#### Meeting of the Central Valley Flood Protection Board June 22, 2012

#### **Staff Report – Encroachment Permit**

## Central Valley Independent Network, LLC Fiber Optic Cable Conduit, San Joaquin County

#### <u>1.0 – ITEM</u>

Consider approval of Permit No.18743 (Attachment B)

#### 2.0 – APPLICANT

Central Valley Independent Network, LLC (CVIN)

#### 3.0 - LOCATION

The project is located immediately north of the Copperopolis Road Bridge across Mormon Slough in San Joaquin County.

(Mormon Slough, San Joaquin County, see Attachment A)

#### 4.0 - DESCRIPTION

Applicant proposes to bore (directional drill) a four inch diameter HDPE casing pipe beneath Mormon Slough 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 four (4) inch diameter HDPE casing pipe beneath Mormon Slough that will contain two (2) 1.25 inch HDPE fiber optic cable conduits. The casing pipe will be drilled a minimum of 30-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 a minimum of 225-feet from landside toe of both levees. The fiber optic cable will continue in both directions from Mormon Slough in the Copperopolis Road right-of-way. 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 a minimum of 30-feet below the channel.

#### 5.2 - Geotechnical Analysis

A geotechnical analysis was not required as the fiber optic conduit will be more than 40feet below the levees.

#### 6.0 - AGENCY COMMENTS AND ENDORSEMENTS

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

- San Joaquin Flood Control and Water Conservation District endorsed the project on February 17, 2012, with conditions. The conditions will be incorporated into the permit as Exhibit A.
- The U.S. Army Corps of Engineers 208.10 comment letter <u>has been received</u> for this application. The USACE District Engineer has no objection to the project, subject to conditions. The letter is incorporated into the permit as Exhibit B.

#### 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 <a href="http://www.cvfpb.ca.gov/meetings/2012/06-22-2012.cfm">http://www.cvfpb.ca.gov/meetings/2012/06-22-2012.cfm</a> under a link for this agenda item. These documents are also available for review in hard copy at the Board and CPUC offices.

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

 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 entire State Plan of Flood Control:

There will be no effect to the State Plan of Flood Control as the proposed fiber optic conduit will be 30-feet below the invert of Mormon Slough.

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, approve the permit, and direct staff to file a Notice of Determination with the State Clearinghouse.

#### <u>10.0 – LIST OF ATTACHMENTS</u>

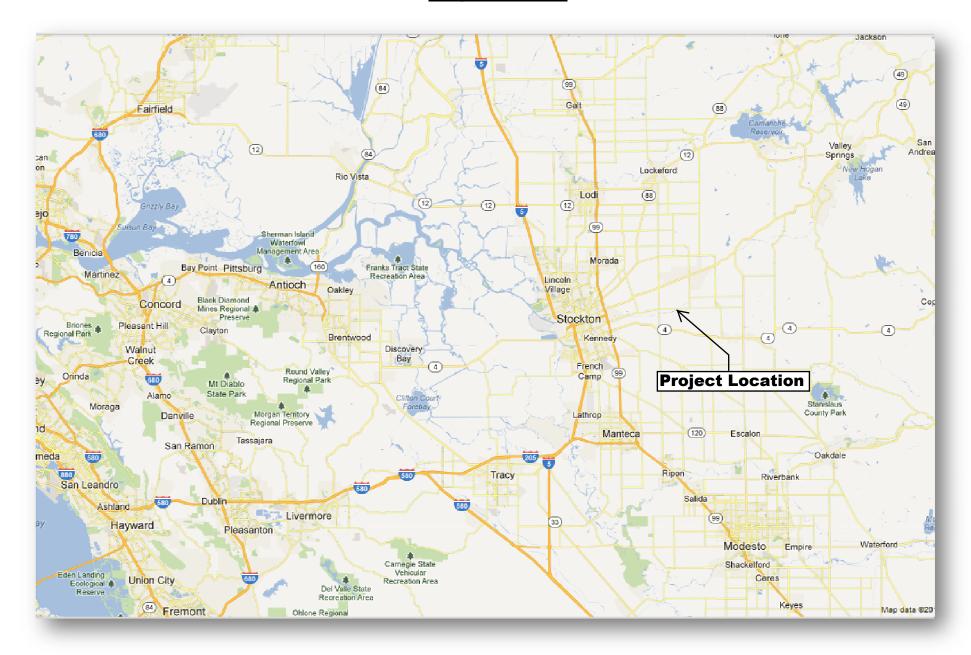
- A. Location Maps and Photos
- B. Draft Permit No. 18743
- C. Project drawing

Design Review: Gary W. Lemon P.E.

Environmental Review: Andrea Mauro, James Herota

Document Review: Mitra Emami P.E., Len Marino P.E.

