral drainages, however, until further notice the use of the OHWM will be used to delineate such resources.

Porter-Cologne Act

In the Porter-Cologne, the Legislature declared that the "State must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the State from degradation..." (California Water Code Section 13000). Porter-Cologne grants the Boards the authority to implement and enforce the water quality laws, regulations, policies and plans to protect the groundwater and surface waters of the State. It is important to note that enforcement of the

State's water quality requirements is not solely the purview of the Boards and their staff. Other agencies [e.g., CDFW] have the ability to enforce certain water quality provisions in state law.

The Porter Cologne Act requires "any person discharging waste, or proposing to discharge waste, within any region that could affect the Waters of the State to file a report of discharge (an application for waste discharge requirements (WDRs))" (Water Code § 13260(a)(1)). Discharge of fill material into Waters of the State which does not fall under the jurisdiction of the ACOE pursuant to Section 404 of the CWA may require authorization through application for WDRs or through waiver of WDRs.

2.3 City of San Diego Wetlands

The City of San Diego regulates Environmentally Sensitive Lands (ESL) under the SDMC Chapter 143.0110 and Biology Guidelines 2018. The City focuses on the predominance of hydrophytic plant species as a common element of all wetland vegetation communities. The City considers areas lacking naturally occurring wetland vegetation communities to be wetlands when hydric soil or wetland hydrology are present and past human activities have occurred to remove the historic vegetation, or catastrophic or recurring natural events preclude the establishment of wetland vegetation. Examples of these types of areas include channelized streambeds, and unvegetated natural flood.

3.0 JURISDICTIONAL DELINEATION METHODS

3.1 Database and Literature Review

Prior to conducting the jurisdictional delineation, Trestles conducted a review of available background information pertaining to the Project including historic aerials, geography, and topography. A desktop analysis using aerial maps (Google Earth 2020) was conducted to determine visual drainage features. Site topography was also reviewed based upon Project topographic survey completed in 2020. The following resources were also reviewed or used prior to the field surveys:

- U.S. Fish and Wildlife Service's (USFWS) NWI Wetland Mapper (USFWS 2020)
- The National Wetland Plant List: 2018 update (Lichvar et al. 2018)
- Natural Resources Conservation Service's (NRCS) Web Soil Survey, queried to determine the soils that been mapped on the project site (NRCS 2020)
- Hydric Soils List, 2018 (NRCS, 2018)

Site maps were generated with available aerial photographs and potentially jurisdictional features were identified to assist in field verification.

3.2 Field Surveys

Trestles' biologist Julie Fontaine conducted field surveys on April 15 and May 11, 2020 to evaluate the extent of jurisdictional features subject to the City of San Diego, the ACOE, the RWQCB and the CDFW. The limits of WoUS and Waters of the State were recorded in the field within accessible areas using aerial maps and Google earth.

3.2.1 Delineating Waters of the U.S.

3.2.1.1 Non-wetlands

Federal (ACOE) and State (RWQCB) jurisdiction over a non-wetland waters of the U.S. extends to the ordinary high-water mark (OHWM), defined in 33 C.F.R. § 328.3 as the line established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, or the presence of litter and debris. In the Arid West region of the United States, waters are variable and include ephemeral, intermittent and perennial channel forms. Delineation methods and data sheets were completed in accordance with *A Field Guide to the Identification of the Ordinary High Water Mark* (OHWM) in the Arid West Region of the Western United States (ACOE 2008) the *Updated Datasheet for the Identification of the Ordinary High Water Mark* (OHWM) in the Arid West Region of the Western United States (ACOE 2010) and 2020 ACOE Navigable Waters Protection Rule.

3.2.1.2 Wetlands

The climate of the region drastically influences the hydrology, channel-forming processes, and distribution of OHWM indicators such that delineations can be inconsistent (over space and time)

and problematic. The dynamics of arid channel forms and the transitory nature of traditional OHWM indicators in arid environments render the limit of the active floodplain the only reliable and repeatable feature in terms of OHWM delineation (Lichvar and McColley 2008). This was supported by recent additional research in *Vegetation and Channel Morphology Responses to Ordinary High Water Discharge Events in Arid West Stream Channels* (Lichvar et al. 2009).

To determine the extent of potential jurisdictional wetlands on a project site, the Army Corps of Engineers Wetlands Delineation Manual (ACOE 1987) and Regional Supplement to the Army Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (ACOE 2008b) was used as a guide for identifying wetland characteristics. The following three indicators are must all be present to be defined as a wetland:

1. Hydrology, providing permanent or periodic inundation by groundwater or surface water;
2. Hydrophytic vegetation; and
3. Hydric soils.

To be considered a wetland, an area must exhibit at least minimal hydric conditions within these three parameters. Wetland data pits were not sampled since the channel is concrete lined.

Wetland Hydrology

Wetland hydrology indicators are classified into four groups:

> **Group A** – **Observation of Surface Water or Saturated Soils:** This group is based on the direct observation of surface water or saturated soils.
> **Group B** – **Evidence of Recent Inundation:** This group consists of evidence that the site is subject to flooding or ponding, although the inundation may not be recent. Indicators include water marks, drift deposits, sediment deposits, and similar characteristics.
> **Group C** – **Evidence of Recent Soil Saturation:** This group consists of indirect evidence of recent soil saturation. Indicators include oxidized rhizospheres around living roots and the presence of reduced iron and sulfur in the soil profile.
> **Group D** – **Evidence from Other Site Conditions or Data:** This group consists of soil and vegetation features that indicate current rather than historic hydric conditions. The presence of wetland hydrology is assessed at each location where the wetland criteria are met. Data recorded include the extent of surface flows, depth of inundation, depth to saturated soils, and depth to free water in the soil test pit.

Hydrophytic Vegetation

Hydrophytic plants grow partially or completely in water and are indicators of wetland environments. Hydrophytic vegetation occurs only in areas where frequent or sustained inundations are sufficient to produce soil saturation that exerts a controlling influence on plant species. These periodic events must occur for sufficient duration to result in reduced oxygen soil

conditions. Wetlands are characterized by communities of plants, so that the occurrence of individual hydrophytic species in an area otherwise dominated by uplands species is insufficient to characterize the area as a wetland. In arid environments, specific indicator species are important in identification of wetlands (e.g., halophytes and phreatophytes are associated with many wetland settings in the arid west), but in general, the totality of plant species growing on a site is of greater importance than the presence or absence of particular indicator species. Species that are indicators of wetlands have been classified in the National Wetland Plant List (Lichvar et al. 2018). Frequency of a species occurrence in wetlands has been divided into the following five categories.

