Meeting of the Central Valley Flood Protection Board March 25, 2011

Staff Report – Encroachment Permit

Reclamation District No. 999 Pipe Replacement, Yolo County

<u> 1.0 – ITEM</u>

Consider approval of Permit No. 18633 (Attachment B)

<u> 2.0 – APPLICANT</u>

Reclamation District No. 999

3.0 - LOCATION

The project is located southwest of Clarksburg and west of Road 158. (Sacramento Deep Water Ship Channel, Yolo County, see Attachment A)

4.0 – DESCRIPTION

The applicant proposes to remove an existing 24-inch-diameter discharge pipe and replace it with a new 24-inch-diameter schedule 10 pipe up and over the left (east) bank levee of the Sacramento Deep Water Ship Channel. This permit will supersede Permit No. 11735-GM that was issued for this encroachment on September 20, 1976.

5.0 - PROJECT ANALYSIS

Reclamation District No. 999 (district) owns and operates a discharge pump station at levee mile 12.29 on the landside of the left bank levee of the Sacramento Deep Water Ship Channel. The existing 24-inch diameter discharge pipe through the levee failed during the winter of 2010 and requires replacement. The replacement pipe will be the same size as the pipe being removed but the invert of the pipe through the crown of the levee will be raised above the 100-year flood elevation.

The district pump station and discharge pipe were previously permitted under Encroachment Permit No. 11735. Permit No. 18633 will be written to incorporate new Title 23 standards and it will supersede Permit No. 11735.

5.1 – Hydraulic Analysis

No hydraulic analysis was required as the proposed project replaces an existing pipe.

5.2 – Geotechnical Analysis

No geotechnical analysis was required for the proposed replacement project.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

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

- Reclamation District No. 999 is the applicant for the proposed project.
- The U.S. Army Corps of Engineers 208.10 comment letter has not yet been received for this application. Upon receipt of a favorable letter and review by Board staff the letter will be incorporated into the permit as Exhibit A.

7.0 – CEQA ANALYSIS

Board staff has prepared the following CEQA determination:

The Reclamation District No. 999, as lead agency under CEQA, approved the project (Netherlands District 2010-2011 Routine Maintenance) on June 15, 2010 and filed an exemption with Yolo County Clerk. The district determined that the project was categorically exempt under Class 1, Section 15301 covering the repair and maintenance of existing facilities.

The Board, acting as a responsible agency under CEQA, has reviewed the Reclamation District No. 999 determination and has independently determined that the project is exempt from CEQA under Class 1, Section 15301 covering the repair and 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 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 project replaces an existing authorized encroachment so there will be no effect to the State Plan of Flood Control.

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

Future changes in hydrology caused by climate change could result in the need to remove and redesign the project if precipitation and water levels raise necessitating levee modifications.

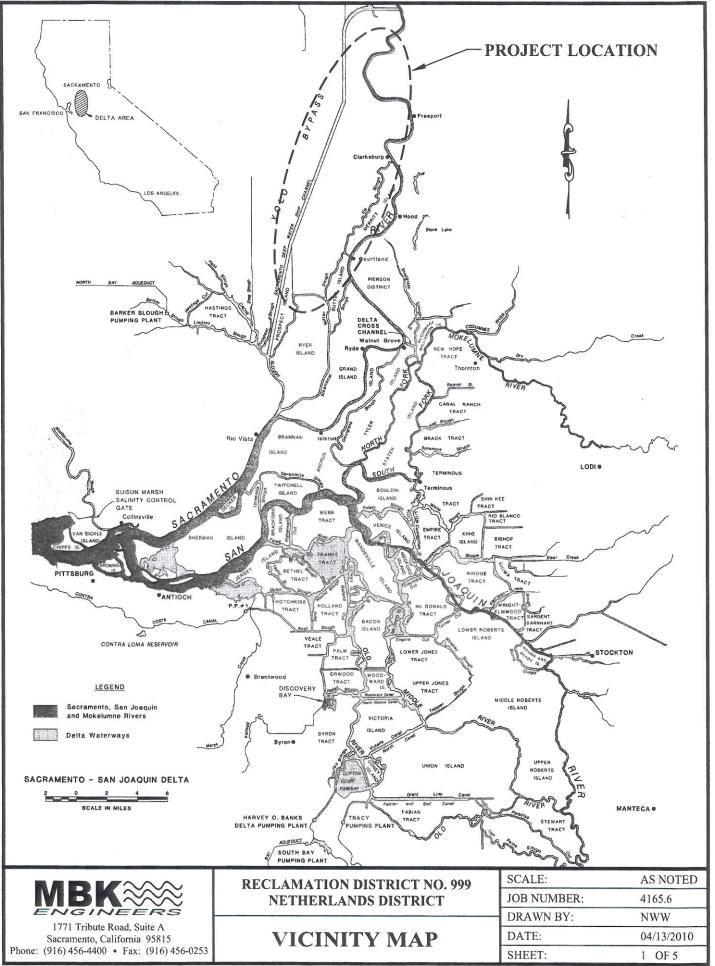
9.0 – STAFF RECOMMENDATION

Staff recommends that the Board determine the project to be exempt from CEQA and approve the permit conditioned upon receipt of a favorable U.S. Army Corps of Engineers comment letter.

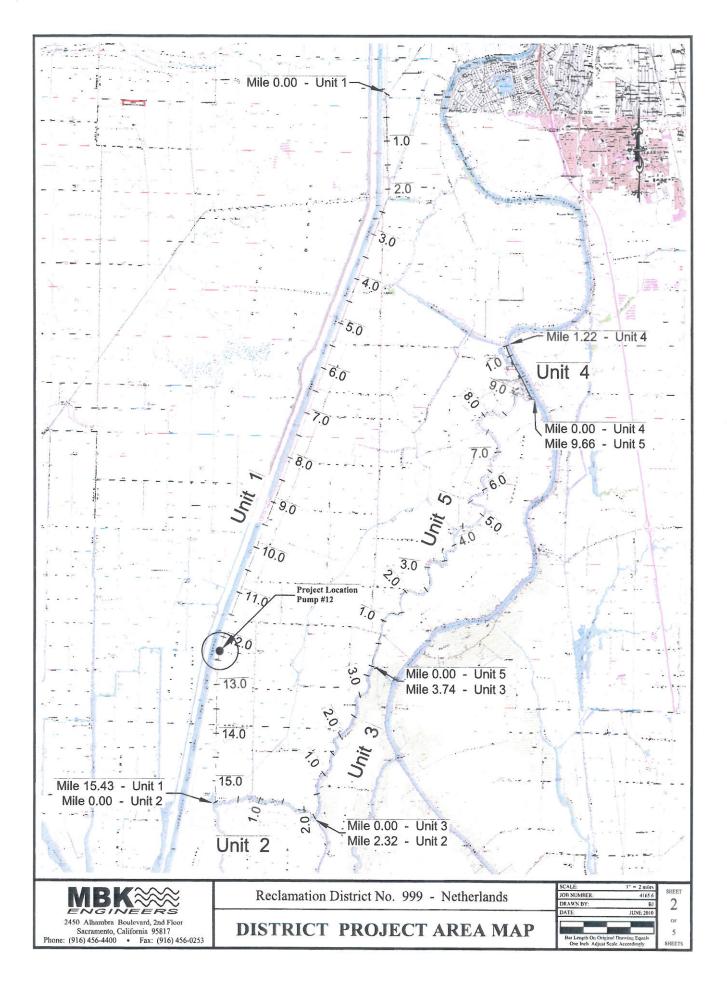
<u>10.0 – LIST OF ATTACHMENTS</u>

- A. Location Maps and Photos
- B. Draft Permit No. 18633
- C. Design drawing

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

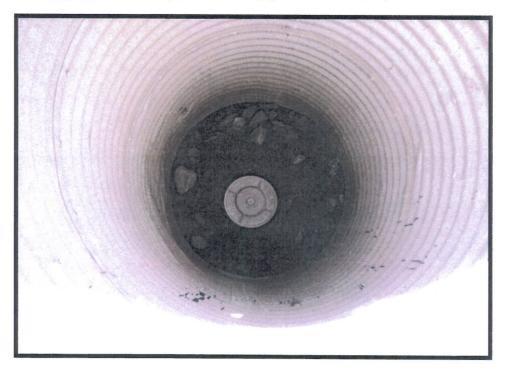


R: \4165.60 RD 999 - Holland Land \2010-05 Pump #12 Encroachment Permit \01 - Netherlands District - Vicinity Map.dwg 6-07-10 01:02:45 PM moncrief





Facing west, landside slope, view of stand pipe on crown and pump at toe of levee.



Landside crown, view of air release valve in stand pipe 5 feet below levee crown.

RD 999 Site Inspection, June 1, 2010

Photographer - Mike Moncrief





Facing east, landside slope, view of area scoured out by pipe failure, winter 2010.

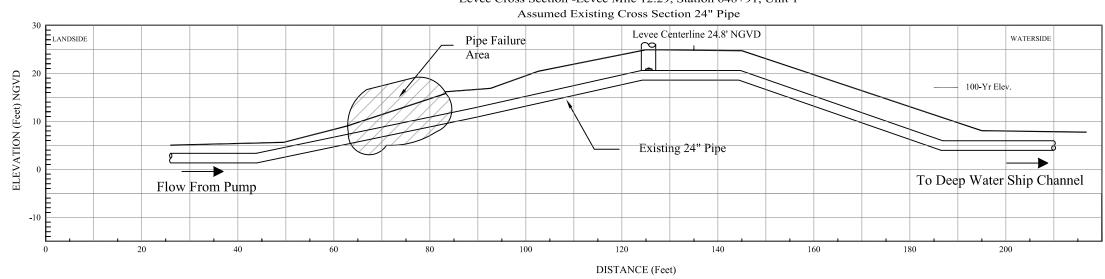


Facing west, landside levee toe, view of sheetpile wall and pump station #12.

RD 999 Site Inspection, June 1, 2010

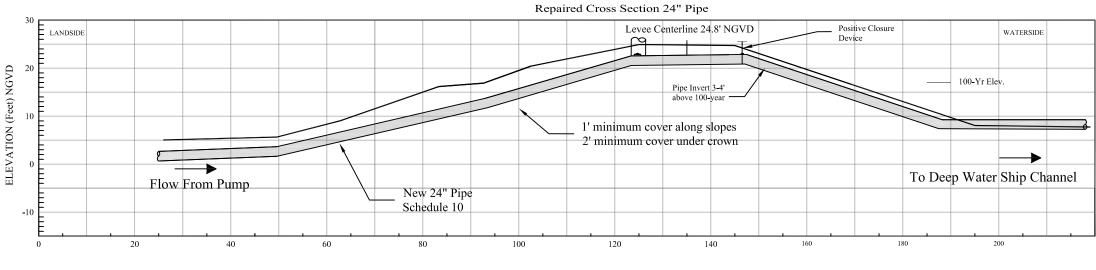
Photographer - Mike Moncrief





R.D. NO. 999 - Netherlands Critical Pipe Replacement Levee Cross Section -Levee Mile 12.29, Station 648+91, Unit 1

R.D. NO. 999 - Netherlands Critical Pipe Replacement Levee Cross Section -Levee Mile 12.29, Station 648+91, Unit 1



DISTANCE (Feet)



1771 Tribute Road, Suite A Sacramento, California 95815 (916) 456-4400 **RECLAMATION DISTRICT NO. 999 NETHERLANDS**

EXISTING AND DESIGN CROSS SECTIONS - LEVEE MILE

Attachment C

Sheet 3 of 6

1	SCALE:	1" = 20'
	JOB NUMBER:	4165.6
2 12.29	DRAWN BY:	MRM
	DATE:	JULY 2010