

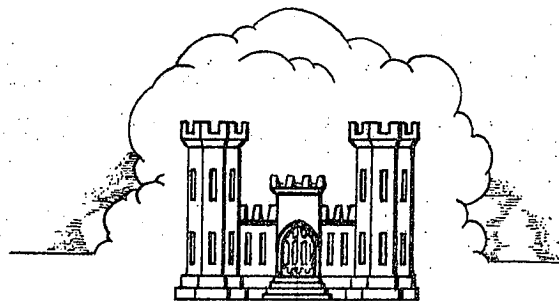
47

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

Incl 1²

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

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UNIT NO. 133 (REVISED)

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A-1	Location Drawing	1 Sheet
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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	Flood Plane Elevation (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 supercedes 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.

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 above-mentioned 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.

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
---------------------------	--------------------------	---------------------------	-----------------------------	-----------------------------

Unit No. 1-Left Bank Yolo Bypass

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

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
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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.

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 2 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.

EXHIBIT B
Unattached

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						

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. 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 _____

(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. 5 -						
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						
6.61	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						

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

THE RECLAMATION BOARD
OF THE
STATE OF CALIFORNIA

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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.

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THE RECLAMATION BOARD
OF THE
STATE OF CALIFORNIA

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June 27, 1955

District Engineer
Sacramento District
ATTN: Mr. R. W. Barsdale
P. O. Box 1739
Sacramento, 8, 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 thereof 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

C
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13 July 1955

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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

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THE RECLAMATION BOARD

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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. BARION
Chief Engineer and General Manager

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

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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 there of, 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. Eodi, 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 status 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</u>	<u>Total</u>
1. Inspection					
2. Maintenance					
3. Flood fighting operations					
TOTAL					

Respectfully submitted,

Superintendent of Works

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

UNIT NO. 113

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

REVISIONS OR ADDITIONS

ADDITIONS	DATE
Paragraph 1-04 ----- Add subparagraph g	December 1971
Paragraph 2-01 ----- Add subparagraph c	December 1971
EXHIBIT B ----- Add Drawing No. 50-4-4378	December 1971
EXHIBIT F ----- Add copy of letter of acceptance dated 9 December 1971	December 1971

1-04. Construction data.

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^o, 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.

2-01. Levees.

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.

EXHIBIT B

DRAWING NO.

TITLE

50-4-4378

Bank Protection, Various Locations, Left Bank, Sacramento River between mile 24.7 and 53.7, in 23 sheets

C
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THE RECLAMATION BOARD
STATE OF CALIFORNIA

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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

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

UNIT NO. 113 - PART NO. 1

EAST LEVEE OF YOLO BYPASS FROM
SOUTH BOUNDARY OF RECL. DIST. NO. 900
DOWNSTREAM TO MINER SLOUGH

REVISIONS OR ADDITIONS

ADDITIONS	DATE
Paragraph 1-04 c. ----- add Contract No. 57-59	Nov. 1963
EXHIBIT B ----- add Drawing No. 50-4-3298	Nov. 1963

enc 2

UNIT NO. 113 - PART NO. 1

1-04.

c. Emergency levee repairs - east levee Yolo Bypass was accomplished 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.

EXHIBIT B

File No.

Title

50-4-3298

Emergency levee repairs - east levee Yolo Bypass in 2 sheets.

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

UNIT NO. 113

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

REVISIONS OR ADDITIONS	DATE
Paragraph 1-04 - - - Add subparagraph h.	October 1975
Paragraph 2-01 - - - Revised subparagraph c.	October 1975
EXHIBIT B - - - - - Add Drawing No. 50-4-4687	October 1975
EXHIBIT F - - - - - Add copy of letter of acceptance dated 12 January 1973	October 1975

SECTION I

1-04.

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.

SECTION II

2-01.

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.

EXHIBIT B

File No.

Title

50-4-4687 Bank Protection, Various Locations Right and Left Banks,
Sacramento River Mile 55.0 to Mile 16.0, in 28 sheets.

C
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THE RECLAMATION BOARD
STATE OF CALIFORNIA

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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

Rec'd 10-4-77

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 LEVEE OF SUTTER SLOUGH, ELKHORN SLOUGH AND SACRAMENTO
RIVER, ALL BORDERING RECLAMATION DISTRICT NO. 999

REVISIONS OR ADDITIONS	DATE
Paragraph 1-04 - - - Add subparagraph i.	December 1975
EXHIBIT B - - - - - Add Drawing No. 50-4-4768.	December 1975
EXHIBIT F - - - - - Add copy of letter of acceptance dated 4 December 1974.	December 1975

SECTION I

1-04.

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-9946 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.

EXHIBIT B

File No.

Title

50-4-4768

Bank Protection, Various Locations, Sutter, Steamboat, Miner and Georgiana Sloughs, in 33 sheets.

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THE RECLAMATION BOARD
STATE OF CALIFORNIA

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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. DACW05-73-C-0046, insofar as could be determined visually.

Sincerely yours,

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

RD 999

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

UNIT NO. 113 (Revised)

47

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

REVISIONS OR ADDITIONS	DATE
Paragraph 1-04 - - - Add subparagraph j	March 1983
EXHIBIT B - - - - - Add Drawing No. 50-4-5164	March 1983
EXHIBIT F - - - - - Add copy of letter of transfer dated 21 October 1977	March 1983

SECTION I

1-04.

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.

EXHIBIT B

<u>File No.</u>	<u>Title</u>
50-4-5164	Bank Protection, Various Locations, Right and Left Banks, Miner, Sutter and Steamboat Slough, in 22 sheets.



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

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RD 501
RD 999

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

EXHIBIT F

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

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

47

REVISIONS OR ADDITIONS	DATE
Paragraph 1-04 - - - Add subparagraph k.	December 1983
Paragraph 2-05 - - - Add Environment Protection	December 1983
EXHIBIT B - - - - - Add Drawing No. 50-4-5541	December 1983
EXHIBIT F - - - - - Add copy of letter of transfer dated 16 November 1982	December 1983

SECTION I

1-04.

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.

EXHIBIT B

File No.

Title

50-4-5541 Bank Protection, Various Locations, Right and Left Banks,
Miner, Sutter, Steamboat and Elk Sloughs.

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UNIT NO. 1¹/₃ (REVISED)

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(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.) *



C
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REPLY TO
ATTENTION OF

SPKCO-0

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

C
O
P
Y

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 Bank 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.

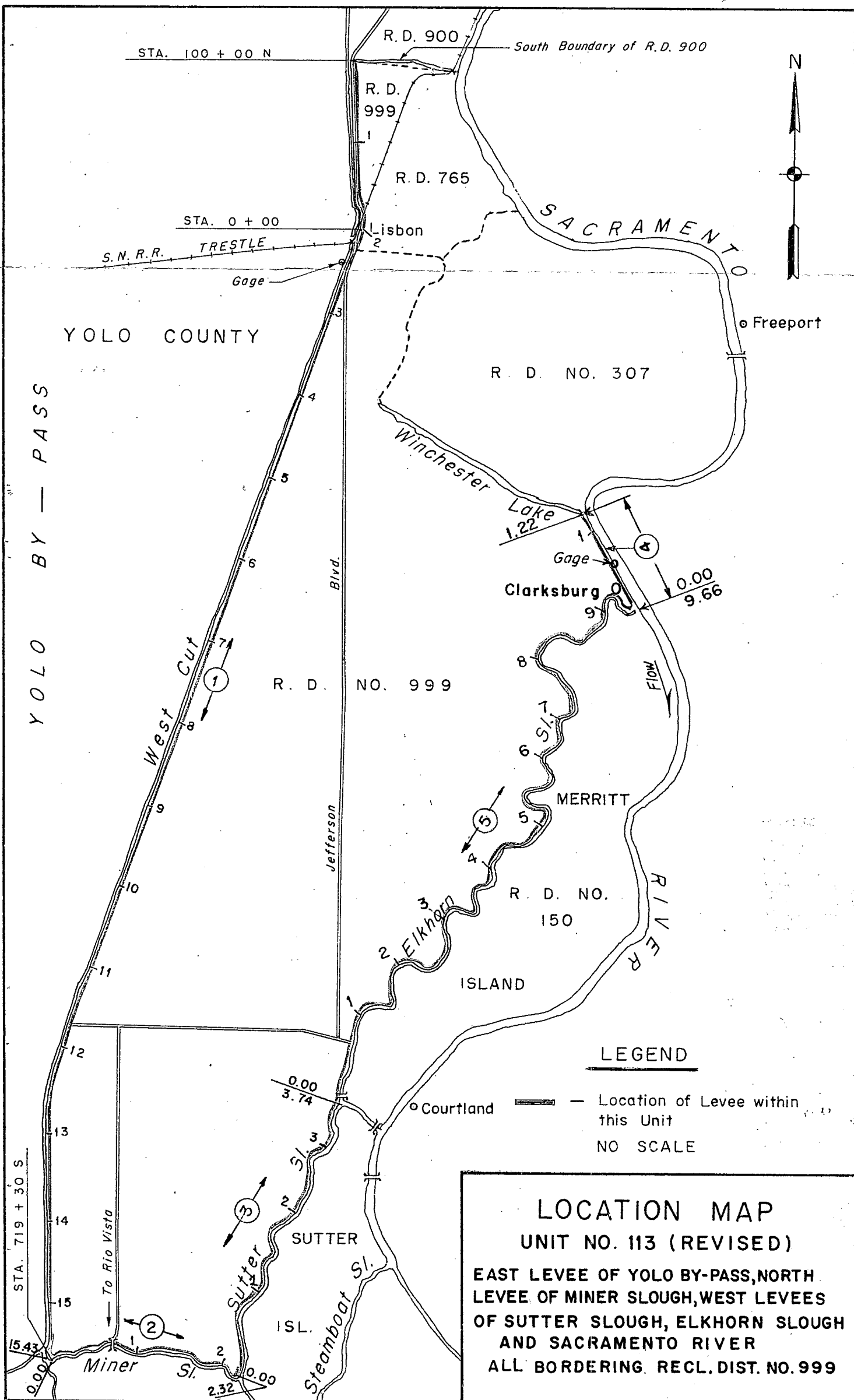
This portion of the work will be added by amendment to the Operation and Maintenance Manual, Supplement Nos. 105 and 113(Revised), Sacramento River Flood Control Project. Copies will be furnished your office at a later date.

Sincerely,


HENRY LEE
Lieutenant Colonel, CE
Acting District Engineer

Copy furnished:
DWR, ATTN: M. Luttropp
DWR, ATTN: D. Meixner

EXHIBIT F



LEGEND


 — Location of Levee within this Unit
 NO SCALE

LOCATION MAP
UNIT NO. 113 (REVISED)
 EAST LEVEE OF YOLO BY-PASS, NORTH LEVEE OF MINER SLOUGH, WEST LEVEES OF SUTTER SLOUGH, ELKHORN SLOUGH AND SACRAMENTO RIVER
 ALL BORDERING RECL. DIST. NO. 999