

**Meeting of the Central Valley Flood Protection Board
August 24, 2012**

Staff Report – Encroachment Permit

**Central Valley Independent Network, LLC
Fiber Optic Cable Conduit, Colusa and Sutter County**

1.0 – ITEM

Consider approval of Permit No.18755 (Attachment B)

2.0 – APPLICANT

Central Valley Independent Network, LLC (CVIN)

3.0 – LOCATION

The project is located along the south side of State Highway 20 (Colusa Highway) downstream from the Meridian Bridge, crossing under the Sacramento River at approximately River Mile 134.

(Sacramento River, Colusa and Sutter Counties, see Attachment A)

4.0 – DESCRIPTION

To bore (directional drill) a 12-inch diameter high-density polyethylene (HDPE) casing pipe beneath the Sacramento River that will contain two 1.25-inch diameter HDPE fiber optic cable conduits.

5.0 – PROJECT ANALYSIS

The applicant is proposing to use horizontal directional drilling to install a twelve (12) inch diameter HDPE casing pipe beneath the Sacramento River that will contain two (2) 1.25 inch HDPE fiber optic cable conduits. The casing pipe will be drilled a minimum of 35-feet below the channel invert to avoid any possibility that the pipe would become exposed due to stream scour. The entry and exit bore pits will be in excess of 200-feet from the landside levee toes of the levee. The fiber optic cable will continue in both

directions from the Sacramento River on the south side of State Highway 20. The proposed project conforms to all Title 23 standards.

5.1 – Hydraulic Analysis

A hydraulic analysis was not required as the fiber optic conduit will be underground.

5.2 – Geotechnical Analysis

A geotechnical analysis was not required as the conduit will be placed sufficiently deep to avoid any potential impacts to the channel and/or levees.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

The comments and endorsements associated with this project, from all pertinent agencies are shown below:

- Reclamation District No. 70 and the Sacramento River West Side Levee District have endorsed the project with no conditions.
- The U.S. Army Corps of Engineers 208.10 comment letter has not been received for this application. Staff anticipates receipt of a letter indicating that the USACE District Engineer has no objection to the project, subject to conditions. Upon receipt of the letter, staff will review to ensure conformity with the permit language and incorporate it into the permit as Exhibit A.

7.0 – CEQA ANALYSIS

The Board, as a responsible agency under CEQA, has reviewed Initial Study/ Negative Declaration (IS/ND) (September 2010, SCH# 2011042097) for the Central Valley Independent Network Fiber Optic Communication Network Project prepared by the lead agency, California Public Utilities Commission (CPUC). These documents, including project design, may be viewed or downloaded from the Central Valley Flood Protection Board website at <http://www.cvpfb.ca.gov/meetings/2012/08-24-2012.cfm> under a link for this agenda item. These documents are also available for review in hard copy at the Board and CPUC office.

CPUC determined that the project would not have a significant effect on the environment and approved the project with Resolution T-17295 on July 14, 2011 and subsequently filed a Notice of Determination with the State Clearinghouse on October

17, 2011. Board staff has independently reviewed the subject documents and finds that the proposed project will not have a potentially significant effect on the environment.

8.0 – SECTION 8610.5 CONSIDERATIONS

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on the facilities of the State Plan of Flood Control, and consistency of the proposed project with the Central Valley Flood Protection Plan as adopted by Board Resolution 2012-25 on June 29, 2012:

The proposed project will have no adverse effect on facilities of the State Plan of Flood Control and is consistent with the Central Valley Flood Protection Plan.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

There will be no effects to the proposed fiber optic conduit from reasonable projected future events as the conduit will be underground.

9.0 – STAFF RECOMMENDATION

Staff recommends that the Board adopt the CEQA findings and approve the permit, conditioned upon receipt of a U.S. Army Corps of Engineers comment letter indicating that the District Engineer has no objection to the project, subject to conditions, and direct staff to file a Notice of Determination with the State Clearinghouse.

10.0 – LIST OF ATTACHMENTS

- A. Location Maps and Photos
- B. Draft Permit No. 18755
- C. Project drawing

Design Review:	Gary W. Lemon P.E.
Environmental Review:	Andrea Mauro, James Herota
Document Review:	Mitra Emami P.E., Len Marino P.E.



