# PUBLIC NOTICE

**U.S. ARMY CORPS OF ENGINEERS** **BUILDING STRONG®**
**LOS ANGELES DISTRICT**

**APPLICATION FOR PERMIT**
**Santa Margarita River Conjunctive Use Project**

**Public Notice/Application No.:** SPL-2014-00407-MAL
**Project:** Santa Margarita River Conjunctive Use Project
**Comment Period:** March 6 through April 5, 2017
**Project Manager:** Michael LaDouceur; (760) 602-4835; Michael.A.Ladouceur@usace.army.mil

**Applicant**
Bartholomew Battista
MCI WEST Environmental Security
Land Management Section
Box 555008, Bldg 26049
Camp Pendleton, California 92055-5008
(760) 725-4540

**Contact**
Kristin Thomas
Strategic and Regional Planning
Environmental Security
Box 555008, Bldg 26049
Camp Pendleton, California 92055-5008
(760) 763-7946

**Location**
The proposed project area is located at Marine Corps base (MCB) Camp Pendleton and the Naval Weapons Station Seal Beach Detachment Fallbrook in San Diego County, California. MCB Camp Pendleton encompasses approximately 200 square miles within the northern portion of San Diego County, approximately 40 miles north of the City of San Diego. MCB Camp Pendleton is bordered to the northwest by Orange County, to the north and east by the City of San Clemente and the Cleveland National Forest, to the east by the community of Fallbrook and the Naval Weapons Station Seal Beach Detachment Fallbrook, to the south by the City of Oceanside, and to the west by the Pacific Ocean (at: 33.341200, -117.332121).

**Activity**
The proposed project would replace an existing sheet pile diversion structure with an upgraded inflatable weir system, upgrade an existing water intake to include fish exclusion screens and increase capacity, modify O'Neil ditch channel to increase capacity and line the channel with concrete, construct a raw water pipeline, and construct of a bi-directional water pipeline.

Interested parties are hereby notified that an application has been received for a Department of the Army permit for the activity described herein and shown on the attached drawing(s). We invite you to review today's public notice and provide views on the proposed work. By providing substantive, site-specific comments to the Corps Regulatory Division, you provide information that support the Corps' decision-making process. All comments received during the comment period become part of the record and will be considered in the decision. This permit will be issued, issued with special conditions, or denied under Section 404 of the Clean Water Act of 1972 (33 U.S.C. 1344).

Comments should be mailed to:

Los Angeles District, Corps of Engineers
Regulatory Division, Carlsbad Field Office
Attn: Michael LaDouceur
5900 La Place Court, Suite 100
Carlsbad, CA 92008

Alternatively, comments can be sent electronically to: Michael.A.Ladouceur@usace.army.mil

The mission of the U.S. Army Corps of Engineers Regulatory Program is to protect the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands. The Regulatory Program in the Los Angeles District is executed to protect aquatic resources by developing and implementing short- and long-term initiatives to improve regulatory products, processes, program transparency, and customer feedback considering current staffing levels and historical funding trends.

Corps permits are necessary for any work, including construction and dredging, in the Nation's navigable water and their tributary waters. The Corps balances the reasonably foreseeable benefits and detriments of proposed projects, and makes permit decisions that recognize the essential values of the Nation's aquatic ecosystems to the general public, as well as the property rights of private citizens who want to use their land. The Corps strives to make its permit decisions in a timely manner that minimizes impacts to the regulated public.

During the permit process, the Corps considers the views of other Federal, state and local agencies, interest groups, and the general public. The results of this careful public interest review are fair and equitable decisions that allow reasonable use of private property, infrastructure development, and growth of the economy, while offsetting the authorized impacts to the waters of the United States. The permit review process serves to first avoid and then minimize adverse effects of projects on aquatic resources to the maximum practicable extent. Any remaining unavoidable adverse impacts to the aquatic environment are offset by compensatory mitigation requirements, which may include restoration, enhancement, establishment, and/or preservation of aquatic ecosystem system functions and services.

## Evaluation Factors

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof. Factors that will be considered include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people. In addition, if the proposal would discharge dredged or fill material, the evaluation of the activity will include application of the EPA Guidelines (40 CFR Part 230) as required by Section 404 (b)(1) of the Clean Water Act.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**Preliminary Review of Selected Factors**

**EIS Determination** – The Department of the Navy and the Bureau of Reclamation completed an Environmental Impact Statement for the proposed activity. The Record of Decision was published in the Federal Register on January 11, 2017.

**Water Quality** - The applicant would be required to obtain a Water Quality Certification, under Section 401 of the Clean Water Act, from the California Regional Water Quality Control Board. Section 401 requires that any applicant for an individual Section 404 permit provide proof of Water Quality Certification to the Corps prior to permit issuance. For any proposed activity on Tribal land that is subject to Section 404 jurisdiction, the applicant will be required to obtain water quality certification from the U.S. Environmental Protection Agency. The applicant submitted an application to the Regional Water Quality Control Board on November 12, 2016 for Water Quality Certification.

**Coastal Zone Management** - This project is located outside the coastal zone and preliminary review indicates it would not affect coastal zone resources. After a review of the comments received on this public notice and in consultation with the California Coastal Commission, the Corps will make a final determination of whether this project affects coastal zone resources after review of the comments received on this Public Notice.

**Essential Fish Habitat** - No Essential Fish Habitat (EFH), as defined by the Magnuson-Stevens Fishery Conservation and Management Act, occurs within the project area and no EFH is affected by the proposed project.

**Cultural Resources** – The Corps acknowledges under existing lead agency guidance that the United States Marine Corps (USMC) is the lead agency for cultural resources, and the Corps shall review and potentially adopt its compliance with the National Historic Preservation Act. The USMC has determined that the proposed actions can be approved with a finding of "No Historic Properties Affected". Consultation with the State Historic Preservation Officer (SHPO) was completed in September of 2013.

**Endangered Species** - The Corps acknowledges under existing lead agency guidance that the USMC is the lead agency for Endangered Species Act (ESA) compliance and shall be reviewing and potentially adopting their compliance with the ESA. The USMC has completed ESA Section 7 consultation with the National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service (USFWS) and received Final Biological Opinions concluding that the proposed action is not likely to jeopardize the continued existence of Federal threatened and endangered species and California state special status species including southern California steelhead, least Bell's vireo, southwestern willow flycatcher, and arroyo toad.

**Public Hearing** - Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearing shall state with particularity the reasons for holding a public hearing.

## Proposed Activity for Which a Permit is Required

Basic Project Purpose – The basic project purpose comprises the fundamental, essential, or irreducible purpose of the proposed project, and is used by the Corps to determine whether the applicant's project is water dependent (i.e. requires access or proximity to or siting within the special aquatic site to fulfill its basic purpose). Establishment of the basic project purpose is necessary only when the proposed activity would discharge dredged or fill material into a special aquatic site (e.g. wetlands, pool and riffle complex, mudflats, coral reefs). The basic purpose for the proposed project is to provide raw water. The project is not water dependent.

Overall Project Purpose – The overall project purpose serves as the basis for the Corps' 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, and which allows a reasonable range of alternatives to be analyzed. The overall project purpose for the proposed project is to maintain and upgrade the capacity of an existing water diversion structure, improve efficiency and capacity of existing water conveyances, and improve water supply reliability for the MCB and Fallbrook Public Utility District (FPUD).

## Additional Project Information

Baseline information - The Proposed Action would resolve the water rights issues between U.S. MCB Camp Pendleton and Fallbrook Public Utility District (FPUD) and satisfy the Court's order to find a "physical solution" to the ongoing dispute in United States v. Fallbrook Public Utility District, et al. The proposed project would involve the conjunctive use of surface water and groundwater within the Lower Santa Margarita River (SMR) Basin. "Conjunctive use" would consist of adaptive management of surface water and groundwater resources and would be achieved through the diversion of SMR surface waters to groundwater recharge ponds and the active use of groundwater aquifers for water storage. The Proposed Action has been designed to meet the long-term water demands of MCB Camp Pendleton and the FPUD, reduce dependence on imported water, maintain watershed resources, and improve water supply reliability by managing the yield of the Lower SMR Basin. Currently, an existing sheet pile weir diverts water into O'Neill ditch to perform the functions described above.

The USMC and FPUD have prepared an Environmental Impact Statement/Environmental Impact report (EIS/EIR) in accordance with the National Environmental Policy Act and California Environmental Quality Act.

Project description – The proposed action would rehabilitate existing, and build new facilities within the Lower SMR Basin to capture surface runoff during high streamflow events that currently flow to the Pacific Ocean. The captured surface water would be used to recharge groundwater through existing groundwater recharge ponds, and stored in groundwater basins during wet years in order to augment water supplies during dry years, thereby reducing reliance on imported water.

Construction of the proposed project would result in permanent impacts to approximately 1.609 acres of wetlands and non-wetland waters of the U. S. and temporary impacts to 2.935 acres of wetlands and non-wetland waters of the U.S.

The existing sheet pile diversion structure on the SMR would be replaced with an inflatable weir diversion structure resulting in permanent impacts to 0.849 acre of Palustrine Forested wetland (PFO), 0.376 acre of Palustrine Emergent wetland (PEM), and 0.384 acre of the SMR). Temporary impacts resulting from construction would occur to 0.49 acre of PFO, 0.119 acre of PEM, and 0.297 acre of the SMR. The inflatable weir diversion structure would extend up to one foot higher than the existing diversion structure. The existing headgate on O'Neill ditch would be replaced, O'Neill ditch would be excavated to increase capacity, removing approximately 2,500 cubic yards (CY) of soil and gravels, and concrete would be poured to line the ditch along 5,188 linear feet, impacting 2.33 acres of the ditch. Maintenance dredging would be required for the proposed diversion structure.

A new bi-directional water pipe would be constructed from MCB Camp Pendleton to FPUD facilities. The pipe would be constructed by excavating a trench, side casting material, installing the pipe, and restoring the area once the pipe is installed. Construction would require 10 crossings, 2 crossings at Fallbrook Creek and 8 across intermittent tributaries, temporarily impacting 0.04 acre of Fallbrook Creek, 0.22 acre of intermittent tributaries, 1.519 acres of PFO, and 0.07 acre of PEM. A 24-inch raw water pipe would also be installed using similar methods described above. The construction of the raw water pipe would require 2 crossings and result in temporary impacts to 0.11 acre of PFO and 0.07 acre of Intermittent tributary.

Construction is anticipated to begin in spring 2017 and would take approximately 36 months to complete. In-water work for any project construction year would be scheduled to occur outside of the rainy season for southern California. All temporary impacts would be restored and revegetated with native plants.

Proposed Mitigation Measures and Best Management Practices– The applicants have proposed mitigation measures and best management practices (BMPs). These proposed measures may be modified as a result of comments received in response to this public notice, the applicant's response to those comments and/or the need for the project to comply with the 404(b)(1) Guidelines. In consideration of the above, the proposed mitigation sequence (avoidance/minimization/ compensation), as applied to the proposed project is summarized below:

Avoidance: The applicant has designed the weir structure to allow for fish and aquatic passage during low flows and to allow for the flushing of sediment during large storm events, restoring sediment transportation and deposition within the SMR system. The project avoided additional impacts by removing a proposed water treatment facility at MCB Camp Pendleton in Haybarn Canyon.