### **Regional Map**





"LOOKING NORTHWEST"

## SOUTH SIDE OF E. COPPEROPOLIS RD AT MORMON SLOUGH

NOT TO SCALE

CVIN PERMIT: SM-S02FC

REV	DATE	DESCRIPTION	ВҮ	CKD	APPV'D	PLANS FOR THE INSTALLATION OF UNDERGROUND FIBER OPTIC FACILITIES					
						Engineering Associated W. 11th St. (S Tracy, Ca. 95376 Ph. 209-830-0162 Fax 209-830-8157	Sulte B)		CENTR. INDEPENI 855 M Street, Suite 1120	DENT-NETY	
			-	-		DATE: SC.	CALE:	SEGMENT:		SHEET:	TOTAL:
						03/29/2012	1"=100'   16 STC		CKTON-MILTON	02	02

#### **DRAFT**

## STATE OF CALIFORNIA THE RESOURCES AGENCY

#### THE CENTRAL VALLEY FLOOD PROTECTION BOARD

**PERMIT NO. 18743 BD** 

This Permit is issued to:

Central Valley Independent Network, LLC 855 M Street, Ste. 1120 Fresno, California 93721

To bore (directional drill) a four inch diameter HDPE casing pipe beneath Mormon Slough that will contain two 1.25-inch diameter HDPE fiber optic cable conduits. The project is located immediately north of the Copperopolis Road Bridge across Mormon Slough in San Joaquin County (Section 32, T2N, R8E, MDB&M, San Joaquin County Flood Control and Water Conservation District, Mormon Slough, San Joaquin 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. 18743 BD

THIRTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications 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 San Joaquin County Flood Control & Water Conservation District 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 following grouting procedure shall be implemented at both ends of the conduit: (a) grouting tubes shall be inserted as far as possible into the borehole after the pipe is pulled back, and (b) the grout mixture shall be pumped into the annulus through these tubes until grout returns to the surface at the entry or exit of the pipeline. Grouting pressures must be carefully controlled and monitored to minimize the risks of hydrofracturing.

TWENTY-ONE: Cementitious grout shall be a neat cement, prepared with Portland cement and clear, potable water. Up to 5 percent clean, fine sand, by dry weight, may be added as an aggregate. Up to 5 percent bentonite or pozzolan, by dry weight, may be added as a lubricant. Use of other mixtures and/or accelerators shall be discussed with DWR inspector(s) prior to final decision. Grout mixing equipment shall be adequate to assure the complete and uniform mixing of grout materials.

TWENTY-TWO: Permanent, ferromagnetic, location markers shall be placed 10 feet from the landward toe of each levee unless there are permanent surface structures that adequately identify the pipeline's alignment.

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

TWENTY-FOUR: 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-FIVE: 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-SIX: 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-SEVEN: 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-EIGHT: The permittee shall comply with all conditions set forth in the letter from San Joaquin County Flood Control & Water Conservation District dated February 17, 2012, which is attached to this permit as Exhibit A and is incorporated by reference.

TWENTY-NINE: The permittee shall comply with all conditions set forth in the letter from the Department of the Army dated June 6, 2012, which is attached to this permit as Exhibit B and is incorporated by reference.

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



THOMAS M. GAU

DIRECTOR OF PUBLIC WORKS
FLOOD CONTROL ENGINEER

February 17, 2012





Central Valley Flood Protection Board 3310 El Camino Avenue Sacramento, California 95821

Attention: Floodway Protection Section

SUBJECT: CENTRAL VALLEY FLOOD PROTECTION BOARD PERMIT APPLICATION OF

CENTRAL VALLEY INDEPENDENT NETWORK (CVIN), INC., TO INSTALL TWO HDPE DUCTS AND FIBER OPTIC CABLE ACROSS AND BENEATH MORMON

SLOUGH ALONG EAST COPPEROPOLIS ROAD

ASSESSOR'S PARCEL NOS. 105-050-06 AND 105-110-26

#### Gentlemen:

Reference is made to the Central Valley Flood Protection Board Permit Application (Permit) of CVIN, Inc., to directionally drill 550 feet across and beneath Mormon Slough at Copperopolis Road and install two 1.25-inch HDPE ducts and fiber optic cable. Drilling shall maintain a minimum depth of three feet along the slough's banks and a minimum of five feet along the Slough's bed.

The Project is located at Mormon Slough and east Copperopolis Road, approximately two miles east of Jack Tone Road, adjacent to Assessor's Parcel Nos. 105-050-06 and 105-110-26, in San Joaquin County, in Section 32, Township 2 North, Range 8 East, Mount Diablo Base and Meridian.

