

**Meeting of the Central Valley Flood Protection Board
October 25, 2013**

Staff Report – Encroachment Permit 18876

**Lion Farms, LLC
Chowchilla Canal Bypass, Madera County**

1.0 - ITEM

Consider approval of Permit No. 18876 (Attachment B).

2.0 – APPLICANT

Lion Farms LLC

3.0 – LOCATION

The project is located on the left (west) levee of the Chowchilla Bypass approximately 2 miles south of Avenue 14, west of the City of Madera (Chowchilla Bypass, Madera County, See Attachment A).

4.0 – DESCRIPTION

To install approximately 211-feet of 42-inch diameter rubber gasket reinforced concrete pipe (RGRCP) through the levee and installation of a trash rack and a canal gate accessible through a concrete vault at the waterside of the levee hinge point.

5.0 – PROJECT ANALYSIS

The applicant is proposing to install a 42-inch pipe through the levee with a trash rack at the outlet on the bypass and a concrete vault on the waterside of the levee. The concrete vault will provide access for maintenance and include a screw gate for operating during flows. The project conforms to all standards in California Code of Regulations Title 23.

5.1 – Hydraulic Analysis

The scope of the work for this project does not require a hydraulic analysis.

5.2 – Geotechnical Analysis

The scope of work for this project does not require a geotechnical analysis.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

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

- 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.
- Lower San Joaquin Levee District endorsed the project on November 21, 2012 with conditions. The conditions will be incorporated into the permit as Exhibit B.

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 3 Categorical Exemption (CEQA Guidelines Section 15303) covering new construction of small structures.

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 entire State Plan of Flood Control:

The proposed pipe and concrete vault 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 find the project exempt from CEQA, 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 Exemption (NOE) with the State Clearinghouse.