Minimization: The applicant would develop and implement a stormwater pollution prevention plan to manage stormwater runoff during construction and a spill prevention, control, and countermeasures plan to prevent and prepare for potential spills during construction. Temporary erosion and sedimentation control measures would be implemented throughout the project construction period. Grading, excavation, and in-water demolition or construction would occur outside of the rainy season. The project would follow conservation measures established in the Biological Opinions issued by the USFWS and the NMFS. The contractor would use only clean construction materials suitable for use in the aquatic environment. The contractor shall ensure that debris, soil, silt, sand, sawdust, rubbish, cement or concrete washings thereof, chemicals, and oil or petroleum products from construction are not placed where they may be washed by rainfall or runoff into waters of the United States. All debris would be transported to, and disposed of, at an appropriate upland disposal site, or recycled, if appropriate. During project implementation, USMC would regularly monitor construction activities to ensure that no deviation from the project occurs. The USMC would report any

violation of unauthorized impacts to the appropriate regulatory agency within 24 hours of its occurrence. All vegetation removal in habitats occupied by federally listed bird species will occur outside of the nesting season of February 15 to August 31.

Compensation: No compensatory mitigation for aquatic resource impacts was proposed by the applicant. The applicant will mitigate for potential impacts to arroyo toad and their habitat as required by the USFWS, including the use of habitat credits, funding of the conservation of an Open Space Management Zone within the upper Santa Margarita Watershed, and placing money in a conservation fund for the purpose of conserving and managing at-risk properties that contain significant arroyo toad breeding populations and their associated breeding habitat.

**Proposed Special Conditions**

No additional special conditions are proposed at this time.

For additional information please call Michael LaDouceur of my staff at 760-602-4835 or via e-mail at Michael.A.LaDouceur@usace.army.mil. This public notice is issued by the Chief, Regulatory Division.

*Regulatory Program Goals:*

- To provide strong protection of the nation's aquatic environment, including wetlands.
- To ensure the Corps provides the regulated public with fair and reasonable decisions.
- To enhance the efficiency of the Corps' administration of its regulatory program.

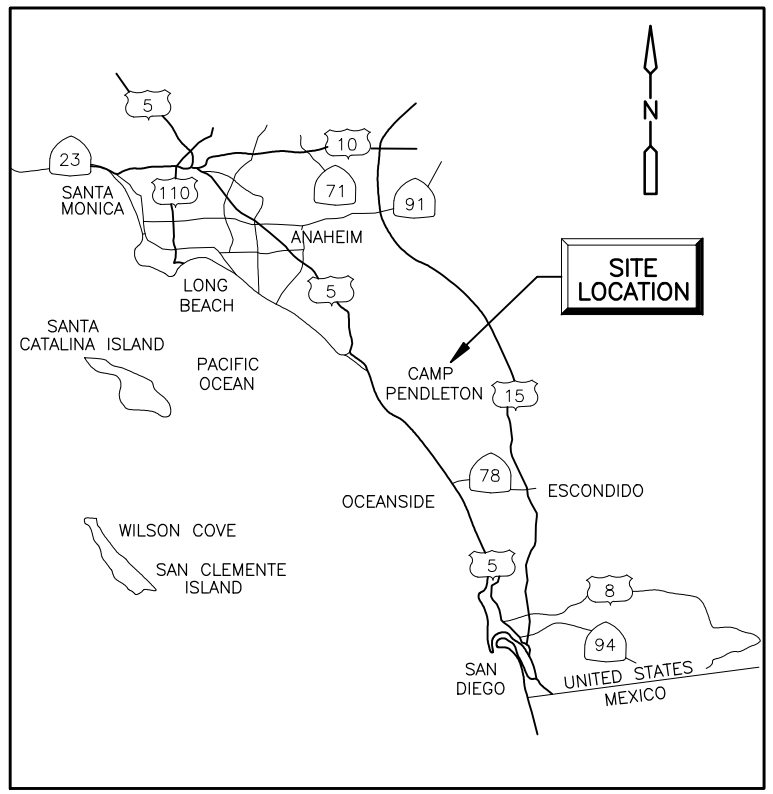
**DEPARTMENT OF THE ARMY**
**LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS**
5900 LA PLACE COURT, SUITE 100
CARLSBAD, CALIFORNIA 92008

WWW.SPL.USACE.ARMY.MIL/MISSIONS/REGULATORY

# N62470-14-D-9022

# PROJECT P-1220 RAW WATER PIPELINE PENDLETON TO FALLBROOK

# MARINE CORPS BASE CAMP PENDLETON

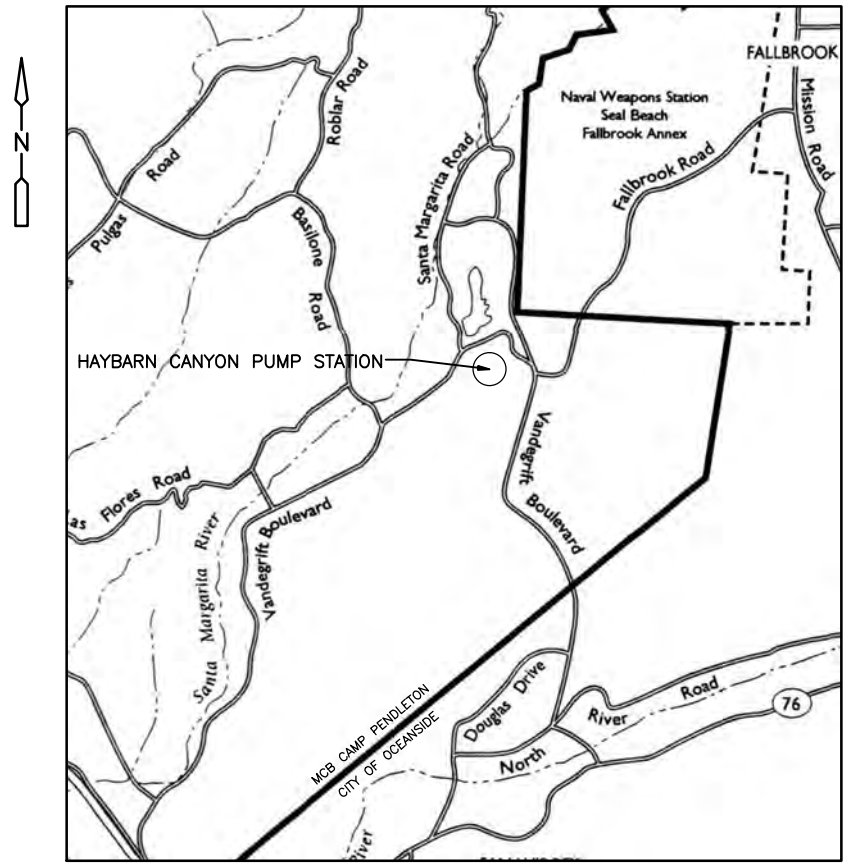



## LOCATION MAP

NTS

HAVING PARTICIPATED IN THE DESIGN OF PROJECT No. P-1220, RAW WATER PIPELINE PENDLETON TO FALLBROOK, SAN DIEGO, CALIFORNIA, AND HAVING THOROUGHLY REVIEWED THE COMPLETED PROJECT DOCUMENTS, I DECLARE THAT THE FACILITY DESIGN INCLUDED HEREIN COMPLIES WITH APPLICABLE UNITED STATES CODES AND LAWS.

REGISTERED PROFESSIONAL ENGINEER
MICHAEL VINCENT RIDLEY
No. 15183
ELECTRICAL
STATE OF CALIFORNIA
JUNE 20, 2016




## VICINITY MAP

NTS

Underground Service Alert

CALL BEFORE YOU DIG

Call: TOLL FREE
1-800-227-2600

AT LEAST TWO WORKING DAYS PRIOR TO START OF EXCAVATION

NOTE:

IN CASE OF A UTILITY RELATED EMERGENCY DURING CONSTRUCTION, IMMEDIATELY CONTACT THE BASE EMERGENCY UTILITIES UNITY ROOM AT (760) 725-4683.

| | APPR | DATE | DESCRIPTION | SYM |
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DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
SOUTHWEST DIVISION

SAN DIEGO, CALIFORNIA

RAW WATER PIPELINE PENDLETON TO FALLBROOK

COVER SHEET

SCALE: AS SHOWN

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| EPROJECT NO.: | 1354721 |
| CONSTR. CONTR. NO. | N62470-14-D-9022 |
| NAVFAC DRAWING NO. | 18230468 |
| SHEET 1 OF 260 | |
| | 00-G-001 |

DRAWFORM REVISION: 10 MAY 2014

AH/BC NAVY JV, LLC
11837 ROCK LANDING DRIVE, SUITE 300
NEWPORT NEWS, VA 23606

# Santa Margarita River Conjunctive Use Project Jurisdictional Waters Impact Table

| Impact Number | Description | Wetland | Other Waters | Type | Feature Number | Acreage Impacted[3] | | Activity Description[1,2] | Duration/ Timeline | Other Notes[3] | Figure Number |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Temp | Perm | | | | |
| 1 | Weir/ Sand Trap | X | | Palustrine Emergent | 54 | 0.119 | 0.376 | Replace existing sheet pile weir with an inflatable Obermeyer diversion structure with fish screen, fish ladder, sand trap, and controlloable headgate. Excavate approximately 8,700 CY and dispose offsite. Construct concrete weir foundation, retaining walls and rip rap bank erosion protection. Approx dimensions of construction area: 560' x 320' | Permanent | Impacted acreages for revised weir design from JURISDICTIONAL RESOURCES DELINEATION REPORT ADDENDUM SANTA MARGARITA RIVER CONJUNCTIVE USE PROJECT 8/23/16 | Replacement B-58 |
| | | X | | Palustrine Emergent | 55 | | | | | | |
| | | X | | Palustrine Forested | 52 | 0.49 | 0.849 | | | | |
| | | X | | Palustrine Forested | 63 | | | | | | |
| | | | X | Lower Perrennial Riverine | 53 | 0.297 | 0.384 | | | | |
| 2 | O'Neill Ditch | | X | Riverine Intermittent | 51 | | 2.33 | Increase O'Neil Ditch capacity to from 60 cfs to 200 cfs by increasing culvert crossing capacity and concrete lining of approx 5,188 linear feet of existing ditch. Install Parshall flumes for diversion measurement in accordance with SB88. Excavate approximately 2,500 CY and dispose offsite. | Permanent | Camp Pendleton's assertion that the ditch is not waters of the US, as it is artificially irrigated and would likely revert to dry land absent the application of irrigation water was not accepted by USACE. | B-55, B-56, B-57, B-58 |
| 3 | Bi-Directional Pipeline Fallbrook Creek Crossing 1 | | X | Upper Perrenial Riverine | 19 | 0.551 | | Bi Directional Pipeline Constrcution. Impact to approx 164' x 14' of riverine habitat. | Temporary, but >24 hours | Proposal to restore 300 linear feet of channel and riparian habitat for Fallbrook Creek Crossing 1 and 2. Acreages from Chapter 3, JURISDICTIONAL RESOURCES DELINEATION REPORT ADDENDUM SANTA MARGARITA RIVER CONJUNCTIVE USE PROJECT 8/23/16 | Replacement B-27 |
| | | X | | Palustrine Forested | 20 | 1.369 | | | | | |
| 4 | Bi-Directional Pipeline Fallbrook Creek Crossing 2 | | X | Upper Perrenial Riverine | 21 | 0.04 | | Impact to approx 121' x 19' of Upper Perrenial Riverine | Temporary, but >24 hours | Proposal to restore 300 linear feet of channel and riparian habitat for Fallbrook Creek Crossing 1 and 2. | B-30 |
| 5 | Bi-Directional Pipeline Tributary Crossing 1 | | X | Riverine Intermittent | 22 | 0.02 | | Bi Directional Pipeline Constrcution. Impact to 112' x 10' of Riverine Intermittent | Temporary, <24 hours | | B-32 |
| 6 | Bi-Directional Pipeline Tributary Crossing 2 | | X | Riverine Intermittent | 23 | 0.01 | | Bi Directional Pipeline Constrcution. Impact to 40' x 3' of Riverine Intermittent | Temporary, <24 hours | | B-33 |
| 7 | Bi Directional Pipeline Tributary Crossing 3 | | X | Riverine Intermittent | 24 | 0.03 | | Bi Directional Pipeline Constrcution. Impact to 89' x 1' of Riverine Intermittent | Temporary, <24 hours | | B-33 |
| 8 | Bi Directional Pipeline Tributary Crossing 4 | | X | Riverine Intermittent | 25 | 0.04 | | Bi Directional Pipeline Constrcution. Impact to 115' x 16' of Riverine Intermittent | Temporary, <24 hours | | B-34 |
| 9 | Bi Directional Pipeline Tributary Crossing 5 | X | | Palustrine Emergent | 26 | 0.07 | | Bi Directional Pipeline Constrcution. Impact to .07 acres of Palustrine Emergent Wetlands | Temporary, <24 hours | | B-35 |
| 10 | Bi Directional Pipeline Tributary Crossing 6 | | X | Riverine Intermittent | 27 | 0.03 | | Bi Directional Pipeline Constrcution. Impact to 141' x 12' of Riverine Intermittent. | Temporary, <24 hours | | B-37 |