1. **Obligate Wetland (OBL):** Occurs almost always (estimated probability >99%) under natural conditions in wetlands.
2. **Facultative Wetland (FACW):** Usually occurs in wetlands (estimated probability 67%–99%) but occasionally found in non-wetlands.
3. **Facultative (FAC):** Equally likely to occur in wetlands or non-wetlands (estimated probability 34%–66%).
4. **Facultative Upland (FACU):** Usually occurs in non-wetlands (estimated probability 67%–99%) but occasionally found in wetlands (estimated probability 1%–33%).
5. **Obligate Upland (UPL):** Occurs in wetlands in another region but occurs almost always (estimated probability >99%) under natural conditions in non-wetlands in the region specified.

The ACOE considers species that fall into the OBL, FACW, and FAC categories as being positive indicators of wetland vegetation. The prevalent vegetation that occurs in a wetland may be associated with more than one community and is characterized by the dominant species. A dominance test (Indicator 1) is the basic hydrophytic vegetation indicator and is used to determine the dominant species of a given plant community. The 50/20 Rule is used to determine wetland status by examining the species that dominate a community. This method involves identifying the species type that makes up at least 50% of the stratum of the community, and then identifying a second species type that makes up at least 20% of the stratum. This method should be applied in every wetland determination. Although some plant communities cannot be characterized by the dominance test, most wetlands in the Arid West have plant communities that will pass the dominance test, and therefore this test provides a sufficient indicator in most situations. If the plant community passes the dominance test for wetland species, then the vegetation is characterized as hydrophytic and no further vegetation analysis is required.

The prevalence index (Indicator 2) is used when the vegetation fails the dominance test, but hydric soils and wetland hydrology are present. The prevalence index weighs all of the plant species in a community, rather than just the dominant species. The prevalence index is a weighted-average wetland indicator status of the plant species in a sampling plot. Each indicator status is given a numeric code (OBL = 1, FACW = 2, FAC = 3, FACU = 4, and UPL = 5) and is weighted by the percent cover. Hydrophytic vegetation is present if the prevalence index is 3.0 or less.

Plant morphological adaptations (Indicator 3) can be used to distinguish certain wetland plant communities in the Arid West in the presence of hydric soils and wetland hydrology. Some hydrophytes develop easily recognized physical characteristics due to their adaption to wetland conditions. Common morphological adaptations include adventitious roots and shallow root systems developed on or in the upper layers of the soil. This indicator is applied when the wetland morphological adaptations are found on 50% or more of the FACU species present.

Hydric Soils

The National Technical Committee for Hydric Soils defines a hydric soil as "a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (U.S. Department of Agriculture 2006). Soils that are sufficiently wet because of artificial measures are included in the concept of hydric soils. This classification includes soils that were historically hydric but have since become non-hydric as a result of artificial modification of the hydrologic system that originally created the hydric soil. Some series, designated as hydric, have phases that are not hydric, depending on water table, flooding, and ponding characteristics.

Hydric soils are identified using soil indicators presented in the Regional Supplement to the ACOE of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (ACOE 2008b) and the Field Indicators of Hydric Soils in the United States, Version 8.2, 2018 (NRCS 2018). Indicators of non-sandy hydric soils include an organic composition that is greater than 50% (formed in oversaturated conditions where the decomposition of plant debris is inhibited and slowly accumulates), the presence of sulfides in the soil composition that emanate a strong sulfur odor, and soils with peraquic (groundwater always at or near the soil surface) moisture regimes. The soil coloration produced by soil components is also an indicator that can be used to identify hydric soils while performing field observations. Gleyed soils are produced when reduced oxygen soil environment result in the pronounced chemical reduction of iron, manganese, and other elements, thereby producing grayish, bluish, and greenish soil colors. Mineral hydric soils that are saturated for substantial periods of the growing season (but not long enough to produce gleyed soils) will have bright mottles (marked with spots of contrasting colors) and a dark coloration matrix (the portion of the soil that makes up more than 50% of the composition that has the predominant color). In some mineral hydric soils, mottling may be absent and only the dark coloration occurs.

The coloration of the soil samples, matrix, and mottles is assessed using the Munsell Soil Color Charts (Munsell 2009). The Munsell Color System is the field and laboratory standard for classifying soil color, rocks, and archaeological specimens. The system has three components: hue (a specific color), value (lightness and darkness), and chroma (color intensity). Samples of these components are arranged in books of color chips, each of which is labeled to indicate the assigned value of each of these components. The soil sample is viewed through an aperture below each chip to compare and contrast the coloration until a best-match determination is made.

3.2.2 Delineating Waters of the State of California

3.2.2.1 Regional Water Quality Control Board

Evaluation of jurisdiction under the RWQCB traditionally followed guidance from Section 401 of the CWA, and generally consists of the same jurisdictional areas as ACOE. In addition, the wetland delineation procedures were followed per the "State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State" (April 2019).

3.2.2.2 California Department of Fish and Wildlife Jurisdiction

CDFW jurisdiction typically includes water features with a defined bed and bank. Evaluation of potentially jurisdictional areas followed the guidance of relevant CDFW materials and standard practices by CDFW personnel. CDFW jurisdiction was delineated by measuring the outer width and length boundaries of potentially jurisdictional areas, consisting of the greater of either the top of bank measurement or the extent of associated riparian or wetland vegetation.

3.2.3 Delineating Wetlands Defined under the San Diego Municipal Code

Focus of field surveys for wetlands defined by the City of San Diego focused on naturally occurring wetland vegetation communities, hydric soils and wetland hydrology. The San Diego Municipal Code was followed to define the limits of Disturbed Wetland within the channel.

3.2.4 Limitations

This chapter describes the delineated features, existing conditions and expected jurisdictional status within the Project. The information and results included herein document the investigation, best professional judgment, and conclusions of Trestles. It is correct and complete to the best of our knowledge. However, all jurisdictional determinations should be considered preliminary until reviewed and approved by the regulatory agencies.

4.0 ENVIRONMENTAL SETTING

This chapter describes the topography, land use, hydrology, vegetation characteristics, and soils associated with the Project. The Project lies outside the coastal zone, and therefore there are no jurisdictional wetlands or waters regulated under the California Coastal Act.

