

**Meeting of the Central Valley Flood Protection Board
March 22, 2013**

Staff Report – Encroachment Permit

**City of Bakersfield
To Authorize an Existing Sewer Pipeline
Kern County**

1.0 – ITEM

Consider approval of Permit No. 18815 (see Attachment B)

2.0 – APPLICANT

City of Bakersfield

3.0 – LOCATION

The sewage pipeline is located within the Kern River Channel at Mile 122.0 which is approximately fifty (50) feet upstream of the 24th Street Bridge crossing said River Channel and being within the City of Bakersfield (City). (Kern River Designated Floodway, Kern County, see Attachment(s) A)

4.0 – DESCRIPTION

In 2011 the Kern River experienced extremely high flows as the result of a water year consisting of 201% of normal rainfall which translated into a peak discharge of 4,333 acre feet per day in May 2011 within the Kern River. These high flows created extensive scour adjacent to a 15 –inch diameter sewer pipeline and numerous other utilities crossing under the Kern River Channel. Said scouring exposed the pipeline and other utilities that were constructed prior to the adoption of the Kern River as a Designated Floodway. Additionally, the massive flows created scour adjacent to several of the 24th Street Bridge pilings and piling caps.

On August 10, 2012 the City requested an emergency authorization from Board staff to repair the aforementioned scour. On August 12, 2012 Board staff authorized emergency repairs conditioned with a requirement that the City formally apply for a Central Valley Flood Protection Board encroachment permit for their sewage pipeline. (see Attachment(s) C & D)

5.0 – PROJECT ANALYSIS

The pipeline, if permitted will allow for the continued transport of waste water from its point of origin to the City of Bakersfield wastewater treatment facilities.

The proposed project conforms to all Title 23 Standards.

5.1 – Hydraulic Analysis

The pipeline has no effect upon channel hydrology as the pipe is buried 5 –feet below the low –flow channel.

5.2 – Geotechnical Analysis

The proposed project does not involve any levees; therefore a geotechnical analysis was not required.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

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

- The applicant is the local maintaining agency in the project area.
- 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

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

The Board determined that the project is categorically exempt from CEQA under a Class 1 Categorical Exemption (CEQA Guidelines Section 15301) covering maintenance of existing facilities.

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 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:

The project as constructed 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 project from reasonable projected future events.

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

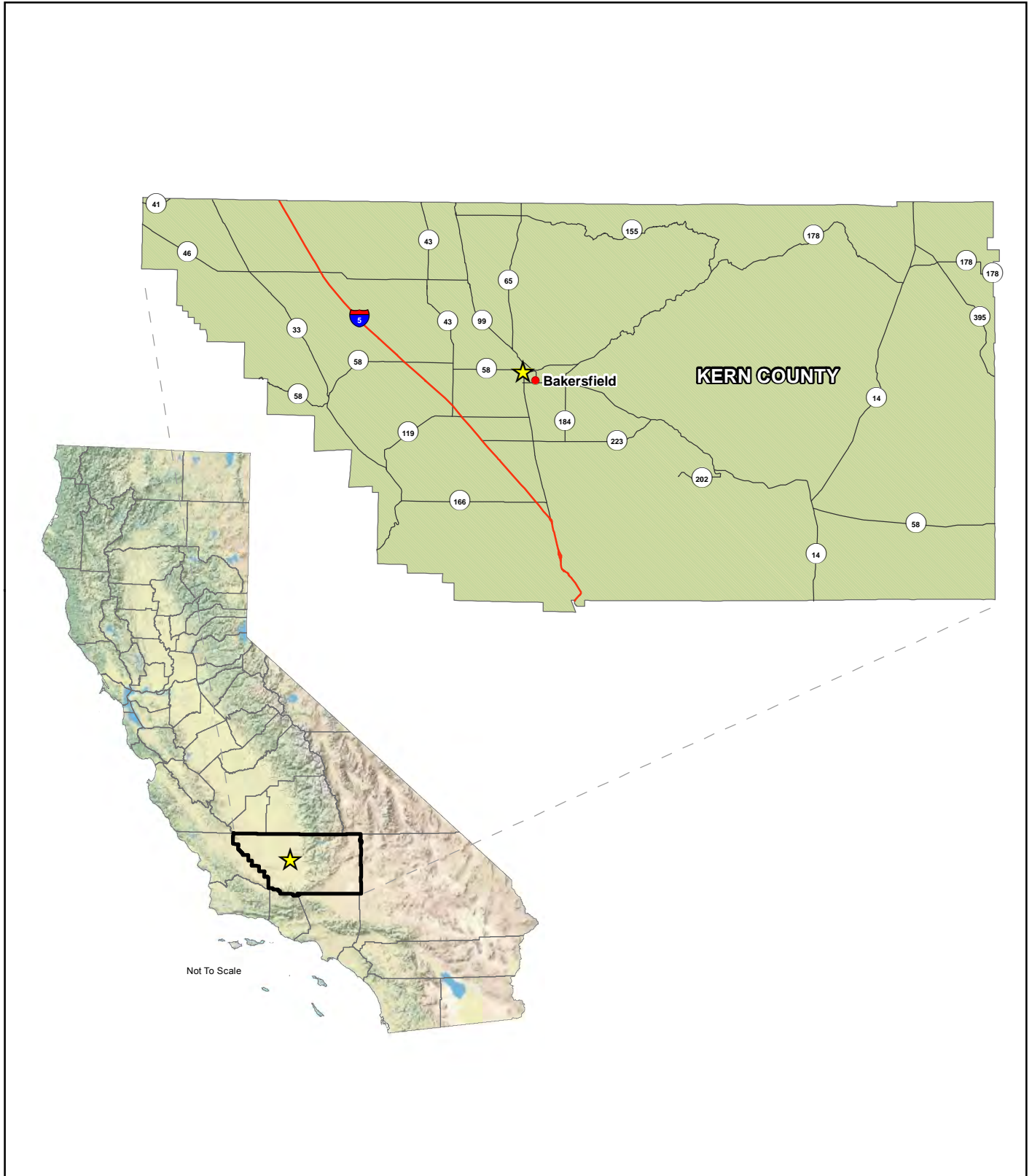
- A. Location Maps
- B. Draft Permit No. 18815
- C. Site Photos
- D. Letter Of Authorization
- E. Original Pipeline Plans