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VICINITY MAP



OVERVIEW



EXCERPTS FROM CALIFORNIA CODE OF REGULATIONS, TITLE 23 - WATERS, ARTICLE 8 - STANDARDS, SECTION 123 - PIPELINES, CONDUITS, AND UTILITY LINES


- (a)(1) Pipelines, conduits, utility lines, utility poles, and appurtenant structures may not be installed within the levee section, within ten (10) feet of levee toes, or within the floodway during the flood season.....
- (c)(1) Pipelines, conduits, and utility lines installed within the floodway must have a minimum cover of five (5) feet beneath the low-water channel, and a minimum of two (2) feet in the remaining area of the floodway. A greater depth of cover may be required based upon the feasibility of achieving the required cover or local soil stability and channel hydraulics.
- (d)(3) Buried pipelines, conduits, and utility lines that do not surface near the levee toes must have location markers near both levee toes.
- (d)(4) Buried pipelines, conduits, and utility lines that cross the levee at right angles must have a location marker located on the levee slope adjacent to either shoulder.
- (d)(16) Electrical and communication lines installed through a levee or within ten (1) feet of a levee toe must be encased in schedule 40 PVC conduit or equivalent. Low-voltage lines (24 volts or less) and fiber optic cable may be allowed without conduit if properly labeled.
- (d)(21) Boring a pipeline or conduit through a levee is permitted if the following additional conditions are met:
 - (A) The invert of the pipeline or conduit must be located at least three (3) feet above the design flood plane.
 - (C) The pipeline or conduit must be installed by the bentonite boring method or equivalent.....

NOTE: Construction and restoration must be per all applicable C.V.F.P.B., Caltrans, Sutter, and Colusa County standards and specifications.

CAUTION

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE PERMIT AGENCY'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THAT AGENCY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

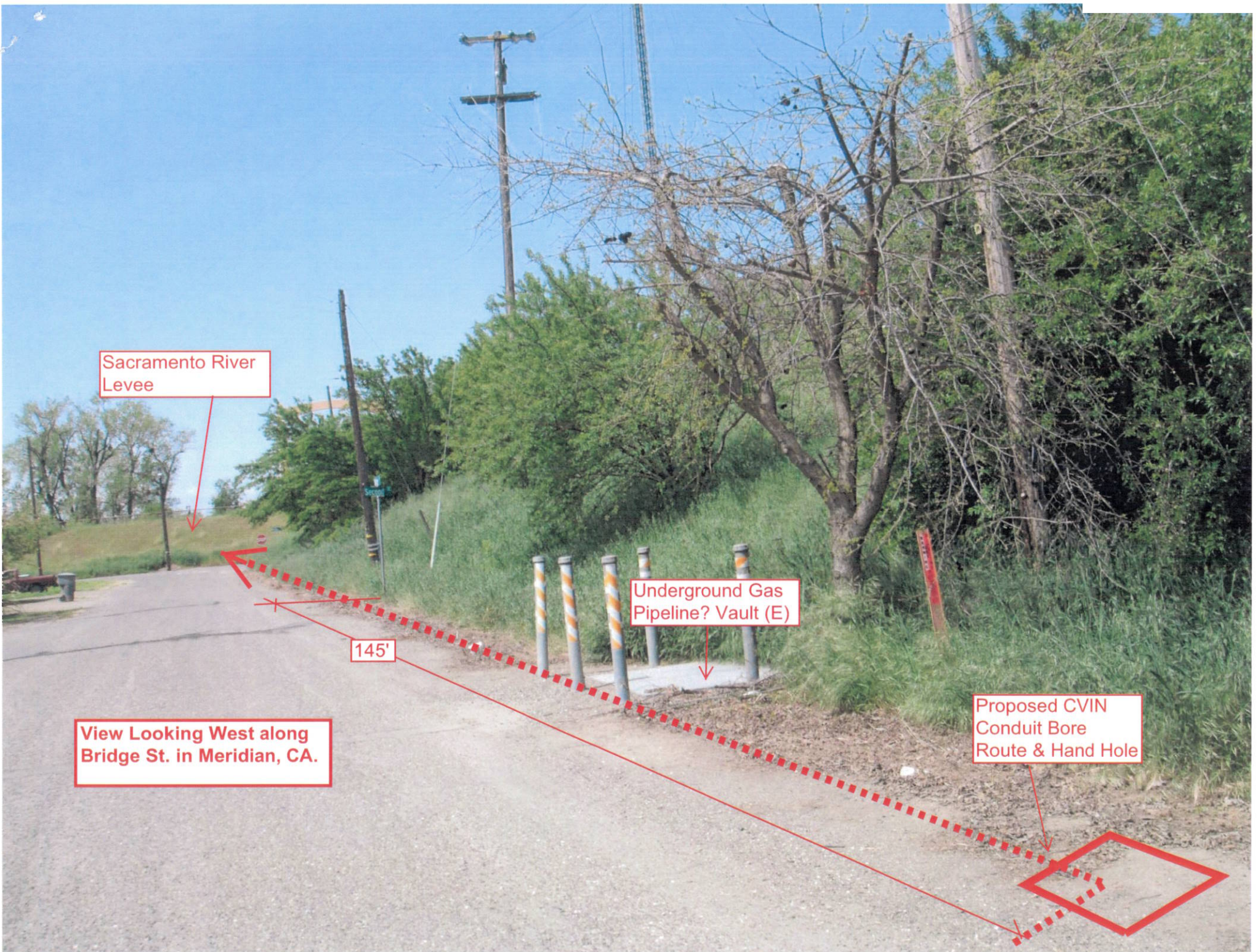
- 1. THE LOCATIONS OF EXISTING UTILITIES, RIGHTS-OF-WAY AND EASEMENTS SHOWN ON THESE PLANS ARE BASED ON AVAILABLE RECORDS AND ARE APPROXIMATE IN NATURE. WHERE CONFLICTS EXIST WITHIN THE RECORDS OR BETWEEN THE RECORDS AND FIELD OBSERVATIONS, THOSE DISCREPANCIES ARE NOTED ON THE PLANS AND THE ENGINEER OF WORK ASSUMES NO RESPONSIBILITY FOR THE CORRECTNESS OF THE INFORMATION AS DEPICTED.
- 2. PRIOR TO COMMENCING IMPROVEMENT OPERATIONS, THE CONTRACTOR SHALL VERIFY THE LOCATION, BOTH HORIZONTALLY AND VERTICALLY, OF ALL EXISTING FACILITIES AFFECTED BY THE PROPOSED WORK, WHETHER OR NOT THOSE FACILITIES ARE DEPICTED CORRECTLY ON THESE PLANS.
- 3. IF EXISTING FACILITIES VARY SIGNIFICANTLY IN LOCATION OR DEPTH FROM THESE PLANS, THE ENGINEER OF WORK SHOULD BE NOTIFIED TO MAKE ANY DESIGN CHANGES REQUIRED.
- 4. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
- 5. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER OF WORK HARMLESS.