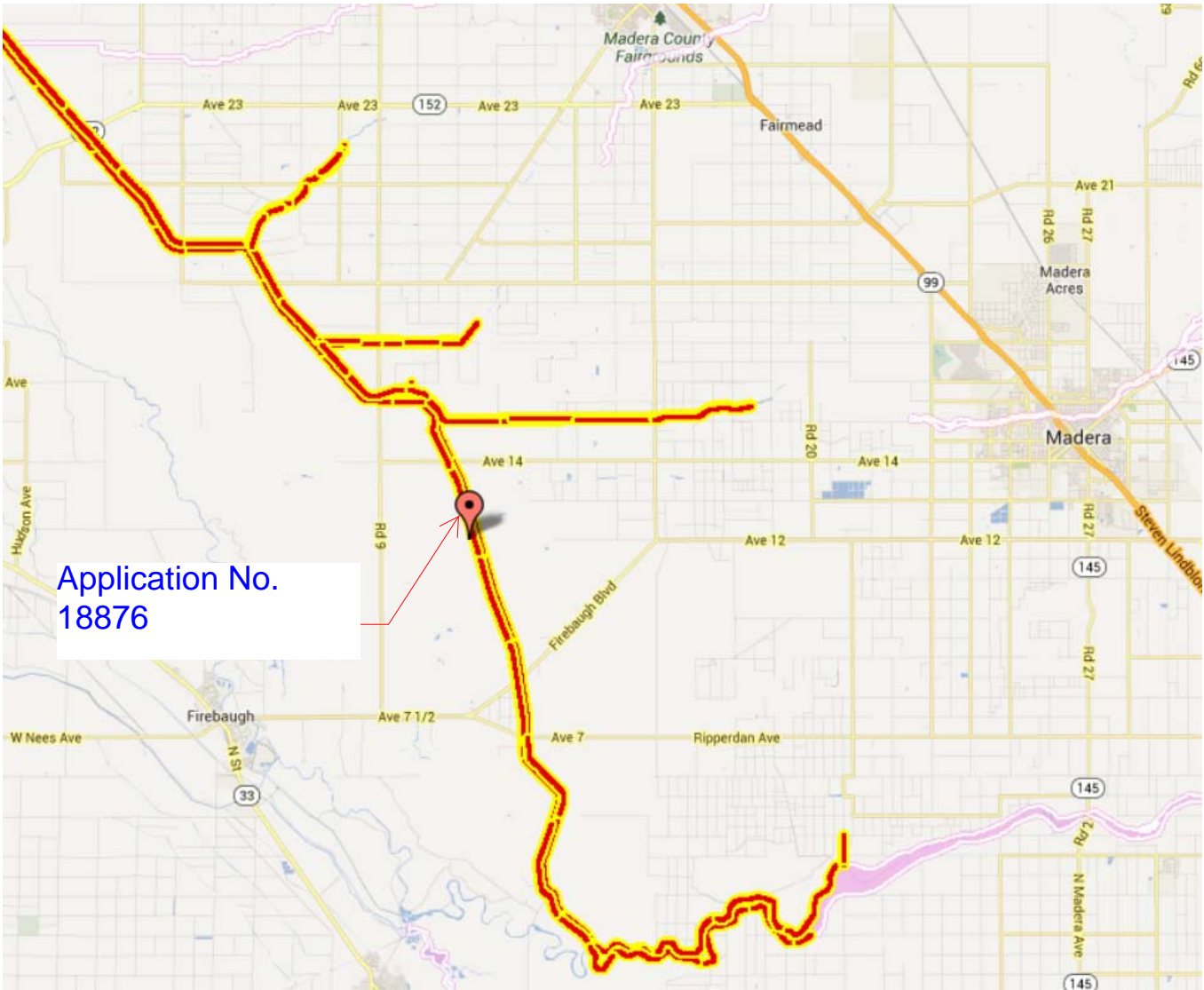
10.0 – LIST OF ATTACHMENTS

- A. Location Maps and Photos
- B. Draft Permit No. 18876
- C. Project Plans

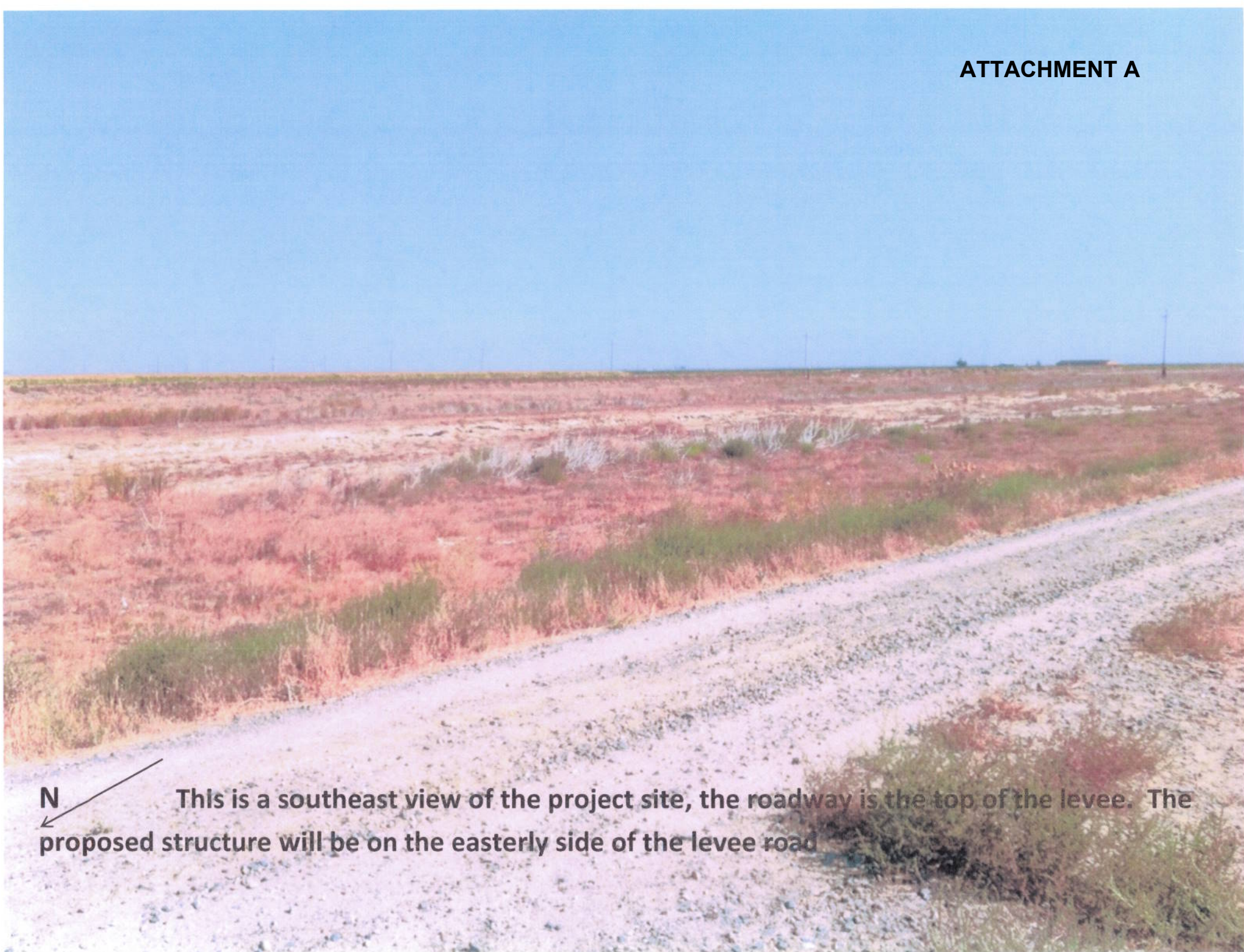
Design Review:	Angeles Caliso
Environmental Review:	Andrea Mauro
Document Review:	Gary Lemon P.E., Len Marino P.E.