Design Review:	Sterling A. Sorenson WREA
Environmental Review:	James Herota, Andrea Mauro
Document Review:	Mitra Emami P.E., Len Marino P.E.



CITY OF BAKERSFIELD

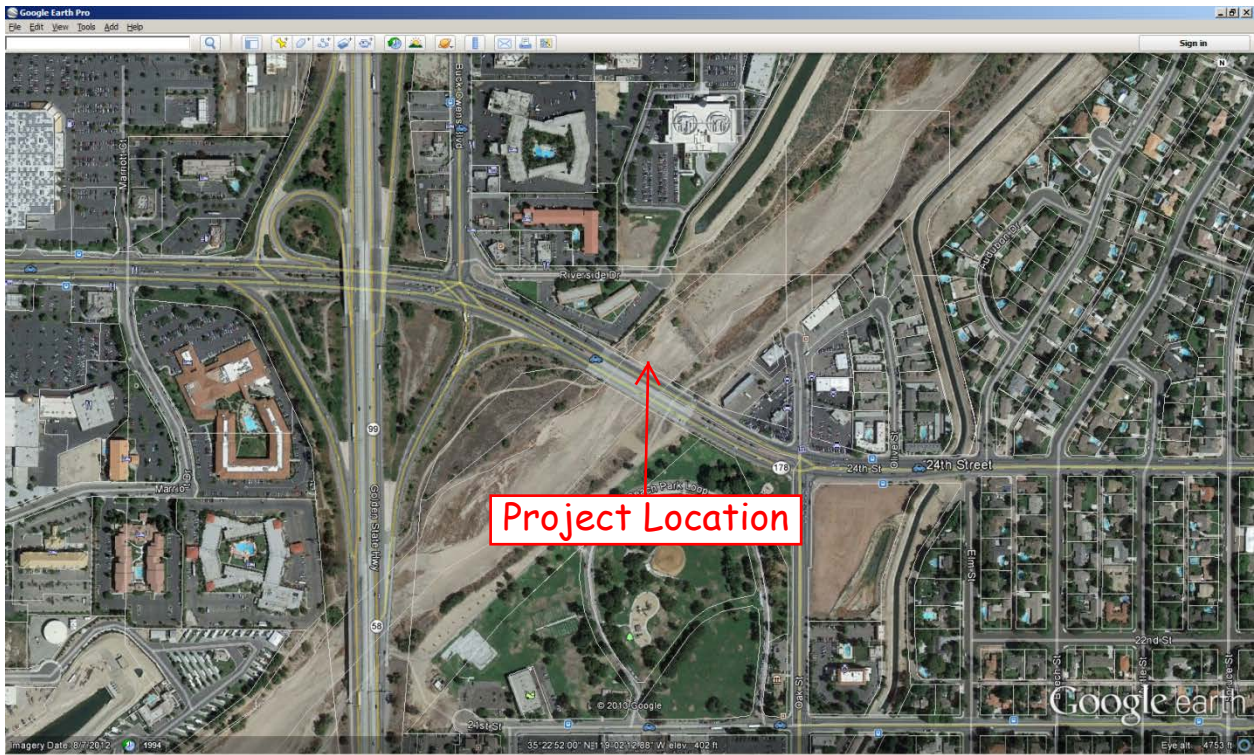
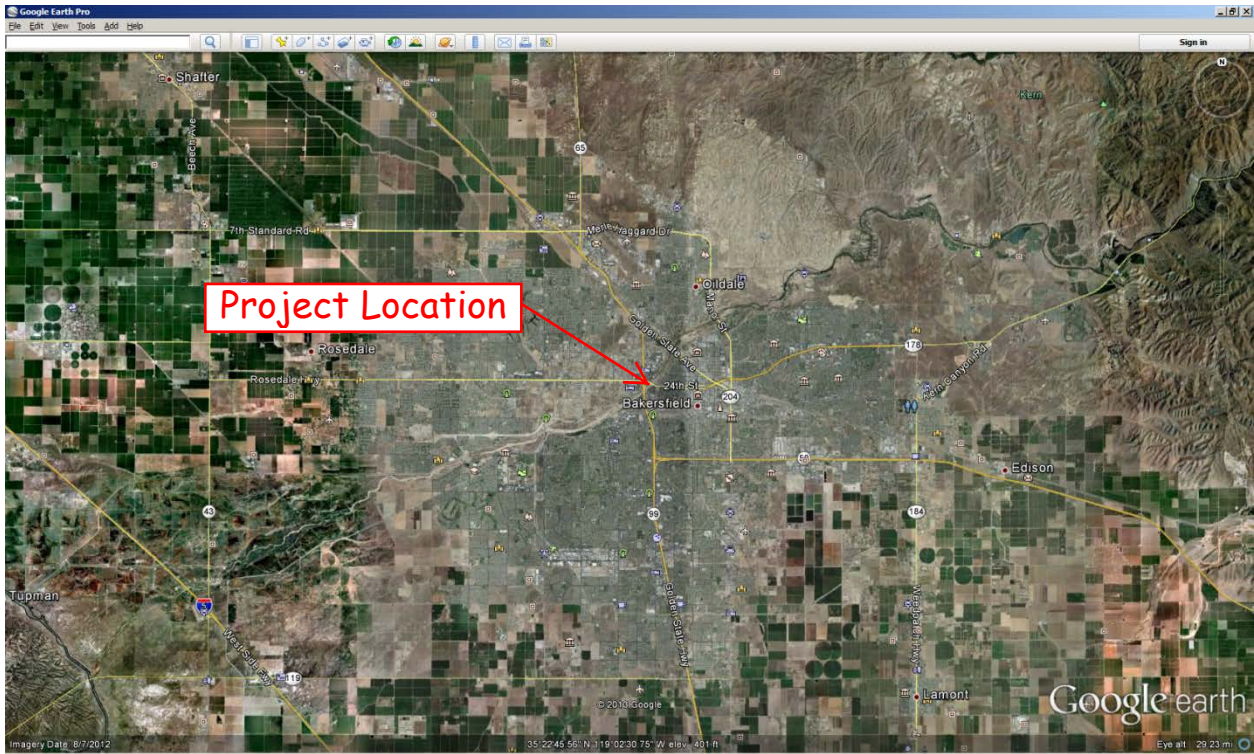
Site Vicinity Map