| Impact Number | Description | Wetland | Other Waters | Type | Feature Number | Acreage Impacted[3] | | Activity Description[1,2] | Duration/ Timeline | Other Notes[3] | Figure Number |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Temp | Perm | | | | |
| 11 | Bi Directional Pipeline Tributary Crossing 7 | | X | Riverine Intermittent | 28 | 0.01 | | Bi Directional Pipeline Construction. Impact to 181' x 2' of Riverine Intermittent | Temporary < 24 hours | | B-38 |
| | | X | | Palustrine Forested | 29 | 0.04 | | Bi Directional Pipeline Construction. Impact to 0.04 acres of Palustrine Forested Wetland | Temporary < 24 hours | | B-38 |
| 12 | Bi Directional Pipeline Tributary Crossing 8 | | X | Riverine Intermittent | 37 | 0.03 | | Bi Directional Pipeline Constrcution. Impact to 162' x 8' of Riverine Intermittent | Temporary, <24 hours | | B-47 |
| 13 | Bi Directional Pipeline Tributary Crossing 9 | | X | Riverine Intermittent | 38 | 0.01 | | Bi Directional Pipeline Constrcution. Impact to 114' x 6' of Riverine Intermittent | Temporary, <24 hours | | B-47 |
| 14 | Bi Directional Pipeline Tributary Crossing 10 | | X | Riverine Intermittent | 39 | 0.04 | | Bi Directional Pipeline Construction. Impact to 131' x 16' of Riverine Intermittent | Temporary, <24 hours | | B-49 |
| 15 | Raw Water Tributary Crossing 1 | X | | Palustrine Forested | 44 | 0.11 | | Raw Water Conveyance Pipe from Wells to Haybarn Canyon. Impact to 0.11 acres of Palustrine Forested Wetland | Temporary, <24 hours | | B-50 |
| 16 | Raw Water Tributary Crossing 2 | | X | Riverine Intermittent | 43 | 0.07 | | Raw Water Conveyance Pipe from Wells to Haybarn Canyon. Impact to 134' x 28' of Riverine Intermittent | Temporary, <24 hours | | B-50 |
| | | | | | Total | 3.376 | 3.939 | | | | |

Note 1: Bi-Directional Pipeline Note: Installation of approximately 36,000 linear feet (LF) of bidirectional pipeline and associated appurtenances using open cut and cover techniques.

Note 2: Raw Water Conveyance Note: Piping improvements to the Raw Water Transmission system at theVandegrift Road crossing consisting of the installation of approximately 200 LF of new 24" piping using open cut and cover techniques.

Note 3: Acreages from theJurisdictional Resources Delineation Report, Santa Margarita River, Conjunctive Use Project, January 2014 unless otherwise noted.

NOTES:
1. SEE SHEET 00-C-102 FOR SURVEY CONTROL POINTS.
2. CONTROLS LAYOUT ARE SHOWN ON PLAN VIEWS.

EXISTING SHEET PILE WEIR
(TOP ELEV=117.7)

LONG SECTION INFLATABLE WEIR

INFLATABLE WEIR
(SEE 10-C-104)

EXCAVATED AREA
(BOTTOM ELEV=114)
SEE 10-C-103

EXCAVATED AREA
(BOTTOM ELEV=114)
SEE 10-C-103

FISH LADDER

SLUICEWAY 1

SLUICEWAY 2

POOL AND CHUTE FISH LADDER
(SEE 10-C-401)

PERMANENT IMPACT AREA

TEMPORARY IMPACT AREA

FLOW VECTOR (TYP)

RIVER ACCESS ROAD
(SEE DETAIL F/10-S-510)

CONTROL BUILDING ACCESS SLAB

CONTROL BUILDING
(SEE 10-C-107)

SERVICE DECK
(ELEV=120')

FISH SCREEN
DIVERSION FACILITIES
(SEE 10-C-105)

STAIR
CASE

WATER SUPPLY PIPELINE
(SEE 10-C-106)

NORTH SAND TRAP
CONCRETE RETAINING WALL

ACCESS PATH

POWER POLE

ELECTRIC LINE
(SEE ELECTRICAL
DRAWINGS)

FLOW VECTOR

BYPASS GATE

SERVICE AREA SLAB

SAND TRAP
(BOTTOM ELEV=109')
(SEE 10-C-303)

LOW FLOW
SLUICE GATE

SERVICE AREA
RETAINING WALL

SOUTH SAND TRAP
CONCRETE RETAINING WALL

SERVICE AREA

RE-GRADE EXISTING SERVICE
ROAD AND WORKING AREA
(SEE 10-C-103 &
B/00-C-502 FOR ROAD
DETAILS)

7' HIGH, 12' WIDE
INFLATABLE WEIR HEADGATE
(SEE 10-C-303)

LINED DITCH
(SEE 20-C-101)

KEYNOTES:
1. 2760-WEIR
2. 2760-WEIR-LDR
3. 2760-WEIR-SG1
4. 2760-WEIR-SG2
5. 2760-WEIR-FS
6. 2760-WEIR-HG

LEGEND
- 110 EXISTING MAJOR CONTOUR LINE
- 112 EXISTING MINOR CONTOUR LINE
- 110 FINISH GROUND MAJOR CONTOUR LINE
- 112 FINISH GROUND MINOR CONTOUR LINE
- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- GRADING BOUNDARY
- GRADING BREAKLINE

0 10' 20' 40'
SCALE IN FEET

PLAN
SCALE: 1" = 20'

| APPR | DATE | DESCRIPTION | SYM |
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NAVFAC

REGISTERED PROFESSIONAL ENGINEER JOE DEMAGGIO C 32954 CIVIL STATE OF CALIFORNIA
SEAL

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NAVAL FACILITIES ENGINEERING COMMAND
SOUTHWEST DIVISION
DEPARTMENT OF THE NAVY

SAN DIEGO, CALIFORNIA

RAW WATER PIPELINE PENDLETON TO FALLBROOK

SMR FACILITIES SITE PLAN

STETSON ENGINEERS INC.
785 GRAND AVENUE, SUITE 202
CARLSBAD, CA. 92008
(760) 730-0701

AH/BC NAVY JV, LLC
11837 ROCK LANDING DRIVE, SUITE 300
NEWPORT NEWS, VA 23606

| | |
|---|---|
| SCALE: | AS SHOWN |
| EPROJECT NO.: | 1354721 |
| CONSTR. CONTR. NO. | N62470-14-D-9022 |
| NAVFAC DRAWING NO. | 1823049 3 |
| SHEET | 26 OF 260 |

10-C-101

DRAWFORM REVISION: 10 MAY 2014

0 25' 50' 100'
SCALE IN FEET

SANTA MARGARITA ROAD

SURVEY CONTROL POINT (TYP)
SEE 00-C-102

822

ACCESS ROAD

STAGING AREA

821

823

STAGING AREA

RIVER ACCESS DURING CONSTRUCTION

PERMANENT IMPACT AREA

TEMPORARY IMPACT AREA

SANTA MARGARITA RIVER FLOW

PLAN
SCALE: 1" = 50'

| APPR | DATE | STM | DESCRIPTION |
|---|---|---|---|

NAVFAC

REGISTERED PROFESSIONAL ENGINEER
JOE DEMAGGIO
C 32954
CIVIL
STATE OF CALIFORNIA
SEAL

A/E INFO

APPROVED
FOR COMMANDER NAVFAC
ACTIVITY
SATISFACTORY TO

| DES JD | DRW GT | CHK SR |
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| XXXX | | |

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

# RAW WATER PIPELINE PENDLETON TO FALLBROOK

SITE ACCESS AND STAGING AREAS

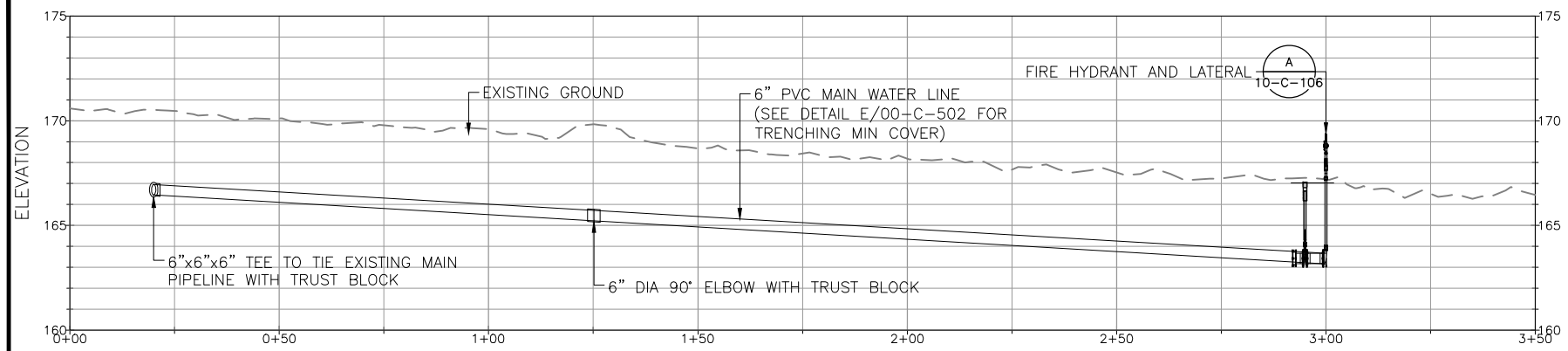
STETSON ENGINEERS INC.
STETSON ENGINEERS, INC.
785 GRAND AVENUE,
SUITE 202
CARLSBAD, CA. 92008
(760) 730-0701