The San Joaquin County Flood Control and Water Conservation District (District) has reviewed the Board's Permit Application of CVIN, Inc. (Permittee), and endorses the Project subject to the following conditions:

- 1. The District shall not be responsible for the maintenance of the facilities specified in this Permit.
- 2. The District shall not be held liable for damage(s) to the permitted encroachment(s) due to the District's operation, maintenance, flood fight, inspection, or emergency repairs.
- 3. The Permittee or the Successors-in-Interest shall be responsible for the modification or possible removal of the facilities, as requested by the District, if required for any future flood control plans at the Permittee or the Successors-in-Interest sole cost and expense.
- 4. The Permittee shall be liable for any damage to Mormon Slough that may occur as a result of this Project.

- 5. The Project shall be constructed in accordance with the plans dated January 4, 2012, submitted with the application dated January 19, 2012. Any revisions to the Project will require the submittal of the revised plans to the District for review and approval.
- No work shall be allowed in the Mormon Slough's channel between November 1st and April 15th without prior approval of the Central Valley Flood Protection Board and the District.
- 7. The Permittee or Successors-in-Interest shall keep the encroachments properly maintained in accordance with applicable current or future local, State and Federal standards.
- 8. The portal and outlet of a tunnel, jacking, or boring must be a minimum distance of 25 feet landward from the bank hinge point of Mormon Slough.
- 9. There shall be a minimum of three feet of cover along the creek banks and five feet of cover between the bottom of channel and the bore casing.
- 10. District approved visible markers shall be installed and maintained by the Permittee or Successors-in-Interest to identify the location of the buried conduits.
- 11. Access roads shall be kept open for maintenance at all times.
- 12. Future maintenance of the improvements shall be the ongoing responsibility of the Permittee or Successors-in-Interest.
- 13. Upon completion of the Project, CVIN, Inc., shall submit a hard copy and an electronic copy in AutoCAD and PDF format of the as-built drawings to:

San Joaquin County Flood Control and Water Conservation District 1810 East Hazelton Avenue Stockton, California 95205

Should there be any questions regarding these comments, please contact me at (209) 953-7617.

Sincerely,

JOHN I. MAGUIRE

**Engineering Services Manager** 

JIM:SS:mk FM-12B010-M1



# DEPARTMENT OF THE ARMY U.S. Army Engineer District, Sacramento Corps of Engineers 1325 J Street Sacramento, California 95814-2922

Flood Protection and Navigation Section (18743)

JUN 06 2012

Mr. Jay Punia, Executive Officer Central Valley Flood Protection Board 3310 El Camino Avenue, Room 151 Sacramento, California 95821

Dear Mr. Punia:

We have reviewed a permit application by Central Valley Independent Network, LLC (application number 18743). This project includes boring (directional drill) a 4 inch diameter HDPE casing pipe beneath Mormon Slough. The project is located east of Stockton, north of the Copperopolis Road Bridge across Mormon Slough, at 37.9718°N 121.1133°W NAD83, San Joaquin County, California.

The District Engineer has no objection to approval of this application by your Board from a flood control standpoint, subject to the following conditions:

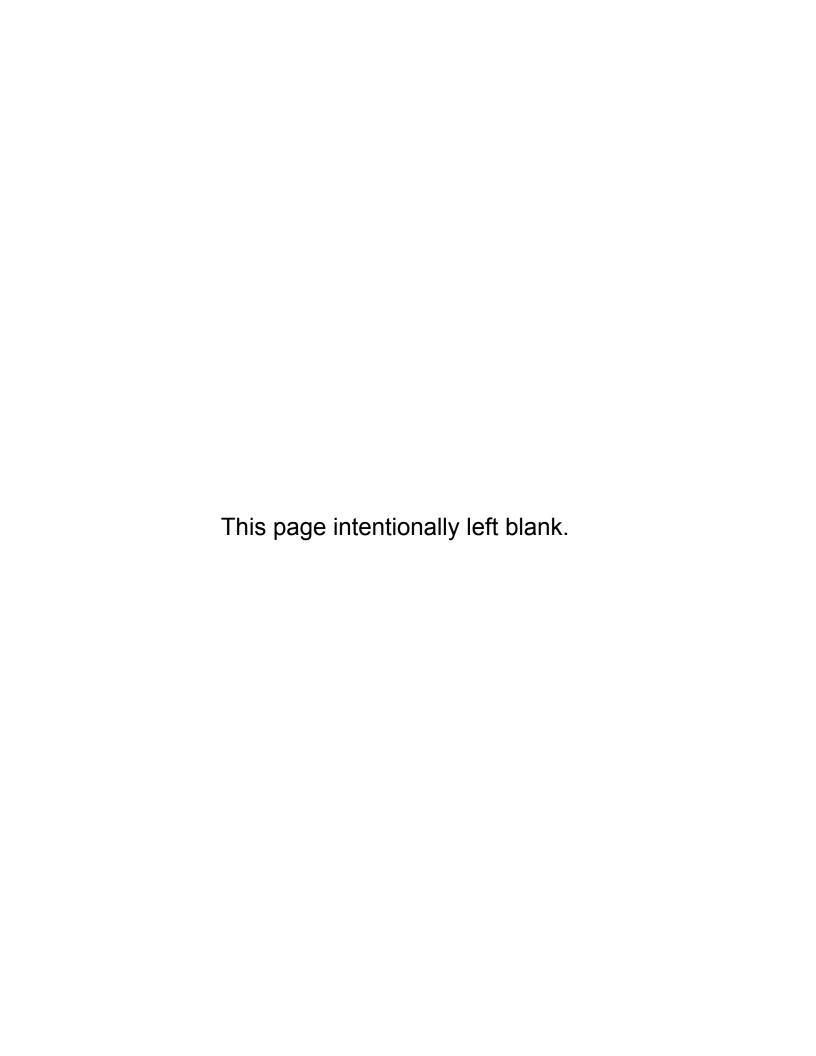
- a. That the proposed conduit shall be installed at least 30 feet below the channel invert as shown in the revised application drawing.
- b. That the proposed conduit shall be clearly marked in the field such that its location can be easily established in a flood event/emergency repair action.