REV	DATE	DESCRIPTION	BY	CKD	APPV'D	PLANS FOR THE INSTALLATION OF UNDERGROUND FIBER OPTIC FACILITIES:				
△	3/27/12	REDLINE REVISIONS PER CVFPB PLAN CHECK	IR			SACRAMENTO RIVER AT ROUTE 20 MERIDIAN, CA				
						ENGINEERING CONTRACTOR:		OWNER:		
						Engineering Associates, Inc. 445 W. 11th St. (Suite B) Tracy, Ca. 95376 Ph. 209-830-0162 Fax 209-830-8157		 CENTRAL VALLEY INDEPENDENT NETWORK 855 M Street, Suite 1120, Fresno, CA 93721		
DATE:		SCALE:		SEGMENT:		SHEET:		OF:		
3/23/2012		AS SHOWN		SUTTER/COLUSA		1		4		



West Bore Pit at base of levee & highway slope

CVIN - Sacramento River Bore
View looking east at west bore pit
9/15/11



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DRAFT

STATE OF CALIFORNIA
THE RESOURCES AGENCY
THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18755 BD

This Permit is issued to:

Central Valley Independent Network, LLC (CVIN)
9479 N. Fort Washington
Suite 105
Fresno, California 93730

To bore (directional drill) a 12-inch diameter high-density polyethylene (HDPE) casing pipe beneath the Sacramento River that will contain two 1.25-inch diameter HDPE fiber optic cable conduits. The project is located along the south side of State Highway 20 (Colusa Highway) downstream from the Meridian Bridge, crossing under the Sacramento River at approximately River Mile 134 (Section 13, T15N, R1W, MDB&M, SRWSLD & RD 70, Sacramento River, Colusa County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated: _____

Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to

change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 18755 BD

THIRTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications dated March 23, 2012, except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

FOURTEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

FIFTEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Central Valley Flood Protection Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

SIXTEEN: The Central Valley Flood Protection Board, Department of Water Resources, and Reclamation District No. 70 shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

SEVENTEEN: No construction work of any kind shall be done during the flood season from November 1st to April 15th without prior approval of the Central Valley Flood Protection Board.

