

**Meeting of the Central Valley Flood Protection Board
October 28, 2016**

Permit Staff Report

**City of Roseville
New Sewer Force Main Pipelines, Placer County**

1.0 – ITEM

Consider approval of Permit No. 19133 BD. (Attachment B)

2.0 – APPLICANT

City of Roseville. (City)

3.0 – PROJECT LOCATION

The project is located slightly west of the intersection of Green Pointe and Shadow Ridge in the City of Roseville.
(Dry Creek, Placer County, see Attachment A)

4.0 – PROJECT DESCRIPTION

Applicant proposes to install two (2) concrete-encased 6-inch diameter sewer force main pipelines under Dry Creek.

5.0 – AUTHORITY OF THE BOARD

California Water Code § 8534, 8590 – 8610.5, and 8700 – 8710

California Code of Regulations Title 23 (Title 23):

- § 6, Need for a Permit
- § 11(d) Waiver of Standards
- § 13, Evidentiary Hearings

- § 112, Streams Regulated and Nonpermissible Work Periods
- § 123, Pipelines, Conduits, and Utility Lines

6.0 – PROJECT ANALYSIS

The City is proposing to install two concrete-encased 6-inch diameter sewer force main pipelines. These pipelines will be part of a larger project to rehabilitate the existing Shadowbrook Lift Station to improve its resiliency to sewer system overflows. The pipelines will be the only component of the project within the jurisdiction of the Central Valley Flood Protection Board. The pipelines will be installed with a minimum depth of 3-feet below Dry Creek with the entry and exit pits being greater than 50-feet from either side of the channel. (Attachment C)

6.1 – Hydraulic Analysis

The sewer force main pipelines will be placed a minimum of 3-feet below the Dry Creek Channel and both the entry and exit pits are located greater than 50-feet from either side of the channel. Due to the depth of the pipelines below the channel, there will be no adverse hydraulic impacts to the Dry Creek Channel, and therefore, no hydraulic analysis is required.

6.2 – Geotechnical Analysis

A geotechnical analysis was not required since there are no levees associated with the project. Nevertheless, a geotechnical analysis was conducted to test the soils at this location. The geotechnical analysis determined that the project site is underlain by the Mehrten Formation of mudflow tuff breccia and volcanic derived sandstones. Because of this soil material, the City anticipates that the greatest depth that the sewer pipelines can be installed is 3 feet below the channel. The City, however, plans to place the pipelines deeper, if possible, without touching the mudflow tuff breccia and volcanic derived sandstones.

6.3 Waiver of Title 23, Section 11(d) Standard

The City requested a variance to Title 23, §123(c) (1) that requires pipelines to be located greater than 5 feet below the channel. The requested variance has been reviewed by Board staff and after consulting the Board's legal counsel, has recommended to the Executive Officer (EO) that pursuant to Title 23, Section 11(d),

there is no legitimate reason for the application of Title 23, §123(c) (1) for the sewer pipelines.

Board staff has determined that:

- Applying this standard may require the applicant to place the pipelines through a layer of mudflow tuff breccia and volcanic derived sandstones which is a rock formation that would make installation difficult and the solid rock could damage the pipelines in the future; and
- With a minimum of three feet of cover from the top of the rock formation to the bottom of the creek the stream is considered depositional at this location; and
- The proposed pipelines will cause no negative geotechnical or hydraulic impacts.

Based on the reasons above, the EO concurs with Board staff's recommendation to waive the inapplicable Title 23 standard. The approved waiver will only apply to the project as shown in the approved plans and specifications and would not apply to any future addenda or requested construction variances without further consultation, review, and concurrence by Board staff, the Board's legal counsel, and the EO.

7.0 – AGENCY COMMENTS AND ENDORSEMENTS

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

- The application was endorsed by the City of Roseville on August 10, 2016, with no conditions.
- The U.S. Army Corps of Engineers 33 U.S.C. 408 decision letter has been received for this application. The USACE Sacramento District Engineer has no comments or recommendations regarding flood control because the proposed work does not affect a federally constructed project. The letter is incorporated into the permit as Exhibit A.