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ATTACHMENT A



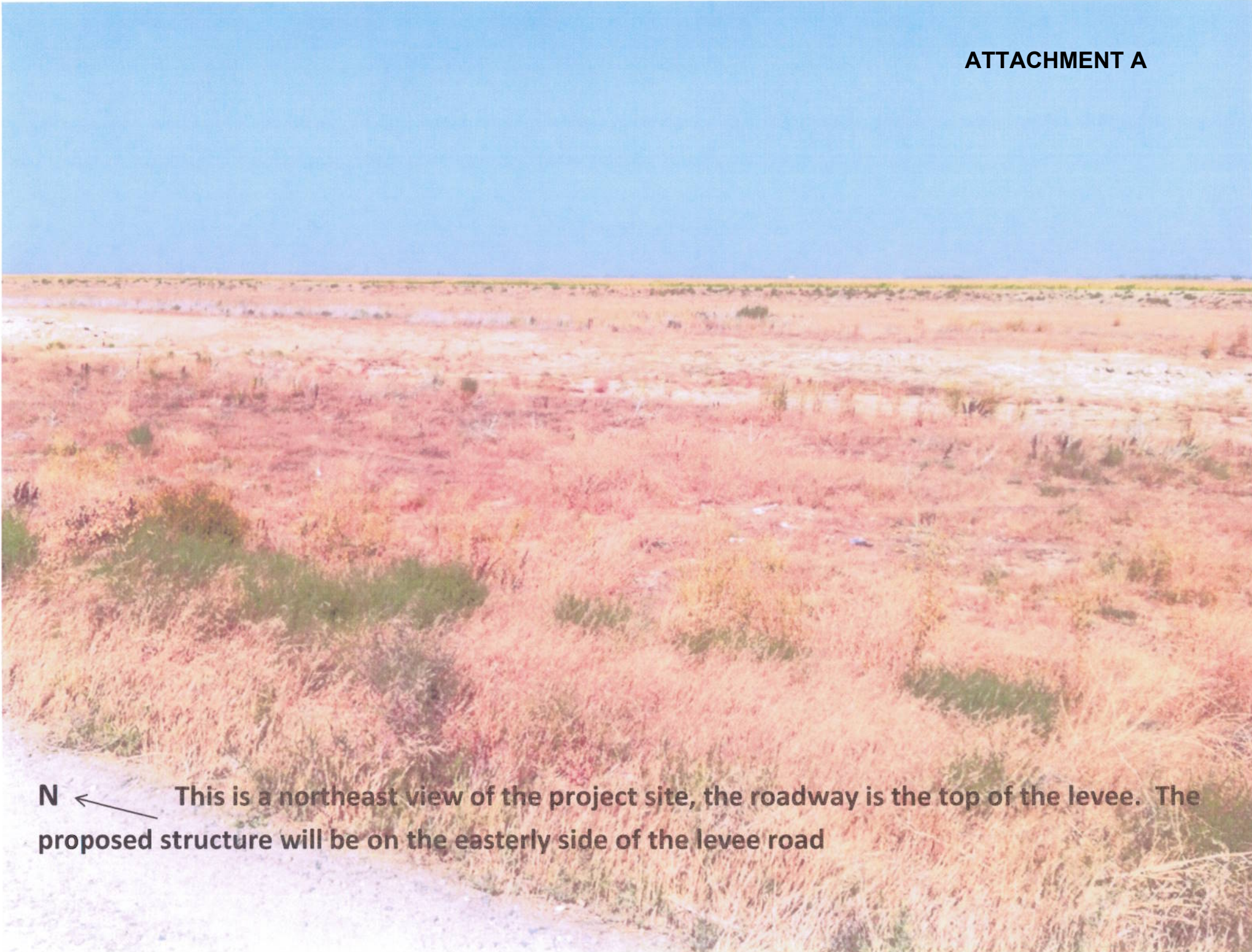
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N