EIGHTEEN: Upon receipt of a signed copy of the issued permit the permittee shall contact the Department of Water Resources by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

NINETEEN: The permittee shall be responsible for all damages due to settlement, consolidation, or heave from any construction-induced activities.

TWENTY: The work area shall be restored to the condition that existed prior to start of work.

TWENTY-ONE: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources or any other agency responsible for maintenance.

TWENTY-TWO: The permitted encroachment(s) shall not interfere with operation and maintenance of the flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation or maintenance of the flood control project to interfere, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Central Valley Flood Protection Board or Department of Water Resources. If the permittee does not comply, the Central Valley Flood Protection Board may modify or remove the encroachment(s) at the permittee's expense.

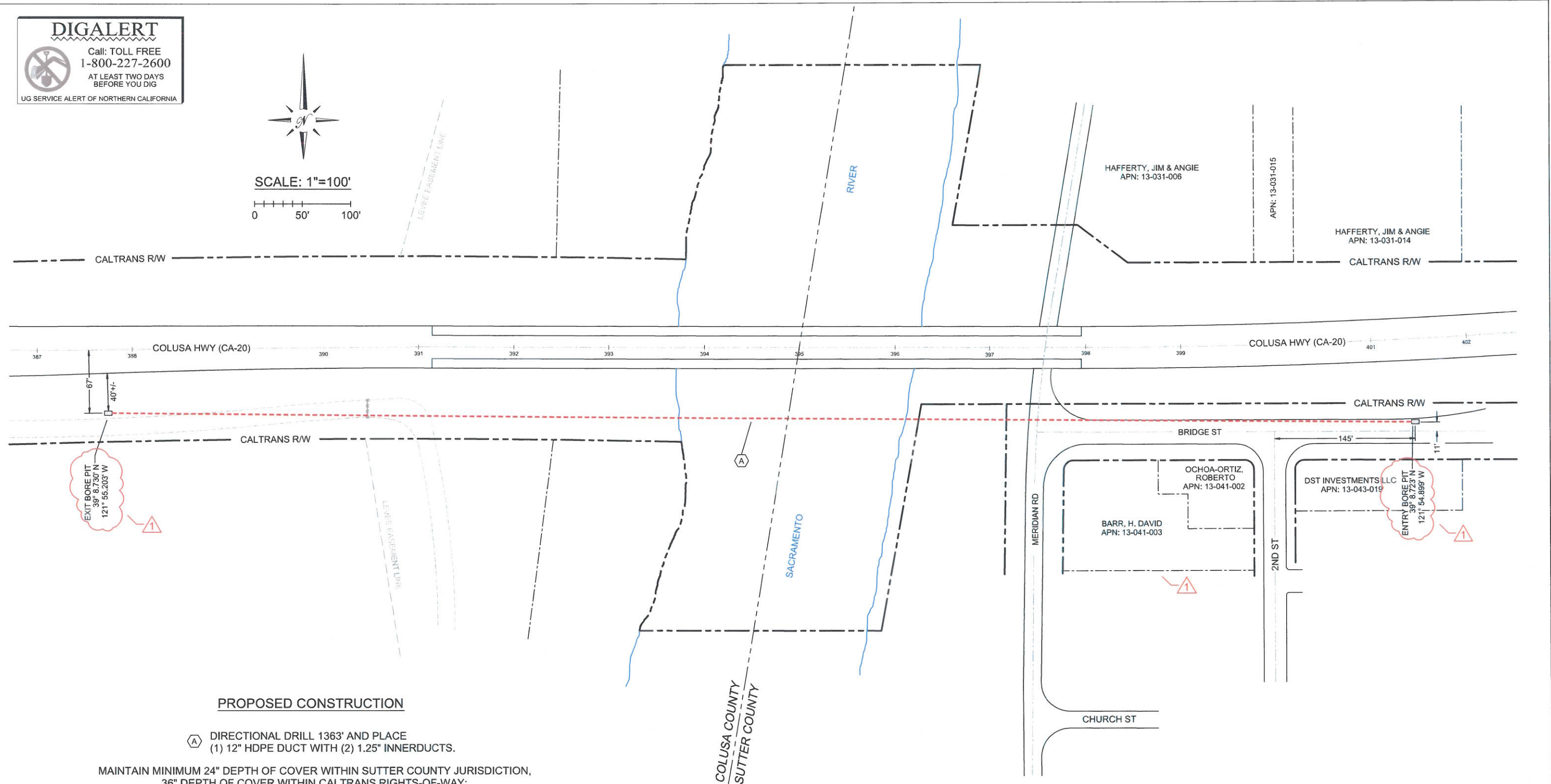
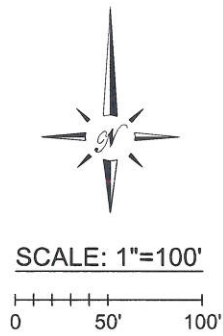
TWENTY-THREE: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

