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Sacramento District  
Corps of Engineers  
U.S. Army  
March 1981

This manual supersedes the Operation and Maintenance Manual issued May 1964.
1-01. Project Authorization and Description. The Sacramento River, Chico Landing to Red Bluff Project was authorized in the Flood Control Act of 1958 (Public Law 85-500, 3 July 1958), which reads in part as follows:

The project for flood protection on the Sacramento River from Chico Landing to Red Bluff, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document No. 272, Eighty-fourth Congress, at an estimated cost of $1,560,000.

House Document 272, 84th Congress, 2d Session, provided that the Sacramento River Flood Control Project be modified:

... to include bank protection work and clearing and snagging along the Sacramento River from Chico Landing to Red Bluff ... subject to the condition that only such work be constructed as is found economically justified at the time of construction in the light of conditions then prevailing along the river ... .

and that:

... the existing project ... be extended to Keswick Dam for the purpose of zoning the area below the dam to prevent the erection of future improvements within the flood plain ... by the enactment and enforcement of adequate zoning regulations over the flood plain area.

The Sacramento River, Chico Landing to Red Bluff Project is in north central California. Bank protection sites extend intermittently along a 50-mile reach of the river beginning at Chico Landing (River Mile 194), Butte County, and ending at Red Bluff (River Mile 244), Tehama County. A location map is shown as Exhibit A.
1-02. **Purpose of Manual.** This manual has been prepared to provide local interests with information pertinent to the operation and maintenance of project facilities, to advise them of the details of applicable requirements, and to assure that structures and facilities provided by the United States for local protection are continuously maintained and operated as necessary to obtain maximum benefits. Rules that govern local interests in operating and maintaining flood control projects are contained in the Code of Federal Regulations. (See Exhibit B.) The Flood Immunity Statute (33 U.S.C., Section 702c.) protects the United States from liability of any kind from damage caused by floodwater related to a flood control project.

1-03. **Definitions.** Definitions applicable to this manual are:

**District Engineer:** The chief executive of the Sacramento District, U.S. Army Corps of Engineers, 650 Capitol Mall, Sacramento, 95814. In certain contexts, the term may be construed to include representatives of the District Engineer.

**Regulations:** Part 208, Chapter II, Title 33, Code of Federal Regulations. (Exhibit B of this manual is an extract.)

**Right or left bank:** The right or left side of a stream or waterway as the viewer faces downstream.

**Superintendent:** The local official with responsibility (pursuant to regulations) for developing and maintaining, and directly in charge of, an organization charged with the efficient operation and maintenance of flood control facilities provided by the United States.

1-04. **Construction data.** A summary of data pertinent to the construction of project facilities covered by this manual is shown on page 3.
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* Data for certain early contracts reflects "old" river mile designations. For these older contracts, locations of work are shown in "new" river miles (from Sacramento District Drawing File ) and in ( ) = "old" river miles (from Drawing File 6-12-583), River mile 141.2 (File 4-12-1711).
SECTION II
LOCAL COOPERATION

2-01. Stated Requirements. House Document No. 272 provided that local interests:

(a) furnish without cost to the United States all necessary land, easements, and rights-of-way for construction of the project;
(b) hold and save the United States free from damages due to the construction works; and
(c) maintain the works after completion in accordance with regulations prescribed by the Secretary of the Army.

The authorizing legislation recognized that continued encroachment onto the flood plain of the Sacramento River below Keswick Dam would ultimately prevent Shasta Dam from being operated to provide fully the benefits for which it was authorized. Accordingly, House Document No. 272 also provided that local interests enact and enforce adequate zoning regulations to prevent construction of future permanent improvements in the flood plain of the Sacramento River.

2-02. Assurances Provided by Local Interests. Section 12538.2 of the California Water Code (added by Section 1, Chapter 1912, California Statutes of 1959) adopted and authorized the Sacramento River Bank Protection Project. Assurances of local cooperation by the State Reclamation Board are contained in Section 12657, which reads in part:

... the Reclamation Board shall give assurances satisfactory to the Secretary of the Army that the local cooperation, required by Section 3 of the Act of Congress approved December 22, 1964 (Public Law 534, 78th Congress, Second Session), and Section 2 of the Act of Congress approved August 18, 1941 (Public Law 228, 78th Congress, First Session), will be furnished by the state in connection with the flood control project authorized and adopted in Section ... 12648.2 ...

Glenn, Butte, Tehama, and Shasta Counties are involved in the requirement for local interests to enact and enforce flood plain zoning from Chico Landing to Keswick Dam. Glenn and Butte Counties adopted ordinances to control development in secondary floodways in 1972 and 1971, respectively. Tehama County adopted a flood plain zoning ordinance in 1976. These ordinances, in combination with the Designated Floodway Program of the State of California (Section 8400, California Water Code--Cobey-Alquist Flood Plain Management Act), satisfied the flood plain zoning requirement. The State Reclamation Board provided specific assurances of local cooperation for Tehama County bank protection sites on 15 March 1962, for Butte County sites on 29 June 1972, and for Glenn County sites on 9 March 1973. There are no bank protection sites in Shasta County.
2-03. Transfer of Responsibility. The responsibility for maintenance and operation of the project was transferred to the State Reclamation Board as portions of the work were completed. Completed work was officially transferred by letters dated 11 December 1963, 17 January 1964, 13 November 1968, 17 September 1970, 26 November 1971, 4 November 1974, 27 November 1974, 10 November 1975, 12 January 1976, 3 August 1976, 19 November 1976, 15 November 1978, and 19 June 1979. The transfer letters are shown as Exhibit C.
3-01. Introduction. This manual has been prepared to furnish local interests with information on the project works and advice on the details of the requirements of operation and maintenance applicable. The project works are to be maintained and operated in accordance with the Regulations shown as Exhibit B and the interpretations and amplifications thereof as contained herein.

3-02. Responsibilities of the Superintendent. A general outline of the responsibilities of the Superintendent is contained in Section 208.10, Subsection (a) of the Regulations. Subparagraph (2) is an overview of these responsibilities. It reads:

The State, political subdivision thereof, or other responsible local agency, which furnished assurance that it will maintain and operate flood control works in accordance with regulations prescribed by the Secretary of the Army, as required by law, shall appoint a permanent committee consisting of or headed by an official hereinafter called the "Superintendent," who shall be responsible for the development and maintenance of, and directly in charge of, an organization responsible for the efficient operation and maintenance of all of the structures and facilities during flood periods and for continuous inspection and maintenance of the project works during periods of low water, all without cost to the United States.

Major specific duties of the Superintendent are:

a. Training Key Personnel. Key personnel of the maintenance and operation organization and an Assistant Superintendent should be trained to handle maintenance as well as unexpected problems related to flood control. Sector foremen should be trained to lead in patrol, inspection, and maintenance work so these functions will be handled in an orderly and expeditious manner.

b. Preventing Encroachment and Trespass. Project right-of-way should be posted with clearly visible signs to prevent encroachment or trespass of project facilities. The Superintendent will take action under local ordinances and authorities to prosecute trespassers or remove unauthorized encroachments, and make a written report to the State Reclamation Board on any actions taken.

c. Permits for Right-of-Entry or Use of Right-of-Way. Permits for temporary right-of-entry upon, or the use of portions of project right-of-way, shall not be issued until the State Reclamation Board determines the conditions to be included in the permit document. The Superintendent will, therefore, cause notices to be posted at conspicuous locations along the project right-of-way to direct public attention to this requirement. See Exhibit D for a sample permit.
d. Permits for Improvements or Construction Within the Project Right-of-Way. The Superintendent will assure that all requests for permits for construction of any improvements of any nature within the limits of the project right-of-way are referred to the District Engineer through the State Reclamation Board for determination that such construction will not adversely affect the stability, safety, or functioning of the protective facilities, and for definition of the conditions under which the permit should be granted. These conditions will include, among others, the following:

1. That all work be performed in accordance with standard engineering practice using plans and specifications approved by the District Engineer or his authorized representative.

2. That drawings of proposed improvements or alterations of existing flood control works be submitted to the State Reclamation Board sufficiently in advance of the start of construction to permit adequate study and consideration.

3. That proposed work be determined compatible with existing project improvements.

4. That after completion of the improvement or alteration "As Constructed" drawings be submitted to the District Engineer in duplicate.

e. Inspection. The Superintendent must make periodic inspections to insure that effective maintenance is continuing. Regulations provide that such inspections shall be made just before the beginning and at the end of the flood season; immediately after each major high water period, otherwise at intervals not exceeding 90 days; and at such intermediate times as necessary to insure the best possible care of project facilities. For uniformity, the flood season is deemed to extend from 1 November through 15 April. The suggested check list shown as Exhibit E should be followed to insure that no feature of the project works is overlooked during inspections.

f. Maintenance. It is the responsibility of the Superintendent to maintain project facilities in a manner that insures their serviceability in time of flood. Maintenance and repair shall be accomplished during the appropriate season as scheduled by the Superintendent. Immediate steps will be taken to correct dangerous conditions disclosed by an inspection.

The Superintendent is fully responsible for making repairs and selecting the methods used. The District Engineer will be available for advice and consultation. All repairs shall be made in accordance with standard engineering practice, to line and grade, and in accordance with details shown on the construction drawings for the project works (Exhibit F). No change or alteration shall be made in any feature of the project works without a prior determination by the District Engineer that such alteration will not adversely affect the stability and functioning of project facilities. Plans and specifications for all proposed changes or alterations shall be submitted to the District Engineer through the State Reclamation Board for investigation and approval before prosecution of the work.

In the event that damage to the project works, whether due to floods or other causes, is considered to be beyond the maintenance responsibility of
the local interests to repair, the Superintendent will contact the District Engineer, through the State Reclamation Board, and he will assist, advise, or suggest the course of action to be taken.

g. Protecting the Environment. Project maintenance is to be accomplished in a manner that minimizes adverse environmental impact. Vegetation preserved through selective clearing during construction of project works 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 project works.

h. Maintaining Records and Making Reports. The Superintendent must maintain files of records, drawings, and reports on the project works and make these data available to the District Engineer upon request. The Superintendent shall submit a semi-annual report to the District Engineer within a 10-day period following 15 April and 1 November. The report will comprise statements of:

1. The physical condition of the protective works as summarized from logs of inspection.
2. Flood-fighting activities during the report period and the behavior of the project works during floods.
3. Prosecutions for encroachment or trespass.
4. Maintenance measures taken; nature, date of construction, and date of removal of temporary repairs; and date of completion of permanent repairs.
5. Permits issued for right-of-entry or use of right-of-way.
6. Permits issued for improvements or construction within the project right-of-way.
7. The cost of maintenance and operation for the report period.
8. Any unusual, abnormal, or unexpected conditions or occurrences bearing on the stability or continued effectiveness of the project works.

A suggested form for submitting the semi-annual report is shown as Exhibit G. Copies of inspector's field notes as recorded on a check-list (Exhibit E) will be made an inclosure to the semi-annual report.

3-03. Assistance by the District Engineer. To assist the Superintendent in meeting responsibilities under the Regulations, the District Engineer will:

a. Furnish "As Constructed" drawings of project works to the local interests responsible for maintenance and operation of project works. (Exhibit F)

b. Make periodic inspections of the project works and notify local interests of any repairs or maintenance measures deemed necessary in addition to measures taken and repairs made by the Superintendent.
c. Submit detailed reports on all cases of non-compliance with the Regulations to the Chief of Engineers for determination of corrective measures.

d. Make a prior determination of the effect of any proposed alteration of project works (or encroachment, excavation, or construction within the project right-of-way) on project functioning and furnish the results to the Superintendent in writing.

3-04. Specific Maintenance and Operation Requirements. The requirements for maintaining and operating channels and floodways are contained in paragraph 208.10(g) of the Regulations, which is quoted in part as follows:

... Periodic inspections of improved channels and floodways shall be made by the Superintendent to be certain that:

* * * * * * *

The channel or floodway is not being restricted by the depositing of waste materials, building of unauthorized structures or other encroachments;

* * * * * * *

Banks are not being damaged by rain or wave wash, and that no sloughing of banks has occurred;

Riprap sections and deflection dikes and walls are in good condition;

Approach and egress channels adjacent to the improved channel or floodway are sufficiently clear of obstructions and debris to permit proper functioning of the project works.

Such inspections shall be made prior to the beginning of the flood season and otherwise at intervals not to exceed 90 days. Immediate steps will be taken to remedy any adverse conditions disclosed by such inspections. Measures will be taken by the Superintendent to promote the growth of grass on bank slopes and earth deflection dikes...

* * * * * * *

The improved channel or floodway shall be thoroughly inspected immediately following each major high water period. As soon as practicable thereafter, all snags and other debris shall be removed and all damage to banks, riprap, deflection dikes and walls, drainage outlets, or other flood control structures repaired.
a. Periodic Inspections. The State Department of Water Resources will make a detailed inspection of the project in the spring and fall of each year and note any required maintenance. Inspections are to be scheduled to coincide with the beginning and end of the flood season (1 November and 15 April), and the check list shown as Exhibit E is to be utilized. The purpose of these and other periodic inspections is to insure that conditions that may impair the effectiveness of the project are not developing. It is intended that inspections disclose all conditions that in any way affect the stability and functioning of the structures. Particular attention will be given to the following during every inspection:

1. Location, extent, and size of vegetation.
2. Unauthorized operations such as excavation or construction of buildings and other structures, levees, bank protection, or training dikes within the floodflow channel right-of-way.
3. Deposition of rubbish of any sort and disposal of industrial waste.
4. Changes such as aggradation or degradation in the streambed, which could interfere with free flow from side drainage structures or induce local meanders that would scour the banks.
5. Upstream operations of any nature that would affect flow conditions in the project reach.
6. The condition of project facilities.

During inspections, it should be determined whether the following provisions of the Regulations are being adhered to:

1. That brush, trees, shrubs, vines, and other growth that have established themselves in the rock revetment do not displace or cause the revetment to be washed out or fail.
2. That all caves, sloughs, burrows, holes, slips, or other damaged portions of the banks have been repaired.
3. That all irrigation and drainage structures within the project reaches are in good condition.
4. That no revetment work or riprap has been displaced, washed out, or removed.

b. Special Instructions. Maintenance. The principal feature of the project consists of bank protection. Accordingly, the requirements of paragraph 208.10(g) are supplemented as follows:

1. Where scour, wash, settlement, displacement, or failure of a portion of the originally provided stone protection has occurred, or where inspection indicates such damage may result during the next flood or high water period, the scour or wash shall be filled with earth free from brush, roots, sod, or other unsuitable materials, and additional stone placed upon
the earth fill to bring the stone protection to its original section. In an emergency, and when stone is not available, sandbags or bags filled with gravel may be used as a temporary remedial measure.

2. When the stone protection is permanently repaired, the stone used shall, in so far as possible, be similar to the kind and gradation as originally used and placed to the thickness shown on the "As Constructed" drawings identified in Exhibit F.

3. In the event an inspection reveals that due to scour, settlement, or other causes, stone protection on the bank is required beyond the limits of the original construction, or in reaches of the bank not originally provided with such protection, local interests will provide additional sloping of the bank and placement of stone protection as needed to protect the completed work. The work shall be done in a manner acceptable under standard engineering practice. Drawings showing such improvements or alterations shall be furnished to the District Engineer for approval prior to starting the work.

4. Trees, shrubs, brush, vines, and other vegetation may be allowed to grow through the revetment. Revetment displaced by vegetation shall be repaired. Vegetation that jeopardizes the integrity of the revetment shall be cut and removed and the revetment repaired.

5. A 20-foot maintenance strip shall be retained adjacent to the top of the bank to permit inspection and maintenance activities, and all of the bank waterward of the maintenance strip shall be maintained. Slopes above the revetment shall be maintained at those locations where the lower part of the bank was revetted and the upper part sloped and seeded during project construction. Where the bank above the revetment was not sloped, maintenance of the bank will begin when necessary to stabilize the bank on a 1 vertical to 2 horizontal slope. In general, the upper bank will be stabilized and maintained, as needed, by additional bank sloping and stone protection, or by other methods of erosion control.

6. All access roads should be maintained in a manner that allows inspection and maintenance vehicles to travel over them during non-flood periods. No encroachments shall be allowed in the 20-foot maintenance strip without the prior approval of the State Reclamation Board.
CODE OF FEDERAL REGULATIONS (EXTRACT)

TITLE 33 - NAVIGATION AND Navigable Waters

Chap. XX - Corps of Engineers, Department of the Army

PART 290 - FLOOD CONTROL REGULATIONS

Subpart A - Section 290.3

§ 290.3 Inspection of works.

(a) Such inspections shall be made immediately prior to the beginning of each major high water period, and otherwise at intervals not exceeding 90 days; and immediate steps will be taken to protect the concrete and its foundations from any condition which endangers the stability of the work.

(b) Drainage structures - (1) Maintenance. Adequate measures shall be taken to keep all outlet channels open and free from trash, drift, or debris. Such measures shall be at least once during each calendar year.

(c) Operation. During flood periods, 다만 when it may be necessary to locate possible bank and erosion points or to protect the concrete and its foundations from any condition which endangers the stability of the work.
The Reclamation Board  
State of California  
1215 "O" Street  
Sacramento 14, California  

Gentlemen:

Reference is made to the joint inspection made on 3 and 4 December 1963 of flood control work pertaining to the Sacramento River Chico Landing to Red Bluff Flood Control Project, for the purpose of transferring this work, upon completion, to the State of California for operation and maintenance.

The flood control work consists of shaping the river banks and placement of stone protection on the left bank of the Sacramento River at Site No. 8, River Mile 183.4; and Site No. 9 River Mile 183.9; and on the right bank at Site No. 10, River Mile 187.0; Site No. 11, River Mile 188.6; and Site No. 12, River Mile 189.7. The work was completed on 3 December 1963 in accordance with Specification No. 2898, Contract No. DA-04-167-CIVENG-63 74 and Drawing No. 50-4-3713. Sites Nos. 6 and 7 are not included herein and will be transferred at a later date when completed.

The flood control work described above now meets the requirements of the Sacramento River Chico Landing to Red Bluff Flood Control Project Therefore said flood control work is transferred to the State of California for operation and maintenance.

The maintenance work required under the provisions of the Sacramento River Chico Landing to Red Bluff 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 provided under paragraph 208.10(10) of these regulations, an operation and maintenance manual for the project is in process of preparation and will be furnished at a later date upon completion.
A copy of this letter is being transmitted to the Department of Water Resources.

Sincerely yours,

ROBERT E. MATHE
Colonel, CE
District Engineer

Copy Furnished
Dept Water Resources
23rd & "R" Streets
Sacramento, Calif.

(by) C. R. TEAGLE
Lt. Col., CE
Deputy District Engineer
The Reclamation Board  
State of California  
1215 "O" Street  
Sacramento, California 95814

Gentlemen:

Reference is made to the joint inspection made on 14 January 1964 of flood control work pertaining to the Sacramento River Chico Landing to Red Bluff Flood Control Project, for the purpose of transferring this work, upon completion, to the State of California for operation and maintenance.

The flood control work consists of shaping the river banks and placement of stone protection on the right bank of Sacramento River at Site No. 6, River Mile 169.0; and Site No. 7, River Mile 169.8. The work was completed on 20 December 1963, in accordance with Specification No. 2898, Contract No. DA-04-167-CIVENG-63-74 and Drawing No. 50-4-3713.

The flood control work described above now meets the requirements of the Sacramento River Chico Landing to Red Bluff Flood Control Project. Therefore, said flood control work is transferred to the State of California for operation and maintenance.

The maintenance work required under the provisions of the Sacramento River Chico Landing to Red Bluff Flood Control Project shall be performed in accordance with existing flood control regulations, enclosed 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 provided under paragraph 208.10(10) of these regulations, an operation and maintenance manual for the project is in process of preparation and will be furnished at a later date upon completion.

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

Sincerely yours,

ROBERT E. MATHE
Colonel, CE  
District Engineer

1 Incl
F.C. Regs

Copy furnished:
Dept Water Resources  

EXHIBIT C
Sheet 3 of 21
The Reclamation Board  
State of California  
1416 - 9th Street, Room 1335  
Sacramento, California 95814

Gentlemen:

Reference is made to the joint inspection of 12 November 1968, made for the purpose of transferring a portion of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project to the State of California for operation and maintenance.

The flood control work consists of shaping the riverbank and placement of 500 feet of stone bank protection on the right bank of the Sacramento River at Site Mile 177.3. The work was completed on 23 October 1968, in accordance with Specification No. 3559, Contract No. DACW05-69-C-0011, and Drawing No. 50-4-4412.

The work was performed under the general authority of the Flood Control Act of 1958, 85th Congress, 1st Session (PL 85-500, 3 July 1958), and now meets the requirements of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. Therefore, said flood control work together with the waterway banks contiguous thereto, is transferred to the State of California for operation and maintenance.

This portion of the project work will be added by amendment to the Operations and Maintenance Manual, Sacramento River, Chico Landing to Red Bluff Bank Protection Project. Copies will be furnished your office at a later date.

Sincerely yours,

CRAWFORD YOUNG  
Colonel, CE  
District Engineer

Copy furnished:  
Dept Water Resources  

EXHIBIT C  
Sheet 4 of 21
The Reclamation Board  
State of California  
1416 – 9th Street, Room 1335  
Sacramento, California 95814

Gentlemen:

Reference is made to the joint inspection of 1 September 1970 made for the purpose of transferring a portion of the Sacramento River Bank Protection Project, Chico Landing to Red Bluff, to the State of California for operation and maintenance.

The flood control work consists of shaping the river bank and placement of 525 feet of stone bank protection on the left bank of the Sacramento River at Site Mile 218.3. The work was completed on 12 June 1970, in accordance with Specification No. 3694, Contract No. DACW05-70-C-0086, and Drawing No. 6-4-2125.

The work was performed under the general authority of the Flood Control Act of 1958, 85th Congress, 1st Session (PL 85-500, 3 July 1958), and now meets the requirements of the Sacramento River Bank Protection Project, Chico Landing to Red Bluff. Therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred as of 12 June 1978, to the State of California for operation and maintenance.

This portion of the project work will be added by amendment to the Operations and Maintenance Manual, Sacramento River Bank Protection Project, Chico Landing to Red Bluff, Copies will be furnished your office at a later date.

Sincerely yours,

JAMES H. HIGMAN  
Lieutenant Colonel, CE  
Acting District Engineer

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

Gentlemen:

Reference is made to the joint inspection of 18 November 1971 made for the purpose of transferring a portion of the Sacramento River Bank Protection Project, Chico Landing to Red Bluff, to the State of California for operation and maintenance.

The flood control work consists of shoring the river bank and placement of stone bank protection on the left bank of the Sacramento River at Site Mile 185.3. The work was completed on 18 November 1971, in accordance with Specification No. 4106, Contract No. DACW05-72-C-0019, and Drawing No. 50-4-4706.

The work was performed under the general authority of the Flood Control Act of 1958, 83rd Congress, 1st Session (PL 85-500, 3 July 1958), and now meets the requirements of the Sacramento River Bank Protection Project, Chico Landing to Red Bluff. Therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred as of 18 November 1971, to the State of California for operation and maintenance.

This portion of the project work will be added by amendment to the Operations and Maintenance Manual, Sacramento River Bank Protection Project, Chico Landing to Red Bluff. Copies will be furnished your office at a later date.

Sincerely yours,

JAMES C. DONOVAN
Colonel, CE
District Engineer

Copy furnished:
DWR, ATTN: John Wright

EXHIBIT C
Sheet 6 of 21
The Reclamation Board  
State of California  
1416 – 9th Street, Room 335  
Sacramento, California 95814

Gentlemen:

Reference is made to joint inspections on Site Miles 194.0 and 196.3 made for the purpose of transferring a portion of the Sacramento River Chico Landing to Red Bluff bank protection project to the State of California for operation and maintenance.

It is our understanding that Butte County plans to replace and raise the road at Site Mile 194.0. After road repair is accomplished we will give consideration to providing additional rock protection along the raised bank and extending the rock at the downstream and under Section 14 of Public Law 526, which is authority to provide bank protection to public works such as highways and bridges. Site Mile 196.3 sustained damage during the 1974 flood flows and it is our intent to repair the damaged reach during the next contract under the Chico Landing to Red Bluff bank protection project.

The flood control work consists of shaping the river bank and placement of stone bank protection on the left bank of the Sacramento River at Site Miles 194.0 and 196.3. The work as listed on the inclosure was completed on 4 January 1974 in accordance with Specification No. 4451, Contract No. DACW05-73-C-0109 and Drawing No. 50-4-4891.

The work was performed under the general authority of the Flood Control Act of 1958, 85th Congress, 1st Session (PL 85-500, 3 July 1958), and now meets the requirements of the Sacramento River Chico Landing to Red Bluff bank protection project. Therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred as of 4 November 1974 to the State of California for operation and maintenance.

EXHIBIT C  
Sheet 7 of 21
The Reclamation Board

This portion of the project work will be added by amendment to the Operation and Maintenance Manual, Sacramento River Chico Landing to Red Bluff bank protection project. Copies will be furnished your office at a later date.

Sincerely yours,

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

1 Incl
As stated

Copy furnished:
Dor, ATTN: John Wright
## Summary of Portion of Sacramento River
Bank Protection Project, Chico Landing to Red Bluff
Left Bank

<table>
<thead>
<tr>
<th>Site</th>
<th>Station</th>
<th>L.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>194.0</td>
<td>5+00 to 24+00</td>
<td>1900</td>
</tr>
<tr>
<td>196.3</td>
<td>6+00 to 10+00</td>
<td>400</td>
</tr>
<tr>
<td></td>
<td>16+50 to 21+25</td>
<td>475</td>
</tr>
</tbody>
</table>
The Reclamation Board
State of California
1416 - 9th Street, Room 335
Sacramento, California 95814

Gentlemen:

Reference is made to the joint inspection of 6 November 1974 made for
the purpose of transferring a portion of the Sacramento River Chico
Landing Red Bluff Bank Protection Project to the State of California
for operation and maintenance.

The flood control work consists of shaping the river bank and placement
of stone bank protection on the left bank of the Sacramento River at
Site Miles 208.4 and 213.1. The work as listed on the inclosure, was
completed on 6 November 1974 in accordance with Specification No. 4668,
Contract No. DACW05-74-C-0093, Drawing No. 50-4-4971.

The work was performed under the general authority of the Flood Control
Act of 1958, 85th Congress, 1st Session (PL 85-500, 3 July 1958), and
now meets the requirements of the Sacramento River Chico Landing Red
Bluff Bank Protection Project. Therefore, said flood control work
together with the waterway banks contiguous thereto, are transferred as
of 27 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, Sacramento River Chico Landing Red Bluff Bank
Protection Project. Copies will be furnished your office at a later date.

Sincerely yours,

1 Incl
As stated

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

Copy furnished:
DWR, ATTN: John Wright

EXHIBIT C
Sheet 10 of 21
<table>
<thead>
<tr>
<th>Site Mile</th>
<th>Station</th>
<th>L.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>208.4</td>
<td>0+00 to 4470</td>
<td>4470</td>
</tr>
<tr>
<td>213.1</td>
<td>0+40 to 15+10</td>
<td>1470</td>
</tr>
<tr>
<td></td>
<td>18+60 to 24+70</td>
<td>610</td>
</tr>
</tbody>
</table>
The Reclamation Board  
State of California  
1416 - 9th Street, Room 335  
Sacramento, California  95814

Gentlemen:

Reference is made to the joint inspection of 5 November 1975 made for the purpose of transferring a portion of the Sacramento River Bank Protection Project, Chico Landing to Red Bluff, Unit 3, to the State of California for operation and maintenance.

The flood control work consists of shaping the river bank and placement of stone bank protection on the Sacramento River left bank at Site Miles 194.0 and 230.5 and right bank at Site Miles 202.0 and 229.0. The sites, as listed on the inclosure were completed on 5 November 1975, in accordance with Specification No. 4913, Contract No. DACW05-76-C-0014, and Drawing No. 50-4-5043.

Site Mile 194.0 left (Sta. 3+00 to 24+00 previously transferred to the State of California) was repaired and extended under this unit as stated in our transfer letter dated 4 November 1974 to your Board. The work was performed under the general authority of the Flood Control Act of 1958 85th Congress, 2nd Session (PL 85-500, 3 July 1958) and now meets the requirements of the Sacramento River Bank Protection Project Chico Landing to Red Bluff. Therefore, said flood control work together with the waterway banks contiguous thereto, are transferred as of 7 November 1975, 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 Bank Protection Project, Chico Landing to Red Bluff. Copies will be furnished your office at a later date.

Sincerely yours,

1 Incl  
As stated  

Copy furnished:
DWR, ATTN: R. Franson & Carl King

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

EXHIBIT C  
Sheet 12 of 21
SUMMARY OF PORTION OF SACRAMENTO RIVER
CHICO LANDING TO RED BLUFF BANK PROTECTION PROJECT UNIT NO. 3

Sacramento River Left Bank

<table>
<thead>
<tr>
<th>Site Mile</th>
<th>Stone Protection</th>
<th>L.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 194.0</td>
<td>24+00 to 28+40</td>
<td>440</td>
</tr>
<tr>
<td>230.5</td>
<td>1+00 to 35+25</td>
<td>3425</td>
</tr>
</tbody>
</table>

Sacramento River Right Bank

<table>
<thead>
<tr>
<th>Site Mile</th>
<th>Stone Protection</th>
<th>L.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>202.0</td>
<td>6+00 to 12+00</td>
<td>600</td>
</tr>
<tr>
<td>**229.0</td>
<td>0+00 to 10+00</td>
<td>1000</td>
</tr>
<tr>
<td></td>
<td>15+00 to 38+00</td>
<td>2280</td>
</tr>
</tbody>
</table>

* Transferred to State 4 Nov 74 and extended on this contract.
** Extended.
12 January 1976

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

Gentlemen:

Reference is made to the joint inspection of 9 January 1976 made for the purpose of transferring a portion of the Sacramento River Chico Landing, Red Bluff Bank Protection Project to the State of California for operation and maintenance.

The flood control work consists of shaping the river bank and placement of 6,500 lineal feet of stone bank protection on the right bank of the Sacramento River at Site Mile 197.0. The work was completed on 9 January 1976 in accordance with Specification No. 4913, Contract No. DACW05-76-C-0014, Drawing No. 50-4-5043.

The work was performed under the general authority of the Flood Control Act of 1958, 85th Congress, 2nd Session (PL 85-500, 3 July 1958), and now meets the requirements of the Sacramento River Chico Landing Red Bluff Bank Protection Project. Therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred as of 12 January 1976 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 Chico Landing Red Bluff Bank Protection Project. Copies will be furnished your office at a later date.

Sincerely yours,

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

Copy furnished:
DWR, ATTN: R. Franson & Carl King
DEPARTMENT OF THE ARMY  
SACRAMENTO DISTRICT, CORPS OF ENGINEERS  
650 CAPITOL MALL  
SACRAMENTO, CALIFORNIA 95814

3 August 1976

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

Gentlemen:

Reference is made to the joint inspection of 29 June 1976 made for the purpose of transferring a portion of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project, Unit #3 to the State of California for operation and maintenance.

The flood control work consists of shaping the river bank and placement of stone bank protection on the left bank of the Sacramento River at Site Miles 202.4, 207.0 and 211.1. The work, as listed on the inclosure, was completed on 29 July 1976 in accordance with Specification No. 4913, Contract No. DACW05-76-C-0014, Drawing No. 50-4-5043.

The work was performed under the general authority of the Flood Control Act of 1958, 85th Congress, 2nd Session (PL 85-500, 3 July 1958) and now meets the requirements of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. Therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred as of 3 August 1976 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, Chico Landing to Red Bluff Bank Protection Project. Copies will be furnished your office at a later date.

Sincerely,

[Signature]

1 Incl  
As stated  
DONALD M. O'SHEI  
Colonel, CE  
District Engineer

Copy furnished:  
DWR, ATTN: R. Franson & Carl King

EXHIBIT C  
Sheet 15 of 21
<table>
<thead>
<tr>
<th>Site Mile</th>
<th>Stone Protection</th>
<th>L.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>202.4</td>
<td>0+00 to 13+00</td>
<td>1300</td>
</tr>
<tr>
<td>207.0</td>
<td>0+00 to 19+00</td>
<td>1900</td>
</tr>
<tr>
<td>211.1</td>
<td>2+00 to 42+00</td>
<td>4000</td>
</tr>
</tbody>
</table>
The Reclamation Board  
State of California  
1416 - 9th Street, Room 335  
Sacramento, CA 95814

Gentlemen:

This is in regard to the joint inspection of 18 November 1976, to review repair work on Site Mile 196.3 left bank, Sacramento River Bank Protection Project, Chico Landing to Red Bluff in Butte County. Reference is also made to your letter of 25 November 1974 relative to the repair work.

The work consisted of repairing 650' of stone bank protection (Station 10+00 to 16+50) and was completed on 15 November 1976. This site was previously transferred to the State of California for operation and maintenance on 4 November 1974.

The repairs were accomplished under Contract No. DACW05-76-C-0014 and meet the requirements of the Sacramento River Bank Protection Project, Chico Landing to Red Bluff.

Sincerely yours,

DONALD M. O'SHEI  
Colonel, CE  
District Engineer

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

EXHIBIT C  
Sheet 17 of 21
DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
650 CAPITOL MALL
SACRAMENTO, CALIFORNIA  95814

REPLY TO
ATTENTION OF  SPKCO-0

15 November 1978


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

Gentlemen:

This is in regard to the joint inspection of 9 November 1978 made for the purpose of transferring a portion of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project, Units #4A and #4B, to the State of California for operation and maintenance.

The flood control work consists of shaping the river bank and placement of stone bank protection on the Sacramento River right bank and Site Miles 215.3, 226.3 and 231.2 and on the left bank at Site Miles 233.9, 238.1, and 238.8 and 242.0. The work as listed on the inclosure was completed on 9 November 1978 in accordance with Specification No. 5412 Drawing No. 50-4-5402, Contract No. DACW05-78-C-0026.

The work was performed under the general authority of the Flood Control Act of 1958, 85th Congress, 2nd Session (PL 85-500, 3 July 1958) and now meets the requirements of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. Therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred as of 13 November 1978 to 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, Chico Landing to Red Bluff Bank Protection Project. Copies will be furnished your office at a later date.

Sincerely yours,

Donald M. O'Shei
Colonel, CE
District Engineer

1 Incl
As stated

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

EXHIBIT C
Sheet 18 of 21
<table>
<thead>
<tr>
<th>Site Mile</th>
<th>Station</th>
<th>Stone Protection L.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 213.3</td>
<td>11+80 to 25+00</td>
<td>1320+</td>
</tr>
<tr>
<td>* 226.3</td>
<td>0+20 to 71+50</td>
<td>7130+</td>
</tr>
<tr>
<td>231.2</td>
<td>4+40 to 19+90</td>
<td>1550+</td>
</tr>
</tbody>
</table>

**SACRAMENTO RIVER LEFT BANK**

<table>
<thead>
<tr>
<th></th>
<th>Station</th>
<th>Stone Protection L.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>233.9</td>
<td>1+60 to 18+00</td>
<td>1640+</td>
</tr>
<tr>
<td>238.1</td>
<td>2+65 to 9+75</td>
<td>710+</td>
</tr>
<tr>
<td>239.8</td>
<td>0+60 to 7+50</td>
<td>690+</td>
</tr>
<tr>
<td>* 242.0</td>
<td>18+00 to 43+25</td>
<td>2525+</td>
</tr>
</tbody>
</table>

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

Gentlemen:

This is in regard to the joint inspection of 14 June 1979, made for the purpose of transferring a portion of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project, Units #4A and 4B, to the State of California for operation and maintenance.  

The flood control work consists of shaping the river bank and placement of stone bank protection on the Sacramento River right bank at Site Mile 204.9, and on the left bank at Site Mile 242.0 extension. The work as listed on the inclosure was completed on 14 June 1979 in accordance with Specification No. 5412 Drawing No. 50-4-5402, Contract No. DACW05-78-C-0026.  

The work was performed under the general authority of the Flood Control Act of 1958, 85th Congress, 2nd Session (PL 85-500, 3 July 1958) and now meets the requirements of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. Therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred as of 14 June 1979 to 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, Chico Landing to Red Bluff Bank Protection Project. Copies will be furnished your office at a later date.  