4.1 Topography

Within the Project limits, Chollas Creek topography consists gentle grades between 1 and 2% slope. The proposed pedestrian trail also is flat with similar topography. Site topography consists of steep north facing engineered slopes of the SR-94 highway to the south, steep engineered slopes associated with the I-805 to the east of Chollas Creek, and flat valley bottom to the north and west of the Project limits. The elevation ranges from 85 feet above mean sea level (AMSL) in the western-most area of Chollas Creek corner up to 140 feet AMSL on the on the SR-94 Caltrans engineered slopes on the southeastern part of the Project near the I-805 bridge.

4.2 Land Use

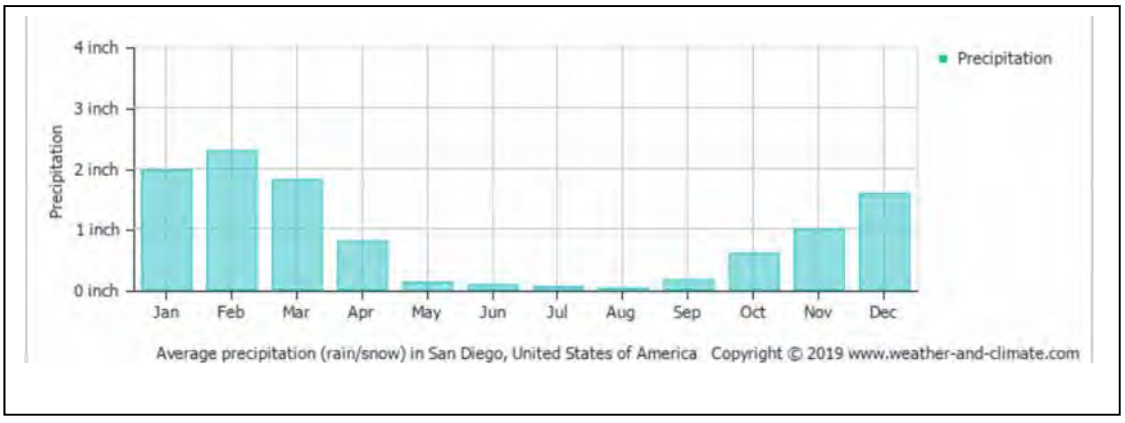
The Project limits consist mostly of disturbed/developed urbanized areas, including the concrete lined Chollas Creek channel, a gravel parking lot and the shoulder of Federal Boulevard.

4.3 Hydrology

The Project lies within the FEMA 100 Year floodplain (see Figure 6). The National Hydrography Dataset (NHD) identifies Chollas Creek as a blue line stream (see Figure 7).

4.3.1 Precipitation

Average precipitation in San Diego is approximately 10.31 inches per year (www.weather-and-climate.com 2019), with the majority of rainfall occurring from November through March.



4.3.2 Hydrologic Unit

The Project is located within the San Diego Hydrologic Unit (HUC8). The Project is located in the Chollas Creek (HUC12) sub hydrologic unit (#180703041201). See Figure 8 for Chollas Creek HUC12 boundary. The San Diego HUC8 and Chollas Creek HUC12 ultimately terminate in San Diego Bay (HUC10) and then to the Pacific Ocean.

4.4 Soils

There are no hydric soils found within the Project limits. Soils mapped are upland soils, and the majority is classified as "Made Land" (see Figure 9), including the current location of Chollas Creek. The 1971 Caltrans As-Builts for the SR-94 freeway shows the channelization and placement of fill in the current location of the Chollas Creek channel.

The "Made Land" classification is generally associated with highly disturbed or altered land, such as the placement of fill or other materials, in urban areas. By definition it reads: *Made Land consists of areas filled artificially with earth, trash, or both, and smoothed*. It occurs most commonly in and around urban areas. A small pocket of Redding-Urban Land Complex mapped unit also is found within the Project limits. Within the study area other mapped soils in addition to the Made Land and Redding-Urban Land Complex includes Huerhuero loam and Terrace Escarpments (USDA, 2020). For the Redding-Urban Land Complex, where there are mixtures or complexes of spots of recognizable series extensive areas of cut and fill made land, both intermixed with urban areas of streets, houses and industrial areas, a name combining the identified series and urban land is used. Redding soils consists of a cobbly to gravelly loam in the upper surface with a hardpan layer typically 20-40 inches below the surface. This hardpan restricts downward movement of water, and allows the concentration of clays just above this layer.

Soils of the Huerhuero series are now included with the Antioch series. These are soils that are clays with a strong shrink-swell capacity, and have very high salt content in the subsurface Bt horizon. Terrace escarpments consist of long, narrow, rocky areas that rise abruptly from the mean tide line to the coastal plain terraces or plateaus. This land type consists of steep faces that separate the terraces from the lower lying land. The faces are composed of soft coastal sandstone, hard shale, or hard, weather-resistant, fine-grained sandstone.

4.5 Vegetation

Chollas Creek is currently concrete lined both on the bottom and the sides of the channel and is classified as Disturbed/Developed (Holland 1986). In cracks at the channel edges and at the top of bank, some vegetation has established due to the regular flow of water, but these are primarily invasive species. Species noted within the OHWM include FAC species including: fountain grass (*Pennisetum setaceum*). Within the concrete lined channel, but outside the OHWM these species were recorded. Tree of Heaven (*Ailanthus altissima*), Mexican fan palm (*Washingtonia robusta*), Canary palm (*Phoenix canariensis*) and shamel ash (*Fraxinus uhdei*).

Total acreages of recorded vegetation communities are provided below. Table 1 provides a breakdown of acreages, providing details of vegetation community types within the Project footprints. Figure 10 provides a map of the vegetation communities for the entire Project.