AH BC
AH/BC NAVY JV, LLC
11837 ROCK LANDING DRIVE, SUITE 300
NEWPORT NEWS, VA 23606

| | |
|---|---|
| SCALE: | AS SHOWN |
| EPROJECT NO.: | 1354721 |
| CONSTR. CONTR. NO. | N62470-14-D-9022 |
| NAVFAC DRAWING NO. | 18230494 |
| SHEET | 27 OF 260 |

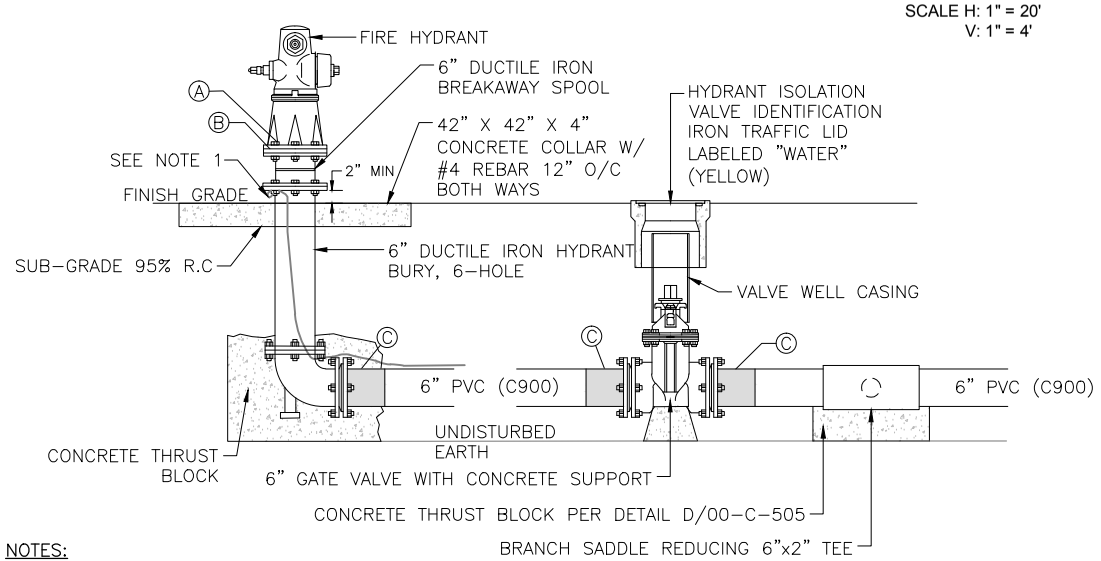
10-C-102

DRAWFORM REVISION: 10 MAY 2014




## PROFILE

SCALE H: 1" = 20'
V: 1" = 4'




NOTES:
1. ATTACH TRACING WIRE TO FLANGE BOLT.
2. ALL THRUST BLOCKING TO BE AGAINST UNDISTURBED TRENCH WALLS.
3. INSTALL TRACING WIRE AND WARNING TAPE.
4. HYDRANT OUTLETS TO FACE CONTROL BUILDING.
5. USE YELLOW PLASTIC HYDRANT CAPS AND PAINT YELLOW.
6. HYDRANT FLANGE CONNECTIONS STANDARD 6 HOLE DRILLING.
7. THE FIRE HYDRANT CONFIGURATION MUST FOLLOW THE LATEST VERSION OF THE CPR, UFC 3-600-01 AND MUST COMPLY WITH SDRSD SDW-104.

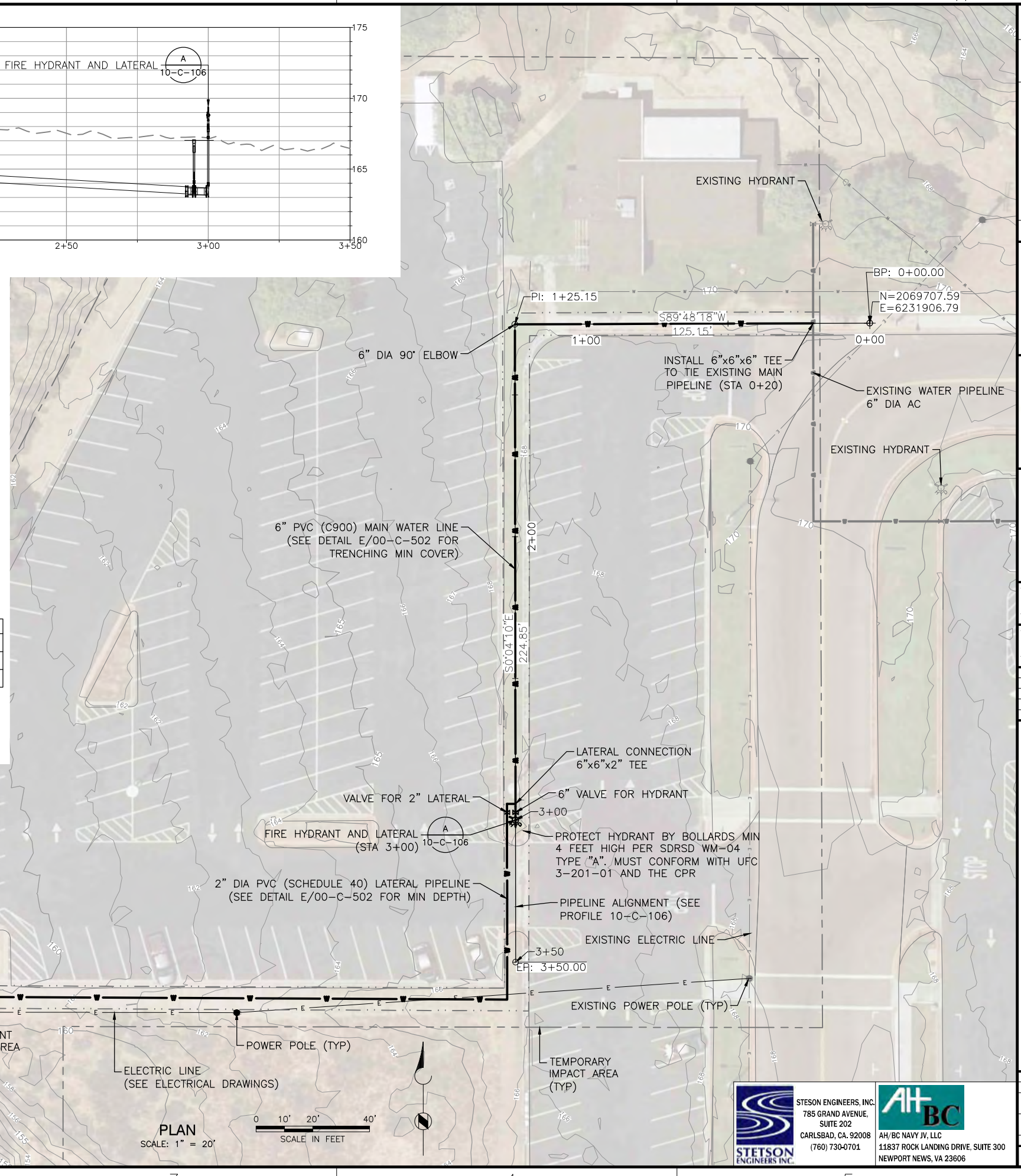
| No. | DESCRIPTION |
|---|---|
| Ⓐ | TYPE 316 S.S. HYDRANT BOLT KIT, TYP |
| Ⓑ | 6" RUBBER FLANGE-TYPE GASKET, TYP |
| Ⓒ | 6" PVC MJ ADAPTER |

FIRE HYDRANT AND LATERAL

## DETAIL

A
10-C-106

SCALE: NTS




## PLAN

SCALE: 1" = 20'

0 10' 20' 40'
SCALE IN FEET

| | |
|---|---|
| APPR | |
| DATE | |
| DESCRIPTION | |
| SYM | |

NAVFAC

REGISTERED PROFESSIONAL ENGINEER JOE DeMAGGIO C 32954 CIVIL STATE OF CALIFORNIA
SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO

| DES JD | DRW GT | CHK SR |
|---|---|---|
| XXXX | | |

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

# RAW WATER PIPELINE PENDLETON TO FALLBROOK

PIPELINE PLAN VIEW, PROFILE AND DETAILS

STETSON ENGINEERS INC.
STESON ENGINEERS, INC.
785 GRAND AVENUE, SUITE 202
CARLSBAD, CA. 92008
(760) 730-0701

AH/BC
AH/BC NAVY JV, LLC
11837 ROCK LANDING DRIVE, SUITE 300
NEWPORT NEWS, VA 23606

| | |
|---|---|
| SCALE: | AS SHOWN |
| EPROJECT NO.: | 1354721 |
| CONSTR. CONTR. NO. | N62470-14-D-9022 |
| NAVFAC DRAWING NO. | 18230498 |
| SHEET | 31 OF 260 |

10-C-106

DRAWFORM REVISION: 10 MAY 2014

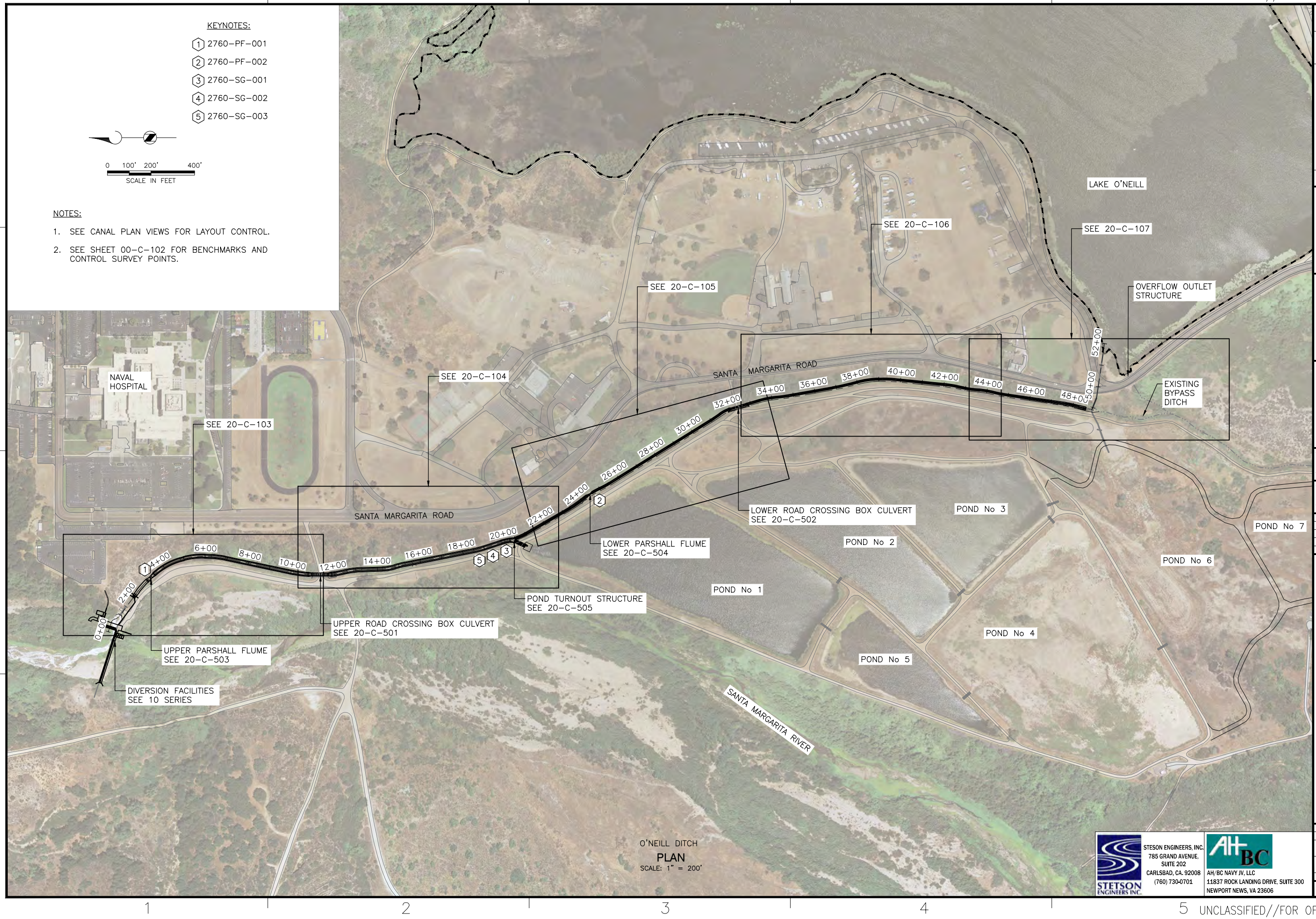
KEYNOTES:

1. 2760-PF-001
2. 2760-PF-002
3. 2760-SG-001
4. 2760-SG-002
5. 2760-SG-003

0 100' 200' 400'
SCALE IN FEET

NOTES:

1. SEE CANAL PLAN VIEWS FOR LAYOUT CONTROL.
2. SEE SHEET 00-C-102 FOR BENCHMARKS AND CONTROL SURVEY POINTS.




PLAN
SCALE: 1" = 200'

| APPR | DATE | DESCRIPTION | SYM |
|---|---|---|---|

NAVFAC

REGISTERED PROFESSIONAL ENGINEER JOE DE MAGNUS C 32954 CIVIL STATE OF CALIFORNIA
SEAL

A/E INFO

APPROVED
FOR COMMANDER NAVFAC
ACTIVITY
SATISFACTORY TO

| DES JC | DRW GT | CHK SR |
|---|---|---|
| XXXX | | |

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA
RAW WATER PIPELINE PENDLETON TO FALLBROOK
OVERALL SITE PLAN/INDEX

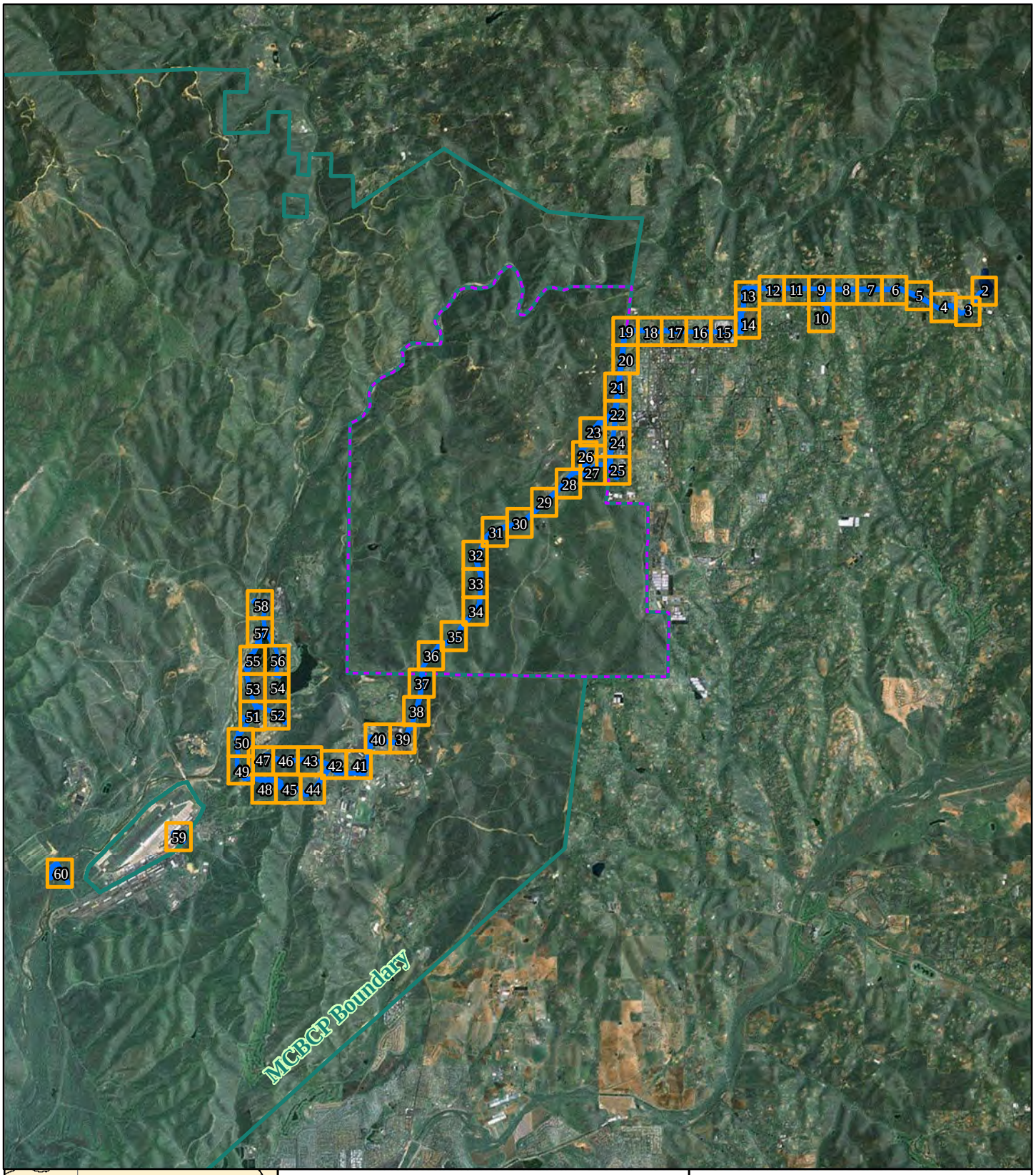
STETSON ENGINEERS INC.
STETSON ENGINEERS, INC.
785 GRAND AVENUE, SUITE 202
CARLSBAD, CA. 92008
(760) 730-0701

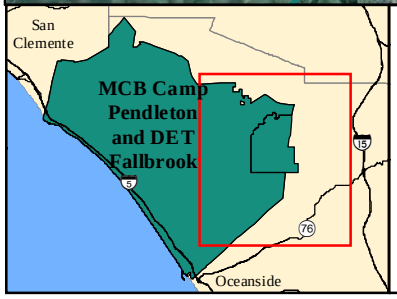
AH/BC
AH/BC NAVY JV, LLC
11837 ROCK LANDING DRIVE, SUITE 300
NEWPORT NEWS, VA 23606

| | |
|---|---|
| SCALE: | AS SHOWN |
| EPROJECT NO.: | 1354721 |
| CONSTR. CONTR. NO. | N62470-14-D-9022 |
| NAVFAC DRAWING NO. | 18230508 |
| SHEET | 41 OF 260 |

20-C-101

DRAWFORM REVISION: 10 MAY 2014




**Legend**

- Project Area
- DET Fallbrook Boundary
- MCB Camp Pendleton
- Appendix B Wetland Figures

Figure B-1
Wetland Figure Locations

0 1 2 Miles
0 2 4 Kilometers

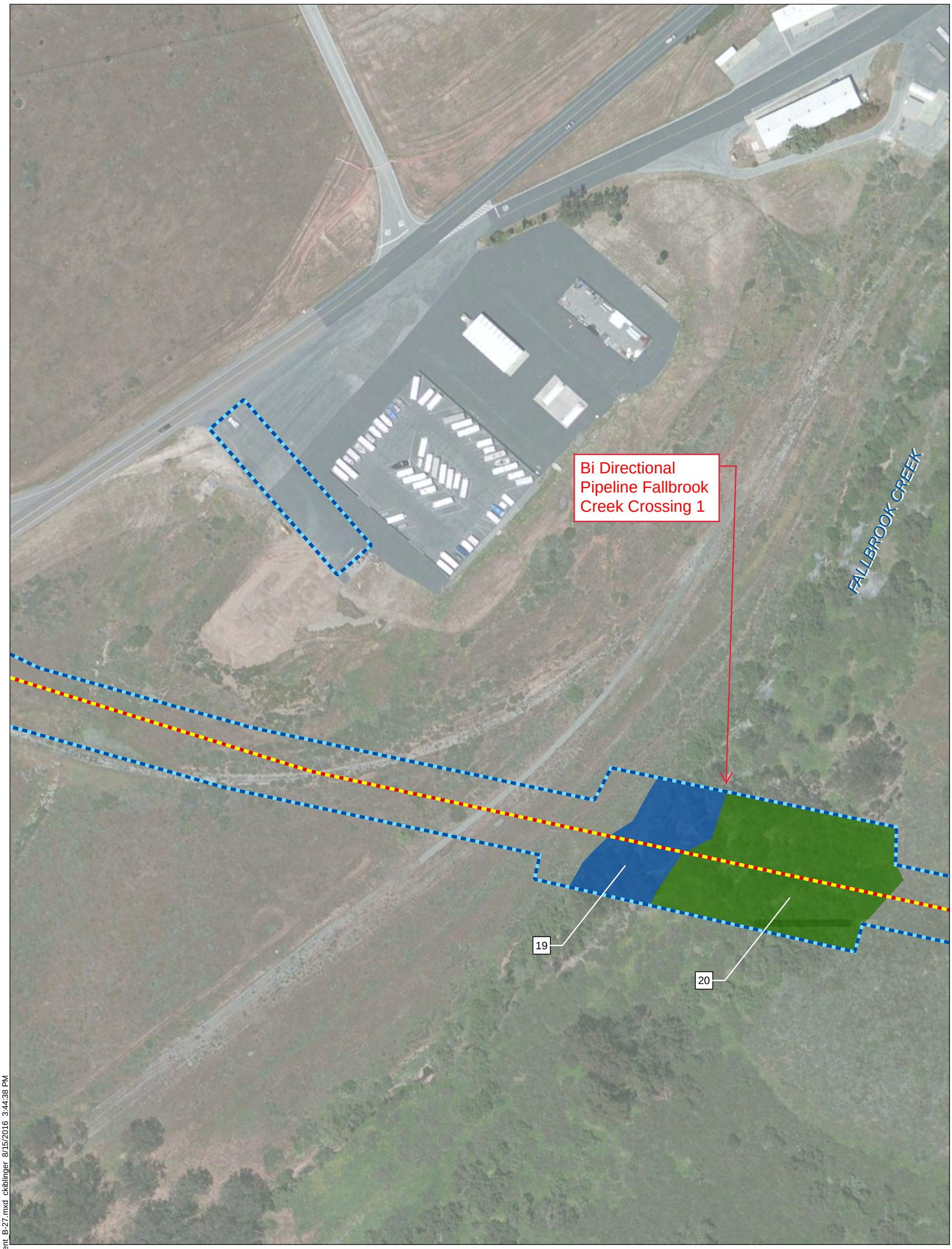
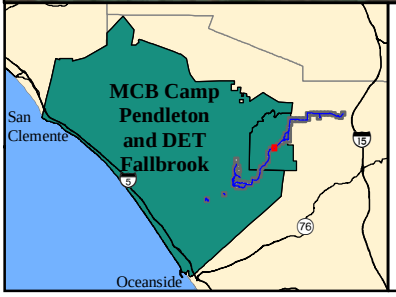