This is a southeast view of the project site, the roadway is the top of the levee. The proposed structure will be on the easterly side of the levee road



N ← This is a northeast view of the project site, the roadway is the top of the levee. The proposed structure will be on the easterly side of the levee road

ATTACHMENT B
DRAFT

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

PERMIT NO. 18876 BD

This Permit is issued to:

Lion Farms LLC
12555 Road 9
Madera, California 93637

To install approximately 211-feet of 42-inch diameter rubber gasket reinforced concrete pipe with a trash rack and a canal screw gate, accessible through a concrete vault at the waterside levee hinge point, through the left (west) bank levee of the Chowchilla Bypass. The project is located on the left levee of the Chowchilla Canal Bypass just downstream of the Firebaugh Blvd. crossing, in Madera County. (Section 33, T11S, R15E, MDB&M, Lower San Joaquin Levee District, Chowchilla Canal Bypass, Madera 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

ATTACHMENT B

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. 18876 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 should contact the U.S. Army Corps of Engineers, Sacramento District, Regulatory Branch, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250, as compliance with Section 10 of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act may be required.

FIFTEEN: 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.

SIXTEEN: 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.

ATTACHMENT B

SEVENTEEN: The Central Valley Flood Protection Board and Department of Water Resources shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

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

NINETEEN: 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.

TWENTY: During construction of the project, any and all anticipated or unanticipated conditions encountered which may impact levee integrity or flood control shall be brought to the attention of the Flood Project Inspector immediately and prior to continuation of the project.

TWENTY-ONE: No material stockpiles, temporary buildings, or equipment shall remain in the Chowchilla Bypass or levee embankment during the flood season from November 1st to July 15th.

TWENTY-TWO: Excavations below the design flood plane and within the levee section or within 10 feet of the projected waterward and landward levee slopes shall have side slopes no steeper than 1 horizontal to 1 vertical. Flatter slopes may be required to ensure stability of the excavation.

TWENTY-THREE: Pipe installed below the levee section and within 10 feet of the levee toes shall be rubber gasket reinforced concrete pipe (RGRCP).

TWENTY-FOUR: The 42-inch diameter RGRCP shall be installed through the levee section at a right angle to the centerline of the levee.

TWENTY-FIVE: RGRCP, box culvert, or concrete cylinder pipe below the design flood plane elevation shall meet or exceed ASTM Specification C76-90.

TWENTY-SIX: RGRCP or box culvert joints shall be encased in reinforced concrete at least 6 inches thick and cast against firm undisturbed earth.

TWENTY-SEVEN: RGRCP installed below the design flood plane shall be encased below the springline in concrete cast against firm undisturbed earth.

TWENTY-EIGHT: Backfill material for excavations within the levee section and within 10 feet of the levee toes shall be free of stones or lumps that exceed 3 inches in greatest dimension, organic matter, or other unsatisfactory material and shall be placed in 4- to 6-inch layers, compacted to at least 95% of the minimum density obtained by the Standard Proctor Test (ASTM D 698) with a moisture content between -1% and +3% of the optimum moisture content.

TWENTY-NINE: Positive-closure devices that are readily accessible during periods of high water shall be installed on the waterward side of the levee.

THIRTY: Compaction tests by a certified soils laboratory will be required to verify compaction of

ATTACHMENT B

backfill within the levee section or within 10 feet of the levee toe.

THIRTY-ONE: The levee crown shall be surfaced with a minimum of 4 inches of compacted, Class 2, aggregate base (Caltrans Specification 26-1.02A).

THIRTY-TWO: The project area shall be restored to at least the condition that existed prior to commencement of work.

THIRTY-THREE: The condition of the pipes shall be verified using video or sonar equipment at least once every five years or annual pressure readings showing no significant loss in pressure. The results shall be submitted through the Central Valley Flood Protection Board to the Department of Water Resources, Flood Project Integrity and Inspection Branch and the Corps of Engineers.

THIRTY-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.

THIRTY-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.

THIRTY-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.

THIRTY-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.

THIRTY-EIGHT: The permittee shall comply with all conditions set forth in the letter from the Department of the Army dated Month XX, 201X, which is attached to this permit as Exhibit A and is incorporated by reference.

THIRTY-NINE: The permittee shall comply with all conditions set forth in the letter from the Lower San Joaquin Levee District dated November 21, 2012, which is attached to this permit as Exhibit B and is incorporated by reference.

