

County of San Diego Stormwater Quality Management Plan (SWQMP) *Attachment 1: Storm Water Intake Form for All Permit Applications*

This form establishes Stormwater Quality Management Plan (SWQMP) requirements for Development Projects per Sections 67.809 and 67.811 of the County of San Diego Watershed Protection Ordinance (WPO). See *Storm Water Intake Form Instructions* for additional guidance and explanation of terms.

Part 1. Project Information			
Project Name:	Sandia Creek Road Bridge Crossing S	anta Margarita River	
Record ID (Permit) No(s):	Record ID (Permit) No(s): PDS2020-LDGRMJ-30309 / PDS2020-LDPIIP-60093		
Assessor's Parcel No(s):	102-250-2400		
Street Address (or Intersection):	Project Located in the Vicinity of Fall	brook	
City, State, Zip:	Fallbrook, CA 92028		
Part 2. Applicant / Project	Proponent Information		
Name:	Sandra Jacobson, Ph.D		
Company:	California Trout		
Street Address: 5425 Oberlin Drive, Suite 209			
City, State, Zip:	San Diego, California 92121		
Phone Number	(858) 414-1518		
Email:	sjacobson@caltrout.org		
Part 3. Required Informat	ion for All Development Proje	ets	
(A) 1. Existing (pre-development) impervious surfaces (fi	2. Created or replaced 2) impervious surfaces (ft ²)	3. Total disturbed area (acres or ft²)	
38,528	49,559	101,493	
	a WDID# if this project is subject uction General Permit (Order No.	WDID # (if issued)	

For County Use Only	Reviewed By:	Review Date:
□ Standard SWQMP		□ Green Streets PDP Exemption SWQMP

¹ Available at: <u>https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html</u>

A If your project is the following (select one)	B	You must complete
Standard Project		→ Standard SWQMP Form
\Box a. Project is East of the Pacific/Salton Sea Divide		
\Box b. None of the PDP criteria below applies		
Priority Development Project (PDP)		→ PDP SWQMP Form
\Box 1. Project is part of an existing PDP, <u>OR</u>		
\Box 2. Project does any of the following:		
□ a. Creates or replaces a total of 10,000 ft ² or more of impervious surface		
 b. Creates or replaces a combined total of 5,000 ft² or more of impervious surface within one or more of the following uses: (1) parking lots; (2) streets, roads, highways, freeways, and/or driveways; (3) restaurants; and (4) hillsides 		
□ c. Creates or replaces a combined total of 5,000 ft ² or more of impervious surface within one or more of the following uses: (1) automotive repair shops; and (2) retail gasoline outlets		
☐ d. Discharges directly to an Environmentally Sensitive Area (ESA) AND creates or replaces 2,500 ft ² or more of impervious surface		
□ e. Disturbs one or more acres of land (43,560 ft²) and is expected to generate pollutants post-construction		
□ f. Is a <u>redevelopment</u> project that creates or replaces 5,000 ft ² or more of impervious surface on a site already having at least 10,000 ft ² of impervious surface		
Green Streets PDP Exemption ²		→ Green Streets PDP Exemption SWQMP Form
Part 5. Applicant Signature		
I have reviewed the information in this form, and it is true and co	orrect	to the best of my knowledge.
Applicant / Project Proponent Signature:		Date: 12/16/2021

- **Upon completion** submit this form to the County.
- *If requested*, attach supporting documentation to justify selections made or exemptions claimed.
- If this is a PDP that is part of a larger existing PDP, you will be required to attach a copy of the existing SWQMP to the newer SWQMP submittal.

² *Green Streets PDP Exemption Projects* are those claiming exemption from PDP classification per WPO Section 67.811(b)(2) because they consist exclusively of *either* 1) development of new sidewalks, bike lanes, and/or trails; *or* 2) improvements to existing roads, sidewalks, bike lanes, and/or trails.



County of San Diego Green Streets PDP Exempt Stormwater Quality Management Plan (SWQMP)

This form must accompany applications for Green Streets PDP-exempt projects such as a) development of new sidewalks, bike lanes, and/or trails, or b) improvements to existing roads, sidewalks, bike lanes, and/or trails as described in Section 1.4.3 of the County BMP Design Manual.

Project Identification		
<u>Project Information</u> Project Name Project Street Address Project City, State, Zip Assessor's Parcel Number Project/Oracle Number	Sandia Creek Drive Bridge Crossing Santa Margarita River Project Located in the Vicinity of Fallbrook, 1.2 miles northeasterly of Deluz Road Fallbrook, CA APN: 102-250-2400 PDS2020-LDGRMJ-30309 PDS2020-LDPIIP-60093	
<u>Applicant Information</u> Applicant Name Applicant Phone Number Applicant Email Address Company Name Company Address	Sandra Jacobson, Ph.D (858) 414-1518 <u>sjacobson@caltrout.org</u> California Trout 5425 Oberlin Drive, Suite 209 San Diego, California 92121	
Engineer's Certification Engineer's Signature PE Number State of Licensure I hereby declare that I am the Engineer in Responsible Charge of design of stormwater BMPs for this project. (This item is only required at final submittal).	Todd A. Graham Reg. No. C71834 California	
Preparation Date:	11/19/2021	

Project Description

Describe project intent, existing/proposed drainage patterns, net increase in impervious area, and green street performance strategies.

If the project consists entirely of "routine maintenance" activities as outlined in Table 1-2 of the County BMPDM (i.e. road resurfacing, utility trenching, etc), clearly state so and provide a thorough description of these activities. Routine maintenance projects are not required to complete the rest of this SWQMP form. The project consists of the replacement bridge located near the Santa Margarita River Hiking Trail, located in the County of San Diego, California.

The existing fish passage and approach road are located just north of Fallbrook near the intersection of Sandia Creek Road and De Luz road. Stormwater runoff generally sheet flows overland on either side of the road (Refer to Exhibit A1 for a graphical depiction of the existing drainage patterns and drainage areas). The existing fish passage is not only an impediment for steelhead, but also a hazardous pedestrian and vehicular crossing during significant rain events. The proposed fish passage barrier removal and crossing replacement project will provide multiple benefits;

- 1. Provide juvenile and adult steelhead access to 12 miles of upstream habitat, including high quality habitat in the upper watershed near Temecula.
- 2. Provide improved habitat through riparian restoration at the project site. This will provide cover and resting areas for steelhead migrating upstream to spawning and rearing sites that are undergoing restoration in preparation for their passage.
- Bridge modification of the existing fish passage can reduce adverse impacts of periodic overtopping of the existing culvert crossing during storms that block access to the homes of local residents.

The proposed bridge will be a three-span bridge that will join the existing Sandia Creek Road to the south and Rock Mountain Drive to the north and it will replace the existing fish passage (bridge). It is anticipated that the proposed bridge will be approximately 574' long and 40' wide. Runoff will flow from the centerline of the bridge in opposing directions to the bridge decks where it will travel north and south towards Sandia Creek Road and Rock Mountain Drive. Proposed development will maintain existing drainage patterns, as much as feasible, and runoff from the road will continue to be split to sheet flow overland on both sides of the road. Since this project consists of a replacement bridge resulting in realignment of the existing road as opposed to proposing an entirely new road, this project qualifies as a Green Streets project.

Runoff from drainage management areas (DMAs) 1, 2, 3, 9, and 12 will be directed to the vegetated swale (BMP-1). See Attachment 2B, Exhibit A2 for all drainage patterns, flow directions, and point of discharge. DMA 1, 2, and 12 mimics the existing drainage pattern flowing into the proposed location of the vegetated swale. Runoff from DMA 3 flows to the bridge deck and is directed south towards Sandia Creek Road where it also discharges into the proposed vegetated swale. DMA 9 consists of new landscape area that will flow into the proposed vegetated swale. The swale was selected for several reasons: Landscape maintenance is inherent with private property ownership; small volume of required treatment rates; medium removal efficiencies for secondary pollutants of concern associated with the propose project; etc. Additionally, the San Diego County BMP Design Manual identifies Vegetated Swales as a BMP for consideration. Swales incorporated into the project will be constructed using the design criteria and guidelines listed in the Handbook's standard drawing, FT-1.

The sizing requirements included in Appendix K of the San Diego County BMP Design Manual (Guidance on Green Infrastructure) were followed. The total net increase area for this project was calculated to be 11,082 sq-ft which is the minimum required treatment area per Appendix K, Green streets performance standard. The actual impervious area draining into vegetated swale was calculated to be 21,248 sq-ft. Therefore, the greater of both (21,248 sq-ft) was used to calculate the required water quality flow rate of the proposed flow-thru treatment BMP (0.082 cfs). Since the provided treatment is greater than the net increase in impervious area (required treatment), the BMP design complies with Green Streets Performance Standard. The proposed vegetated swale will provide a flow-thru treatment of 0.946 cfs which also exceeds the required treatment volume (see calculations included in Attachment 2).

County of San Diego Green Streets PDP Exempt SWQMP

Best Management Practices	
Minimize Impervious Area Project considered use of pervious pavements and constructs all impervious features to the minimum widths necessary.	 □ Yes □ No ⊠ Not Applicable
Conserve Natural Areas Project preserves soils, vegetation, waterbodies, existing trees, open space, drainage patterns, and drainage features to the maximum extent practicable.	 ☑ Yes □ No □ Not Applicable
Construction BMPs <i>Project implements all relevant construction</i> <i>BMPs as depicted in Attachment 1.</i>	⊠ Yes □ No □ Not Applicable
Storm Drain Stenciling Project stencils all new storm drain inlets as depicted in Attachment 1.	 □ Yes □ No ⊠ Not Applicable
Landscaping Project uses only native and/or drought tolerant species in the landscape palette as depicted in Attachment 1.	⊠ Yes □ No □ Not Applicable
Trash Storage Project designs all trash storage areas to prevent wind and water-based dispersal of trash as depicted in Attachment 1.	 □ Yes □ No ⊠ Not Applicable
Green Streets BMPs Project implements Green Streets BMPs as depicted in Attachment 2.	☑ Yes□ No□ Not Applicable
Additional Information Provide a brief explanation for all "No" answers above.	

ATTACHMENT 1A PLANS

SHEETPLANCIVILPLANS01C1TITLESHEET02C2GENERALNOTESAND03C3EXISTINGUTILITIES04C4PROJECTIMPACTAREA05C5WATERPOLLUTIONCONTROL06C6TRAFFICCONTROL	14 15 16 17	B1 B2 B3	BRIDGE GENERAL PLAN GENERAL NOTES
 O2 C2 GENERAL NOTES AND REFERENCES O3 C3 EXISTING UTILITIES O4 C4 PROJECT IMPACT AREA (PIA) MAP O5 C5 WATER POLLUTION CONTROL PLAN 	15 16 17	B2 B3 B4	GENERAL NOTES SUGGESTED CONSTRUCTION SEQUENCE
 03 C3 EXISTING UTILITIES 04 C4 PROJECT IMPACT AREA (PIA) MAP 05 C5 WATER POLLUTION CONTROL PLAN 	16 17	B3 B4	SUGGESTED CONSTRUCTION SEQUENCE
04 C4 PROJECT IMPACT AREA (PIA) MAP 05 C5 WATER POLLUTION CONTROL PLAN	17	Β4	
05 C5 WATER POLLUTION CONTROL PLAN			
	10	RD	CAST IN DRILLED HOLE PILE DETAILS
UU CU INALLIC CUNTRUL FLAN	19	B6	ABUTMENT 1 ELEVATION
07 C7 DEMOLITION PLAN	20	B7	ABUTMENT 1 CROSSBEAM PLAN AND ELE
07 C7 DEMOLITION FLAN 08 C8 GRADING PLAN	20	B8	ABUTMENT 1 DETAILS
09 C9 APPROACH ROADWAY PLAN AND PROFIL		B9	PIER 2 ELEVATION
	LE 22 23	B10	PIER 2 CROSSBEAM PLAN AND ELEVATION
11 C11 WINGWALL PLAN NWW1 AND NWW2			
12 C12 STRIPING PLAN	25	B12	PIER 3 CROSSBEAM PLAN AND ELEVATIC
13 C13 DETAILS	26	B13	
	27	B14	ABUTMENT 4 ELEVATION
	28	B15	ABUTMENT 4 CROSSBEAM PLAN AND ELE
	29	B16	BEARING PLAN
	30	B17	BEARING DETAILS
	31	B18	GIRDER CAMBER AND SLAB POURING SEC
	32	B19	STRUCTURAL STEEL NOTES
	33	B20	GIRDER LAYOUT - SPAN 1
	34	B21	GIRDER LAYOUT - SPAN 2 AND 3
	35	B22	GIRDER ELEVATION - SPAN 1
	36	B23	GIRDER ELEVATION – SPAN 2
	37	B24	GIRDER ELEVATION - SPAN 3
	38	B25	GIRDER DETAILS
	39	B26	GIRDER FIELD SPLICE DETAILS
	40	B27	GIRDER FIELD SPLICE DETAILS
	41	B28	GIRDER FIELD SPLICE DETAILS
	42	B29	GIRDER FIELD SPLICE DETAILS
	43	B30	GIRDER FIELD SPLICE DETAILS
	44	B31	DIAPHRAGMS – ABUTMENT 1 AND PIER
	45	B32	DIAPHRAGMS - PIER 3 AND ABUTMENT
	46	B33	INTERMEDIATE CROSS FRAMES
	47	B34	SLAB REINFORCING PLAN – SPAN 1
	48	B35	SLAB REINFORCING PLAN – SPAN 2 ANI
	49	B36	TYPICAL SECTION AND SLAB REINFORCEM
	50	B37	STRIP SEALS
	51	B38	BARRIER 1
	52	B39	BARRIER 2
	53	B40	BARRIER 3



COUNTY OF SAN DIEGO, CALIFORNIA DEPARTMENT OF PUBLIC WORKS

ELEVATION

ATION

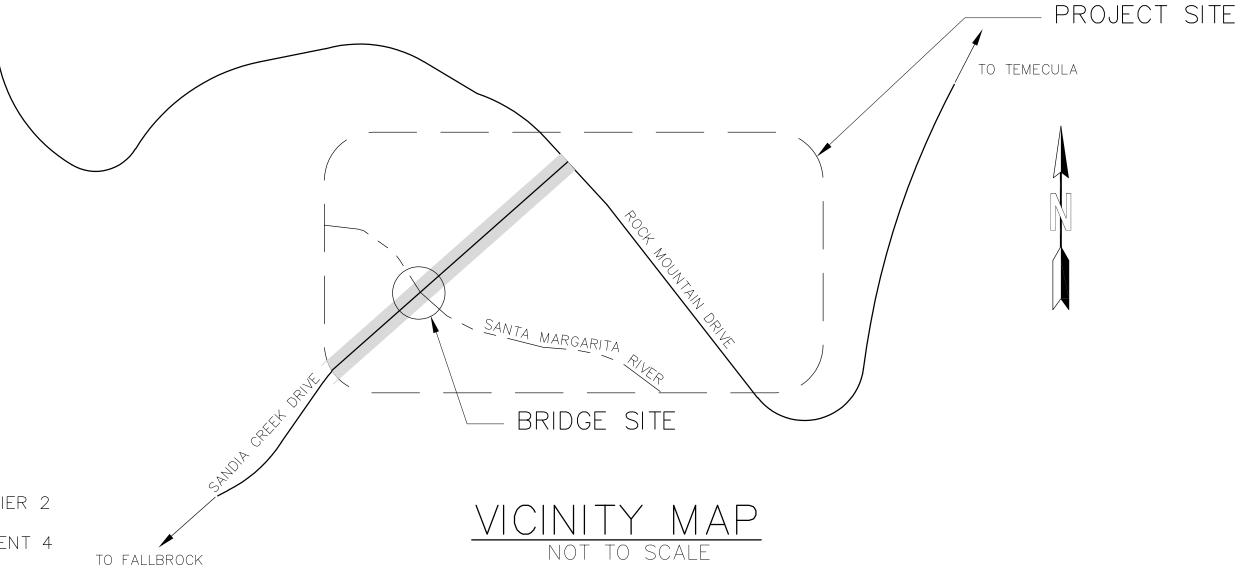
ATION

ELEVATION

SEQUENCE

PLANS FOR **CONSTRUCTION OF**

Sandia Creek Drive Bridge Replacement In the Vicinity of: Fallbrook Net Length: 0.21 Miles



and 3

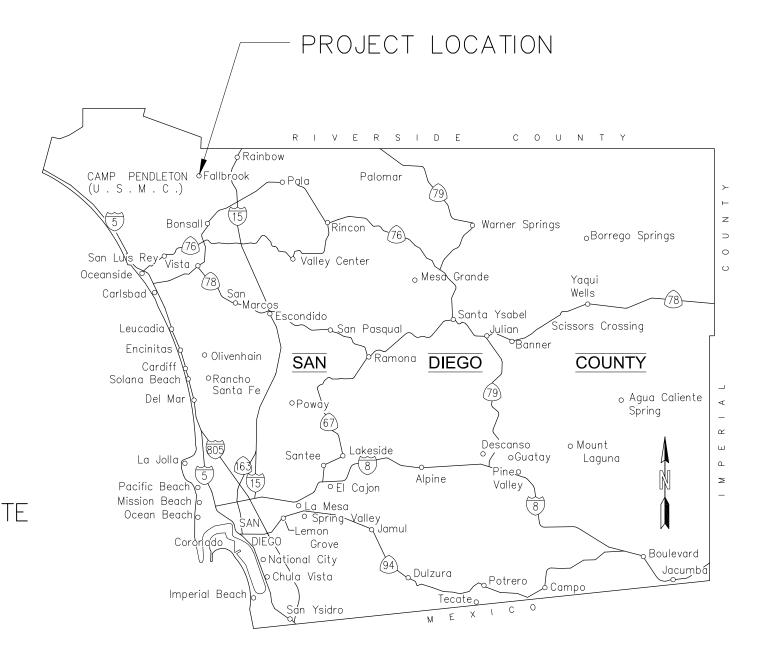
RCEMENT

UTILITY ALERT NOTE:

ATTENTION IS DIRECTED TO THE POSSIBLE EXISTENCE OF UNDERGROUND UTILITY FACILITIES NOT KNOWN OR IN A LOCATION DIFFERENT FROM THAT SHOWN ON THE PLANS OR IN THE SPECIAL PROVISIONS. THE CONTRACTOR SHALL TAKE STEPS TO ASCERTAIN THE EXACT LOCATION OF ALL UNDERGROUND FACILITIES PRIOR TO PERFORMING WORK THAT MAY DAMAGE SUCH FACILITIES OF INTERFERE WITH THEIR SERVICE. FORTY-EIGHT HOURS BEFORE EXCAVATION, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF UNDERGROUND FACILITIES BY CONTACTING UNDERGROUND SERVICE ALERT AT TELEPHONE 1-800-422-4133.

THE CONTRACTOR SHALL ALSO INDIVIDUALLY CONTACT OPERATORS OF GRAVITY SEWER SYSTEMS AND OTHER UTILITIES, WHO ARE NOT MEMBERS OF UNDERGROUND SERVICE ALERT.

ΒY	REVISION	SANDIA CREEK ROAD BRIDGE REPLACEMENT	PROJECT NO.: 200011
		DESIGN: RO	SCALE: AS SHOWN
		CHECKED: TG	DATE: 2021-10-08
		DRAWING NO.	<u>^1</u>
		TITLE SHEET	
		SHEET NO.	01 OF 54



PROJECT STANDARD SPECIFICATIONS

CALTRANS STANDARD SPECIFICATIONS, 2018

PROJECT STANDARD PLANS

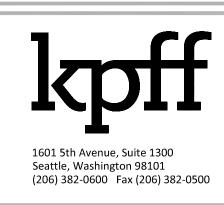
CALTRANS STANDARD PLANS (CSP), 2018

ROAD WORK:

A3A, A3B, A3C	ABBREVIATIONS
A10A, A10B, A10C, A10D, A10E	LEGEND – LINES AND SYMBOLS
A20A, A20B	PAVEMENT MARKERS & TRAFFIC LINES - TYPICAL DETAILS
A20D	PAVEMENT MARKERS & TRAFFIC LINES - TYPICAL DETAILS
A24A	PAVEMENT MARKINGS – ARROWS
A24E	PAVEMENT MARKINGS, WORDS, LIMIT AND YIELD LINES
A73B	MARKERS
A73C	DELINEATORS, CHANNELIZERS AND BARRICADES
A77Q1	TYPE 12A MBGF STRUCTURAL APPROACH
A77Q4	TYPE 12AA MBGF STRUCTURAL DEPARTURE
A77M1	MIDWEST GUARDRAIL SYSTEM STANDARD HARDWARE
A77N1	MIDWEST GUARDRAIL SYSTEM WOOD POST AND WOOD BLOCK DETAILS
A78A	THRIE BEAM BARRIER STANDARD BARRIER RAILING SECTION (WOOD PO
A78C1	THRIE BEAM BARRIER STANDARD HARDWARE DETAILS
A78C2	THRIE BEAM BARRIER POST AND BLOCK DETAILS
A78E3	DOUBLE THRIE BEAM BARRIER - CRASH CUSHION END TREATMENT
BRIDGE:	

STRUCTURE APPROACH SLAB TYPE N (30)

lotted: Dec 15, 2021 — 4:31pm anunez Layout: C2 1:\2017\1700232 Santa Maraarita River Fish Passaae\Drawinas\Current\xxxxxx-C2-General Notes and Reference:



NO.	DATE

PERMANENT WATER POLLUTION CONTROL BMP'S

1. SITE DESIGN BMP'S

VEGETATED SWALE

LEGEND

SYMBOL	DESCRIPTION	RSD
	CENTERLINE	
	SAWCUT LINE	
259.0	PROPOSED ELEV.	
	3" ASPHALT CONCRETE TYPE B	
	PLANE AC PAVEMENT	
	EXIST. RIGHT-OF-WAY	
	EXIST. AC DIKE	
(259.0)	EXISTING GROUND SPOT ELEV.	

TYPICAL CONSTRUCTION NOTES

CONSTRUCTION NOTES ARE TO RETAIN THE SAME NOTE NUMBER FOR THE SAME CONSTRUCTION NOTE THROUGHOUT THE ENTIRE SET OF PLANS.

ATE BY	REVISION	SANDIA CREEK ROAD BRIDGE REPLACEMENT	DYU	PROJECT NO.: 2000118
		DESIGN:	RO	SCALE: AS SHOWN
		CHECKEI	D: TG	DATE: 2021-10-08
		GENERAL NOTES AND REFERENCES	G NO.	C2
		SHEET N	NO.	D2 OF 54

POST WITH WOOD BLOCK)

Ζ

SURVEY CONTROL

BENCHMARK

SAN DIEGO SURVEY CONTROL # SMR 1 ELEV = 343.433' DATUM: NAVD 88 3-1/4" BRASS DISK WITH A DRILL HOLE AND EPOXY, MARKED "SAN DIEGO COUNTY SURVEYOR, SURVEY CONTROL, 2014, SMR1" ON THE SOUTHERLY SIDE OF ARIZONA CROSSING ON THE EASTERLY SIDE OF SANDIA CREEK ROAD, IN THE NORTHBOUND LANE, APPROXIMATELY 42.5 FEET SOUTHWESTERLY FROM ABUTMENT OF ARIZONA CROSSING. MONUMENT IS APPROXIMATELY 460 FEET SOUTHWESTERLY OF ROCK MOUNTAIN DRIVE.

REMARKS

THESE PLANS ARE BASED ON US CUSTOMARY (ENGLISH) UNITS. ALL DISTANCES ARE EXPRESSED IN FEET (FT) AND INCHES (IN) UNLESS OTHERWISE NOTED

HORIZONTAL CONTROL

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE NAD 83, ZONE 6, GRID BEARING BETWEEN STATION "SDGPS-02" AND STATION "103WCCS1", (BOTH HAVING A CALIFORNIA COORDINATE VALUE OF FIRST ORDER ACCURACY OR BETTER) AS SAID STATIONS ARE PUBLISHED IN THE SAN DIEGO COUNTY HORIZONTAL CONTROL BOOK, BEING NORTH 61"14'15.2" WEST.

TO BE MODIFIED BY SURVEYOR

 $\lambda = 0^{\circ}23'12.48''$ COMBINATION FACTOR = 0.99991830 GROUND DISTANCE = GRID DISTANCE / COMBINATION FACTOR CONVERSION FACTOR: 1 US SURVEY FOOT = 1200/3937 METERS

CONTRUCTION PHASING

CONSTRUCTION PHASING SHALL OCCUR AS FOLLOWS:

- NEW BRIDGE SHALL BE CONSTRUCTED PRIOR TO DEMOLITION OF EXISTING BRIDGE.
- MAINTAIN ACCESS TO EXISTING BRIDGE DURING CONSTRUCTION.
- MAINTAIN ACCESS TO HIKING TRAIL PARKING AREA AT ALL TIMES.

NOTES

- 1. ALL CONSTRUCTION ACTIVITIES SHALL OCCUR OUTSIDE BREEDING SEASON FOR POTENTIALLY-OCCURRING THREATENED/ENDANGERED SPECIES, SUCH AS VIREO, FLYCATCHERS, ARROYO TOAD, AND ARROYO CHUB. PROPER PERMITS SHALL BE OBTAINED FROM THE CALIFORNIA DEPARTMENT OF FISH & WILDLIFE, THE COUNTY OF SAN DIEGO, THE REGIONAL WATER QUALITY CONTROL BOARD, AND THE ARMY CORPS OF ENGINEERS.
- 2. IN THE EVENT EXISTING CONDITIONS DIFFER FROM WHAT IS SHOWN ON THE PROJECT DOCUMENTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.