A Section 10 and/or Section 404 permit application (SPK-2012-00412) is in process for this work.

A copy of this letter is being furnished to Mr. Don Rasmussen, Chief, Flood Project Integrity and Inspection Branch, 3310 El Camino Avenue, Suite LL30, Sacramento, CA 95821.

Sincerely,

Rick L. Poeppelman, P.E. Chief, Engineering Division



#### -Attachment C CROSSING -FINISH GRADE AT PIPE C/L LOCATION 0.0 E<sub>i</sub>Copperopolis Rd MORMON 36" TYP. 36" TYP. SLOUGH -5.0 -5.0 TOE OF LEVEE -10.0 -10.0 TOE OF LEVEE BORE PIT--RECEIVING PIT -15.0 -15.0 -20.0 -20.0 -25.0 -25.0 46'± -30.0 -30.0 -35.0 -35.0 DIRECTIONAL DRILL WITH HPDE CASING -40.0 -40.0 PIPE, SEE GROUTING NOTES FOR **VICINITY MAP** BEGINNING AND END OF CASING PIPE. -45.0 30' MIN. -45.0 NOT TO SCALE -50.0 -50.0 -55.0 -55.0 ROAD -60.0 -60.0 R/W -65.0 -65.0 -70.0 -70.0 310 311 3' MIN. FIBER OPTIC CABLE "LOOKING NORTH" **BORE PROFILE** LOOKING UPSTATION DIRECTIONAL DRILL AT MORMON SLOUGH TYPICAL FIBER PLACEMENT SCALE: HOR. 1"=100'; VERT. 1"=20' NOT TO SCALE APN 105-110-26 BORE UNDER RIVER/CREEK RECEIVING PIT APN 105-050-06 (2WX3LX4 DEEP) DIRECTIONAL DRILL 716' - PATH OF FIBER ROUTE PLACE (2) 1.25" HDPE DUCTS 321 IN 4" CASING PIPE. MAINTAIN E Copperopolis Rd MIN. 36" COVER 315+00 310+00 305+00 BORE PIT (2WX3LX4 DEEP) APN 183-190-09 **GROUTING NOTES:** 1. GROUTING MATERIAL SHALL BE A CEMENT MIXTURE OF PCC AND CLEAR POTABLE WATER WITH UP TO 5% (DRY WEIGHT) OF CLEAN APN 183-190-04 FINE SAND AS AN AGGREGATE AND UP TO 5% (DRY WEIGHT) OF CVIN PERMIT: SM-S02FC BENTONITE OR POZZOLAN AS A LUBRICANT. Mormon Slough BY CKD APPV'D PLANS FOR THE INSTALLATION OF UNDERGROUND FIBER OPTIC FACILITIES DATE DESCRIPTION REV BOTH ENDS OF THE BORE SHALL BE GROUTED WITHIN 72 HOURS AFTER COMPLETION OF THE BORING OPERATION WITH THE USE OF Engineering Associates, Inc. A GROUTING TUBE. GROUT SHALL BE PUMPED INTO THE ANNULUS 445 W. 11th St. (Sulte B) OF THE CASING PIPE UNTIL IT RETURNS TO THE SURFACE OF THE END Tracy, Ca. 95376 OF THE PIPE. Ph. 209-830-0162 GROUTING PRESSURE SHALL BE MONITORED TO PREVENT Fax 209-830-8157 855 M Street, Suite 1120, Fresno, CA 93721 HYDROFACTURING. 4/26/12 16 STOCKTON-MILTON