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

Lower San Joaquin Levee District
11704 West Henry Miller Avenue, Dos Palos, CA 93620
Telephone: (209) 387-4545
FAX: (209) 387-4237

**ATTACHMENT B
EXHIBIT B**

Directors

Roy Catania, Chairman
George Park, Vice Ch.
Sean Howard
Robert D. Kelley, Jr.
Aldo Sansoni
Donald C. Skinner
Case Vlot

Secretary-Manager
Reggie N. Hill

Superintendent
James E. Batey

November 21, 2012

CENTRAL VALLEY FLOOD PROTECTION BOARD
Encroachment Permit Section
3310 El Camino Avenue, Room 151
Sacramento, CA 95821

RE: Encroachment Application by Lion Farms LLC

Enclosed you will find a copy of **Resolution No. 623-12**, which was adopted by the Board of Directors of the Lower San Joaquin Levee District at their regular meeting held on October , 2012, pertaining to an encroachment application by Lion Farms LLC, 12555 Road 9, Madera, CA 93637.

Sincerely,



Reggie N. Hill, Secretary-Manager

Encls.

cc Lion Farms LLC

LOWER SAN JOAQUIN LEVEE DISTRICT

DOS PALOS, CALIFORNIA

RESOLUTION NO. 623-12

WHEREAS, The Board of Directors of the Lower San Joaquin Levee District read the Central Valley Flood Protection Board permit application by Lion Farms, LLC, 12555 Road 9, Madera, CA, regarding the proposal to construct a concrete box takeout structure in the levee of the Chowchilla Canal Bypass, in Madera County, within the boundaries of the Levee District; and

WHEREAS, The proposed construction is located in the Chowchilla Canal Bypass Levee Unit #18, at approximately levee mile 4.00; and will consist of a concrete box, 7'3" wide x 5'8" long x 21'6" deep; two feet off of the levee roadway; containing a wall mounted steel ladder for access into the box and a screw gate for operation during flows; attachment and installation of 126 linear feet of 42" cmp pipe from the box structure out into the bypass channel with a debris screen inlet; attachment and installation of 85 linear feet of 42" cmp pipe from the box structure on the landside of the levee; and

WHEREAS, the Levee District staff have reviewed the permit and stated no impacts to the operations and maintenance of the flood project will be affected; and

WHEREAS, This Board has reviewed and studied the information presented; and

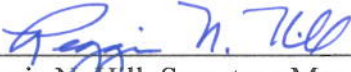
NOW, THEREFORE, BE IT RESOLVED, The Board of Directors of the Lower San Joaquin Levee District, by this Resolution, hereby does not oppose the proposed construction; but does place certain conditions recommended by its engineer, which are attached; and

BE IT FURTHER RESOLVED, Notification of this action will be transmitted to the Central Valley Flood Protection Board and applicant.

CERTIFICATION

11704 W. Henry Miller Ave.
Dos Palos, CA 93620
November 1, 2012

I, REGGIE N. HILL, Secretary-Manager of the Lower San Joaquin Levee District, do hereby certify that the foregoing **RESOLUTION NO. 623-12** was unanimously adopted by the Board of Directors of the said District at the Regular Meeting of the Board, held in the office of the District, located at 11704 W. Henry Miller Avenue, Dos Palos, Merced County, California, on the 16th day of October 2012, at the hour of 9:35 A.M., and do further certify that there was present at this meeting a quorum at all times, and that this Resolution has not been amended or rescinded, but remains in full force and effect.



Reggie N. Hill, Secretary-Manager
LOWER SAN JOAQUIN LEVEE DISTRICT

**ATTACHMENT B
EXHIBIT B**

SUMMERS ENGINEERING, INC.

CONSULTING ENGINEERS

222 N. TOWNE ST., P.O. BOX 1122

HANFORD, CALIFORNIA 93232-1122

TELEPHONE
(559) 882-0233

FAX
(559) 882-1332

JOSEPH B. SUMMERS
(559) 882-0233

JOSEPH B. McCAHAN
ROGER S. REYNOLDS
BRIAN J. GRASSO
ROBERT E. JACOBSON
JAMES C. LINNEMAN

October 15, 2012

Reggie Hill
Lower San Joaquin Levee District
11704 Henry Miller Avenue
Dos Palos, CA 93620

Subject: Review of Lion Farms Encroachment Permit Application

Dear Reggie:

We have reviewed the Encroachment Permit Application submitted to the District by Lion Farms. We agree with your assessment that the proposed installation should not pose any operation or maintenance problems for the District. We would recommend that Lion Farms hire a geotechnical engineer to sample the levee material from the trench excavation and prepare a compaction curve. When the excavated material is replaced it should be moisture conditioned and placed in compacted lifts, and the geotechnical engineer should test the backfill to verify it is compacted to at least 90% relative density per ASTM D1557-91 or 97% relative density per ASTM D698-91. We also noted that the plans appear to allow high density polyethylene pipe as an alternative to reinforced concrete pipe (RCP). We would recommend that only Class III rubber gasket RCP in accordance with ASTM C76 be accepted.