Table 1 - Vegetation Communities

Vegetation Community (Holland/Oberbauer Code)	SDBG Vegetation Community	Tier/Wetland*	Acreage
Southern Mixed Chaparral	Mixed Chaparral	IIIA	1.11
Disturbed Wetland	Disturbed Wetland	Wetland	1.52
Disturbed Concrete Lined Channel Banks	Disturbed Land	IV	0.74
Disturbed/Developed/Upland Habitat	Disturbed Land	IV	2.61
Eucalyptus Woodland/ Ornamental Planting	Eucalyptus woodland/ Ornamental Planting	IV	0.36
	Total:		**6.34**

*per City of San Diego Biology Guidelines (2018)

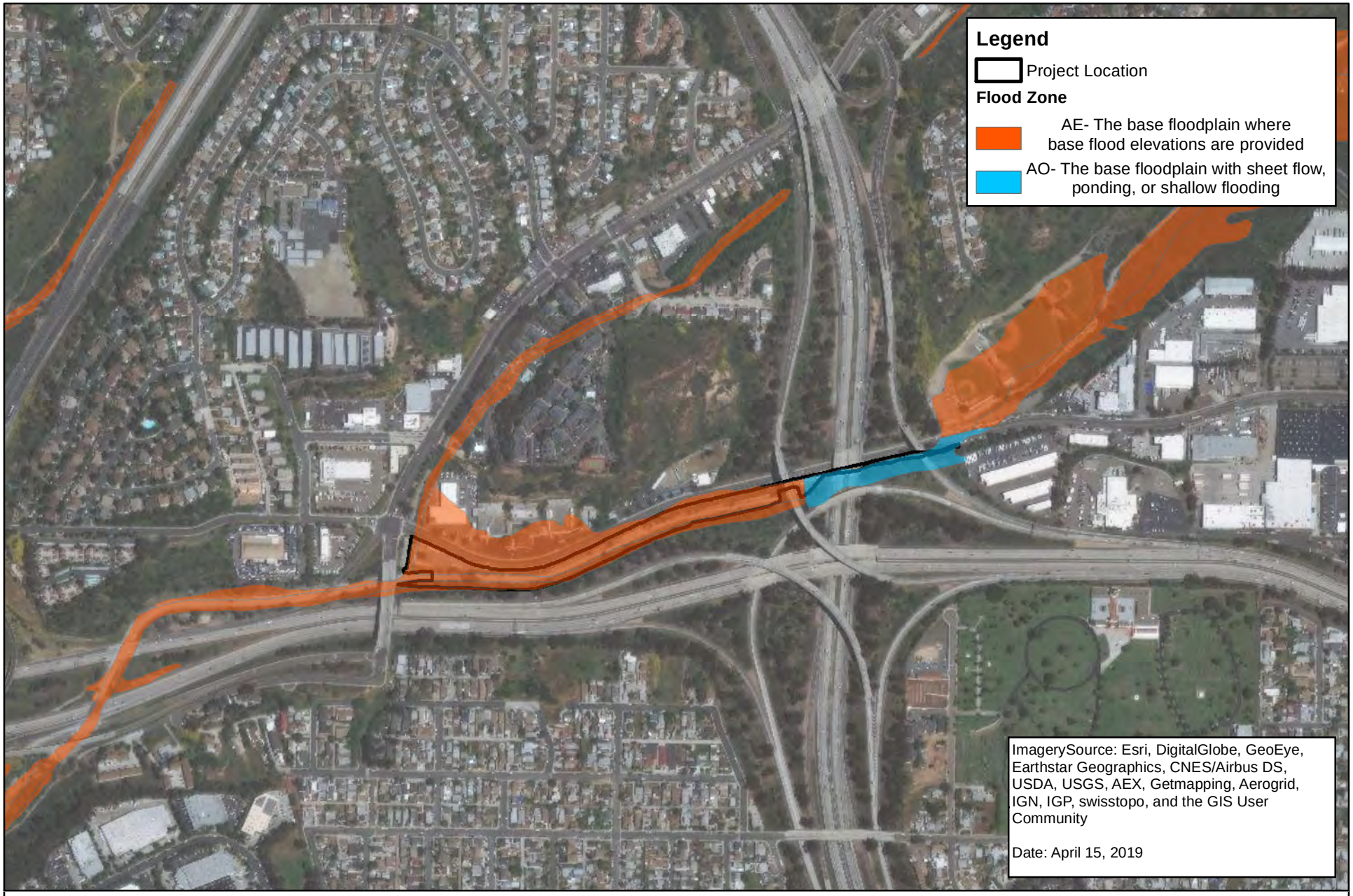


Figure 6

FEMA 100 Year Floodplain Map

Federal Boulevard Chollas Creek Restoration and Trail Project

Trestles

N

1 inch = 700 feet

0 350 700 Feet

Figure 7

USGS National Hydrography Dataset Map

Federal Boulevard Chollas Creek Restoration and Trail Project

N

1 inch = 700 feet

0 350 700 Feet

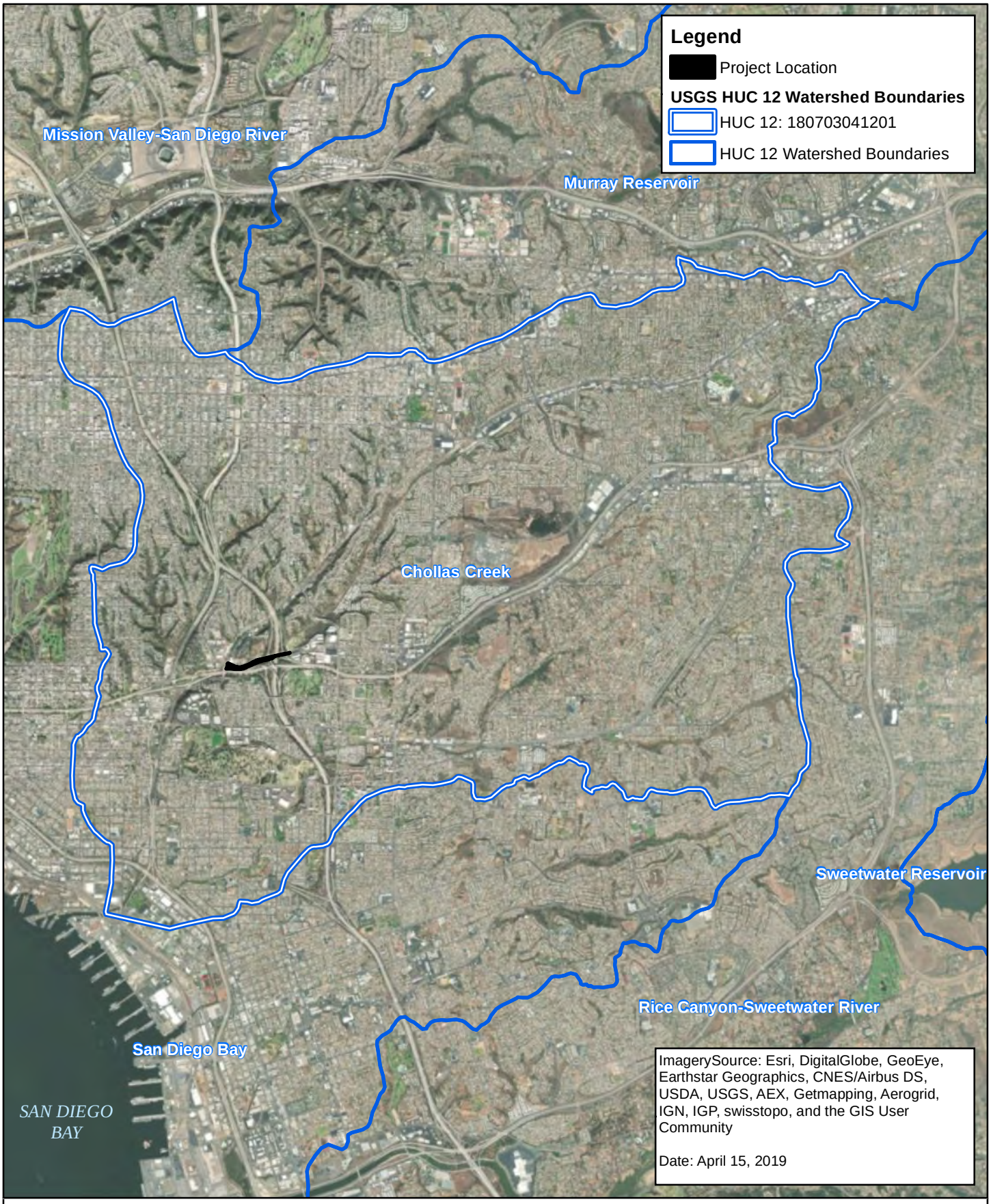


Figure 8

USGS 12 Digit Hydrologic Unit Code Map

Federal Boulevard Chollas Creek Restoration and Trail Project

N

1 inch = 6,000 feet

0 3,000 6,000 Feet

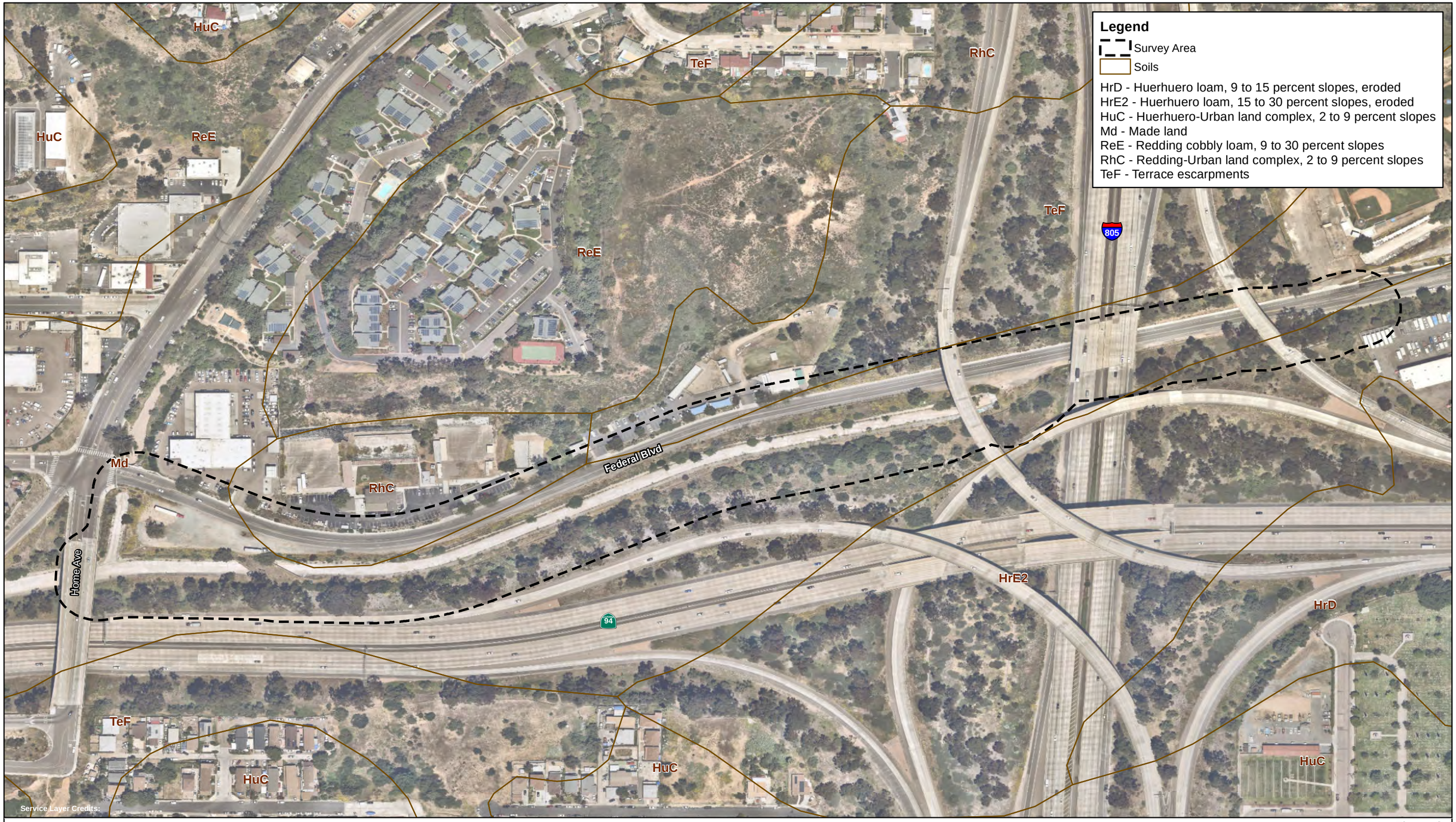


Figure **9**

Soils Map

Federal Boulevard Chollas Creek Restoration and Trail Project

Trestles Environmental Corporation

N

1 inch = 250 feet

0 125 250 Feet

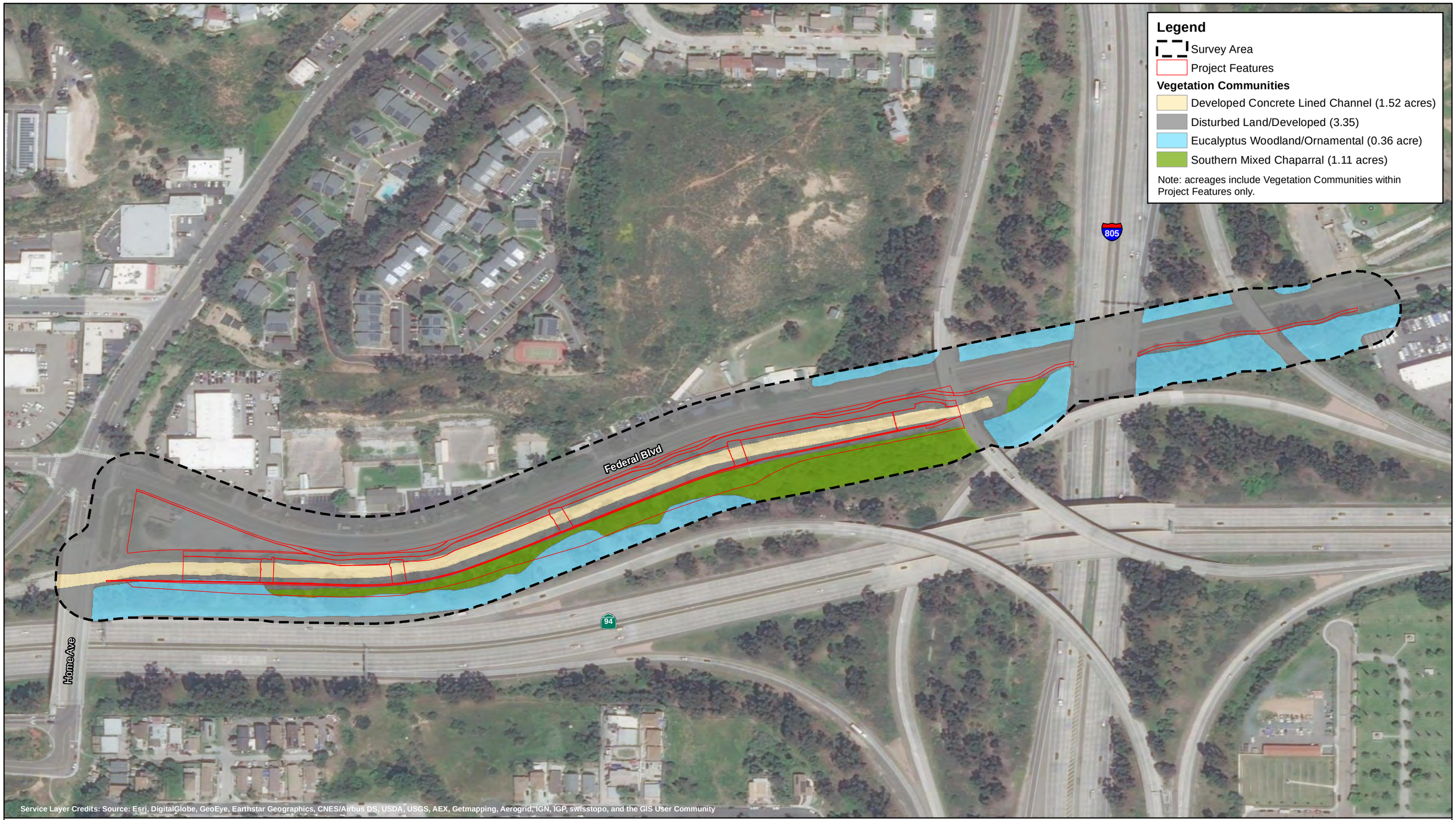