Note: symbols are for illustrative purposes only and are not shown to scale.



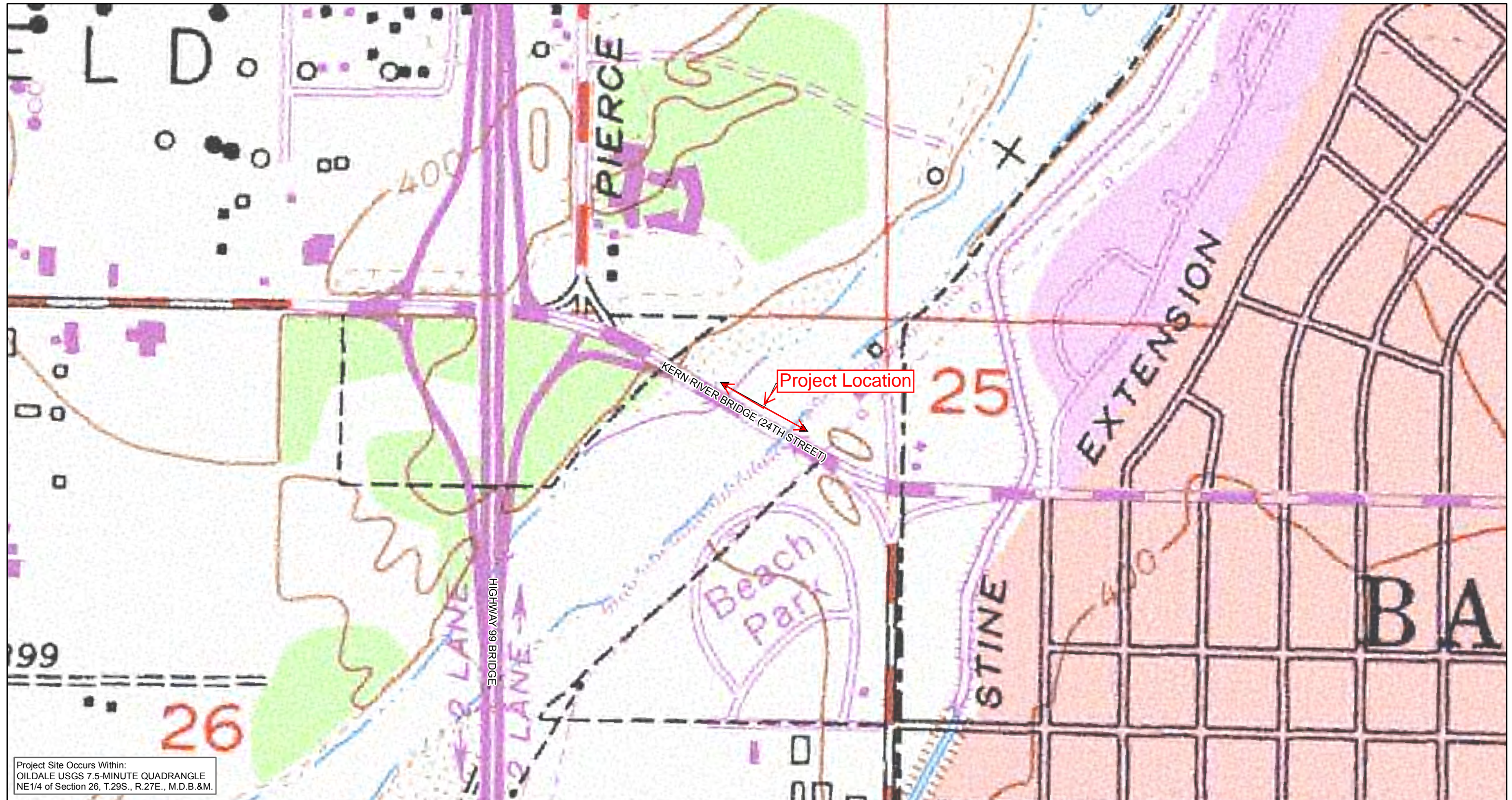
★ EXISTING 15-INCH SEWER MAIN (APPROXIMATE)





