
**SUPPLEMENT TO STANDARD
OPERATION AND MAINTENANCE
MANUAL**

SACRAMENTO RIVER
FLOOD CONTROL PROJECT
UNIT NO. 156
TISDALE WEIR AND BYPASS
SACRAMENTO RIVER, CALIFORNIA



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

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Prepared in the Sacramento District
Corps of Engineers, U. S. Army
Sacramento, California
August 1955

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LOCATION	ADDITION OR REVISION	DATE
Exhibit F	Add copy of letter of transfer dated 13 Dec 1951	28 Dec 2010

UNIT NO. 156
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<u>Exhibit</u>	<u>Description</u>
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B	"As Constructed" Drawings - - - - - Unattached
C	Plates of Suggested Flood Fighting Methods- - - - Unattached (Contained in Standard Manual)
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SUPPLEMENT TO STANDARD
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SECTION I - INTRODUCTION

1-01. Location. - The improvement covered by this manual is that part of the Sacramento River Flood Control Project which comprises the Tisdale Weir together with its appurtenances which include a concrete apron, cobble revetments, a highway bridge that traverses the length of the weir and a bypass channel, as indicated on location drawing, Exhibit A-1. Levees along the bypass channel are not a part of this manual. The weir is located along the easterly side (left bank) of the Sacramento River about 10 miles southeast of Meridian, California and 14 miles southwest of Marysville, in Sutter County, California. The northerly portion of the improvement is in Reclamation District No. 1660 and the southerly portion is in Reclamation District No. 1500.

1-02. Project Works. Tisdale Weir is a reinforced concrete structure 1,149.5 feet long that is traversed by a highway bridge. The bypass channel is 1150 feet wide and 4 miles long, extending from the Sacramento River to the weir and thence to Sutter Bypass. For more complete details of the structure reference is made to drawings of Exhibit B.

1-03. Protection Provided. - The primary function of Tisdale Weir is to provide a means for release of excess overflow waters of the Sacramento River into Sutter Bypass. The adjoining levees provide direct protection to adjacent agricultural lands. The project design capacity of Tisdale Weir and Bypass is 38,000 cubic feet per second.

1-04. Construction Data and Contractor. - Tisdale Weir was originally built by local interests and additional work necessary to complete the structure to its present condition was accomplished by the Sacramento District Corps of Engineers under the following contracts:

a. Repair of Tisdale Weir was accomplished under Contract No. W-1105-eng-876 by Lord & Bishop and completed on 29 February 1932.

b. Construction of new abutments was accomplished under Contract No. "W-1105-eng-1496 by M. A. Jenkins and completed on 12 December 1934.

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 the Sacramento River reaches or exceeds the reading of 48.0 on the U. S. Corps of Engineer and State Division of Water Resources cooperative continuous water stage recorder and staff gage located on the left bank of the Sacramento River at the north end of Tisdale Weir. This gage is set on U. S. Corps of Engineers datum.

1-06. Assurances provided by local interests. - Assurance 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 State Reclamation Board. - Responsibility for operating and maintaining the completed works was officially accepted by the Reclamation Board of the State of California on 2 January 1952, as shown on the attached letter of acceptance, exhibit F.

1-08. Superintendent. - The name and address of the Superintendent appointed by the State or acting as a representative of the State Division of Water Resources for the continuous inspection, operation and maintenance of the project works shall be furnished the District Engineer, and in case of any change of Superintendent, the District Engineer shall be so notified.

SECTION II

FEATURES OF THE PROJECT SUBJECT TO FLOOD CONTROL REGULATIONS *

2-01. Drainage and Weir Structure.

a. Description. The Tisdale Weir is a fixed concrete drainage structure located along the easterly side of the Sacramento River about 10 miles southeast of Meridian, California. The main concrete slab is placed on piles, having a steel cut-off wall on the upstream side and a wood pile cut-off on the downstream side. The reinforced concrete structure is 2 feet thick, 22 feet wide and has a crest length of 1,149.5 feet. In the channel, an 18-inch thick layer of cobbles adjoins the weir and extends a distance of 3 feet upstream. Downstream there is a concrete stilling basin 3 feet deep and 12 feet wide. Beyond the stilling basin the channel is paved with a 2 foot thick cobble revetment for a distance of 24 feet. A highway bridge supported on concrete pile bents spaced on 39 foot centers traverse the length of the Weir. For more complete details of the structure reference is made to drawings of Exhibit B.

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.

2-02. Channel.

a. Description. The channel of the Tisdale Bypass extends from the Sacramento River to Sutter Bypass as described in paragraphs 1-01 and 1-02.

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 Superintendent to maintain a patrol of the project works during all periods of flood flow in excess of a reading of 48.0 on the gage located on the north end of Tisdale Weir, as indicated in paragraph 1-05 of this manual. The Superintendent shall dispatch a message by the most suitable means to the District Engineer whenever the water surface at Tisdale Weir reaches the gage reading indicated above. The Superintendent shall cause readings to be taken at intervals of two to four hours during the period when the water surface is above flood-flow stage and record the time of the observations. One copy of the readings shall be forwarded to the District Engineer immediately following the flood, and a second copy transmitted as an inclosure to the semi-annual report in compliance with paragraph 3-06 of the Standard Manual.