Figure **10**

Vegetation Communities

Federal Boulevard Chollas Creek Restoration and Trail Project

Trestles Environmental Corporation

N

1 inch = 250 feet

0 125 250 Feet

5.0 JURISDICTIONAL DELINEATION RESULTS

The project limits contain Chollas Creek and one side drainage subject to the jurisdiction of the ACOE, the RWQCB, the CDFW and the City of San Diego. See Figures 11 and 12 for a map of jurisdiction. Table 2 provides a summary of acreage and linear feet. Site photos locations are depicted in Figure 13 and photos are found in Appendix A. The Arid Land JD Forms are found in Appendix B and Ordinary High Water Mark Forms are found in Appendix C.

Both channels are completely concrete lined. There are no jurisdictional "wetland waters of the US or State" within the project limits.

The City of San Diego (City) wetland definition is met, and therefore the two drainages are considered a "wetland" under the City definition (City, 2018).

Chollas Creek: Concrete-Lined Channel

Chollas Creek within the Project Limits extends for 1,885 linear feet and is concrete lined. It is an intermittent stream. Chollas Creek falls under the jurisdiction of one local agency, two state agencies and one federal agency: the City, the CDFW, the RWQCB and ACOE.

The area of jurisdiction would include the channel from the culvert immediately west of the I-805/SR-94 on-ramp, extending downstream to the Home Avenue Bridge (see Figures 11-12). Jurisdictional resources are identified in Table 2 for within the Project Limits.

The concrete lined channel would be considered a "non-wetland water of the US/State". The channel bottom is 30 feet wide and the top of the channel is 50 feet wide. Some invasive plants have established within the cracks of the concrete. Under the 2020 ACOE "Navigable Waters Protection Rule" it would be considered a "Category (a)(2) Water of the US", which is a tributary to a San Diego Bay and the Pacific Ocean (Traditionally Navigable Water) because of its intermittent flow.

The portion of Chollas Creek in the project area is also a wetland regulated by the City of San Diego. As indicated by the Wetland Determination Data Forms, wetland hydrology is present whereas hydric soils and wetland vegetation are not present. Therefore the concrete-lined channel is a regulated wetland where wetland hydrology is present (*i.e* the elevation of the ordinary high water mark).

Total related jurisdiction within the Project limits is 1.52 acres of City/ACOE/RWQCB and 2.26 acres of CDFW jurisdiction.