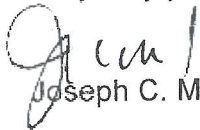
You may recall that we recently provided engineering services to another local farming company for a similar installation in the East Side Bypass. That project involved a lengthy (more than 1 year) permitting process with the Central Valley Flood Protection Board (CVFPB) and the Army Corps of Engineers. Following are some of the key issues we had to address with those agencies in order to secure a permit.

1. California Environmental Quality Act (CEQA) documentation had to be filed. CEQA requires a public agency to be the lead agency filing such documentation which can be problematic for a private entity. Another public agency with interest in the project ultimately filed the CEQA documents for our client. However, at one point CVFPB suggested that the County be the lead agency and this may be the only option for Lion Farms.
2. Pipe installed under the levees (between the outside and inside toe) had to be encased in concrete up to the vertical centerline of the pipe. Pipe joints had to be fully encased in concrete with steel reinforcement hoops.

3. The shutoff gate had to conform with Army Corps Standard EM1110-2-19-13. We proposed a Waterman C-20 canal gate with total galvanizing, which was accepted.

It does not appear to us that Lion's application has addressed these issues and doing so now might help them reduce the time needed to acquire their permit.

Very truly yours,


Joseph C. McGahan

SLJ/sj

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PROVIDE IRRIGATION STRUCTURE (JENSEN PRECAST MODEL 4878-U OR APPROVED EQUAL) WITH WALL-MOUNTED STEEL LADDER, CONCRETE COVER WITH SLOTTED METAL GRATE, AND C-20 CANAL GATE AT DOWNSTREAM SIDE OF STRUCTURE; PROVIDE 2' CLEAR SPACING BETWEEN EXISTING GRAVEL ROAD AND PROPOSED STRUCTURE AND PROPOSED STRUCTURE TOP=100.00; BOTTOM=78.00 FL 42" NE, SW=78.87

LEGEND

286.51 Ng X 283.13 Tc 282.64 FL EXISTING GRADE

CONTROL POINTS

BRE CONTROL POINT#500
SET HUB AND TACK
NORTHING=20000.0000
EASTING=5000.0000
ELEVATION=100.00 (ASSUMED)

BRE CONTROL POINT#502
SET GINNIE AND TACK
NORTHING=19853.7193
EASTING=4972.3171
ELEVATION=90.21

BRE CONTROL POINT#501
SET GINNIE AND TACK
NORTHING=19995.8918
EASTING=4922.7569
ELEVATION=89.99

BRE CONTROL POINT#503
SET GINNIE AND TACK
NORTHING=20125.8912
EASTING=4877.6689
ELEVATION=90.11

ABBREVIATIONS

BM BENCHMARK
C CONCRETE
CDR CENTER OF DIRT ROAD
CL CENTERLINE
CP CONTROL POINT
D DIRT
EDR EDGE OF DIRT ROAD
GB GRADE BREAK
NG NATURAL GROUND
TOE TOE OF SLOPE
TOP TOP OF SLOPE