2-03. Levees.

a. Description. Levees adjoining Tisdale Weir and the Bypass are to be maintained by adjacent Reclamation Districts and will not be considered in 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) Bridge. Timber trestle of S.P.R.R. Co. across Tisdale Bypass at station 1042 + 65 as shown on drawings of Exhibit B. To be maintained by S.P.R.R. Co.

(2) Utility Relocation. A County Road located over a new bridge which extends the full length of Tisdale Weir. This bridge is 10 feet wide with a turnout near the center of the bridge span. Bridge to be maintained by the County.

(3) Hydrographic Facilities. Water gages to be maintained by the following agencies are located as follows:

(a) U. S. Corps of Engineers and State Division of Water Resources gage located at the north end of Tisdale Weir.

(b) Reclamation District No. 1660 gage located on the north levee of Tisdale Bypass about two miles east of Tisdale Weir.

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

(1) Maintenance - paragraph 7-02 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

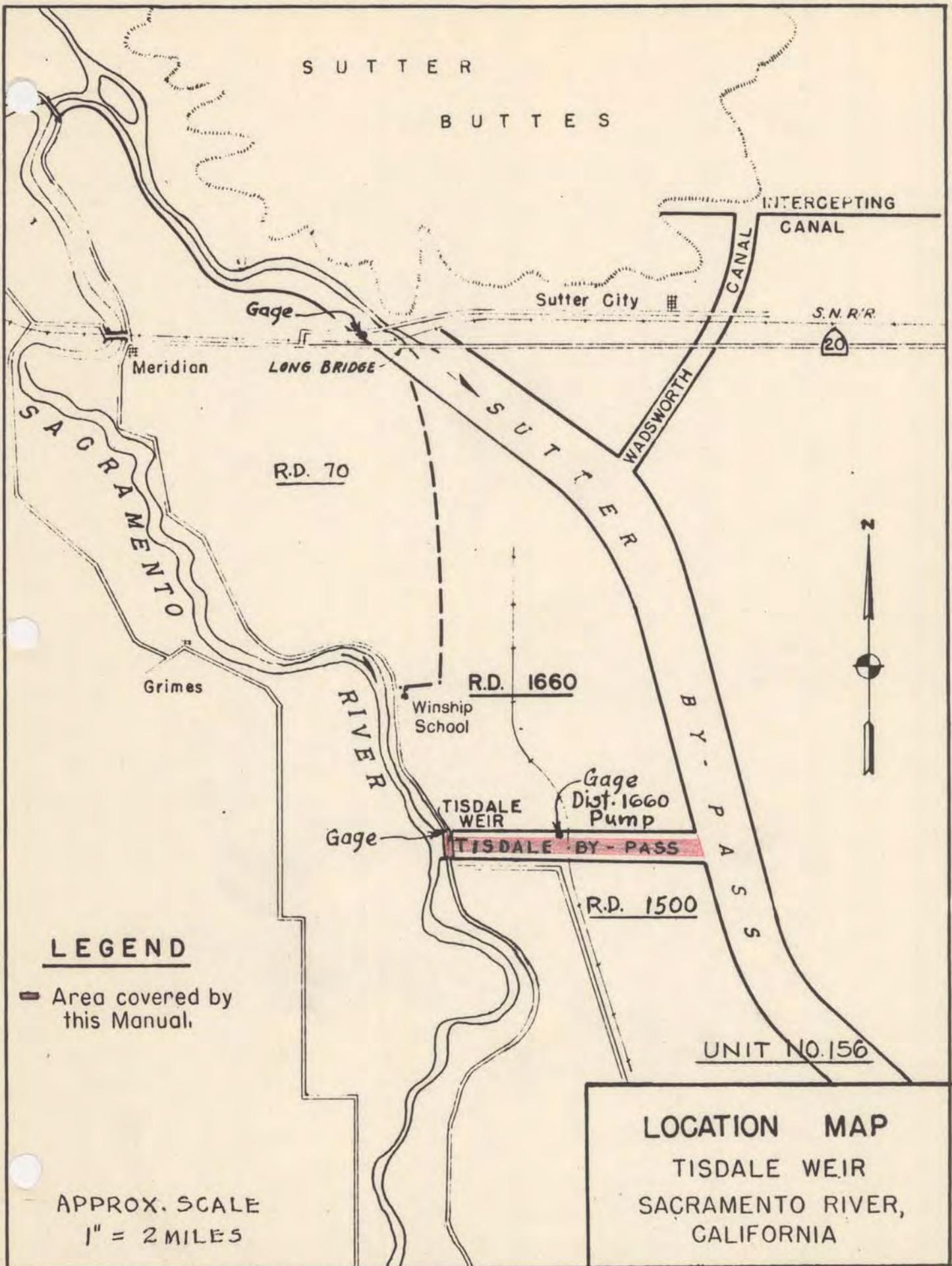
3-01. Repair of Damage. In the event of serious damage to the project works, whether due to flood conditions or other causes, and which may be beyond the capability of local interests to repair, the Superintendent will contact a representative of the Division of Water Resources, State of California, 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)



S U T T E R
B U T T E S

INTERSECTING
CANAL

Sutter City

S.N.R.R.

20

Gage

Meridian

LONG BRIDGE

WADSWORTH
CANAL

S U T T E R

R.D. 70



Grimes

R.D. 1660

Winship
School

RIVER

Gage
Dist. 1660
Pump

TISDALE
WEIR

Gage

TISDALE BY-PASS

B Y - P A S S

R.D. 1500

UNIT NO. 156

LEGEND

■ Area covered by
this Manual.

APPROX. SCALE
1" = 2 MILES

LOCATION MAP
TISDALE WEIR
SACRAMENTO RIVER,
CALIFORNIA

5-4-1940-1

EXHIBIT B

"AS CONSTRUCTED"
DRAWINGS

(See separate folder for the following drawings)

<u>File No.</u>	<u>Title</u>
50-9-1286-1	Tisdale Weir - Plan, Sections and Details, sheets 1 and 2.
50-9-1448	Tisdale Weir Abutments, 1 sheet
50-4-1814	North Levee of Tisdale Bypass, sheets 2 and 3

EXHIBIT B

Unattached

EXHIBIT C

PLATES OF SUGGESTED FLOOD FIGHTING METHODS

(See Standard Manual)

EXHIBIT D

CHECK LIST NO. 1

LEEVE INSPECTION REPORT

(See Standard Manual)

EXHIBIT E

CHECK LISTS OF LEVEES,

CHANNEL AND STRUCTURES

For definition of "flood" or "high water period"
see paragraph 1-05 of this manual.

CHECK LIST NO. 2

TISDALE WEIR AND BYPASS

Inspector's Report Sheet No. _____

Inspector _____

Date _____

Superintendent _____

Item	Remarks
(a) Location by Station	
(b) Settlement, sloughing, or loss of grade	
(c) Erosion of both slopes	
(d) Condition of roadways, including ramps	
(e) Evidence of seepage	
(f) Condition of 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.
- Item (c) If sufficient erosion or gulying of slopes of levee has taken place to be noticeable by visual inspection, indicate area affected and depth.
- Item (d) Note any other 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
TISDALE WEIR AND BYPASS

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 the flood flow channel.
- Item (c) Note nature and extent of debris and refuse that might cause fouling of the bridges over the channel.
- Item (d) Report any construction along or above the diversion channel 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 of 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

WEIR STRUCTURE

TISDALE WEIR

Inspector's Report Sheet No. _____

Inspector _____

Date _____

Superintendent _____

Item	Remarks
(a) Condition of concrete bridge and piling	
(b) Condition of concrete weir section	
(c) Condition of concrete abutments	
(d) Condition of riprapped sections	
(e) Vegetal growth	
(f) Accumulation of trash and debris	
(g) Measures taken since last inspection	
(h) Comments	

Instructions for Completing Sheet 6, Exhibit E

(To be printed on back of sheet 6)

- Item (a) Inspect condition of concrete bridge and piling bents and record observations.
- Item (b) Note condition of concrete weir section for abrasion, chipping or spalling.
- Item (c) Note condition of concrete abutments for abrasion, chipping or spalling.
- Item (d) Note condition of riprap such as erosion, movement of the rock or presence of vegetal growth through the riprap.
- Item (e) Note nature, extent, and size of vegetal growth in and around the weir structure.
- Item (f) Note nature and extent of debris that might cause scour around the weir or bridge structure or tend to decrease the channel capacity.
- Item (g) Indicate maintenance measures that have been performed since the last inspection and their condition at time of this inspection.
- Item (h) Record opinion, if any, of contributory causes for conditions observed, also any observations not covered under other items.

NOTE: A copy of the Inspector's Report is to be mailed to the District Engineer immediately on completion.

EXHIBIT F

LETTER OF ACCEPTANCE
BY STATE RECLAMATION BOARD

The Reclamation Board
of the
State of California

May 22, 1952

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

Dear Sir:

Reference is made to your letter (1) SPKKO-P 824.3 (Sac. Riv. F.C.P.) 13 December 1951, (2) your letter SPKKO-P 824.3 (Sac. Riv. F.C.P.) 19 December 1951, and (3) your letter SPKKA 824.3 (Sac. Riv. F.C.P.) 13 December 1951, transferring 101 reaches of levee and contiguous banks to The Reclamation Board for flood control operation and maintenance.

On January 2, 1952, the Reclamation Board accepted the transfer of the reaches of levee listed in first tabulation attached and did not accept those reaches of levee and contiguous bank in the second tabulation.

Yours very truly,

THE RECLAMATION BOARD

By /s/ A. M. Barton
A. M. BARTON

Chief Engineer and General Manager

January 2, 1952

The Board accepted the transfer from the Corps of Engineers, in letters as listed below, the following reaches of levees and their contiguous waterway banks, where applicable, for flood control operation and maintenance, as complete and meeting the requirements of the Sacramento River Flood Control Project:

<u>No.</u>	<u>Date of Letter</u>	<u>Levee Location</u>	<u>Remarks</u>
*	* * * * *	* * * * *	* * *
3	13 December 1951	d(61) East bank Sacramento River at Tisdale Weir	Maintained by State under Section 8361 Water Code
*	* * * * *	* * * * *	* * *

Note: Only items pertaining to Operation and Maintenance Manual No. 156 are included in the above copy.

REGISTERED MAIL
Return Receipt
Requested

Letter No. 13

①

⑬

13 DEC 1951

SPIKA 824.S (Sac. Riv. F.C.P.)

Accepted by the Recl. Board:

- ○ Completed by Contract by C. of E.
- ⊕ Const. by Local Interests 203-248 - 250-255
- ∪ No maint. is required. 204

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

Not Accepted

⊖ No capable of separate maint.

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:

a. Sherman Island levee of Three Mile Slough.

- 199 (1) State Highway Bridge to Sacramento River. ○ 101
- 200 (2) From the State Highway Bridge, 1300 feet toward the San Joaquin River. ○ 101
- 201 (3) From a point 3900 feet toward the San Joaquin River from the State Highway Bridge to a point 6900 feet toward the San Joaquin River from the State Highway Bridge. 101
- 202 (4) From a point 10,500 feet toward the San Joaquin River from the State Highway Bridge to the San Joaquin River. 101

203 b. Plug across Seven Mile Slough near Three Mile Slough. ⊕ 102

204 c. Sherman Island levee of Seven Mile Slough and Three Mile Slough from the Plug across Seven Mile Slough southwesterly to Sacramento River. ∪ 102

Items 199 to 295

⑬

SPRKA 624, S (Sac. Riv. F. C. P.)
The Reclamation Board

d. Easterly levee of the Sacramento River.

Reach
19

- 205 (1) From a point 23,650 feet, measured along the Sherman Island levee, downstream from Three Mile Slough to a point 21,950 feet downstream from Three Mile Slough. 101
- 206 (2) From a point 14,850 feet, measured along the Sherman Island levee, downstream from Three Mile Slough to a point 7,700 feet downstream from Three Mile Slough. 101
- 207 (3) From a point 6,300 feet, measured along the Sherman Island levee, downstream from Three Mile Slough to a point 3,450 feet downstream from Three Mile Slough. 101
- 208 (4) From a point 5,500 feet, measured along the Sherman Island levee, downstream from Three Mile Slough to a point 700 feet downstream from Three Mile Slough. 101
- 209 (5) From a point 500 feet, measured along the Sherman Island levee, downstream from Three Mile Slough to Three Mile Slough. 101
- 210 (6) Three Mile Slough to Mile 10.58. 102
- 211 (7) Mile 10.71 to Mile 13.1. 102
- 212 (8) Mile 13.59 to Mile 14.5 (Junction Point). 102
- 213 (9) Mile 14.5 (Junction Point) to Mile 15.0. 102
- 214 (10) Mile 15.1 to Mile 16.9. 102
- 215 (11) Mile 16.95 to Mile 17.5. Brannan 102
- 216 (12) Mile 17.6 to Mile 18.0. Andrus 103
- 217 (13) Mile 18.15 to Mile 18.5. " 103
- 218 (14) Mile 18.5 to Mile 21.5. v o " 103
- 219 (15) Mile 21.6 to Mile 26.3. v o " 103
- 220 (16) Mile 26.4 to Georgiana Slough. v o 103
- 221 (17) Mile 26.5 to Mile 27.55. v o III
- 222 (18) Mile 27.7 to Mile 28.5. III

2 X

Reach
19

SPKKA 824.3 (Sac. Riv. F.O.P.)
The Reclamation Board

d. Easterly levee of the Sacramento River. (cont'd)

- ✓ 223 (19) Mile 28.6 to Mile 28.9.
- ✓ 224 (20) Mile 29.1 to Mile 29.9.
- ✓ 225 (21) Mile 30.25 to Mile 30.55.
- ✓ 226 (22) Mile 30.75 to Mile 31.5.
- ✓ 227 (23) Mile 31.8 to Mile 32.2.
- ✓ 228 (24) Mile 32.4 to Mile 33.0.
- ✓ 229 (25) Mile 33.1 to Mile 34.45.
- ✓ 230 (26) Mile 34.55 to Mile 34.95.
- ✓ 231 (27) Mile 35.1 to Mile 35.58.
- ✓ 232 (28) Mile 35.58 to Mile 35.74. ✓
- ✓ 233 (29) Mile 35.85 to Mile 36.55.
- ✓ 234 (30) Mile 36.5 to Mile 36.75.
- ✓ 235 (31) Mile 36.85 to Mile 37.15.
- ✓ 236 (32) Mile 37.5 to Mile 37.85.
- ✓ 237 (33) Mile 38.0 to Mile 38.3.
- ✓ 238 (34) Mile 38.5 to Mile 39.15.
- ✓ 239 (35) Mile 39.75 to Mile 39.9.
- ✓ 240 (36) Mile 40.0 to Mile 40.15.
- ✓ 241 (37) Mile 40.25 to Mile 40.35.
- ✓ 242 (38) Mile 40.5 to Mile 40.8.
- ✓ 243 (39) Mile 41.2 to Mile 41.6.
- ✓ 244 (40) Mile 41.75 to Mile 42.35.
- ✓ 245 (41) Mile 42.5 to Mile 43.05.

Reach 17



SPKRA 324.3 (Sac. Riv. F.C.P.)
The Reclamation Board

d. Easterly levees of the Sacramento River. (cont'd)

Reach 17

- ✓ (246) (42) Mile 43.3 to Mile 45.56. } III
- ✓ (247) (43) Mile 45.56 to Mile 44.2. } III
- ✓ (248) (44) Mile 44.5 to Mile 45.3. x D 115
- ✓ (249) (45) Mile 55.4 to Mile 55.5. 115
- ✓ (250) (46) Mile 55.1 to American River. x D 118.1

Reach 14

- (251) (47) West levee of Sutter Bypass to Mile 87.5.
- (252) (48) Mile 91.4 to Mile 92.1.
- (253) (49) Mile 92.6 to Mile 92.7.
- (254) (50) Mile 92.9 to Mile 94.0. ✓ ○
- (255) (51) Mile 96.6 to Mile 97.4.
- (256) (52) Mile 97.5 to Mile 97.7. ✓ ○
- (257) (53) Mile 97.7 to Mile 97.8.
- (258) (54) Mile 99.9 to Mile 102.5. ✓ ○
- (259) (55) Mile 103.45 to Mile 103.7.
- (260) (56) Mile 103.8 to Mile 104.2.
- (261) (57) Mile 104.2 to Mile 104.7. ✓ ○
- (262) (58) Mile 104.7 to Mile 105.65.
- (263) (59) Mile 110.9 to Mile 111.5. ✓ ○
- (264) (60) Mile 118.4 to Mile 118.6 (South End Tisdale Weir)
- (265) (61) At Tisdale Weir. ✓ ○ 150

129

(266) e. Northerly levees of Miner Slough from a point 1,200 feet easterly from the easterly levees of Yolo Bypass to a point 4,400 feet easterly from the easterly levees of Yolo Bypass.

SPKHA 324.3 (Sac. Riv. F.O.P.)
The Reclamation Board

Letter No. 13

13

f. Westerly levee of Sutter Slough.

113

Ranch 36

- ✓ (267) (1) Mile 26.3 to Mile 26.7.
- ✓ (268) (2) Mile 27.05 to Mile 27.2.
- ✓ (269) (3) Mile 27.3 to Elkhorn Slough.

g. Westerly levee of Elkhorn Slough.

113

- ✓ (270) (1) Sutter Slough to Station "A" 431+00.
- ✓ (271) (2) Station "A" 429+50 to Station "A" 405+00.
- ✓ (272) (3) Station "A" 403+50 to Station "A" 344+75.
- ✓ (273) (4) Station "A" 340+75 to Station "A" 326+00.
- ✓ (274) (5) Station "A" 70+50 to Station "A" 60+50.

h. Westerly levee of the Sacramento River.

131

Ranch 3

- ✓ (275) (1) Mile 119.2 to Mile 119.7.
- ✓ (276) (2) Mile 131.4 to Mile 131.8.
- ✓ (277) (3) Mile 133.1 to Mile 133.3. ✓ 0
- ✓ (278) (4) Mile 134.0 (Meridian Bridge) to Mile 134.3.
- ✓ (279) (5) Mile 134.3 to Mile 140.6. ✓ 0
- ✓ (280) (6) Mile 140.6 to Mile 141.3.
- ✓ (281) (7) Mile 141.3 to Mile 142.0. ✓ 0
- ✓ (282) (8) Mile 142.0 to Mile 142.3.
- ✓ (283) (9) Mile 142.3 to Mile 142.7 (Union Oil Co. Wharf). ✓ 0

AX (284) 1. Easterly levee of Georgiana Slough from the S.P.R.R. stream 22,500 feet. ✓ 103

W8

(285) j. Northerly levee of the American River and the back levee of Reclamation District No. 1000 from Jibboom Street Bridge to El Canino Avenue. x D

125

13

SPEKA 524.3 (Sac. Riv. F.C.F.)
The Reclamation Board

k. Northerly levee of Natamas Cut.

- 48 ✓ (286) (1) From Sacramento River easterly to a point 1,550 feet easterly from the Garden Highway Bridge. 142
- ✓ (287) (2) From a point 2,550 feet easterly from the Garden Highway Bridge to a point 3,250 feet easterly from the Garden Highway Bridge. 142
- ✓ (288) 1. Back levee of Reclamation District No. 2068 along the S.N.R.R. from the County Road northeasterly 7,200 feet to high ground. 109
- ✓ (289) n. Southerly levee of North Dry Creek near Wheatland from high ground to the W.P.R.R. Interceptor. 145
- ✓ (290) n. Easterly levee of the W. P. R. R. Interceptor from North Dry Creek southerly to Bear River. 145
- ✓ (291) o. Northerly levee of Bear River from the W. P. R. R. Interceptor easterly to South Dry Creek. 145
- ✓ (292) p. Northerly levee of South Dry Creek near Wheatland from Bear River easterly to high ground, including the Singh saddle closure levee. 145
- ✓ (293) q. Southerly levee of Bear River from the W.P.R.R. easterly to a point 5,400 feet easterly from Carlin Bridge. 141.1
- ✓ (294) r. Southerly levee of South Dry Creek near Wheatland from Bear River easterly 1.86 miles. 144
- ✓ (295) s. Northerly levee of Bear River from South Dry Creek easterly to a point 4,000 feet easterly from Carlin Bridge. 144

Reck No. 30

The records of this office show that your Board has accepted the levees and/or works covered by Items d.(14), d.(15), d.(16), d.(29), d.(50), d.(52), d.(54), d.(57), d.(59), d.(61), h.(3), h.(5), h.(7), h.(9), i., n., n., o., p., q., r., and s., above, as complete. Accordingly the waterway bank contiguous to said Items is hereby transferred to the State of California for maintenance and operation.

The levee covered by Items a. to c., inclusive, d.(1) to d.(13), inclusive, d.(17), to d.(27), inclusive, d.(29), to d.(49), inclusive, d.(51), d.(53), d.(55), d.(56), d.(58), d.(60), e., f., g., h.(1), h.(2), h.(4), h.(6), h.(8) and j. to l., inclusive, above, although complete has not been formally transferred as contemplated by the Project documents.