Table 2 – Jurisdictional Areas within Project Limits

Jurisdiction	CDFW (acres)	ACOE/RWQCB/City (acres)*	Linear Feet
Chollas Creek	2.26	1.52	1,885

*ACOE/RWQCB/City are inclusive of CDFW jurisdictional acreage

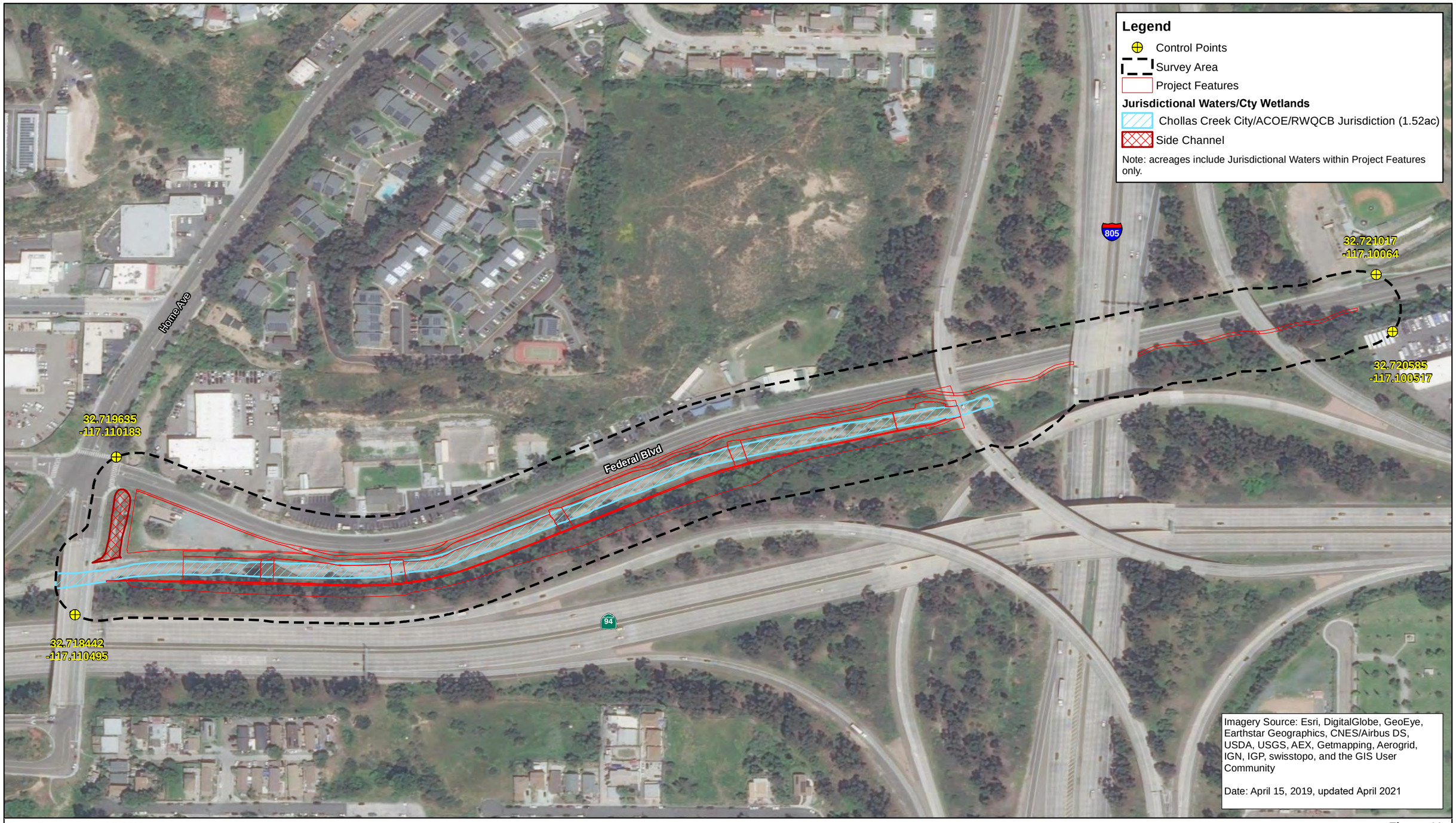


Figure Prepared on: 12/2/2020
by Trestles Environmental Corporation

N

1 inch = 250 feet

0 125 250 Feet

Figure 11

Existing City/ACOE/RWQCB Jurisdiction

Federal Boulevard Chollas Creek Restoration and Trail Project

Figure Prepared on: 12/2/2020
by Trestles Environmental Corporation

N

1 inch = 250 feet

0 125 250 Feet

Figure 12

Existing CDFW Jurisdictional Waters

Federal Boulevard Chollas Creek Restoration and Trail Project

Figure Prepared on: 5/2021
by Trestles Environmental Corporation

Photo Stations

N

1 inch = 250 feet

0 125 250 Feet

Figure 13

Photo Point Locations

Federal Boulevard **De-Channelization &** Trail Project

6.0 CONCLUSIONS AND SUMMARY

The project contains non-wetland WoUS and of the State of California regulated by the ACOE, RWQCB and the CDFW. It also contains City wetlands. Chollas Creek is concrete lined. Under the 2020 ACOE "Navigable Waters Protection Rule" both would be considered a "Category (a)(2) Water of the US", which are tributary to a Traditionally Navigable Water (Pacific Ocean) as a result of their intermittent flow. Within Chollas Creek along the 1,885 foot reach, a total of 1.52 acres of ACOE/RWQCB/City and 2.26 acres of CDFW jurisdiction is present. The restoration of Chollas Creek is one of the primary goals of the Project and will result in the removal of 1,885 linear feet of concrete, and the return Chollas Creek in this reach to a more natural state.

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APPENDIX A – SITE PHOTOS

Photo 1: View of Chollas Creek from upper end of Project. Concrete removal will begin downstream of the I-805 Bridge piling, as seen on the right of the photo.

Photo 2. View of Chollas Creek, looking downstream, near upper part of the Project.

Photo 3. Chollas Creek, looking upstream. I-805 overpass visible from upper left in photo.

Photo 4. View of Chollas Creek, looking downstream.

Photo 5. View of bridge structure that will be removed as part of the Project, looking downstream.

Photo 6. View of Chollas Creek adjacent to Home Avenue Bridge, looking south.