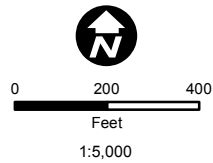
CITY OF BAKERSFIELD

U.S. Geological Survey Topographic Map



Project Site Occurs Within:
 OILDALE USGS 7.5-MINUTE QUADRANGLE
 NE1/4 of Section 26, T.29S., R.27E., M.D.B.&M.

Note: symbols are for illustrative purposes only and are not shown to scale.



↔ EXISTING 15-INCH SEWER MAIN (APPROXIMATE)

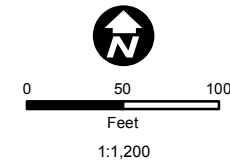


CITY OF BAKERSFIELD

Adopted Plan of Flood Control Map



Note: symbols are for illustrative purposes only and are not shown to scale.



- ↔ EXISTING 15-INCH SEWER MAIN (APPROXIMATE)
- KERN RIVER DESIGNATED FLOODWAY BOUNDARY
- SECTION LINE

FIGURE 7

DRAFT

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

PERMIT NO. 18815 BD

This Permit is issued to:

City of Bakersfield
1600 Truxtun Avenue
Bakersfield, California 93301

To authorize an existing 15-inch sewer main crossing the Kern River. The project crosses the Kern River approximately 50 feet upstream of the 24th Street Bridge in the City of Bakersfield. (Section 26, T29S, R27E, MDB&M, City of Bakersfield Water Resources Dept., Kern River, Kern 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. 18815 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 herein permitted encroachment 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 and/or the State of California, its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors shall not be held liable for any damage to the herein permitted encroachment(s) resulting from release(s) of water from reservoirs, flood fight, operation, maintenance, inspection, or emergency repairs to the Kern River Designated Floodway.

SEVENTEEN: The permittee shall contact the Department of Water Resources by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a conference concerning the issuance of

this permit and its conditions. Failure to do so within 10 working days of receipt of this permit may result in adverse action by The Board.

EIGHTEEN: Cleared trees and brush shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1st to July 15th.

NINETEEN: All other debris generated by this project shall be properly disposed of outside the limits of the Kern River Designated Floodway.

TWENTY: The permittee shall be responsible for repair of any damages to the Kern River Designated Floodway due to construction, operation, or maintenance of the herein permitted project.

TWENTY-ONE: If at any time in the future the herein permitted pipeline becomes exposed due to erosion/scour, the permittee shall propose measures to be approved by the Central Valley Flood Protection Board prior any repairs to prevent re-occurring exposure of the pipe.

TWENTY-TWO: If the herein permitted encroachment, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the encroachment under direction of the Central Valley Flood Protection Board at the permittee's or successor's cost and expense.

TWENTY-THREE: The permittee may be required, at permittee's cost and expense, to remove or alter all or any part of the herein permitted encroachment if modification or alteration 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 modify the herein permitted encroachment at the permittee's expense.

TWENTY-FOUR: The permittee shall comply with all conditions set forth in the U.S. Army Corps of Engineers 208.10 comment letter dated March XX, 2013, which is attached to this permit as Exhibit A and is incorporated by reference.

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Exposed sewer line
prior to emergency
repairs



Exposed sewer pipe prior to emergency repairs



Sewer pipe location
post emergency
repairs



Borrow site pre material removal



Borrow site post material removal

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WATER RESOURCES DEPARTMENT
Art R. Chianello, P.E. • Water Resources Manager

August 10, 2012

Mr. Len Marino
Chief Engineer

Central Valley Flood Protection Board
California Natural Resources Agency
3310 El Camino Ave., Rm. 151
Sacramento, CA 95821

Re: Authorization Request Letter
Emergency Work Necessary to Protect Life or Property
Kern River Channel - Utility Crossings and Bridge Pilings

Dear Mr. Marino:

The City of Bakersfield Water Resources Department has determined that it needs to perform emergency work in the Kern River channel to protect life, and property of various public agencies and private entities. City staff recently observed areas within the Kern River channel that require immediate attention to mitigate damage to public utilities and two bridge crossings. High water flows in the Kern River channel have caused severe scour and undermining at the utility crossings and under the two bridges and has exposed the bridge pilings and pile caps (see attached photos). This emergency work will occur within the river channel from approximately 100 feet upstream of the 24th Street bridge (which crosses the Kern River) to approximately 100 feet downstream of the Highway 99 bridge (see attached figure).