Letter No. 13

13

SPEKA 624.5(Sac,Riv.F.C.F.)
The Reclamation Board

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,

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

13

EXHIBIT G

SUGGESTED SEMI-ANNUAL REPORT FORM

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

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

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 - Tisdale Weir 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 stages (water level at 48.0 on the gage at north end of Tisdale Weir) occurred on the following dates:

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

Comments on the behavior of the protective works during such high water stages 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:

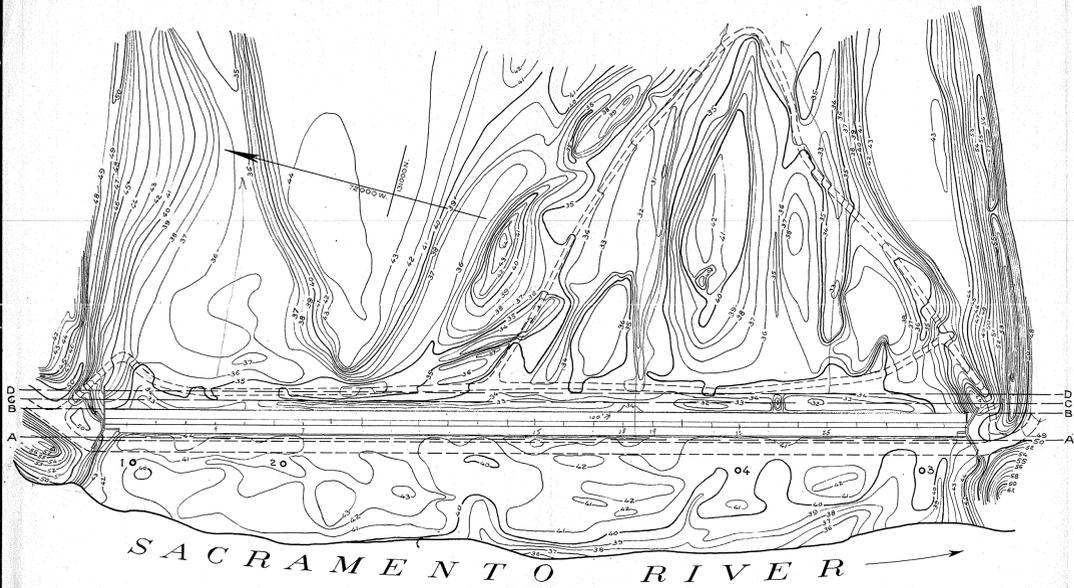
(Statement of maintenance operations, item by item with percent completion.)

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

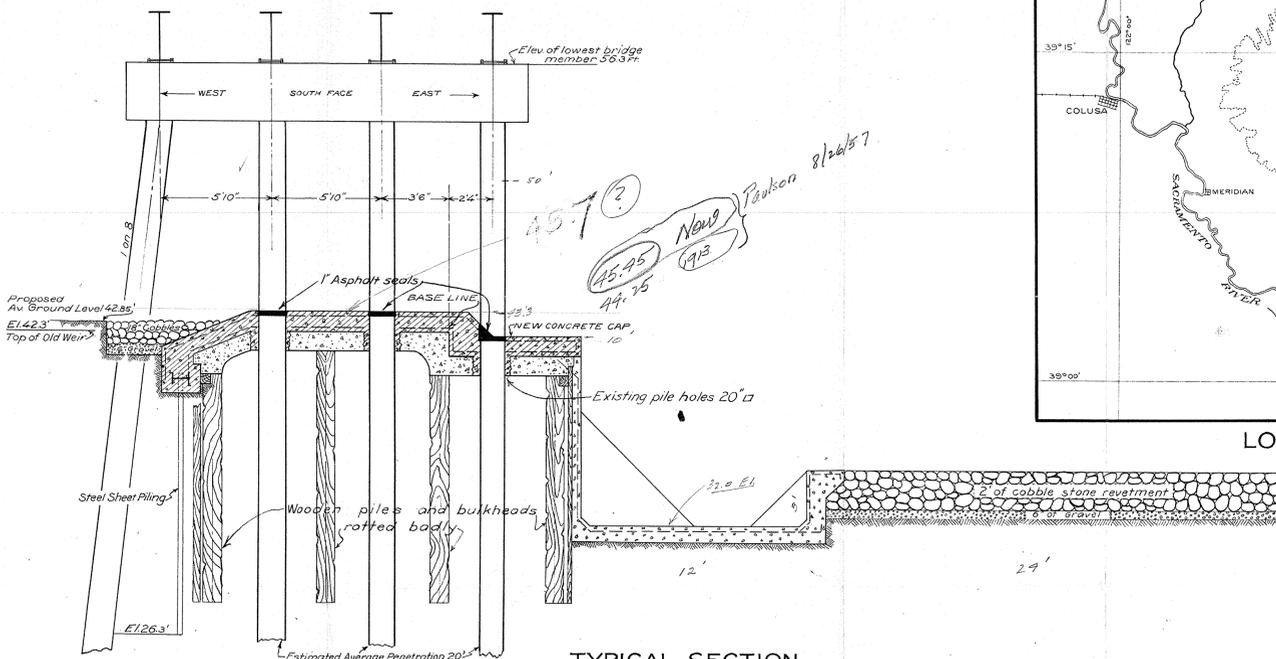
	<u>Labor</u>	<u>Material</u>	<u>Equipment</u>	<u>Overhead</u>	<u>Total</u>
1. Inspection					
2. Maintenance					
3. Flood fighting operations					
TOTAL					

Respectfully submitted,

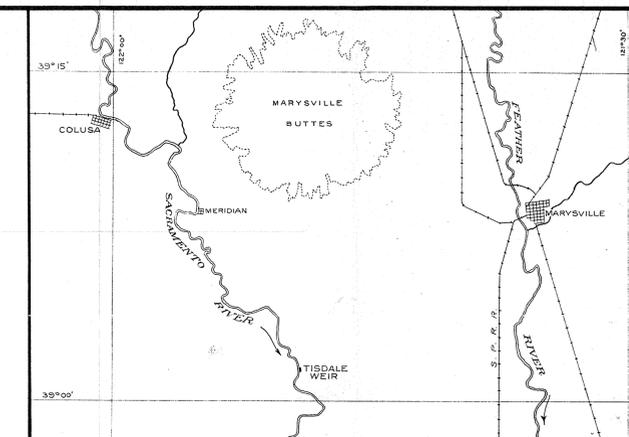
Superintendent of Works



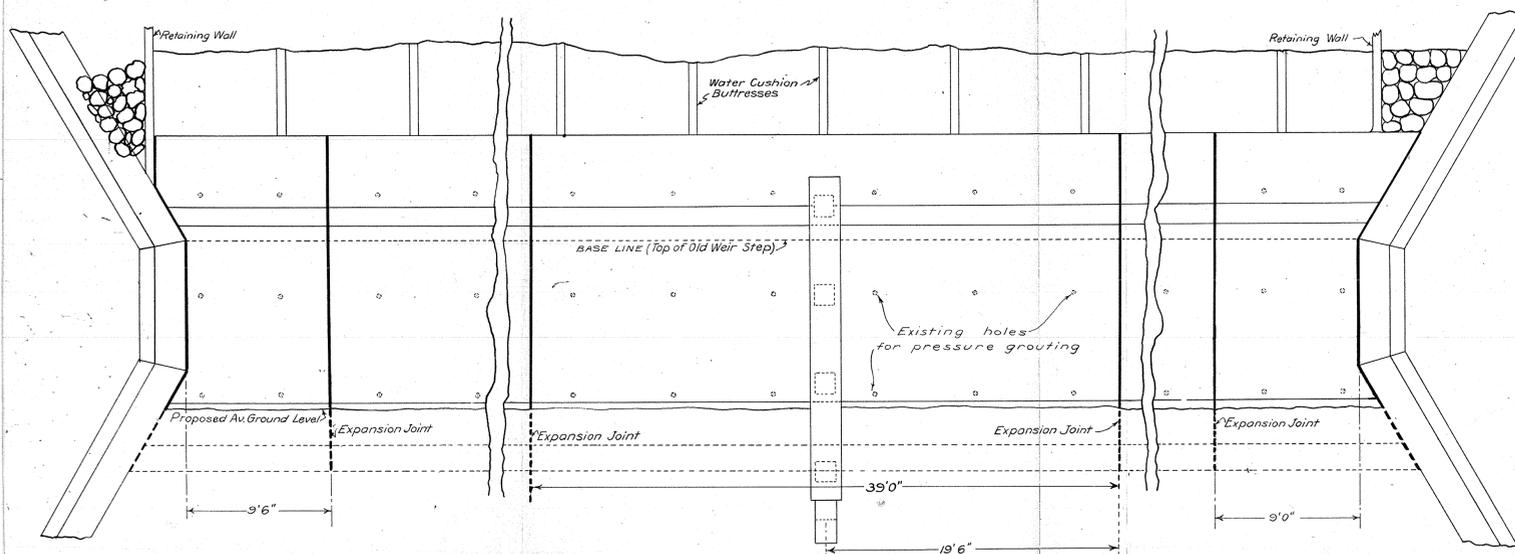
PLAN OF WEIR SITE
SCALE: 1 IN = 100 FT.



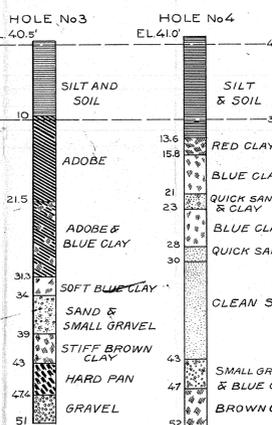
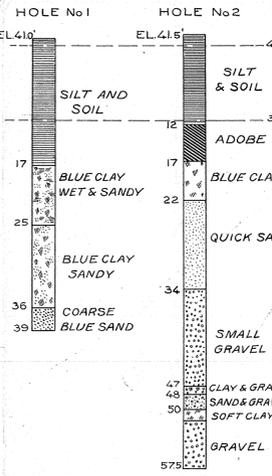
TYPICAL SECTION
SCALE: 1/2 IN = 1 FT.



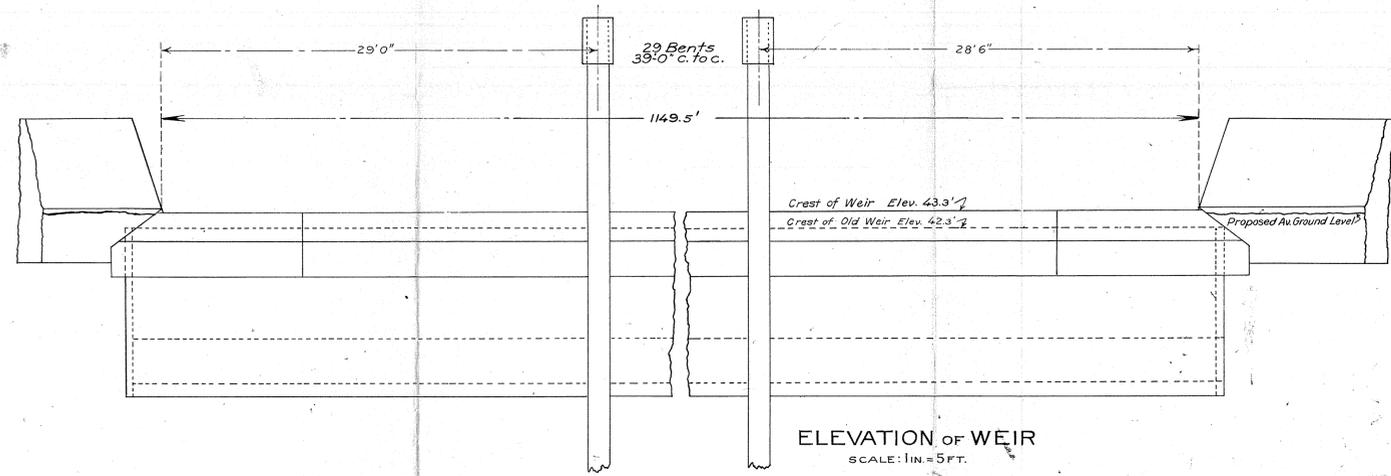
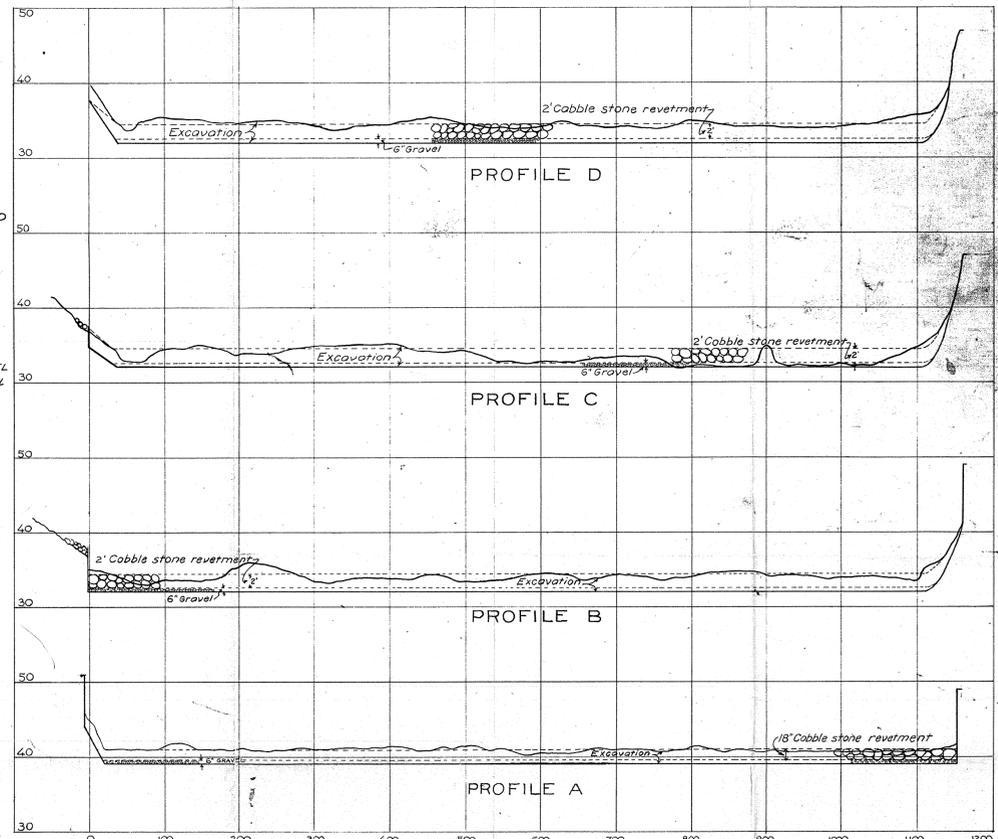
LOCALITY MAP
SCALE: 1 in = 4 Mi.



PLAN OF WEIR
SCALE: 1 IN = 5 FT.



TEST BORINGS



ELEVATION OF WEIR
SCALE: 1 IN = 5 FT.

AS CONSTRUCTED
TISDALE WEIR
 SACRAMENTO RIVER FLOOD CONTROL PROJECT
 PLAN, SECTION, LOCATION & BORINGS
 IN TWO SHEETS SHEET ONE SCALE AS SHOWN
 U.S. ENGINEER OFFICE SACRAMENTO, CALIF.
 CALIFORNIA DEBRIS COMMISSION, JULY 1931

Submitted: *Leon Bartlett*
 Approved: *J.R. Mathison*
 Major, Corps of Engineers, U.S.A.
 DRAWN BY: N.S.M.
 DOC. FILE: FILE DIV. SHEET
 50 9 1286-1