**Figure 5**
Replacement Figure B-27
Jurisdictional Resources Delineation Report Addendum
Santa Margarita River Conjunctive Use Project

ANCHOR QEA


**Legend**

- Permanent Impact Area
- Temporary Impact Area
- Alternatives 1 and 2
- Photo Direction and Number
- # Feature Number

Sample Point and Number

- Inside Wetland
- Outside Wetland

Aquatic Features

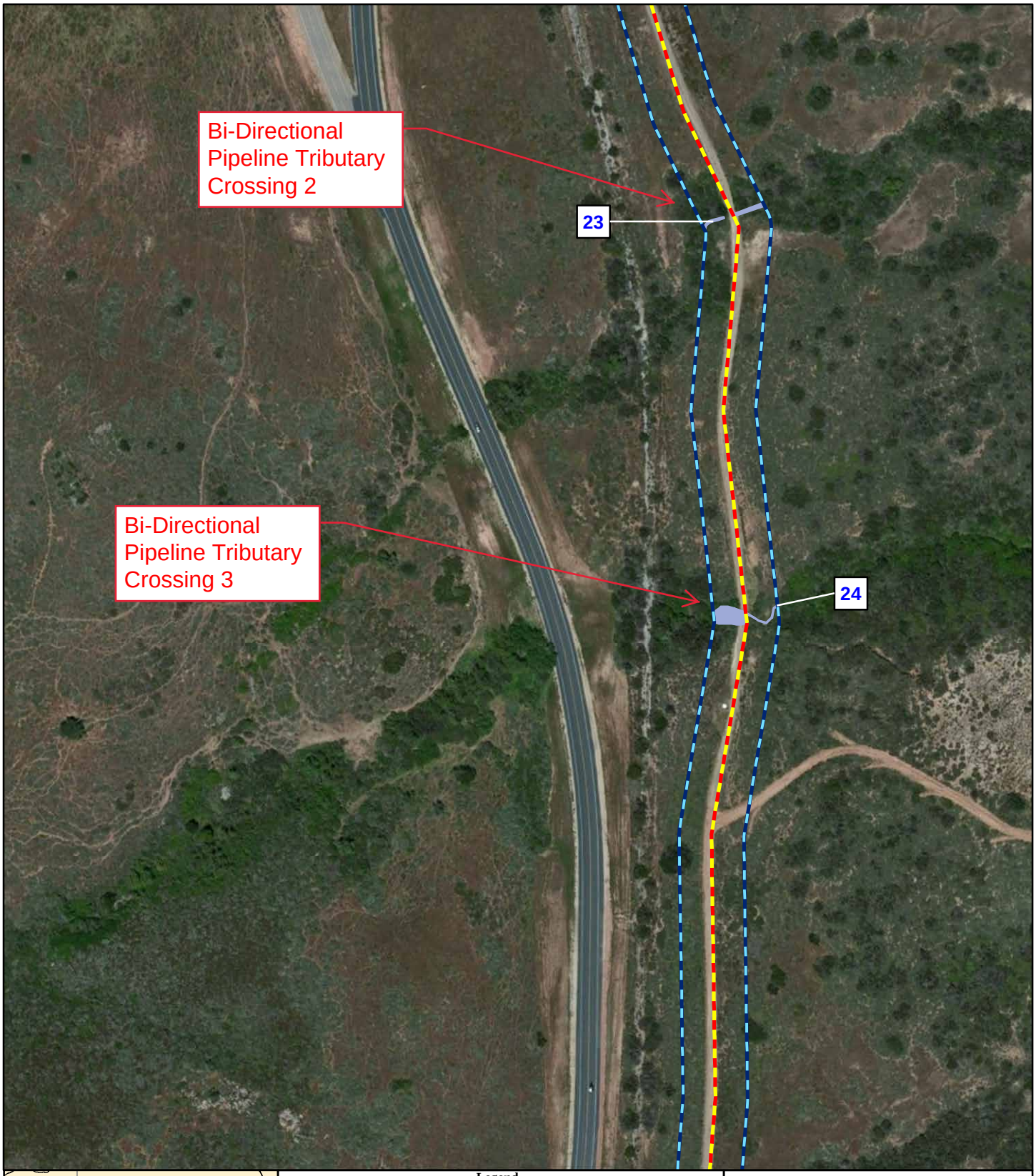
- Upper Perennial Riverine

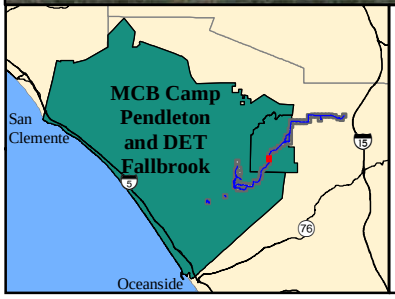
Figure B-30
Wetlands and other Waters of the U.S. for Alternatives 1 and 2

0 100 200 Feet
0 50 100 Meters

N


Figure B-32
Wetlands and other Waters of the U.S.
for Alternatives 1 and 2



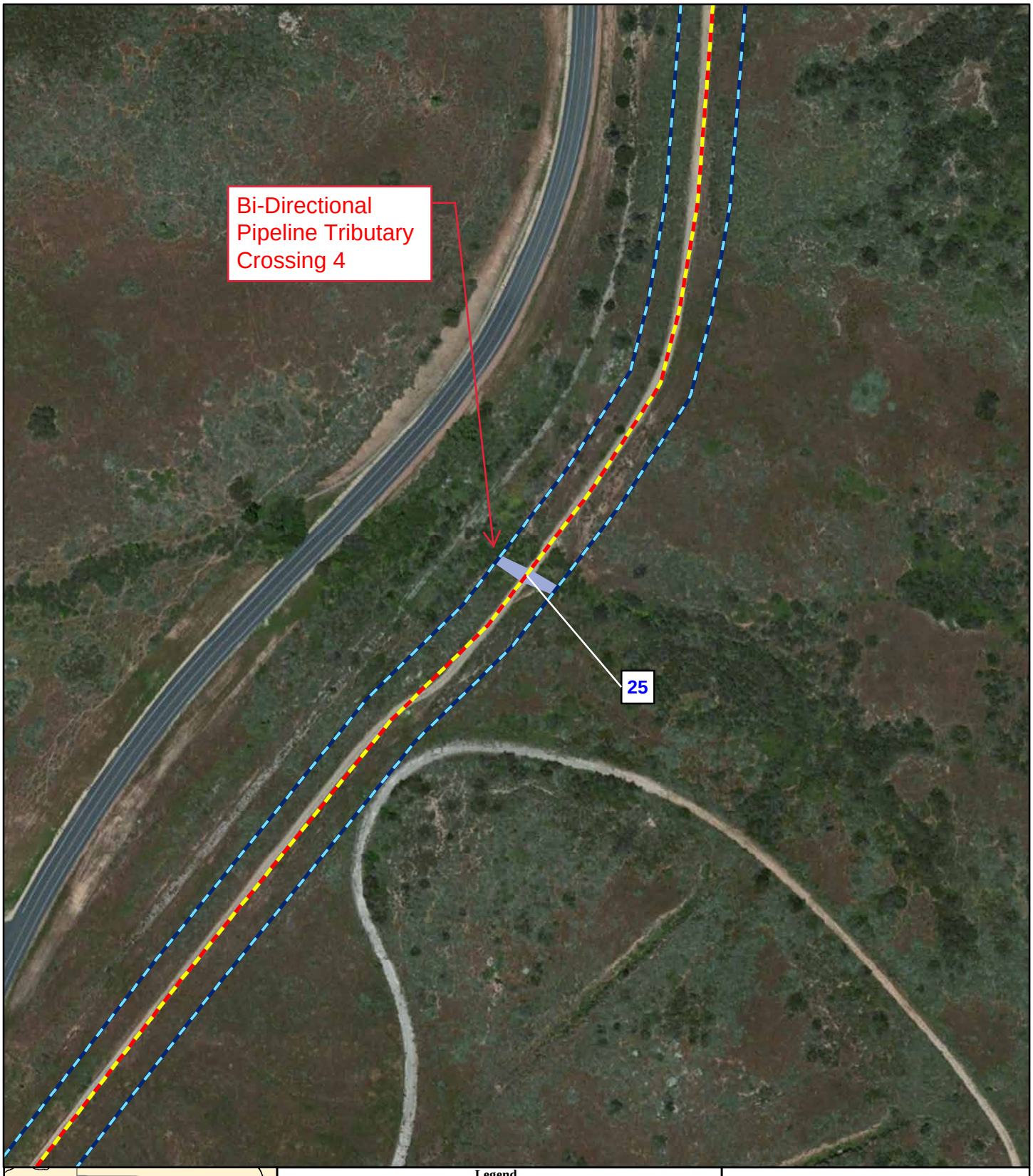

**Legend**

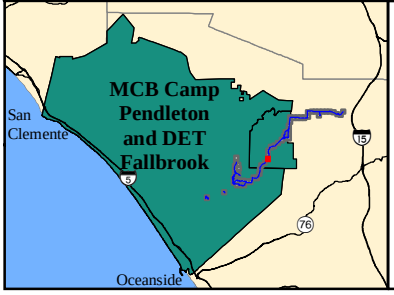
- Permanent Impact Area
- Temporary Impact Area
- Alternatives 1 and 2
- # Feature Number
- Aquatic Features
- Intermittent Riverine