Background

Due to a 201% of normal water year in 2011, flows in the river channel within this reach averaged 1,346 acre-feet per day, with an average flow of 4,333 acre-feet per day in May 2011. Flows in this reach started in December 2010 and ended in November 2011. The restriction on the capacity of the Lake Isabella Reservoir to a water volume of 67% of its historic maximum capacity also contributed to this high flow situation. This restriction is due to some

Re: Emergency Work in Kern River Channel
Attn: Mr. Len Marino
August 10, 2012

seismic/seepage related concerns that are currently being studied by the U.S. Army Corps of Engineers (Corps). Additional water that would have otherwise been stored in Isabella in 2011 was released in the river channel during 2011 due to this storage restriction imposed by the Corps.

Several utilities that cross the Kern River just north of the 24th Street bridge have been exposed (see attached photos). The known utilities include a 12-inch diameter potable water line in a 24-inch steel casing owned by California Water Service Company, a 15-inch sewer main owned by the City of Bakersfield Public Works Department, and other miscellaneous cables. As required by your office, if there is no existing encroachment permit for the City sewer line, the City Public Works Department will submit an encroachment permit application for the City's sewer main. At this time the City is trying to determine who owns the cables and the City will notify your office once this determination has been made. In addition to the exposed utilities, our staff also observed some exposed pilings and pile caps at the 24th Street bridge and the State Route 99 bridge.

It is imperative that these exposed utilities and bridge pilings be backfilled prior to the upcoming wet season. It is feasible that some river flows could occur in this stretch of river as early as September/October 2012. If the water line or sewer line ruptured during a high flow event similar to what occurred during 2011, the lines could not be repaired until after the rainfall season ended. This could severely impact the water and sewer systems and lead to illegal sewer discharges into the river channel. Backfilling these utilities immediately could prevent or mitigate loss of, or damage to, life health, property, and essential public services. The bridge pilings require backfilling for protection of the structural integrity of the bridges and protection of the vehicles and users of the bridges.

Determination by City

City management has determined that there is significant risk in delaying the backfilling of the utilities and bridge pilings. The appropriate permit application packages are currently being prepared in accordance with state and federal laws; however, we are requesting emergency repair status be granted by your office and other affected agencies to ensure that work is completed prior to the commencement of the next rainfall season. The City plans on commencing work on August 13, 2012 and will complete activities within 30 working days. The City estimates that about 7,500 cubic yards of river sand will need to be placed on the exposed utility lines and over the exposed bridge piles. The sand for the

Re: Emergency Work In Kern River Channel
Attn: Mr. Len Marino
August 10, 2012

repairs will be obtained within the previously described work area where excess material has accumulated. We anticipate that the following equipment will be required to move and place the sand: D-6 Dozer, D-8 Dozer, Excavator, and a 24 Yard Scraper. The emergency work is estimated to cost the City approximately \$25,000.

The City will comply with all of the following Central Valley Flood Protection Board conditions:

- Only the work described above shall be performed.
- Any work on levee section(s) shall conform to Title 23 standards. No work on the adjacent levees is anticipated as part of the proposed work.
- Project area shall be restored to at least the same conditions that existed prior to start of work. Soil cuttings, grout wastes, and debris resulting from drilling activities will be removed from the site.
- City will be responsible for any and all damages to the levee, floodway and adjacent properties resulting from this project.
- City will obtain the approval of the local maintaining agency (LMA) - e.g. Reclamation District, Levee District, State Maintenance area, County, etc. - prior to start of work. The City is the LMA, as it owns and maintains the levees and the river channel in the proposed project area.
- City will notify the Department of Water Resource's Flood Project Inspection Section at (916) 574-1213, at least 5 days prior to start of work.
- City understands this authorization does not relieve the City of the responsibility to obtain authorization from all concerned Federal, State and local agencies or to satisfy any California Environmental Quality Act (CEQA) requirements.

It should be noted that historically, during wet years, substantial scour occurs in this reach along the river. To alleviate the scouring and stabilize the river profile, the City has hired a consultant to study the possibility of installing grade control structures within the river channel at certain key locations. We anticipate that the study will be complete by Fall 2012. Once the study is finalized and funding is available for design and construction, the City will work with all applicable regulatory agencies to permit and install the structures.

A signature line has been included at the end of this letter for you to sign approving this emergency work.

Re: Emergency Work in Kern River Channel
Attn: Mr. Len Marino
August 10, 2012

Thank you for your consideration in this matter. Please call me at 661-326-3715 if you have any questions.