TWENTY-FOUR: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

TWENTY-FIVE: The permittee shall comply with all conditions set forth in the letter from the Department of the Army dated August xx, 2012, which is attached to this permit as Exhibit A and is incorporated by reference.


TWENTY-SIX: Upon completion of the project, the permittee shall submit as constructed plans to: Department of Water Resources, Flood Project Inspection Section, 3310 El Camino Avenue, Suite 256, Sacramento, California 95821.

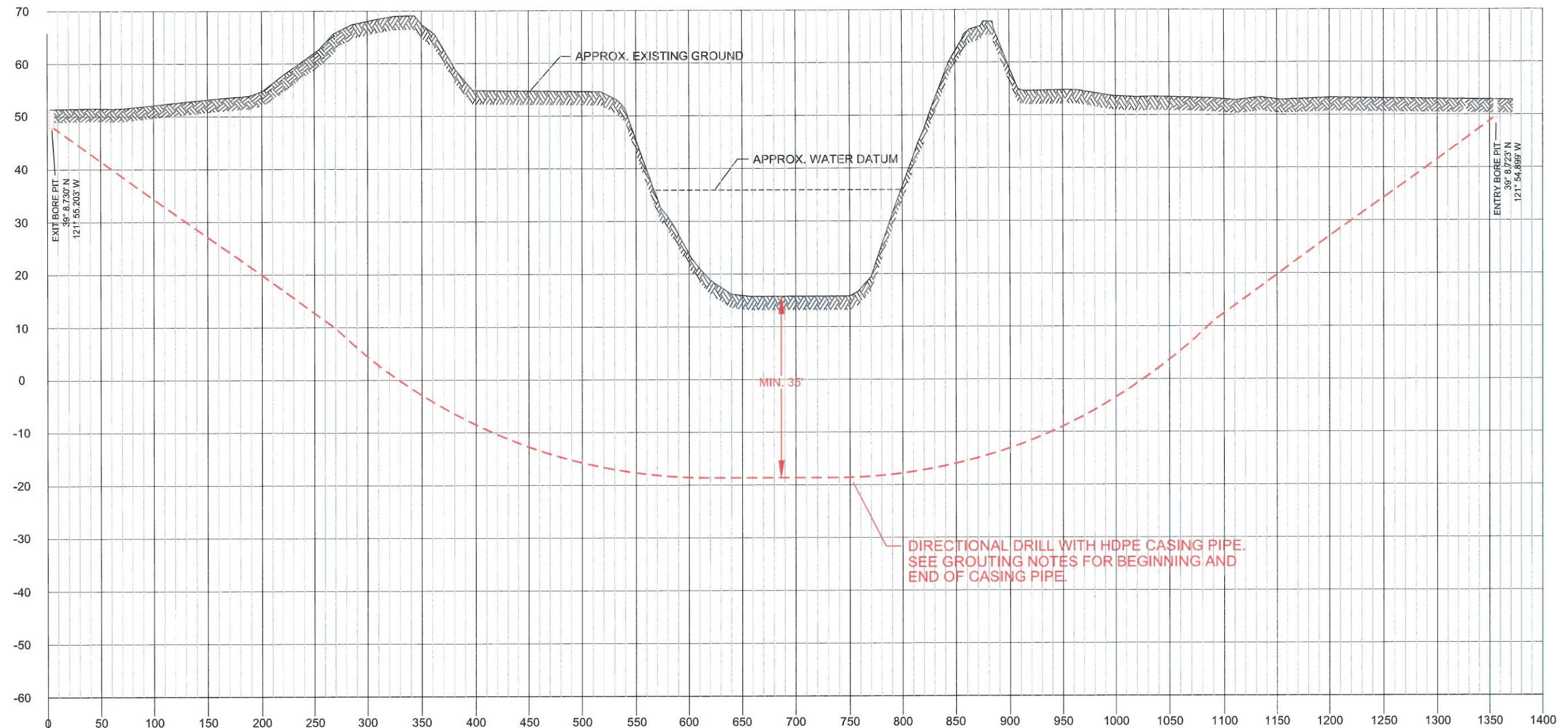
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**(A) DIRECTIONAL DRILL 1363' AND PLACE
(1) 12" HDPE DUCT WITH (2) 1.25" INNERDUCTS.**

SEE SHEETS 3 AND 4 FOR ADDITIONAL DETAIL.

REV	DATE	DESCRIPTION	BY	CKD	APPV'D	PLANS FOR THE INSTALLATION OF UNDERGROUND FIBER OPTIC FACILITIES:				
1	3/27/12	ADDED PARCEL LINES AND OWNER INFO NOTED BORE PIT LOCATIONS AND LAT/LONG	IR			<div style="text-align: center;"> <h2>SACRAMENTO RIVER</h2> <p>AT ROUTE 20 MERIDIAN, CA</p> </div>				
						ENGINEERING CONTRACTOR: Engineering Associates, Inc. 445 W. 11th St. (Suite B) Tracy, Ca. 95376 Ph. 209-830-0162 Fax 209-830-8157		OWNER:  855 M Street, Suite 1120, Fresno, CA 93721		
						DATE:	SCALE:	SEGMENT:	SHEET:	OF:
						3/23/2012	AS SHOWN	SUTTER/COLUSA	2	4



SCALE:
VERTICAL - 1"=20'
HORIZONTAL - 1"=100'

NOTE

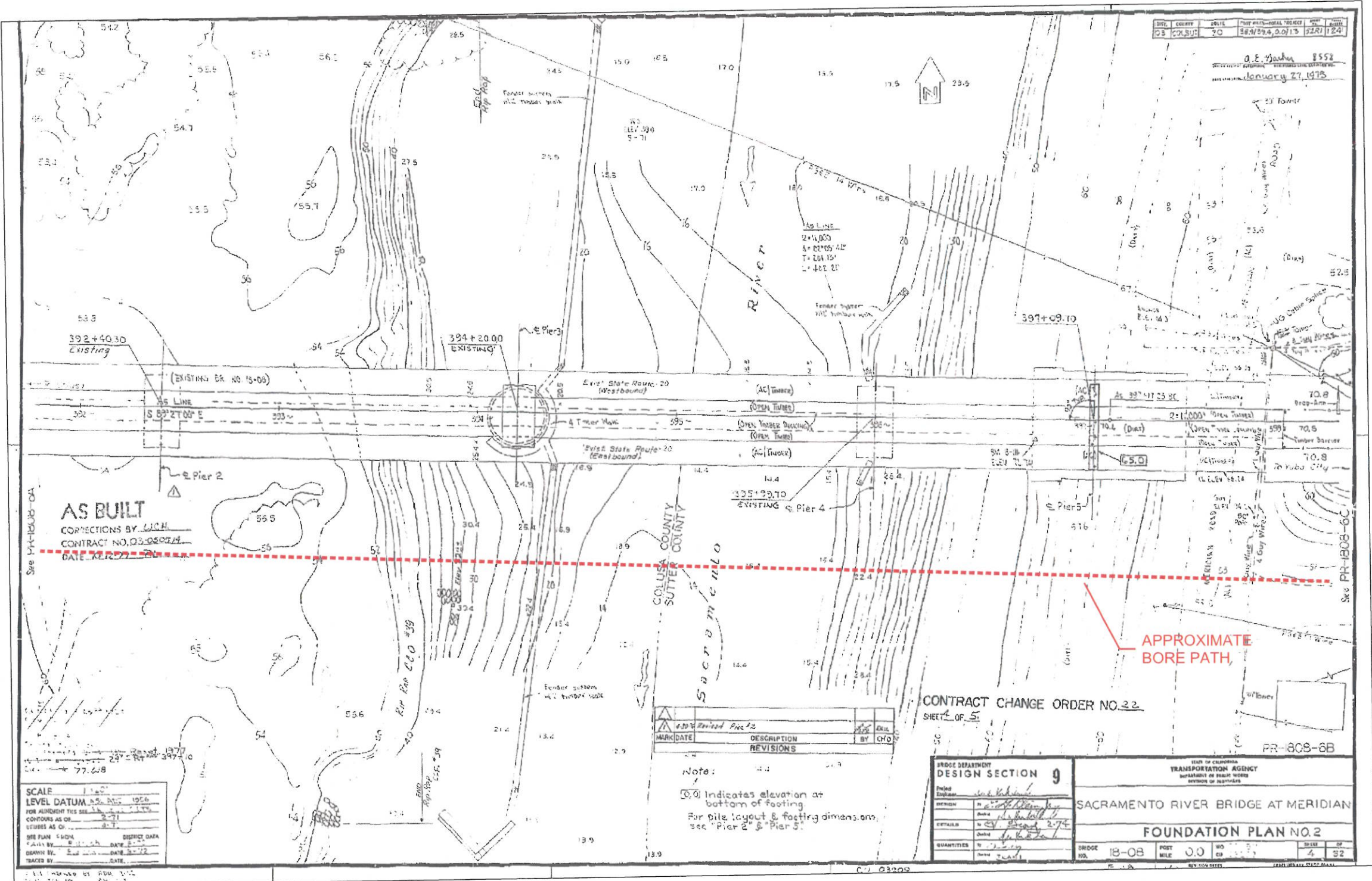
DEPICTED BORE PROFILE IS FOR MINIMUM CLEARANCE ILLUSTRATION ONLY.
INFORMATION WAS ACQUIRED FROM A DRAWING CREATED IN 1973 AND MAY NOT BE ACCURATE.
ACTUAL PROFILE TO BE DETERMINED BY CONTRACTOR AT TIME OF CONSTRUCTION.

GROUTING NOTES:

1. GROUTING MATERIAL SHALL BE A CEMENT MIXTURE OF PCC AND CLEAR POTABLE WATER WITH UP TO 5% (DRY WEIGHT) OF CLEAN FINE SAND AS AN AGGREGATE AND UP TO 5% (DRY WEIGHT) OF BENTONITE OR POZZOLAN AS A LUBRICANT.
2. BOTH ENDS OF THE BORE SHALL BE GROUTED WITHIN 72 HOURS AFTER COMPLETION OF THE BORING OPERATION WITH THE USE OF A GROUTING TUBE. GROUT SHALL BE PUMPED INTO THE ANNULUS OF THE CASING PIPE UNTIL IT RETURNS TO THE SURFACE OF THE END OF THE PIPE.
3. GROUTING PRESSURE SHALL BE MONITORED TO PREVENT HYDROFRACTURING.

1

REV	DATE	DESCRIPTION	BY	CKD	APPV'D	PLANS FOR THE INSTALLATION OF UNDERGROUND FIBER OPTIC FACILITIES:			
△	3/27/12	REMOVED BACKGROUND IMAGE AND UPDATED PROFILE TO SHOW 35' MIN DEPTH OF COVER, GROUTING NOTES AND ENTIRE BORE	IR			SACRAMENTO RIVER AT ROUTE 20 MERIDIAN, CA			
						ENGINEERING CONTRACTOR: Engineering Associates, Inc. 445 W. 11th St. (Suite B) Tracy, Ca. 95376 Ph. 209-830-0162 Fax 209-830-8157	OWNER: CVIN CENTRAL VALLEY INDEPENDENT NETWORK 855 M Street, Suite 1120, Fresno, CA 93721		
DATE:		3/23/2012	SCALE:	AS SHOWN	SEGMENT:	SUTTER/COLUSA	SHEET:	3	OF: 4



NOTE

BACKGROUND DRAWING IS FROM 1974 AND MAY NOT BE ACCURATE.
ACTUAL ALIGNMENT TO BE DETERMINED BY CONTRACTOR AT TIME OF CONSTRUCTION.

PLANS FOR THE INSTALLATION OF UNDERGROUND FIBER OPTIC FACILITIES:

SACRAMENTO RIVER
AT ROUTE 20
MERIDIAN, CA

ENGINEERING CONTRACTOR:

Engineering Associates, Inc.
445 W. 11th St. (Suite B)
Tracy, Ca. 95376
Ph. 209-830-0162
Fax 209-830-8157

OWNER:

CVIN
CENTRAL VALLEY
INDEPENDENT NETWORK
855 M Street, Suite 1120, Fresno, CA 93721

DATE:	SCALE:	SEGMENT:	SHEET:	OF:
3/23/2012	AS SHOWN	SUTTER/COLUSA	4	4