Figure B-33
Wetlands and other Waters of the U.S.
for Alternatives 1 and 2

0 100 200 Feet
0 50 100 Meters

N



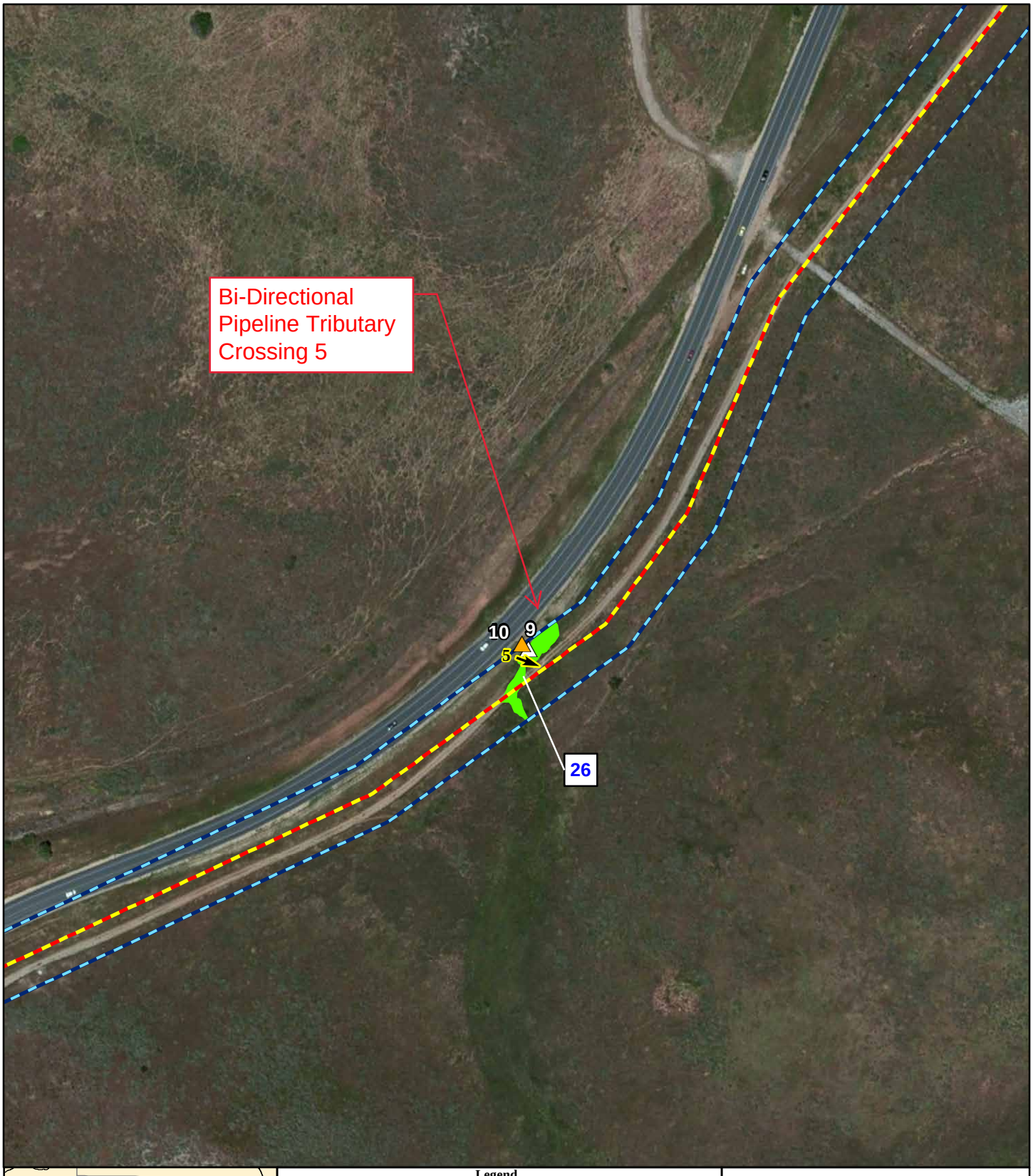



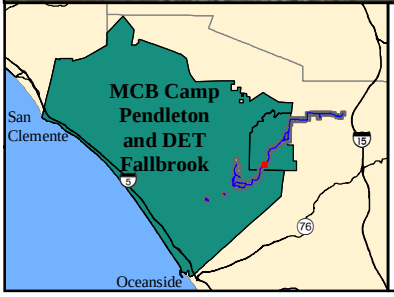

**Legend**

Permanent Impact Area
Temporary Impact Area
Alternatives 1 and 2
# Feature Number
Aquatic Features
Intermittent Riverine

Figure B-34
Wetlands and other Waters of the U.S.
for Alternatives 1 and 2

0 100 200 Feet
0 50 100 Meters




**Legend**

- Permanent Impact Area
- Temporary Impact Area
- Alternatives 1 and 2
- Photo Direction and Number
- # Feature Number

Sample Point and Number

- Inside Wetland
- Outside Wetland

Aquatic Features

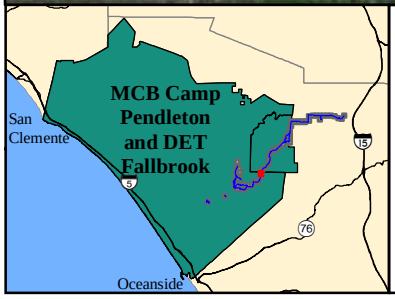
- Palustrine Emergent Wetland

0 100 200 Feet

0 50 100 Meters

N

Figure B-35
Wetlands and other Waters of the U.S. for Alternatives 1 and 2


**Legend**

- Permanent Impact Area
- Temporary Impact Area
- Alternatives 1 and 2
- MCB Camp Pendleton Boundary
- # Feature Number

Sample Point and Number

- Outside Wetland

Aquatic Features

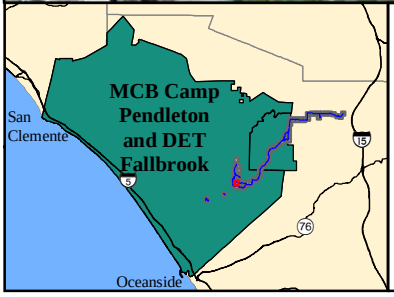
- Intermittent Riverine

Figure B-37
Wetlands and other Waters of the U.S. for Alternatives 1 and 2

0 100 200 Feet
0 50 100 Meters

N


Figure B-38
Wetlands and other Waters of the U.S.
for Alternatives 1 and 2


**Legend**

- Permanent Impact Area
- Temporary Impact Area
- Alternative 1
- # Feature Number