Sincerely,

Approval of Work:


Jason Meadors, P. E.
Water Resources Director

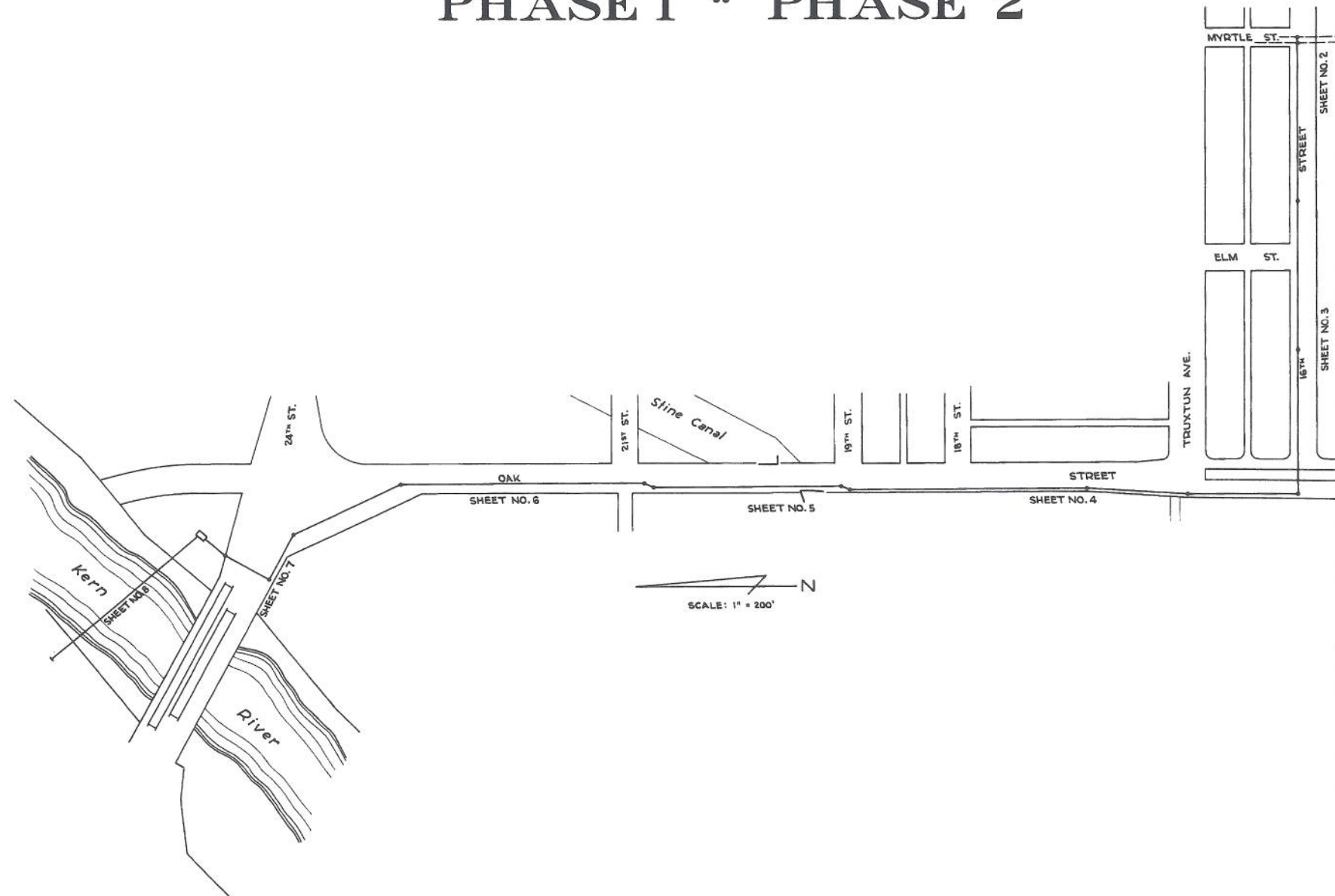

Len Marino, Chief Engineer
Central Valley Flood Protection Board

Enclosures: As Noted

Copy to: Art Chianello, City of Bakersfield
Don Richardson, City of Bakersfield
Stuart Patteson, City of Bakersfield
Rudy Valles, Cal Water
James Buchanan, Quad Knopf
File

