

THREE RIVERS LEVEE IMPROVEMENT AUTHORITY - SUPPLEMENTAL UTILITY DOCUMENTATION

*Project Name: TRLIA Phase 1, 2 and 4
Levee Repair Projects*

January 10, 2007

Reviewed by: Blake Johnson, PE

Prepared by: Anthony Quintrall

Supplemental Utility Documentation

A general assessment of the utilities that exist near the Yuba River left bank levee, Bear River North Levee, and WPIC west levee has been conducted and preliminary findings were described in the Basis of Design for Three Rivers Levee Improvement Authority, Bear River, WPIC, & Yuba River Levees Repair Project (Phase 2) dated December 2006 and the Basis of Design for Three Rivers Levee Improvement Authority, Yuba River Levees Repair Project Phase 4 (December 2006). During construction, additional utilities were identified and are listed below.

Telephone/Fiber Optic Lines: SBC/Pac Bell/AT&T identified two underground telephone cables at stations 6+26 and 13+64 along the Yuba River levee. The underground cable at station 13+64 has been abandoned. The depth of each cable is not known. According to RD 784, these underground cables have not caused any maintenance issues along the levee.

Sprint has indicated that a fiber optic line extends through the Bear River levee at approximate station 168+30 and continues along the landside toe ditch of the WPIC levee. According to Sprint, this line is encased in either a PVC or steel conduit. The depth of this line is approximately 2 feet to 4 feet below the crown of the Bear River levee. According to RD 784, this underground fiber optic line has not caused any maintenance issues along the levee.

Additional Culverts: A portion of the design for the WPIC indicated that a 36 inch corrugated metal drainage culvert was going to be extended for drainage purposes (station 120+30). It was determined, based on conversations with RD 784, that this drainage was not necessary. This culvert was filled with concrete and capped per Reclamation Board standards. The depth of the culvert is approximately 25 feet below the crown of the levee. According to RD 784, this culvert has not caused any maintenance issues along the levee.

During the construction of the keyway trench along the WPIC, another corrugated metal drainage culvert was encountered (station 132+00). This was a 12 inch culvert. Both ends of the pipe were covered with soil indicating this culvert was not being used for drainage. This culvert was filled with concrete and capped per Reclamation Board standards. The depth of the culvert is approximately 25 feet below the crown of the levee. According to RD 784, this culvert has not caused any maintenance issues along the levee.

During the construction of the seepage berm on the landside of the Yuba River, a 12 inch concrete culvert was located. This culvert was approximately 350 feet long and extended from station 9+50 to 13+00. The culvert terminated on the northwestern side of Shadpad Road on the landside of the Yuba River. Approximately 220 feet of culvert was removed. The remaining culvert under Shadpad Road was filled with concrete and capped per Reclamation Board standards. The depth of the culvert is approximately 20 feet below the crown of the levee. According to RD 784, this culvert has not caused any maintenance issues along the levee.

Table 1, Utility Crossings, indicates the Three Rivers Project Phase number, Design Sheet number, Station, Utility, Owner, Type, Depth below Crown, and Maintenance History. This table lists all known utilities either shown on the design drawings, found during construction of each Phase, or during conversations with the utility companies.



Table 1 - Utility Crossings

YUBA RIVER SOUTH LEVEE									
TRLIA Phase	Sheet	Station	Utility	Owner	Type	Depth Below Crown	Maintenance History		
Phase 1	C-01	6+26	UG Telephone Cable	SBC (Pacbell)	Unknown	Unknown	No Issues		
Phase 1	C-02	13+64	UG Telephone Cable	SBC (Pacbell)	Abandoned	-	No Issues		
Phase 2	C-300	1+45	UG Telephone Cable	Sprint	Fiber Optic	2-3'	No Issues		
Phase 2	C-300	1+45	Gas Line	PG&E	High Pressure	Unknown	No Issues		
Phase 2	C-302	33+00	Gas Line	Kinder Morgan	High Pressure	Unknown	No Issues		
Phase 2	C-300	9+50 to 13+00	Drainage Pipe	Unknown	12" Concrete Pipe	Landside Toe - 20'	No Issues - Abandoned during construction per Reclamation Board requirements (concrete filled)		
Phase 4	C-06	102+60	UG Telephone	Sprint	Fiber Optic	2-4'	No Issues		
Phase 4	C-06	102+60	Comcast Cable	Comcast	TV Cable	2-4'	No Issues		
Phase 4	C-06	102+60	Gas Line	PG&E	High Pressure	Unknown	No Issues - Abandoned during Construction		
UPPER BEAR NORTH LEVEE									
TRLIA Phase	Sheet	Station	Utility	Owner	Type	Depth Below Crown	Maintenance History		
Phase 2	C-101	140+75	PS 6 Outfall Lines	RD 784	Steel Pipe	3'	No Issues - Recent construction		
Phase 2	C-103	168+30	UG Telephone Cable	Sprint	Fiber Optic	2-4'	No Issues		
WPIC WEST LEVEE									
TRLIA Phase	Sheet	Station	Utility	Owner	Type	Depth Below Crown	Maintenance History		
Phase 2	C-210	120+30	Drain Pipe	Unknown	Corrugated metal	25'	No Issues - Abandoned during construction per Reclamation Board requirements (concrete filled)		
Phase 2	C-211	132+00	Drain Pipe	Unknown	Corrugated metal	25'	No Issues - Abandoned during construction per Reclamation Board requirements (concrete filled)		