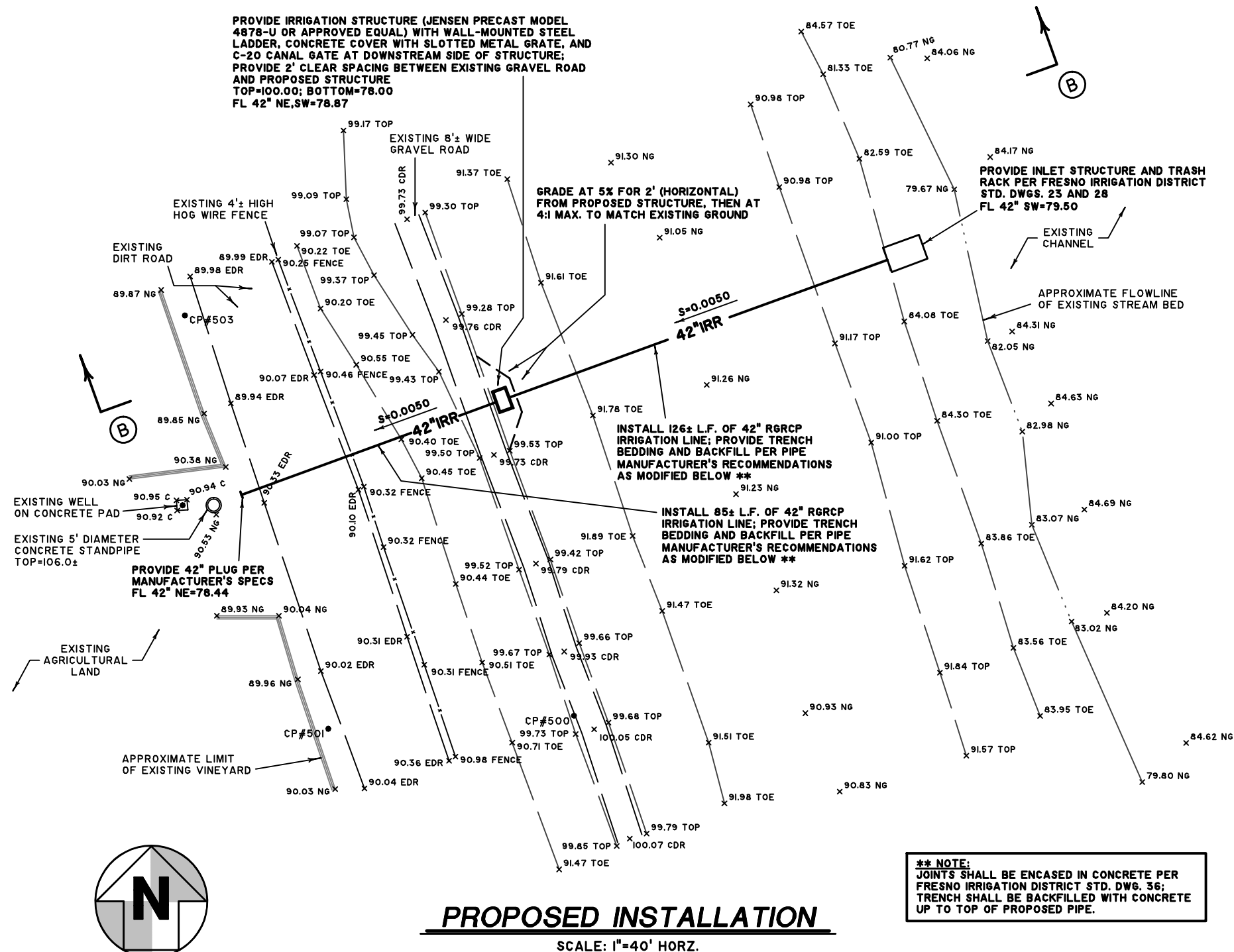
DATE: JUNE 25, 2013
DRAWN BY: DOH
CHECKED BY: DOH
PROJECT NO: 12-2145
DRAWING NO: 12-2145-Topo
SHEET NO: 3 OF 6

C3

P.O. Box 25783
Fresno, CA 93729
voice: 559.645.4849
fax: 559.645.4869
www.bedrockeng.com

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PROPOSED INSTALLATION
SCALE: 1"=40' HORZ.

**** NOTE:**
JOINTS SHALL BE ENCASED IN CONCRETE PER FRESNO IRRIGATION DISTRICT STD. DWG. 36; TRENCH SHALL BE BACKFILLED WITH CONCRETE UP TO TOP OF PROPOSED PIPE.

NOTE:
ALL EXCAVATED MATERIAL SHALL BE MOISTURE CONDITIONED AND RECOMPACTED TO AT LEAST 90% RELATIVE DENSITY PER ASTM D1557-91 OR AS DIRECTED BY PROJECT SOILS ENGINEER.

NOTE:
ALL TOPOGRAPHIC SURVEY DATA IS BASED ON A FIELD SURVEY PERFORMED ON JUNE 6, 2012.