APPENDIX B - ARIDS LAND JD FORMS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Federal Blvd Chollas Creek Restoration & Trail Project City/County: San Diego/San Diego Sampling Date: 4/15/20

Applicant/Owner: Groundwork San Diego - Chollas Creek State: CA Sampling Point: 01

Investigator(s): Julie Fontaine Section, Township, Range: Section 5, Township 17S, Range 02 W

Landform (hillslope, terrace, etc.): Creek Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): C Lat: 32.7196 Long: --117.1058 Datum: NAD83

Soil Map Unit Name: Made Land NWI classification: NWI not up to date

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐	No ☒		
Hydric Soil Present?	Yes ☐	No ☒	**Is the Sampled Area within a Wetland?**	**Yes ☐ No ☒**
Wetland Hydrology Present?	Yes ☒	No ☐		

Remarks: Chollas Creek is concrete lined

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = _____, 20% = _____		= Total Cover	
Sapling/Shrub Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
50% = _____, 20% = _____		= Total Cover	
Herb Stratum (Plot size:_____)			
1. *Pennisetum setaceum*	0	no	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
50% = _____, 20% = _____		= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1.			
2.			
50% = _____, 20% = _____		= Total Cover	
% Bare Ground in Herb Stratum _____		% Cover of Biotic Crust _____	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	0	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index worksheet:

	Total % Cover of :	Multiply by:
OBL species	0	x1 = _____
FACW species	0	x2 = _____
FAC species	1	x3 = 1
FACU species	0	x4 = _____
UPL species	0	x5 = _____
Column Totals:	1 (A)	3 (B)

Prevalence Index = B/A = 0.33

Hydrophytic Vegetation Indicators:

☐ Dominance Test is >50%

☐ Prevalence Index is ≤3.0[1]

☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes ☐ No ☒**

Remarks: Less than 5% vegetation cover. Channel is concrete lined with an occasional invasive plant established in cracks (fountain grass)

Project Site: Federal Blvd Chollas Creek Restoration & Trail

SOIL

Sampling Point: 01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (Moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR C)**
- ☐ 2 cm Muck (A10) **(LRR B)**
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (Inches): _____

Hydric Soils Present? **Yes** ☐ **No** ☒

Remarks: No hydric soils. Chollas Creek is concrete lined. Underlying soils are "Made Land" = fill from 1971 SR-94 construction, per Caltrans As-Builts

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) **(Nonriverine)**
- ☐ Sediment Deposits (B2) **(Nonriverine)**
- ☐ Drift Deposits (B3) **(Nonriverine)**
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☒ Water Marks (B1) **(Riverine)**
- ☐ Sediment Deposits (B2) **(Riverine)**
- ☒ Drift Deposits (B3) **(Riverine)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	☒	No	☐	Depth (inches):	2"
Water Table Present?	Yes	☐	No	☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☒ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Surface water present at time for field visits. Hydrology met

APPENDIX C: OHWM FORMS

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Federal Blvd Chollas Creek Restoration/Trail Proje **Date:** 4/11/2020 **Time:** 8am
Project Number: **Town:** San Diego **State:** CA
Stream: Chollas Creek **Photo begin file#:** 1 **Photo end file#:** 6
Investigator(s): Julie Fontaine

Y [x] / N [ ] Do normal circumstances exist on the site?

Y [x] / N [ ] Is the site significantly disturbed?

Location Details:
Concrete lined portion of Chollas Creek b/n Home Ave & I-805 Bridge

Projection: 32.71886/-117.10927 **Datum:** NAD83
Coordinates: Lat/Long

Potential anthropogenic influences on the channel system:

Chollas Creek was channelized and concrete lined in 1971 in association with the adjacent construction of SR-94 highway.
Soils are "Made Land" consisting of fill.

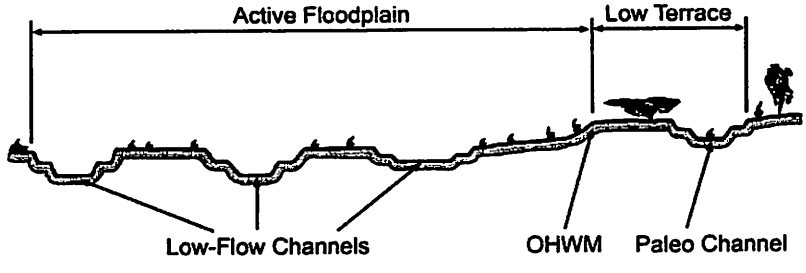
Brief site description:

The Project study area is 2,100 linear feet of concrete lined channel. The channel is U shaped. Channel bottom is 28' wide.
Top of concrete banks extend channel width to 50 feet.

Checklist of resources (if available):

- [x] Aerial photography
  Dates:
- [x] Topographic maps
- [ ] Geologic maps
- [x] Vegetation maps
- [x] Soils maps
- [ ] Rainfall/precipitation maps
- [ ] Existing delineation(s) for site
- [ ] Global positioning system (GPS)
- [ ] Other studies
- [ ] Stream gage data
  Gage number:
  Period of record:
  - [ ] History of recent effective discharges
  - [ ] Results of flood frequency analysis
  - [ ] Most recent shift-adjusted rating
  - [ ] Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

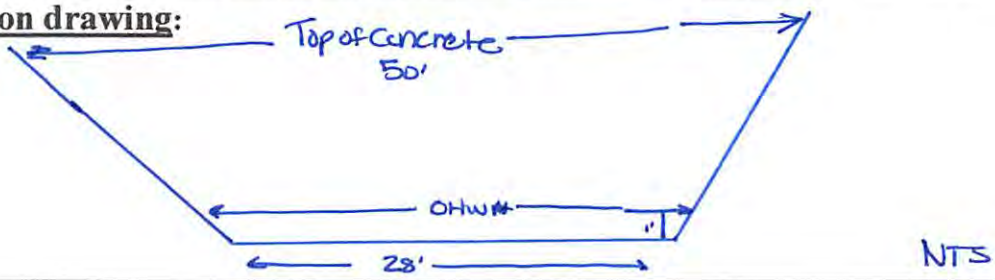


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - [x] Mapping on aerial photograph
   - [ ] Digitized on computer
   - [ ] GPS
   - [ ] Other:

Project ID: Fed Blvd **Cross section ID:** Chollas Creek **Date:** 4/11/2020 **Time:** 8am

Cross section drawing:



OHWM

GPS point: same OHWM throughout entire reach

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☐ Break in bank slope
- ☒ Other: Water marks on concrete slope ~ 1 foot higher than thalweg
- ☐ Other: _____

Comments:

Floodplain unit:

☒ Low-Flow Channel ☒ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: concrete lined

Total veg cover: 0 % Tree: 0 % Shrub: 0 % Herb: <1 %

Community successional stage:

- ☒ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☒ Other: Staining of concrete
- ☐ Other: _____
- ☐ Other: _____

Comments: