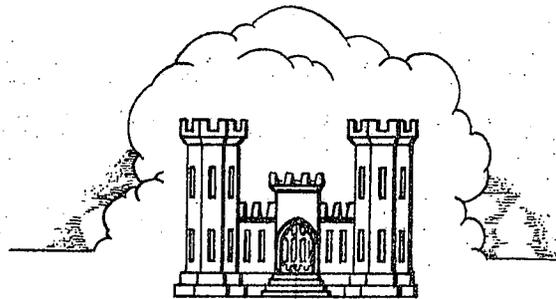


SUPPLEMENT TO STANDARD
OPERATION AND MAINTENANCE
MANUAL

SACRAMENTO RIVER
FLOOD CONTROL PROJECT

UNIT NO. 113 (REVISED)

EAST LEVEE OF YOLO BYPASS,
NORTH LEVEE OF MINER SLOUGH,
WEST LEVEES OF SUTTER SLOUGH,
ELKHORN SLOUGH AND SACRAMENTO RIVER,
ALL BORDERING RECL. DISTRICT NO. 999



U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

CORPS OF ENGINEERS

U. S. ARMY

SUPPLEMENT TO STANDARD

OPERATION AND MAINTENANCE MANUAL

SACRAMENTO RIVER FLOOD CONTROL PROJECT

UNIT NO. 113 - (REVISED)

EAST LEVEE OF YOLO BYPASS, NORTH LEVEE OF
MINER SLOUGH, WEST LEVEES OF SUTTER SLOUGH,
ELKHORN SLOUGH AND SACRAMENTO RIVER
ALL BORDERING RECLAMATION DISTRICT NO. 999

U. S. Army Engineer District
Corps of Engineers
Sacramento, California
October 1966

**SUPPLEMENT TO STANDARD
OPERATION AND MAINTENANCE MANUAL
SACRAMENTO RIVER FLOOD CONTROL PROJECT**

UNIT NO. 113 (REVISED)

EAST LEVEE OF YOLO BYPASS,
NORTH LEVEE OF MINER SLOUGH,
WEST LEVEES OF SUTTER SLOUGH,
ELKHORN SLOUGH AND SACRAMENTO RIVER,
ALL BORDERING RECL. DISTRICT NO. 999

LOCATION	ADDITION OR REVISION	DATE
1-04	Add subparagraph c – Contract No. 57-59	Nov 1963
Exhibit B	Add Drawing No. 50-4-3298	Nov 1963
Paragraph 1-04	Add subparagraph g	Dec 1971
Paragraph 2-01	Add subparagraph c	Dec 1971
Exhibit B	Add Drawing No. 50-4-4378	Dec 1971
Exhibit F	Add copy of letter of acceptance dated 9 Dec 1971	Dec 1971
Paragraph 1-04	Add subparagraph h	Oct 1975
Paragraph 2-01	Revised subparagraph c	Oct 1975
Exhibit B	Add Drawing No. 50-4-4687	Oct 1975
Exhibit F	Add copy of letter of acceptance dated 12 Jan 1973	Oct 1975
Paragraph 1-04	Add subparagraph i	Dec 1975
Exhibit B	Add Drawing No. 50-4-4768	Dec 1975
Exhibit F	Add copy of letter of acceptance dated 4 Dec 1974	Dec 1975
Paragraph 1-04	Add subparagraph j	Mar 1983
Exhibit B	Add Drawing No. 50-4-5164	Mar 1983
Exhibit F	Add copy of letter of acceptance dated 21 Oct 1977	Mar 1983
Paragraph 1-04	Add subparagraph k	Dec 1983
Paragraph 2-05	Add Environment Protection	Dec 1983
Exhibit B	Add Drawing No. 50-4-5541	Dec 1983
Exhibit F	Add copy of letter of transfer dated 16 Nov 1982	Dec 1983
Paragraph 1-04	Add subparagraph l	29 Apr 2010
Exhibit B	Add Drawing No. 50-4-6057-A	29 Apr 2010
Exhibit F	Add copy of letter of transfer dated 28 Jul 2004	29 Apr 2010
Paragraph 1-04	Add subparagraph m	29 Apr 2010
Exhibit B	Add Drawing No. 50-4-6031	29 Apr 2010
Exhibit F	Add copy of letter of transfer dated 23 Apr 2001	29 Apr 2010
Exhibit F	Add copy of letter of transfer dated 2 Feb 1951	20 Dec 2010
Exhibit F	Add copy of letter of transfer dated 6 Dec 1951	20 Dec 2010
Exhibit F	Add copy of letter of transfer dated 8 Dec 1951	20 Dec 2010
Exhibit F	Add copy of letter dated 2 Apr 1952 regarding transfer dated 6 Dec 1951	20 Dec 2010

LOCATION	ADDITION OR REVISION	DATE
Exhibit F	Add copy of letter of transfer dated 5 Dec 1956 (Items 510 – 526)	20 Dec 2010
Exhibit F	Add copy of letter of transfer dated 5 Dec 1956 (Item 556)	20 Dec 2010
Exhibit F	Add copy of letter of transfer dated 20 Jul 1960	20 Dec 2010
Exhibit F	Add copy of letter of acceptance dated 9 Aug 1960	20 Dec 2010
1-04	Add subparagraph n	20 Dec 2010
2-01	Add subparagraphs d and e	20 Dec 2010
Exhibit B	Add drawing no. 50-04-6252	20 Dec 2010
Exhibit F	Add copy of letter of transfer dated 21 Dec 2007	20 Dec 2010
1-04	Add subparagraph o	2 Feb 2011
Exhibit B	Add drawing no. 50-4-4006	2 Feb 2011
Exhibit F	Add copy of letter of transfer dated 23 Nov 1966	2 Feb 2011
Exhibit F	Add copy of letter of acceptance dated 23 Dec 1966	2 Feb 2011
Exhibit F	Add copy of letter of transfer dated 18 Nov 1971	2 Feb 2011
Exhibit F	Add copy of letter of transfer dated 18 Dec 1972	2 Feb 2011
Exhibit F	Add copy of letter of transfer dated 18 Nov 1974	7 Mar 2011
Exhibit F	Add copy of letter of transfer dated 7 Nov 1977	7 Mar 2011
1-04	Add subparagraph p	7 Mar 2011
Exhibit B	Add drawing no. 50-4-5777	7 Mar 2011
Exhibit F	Add copy of letter of transfer dated 13 Jan 1988	7 Mar 2011
1-04	Add subparagraph q	7 Mar 2011
Exhibit B	Add drawing no. 50-4-5784	7 Mar 2011
Exhibit F	Add copy of letter of transfer dated 16 Nov 1989	7 Mar 2011
Exhibit F	Add copy of letter of acceptance dated 6 May 2005	23 May 2011
Exhibit F	Add copy of letter of transfer dated 29 Nov 2016	29 Dec 2016

TABLE OF CONTENTS
UNIT NO. 1¹~~8~~3 (REVISED)

<u>Paragraph</u>	<u>Subject</u>	<u>Page</u>
<u>SECTION I - INTRODUCTION</u>		
1-01	Location	1
1-02	Protection Provided	1
1-03	Project Works	2
1-04	Construction Data and Contractor	2
1-05	Flood Flows	3
1-06	Assurances Provided by Local Interests	3
1-07	Acceptance by or Transfer to the State Reclamation Board	3
1-08	Inspection Procedure	3
<u>SECTION II - FEATURES OF THE PROJECT SUBJECT TO FLOOD CONTROL REGULATIONS</u>		
2-01	Levees	5
2-02	Drainage and Irrigation Structures	5
2-03	Channel	8
2-04	Miscellaneous Facilities	8
2-05	Environment Protection	9 *
<u>SECTION III - REPAIR OF DAMAGE TO PROJECT WORKS AND METHODS OF COMBATING FLOOD CONDITIONS</u>		
3-01	Repair of Damage	10
3-02	Applicable Methods of Combating Floods	10

EXHIBITS

<u>Exhibit</u>	<u>Description</u>	<u>Page</u>
A	Flood Control Regulations (Contained in Standard Manual)	Unattached
A-1	Location Drawing	1 Sheet
B	"As Constructed" Drawings	Unattached
C	Plates of Suggested Flood Fighting Methods (Contained in Standard Manual)	Unattached
D	Check List No. 1 - Levee Inspection Report (Contained in Standard Manual)	Unattached
E	Check Lists - Levees, Channels and Structures	Sheet 1 thru 10
F	Letters of Acceptance by or Transfer to the State Reclamation Board	Sheets 1 thru 9
G	Semi-annual Report Form	Sheets 1 and 2

SUPPLEMENT TO STANDARD
OPERATION AND MAINTENANCE MANUAL
SACRAMENTO RIVER FLOOD CONTROL PROJECT

UNIT NO. 113 (REVISED)

EAST LEVEE OF YOLO BYPASS, NORTH LEVEE OF
MINER SLOUGH, WEST LEVEES OF SUTTER SLOUGH
ELKHORN SLOUGH AND SACRAMENTO RIVER
ALL BORDERING RECLAMATION DISTRICT NO. 999

SECTION I

INTRODUCTION

1-01. Location. The improvement covered by this manual is that part of the Sacramento River Flood Control Project which includes the east levee of the Yolo Bypass from the south boundary of Reclamation District No. 900 downstream to Miner Slough, a distance of 15.43 miles; the north levee of Miner Slough from the Yolo Bypass to Sutter Slough (2.32 miles); the westerly levee of Sutter Slough from Miner Slough to Elkhorn Slough (3.74 miles); the westerly levee of Elkhorn Slough from Sutter Slough to the Sacramento River (9.66 miles); and the westerly levee of the Sacramento River from Elkhorn Slough to Winchester Lake (1.22 miles).

The levees of this unit are located within Reclamation District No. 999 and a small portion of Reclamation District No. 765, in Yolo County, California, as shown on the Location Map, EXHIBIT A-1. This manual replaces Unit No. 113 - Part No. 1.

1-02. Protection Provided. The levees bordering Reclamation District No. 999 are an essential feature of the Sacramento River Flood Control Project. They provide direct protection to adjacent agricultural lands against flood waters from the Yolo Bypass, Sacramento River, Miner, Sutter and Elkhorn Sloughs. Within this unit the grades of the adopted flood plane profiles and the project design capacities are as follows:

Stream	<u>Flood Plane Elevation</u> (C. of E. Datum)		Project Design Capacity (cubic feet per second)
	Upstream end	Downstream end	
Yolo Bypass	27.2	19.8	490,000
Miner Slough	19.8	19.7	10,000
Sutter Slough	21.0	19.8	25,500
Elkhorn Slough	21.0	21.0	0
Sacramento River	26.4	25.8	110,000

Along the Sacramento River and the Yolo Bypass the levee grade provides a freeboard of at least 6 feet above the adopted flood plane profile. Along the right banks of Miner, Sutter and Elkhorn Sloughs the levee grade provides a freeboard of at least 3 feet above the adopted flood plane profile.

1-03. Project Works. The flood control improvement covered by this manual is a part of the Sacramento River Flood Control Project authorized by the Flood Control Act of 1917 as modified by the Acts of 1928, 1937 and 1941, and consists of the east levee of the Yolo Bypass, the north levee of Miner Slough and the westerly levees of Sutter Slough, Elkhorn Slough and the Sacramento River bordering Reclamation District No. 999 as described in the above paragraph 1-01. This Unit No. 113 (Revised) replaces and supersedes Unit No. 113 - Part No.1 dated August 1955, which covered the Yolo Bypass levee only.

1-04. Construction Data and Contractor. Construction required by the Corps of Engineers to bring levees of this unit to project standards and to perform repair work to locally built levees was accomplished under the following job orders and contracts:

a. Enlargement of the east levee of Yolo Bypass from the south boundary of Reclamation District No. 900 downstream to Miner Slough was accomplished under Contract No. W-1105-eng-1294 by Olympian Dredge Company and completed on 14 November 1934. Specification No. 5867, Drawing No. 50-4-1378-3.

b. As shown on Drawing No. 50-4-2013 of EXHIBIT B, 800 linear feet of the east levee of Yolo Bypass located about 1.5 miles south of Lisbon station was rebuilt by hired labor under Job Order No. 864 and completed on 2 October 1942.

c. Emergency levee repairs were accomplished on the east levee of the Yolo Bypass under Contract No. DA-04-167-CIVENG-57-59 by Lee Stephens during the period from 3 October 1956 to 31 December 1956, Specification No. 2235, Drawing No. 50-4-3298.

d. Bank protection work was accomplished along the right bank of Sutter and Miner Sloughs under Contract No. DA-04-167-CIVENG-56-149 by Blake Brothers Company during the period from 1 May 1956 to 20 October 1956, Specification No. 1979, Drawing No. 50-4-3077.

e. Construction of an inlet structure at the head of Elkhorn Slough near Clarksburg was accomplished under Contract No. DA-04-167-CIVENG-56-195 by Lord and Bishop, Inc. during the period from 16 April 1956 to 14 October 1956, Specification No. 2027, Drawing No. 50-4-3174.

f. Bank protection work was accomplished along the right bank of the Sacramento River under Contract No. DA-04-167-CIVENG-60-30 by Elmer G. Wendt, Inc. during the period from 5 October 1959 to 8 June 1960, Specification No. 2601, Drawing No. 50-4-3614.

g. Bank sloping and stone protection on the right bank of the Sacramento River at Site Mile 42.5 (a portion of unit No. 19, Sacramento River Bank Protection Project) was accomplished under Contract No. DACW05-71-C-0021 by James L. Ferry

and Son during the period from 26 August 1970 to 20 December 1971. Specification No. 3427, Drawing No. 50-4-4378.

h. Bank protection and selective clearing on the right bank of the Sacramento River at Site Mile 42.3 (Unit No. 23) was accomplished under Contract No. DACW05-73-C-0012 by James L. Ferry and Son during the period from 1 August 1972 to 10 July 1974. Specification No. 4041, Drawing no. 50-4-4687.

i. Bank protection and selective clearing on the right bank of Sutter Slough at Site Miles 26.1 and 26.5 (of the Sacramento River Bank Protection Project), Unit No. 25 was accomplished under Contract No. DACW05-73-C-0046 by James L. Ferry and Son during the period from 8 November 1972 to 5 November 1974. Specification No. 4210, Drawing No. 50-4-4768.

j. Bank sloping, stone protection and selective clearing on the right bank of Sutter Slough at Site Miles 26.4, 27.0 and 27.9 and Miner Slough at Site Miles 6.0 and 6.5, (a portion of Unit 31) was accomplished under Contract No. DACW05-77-C-0046 by James L. Ferry and Sons Inc. Construction was completed on 15 October 1977, Specification No. 5106, Drawing No. 50-4-5164.

k. Bank sloping, stone protection and selective clearing on the right bank of Miner Slough at Site Miles 6.9 and 7.2, on the right bank of Steamboat Slough at Site Miles 17.2 and 20.1, and on the right bank of Sutter Slough at Site Miles 24.2, 24.8, 25.0 and 27.8 (a portion of Unit 36) was accomplished under Contract No. DACW05-80-C-0113 by E. W. Eldridge. Specification No. 5747, Drawing No. 50-4-5541.

l. Repair of bank settlement on the right (north) bank of Miner Slough between Sutter Slough and the Yolo Bypass, starting at the Ryer Avenue (Highway 84)/Holland Road intersection extending approximately 0.34-miles east along the levee crown. Accomplished under Contract No. DACW05-01-D-0022 (Task Order No. 5) completed 16 October 2003 by TN & associates, Inc. Specification No. 9983-A, Drawing No. 50-04-6057-A.

m. Emergency levee repairs and stone protection were accomplished at mile 0.21 and for 260 feet from mile 1.20, on the right bank of Sacramento River under Contract No. DACW05-97-C-0128 by Ford Construction and completed on 11 October 1997. Specification No. 9858E, Drawing No. 50-4-6031.

n. Emergency protection under PL 84-99 was provided along the Sacramento River at the following three sites:

- Site 2, Station 33+26 to 36+33 (20051230-005-007). Repairs consisted of restoring a 332 foot long levee slope to its original geometry. This was accomplished by placing 18-inch quarry rock to a minimum of 3-feet in depth (soil filled), two layers of coir fabric placed at the summer's mean water surface elevation, and 6-inches of seeded soil cover on top. Soil fill on top of 18-inch quarry rock was also used to develop

associated levee trench. Berm included anchored instream wood (i.e., 13 trees @ 16-feet on center) and plantings. Notched openings were placed along the berm at every 100-foot. It also included restoring the levee slope rock protection to match the existing adjacent undamaged area. Voids under an existing concrete platform between sites 2 and 3 were grouted.

- Site 3, Station 42+76 to 44+25 (20051230-005-008). Repairs consisted of restoring a 148-foot-long levee slope and rockfill protection to pre-flood conditions after an abandoned sunken bridge abutment was removed (total concrete removed/disposed of 70-cubic yards) and the scour hole and voids were filled with riprap. The levee slope restoration was accomplished by placing 18-inch quarry rock to a minimum of 3-feet in depth (soil filled), two layers of coir fabric placed at the summer's mean water surface elevation, and 6-inches of soil cover on top. In addition, a 12-inch layer of 12-inch pit run rock was placed under the quarry rock (above water only). Work included the installation of anchored instream wood (i.e., 5 trees @ 17 -feet on center) and plantings.

- Site 4, Station 64+42 to 66+42 (20051230-005-009). Repairs consisted of restoring 200-feet of levee embankment and rock slope protection to pre-flood conditions. The levee slope restoration was accomplished by placing 18-inch quarry rock to a minimum of 3-feet in depth (soil filled) , two layers of coir fabric placed at the summer's mean water surface elevation, and 6-inches of soil cover on top. In addition, a 12-inch layer of 12-inch pit run rock was placed under the quarry rock (above water only). Work included the installation of anchored instream wood (i.e., 5 trees @ 17 -feet on center) and plantings. Also, 20-cubic yards of concrete rubble placed by the Reclamation District (during the flood fight) was removed and disposed of. Construction was completed on February 2, 2007 under Contract No. W91238-06-D-0008. Specification Number 1138E, Drawing No. 50-04-6252.

- o. Levee enlargement, stone protection and bank sloping along the left bank of Miner Slough, Site Miles 1.45, 2.00, 2.40, 3.10, 3.70, 4.00, 4.70 and 5.20, and right bank of Sutter Slough, Site Mile 28.1 was completed on 16 November 1966 under Contract No. DA-04-167-CIVENG-66-102. Specification No. 3155, Drawing No. 50-4-4006.

- p. Bank sloping and stone protection along the Sutter Slough, right bank, Site Miles 25.5, 26.0 and 27 and left bank, Site Miles 22.9, 25.0, 25.4 and 28.0 and Miner Slough, right bank, Site Mile 6.8 and left bank, Site Mile 1.2 was completed on 24 December 1987 under Contract No. DACW05-87-C-0079. Specification No. 8054 and Drawing No. 50-4-5777.

- q. Bank sloping and stone protection along the right bank of the Sacramento River, Site Mile 42.7 was completed on 8 November 1989 under Contract No. DACW05-89-C-0037. Specification No. 8259, Drawing No. 50-4-5784.

1-05. Flood Flows. For purposes of this manual, the term "flood or "high water period" shall refer to flows when the water surface in Yolo Bypass reaches or exceeds the reading of 22.0 on the State Division of Water Resources continuous water stage recorder and staff gage located at the intersection of the east levee of Yolo Bypass and the north levee of Sacramento Bypass. Also when the water surface in Yolo Bypass reaches or exceeds a reading of 19.0 on the State Division of Water Resources continuous water stage recorder and staff gage located on the east levee of Yolo Bypass near Lisbon. Both gages are set on U. S. Corps of Engineers datum.

1-06. Assurances Provided by Local Interests. Assurances of cooperation by local interests is provided by State legislation as contained in Chapter 3, Part 2, Division 5 of the State Water Code (see paragraph 2-02a of the Standard Manual.

1-07. Acceptance by or Transfer to the State Reclamation Board. Responsibility for operating and maintaining the completed works was officially accepted by the Reclamation Board of the State of California on 18 December 1951, as shown on the attached letter of acceptance, EXHIBIT F. Copy of a letter of transfer dated 13 December 1951 for Sutter and Elkhorn Sloughs is also inclosed, see EXHIBIT F. Copies of letter of agreement to accept a culvert at the head of Elkhorn Slough in lieu of patrol roads on the levees of Elkhorn Slough are also shown in EXHIBIT F.

1-08. Inspection Procedure. Since the enactment by State Legislation of Chapter 1528, Statutes of 1947, the Department of Water Resources, State of California, has made semi-annual inspections of all levees of authorized flood control projects in the Sacramento - San Joaquin Drainage basin pursuant to the Federal Regulations of 16 August 1944 (Title 33), and reports its findings to the local agency, the State Reclamation Board and the Sacramento District, Corps of Engineers, U. S. Army. This activity, initiated pursuant to section 208.10 (a) of the Federal Regulations, has in effect provided for transfer from the local agencies to the State Department of Water Resources the obligation of compliance with Sections 8371, 8372, and 8373 of the Water Code of the State of California. These sections of the Code require the local responsible agencies to submit a report to the State Department of Water Resources on or before 1 June of each year on the condition of the levees and channels within their jurisdiction. Supervisory powers and duties of the Department are applicable to all works of the Sacramento River Flood Control Project maintained and operated by the local agencies without regard to status of completion, or expenditure of Federal funds on the construction of such works.

The following procedure is used in inspecting the levees of the responsible maintaining agency:

The personnel of the State Department of Water Resources make a detailed inspection in the spring and fall of each year and make a report on any required maintenance. The inspection objectives are to determine if the following items, which are a condensation of Federal Regulations, are being adhered to:

- a. That all brush, trees and wild growth other than sod are removed from the levee crown and slopes.
- b. That all weeds, grass and debris on the levee have been burned during the appropriate season, where not dangerous or impractical.
- c. That all grass and weeds on the levee have been mowed where removal by burning is dangerous or impracticable. This applies only on peat levees or where burning would constitute a hazard to improvements.
- d. That all burrowing animals have been exterminated.
- e. That all caves, sloughs, burrows, holes, slips or other damaged portions of the levee have been repaired.
- f. That all irrigation and drainage structures through the levee are in good working condition.
- g. That no revetment work or riprap have been displaced, washed out or removed
- h. That the crown of the levee is well shaped and maintained and that unauthorized vehicular travel is restricted.
- i. That stock grazing on the levee is restricted to conditions and seasons when the levee would not be seriously scarred or otherwise damaged thereby.
- j. That encroachments are not being erected on the levee which would hinder travel by authorized patrol vehicles.
- k. Prevent the erection of structures on, additions to, or alterations of, the levee unless authorized by permit from the State Reclamation Board.

Following this detailed inspection a joint field inspection is made with representatives of the responsible maintaining agency and the State Department of Water Resources to review and discuss the inspection report.

Upon completion of the fall inspection, the State Department of Water Resources publishes an annual report entitled, "Status of Project Levee Maintenance" which indicates the degree of proficiency attained by each obligated local agency in providing required maintenance.

SECTION II

FEATURES OF THE PROJECT SUBJECT TO FLOOD CONTROL REGULATIONS

2-01. Levees.

a. Description. The levees described in this manual border Reclamation District No. 999 and consist of the east levee of the Yolo Bypass from the south boundary of Reclamation District No. 900 downstream to Miner Slough, a distance of 15.43 miles; the north levee of Miner Slough from the Yolo Bypass to Sutter Slough (2.32 miles); the westerly levee of Sutter Slough from Miner Slough to Elkhorn Slough (3.74 miles); the westerly levee of Elkhorn Slough from Sutter Slough to the Sacramento River (9.66 miles); and the westerly levee of the Sacramento River from Elkhorn Slough to Winchester Lake (1.22 miles) - all as shown on the Location Map, EXHIBIT A-1. The levees of this unit were originally built by local interests and have been rebuilt or repaired by the Corps of Engineers to project grade and section. For more complete details of items of reconstruction of abovementioned levees, refer to the "As Constructed" drawings of EXHIBIT B.

b. For pertinent Requirements of the Code of Federal Regulations and other requirements see the following:

- (1) Maintenance – paragraph 4-02 of the Standard Manual.
- (2) Check Lists – Exhibit E of this Supplement Manual.
- (3) Operation – Paragraph 4-04 of the Standard Manual.
- (4) Special Instructions – Paragraph 4-05 of the Standard Manual.

~~c. Environmental Values. Oak trees preserved on the landside slope of the levee at site mile 42.5 during prosecution of contract listed in paragraph 1-04g shall not be removed as a part of normal maintenance as long as the trees remain in a healthy condition.~~

Revised Oct 1975

c. Environmental Values. Vegetation preserved as a part of selective clearing on the waterside berm or slope above the bank protection during prosecution of the contract shall not be removed as a part of normal maintenance as long as it remains alive and in a healthy state.

d. Inspection. The repaired erosion sites should be visually inspected at the beginning and end of each flood season, and during and after each flood event. The willow plantings shall be trimmed up to allow for visual inspection of the levee slopes. The inspector should note the presence of any of the following items:

- Displacement of rock riprap
- Erosion of soil not covered by riprap
- Depressions, changes in grade, slumps, "sinkholes", bulges, or cracking in the levee slope

- Cracks or depressions in the levee crest
- Rodent activity
- Tilting vegetation
- Seepage, boils, slumps, or "soft" conditions on the landside slope and toe area (during or right after flood events only)
- Loose, corroded, or missing anchoring chain or loose or missing anchoring hardware used to secure the instream wood to the anchor block.
- Missing or significantly decomposed instream woody material.

If any of the above conditions are noted, especially if significant changes have occurred since the previous inspection, then the conditions should be repaired to the lines and grades shown on the contract drawings as part of the normal levee maintenance program. This will include the replacement or adjustment of the anchoring chain for the instream wood.

e. Maintenance of Plantings: Plantings shall be trimmed up to allow for visual inspection of the repair site.

2-02. Drainage and Irrigation Structures.

a. Description. Drainage and irrigation structures which extend through the levee are listed as follows:

Location Levee Mile	Size of Steel Pipe	Gate Valve Location	Other Structure Description	Invert-Ft below crown
<u>Unit No. 1-Left Bank Yolo Bypass</u>				
0.11	14"	L. S.	Pump house L.S.	15.2
1.73	30"	W. S.		6.5
2.13	20"	L. S.		10.0
12.29	24"	W. S.	Pump L. S.	7.0
13.07	12"	W. S.	Pump house W. S.	5.0
15.25	36"	W. S.	Pump house L. S.	7.0

Continues on next page.

Location Levee Mile	Size of Steel Pipe	Gate Valve Location	Other Structure Description	Invert-Ft below crown
---------------------------	--------------------------	---------------------------	-----------------------------	-----------------------------

Unit No. 2-Right Bank Miner Slough

0.32	12"		Abandoned pipe	5.0
0.78	8"		Abandoned pump house W. S.	4.5
0.93	10"		Abandoned pipe	4.9
1.72	10"	W. S.	Pumphouse W. S.	8.3
1.78	8"	W. S.	Pump W. S.	7.7
2.31	10"	W. S.		4.0

Unit No. 3-Right Bank Sutter Slough

0.17	10"	L. S.		6.2
0.79	12"	W. S.	Pump-pile Structure W. S.	12.6
1.71	5"	W. S.	Pump W. S.	4.4
2.01	7"	W. S.	Pump W. S.	4.6
2.65	8"	W. S.		4.7
2.91	16"	L. S.	Pumphouse L. S.	9.3
3.17	8"	W. S.	Pump W. S.	2.5

Unit No. 4-Right Bank Sacramento River

0.00	5' x 5'	W. S.	Concrete culvert at Elkhorn Slough	30.0
0.02	2"	W. S.	Pump W. S.	4.5
0.71	18"	W. S.	Pump-pile structure W. S.	4.7
0.73	2-10"	L. S.	At beet pulp loading shed	3.8
0.81	16"	W. S.	Pump-pile structure W. S.	4.4
0.81	4"	W. S.	Pump-pile structure W. S.	4.4
0.89	6"	W. S.	Standard Oil Co. Bulk Plant	2.5
0.99	24"	W. S.		13.0
0.99	18"		Abandoned pipe	3.5
1.13	16"	L. S.		21.2
1.17	42"		Plate bolted L. S.	17.0

Unit No. 5-Right Bank Elkhorn Slough

0.03	10"	W. S.	Pumphouse W. S.	7.7
0.23	12"	W. S.	Pump-pile structure W. S.	11.0
0.61	16"	W. S.	Abandoned pipe	6.1
0.75	6"	W. S.		11.5
0.96	8"	W. S.		8.7
1.17	10"	W. S.	Pump-pile structure W. S.	3.7
1.34	8"	W. S.		12.7
1.89	8"	W. S.	Pumphouse W. S.	4.7
2.10	14"		Abandoned Pipe	3.0

Location Levee Mile	Size Steel Pipe	Gate Valve Location	Other Structure Description	Invert-Ft below crown
---------------------------	-----------------------	---------------------------	-----------------------------	-----------------------------

Unit No. 5-Right Bank Elkhorn Slough, Cont.

3.12	8"	W. S.	Slant pump W. S.	7.7
3.78	16"	W. S.	Pump-pile structure W. S.	6.3
4.41	2-48"	W. S.	R. D. 999 Main Drainage Pumps	10.0
4.42	2-60"	W. S.	R. D. 999 Main Drainage Pumps	10.0
4.84	10"	W. S.	Pumphouse W. S.	4.3
5.31	8"	W. S.		8.7
5.66	8"	W. S.	Pump W. S.	5.8
5.77	8"	W. S.	Pumphouse W. S.	7.0
6.29	8"	W. S.	Pump W. S.	10.7
6.61	14"	.	Abandoned pipe	7.2
6.92	14"	W. S.	Pump-pile structure W. S.	12.2
7.60	16"	.	Abandoned pipe	4.8
7.65	12"	W. S.	Pump-pile structure W. S.	7.0
7.69	12"	W. S.	Slant pump W. S.	12.0
7.81	3"	L. S.		11.3
7.89	12"	W. S.	Pumphouse W. S.	4.0
8.13	10"	W. S.	Pumphouse W. S.	14.4
8.13	8"		No control valves	12.7
8.14	2"	W. S.	Pumphouse W. S.	12.5
8.23	8"	W. S.	Pumphouse W. S.	6.2
8.43	8"			11.7
9.21	15"	W. S.	Pump W. S.	11.3

Note on abbreviations:

L. S. = Landside
W. S. = Waterside

b. For pertinent Requirements of the Code of Federal Regulations and other requirements see the following:

- (1) Maintenance - paragraph 5-02 of the Standard Manual.
- (2) Check Lists - Exhibit E of this Supplement Manual.
- (3) Operation - paragraph 5-04 of the Standard Manual.
- (4) Additional Requirements - paragraph 5-05 of the Standard Manual.
- (5) Safety Requirements - paragraph 5-06 of the Standard Manual

2-03 Channel.

a. Description. The channels within this unit lie adjacent to the levees as described in paragraph 2-01 and the project design capacities are as listed in paragraph 1-02 of this manual.

b. For pertinent Requirements of the Code of Federal Regulations and other requirements see the following:

- (1) Maintenance - paragraph 6-02 of the Standard Manual.
- (2) Check Lists - Exhibit E of this Supplement Manual.
- (3) Operation - paragraph 6-04 of the Standard Manual.
- (4) Safety Requirements - paragraph 6-05 of the Standard Manual.

It shall be the duty of the responsible maintaining agency to keep a patrol of the project works during all periods of flood in excess of a reading of 22.0 on the gage located at the intersection of the east levee of Yolo Bypass and the north levee of the Sacramento Bypass and/or a reading of 19.0 on the gage located on the east levee of Yolo Bypass near Lisbon, as indicated in paragraph 1-05 of this manual.

2-04. Miscellaneous Facilities.

a. Description. Miscellaneous structures or facilities which were constructed as a part of, or in conjunction with, the protective works, and which might affect their functioning, include the following:

(1) Utility Relocation. Because of the nature of the construction of structures by local interests, no records of any utility relocations are available.

(2) Hydrographic Facilities. Continuous water stage recorders and staff gages to be maintained by the State Department of Water Resources are as follows:

(a) Gage located at the intersection of the east levee of Yolo Bypass and north levee of Sacramento Bypass.

(b) Gage located on the east levee of Yolo Bypass near Lisbon.

(3) Bridges.

(a) Bridge crossing Miner Slough about one mile upstream from the Yolo Bypass.

(b) Bridge crossing Elkhorn Slough about one-half mile upstream from Sutter Slough.

b. For pertinent Requirements of the Code of Federal Regulations and other requirements see the following:

- (1) Maintenance - paragraph 7-20 of the Standard Manual.
- (2) Check Lists - paragraph 7-03 of the Standard Manual.
- (3) Operation - paragraph 7-04 of the Standard Manual.

2-05. Environment Protection.

a. Vegetation preserved as a part of selective clearing on the waterside berm or slope above the bank protection during prosecution of the contract shall not be removed as a part of normal maintenance. *
Dead trees with wildlife value will be retained except where they constitute a hazard to existing flood control works.

b. Consistent with the standards established in this manual and those established by the State of California, all wild growth, including but not limited to, trees, shrubs and other vegetation within those * project areas where environmental easements have been obtained by local interests shall be preserved and retained. (Reference Site Miles 174.4 and 177.4, right bank.)

SECTION III

REPAIR OF DAMAGE TO PROJECT WORKS AND METHODS OF COMBATING FLOOD CONDITIONS

3-01. Repair of Damage. In the event of serious damage to the project works, whether due to flood conditions or other causes, and which may be beyond the capability of local interests to repair, the responsible maintaining agency will contact a representative of the Division of Water Resources, State of California, who coordinates maintenance of project works of the Sacramento River Flood Control Project. The State representative will give assistance or advice, or will determine appropriate action to be taken.

3-02. Applicable Methods of Combating Floods. For applicable methods of combating flood conditions, reference is made to Section VIII of the Revised Standard Manual, where the subject is fully covered.

EXHIBIT A

FLOOD CONTROL REGULATIONS
(See Standard Manual)

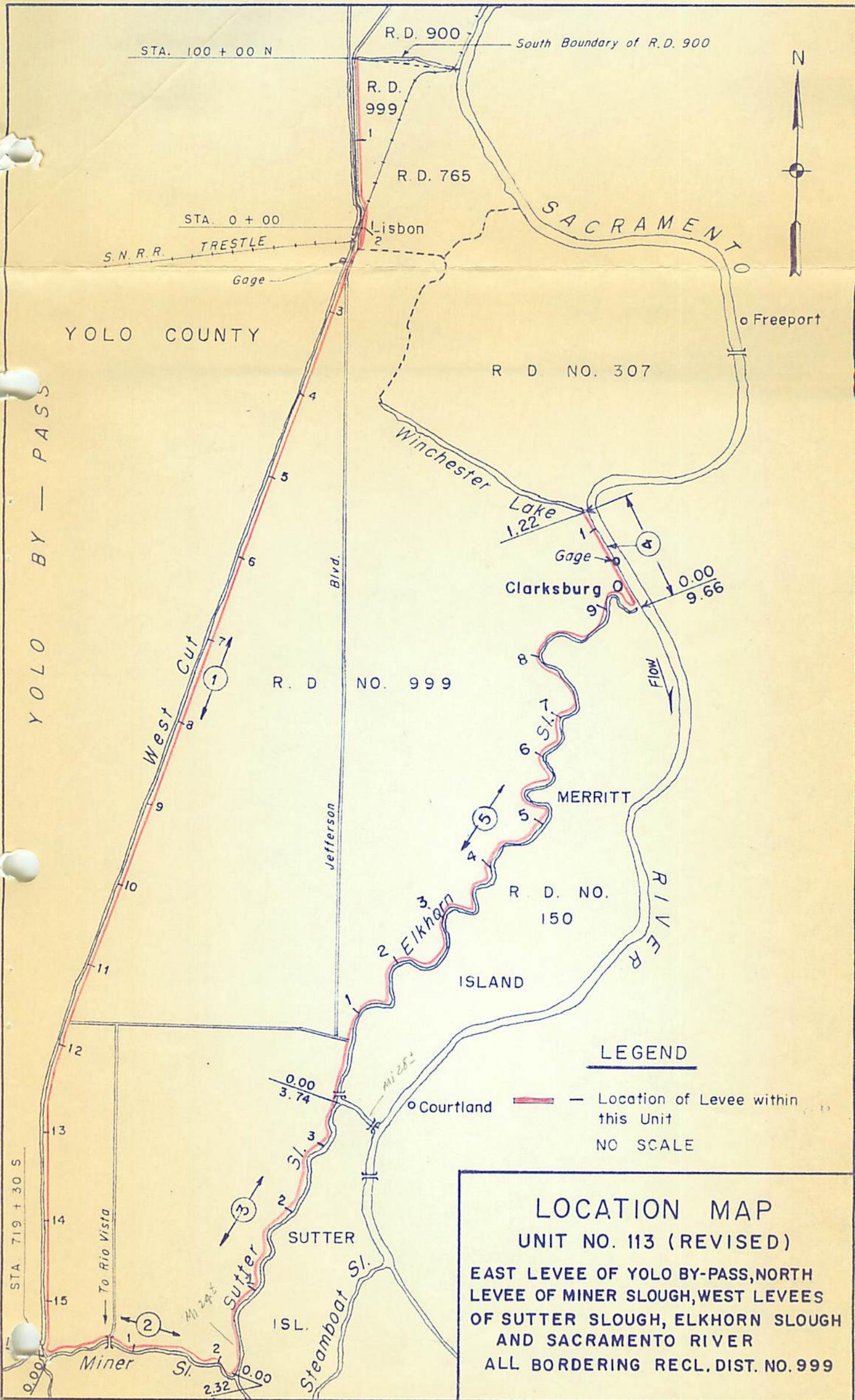


EXHIBIT B
“AS CONSTRUCTED”
DRAWINGS

See separate folder for the following drawings:

<u>File No.</u>	<u>Title</u>
50-4-1378-3	Enlargement of East Levee of Yolo Bypass from Causeway South to Miner Slough, sheets 1, 2 and 3.
50-4-2013	Enlargement of East Levee of Yolo Bypass approximately 1.5 miles South of Lisbon Station, 1 sheet.
50-4-3298	Emergency Levee Repairs on the East Levee of the Yolo Bypass, in 3 sheets.
50-4-3077	Bank Protection Along the Right Bank of Sutter and Miner Sloughs, in 11 sheets.
50-4-3174	Inlet Structure at the Head of Elkhorn Slough near Clarksburg, in 4 sheets.
50-4-3614	Bank Protection Along the Right Bank of the Sacramento River, in 7 sheets.

Additional drawings of cross-sections, structures, and miscellaneous facilities are available in the office of the District Engineer.

50-4-4378	Bank Protection, Various Locations, Left Bank, Sacramento River between mile 24.7 and 53.7, in 23 sheets
50-4-4687	Bank Protection, Various Locations Right and Left Banks, Sacramento River Mile 55.0 to Mile 16.0, in 28 sheets.
50-4-4768	Bank Protection, Various Locations, Sutter, Steamboat, Miner and Georgiana Sloughs, in 33 sheets.
50-4-5164	Bank Protection, Various Locations, Right and Left Banks, Miner, Sutter and Steamboat Slough, in 22 sheets.
50-4-5541	Bank Protection, Various Locations, Right and Left Banks, Miner Sutter, Steamboat and Elk Sloughs.

EXHIBIT B
Unattached

- 50-4-5777 Bank Protection, Contract 41A, Right and Left Banks, River Mile 15.0 to Mile 30.0 and Tributaries, in 59 Sheets
- 50-4-5784 Bank Protection, Contract 42, Right and Left Banks, Sacramento River Mile 7.8 to Mile 56.0 and Tributaries, in 75 Sheets
- 50-4-6031 PL 84-99 – Phase III Emergency Levee Restoration Sacramento River and Yolo Bypass RD 999 levee miles 0.21 and 1.20-1.25, in 3 sheets.
- 50-4-6057-A Bank Protection, right (north) bank of Miner Slough between Sutter Slough and the Yolo bypass, in 15 sheets.
- 50-04-6252 PL 84-99 Levee Rehabilitation Project SN 5/RD 999, in 10 sheets.
- 50-4-4006 Bank protection right and left banks, Sutter Slough, left bank Miner Slough.

EXHIBIT C

PLATES OF SUGGESTED FLOOD FIGHTING METHODS

(See Standard Manual)

EXHIBIT D

CHECK LIST NO. 1

LEVEE INSPECTION REPORT
(See Standard Manual)

EXHIBIT E

CHECK LISTS OF LEVEES,
CHANNEL AND STRUCTURES

For definition of "flood" or "high water
period" see paragraph -105 of this manual.

CHECK LIST NO. 2

UNIT NO. 113 (Revised)

Inspector's Report Sheet No. _____

Inspector _____

Date _____

Superintendent _____

Item	Remarks
(a) Location by Station	
(b) Settlement, sloughing, or loss of grade	
(c) Erosion of back slope	
(d) Condition of roadways, including ramps	
(e) Evidence of seepage	
(f) Condition of farm gates and fencing	
(g) Maintenance measures taken since last inspection	
(h) Comments	

INSTRUCTIONS FOR COMPLETING SHEET 2, EXHIBIT E
(To be printed on back of sheet 2)

- Item (a) Indicate levee station of observation, obtained by pacing from nearest reference point; indicate right or left bank.
- Item (b) If sufficient settlement of earthwork has taken place to be noticeable by visual observation, indicate amount of settlement in tenths of a foot. If sloughing has caused a change in slope of the embankment sections, determine the new slope. Note areas where erosion or gulying of the section has occurred.
- Item (c) If sufficient erosion or gulying of back face of back toe of levee has taken place to be noticeable by visual inspection, indicate area affected and depth.
- Item (d) Note any natural change in any section of roadway or ramps. Indicate any inadequacy in surface drainage system.
- Item (e) Indicate any evidence of seepage through the embankment section.
- Item (f) Indicate the serviceability of all farm gates across the embankments and roadway, and indicate if repainting is required.
- Item (g) Indicate maintenance measures that have been performed since last inspection and their condition at the time of this inspection.
- Item (h) Record opinion, if any, of contributory causes for conditions observed and also any observations not covered under other columns.

NOTE: One copy of the Inspector's Report is to be mailed to the District Engineer immediately on completion, and one copy is to be attached to and submitted with the Superintendent's semi-annual report.

CHECK LIST NO. 3

CHANNEL AND RIGHT-OF-WAY
UNIT NO. 113 (Revised)

Inspector's Report Sheet No. _____ Inspector _____

Date _____ Superintendent _____

Item	Remarks
(a) Name of channel and location by stations	
(b) Vegetal growth in channel	
(c) Debris and refuse in channel	
(d) New construction within right-of-way	
(e) Extent of aggradation or degradation	
(f) Condition of riprapped section	
(g) Condition of bridges	
(h) Measures taken since last inspection	
(i) Comments	

INSTRUCTIONS FOR COMPLETING SHEET 4, EXHIBIT E
(To be printed on back of Sheet 4)

- Item (a) Indicate station of observation obtained by pacing from nearest reference point.
- Item (b) Note nature, extent, and size of vegetal growth within the limits of flood flow channel.
- Item (c) Note nature and extent of debris and refuse that might cause clogging of the conduits of the irrigation intake works, fouling of the tainter gates, or the bridges over the channel.
- Item (d) Report any construction along the diversion channel or above the diversion channel or above the diversion works that has come to the attention of the inspector and that might affect the functioning of the project.
- Item (e) Indicate any change in grade or alignment of the channels, either by deposition or sediment or scour, that is noticeable by visual inspection. Estimate amount and extent.
- Item (f) Indicate any change that has taken place in the riprap such as disintegration of the rock, erosion, or movement of the rock. Note the presence of vegetal growth through the riprap.
- Item (g) Note any damage or settlement of the footings of the bridges. Indicate condition of wooden structures and if repainting is required. Indicate condition of bridge approaches, headwalls, and other appurtenances.
- Item (h) Indicate maintenance measures that have been performed since the last inspection and their condition at time of this inspection.
- Item (i) Record opinion, if any, of contributory causes for conditions observed, also any observations not covered under other columns.

NOTE: One copy of the Inspector's Report is to be mailed to the District Engineer immediately on completion, and one copy is to be attached to and submitted with the Superintendent's semi-annual report.

CHECK LIST NO. 4

DRAINAGE AND IRRIGATION STRUCTURES

UNIT NO. 113 (REVISED)

Inspector's Report Sheet No. _____ Inspector _____

Date _____ Superintendent _____

(a) Location by levee Mile	(b) Bank	(c) Debris or other obstruction to flow	(d) Damage or Settlement of pipe or conduit	(e) Condition of Concrete headwall or invert paving	(f) Condition of right-of-way adjacent to structure	(g) Repair Measures taken since last inspection	(h) Comments
<u>Unit No. 1 - Left Bank Yolo Bypass</u>							
0.11	Left						
1.73	Left						
2.13	Left						
12.29	Left						
13.07	Left						
15.25	Left						
<u>Unit No. 2 - Right Bank Miner Slough</u>							
0.32	Right						
0.78	Right						
0.93	Right						
1.72	Right						
1.78	Right						
2.31	Right						

CHECK LIST NO. 4

DRAINAGE AND IRRIGATION STRUCTURES

UNIT NO. 113 (REVISED)

Inspector's Report Sheet No. _____

Inspector _____

Date _____

Superintendent _____

(a) Location by levee Mile	(b) Bank	(c) Debris or other obstruction to flow	(d) Damage or Settlement of pipe or conduit	(e) Condition of Concrete headwall or invert paving	(f) Condition of right-of-way adjacent to structure	(g) Repair Measures taken since last inspection	(h) Comments
Unit No. 3 - Right Bank Sutter Slough							
0.17	Right						
0.79	Right						
1.71	Right						
2.01	Right						
2.65	Right						
2.91	Right						
3.17	Right						
Unit No. 4 - Right Bank Sacramento River							
0.00	Right						
0.02	Right						
0.71	Right						
0.73	Right						
0.81	Right						
0.81	Right						

DRAINAGE AND IRRIGATION STRUCTURES

UNIT NO. 113 (REVISED)

Inspector's Report Sheet No. _____

Inspector _____

Date _____

Superintendent _____

(a) Location by Levee Mile	(b) Bank	(c) Debris or other obstruction to flow	(d) Damage or Settlement of pipe or conduit	(e) Condition of concrete headwall or invert paving	(f) Condition of right-of-way adjacent to structure	(g) Repair Measures taken since last inspection	(h) Comments
	Unit No. 4	Right Bank	Sacramento	River, Cont.			
0.89	Right						
0.99	Right						
0.99	Right						
1.13	Right						
1.17	Right						
	Unit No. 5	Right Bank	Elkhorn	Slough			
0.03	Right						
0.23	Right						
0.61	Right						
0.75	Right						
0.96	Right						
1.17	Right						
1.34	Right						
1.89	Right						
2.10	Right						

**CHECK LIST NO. 4
DRAINAGE AND IRRIGATION STRUCTURES**

UNIT NO. 113 (REVISED)

Inspector's Report Sheet No. _____

Inspector _____

Date _____

Superintendent _____

(g) Location by Levee Mile	(b) Bank	(c) Debris or other obstruction to flow	(d) Damage or Settlement of pipe or conduit	(e) Condition of concrete headwall or invert paving	(f) Condition of right-of-way adjacent to structure	(g) Repair Measures taken since last inspection	(h) Comments
3.12	Right						
3.78	Right						
4.41	Right						
4.42	Right						
4.84	Right						
5.31	Right						
5.66	Right						
5.77	Right						
6.29	Right						
6.51	Right						
6.92	Right						
7.60	Right						
7.65	Right						
7.69	Right						
7.81	Right						
7.89	Right						
8.13	Right						
8.13	Right						
8.14	Right						
8.23	Right						
8.43	Right						
9.21	Right						
Unit No. 5 - Right Bank Blkhorn Slough, Cont.							

INSTRUCTIONS FOR COMPLETING SHEET (6 THRU 9) EXHIBIT E
(To be printed on back of Sheet 6 thru 9)

- (1) Enter station of all structures under Column (a) for check list.
- (2) Inspect inlet, barrel, and outlet for accumulation of sediment, rubbish, and vegetal matter. Note condition under Column (c).
- (3) If any settlement or damage to the pipe, barrel, or invert of the drain has occurred, estimate the location and amount. Note particularly if any backfill has come into the pipe or been disturbed. Record observations under Column (d).
- (4) Inspect the concrete portions of the structures for evidence of settlement, cracks, "pop-outs", spaces, abrasive wear, or other deterioration. Record conditions under Column (e).
- (5) Inspect backfill area adjacent to structure for evidence of erosion caused by overflow of the drainage structure and note conditions in Column (f).
- (6) Under Column (g) indicate physical measures that have been taken to correct conditions reported in last inspection, and their condition at time of this inspection.
- (7) Under Column (h) record opinion, if any, of contributory causes for conditions observed, also any observations not covered under other columns.
- (8) A copy of the inspector's report is to be mailed to the District Engineer immediately on completion, and a record copy shall be attached to the Superintendent's semi-annual report.

EXHIBIT F

LETTER OF ACCEPTANCE

BY OR TRANSFER TO THE STATE RECLAMATION BOARD



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

NOV 29 2016

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

Dear Ms. Gallagher:

The purpose of this letter is to notify the Central Valley Flood Protection Board of the completion of an effort to update the Operation and Maintenance Manual Supplements for the Sacramento River Flood Control Project and the Lower San Joaquin River Levees and Lower San Joaquin River and Tributaries Project. These updates are a compilation of revisions made to the project over time and where we had record of a transfer letter to the Board. These updated supplements are the most current version and should be utilized as the baseline version for any future project modifications.

This process and the compiled updates have been coordinated with the Central Valley Flood Protection Board and Department of Water Resources staffs for review and comment. All comments have been addressed or incorporated into the manuals.

The Board staff has been provided a copy of the manuals in electronic format. Future updates will include entire unit supplements so updates can be seen in context with the entire unit supplement. The list of completed supplements, by the unit number and title, are attached. If you have any questions regarding this transmittal, please contact Gary Kamei at 916-557-6845.

Sincerely,

A handwritten signature in black ink, appearing to read "D. G. Ray", written over a horizontal line.

David G. Ray, P.E.
Colonel, U.S. Army
District Commander

Enclosures

Standard O&M Manual Sacramento River Flood Control Project	
Unit No.	Project Name
101	RD 341 Sherman Island
102	E. Levee of Sac River, Isleton to Threemile Slough & N. Levee of Threemile Slough from Sac River to SJ River
103	Both Levees of Georgiana Slough & E. Levee of Sac River from Walnut Grove to Isleton
104	Levees around Grand Island
105	Levees Around Reyer Island
106	S. Levee Lindsey Slough & W. Levee of Yolo BP from Lindsey Slough to Watson Hollow and N. Levee of Watson Hollow Drain
107	Levees Around Hastings Tract
108	Levees Around Peters Tract
109	West Levee of Yolo Bypass & E. Levee of Cache Slough
110	Levees Around Sutter Island
111	E. Levee of Sac River from Freeport to Walnut Grove
112	Levees Around Merritt Island
113	E. Levee Yolo Bypass, N. Levee Miner Slough, W. Levees Sutter Slough, Elkhorn Slough & Sac River, All Bordering RD 999
114	W. Levee of Sac River from Northern Boundary of RD 765 to Southern Boundary of RD 307
115	E. Levee of Sac River from Sutterville Rd to Northern Boundary of RD 744
116	W. Levee of Sac River from Sac Weir to Mi 51.2 & S. Levee of Sac Bypass & E. Levee of Yolo Bypass from Sac Bypass to Southern Boundary of RD 900
117	E. Levee Sac River through City of Sac from Tower Bridge to Sutterville Rd
118.1	E. Levee of Sac River from American River to Tower Bridge & S. Levee of American River from Mayhews Downstream to Sac River
118.2	N. Levee American River, E. Levee Natomas Canal, Both Levees Arcade Creek, S. Levee Linda Creek, & Magpie Creek Diversion Channel
118.2 Sup	Vegetation on Mitigation Sites E. Levee of Sac River from American River to Tower Bridge & S. Levee of American River from Mayhews Downstream to Sac River
119	Putah Creek Channel & Levees & W. Levee of Yolo Bypass from Yolo Causeway Downstream 3 mi. Includes O&M manual for the Yolo Basin wetlands, and South Fork Putah Creek Preserve Restoration Section 1135 Authorization.
120	Relocated Willow Slough Channel & Levees & W. Levee Yolo Bypass from mouth of Relocated Willow Slough to Yolo Causeway
121	R. Levee of Yolo Bypass from Willow Slough Bypass to Woodland Rd RD2035
122.1	W. Levee of Sac River from Mi 70.8 to Sac Weir & N. Levee of Sac Bypass & E. Levee of Yolo Bypass from Woodland Hwy to Sac Bypass
123	W. Levee of Sac River from East End of Fremont Weir to Mi 70.8 & E. Levee of Yolo Bypass from East End Fremont Weir to Woodland Hwy RD 1600

124	N. Levee of American River from Natomas E. Canal to Sac River & E. Levee of Sac River from Natomas Cross Canal to American River. Includes supplement, Vegetation on Mitigation Sites.
125	Back Levee of RD 1000
126	Cache Creek Levees & Settling Basin Yolo Bypass to High Ground
127	Knights Landing Ridge Cut & Sac River & Yolo BP Levees of RD's 730 and 819 & S. Levee of Sycamore Slough
128	E. Levee of Sac River from Sutter Bypass to Tisdale Weir all within RD 1500
129	S. Levee of Tisdale By-Pass from E. Levee Sac River to W. Levee Sutter BP & W. Levee of Sutter BP Downstream to E. Levee of Sac River
130	W. Levee Sac River from Sycamore Slough to Wilkins Slough (Mi. 89.9 to Mi. 117.8)
131	W. Levee Sac River from Wilkins Slough to Colusa (Mi. 117.8 to Mi. 143.5)
132	Back Levees of RD 108
133	E. Levee of Sac River from Winship School to Tisdale BP & N. Levee of Tisdale BP & W. Levee of Sutter BP from Long Bridge to Tisdale BP
134	Levees of RD 70, E. Levee of Sac River from Butte Slough Outfall Gates to Winship School & W. Levee of Sutter BP from Butte Slough Outfall Gates to Long Bridge
135	E. Levee of Sutter BP from Sutter Buttes Southerly to Junction with Feather River & E. & W. Levees of Wadsworth Canal & Levee of Intercepting Canals
136	E. Levee of Sac River from Butte Slough Outfall Gates to the Princeton-Afton Rd (Mi. 138.3 to Mi. 164.4)
137	W. Levee of Sac River from North End of Princeton Warehouse to Colusa Bridge
138	E. Levee of Sac River from Parrott-Grant Line to Princeton-Afton Rd
139	W. Levee of Sac River from N. Boundary of LD 2 to North End of Princeton Warehouse
140	W. Levee of Sac River in LD 1 (Mi. 170.5 to Mi. 184.7). Includes mitigation site O&M manual, Yuba County
141.1	E. Levee of Feather River from Bear River to Natomas CC & S. Levee of Bear River & Both Levees of Yankee Slough. Parts 1 and 2
141.2	E. Levee of Feather River from Bear River to Natomas CC & S. Levee of Bear River & Both Levees of Yankee Slough. Parts 1 and 2
142	Back Levee of RD 1001
143	W. Levee of Feather River from North Boundary of RD 823 to E. Levee of Sutter Bypass
144	W. Levee of Feather River from North Boundary of LD 1 to North Boundary of RD 823
145	E. Levee of Feather River, S. Levee of Yuba River, Both Levees of WPRR Intercepting Channel, W. Levee of South Dry Creek & N. Levee of Bear River
146	N. Levee of Bear River & S. Levee of South Dry Creek RD 817 & Vicinity of Wheatland
147	Levee Around the City of Marysville & N. Levee of Yuba River to a Point 1.8 Mi. Upstream from Marysville

148	W. Levee of Feather River from North Boundary of RD 777 to North Boundary of LD 1
149	S. Levee of Yuba River Maintenance Area No. 8
151	E. Levee Feather River from Honcut Creek to Marysville & S. Levee of Honcut Creek & E. Levee of RD 10
152	W. Levee of Feather River from N. Boundary of RD 777 to Western Canal Intake (Levee of Drainage District No. 1)
153	Lower Butte Creek Channel Improvement, Colusa, Glenn & Butte Counties
154	Moulton Weir & Training Levee Sacramento River
155	Colusa Weir & Training Levee Sacramento River
156	Tisdale Weir & Bypass
157	Fremont Weir, Sacramento River
158	Sacramento Weir, Sacramento River
159	Pumping Plants No. 1, 2 & 3, Sutter Bypass
160	Sutter Butte Canal Headgate
161	Butte Slough Outfall Gates
162	Knights Landing Outfall Gates, Sacramento River

Standard O&M Manual San Joaquin River

Unit No.	Project Name
1	Right Bank Levee of the San Joaquin River & French Camp Slough within RD 404
2	Right Bank Levee of the San Joaquin River & French Camp Slough within RD 17
3	North Levee of Stanislaus River & East Levee of the San Joaquin River within RD 2064, 2075, 2094 and 2096
4	East Levee of San Joaquin River within RD 2031
5	East Levee of the San Joaquin River Within RD No. 2092
6	East Levee of the San Joaquin River in RD Nos. 2063 & 2091
7	West Levee of San Joaquin River & North Levee of Old River RD Nos. 524 & 544
8	Right Banks of Old River & Salmon Slough Within RD No. 1 & RD No. 2089
9	Levees Around RD No. 2062 & San Joaquin County Flood Control District Area No.2
10	West Levee of Paradise Cut RD No. 2058 & SJ County Flood Control District, Area No.2
11	West Levee of San Joaquin River from Durham Bridge to Paradise Dam Within RD No. 2085 & 2095
12	West Levee of San Joaquin River From Opposite Mouth of Tuolumne River Downstream to Stanislaus County Line Within RD Nos. 2099, 2100, 2101, & 2102
13	West Levee of the San Joaquin River in RD No. 1602

DEC 21 2007

Flood Protection and Navigation Section

Mr. Jay Punia, General Manager
The Reclamation Board
State of California
3310 El Camino Avenue, Room LL40
Sacramento, California 95821

Dear Mr. Punia:

This letter is to transfer the U.S. Army Corps of Engineers (Corps) recently completed portion of work performed under the PL 84-99, Flood Control and Coastal Emergencies (FCCE) (33 U.S.C. 701n) (69 Stat. 186) for emergency management activities. Emergency repairs were made at 3 sites to rehabilitate a total of 680 feet of eroded levee slope along the western bank of the Sacramento River north of Clarksburg within Unit 4 of Reclamation District No. 999. Additional information about the repairs and location of the sites may be found in the document titled, *Project Information Report for PL 84-99 Levee Rehabilitation, Reclamation District 999*, dated August 2006.

This work meets the requirements of the existing Operation and Maintenance Manuals (O&M) for the PL 84-99 Rehabilitation and Inspection Program (RIP); and therefore, said flood control work is transferred as of the date of this letter to the State of California for operation, maintenance, repair, replacement, and rehabilitation (OMRR&R).

The repairs were completed by Wood Brothers, Inc, in accordance with Specification Number 1138E, Design File Number 50-04-6252, Contract Number W91238-06-D-0008, and Task Order Number 0001. As-designed drawings and revisions to the Operation and Maintenance Manual are enclosed.

If you have any questions regarding this project, please contact the Project Manager, Mr. Lester Schmittner, at (916) 557-7812. If you have any questions regarding this transfer, please contact Ms. Meegan Nagy at (916) 557-7257 or Mr. Robert Murakami at (916) 557-6738, Flood Protection and Navigation Section.

Sincerely,

Thomas C. Chapman, P.E.
Colonel, U.S. Army
District Engineer

Unit 113

Enclosure

CF: Mr. Bob Webber, Reclamation District 999, 37363 Road 144, Clarksburg, CA 95612-5003

file:
yolo

checked

cc:
CESPK-PM-C (Schmittner)
CESPK-CO-OR (Murakami)
CESPK-CO-OR (Strickland)
CESPK-CO-RS
CESPK-ED
CESPK-ED-D
CESPK-PM

MURAKAMI/DD *ea*
NAGY *ms*
SCHMITTNER *kg*
KORMAN *kg*
COWAN *MEC*
~~RICHERT~~
~~ALTENDORF~~
~~PORTER~~
CHAPMAN *TC*

Unit 7113

RD 999 was transferred.

THE RECLAMATION BOARD

3310 El Camino Avenue, LL40
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 579-0682
Permits: (916) 574-0653 FAX: (916) 574-0681

RECEIVED

MAY - 6 2005



MAY 03 2005
Colonel Ronald N. Light
District Engineer
Sacramento District
U.S. Army Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

Dear Colonel Light:

In your July 28, 2004 letter to The Reclamation Board (Board), the U.S. Army Corps of Engineers (Corps) transferred the Lower Sacramento Area, Phase IV, Levee Reconstruction Project, Separable Elements, Reclamation District (RD) No. 999 work to The Reclamation Board (Board) for operation and maintenance. The completed work is located within RD 999 on the right bank of Miner Slough between Sutter Slough and the Yolo Bypass. A description of the repairs and the location of the site are included in the document titled, "Project Information Form, Sacramento River Flood Control Project, Lower Sacramento Area (Phase IV), Solano County, California - Site 2" (attached).

The Board, on behalf of the State of California, accepted the aforementioned work at its April 15, 2005 meeting and transferred the completed work to RD 999 for operation and maintenance. Your letter of August 9, 2004 transmitted an addendum to the operation and maintenance manual for the Project and requested review and comment from Board and RD 999 staffs. Board staff has reviewed the addendum and has no comments. RD 999 staff has reviewed and indicated acceptance of the addendum to the operation and maintenance manual by letter dated October 5, 2004 (attached).

If you have any questions, you may contact me at (916) 574-0609, or your staff may contact Larry Lee, Chief of the Department of Water Resources' Project Development Section B, of the Department of Water Resources' Division of Flood Management, at (916) 574-2736.

Sincerely,

Original signed by

Peter D. Rabbon
General Manager

Attachments

cc: (See attached list.)

Unit 113

July 28, 2004

Navigation and Flood Control Unit

**Mr. Peter D. Rabbon, General Manager
The Reclamation Board
3310 El Camino Avenue, Room LL40
Sacramento, California 95821**

Dear Mr. Rabbon:

This letter is to transfer a portion of work along Miner Slough to the Reclamation Board for Operation, Maintenance, Repair, Replacement, and Rehabilitation (OMRR&R). The completed work is located within Reclamation District 999 on the right bank of Miner Slough between Sutter Slough and the Yolo Bypass. The completed work includes one discontinuous site repaired, based on embankment settlement as documented in the Design Memorandum titled, "Sacramento River Flood Control Project, California, Lower Sacramento Area, Phase IV" dated March 1997. A description of the repairs and the location of the site are included in the document titled, "Project Information Form, "Sacramento River Flood Control Project, Lower Sacramento Area (Phase IV), Solano County, California - Site 2"(encl 1).

The work was performed under the general authority of the Flood Control Act of March 1917 and the special authority granted under the Conference Report accompanying the Energy and Water Development Appropriation Act of 1987, Public Law 99-591. This work now meets the requirements of the existing Operation and Maintenance Manual (O&M) for the Sacramento River Flood Control Project; and, therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred as of the date of this letter to the State of California for operation and maintenance.

The repairs were completed in accordance with Specification Number 9983-A, Design File Number 50-04-6057-A, and Contract Number DACW05-01-D-0022. A final inspection was conducted on October 16, 2003 and all noted deficiencies have been resolved. The as-built drawings for the site are included in the document titled, "Sacramento River Flood Control Project, Phase IV, Levee Reconstruction Contract 1A (Site 2 - RD 999), Lower Sacramento Area, California" (encl 2). An addendum to the O&M will be sent at a later date.

If you have any questions regarding this project, please contact Mr. Eric Nagy of the Programs and Project Management Division at (916) 557-5114. If you have any question regarding this transfer, please contact Mr. Mohsen Tavarna of the Navigation and Flood Control Unit at (916) 557-5282.

Sincerely,

ORIGINAL SIGNED

**Ronald N. Light
Colonel, Corps of Engineers
District Engineer**

Enclosures

**Copy Furnished:
Mr. Larry Lee, State of California, Department of Water Resources, 3310 El Camino Ave, Room 140,
Sacramento, CA 95821**

Exhibit F



REPLY TO
ATTENTION OF

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

APR 23 2001

Navigation and Flood Control Unit

Mr. Peter D. Rabbon, General Manager
The Reclamation Board
State of California
1416 - 9th Street, Room 1601
Sacramento, California 95814

Dear Mr. Rabbon:

This letter is to transfer a portion of work on the west levee of the Sacramento River from the south boundary of RD 307 to Netherlands Road in Clarksburg, in RD 999, to the State of California for operation and maintenance.

The work consisted of restoring the west levee of the Sacramento River damaged by the January 1997 Flood by installing levee fill over geotextile in two eroded areas, with rockfill being placed above existing trees, at levee Mile 0.21. Slope stone protection was placed over rock fill, which in turn was placed over 6-inches of earth bedding over geotextile fabric, for approximately 260-feet, beginning at L.M. 1.20. The work, as listed in the enclosure, was completed on October 11, 1997 in accordance with Specification No. 9858E, Drawing File 50-04-6031, Contract No. DACW05-97-C-0128.

The work was performed under the general authority of 33 U.S.C. 701n (69 Stat. 186) PL 84-99 and now meets the requirements of the Operations and Maintenance Manual for the Sacramento River Flood Control System in RD 999. Therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred as of the date of this letter to the State of California for operation and maintenance.

This portion of the project work will be added by amendment to the Operation and Maintenance Manual, Sacramento River Flood Control Project, which is being transferred under separate cover.

Sincerely,

Robert A. O'Brien III
Lieutenant Colonel,
Corps of Engineers
Deputy District Engineer

Enclosure

Exhibit F

November 16, 1989

Navigation and Flood Control Unit

The Reclamation Board
State of California
1416 - 9th Street, Room 455-6
Sacramento, California 95814

not

Members of the Board:

This is in regard to the joint inspections of November 8 & 9, 1989, made for the purpose of transferring a portion of the Sacramento River Bank Protection Project (Unit 42) to the State of California for operation and maintenance. The flood control work consists of bank sloping, placement of stone protection and miscellaneous work on the Sacramento River right bank at Site Miles 23.6, 26.7, 42.7, 43.5, 56.5 and 56.7 and left bank at Site Miles 20.2, 33.3 and 36.1; Georgiana Slough right bank at Site Miles 7.9 and 8.1 and left bank at Site Miles 4.8 and 11.7; Steamboat Slough right bank at Site Mile 22.1 and left bank at Site Miles 19.8, 23.2 and 25.9, and Sutter Slough left bank at Site Mile 22.2.

The sites were completed on November 8, 1989, in accordance with Contract Number DACW05-89-C-0037, Specification Number 8259 and Drawing Number 50-4-5784.

11-14-89
ROMPALA/mt

The work was performed under general authority of the Flood Control Act of 1960, 86th Congress, 2nd Session (PL 86-645, July 14, 1960), Section 2304(a), Title 10, and the Water Resources Development Act of 1986 (PL 99-662, October 17, 1986), and now meets the requirements of the Sacramento River Bank Protection Project. Therefore, said work together with the waterway bank contiguous thereto is transferred as of November 9, 1989 to the State of California for operation and maintenance.

in for
KELLY
A. SMITH
[Signature]
HEIN

This portion of the work will be added by amendment to the Operation and Maintenance Manual, Supplement Numbers 103, 104, 110, 111, 113, 114 and 116, Sacramento River Flood Control Project. Copies will be furnished to your office at a later date.

FAST

- cc: ~~D-O Div~~; ~~Fld Cntrl Unit~~;
- ~~Central Valley Sec~~; ~~Prog Dev~~;
- ~~F&A Br~~; ~~Valley Res ofc~~; ~~Reading~~

Sincerely,

Jack A. Le Cuyer
Colonel, Corps of Engineers
District Engineer

DENNIS
MASON
[Signature]
Le CUYER

Units 103, 104, 110, 111, 113, 114, 116

Copies Furnished:

DWR, ATTN: G. Snow; DWR, ATTN: G. Qualley; Cdr, SPD, ATTN: CESP-D-0;
Cdr, USACE, ATTN: DAEN-CECW-OM

PC#LTRUNIT42

2



CERTIFIED MAIL RETURN RECEIPT REQUESTED



January 13, 1988

Navigation and Flood Control Unit

The Reclamation Board
State of California
1416 - 9th Street, Room 435-B
Sacramento, California 95814

not

Members of the Board:

This is in regard to the joint inspection of January 12, 1988, made for the purpose of transferring a portion of the Sacramento River Bank Protection Project (Unit 41A), to the State of California for operation and maintenance. The flood control work consists of bank sloping and placement of stone protection on Butter Slough right bank at Site Miles 25.5, 26.0 and 27.3 and left bank at Site Miles 22.9, 23.0, 23.4, and 28.0 and Miner Slough right bank at Site Mile 6.6 and left bank at Site Mile 1.2.

The sites were completed on December 24, 1987, in accordance with Contract Number DACW05-87-C-0079, Specification Number 8034 and Drawing Number 50-4-5777.

The work was performed under general authority of the Flood Control Act of 1960, 86th Congress, 2nd Session (PL 86-645, July 14, 1960), and Section 2304(a), Title 10, and the Water Resources Development Act of 1986 (PL 99-662, October 17, 1986), and now meets the requirements of the Sacramento River Bank Protection Project. Therefore, said work together with the waterway bank contiguous, thereto, is transferred as of January 12, 1988 to the State of California for operation and maintenance.

in 1-13
ROMPALA/sm
[Signature]
KELLY

This portion of the work will be added by amendment to the Operation and Maintenance Manual, Supplement Numbers 105, 110 and 113, Sacramento River Flood Control Project. Copies will be furnished to your office at a later date.

[Signature]
A. SMITH

- cc:
- Flood Control Unit
- Civ Des Sec D (Pahl)
- Prog Dev
- F&A Br
- Valley Res Ofc
- C-O Div
- Reading

Sincerely,

[Signature]
HELM



Wayne J. Scholl
Colonel, Corps of Engineers
District Engineer

[Signature]
FAST

[Signature]
DENNIS

Copies Furnished:

- DWR, ATTN: G. Snow
- DWR, ATTN: G. Qualley
- Commander, South Pacific Division, ATTN: CESPD-0
- Commander, USACE, ATTN: DAEN-CECW-OM

Units 105, 110, 113

[Signature]
20 Jan
CZARZASTY

SCHOLL
[Signature]
WANG #9029



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
650 CAPITOL MALL
SACRAMENTO, CALIFORNIA 95814

C
O
P
Y

C
O
P
Y

SPKCO-0

16 November 1982

The Reclamation Board
State of California
1416 - 9th Street, Room 335
Sacramento, California 95814

Gentlemen:

This is in regard to the joint inspection of 15 November 1982 made for the purpose of transferring a portion of the Sacramento River Bank Protection Project (Unit 36), to the State of California for Operation and Maintenance. The flood control work consists of levee bank sloping and placement of stone protection on Steamboat Slough right bank at Site Miles 17.2 and 20.1; on Sutter Slough right bank at Site Miles 21.9, 22.3, 23.1, 23.4, 23.6, 24.2, 24.8, 25.0 and 27.8; on Miner Slough right bank at Site Miles 6.9 and 7.2, left bank at Site Miles 4.5, 5.1 and 7.6. The sites were completed during the past construction season in accordance with Contract No. DACW05-80-C-0113, Specification No. 5747 and Drawing No. 50-4-5541.

The work was performed under general authority of the Flood Control Act of 1960, 86th Congress, 2nd Session (PL 86-645, 14 July 1960), and Section 2304(a), Title 10, and now meets the requirements of the Sacramento River Protection Project. Therefore, said work together with the waterway bank contiguous, thereto, is transferred as of 15 November 1982 to the State of California for operation and maintenance.

This portion of the work will be added by amendment to the Operation and Maintenance Manual, Supplement Nos. 105 and 113(Revised), Sacramento River Flood Control Project. Copies will be furnished your office at a later date.

Sincerely,

HENRY LEE
Lieutenant Colonel, CE
Acting District Engineer

Copy furnished:

DWR, ATTN: M. Luttrupp
DWR, ATTN: D. Meixner

EXHIBIT F

**DEPARTMENT OF WATER RESOURCES
THE RECLAMATION BOARD**

1416 - 9th Street, Room 335-18
Sacramento, CA 95814
(916) 445-9454



NOV 7 1977

Colonel Donald M. O'Shei
District Engineer
Sacramento District
U. S. Army Corps of Engineers
650 Capitol Mall
Sacramento, CA 95814

Dear Colonel O'Shei:

At its regular meeting of October 25, 1977, The Reclamation Board formally accepted from the District Engineer the completed flood control work on a portion of Unit No. 31 of the Sacramento River Bank Protection Project. The flood control work was transferred to the State of California by your letters of October 4 and 21, 1977.

The flood control work consisted of selective clearing, levee bank sloping, placement of stone bank protection, and such miscellaneous work as necessary to complete the construction at Sites Miles 1.0 and 2.4 Left Bank, 6.0 and 6.5 Right Bank on Miner Slough; 22.7, 23.0, 23.7, 23.9, 24.8, 25.4 and 26.4 Left Bank, 22.6, 26.4, 27.0 and 27.9 Right Bank on Sutter Slough; and 15.7 Left Bank, 18.3, 20.9, 21.0, 23.0, 23.9 and 24.0 Right Bank on Steamboat Slough.

The work was constructed in a workmanlike manner and in conformance with Drawing No. 50-4-5164, Specification No. 5106, and Contract No. DACW 05-77-C-0046, insofar as could be determined visually.

Sincerely,

PAUL L. CLIFTON
General Manager

CERTIFIED MAIL
RETURN RECEIPT REQUESTED



Units 104, 105,
110, 113

10/11/77
10



C
O
P
Y

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
650 CAPITOL MALL
SACRAMENTO, CALIFORNIA 95814

C
O
P
Y

REPLY TO
ATTENTION OF

SPKCO-0

21 October 1977

The Reclamation Board
State of California
1416 - 9th Street, Room 335
Sacramento, CA 95814

Gentlemen:

This is in regard to the joint inspection of 20 October 1977, made for the purpose of transferring a portion of the Sacramento River Bank Protection Project (Unit No. 31), to the State of California for operation and maintenance. The flood control work consists of levee and bank sloping and placement of stone protection on Steamboat Slough right bank at Site Miles 21.0, 20.9, and 18.3 ; on Sutter Slough right bank at Site Miles 27.9, 27.0, 26.4, and 22.6, and on Miner Slough right bank at Site Miles 6.5 and 6.0, and left bank at Site Miles 2.4 and 1.0. The sites as described on the inclosure, were completed on 20 October 1977 in accordance with Contract No. DACW05-77-C-0046, Specification No. 5106 and Drawing No. 50-4-5164.

The work was performed under the general authority of the Flood Control Act of 1960, 86 Congress, 2nd Session (PL86-645, 14 July 1960), and Section 2304(a), Title 10, and now meets the requirements of the Sacramento River Bank Protection Project. Therefore, said work together with the waterway bank contiguous thereto, is transferred as of 21 October 1977 to the State of California for operation and maintenance.

This portion of the work will be added by amendment to the Operation and Maintenance Manual, Supplement Nos. 105 and 113, Sacramento River Bank Protection Project. Copies will be furnished your office at a later date.

Sincerely yours,

1 Incl
As stated

DONALD M. O'SHEI
Colonel, CE
District Engineer

Copy furnished:
DWR, ATTN: R. Franson
Robert Potter

SUMMARY OF SACRAMENTO RIVER BANK PROTECTION PROJECT
PORTION OF UNIT 31

<u>SITE MILE</u>	<u>STONE PROTECTION</u>	<u>L.F.</u>
	<u>Steamboat Slough Right Bank</u>	
21.0	0+00 to 4+25	425
20.9	12+40 to 18+70	630
18.3	0+00 to 6+80	680
	<u>Sutter Slough Right Bank</u>	
27.9	0+00 to 4+75	475
27.0	0+00 to 6+65	665
26.4	0+00 to 2+00	200
22.6	0+00 to 4+75	475
	<u>Miner Slough Right Bank</u>	
6.5	- 0+10 to 8+00	810
6.0	0+00 to 1+60	160
	<u>Miner Slough Left Bank</u>	
2.4	0+10 to 8+60	850
1.0	0+00 to 10+10	1010

C
O
P
Y

THE RECLAMATION BOARD
STATE OF CALIFORNIA

C
O
P
Y

December 4, 1974

District Engineer
Sacramento District
U. S. Army Corps of Engineers
650 Capitol Mall
Sacramento, California 95814

Refer to: 4130.20.111

Dear Sir:

Pursuant to the authority invested in me by The Reclamation Board, I hereby accept from the District Engineer of the Sacramento River Bank Protection Project. The flood control work was transferred to the State of California by your letter of November 18, 1974.

The flood control work consisted of selective clearing, levee bank sloping, placement of stone bank protection, and such miscellaneous work as necessary to complete the construction at Site Miles 22.7, 23.3, 23.5, 23.7, 26.1 and 26.5 Right Bank, Sutter Slough.

The work was constructed in a workmanlike manner and in conformance with Drawing No. 50-4-4768, Specification No. 4210, and Contract No. DACWO5-73-C-0046, insofar as could be determined visually.

Sincerely yours,

/s/ Roy L. McCuiston
for A. E. McCOLLAM
Chief Engineer and
General Manager

Clark file

SPKCO-0

18 November 1974

The Reclamation Board
State of California
1416 - 9th Street, Room 335
Sacramento, California 95814

done

Gentlemen:

Reference is made to the joint inspection of 18 November 1974, made for the purpose of transferring a portion of the Sacramento River Bank Protection Project (Unit No. 25) to the State of California for operation and maintenance. This flood control work consists of levee sloping and placement of stone protection on the Sutter Slough right bank at Site Miles, 22.7, 23.3, 23.5, 23.7, 26.1, and 26.5. The sites, as listed on the inclosure, were completed on 18 November 1974 in accordance with Specification No. 4210, Contract No. DACW05-73-C-0046, Drawing No. 50-4-4768.

The work was performed under the general authority of the Flood Control Act of 1960, 86th Congress, 2nd Session and Section 2304(a), Title 10, and now meets the requirements of the Sacramento River Bank Protection Project. Therefore, said work together with the waterway banks contiguous thereto, is transferred as of 18 November 1974 to the State of California for operation and maintenance.

This portion of the project work will be added by amendment to the Operation and Maintenance Manual, Unit Nos. 105 and 113 Sacramento River Flood Control Project. Copies will be furnished your office at a later date.

Sincerely yours,

Rk
ROMPALA/kh

1 Incl
As stated

F. G. ROCKWELL, JR.
Colonel, CE
District Engineer

McB
COLEMAN
HENSON

Copy furnished:
DWR-ATTN: John Wright & Carl King

Sam
McKENSEN

OCE
SPD

cc:
Engr (Lev & Chan)
(Prog Dev)
Valley Res Ofc
F&A (Grantham)

Units 105/113

POTAMOS
R
ROCKWELL

SUMMARY OF PORTION OF SACRAMENTO
RIVER BANK PROTECTION PROJECT UNIT #25
SUTTER SLOUGH RIGHT BANK

<u>Site Mile</u>	<u>Stone Protection</u>	<u>L.F.</u>
22.7	13+00 to 17+00	400
23.3	-0+50 to 5+00	550
23.5	27+82 to 30+85	303
23.7	8+35 to 16+00	765
26.1	24+00 to 27+00	300
26.5	9+50 to 12+50	300

300
2618 OK.

Units 105, 113

C
O
P
Y

THE RECLAMATION BOARD
STATE OF CALIFORNIA

C
O
P
Y

January 12, 1973

District Engineer
Sacramento District
U. S. Army Corps of Engineers
650 Capitol Mall
Sacramento, California 95814

Refer to: 4130.60.110

Dear Sir:

Reference is made to your letter of December 18, 1972, concerning the transfer to the State of California, for operation and maintenance, a portion of the Sacramento River Bank Protection Project, Unit No. 23.

The flood control work consisted of clearing, levee bank sloping, placement of stone bank protection, and such miscellaneous work as necessary to complete the construction at Site Mile 42.3 Right Bank, Sacramento River.

The flood control work has been completed and was constructed in a workmanlike manner. This flood control work has been constructed in conformance with Drawing No. 50-4-4687, Specification No. 4041, and Contract No. DACW05-73-C-0012, insofar as could be determined visually.

The Reclamation Board at its regular meeting of January 12, 1973, formally accepted from the District Engineer for operation and maintenance, the completed flood control work on the above referenced site.

Sincerely yours,

/s/ A. E. McCollam
A. E. McCOLLAM
Chief Engineer and
General Manager

CERTIFIED MAIL #608899
RETURN RECEIPT REQUESTED

*SM/Clark
file*

SPKCO-0

18 December 1972



73-0012

Valley Res Ofc F & A (Jones)

The Reclamation Board
State of California
1416 - 9th Street, Room 1335
Sacramento, California 95814

Gentlemen:

The purpose of this letter is to officially transfer a portion of the Sacramento River Bank Protection Project (Unit No. 23), to the State of California for operation and maintenance. This portion of flood control work consists of levee sloping and the placement of approximately 1000 feet of stone protection on the sloped levee at site mile 43.2 on the Sacramento River right bank. The site was completed on 13 December 1972 in accordance with Specification No. 4041, Contract No. DACW05-73-C-0012, Drawing No. 50-4-4687.

A2.3

Engrg (Prog Dev)

The work was performed under the general authority of the Flood Control Act of 1960, 86th Congress, 2nd Session and Section 2304(a), Title 10 and now meets the requirements of the Sacramento River Bank Protection Project. Therefore, said work together with the waterway banks contiguous thereto, is transferred as of 18 December 1972 to the State of California for operation and maintenance.

ROMPALA *edc*

COLEMAN

cc: Engrg (Lev&Chan)

This portion of the project will be added by amendment to the Operation and Maintenance Manual, Supplement No. 113 Sacramento River Flood Control Project. Copies will be furnished your office at a later date.

HENSON

Sincerely yours,

MCKINSEY

JAMES C. DONOVAN
Colonel, CE
District Engineer

LORD *DB*

DONOVAN

Copy furnished:
DWR, ATTN: John Wright & Carl King ✓
OCE ✓
SPD ✓

Unit 113

*copy to Jerry K
6 Feb 73
gn*

[Handwritten signature]

C
O
P
Y

THE RECLAMATION BOARD
STATE OF CALIFORNIA

C
O
P
Y

December 9, 1971

District Engineer
Corps of Engineers
U. S. Army
650 Capitol Mall
Sacramento, California 95814

Refer to: 4130.60.108

Dear Sir:

Reference is made to your letters of November 18 and 23, 1971, concerning the transfer to the State of California for maintenance and operation a portion of the Sacramento River Bank Protection Project, Unit No. 19, consisting of Sites Mile 24.7, 30.4, 35.2, 42.0, 42.9 Left Bank and 28.3, 29.3, 42.5, 51.3 Right Bank of the Sacramento River.

This work was constructed in accordance with Specification No. 3427, Contract No. DACW05-71-C-0021, Drawing No. 50-4-4378.

The Reclamation Board, at its regular meeting of December 3, 1971, formally accepted this portion of Unit 19 for maintenance and operation.

Sincerely yours,

/s/ A. E. McCollam
A. E. McCOLLAM
Chief Engineer and
General Manager

EXHIBIT F

1 8 NOV 1971

The Reclamation Board
State of California
1416 - 9th Street, Room 1335
Sacramento, California 95814

F&A(Cordano)

Valley

Prog Dev

cc: Engr-Lev & Chan

Gentlemen:

Reference is made to the joint inspection of 16 November 1971, made for the purpose of transferring a portion of the Sacramento River Bank Protection Project Work (Unit # 19), to the State of California for operation and maintenance.

The flood control work consists of bank sloping, levee enlargement and placement of stone bank protection on the Sacramento River right bank at Site Miles 28.3, 29.3, 42.5 and 51.3 as listed on the inclosure. The work was completed on 16 November 1971 in accordance with Specification No. 3427, Contract No. DACW05-71-C-0021, Drawing No. 50-4-4378.

The work was performed under the general authority of the Flood Control Act of 1960, 86th Congress, 2nd Session and Section 2304(a), Title 10 and now meets the requirements of the Sacramento River Bank Protection Project. Therefore, said work together with the waterway banks contiguous thereto, is transferred as of 16 November 1971 to the State of California for operation and maintenance.

This portion of the project work will be added by amendment to the Operation and Maintenance Manual, Supplements Nos. 104, 113, 114 and 116, Sacramento River Flood Control Project. Copies will be furnished your office at a later date.

Sincerely yours,

JAMES C. DONOVAN
Colonel, CE
District Engineer

1 Incl (in dupe)
as stated

Copy furnished:
DIR, ATTN: John Wright
OCE
SPD

RM
ROMPALA

MJC
COLEMAN

MD
HENSON

[Signature]
DONOVAN

Petrus

Units 104, 113, 114, 116

copies to John Talbot #
22 NOV 71 JK

SUMMARY OF PORTION OF SACRAMENTO RIVER BANK PROTECTION PROJECT
UNIT 19, SACRAMENTO RIVER

RIGHT BANK

<u>SITE MILE</u>	<u>STONE PROTECTION</u>	<u>L.F.</u>	<u>STONE TOEWALL</u>	<u>L.F.</u>	<u>LEVEE ENLARGEMENT</u>	<u>L.F.</u>
28.3	195+48 to 213+55	1807	196+60 to 203+75 205+25 to 213+55	715 830		
29.3	132+50 to 151+65	1915	133+00 to 133+70	70	132+00 to 142+00 148+90 to 151+65	1000 275
42.5	18+00 to 26+20	820	18+40 to 19+00 20+67 to 23+00 25+85 to 26+20	60 233 35		
51.3	55+00 to 85+00	3000				

7542 ✓

Units 10A, 11, 13, 14, 16

THE RECLAMATION BOARD

ROOM 1335, RESOURCES BUILDING, 1416 9TH STREET • SACRAMENTO 95814



STANLEY W. KRONICK, *President*
J. J. MADIGAN, *Vice President*
WALLACE McCORMACK, *Secretary*
GEORGE W. NICKEL, JR.
HAROLD J. O'BANION
H. TERRILL SARTAIN
DONALD L. WEILER
COL. A. E. McCOLLAM, *General Manager*

DEC 23 1966

Refer to: 4130.60.104
Contract 66-102

District Engineer
Corps of Engineers
U. S. Army
650 Capitol Mall
Sacramento, California

Dear Sir:

Reference is made to your letter of November 23, 1966 concerning transfer to the State of California of the Sacramento River Bank Protection Project, Unit No. 9, Sites Mile 28.1, 22.2, 23.2 right bank Sutter Slough, Sites Mile 25.5, 24.0, 23.6 and 22.0 left bank Sutter Slough, and Sites Mile 5.2, 4.7, 4.0, 3.7, 3.0, 2.7, 2.0 and 1.4 left bank Miner Slough, in accordance with Specification No. 3155.

The Reclamation Board, at its meeting of December 15, 1966, formally accepted the above referred to work for operation and maintenance.

Sincerely yours,

A. E. McCollam
A. E. McCOLLAM
General Manager

JHMacC:pa

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Units 105, 110, 113

*Copy to Collier
of former 66-102-66*

23 November 1966

SPKKO-F

The Reclamation Board
State of California
1416 - 9th Street, Room 1335
Sacramento, California 95814

Gentlemen:

Reference is made to the joint inspection of 16 November 1966, made for the purpose of transferring a portion of the Sacramento River Bank Protection work, upon completion, to the State of California for operation and maintenance.

The flood control work consisting of levee enlargement, bank sloping and placement of bank protection at Sutter Slough; Site Miles 22.0, 23.6, 24.0 and 25.5, left bank and Site Miles 22.2, 23.2 and 28.1, right bank; and Miner Slough; Site Miles 1.45, 2.0, 2.7, 3.1, 3.7, 4.0, 4.7 and 5.2, left bank, as listed on the attached inclosure, was completed 16 November 1966. The work was done in accordance with Specification No. 3155, Contract No. DA-04-167-CIVENG-66-102, Drawing No. 50-4-4006.

Cont 9

The work was performed under the general authority of the Flood Control Act of 1960, 86th Congress, 2nd Session; and Section 2304(a), Title 10.

The flood control work as described in the attached inclosure now meets the requirements of the Sacramento River Bank Protection Project. Therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred to the State of California for operation and maintenance.

This portion of the project work will be added by amendment to the operation and maintenance manual, Supplement Nos. 105, 110 and 113, Sacramento River Flood Control Project. Copies will be furnished your office at a later date.

Sincerely yours,

CRAWFORD YOUNG
Colonel, CE
District Engineer

HM
MORGAN/KO-F/PP

CC
COLEMAN/KO-F

PP
HENSON/KO

PP
HARDY/KO

HW
YOUNG/VE

1 Incl
Summary Sheet

Copy furnished:
Dept Water Resources

OCE & SPD

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

CC: Engrg-Lev&Chan; Engrg-ProgDev; Valley; F&A

*Units 105,
110, 113*

HW
23

SUMMARY OF SACRAMENTO RIVER BANK PROTECTION PROJECT

23 NOV 66
66-102

RIGHT AND LEFT BANKS SUTTER SLOUGH:

LEVEE UNIT SITE MILE	LEVEE ENLARGEMENT	LINEAL FEET	BANK SLOPING	LINEAL FEET	STONE PROTECTION	LINEAL FEET	RIGHT OR LEFT BANK
110 22.0 L			334+00to339+00	500	334+00to339+00	500	Left
22.2 R	18+00to25+00	700	17+00to18+00	100	17+00to25+65	865	Right
105 { 23.2 R	4+50to8+50	400	25+00to25+65	65	4+50to8+50	400	Right
23.6 L	247+00to254+00	700			247+00to254+00	700	Left
110 { 24.0 L			224+40to231+00	660	224+40to231+00	660	Left
25.5 L	146+50to152+00	550			147+00to152+00	500	Left
113 28.1 R	10+65to22+70	1205			11+00to22+70	1170	Right
						4795	

101, 901, 87, 110, 113

LEFT BANK MINER SLOUGH:

113 { 1.45 D.S.			199+00to207+00	800	199+00to207+00	800	
2.00			169+00to185+50	1650	169+00to185+50	1650	
2.70			132+00to145+00	1300	132+00to145+00	1300	
3.10			107+60to125+40	1780	107+60to125+40	1780	
3.70			75+58to81+10	552	75+58to81+10	552	
4.00			63+58to69+30	572	63+58to69+30	572	
4.70			22+00to32+00	1000	22+00to32+00	1000	
5.20 V.S.			-2+75to2+00	475	-2+75to2+00	475	

4729

EDMUND G. BROWN
GOVERNOR

STANLEY W. KRONICK, SACRAMENTO
PRESIDENT

GROVER SHANNON, YUBA CITY
VICE PRESIDENT

J. J. MADIGAN, CHICO
SECRETARY

THE RECLAMATION BOARD

OF THE
STATE OF CALIFORNIA

1215 O STREET
SACRAMENTO 14, CALIFORNIA
TELEPHONE: HI 5-4711

MAX S. VANN, SR., WILLIAMS
WALLACE MCCORMACK, RIO VISTA
GEORGE W. NICKEL, JR., LOS BANOS
HAROLD J. O'BANION, DOS PALOS
BOARD MEMBERS
A. N. MURRAY
GENERAL MANAGER AND CHIEF ENGINEER

August 9, 1960

District Engineer
Sacramento District
U. S. Corps of Engineers
P. O. Box 1739
Sacramento, California

Dear Sir:

Reference is made to your letter of July 20, 1960, concerning the transfer to the State of the levee construction and bank revetment on the Sacramento River Flood Control Project on the levee sections listed below:

<u>LEVEE SECTION NO.</u>	<u>SITE</u>	<u>LOCATION</u>
661	C	Sacramento River, Right Bank, 113 Mile 42.76 to 42.98
662	D	Sacramento River, Right Bank, 104 Mile 31.87 to 32.32
663	E	Three-Mile Slough on Sherman Island side of channel, beginning at State Highway 24 Bridge, thence along Horseshoe Bend 0.51 miles 101
664	G	Three-Mile Slough on Sherman Island side of channel, Mile 2.76 to 2.98.

The Reclamation Board at its meeting of August 3, 1960, formally accepted these levee sections for operation and maintenance.

Sincerely yours,

A. N. Murray
A. N. MURRAY
General Manager and Chief Engineer

HSB:ED

8/13/60
Copy sent to -
Northern Area Office
Ed Jensen
J. H. H.

20 JUL 1960

Supplement #2

The Reclamation Board
 State of California
 1215 "O" Street
 Sacramento 14, California

Gentlemen:

Reference is made to the joint inspection made on 26 April 1960 of certain levee sections pertaining to the Sacramento River Flood Control Project for the purpose of transferring them to the jurisdiction of the State of California for operation and maintenance.

The required work, consisting of levee construction and bank revetment, is completed in accordance with Specification No. 2601, Contract No. DA-04-167-CIVENG-60-30 and Drawing No. 50-4-3614. The levee sections referred to above are listed as follows:

<u>LEVEE SECT NO.</u>	<u>TYPE</u>	<u>LOCATION</u>	
661	C	Sacramento River, Right Bank, Mile 42.76 to 42.98	113 42.98 42.76 0.22
662	D	Sacramento River, Right Bank, Mile 31.87 to 32.32	104 32.32 31.87 0.45
663	E	Three-Mile Slough on Sherman Island side of channel, beginning at State Hwy 24 Bridge thence along Horseshoe Bend 0.51 miles	101 0.51
664	G	Three-Mile Slough on Sherman Island side of channel, Mile 2.76 to 2.98	2.98 2.76 0.22

The levee sections described above now meet the requirements of the Sacramento River Flood Control project. Therefore said levee sections, together with the waterway banks contiguous thereto, are hereby transferred to the State of California for operation and maintenance.

The maintenance work required under the provisions of the Sacramento River Flood Control Project shall be performed in accordance with

REGISTERED

RETURN RECEIPT REQUESTED

0.32
 45
 51
 22
 Total 1.50

20 JUL 1960

SPKCO-C
The Reclamation Board

existing Flood Control Regulations, inclosed herewith, which have been prescribed by the Secretary of the Army pursuant to Section 3 of the Act of Congress, approved 22 June 1936, as amended and supplemented by the current issue of the Standard Operation and Maintenance Manual for the Sacramento River Flood Control Project. As provided under Paragraph 208.10(10) of these regulations, a supplement to the Standard Operations and Maintenance Manual covering these units of work is in process of preparation and will be furnished to you upon completion.

A copy of this letter is being transmitted to the Department of Water Resources.

Sincerely yours,

H. N. TURNER
Colonel, CE
District Engineer

✓ 1 Incl
F.C. Reg.

Copy furnished:
✓ Dept Water Resources
23rd & "R" Sts.
Sacramento, Calif. w/o incl
O.C.E. w/o incl
S.P.D. w/o incl

cc: ✓ Engr Divn, Levees & Chann Sect w/o incl
Northern Area Ofc w/o incl
Operations Branch

OPERATIONS BRANCH

Concurrences	
Originator:	LHK
Date:	7/18/60
Dist. Engr.	[Signature]
Asst. D.E. (A)	
Asst. D.E. (O)	3 [Signature]
Exec. Asst.	
Cmptr.	
Budget Fin. & Acctg.	
Mgmt.	
Property Office	
Copy	[Signature]
Engr'g	[Signature]
R. E.	
Prsnl.	
Legal	
Supply	

Stamp: *Benj. [Signature]*
W. [Signature]
R. [Signature]

REGISTERED #1733

RETURN RECEIPT REQUESTED

Handwritten: *MM 75 101, 104, 113*

REGISTERED

RETURN RECEIPT REQUESTED

SPKXO-P 62h.3 (Sacto. Riv. F.C.P.)

5 DEC 1956

The Reclamation Board
State of California
1215 "O" Street
Sacramento 14, California

Gentlemen:

Reference is made to the District Engineer's letter dated 4 October 1956, relative to the joint inspection, made on 15 October 1956, of the construction work on the Inlet Structure on the Sacramento River at Elkhorn Slough at Clatsburg, California.

The construction work referred to above was completed on 19 October 1956 under Contract HA-04-167-CIVENS-56-195, Specification No. 2027, Drawing No. 56-4-317h. This work forms an integral part of the Sacramento River Flood Control Project and meets the requirements of the project; therefore said work is hereby transferred to the jurisdiction of the State of California for operation and maintenance.

The maintenance work required under the provisions of the Sacramento River Flood Control Project shall be performed in accordance with existing Flood Control Regulations, inclosed herewith, which have been prescribed by the Secretary of the Army pursuant to Section 3 of the Act of Congress, approved 22 June 1936, as amended and supplemented by the current issue of the Standard Operation and Maintenance Manual for the Sacramento River Flood Control Project. As provided under paragraph 206.10 (10) of these regulations, a supplement to the Standard Operation and Maintenance Manual covering this unit of work is in process of preparation and will be furnished to you upon completion.

REGISTERED

RETURN RECEIPT REQUESTED

*Postcard
Unit 13*

*Cont. 56-195
Unit 556*

W. B. HARGRAVES

SPKCO-P 82h.3 (Sacto. Riv. F.C.P.)
The Reclamation Board

A copy of this letter is being transmitted to the Department of
Water Resources.

Sincerely yours,

1 Incl
1. F.C. Reg.

A. E. McCOLLAM
Colonel, CE
District Engineer

Copy furnished:
Department of Water Resources
Sacramento, California w/o incl.
OCS w/o incl.
So. Pac. Div. Engr. w/o incl.

cc: Engr Div w/o incl.
Northern Area Ofc w/o incl.
W. B. Hargraves w/o incl.



Unit 113

REGISTERED

RETURN RECEIPT REQUESTED

5 DEC 1956

SPKHO-P 82h.3 (Sac. Riv. F.C.P.)

The Reclamation Board
State of California
1215 "C" Street
Sacramento, California

Gentlemen:

Reference is made to the District Engineer's letter dated 5 October 1956 suggesting a joint inspection of certain levee sections pertaining to the Sacramento River Flood Control Project, for the purpose of transferring them to the jurisdiction of the State of California for operation and maintenance. Reference is also made to the joint inspection of these levee sections made on 15 October 1956.

The required work on the levee sections referred to above was completed on 20 October 1956 in accordance with Specification No. 1979, Contract No. DA-04-167-DIVISION-56-119 and Drawing No. 50-4-3077. The levee sections referred to above are listed as follows:

<u>Levee Section No.</u>	<u>Location No.</u>	<u>Waterway</u>	<u>River Mile Points</u>	<u>Right or Left Bank</u>
50	1	Sutter Sl.	27.2 to 27.3	Right
51	2-3	Sutter Sl.	26.7 to 27.05	Right
52	4	Sutter Sl.	26.2 to 26.3	Right
53	5	Sutter Sl.	25.7 to 25.9	Right
54	6	Sutter Sl.	25.3 to 25.5	Right
55	7-8	Sutter Sl.	24.0 to 25.0 ⁵	Right
56	9	Hiner Sl.	24.3 to 24.8 ⁶	Right
57	10	Hiner Sl.	24.75 to 24.85	Right

The levee sections, Nos. 50 to 57 inclusive, described above now meet the requirements of the Sacramento River Flood Control Project, therefore said levee sections together with the waterway banks contiguous thereto, are hereby transferred to the State of California for operation and maintenance.

REGISTERED

RETURN RECEIPT REQUESTED

Unit 113
Cont. # 56-149
Units. 510-526

Posted

W. B. HARGRAVES

SPKCO-P 82h.3 (Sac. Riv. F.C.F.)
The Reclamation Board

In addition to the above, recent surveys indicate that the levee sections listed below also meet the requirements of the Sacramento River Flood Control Project:

<u>Levee Section No.</u>	<u>Waterway</u>	<u>River Mile Points</u>	<u>Right or Left Bank</u>
518	Sutter Sl.	25.9 to 26.2	Right
519	Sutter Sl.	25.5 to 25.7	Right
520	Sutter Sl.	25.3 to 25.5 ^{25.05 to 25.3}	Right
521	Sutter Sl.	24.8 to 25.0 ^{24.13 to 24.8}	Right
522	Sutter Sl.	22.65 to 22.9 ^{23.0}	Right <i>Out</i>
523	Minor Sl.	24.1 to 24.3	Right
524	Minor Sl.	24.56 to 24.75	Right
525	Minor Sl.	24.85 to 25.6	Right
526	Minor Sl.	26.2 to 26.5	Right

Therefore, said levee sections Nos. 518 to 526 inclusive, together with the waterway banks contiguous thereto, are also hereby transferred to the State of California for operation and maintenance.

It is to be noted that the levee sections described above combined with other sections previously transferred to your jurisdiction now form a continuous levee reach along the right banks of Sutter and Minor Sloughs in Reclamation District 999 from Elkhorn Slough to the east levee of Yolo By-Pass.

The maintenance work required under the provisions of the Sacramento River Flood Control Project shall be performed in accordance with existing Flood Control Regulations, inclosed herewith, which have been prescribed by the Secretary of the Army pursuant to Section 3 of the Act of Congress, approved 22 June 1936, as amended and supplemented by the current issue of the Standard Operation and Maintenance Manual for the Sacramento River Flood Control Project. As provided under Paragraph 206.10 (10) of these regulations, a supplement to the Standard Operation and Maintenance Manual covering these units of work is in process of preparation and will be furnished to you upon completion.

Unit 113

SPKHO-P 52h.3 (Sac. Riv. P.C.P.)
The Reclamation Board

A copy of this letter is being transmitted to the Department of
Water Resources.

Sincerely yours,

1 Incl
1. F.S. Reg.

A. E. McCOLLAM
Colonel, CE
District Engineer

Copy furnished:
Dept. of Water Resources
Sacramento, Calif. w/o incl.
OCH w/o incl.
So. Pac. Div. Engr. w/o incl.

cc: Engr Div w/o incl.
Northern Area Ofc w/o incl.
W. B. Hargraves w/o incl.

3



Unit 113

EARL WARREN
GOVERNOR

A. R. GALLAWAY, JR., SACRAMENTO
PRESIDENT
GROVER SHANNON, YUBA CITY
VICE PRESIDENT
GEO. H. HOLMES, CLARKSBURG
SECRETARY
W. P. HARKEY, GRIDLEY
GEO. R. WILSON, WALNUT GROVE
GEO. E. LODI, ARBUCKLE
DOUGLAS B. COHEN, BANTA

THE RECLAMATION BOARD

OF THE
STATE OF CALIFORNIA
1100 O STREET
SACRAMENTO 14, CALIFORNIA

A. M. BARTON
CHIEF ENGINEER AND GENERAL MANAGER
EDMUND G. BROWN, ATTORNEY GENERAL
LEGAL ADVISER
G. F. MELLIN
ASSISTANT ENGINEER AND APPRAISER
S. A. HONAKER
ASSISTANT SECRETARY

April 2, 1952

District Engineer
Sacramento District
Corps of Engineers, U. S. Army
P. O. Box 1739
Sacramento 8, California

Dear Sir:

1. Reference is made to your letter of 6 December 1951, File SPKKA 824.3 (Sac.Riv.F.C.P.) transferring to The Reclamation Board levee reaches on the westerly bank of the Sacramento River and contiguous waterway banks as follows:

- Item 16 a. Mile 59.0 to Lake Washington Barge Canal (partially constructed)
- Item 17 b. Barge Canal to Mile 50.8
- Item 18 c. Mile 50.8 to Mile 50.5
- Item 19 d. Mile 49.85 to Mile 49.4
- Item 20 e. Mile 46.0 to Mile 42.2
- Item 21 f. Mile 42.0 to Mile 41.9 (Elkhorn Slough Inlet Pipe)

2. These reaches of levee with their contiguous banks are on a section of river where navigation is a major factor in levee deterioration. The levees are of themselves ample in cross section for flood control purposes. All of these reaches of levee are now and have been, maintained by local interests who also paid the cost of their construction. Raised low water level of the Sacramento River by Federal operation of Shasta Reservoir has now exposed a new area of the levee and bank section to navigation wave wash. Numerous jetties and other navigation aids on the easterly side of the Sacramento River have caused river currents at low water stages to cut into the westerly bank of the river opposite such navigation installations.

3. The Reclamation Board on December 18, 1951, formally accepted the levee and contiguous waterway bank under Item "a" for flood control operation and maintenance. This

Reach No. 6
Items 16 to 21

4/2/52

824.3 (SAC. F. PCP) SPK

16

9

7

-2-

District Engineer
April 2, 1952

levee is backed by an extensive dredger spoil area constructed with Federal navigation funds. Bank protection in this reach will be required only for navigation operation and maintenance.

17 4. Item "b" is not formally accepted at this time. The levee, constructed by local interests, is ample for flood control purposes and is being maintained by them. Low water bank erosion is occurring, particularly upstream from Mile 50.8, due to jetty diversion of low stream flow against the west bank of the river.

18 5. Item "c", including levee and contiguous waterward bank, was formally accepted by The Reclamation Board on December 18, 1951 for flood control operation and maintenance. This is a separate contract job of bank protection and as such is separately accepted.

19 20 21 6. Items "d", "e" and "f" are not formally accepted at this time. The levees in these reaches are considered to be of ample section for flood control purposes, but the separate reaches do not constitute units for practicable and reasonable operation and maintenance. Reclamation District No. 765 operates and maintains the reach of levee from Mile 51.1 to Mile 49.5. Reclamation District No. 307 operates and maintains the reach of levee from Mile 49.5 to Mile 42.9. Reclamation District No. 999 operates the reach of levee from Mile 42.9 to 41.9. These reaches are separate and district maintenance units created before any Federal participation in flood control costs were authorized. The levees have been constructed at the sole cost of these districts. When Federal construction obligations are complete for these separate reaches formal acceptance of each entire reach will be made by The Reclamation Board.

7. Your particular attention is directed to your letter of February 26, 1952, File SPKGE, wherein you have determined that existing conditions on the Lisbon levee (R.D. 307) near the old Glide Ferry landing, are not critical. Levee failure at this location would place the levee reaches "c" to "f" of paragraph 1 in serious jeopardy.

Yours very truly

THE RECLAMATION BOARD


A. M. BARTON
Chief Engineer and General Manager

AMB:emw

cc: Chief of Engineers, Washington, D.C.
Division Engineer, San Francisco
State Engineer, Sacramento

Items 16 to 21

REGISTERED MAIL
Return Receipt
Requested

SPKKA 824.3(Sac.Riv. F.C.P.)

8 DEC 1951

The Reclamation Board
State of California
1100 "O" Street
Sacramento 14, California

Gentlemen:

Reference is made to your letter of 6 June 1951 acknowledging that certain reaches of the levees of the Sacramento River Flood Control Project and the waterway bank contiguous to said levee reaches meet the requirements of the project as authorized prior to the Flood Control Act of 1944.

The levee reaches in question are the levees of Merritt Island at the following locations:

- a. Westerly ^{or Northerly} levee of Sutter Slough.
 - 77 (1) Elkhorn Slough upstream 1,800 feet. 113
- b. Westerly levee of Sacramento River.
 - 78 (1) Mile 34.05 to Mile 34.2.
 - 79 (2) Mile 34.3 to Mile 34.5.
 - 80 (3) Mile 34.9 to Mile 35.28.
 - 81 (4) Mile 35.15 to Mile 35.86.
 - 82 (5) Mile 35.86 to Mile 36.0.
 - 83 (6) Mile 36.1 to Mile 37.3.
 - 84 (7) Mile 37.4 to Mile 38.5.

Letter No 9

Items 77 to 90

(19)

824.3(SAC.R.FCP)SPK

SPKKA 824.5(Sac.Riv. F.C.P.)
The Reclamation Board

- 85 (8) Mile 38.8 to Mile 39.1.
- 86 (9) Mile 39.2 to Mile 39.9.
- 87 (10) Mile 40.0 to Mile 40.3.
- 88 (11) Mile 40.4 to Mile 40.6.
- 89 (12) Mile 40.9 to Mile 41.1.
- 90 (13) Mile 41.85 to Elkhorn Slough Inlet Pipes.

The records of this office show that on 5 May 1960 your Board accepted the levee covered by Item b.(4) above as complete. Accordingly, the waterway bank contiguous to said Item is hereby transferred to the State of California for maintenance and operation.

The levee covered by Items a., b.(1) to b.(3), inclusive, and b.(5) to b.(13), inclusive, above, although complete has not been formally transferred as contemplated by the Project documents. Accordingly the levee covered by said Items, together with the waterway bank contiguous thereto, is hereby transferred to the State of California for maintenance and operation.

The maintenance work required under the provisions of the Sacramento River Flood Control Project shall be performed in accordance with existing Flood Control Regulations which have been prescribed by the Secretary of the Army pursuant to Section 3 of the Act of Congress approved 22 June 1936, as amended and supplemented. As provided under paragraph 208.10(10) of these regulations, a maintenance manual covering these works is in process of preparation and will be furnished your Board upon completion.

A copy of this letter is being transmitted to the State Engineer.

FOR THE DISTRICT ENGINEER:

Sincerely yours,

H. R. Reifsnyder
Lt. Colonel, Corps of Engineers
Executive Officer

- Copy Furnished:
- / Office, Chief of Engrs.
 - / So. Pac. Div. Engr.
 - / State Engineer
 - / Engr. Div. (2)
 - / C. de Arrieta

Exec. O	
Chief	
Ad. Asst.	
Chf. Tech. Asst.	
Manag.	
Office Svco.	
Oper.	
Engr'g	
R. E.	
Fisc.	
Pers.	
Legal	
Supply	

Letter No. 9

Items 77 to 90

Design Bushale

REGISTERED MAIL
Return Receipt
Requested

Letter No. 5

5

SPXEA 824.3(Sac. Riv. F.C.P.)

6 DEC 1951

The Reclamation Board
State of California
1100 "O" Street
Sacramento 14, California

Ref: Recl. Board letter of 2 April 1952:
Items 16 and 18 were formally accepted by the Board
on 18 Dec. 1951. Item 16 was also accepted on 18 May 1951
and item 18 on 22 Dec. 1948.
Remaining items are considered by the Board not practicable
for maintenance because they are ~~separate items~~
not contiguous.
Formal acceptance will be made by the Board of these
reaches of levee when Federal obligations are completed.

Gentlemen:

Reference is made to your letter of 6 June 1951 acknowledging that certain reaches of the levees of the Sacramento River Flood Control Project and the waterway bank contiguous to said levee reaches meet the requirements of the project as authorized prior to the Flood Control Act of 1944.

The levee reaches in question are the westerly levee of the Sacramento River at the following locations:

- ✓ 16. a. Mile 59.0 (Tower Bridge) to Proposed Lake Washington Barge Canal. ^{57.0} Bank protection will be required for navigation only. 116
- ✓ 17. b. Proposed Lake Washington Barge Canal to Mile 50.8. 114, 116
- ✓ 18. c. Mile 50.8 to Mile 50.5. 114
- ✓ 19. d. Mile 49.65 to Mile 49.4. 114
- ✓ 20. e. Mile 46.0 to Mile 42.2. 114, 113
- ✓ 21. f. Mile 42.0 to Mile 41.9 (Alkhorn Slough Inlet Pipes). 113

The records of this office show that on 18 May 1951 your Board accepted the levee covered by Item a. above as complete and on 22 December 1948 your Board accepted the levee covered by Item c. above as complete. Accordingly, the waterway bank contiguous to said Items a. and c. is hereby transferred to the State of California for maintenance and operation.

Reach No. 6
Items 16 to 21

SPRKA 824.3(Sac.Riv.F.C.P.)
The Reclamation Board

Letter No. 5

5

The levee covered by Items b., d., e., and f., above, although complete has not been formally transferred as contemplated by the Project documents. Accordingly, the levee covered by said Items b., d., e., and f., together with the waterway bank contiguous thereto, is hereby transferred to the State of California for maintenance and operation.

The maintenance work required under the provisions of the Sacramento River Flood Control Project shall be performed in accordance with existing Flood Control Regulations which have been prescribed by the Secretary of the Army pursuant to Section 5 of the Act of Congress approved 22 June 1936, as amended and supplemented. As provided under paragraph 208.10(10) of these regulations, a maintenance manual covering these works is in process of preparation and will be furnished your Board upon completion.

A copy of this letter is being transmitted to the State Engineer.

FOR THE DISTRICT ENGINEER:

Sincerely yours,

Copy Furnished:
Office, Chief of Engrs.
So. Pac. Div. Engr.
State Engineer
Engr. Div. (2)
C. de Arrieta

H. R. Reifsnyder
Lt. Colonel, Corps of Engineers
Executive Officer

DEC 5 1936
HBD

5

Sac Riv FC Proj.
Pending Transf to
Recl. Bd.

Mrs. Thompson

RT

PSKED-7

FEB 2 1951

*See also
letters dated
16 Feb. 1951. and 18 April 1951
attached.*

The Reclamation Board
1100 "G" Street
Sacramento 14, California

Gentlemen:

Reference is made to letter from this office dated 24 March 1950 in reply to a letter from your Board dated 27 February 1950 concerning surveys to determine the status of levees in the Sacramento River Flood Control Project with a view to transferring those levees in the project that are complete to project standards. It was stated that as surveys progress it was proposed to transfer units of the project found to conform to project standards in order that the provision of State Law regarding maintenance can be placed in effect at the earliest practicable time. Reference is also made to letter dated 26 January 1951 from the Division Engineer, South Pacific Division to the Board involving the foregoing as well as other matters relative to the project.

Pursuant to the above, investigation has been made of those portions of the easterly and westerly levees of Yolo By-pass that were completed between the years 1931 to 1935 and which heretofore have not been turned over formally to your Board for maintenance in accordance with present day practices. The levees under consideration are:

- Unit No. 56A a. Easterly levee of Yolo By-pass from Minor Slough to Yolo Causeway. Covers Map Ref. No. 145-146 and 175. and 174 113, 116
- Unit No. 57A b. Easterly levee of Yolo By-pass from Yolo Causeway to South-ern Pacific Railroad. Covers Map Ref. No. 147 116
- Unit No. 58A c. Easterly levee of Yolo By-pass from Sacramento By-pass to a point approximately 2 miles south of Fremont weir. Covers Map Ref. No. 121-140 and 142 122, 123
- Unit No. 59A d. Westerly levee of Yolo By-pass from a point approximately 109

144 not included, Why not?

Units No. 56A-57A-58A-59A and 60A.

8008

PSKNO-P
The Reclamation Board

FEB 2 1951

1 mile north of the Yolo-Solano County line to a point approximately
 $\frac{1}{2}$ mile south of Yolano.
Covers Map Ref. No. 186-188 and portion of 185 which is between 186 and 188.

It is realized that certain features of these levees do not conform to the revision in project standards for Yolo By-pass authorized by the 1944 Flood Control Act, however, it is believed that a distinction should be made in this case between that authorization and the previous legislation known as the "Old" Sacramento Flood Control Project. Those parts of the levee that require additional construction authorized by the 1944 Flood Control Act will be completed to those standards in due course of time.

Maintenance manuals covering these units are in process of preparation and will be furnished your Board upon completion.

Accordingly, the levee units discussed herein are hereby transferred to the State of California for maintenance and operation. Acknowledgment of acceptance at an early date would be appreciated.

Sincerely yours,

G. C. HADG
Lt. Colonel, Corps of Engineers
District Engineer

cc: W. K. South
R. W. Barsdale
Engr.
✓ R. H. Thompson

O. C. E.
Div, Engr.

THE RECLAMATION BOARD
OF THE
STATE OF CALIFORNIA

C
O
P
Y

C
O
P
Y

April 2, 1952

District Engineer
Sacramento District
U. S. Corps of Engineers
P. O. Box 1739
Sacramento, California

Dear Sir:

1. Reference is made to your letter of 4 December 1951, File SPKKA 824.3 (Sac. Riv. F.C.P.) transferring levee reaches and waterway banks contiguous thereto, to the Reclamation Board, located as follows:

a. Easterly levee of the Yolo Bypass from Fremont Weir to Miner Slough.

b. -----

c. -----

2. There are no contiguous waterway banks to the above reaches of levee other than the levees themselves and the adjoining bypass areas. Since enactment of Chapter 774, California Statutes of 1927, maintenance of the bypass areas has been an obligation of the State of California.

3. The easterly levee of the Yolo Bypass was principally constructed by local interest funds. The Federal work on this levee has been shaping of the same and providing uniform slopes, mainly three horizontal to one vertical on the waterward side. A short section of levee from Fremont Weir southerly, has been constructed to four to one waterward slopes. The remainder of the levee does not have this standard section. A considerable length of this levee will be the waterward bank of the Sacramento Deep Water Channel. The Reclamation Board can not assume any obligation as to that portion of the waterward bank of the Yolo Bypass east levee, which is also the waterward bank of the ship channel project. Maintenance of this levee has continuously since its construction been an obligation of local interests. The State of California under Section 8361 of the Water Code of California now maintains the northerly two miles of

this levee. The remainder is maintained by the following local Reclamation Districts: 1600, 827, 785, 537, 900, 765 and 999. Formal acceptance of the levee by the Reclamation Board on December 18, 1951, is conditioned on the Federal obligation to maintain any of the Sacramento Deep Water Channel.

4. The north and south levees of the Sacramento Bypass itself were entirely constructed by local interests monies. Maintenance and operation thereof is an obligation of the State under Section 8361 of the Water Code. No Federal funds have ever been spent up on this portion of the project. The Flood Control Act of 22 December 1944 calls for flattening of the slopes of these levees to the four to one and three to one authorized section. This work is not required. The Reclamation Board on December 18, 1951, formally accepted these levees and this bypass as complete.

Yours very truly,

THE RECLAMATION BOARD

By /s/ A. M. Barton
A. M. BARTON
Chief Engineer and General Manager

NOTE: Only items pertaining to Operation and Maintenance Manual No. 113 (Revised) are included in the above copy.

C
O
P
Y

THE RECLAMATION BOARD
OF THE
STATE OF CALIFORNIA

C
O
P
Y

June 27, 1955

District Engineer
Sacramento District
ATTN: Mr. R. W. Barsdale
P. O. Box 1739
Sacramento, 3, California

Gentlemen:

The Reclamation Board at its meeting June 15, 1955, considered the work remaining to be done along the levees on both sides of Elkhorn Slough.

The Board requested that the District Engineer, Corps of Engineers, eliminate the patrol roads from the contract on both sides of Elkhorn Slough and eliminate the proposed dam across Elkhorn Slough just north of Reclamation District No. 999 pumping plant. In lieu there of the Board requested the installation of a reinforced concrete box culvert approximately 6 feet by 6 feet openings with an appropriate gate to regulate the flow.

Yours very truly,

THE RECLAMATION BOARD

A. M. BARTON
Chief Engineer and General Manager

/s/ Donald D. Lemmon
DONALD D. LEMMON
Assistant Secretary

EXHIBIT F
Sheet 3 of 9

C
O
P
Y

13 July 1955

C
O
P
Y

The Reclamation Board
State of California
1100 O Street
Sacramento 14, California

Gentlemen:

Reference is made to your letter dated 27 June 1955, requesting the District Engineer to eliminate the remaining work on both levees of Elkhorn Slough and the proposed fill across Elkhorn Slough just upstream of the Reclamation District No. 999 pumping plant, and to substitute therefor the installation of a gate controlled 6' x 6' reinforced concrete conduit through the right bank levee of the Sacramento River at the head of Elkhorn Slough to replace the existing structure.

The District Engineer is agreeable to this substitution of work provided that:

a. The cost to the Federal Government will not exceed that amount required under the Memorandum of Understanding to complete the remaining work on Elkhorn Slough. (i. e., the State of California or other local interests carry any excess costs as determined by the Corps of Engineers).

b. The State Reclamation Board will agree to accept and maintain both the banks and the existing levees along Elkhorn Slough from the inlet structure at the Sacramento River to the junction with Sutter Slough.

EXHIBIT F
Sheet 4 of 9

A firm estimate of the differential in costs between the substituted work and the remaining work on Elkhorn Slough required under the Memorandum of Understanding will be furnished as soon as it is available.

It is requested that a letter of acceptance of the provisions outlined above be furnished this office as soon as possible.

Sincerely yours,

Wm. J. Ely
WM. J. ELY
Col, CE
District Engineer

EXHIBIT F
Sheet 5 of 9

C
O
P
Y

THE RECLAMATION BOARD

C
O
P
Y

District Engineer
Sacramento District
Corps of Engineers, U. S. Army
P. O. Box 1739
Sacramento 8, California

July 20, 1955

Dear Sir:

Reference is made to your letter of July 13, 1955, SPKGGK 824.3 (Sac. Riv.) regarding the substitution of a gate control 6" x 6' reinforced concrete conduit through the right bank levee of the Sacramento River at the head of Elkhorn Slough is place of work required under the Memorandum of Understanding.

The State of California is unable to give you any assurance that it will bear any cost in excess of that required under the Memorandum of Understanding. This agency has no appropriation available for this type of construction. We have, however, contacted Reclamation District No. 999 and they have expressed a willingness to consider making a contribution, if necessary, either in the form of certain work or in the form of cash. However, they are unwilling to commit themselves until a reasonably accurate cost estimate and plans are prepared by your office.

The Reclamation Board at its meeting of July 20, 1955, indicated its willingness to accept and maintain both the banks and the existing levees along Elkhorn Slough from the inlet structure at the Sacramento River to the junction with Sutter Slough upon satisfactory completion of the presently proposed substitute work.

Very truly yours,

THE RECLAMATION BOARD
A. M. BARTON
Chief Engineer and General Manager

/s/ By Robert W. James
ROBERT W. JAMES
Assistant Administrative Adviser

C
O
P
Y

C
O
P
Y

M I N U T E S

MEETING OF THE RECLAMATION BOARD

July 20, 1955

CONSTRUCTION

ELKHORN SLOUGH LEVEES -

Matter of elimination of levee patrol roads and dam across slough just north of R. D. 999 pumping plant; and installation, in lieu thereof, of concrete culvert.

There was presented a communication from the District Engineer dated July 13, 1955, advising that the proposed substitution of a concrete culvert for levee patrol roads and a dam across Elkhorn Slough would be agreeable to the Corps of Engineers, if the cost to the Federal Government does not exceed the amount required to complete the work on Elkhorn Slough, and if the Reclamation Board agrees to accept and maintain the levees as they now exist.

Mr. James reported that the Reclamation Board has no appropriation for construction, if the cost of the substitution should exceed the amount legally expendable by the Corps of Engineers, but that officials of Reclamation District No. 999 had expressed a willingness, either in the form of certain work or in the form of cash; however, they are unwilling to commit themselves until a reasonably accurate cost estimate and plans are prepared by the Corps.

Upon motion of Mr. Holmes, seconded by Mr. Lodi, and carried unanimously by the members present, it was ordered as follows:

(1) That the Reclamation Board expresses its willingness to accept the maintenance of both the banks and existing levees along Elkhorn Slough from the inlet structure at the Sacramento River to the junction with Sutter Slough upon satisfactory completion of the presently proposed substitute work;

(2) That the District Engineer be advised by letter of the Board's action relative to maintenance of the levees, and of the statement of Reclamation District No. 999 relative to sharing in the cost of the substitute work, if necessary.

SPKKA 824.3 (Sac. Riv. F.C.P.)

13 December 1951

The Reclamation Board
State of California
1100 "O" Street
Sacramento 14, California

Gentlemen:

Reference is made to your letter of 2 July 1951 acknowledging that certain reaches of the levees of the Sacramento River Flood Control Project and the waterway bank contiguous to said levee reaches meet the requirements of the project as authorized prior to the Flood Control Act of 1944.

The levee reaches in question are located as follows:

- f. Westerly levee of Sutter Slough.
- (1) Mile 26.3 to Mile 26.7.
 - (2) Mile 27.05 to Mile 27.2.
 - (3) Mile 27.3 to Elkhorn Slough.
- g. Westerly levee of Elkhorn Slough.
- (1) Sutter Slough to Station "A" 431+00.
 - (2) Station "A" 429+50 to Station "A" 405+00.
 - (3) Station "A" 403+50 to Station "A" 344+75.
 - (4) Station "A" 340+75 to Station "A" 326+00.
 - (5) Station "A" 70+50 to Station "A" 60+50.

Accordingly the levee covered by said Items, together with the waterway bank contiguous thereto, is hereby transferred to the State of California for maintenance and operation.

The maintenance work required under the provisions of the Sacramento River Flood Control Project shall be performed in accordance with existing Flood Control Regulations which have been prescribed by the Secretary of the Army pursuant to Section 3 of the Act of Congress approved 22 June 1963, as amended and supplemented. As provided under paragraph 208.10 (10) of

these works is in process of preparation and will be furnished your Board upon completion.

A copy of this letter is being transmitted to the State Engineer.

FOR THE DISTRICT ENGINEER:

Sincerely yours,

H. R. REIFSNYDER
Lt. Colonel, CE
Executive Officer

NOTE: Only items pertaining to Operation and Maintenance Manual No. 113 (Revised) are included in the above copy.

EXHIBIT G

SUGGESTED SEMI-ANNUAL REPORT FORM

TO: The District Engineer
Sacramento District
Corps of Engineers
1209 - 8th Street
Sacramento, California

(1 May 19__)
(1 Nov 19__)

Dear Sir:

The semi-annual report for the period (1 May 19__ to 31 October 19__) (1 November 19__ to 30 April 19__) Sacramento River Flood Control project Unit No. 113 (Revised). The east levee of Yolo Bypass, the north levee of Miner Slough; the westerly levees of Sutter Slough, Elkhorn and the Sacramento River all bordering Reclamation District No. 999 is as follows:

a. The physical condition of the protective works is indicated by the inspector's report, copies of which are inclosed, and may be summarized as follows:

(Superintendent's summary of conditions)

It is our intention to perform the following maintenance work in order to repair or correct the conditions indicated:

(Outline the anticipated maintenance operations for the following 6 months.)

b. During this report period, major high water periods (water level at 22.0 on the gage at the west end of Sacramento Bypass and 19.0 on the gage located near Lisbon occurred on the following dates:

<u>Dates</u>	<u>Maximum Elevation</u>
_____	_____
_____	_____
_____	_____

Comments on the behavior of the protective works during such high water periods are as follows:

(Superintendent's log of flood observations)

During the high water stages when the water level reached a height of _____, on the gage or excess thereof (dates) _____, it was necessary to organize and carry out flood operations as follows:

(See Maintenance Manual _____.)

c. The inspections have indicated (no) or (the following) encroachments or trespasses upon the project right-of-way.

d. (No) (_____) permits have been issued for (the following) improvements or construction within the project right-of-way.

Executed copies of the permit documents issued are transmitted for your files.

e. The statues of maintenance measures, indicated in the previous semi-annual report as being required or as suggested by the representatives of the District Engineer, is as follows:

(Statement of maintenance operations, item by item with percent completion.)

f. The fiscal statement of the Superintendent's operations for the current report period is as follows:

	<u>Labor</u>	<u>Material</u>	<u>Equipment</u>	<u>Overhead Total</u>
1. Inspection				
2. Maintenance				
3. Flood fighting operations				
TOTAL				

Respectfully submitted,

Superintendent of Works