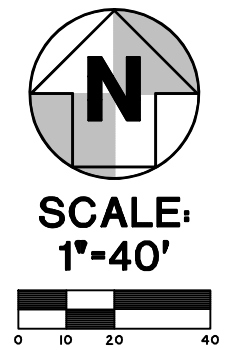
David Hartley
6/26/13

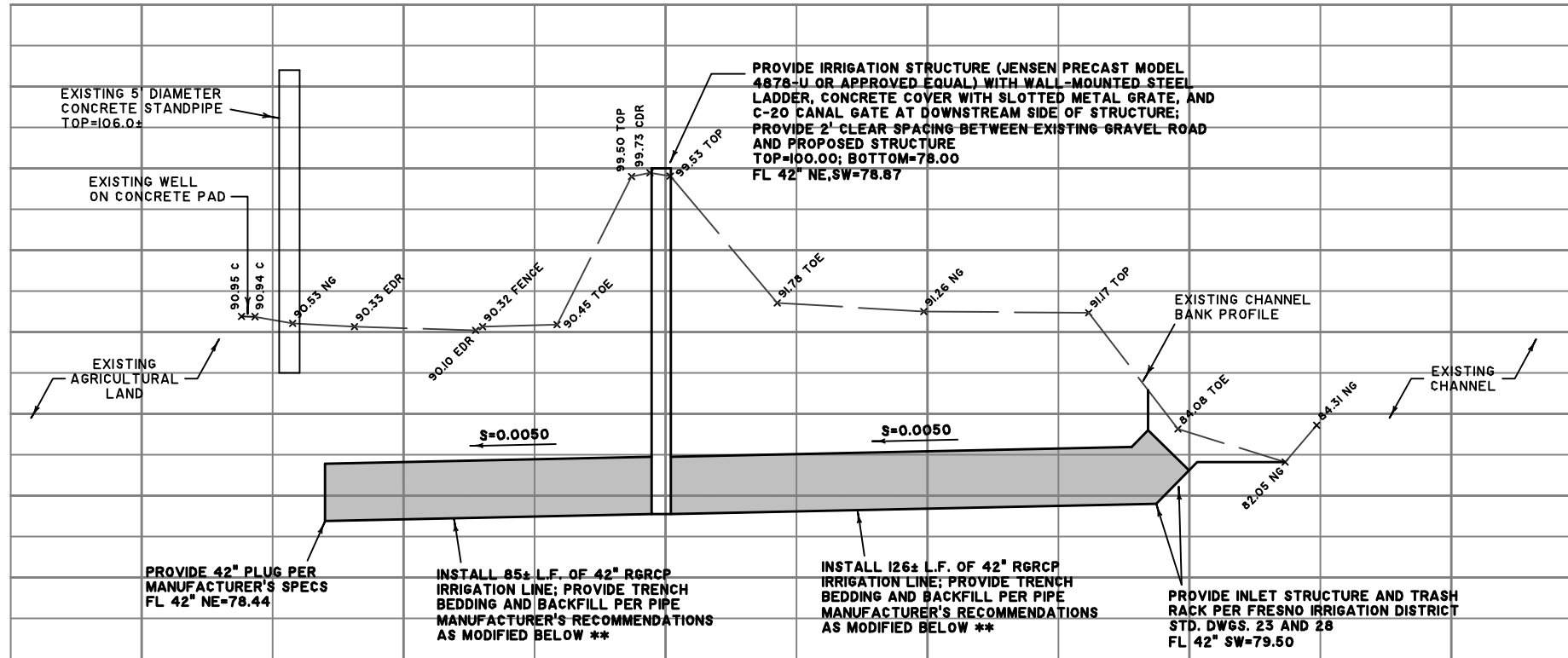
IRRIGATION IMPROVEMENT PLAN

PREPARED FOR:

LION FARMS, LLC

P.O. BOX 1350, SELMA, CA 93662
SITE LOCATION: EAST OF SAN JOAQUIN RIVER BYPASS BETWEEN FIREBAUGH ROAD AND AVENUE 12 ALIGNMENT, MADERA COUNTY, CA





SECTION B-B

SCALE: 1"=40' HORZ.; 1"=10' VERT.

**** NOTE:**
JOINTS SHALL BE ENCASED IN CONCRETE PER FRESNO IRRIGATION DISTRICT STD. DWG. 36; TRENCH SHALL BE BACKFILLED WITH CONCRETE UP TO TOP OF PROPOSED PIPE.

NOTE:
ALL TOPOGRAPHIC SURVEY DATA IS BASED ON A FIELD SURVEY PERFORMED ON JUNE 6, 2012.

DATE: JUNE 25, 2013
DRAWN BY: DOH
CHECKED BY: DOH
PROJECT NO.: 12-2145
DRAWING NO.: 12-2145-Topo
SHEET NO.: C4
SHEET 4 OF 6

P.O. Box 25783
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David Hartley
6/26/13

IRRIGATION IMPROVEMENT PLAN

PREPARED FOR:

LION FARMS, LLC

P.O. BOX 1350, SELMA, CA 93662
SITE LOCATION: EAST OF SAN JOAQUIN RIVER BYPASS
BETWEEN FIREBAUGH ROAD AND AVENUE 12 ALIGNMENT,
MADERA COUNTY, CA