Aquatic Features

- Intermittent Riverine

Figure B-47
Wetlands and other Waters of the U.S. for Alternatives 1 and 2

0 100 200 Feet
0 50 100 Meters

N

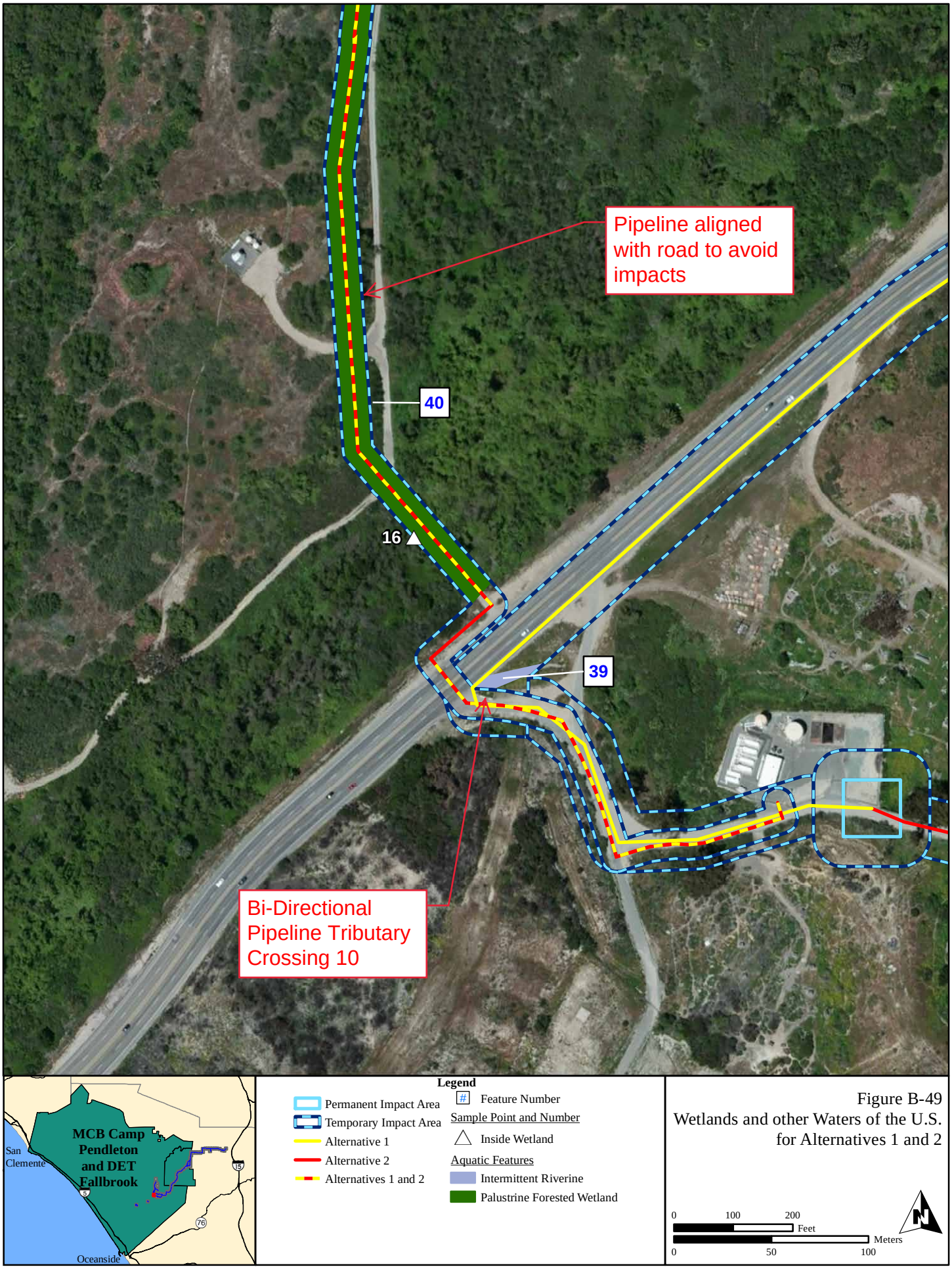



Figure B-49
Wetlands and other Waters of the U.S. for Alternatives 1 and 2

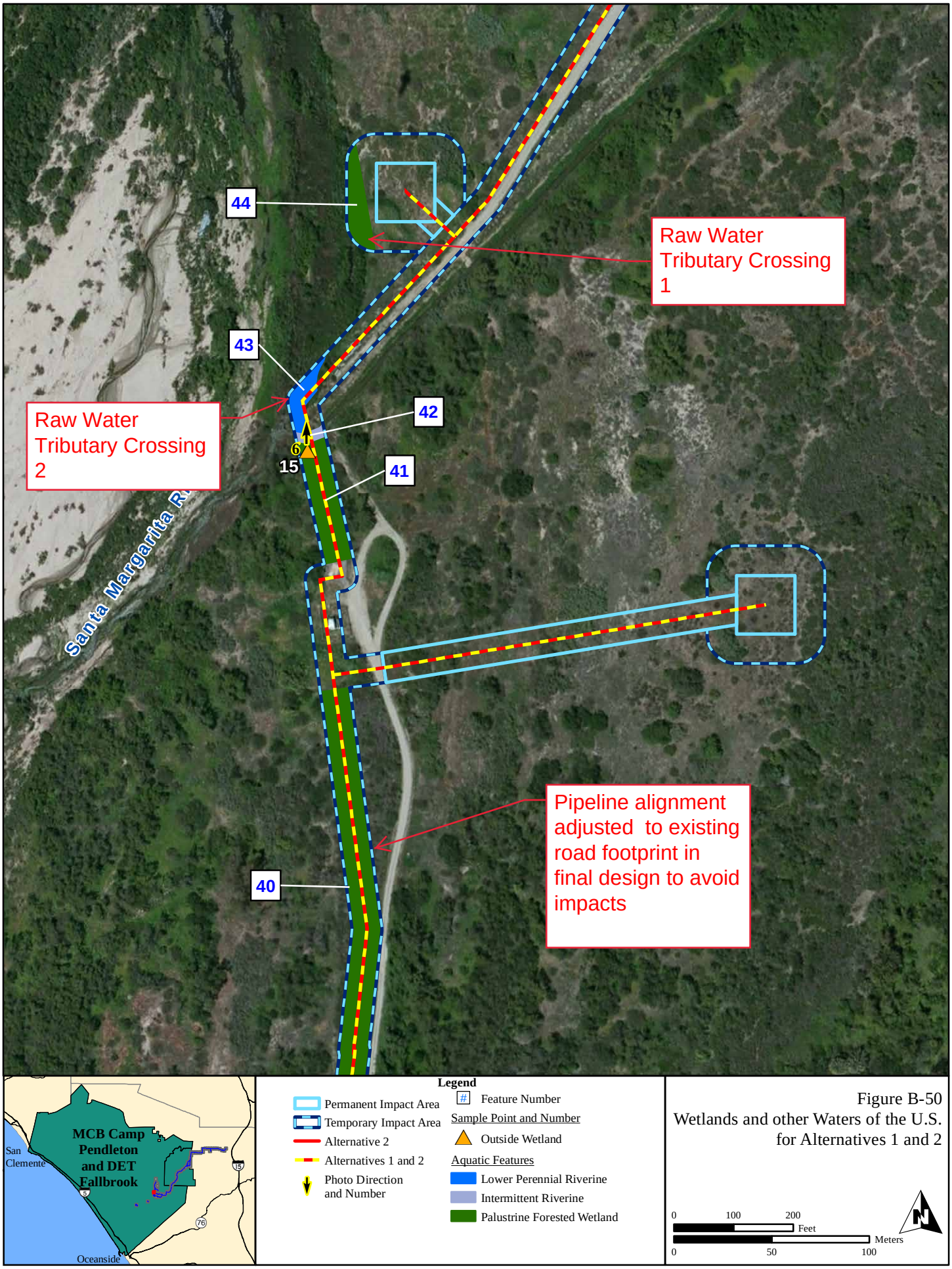
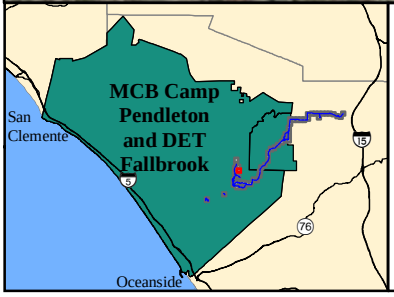



Figure B-50
Wetlands and other Waters of the U.S. for Alternatives 1 and 2


**Legend**

Permanent Impact Area

Temporary Impact Area

# Feature Number

Aquatic Features

Intermittent Riverine

Palustrine Unconsolidated Bottom

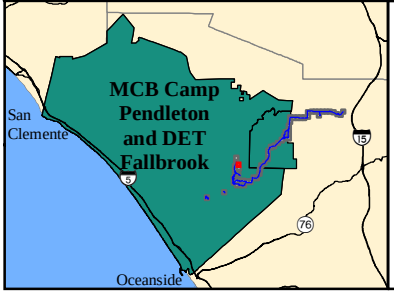
Palustrine Unconsolidated Shore

Figure B-55
Wetlands and other Waters of the U.S.
for Alternatives 1 and 2

0 100 200 Feet

0 50 100 Meters

N


**Legend**

Permanent Impact Area

Temporary Impact Area

\# Feature Number

Aquatic Features

Intermittent Riverine

Palustrine Unconsolidated Bottom

Figure B-56
Wetlands and other Waters of the U.S.
for Alternatives 1 and 2

0 100 200 Feet

0 50 100 Meters

N

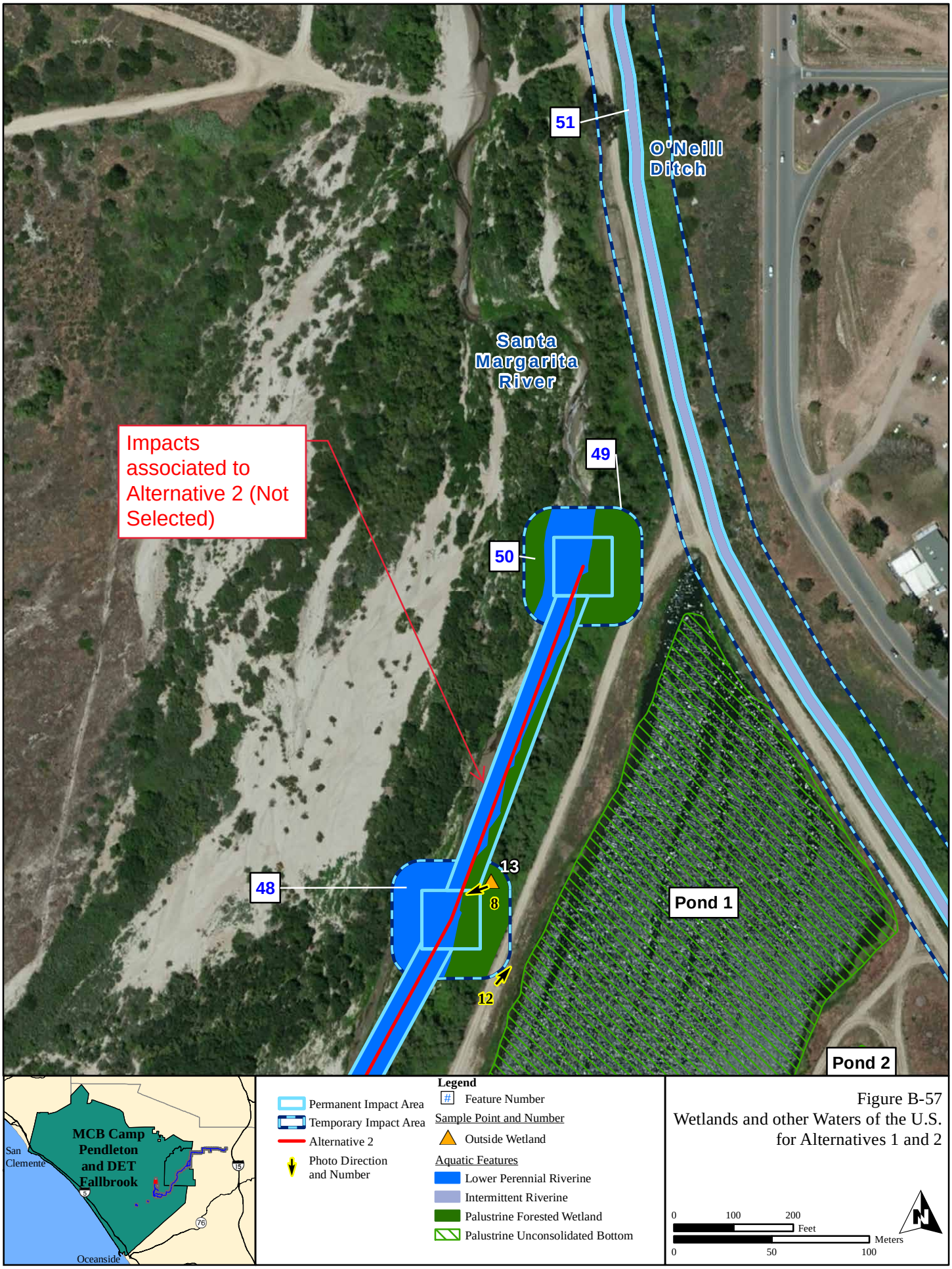



Figure B-57
Wetlands and other Waters of the U.S.
for Alternatives 1 and 2

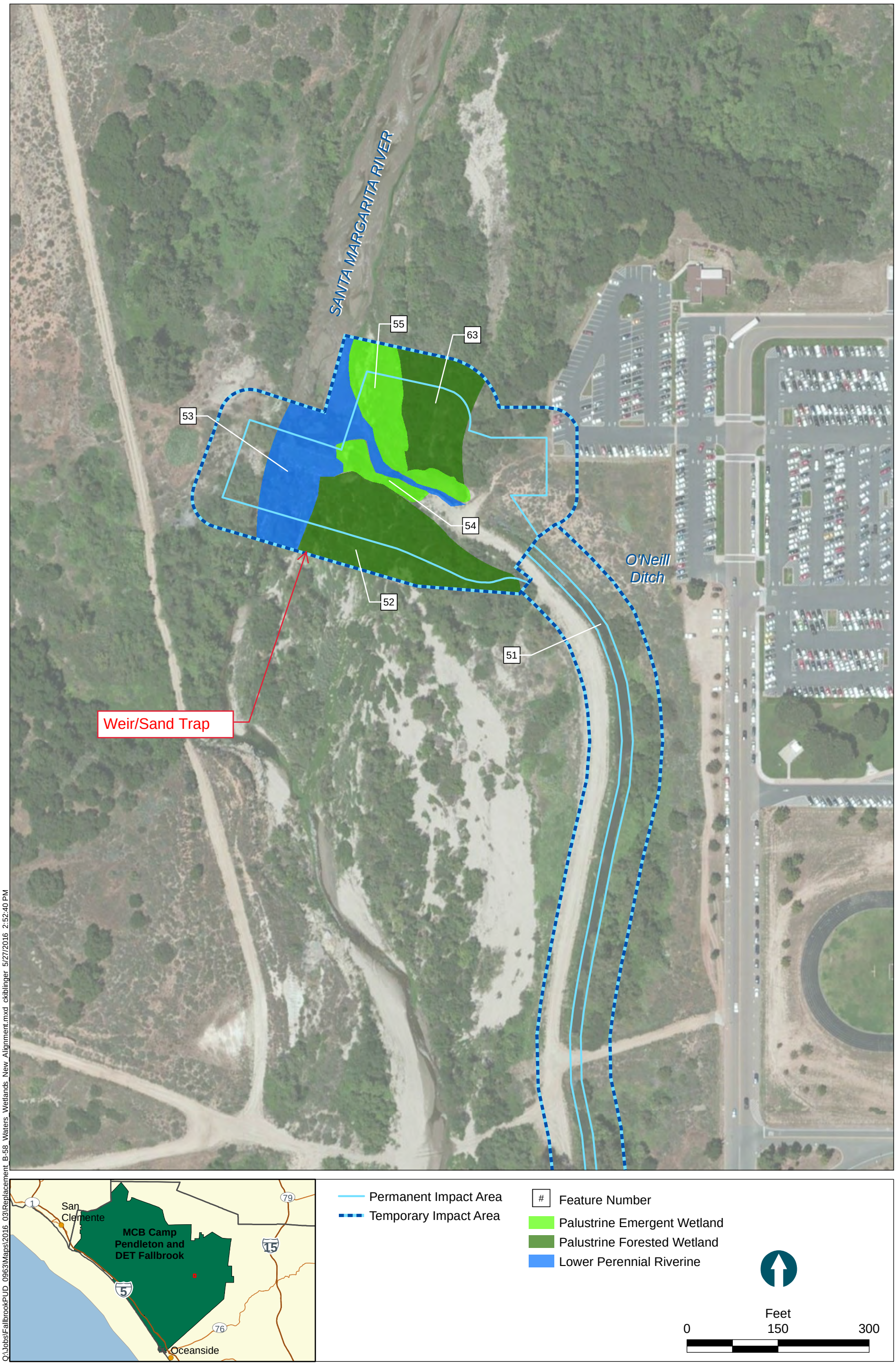



**Figure 1**
Replacement Figure B-58
Jurisdictional Resources Delineation Report Addendum
Santa Margarita River Conjunctive Use Project

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