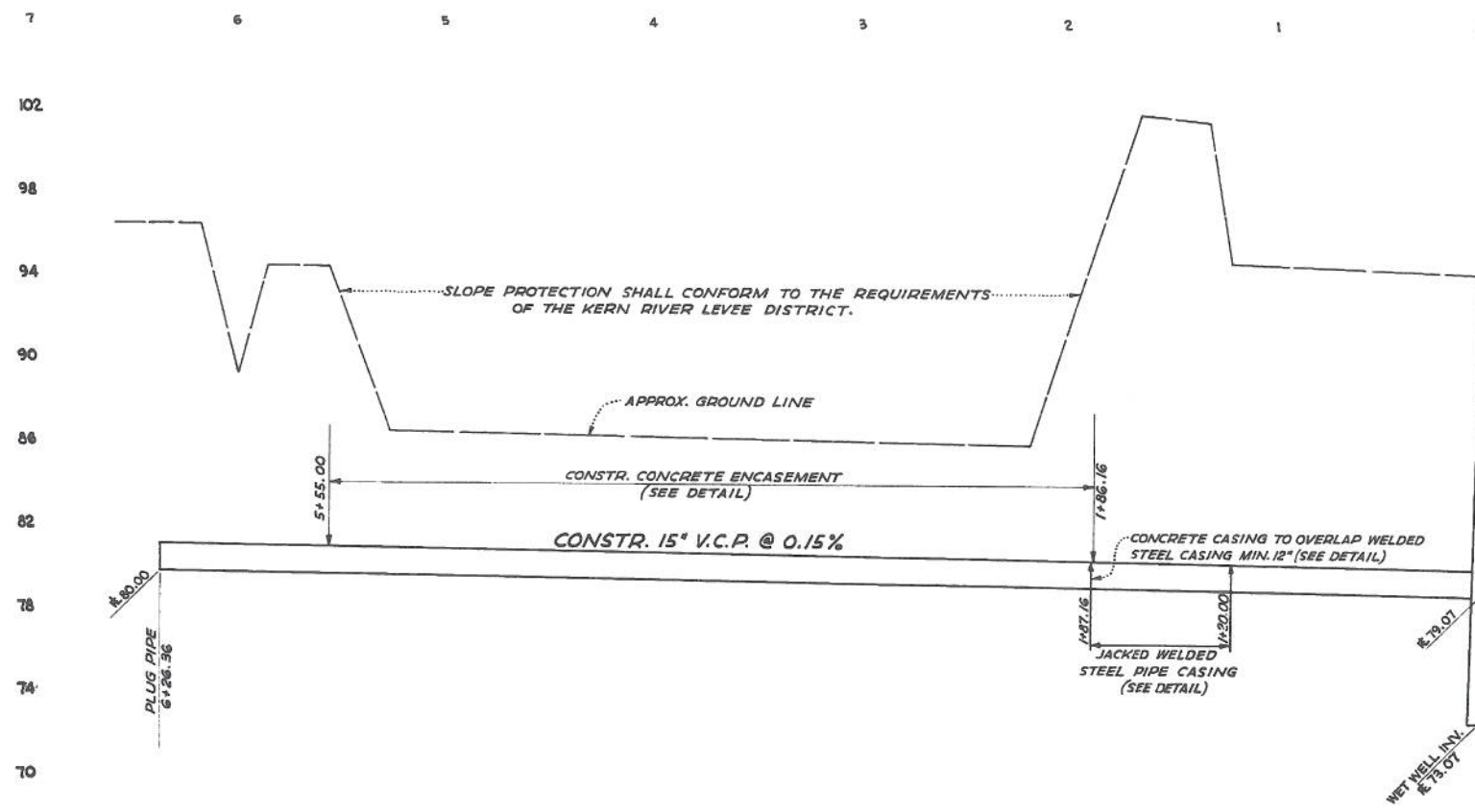
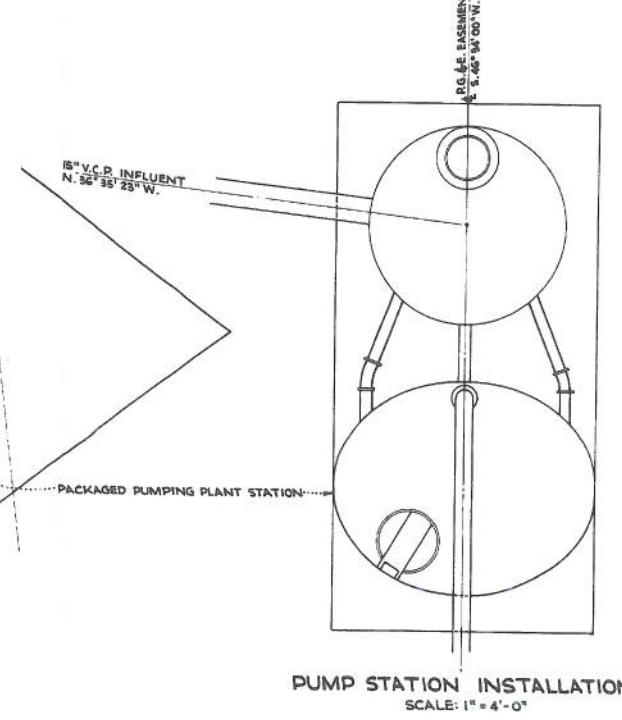
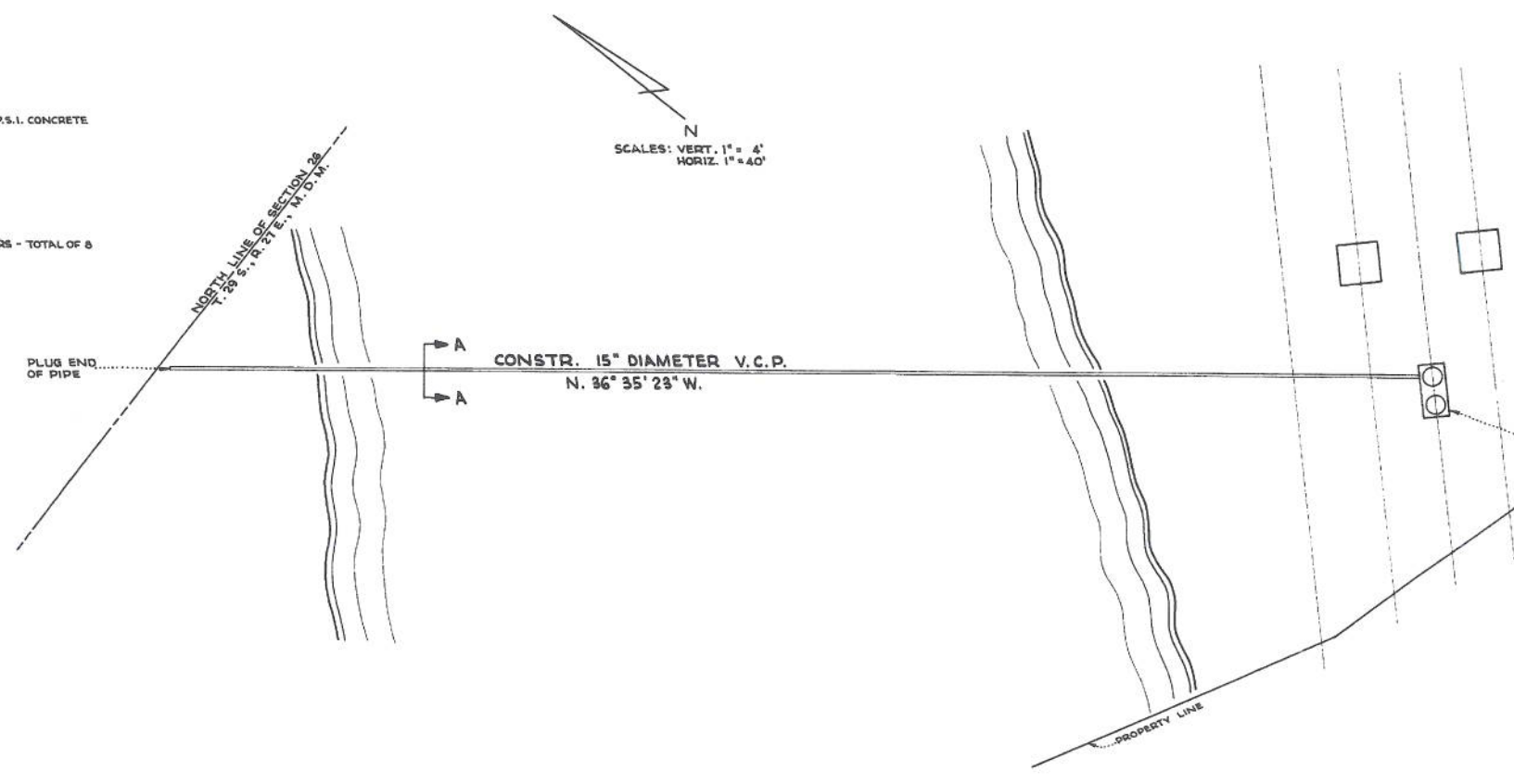
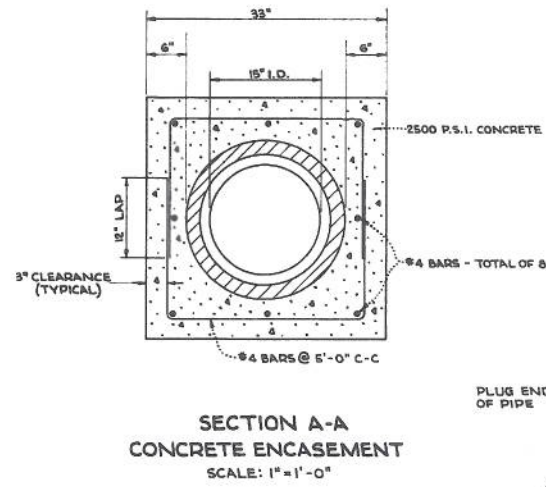
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SANITARY SEWER TO SERVE PIERCE ANNEXATION NO. 1 PHASE 1 - PHASE 2



APPROVED _____ KERN RIVER LEVEE DISTRICT	APPROVED _____ KERN ISLAND CANAL COMPANY INC.	APPROVED BY THE CITY COUNCIL August 5 1968 _____ CITY CLERK APPROVAL RECOMMENDED James D. Howley DEPUTY DIRECTOR OF PUBLIC WORKS APPROVED _____ CITY ENGINEER	DATE JULY, 1968 DRAWN S. HALL CHECKED D. W. N. SCALE AS SHOWN PLANS FOR THE CONSTRUCTION OF A SANITARY SEWER TO SERVE PIERCE ANNEXATION NO. 1 CITY OF BAKERSFIELD CALIFORNIA ENGINEERING DEPARTMENT	No 1 of 8 SHEETS W.O. 3824
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SCANNED



NOTE: THE CONTRACTOR SHALL CONTACT THE PACIFIC GAS AND ELECTRIC COMPANY BEFORE STARTING CONSTRUCTION WITHIN THE RG&E TOWER LINE EASEMENT AND SHALL COMPLY WITH THE RULES AND REGULATIONS OR INSTRUCTIONS OF ITS REPRESENTATIVES IN RELATION TO THE PROPER MANNER OF CONSTRUCTION OR PROTECTION.