8.0 – CEQA ANALYSIS

Board staff has prepared the following California Environmental Quality Act (CEQA) determination:

The Board, as a responsible agency under CEQA, has reviewed the Initial Study/Mitigated Negative Declaration (IS/MND) (SCH Number: 2016032076, March 2016), and the Mitigation Monitoring and Reporting Plan (MMRP) for the Shadowbrook Lift Station and Force Main Project prepared by the lead agency, the City of Roseville. These documents, including project design, may be viewed or downloaded from the Central Valley Flood Protection Board website at: <http://cvfpb.ca.gov/meetings/> under the link for this agenda item. These documents are also available for review in hard copy at the Board and the City of Roseville Permit Center.

The City determined that the project would not have a significant effect on the environment and on June 1, 2016, adopted Resolution No. 16-207, as well as the MMRP. The Notice of Determination was filed with the Roseville City Clerk on June 8, 2016. Board staff finds that although the proposed project could have a potentially significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. The project proponent has incorporated mandatory mitigation measures into the project plans to avoid identified impacts or to mitigate such impacts to a point where no significant impacts will occur. These mitigation measures address impacts to biological resources, cultural resources, geology and soils, noise and paleontological resources. The mitigation measures are further described in the adopted IS/MND.

The documents and other materials which constitute the record of the Central Valley Flood Board's proceedings in this matter are in the custody of the Executive Officer, Central Valley Flood Protection Board, 3310 El Camino Ave., Suite 170, Sacramento, California 95821.

9.0 – CALIFORNIA WATER CODE 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 facilities of the State Plan of Flood Control (SPFC), and consistency of the proposed project with the Central Valley Flood Protection Plan (CVFPP) as adopted by Board Resolution 2012-25 on June 29, 2012:

The project is located under Dry Creek. The proposed pipelines are expected to result in no adverse effects to facilities of the SPFC and are consistent with the CVFPP and applicable Title 23 standards. The sewer lines will be placed as deep as possible without touching the mudflow tuff breccia and volcanic derived sandstones, but no less than 3 feet below the creek channel.

Based upon the above, Board staff, in consultation with legal counsel, has recommended, and the Executive Officer has agreed that there is no legitimate reason for the application of Title 23, §123(c) (1) that requires pipelines to be located greater than 5 feet below the channel and thus, has waived that standard in this particular instance pursuant to the authority in Title 23, §11(d).

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

The proposed pipelines will be located deep enough below the channel that they will not be affected by scouring of the channel bottom in future high water events. Therefore, there are no expected adverse effects to the proposed project from reasonable projected future events.

10.0 – STAFF RECOMMENDATION

Staff Recommends that the Board:

Adopt:

- The CEQA findings:

Approve:

- Encroachment Permit No. 19133 BD in substantially the form provided; and

Direct:

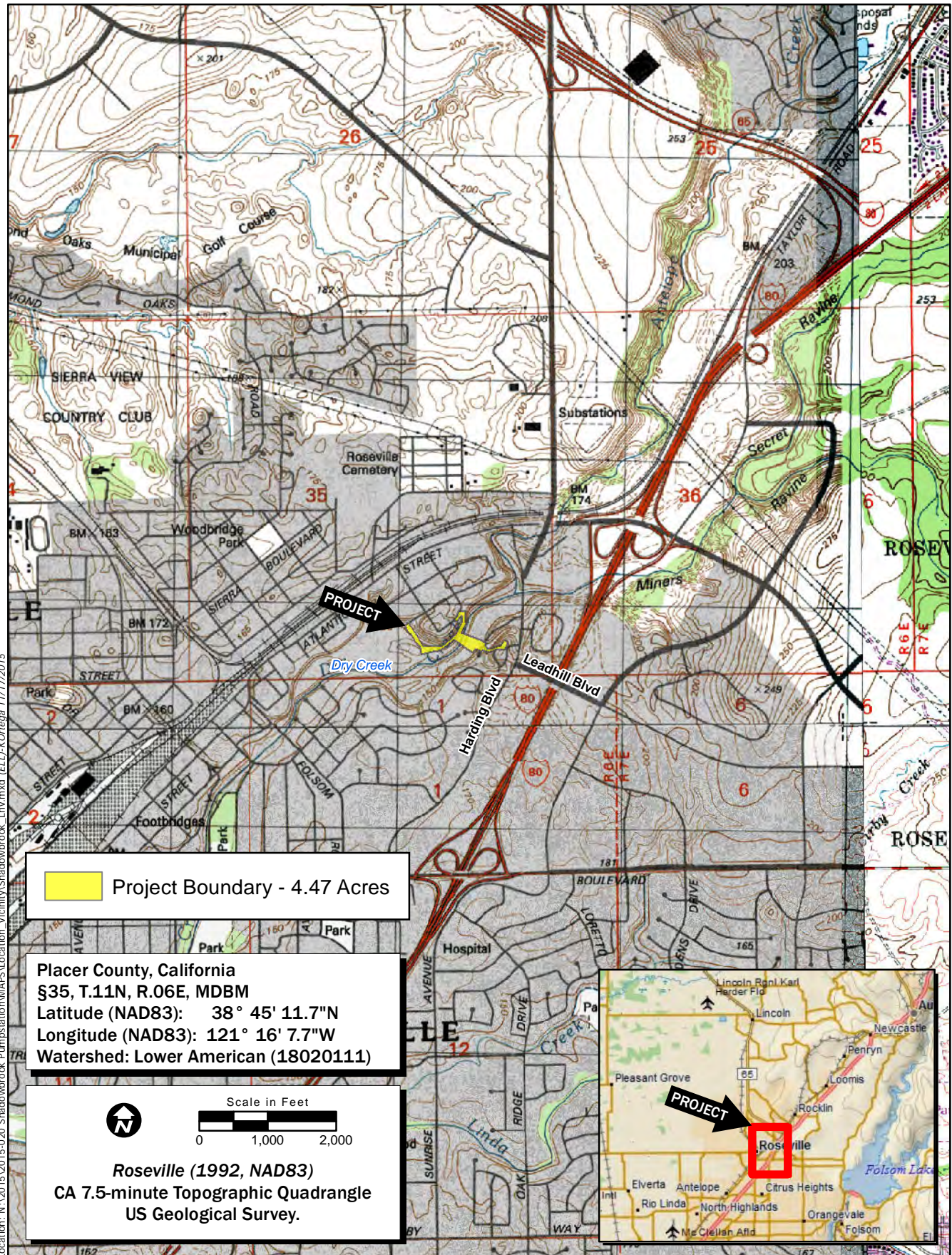
- The Executive Officer to take the necessary actions to execute the permit and file a Notice of Determination pursuant to CEQA with the State Clearinghouse.

11.0 – LIST OF ATTACHMENTS

- A. Location Maps and Photos
- B. Draft Permit No.19133 BD
- C. Project Plans

Design Review:	Remy Gill
Environmental Review:	Ruth Darling, Senior Environmental Scientist (Specialist)
Document Review:	Gary Lemon, PE, Permitting Section Chief
	Mitra Emami, PE, Operations Branch Chief
Legal Review:	Kanwarjit Dua, Board Counsel

Attachment A



Map Date: 11/17/2015
 Service Layer Credits: Copyright:© 2013 DeLorme

Figure 2. Project Location

2015-020 Shadowbrook Pumpstation



Location: N:\2015\2015-020 Shadowbrook Lift Station and Force Main Project\CEQA\SBPS\CEQA_Surrounding_LU_2015\021.mxd (DEK) Kortegea 2/19/2016

Map Date: 2/19/2016

¹ Hatch Mott MacDonald; Photo Source: USGS 2013

Figure 3. Surrounding Land Uses

2015-020 Shadowbrook Lift Station and Force Main Project



Overview of Dry Creek and riparian vegetation, view north, 15 July 2015.



Close-up of Dry Creek and riparian vegetation, view north, 15 July 2015.

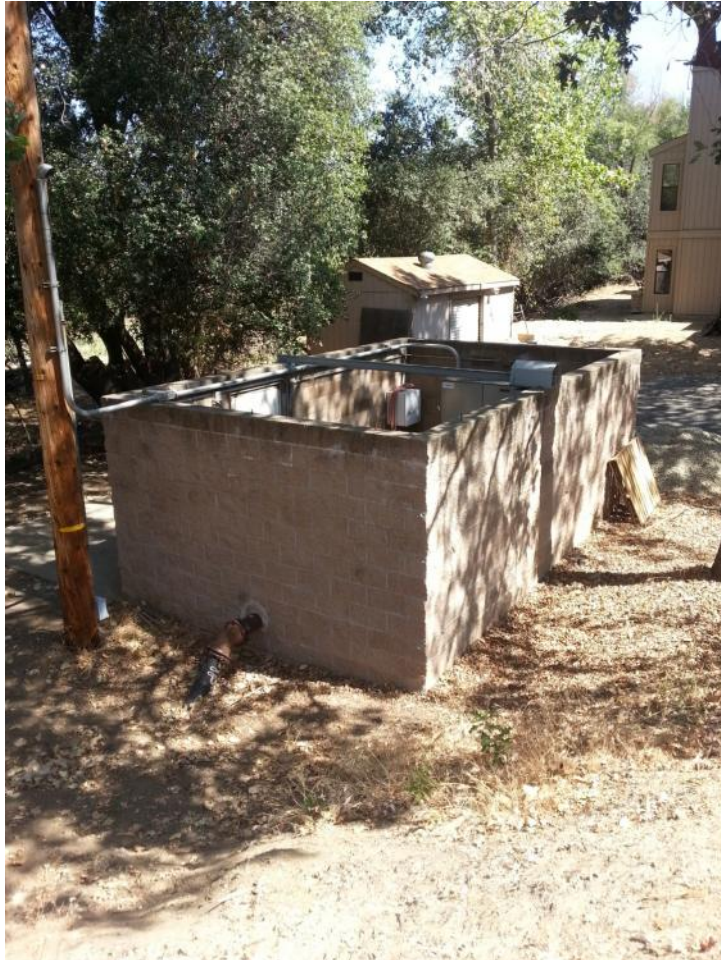


Photo 5. View of Shadowbrook lift station, enclosure, and Shadowbrook Apartment complex, view northwest.



Photo 6. Overview of floodway between Shadowbrook lift station and Dry Creek, view north.



Photo 7. Overview of Dry Creek, view northwest.



Photo 8. Overview of Miners Ravine Trail and proposed material laydown area, view north.

DRAFT

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

PERMIT NO. 19133 BD

This Permit is issued to:

City of Roseville
2005 Hilltop Circle
Roseville, California 95747

To install two (2) concrete-encased 6-inch diameter sewer force main pipelines under Dry Creek.

The project is located slightly west of the intersection of Green Pointe and Shadow Ridge in the City of Roseville, at 38.75344°N -121.27052°W, Dry Creek, Placer County, CA.

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.

Attachment B

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. 19133 BD

LIABILITY AND INDEMNIFICATION

THIRTEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board (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 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.

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 Board and 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 Board and Department of Water Resources shall not be held liable for any damages to the permitted encroachment(s) resulting from releases of water from reservoirs, flood fight, operation, maintenance, inspection, or emergency repair.

AGENCY CONDITIONS

SIXTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications dated May 6, 2016, 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.

Attachment B

SEVENTEEN: Permittee shall pay to the Board, an inspection fee(s) to cover inspection cost(s), including staff and/or consultant time and expenses, for any inspections before, during, post-construction, and regularly thereafter as deemed necessary by the Board.

EIGHTEEN: The permittee shall be responsible for the repair of any damages to the project levee, channel, banks, floodway, or other flood control facilities due to construction, operation, or maintenance of the proposed project.

NINETEEN: A letter received from the Department of the Army (U.S. Army Corps of Engineers, Sacramento District) dated October 4, 2016, is attached to this permit as Exhibit A in reference to this project.

TWENTY: The Board reserves the right to add additional, or modify existing, conditions when there is a change in ownership and/or maintenance responsibility of the work authorized under this permit.

PRE-CONSTRUCTION

TWENTY-ONE: Upon receipt of a signed copy of the issued permit the permittee shall contact the Board by telephone at (916) 574-0609, and submit the enclosed postcard, to schedule a preconstruction conference with the inspector that is assigned to your project. Failure to do so at least 10 working days prior to start of work may result in a delay of the project.

CONSTRUCTION

TWENTY-TWO: No construction work of any kind shall be done during the flood season from November 1 to April 15 without prior approval of the Board.

TWENTY-THREE: Pipe installed under the stream channel shall have a minimum of 3 feet of cover under the stream channel.

POST-CONSTRUCTION

TWENTY-FOUR: All debris generated by this project shall be properly disposed of outside the Dry Creek Channel.

TWENTY-FIVE: Dry Creek shall be restored to at least the condition that existed prior to commencement of work.

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

TWENTY-SEVEN: The pipeline shall be tested and confirmed free of leaks by X-ray, pressure tests, or other approved methods during construction or anytime after construction upon request by the

Central Valley Flood Protection Board.

OPERATIONS AND MAINTENANCE

TWENTY-EIGHT: 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 Central Valley Flood Protection Board, the Department of Water Resources, or any other agency responsible for maintenance and shall, at all times, allow officials from these agencies to access the levee, levee slope, and any adjacent areas as necessary for flood control.

TWENTY-NINE: 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 Board or Department of Water Resources. If the permittee does not comply, the Board may modify or remove the encroachment(s) at the permittee's expense.

THIRTY: In the event the pipe becomes exposed due to erosion, the permittee shall repair the erosion as requested by the Board, Department of Water Resources, or any other agency responsible for maintenance.

PROJECT ABANDONMENT / CHANGE IN PLAN OF FLOOD CONTROL

THIRTY-ONE: 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 Board at the permittee's or successor's cost and expense.

THIRTY-TWO: 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 in the discretion of the Board the 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 the project is not maintained or is damaged by any cause. If the permittee does not comply, or in the event of an emergency, the Board may remove the encroachment(s) at the permittee's expense.

END OF CONDITIONS



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

Flood Protection and Navigation Section (19133)

OCT 04 2016

Ms. Leslie M. Gallagher
Executive Officer
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 151
Sacramento, CA 95821

Dear Ms. Gallagher:

We have reviewed permit application number 19133 submitted by the City of Roseville. This project includes installing two (2) concrete-encased 6 inch diameter sewer force main pipelines under Dry Creek. The project is located slightly west of the intersection of Green Pointe and Shadow Ridge in the City of Roseville, at 38.753369°N 121.269621°W NAD83, Placer County, CA.

The District Engineer has no comments or recommendations regarding flood control because the proposed work does not affect a federally constructed project.

A Section 10 and/or Section 404 permit application (SPK-2016-00449) 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 200, Sacramento, CA 95821.

Sincerely,

for The handwritten signature of Ryan Larson is written in blue ink. It appears to be "Ryan M. Gonzly" with a stylized "for" written to the left.

Ryan Larson, P.E.
Chief, Flood Protection and Navigation Section



SCALE: 1"=20' HORIZ.
1"=4' VERT.



2495 Natomas Park Drive, Ste 530
Sacramento, CA 95833
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www.hatchmott.com



CITY OF ROSEVILLE
ENVIRONMENTAL
UTILITIES DEPARTMENT
2005 HILLTOP CIRCLE
ROSEVILLE, CA 95747
(916) 774-5688

Date: 05/06/2016

SHADOWBROOK LIFT STATION & FORCE MAIN

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1. EDGE OF WATER (E.W.) WAS MAPPED FROM AERIAL PHOTOGRAPHY FLOWN ON 3-3-2015.
2. FURNISH AND INSTALL APPROVED BACKFLOW PREVENTOR FOR USE WITH EXISTING HYDRANTS TO CLEAN LIFT STATION.
3. INSTALL AND OPERATE TEMPORARY SEWAGE BY-PASS SYSTEM. COORDINATE WITH CITY OPERATIONS STAFF PRIOR TO DEVELOPING DETAILED WORK PLAN. THE WORK PLAN WILL BE A REQUIRED SHOP DRAWING/SUBMITTAL. SEE TECHNICAL SPECIFICATIONS, SECTION 2145 AND SEWER BYPASS PLAN (SHEET C-06).
4. REFER TO GEOTECHNICAL REPORT (JULY 2015) AND ADDENDUM PREPARED BY BLACKBURN CONSULTING FOR SOIL BORINGS AND INTERPRETATIONS.
5. INSTALL TEMPORARY 6-FOOT HIGH CHAINLINK FENCE AROUND LIFT STATION WORK SITE. SEE EN-01 FOR TEMPORARY CONSTRUCTION FENCING WITHIN THE CREEK.
6. WETLANDS, TREE IMPACTS, CONSTRUCTION ZONES, FEMA 100-YR FLOOD PLAIN ARE SHOWN ON ENVIRONMENTAL PROTECTION PLAN (EN-01).
7. PIPE JOINTS SHALL BE DEFLECTED WITHIN MANUFACTURERS RECOMMENDATIONS. INSTALL FITTINGS AS NOTED ON PLANS.
8. REFER TO SITE DETAIL SHEET FOR REGRADING IN THE VICINITY OF THE LIFT STATION.

REDUCED HALF SIZE (11X17)