Sincerely,

1 Incl  
As stated  
CARLOS W. HICKMAN  
Lieutenant Colonel, CE  
Acting District Engineer

Copy furnished:  
DWR, ATTN: D. Meixner  
DWR, ATTN: R. Franson

EXHIBIT C  
Sheet 20 of 21
SUMMARY OF PORTION OF SACRAMENTO RIVER
CHICO LANDING TO RED BLUFF BANK PROTECTION
PROJECT UNITS NO. 4A & 4B

SACRAMENTO RIVER RIGHT BANK

<table>
<thead>
<tr>
<th>Site Mile</th>
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<th>Stone Protection L.F.</th>
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</thead>
<tbody>
<tr>
<td>204.9</td>
<td>12+40 to 19+50</td>
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SACRAMENTO RIVER LEFT BANK

<table>
<thead>
<tr>
<th>Site Mile</th>
<th>Station</th>
<th>Stone Protection L.F.</th>
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</thead>
<tbody>
<tr>
<td>*242.0</td>
<td>13+00 to 18+00</td>
<td>500</td>
</tr>
</tbody>
</table>

*Site extended
PERMITS FOR USE OF RIGHTS-OF-WAY
LOCAL FLOOD PROTECTION PROJECTS

Improvements for local flood protection and the associated rights-of-way are owned by the local interests concerned, and are operated and maintained by them in accordance with the Code of Federal Regulations. (See Exhibit B.) Paragraph 208.10a(5) of Exhibit B provides that permits for use of the right-of-way of flood control projects so owned, operated, and maintained are subject to the approval of the District Engineer.

Applications for use of flood control project right-of-way should be addressed to the local interests having jurisdiction. The local interests will forward the application to the District Engineer together with recommendations and the reasons therefor. It is suggested that a draft copy of the permit be included with the application and recommendations so any objectionable features of the permit can be eliminated prior to offering it to the applicant. If the local interests wish to forward a permit without the application and recommendations, five copies should be submitted. The proposed permit should state the exact use of right-of-way for which permission is being requested and express any conditions or restrictions that apply. It should be signed by the applicant and a representative of the local interests having jurisdiction. A drawing, sketch, or detailed plan as may be required to show the exact location, nature of the work to be permitted, and the proposed method of its execution should be attached to each copy of the proposed permit. If the permit is approved by the District Engineer, three copies will be returned to the local interests concerned.

If the use proposed by an applicant could result in damage to the right-of-way or associated flood control structures, it is suggested that the applicant be required to post a bond to protect the local interests from any costs for removal, repair, or restoration, and to guarantee that the permittee faithfully meets conditions imposed by the approved permit. In such cases, the permit would state the amount and conditions of the bond.

In cases involving major construction or other work that may directly affect flood protection structures, it will be necessary that the District Engineer or his representative inspect the work. Local interests may also wish to make inspections. As stated in the permit form, such inspection will be at the expense of the grantee, and this should be called to his attention. Except in cases of known financial security, arrangements should be made with the grantee for an advance deposit or bond to cover inspection costs.

A permit format that has been utilized by a number of cities and levee commissions is attached.
PERMIT
FOR
RIGHT OF ENTRY

(Name of local interest having jurisdiction)

(Location)

Permission is hereby granted to:

(Name of firm or individual)  (Address)

TO:  (Describe in these spaces the proposal, including kind and type of construction, purpose intended, location by stationing. Indicate passageway provided by means of gates, etc. Use separate sheets if necessary, identifying each by reference herein.)

PROVIDED THAT:

Upon termination or expiration of this permit (whether by voluntary relinquishment by the grantee, by revocation by the grantor, or otherwise), the grantee shall remove all structures, improvements, or appurtenances that may have been erected or constructed under this permit, and shall repair or replace any portion of the flood protection structure or right-of-way that may have been damaged by his operations (including grading and seeding, or sodding, if necessary) to the satisfaction of the grantor.

The structure or operation for which this permit is issued shall be maintained by the grantee in such manner as shall not injure or damage the flood protection structure, or interfere with its operation and maintenance in accordance with regulations of the Secretary of the Army.

The structure of operation covered by this permit may be damaged, removed, or destroyed by the grantor in time of flood emergency if such action is determined by the grantor to be necessary in order to preserve life or property, or prevent damage or impairment to the use or safety of the flood protection structure, and the grantor shall not be liable to the grantee for such damage or destruction.
Unless otherwise specifically provided herein, this permit may be canceled at anytime by the grantor upon 10 days written notice mailed to the grantee at the address shown above. During such 10 day period, (or such other period as may be provided herein) the grantee will be permitted to remove any property or improvements installed under this permit, and to repair or replace any damage to the flood protection right-of-way or structures resulting from his use or operations. At the end of such period, the grantor shall have the right to possess and dispose of any such property or improvements remaining upon its right-of-way, and may proceed to repair or replace such damage, and the grantee herein shall be liable to the grantor for the full cost of such repairs or replacements.

The construction, installation, and maintenance of the structure or structures covered by this permit shall be subject to inspection by representatives of the grantor and the United States at all reasonable times.

In the event the work covered by this permit consists of or includes major construction, the cost of inspection thereof by the grantor and/or the United States shall be paid by the grantee.

Grantee agrees that is will not use the area or facilities covered by this permit, or allow such area to be used, for any purpose other than is specifically covered by this permit.

(Use these spaces for special conditions applicable to the permit.)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

THIS PERMIT SHALL NOT BE VALID UNTIL APPROVED BY THE DISTRICT ENGINEER, SACRAMENTO DISTRICT, CORPS OF ENGINEERS, OR HIS AUTHORIZED REPRESENTATIVE.

<table>
<thead>
<tr>
<th>Signature (Grantor)</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Terms of this permit are hereby accepted: Approved:

<table>
<thead>
<tr>
<th>Signature (Grantee)</th>
<th>Date</th>
<th>District Engineer</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</table>

Exhibit D
Sheet 3 of 3
### SUGGESTED CHECK LIST

#### CHANNEL AND RIGHT-OF-WAY

<table>
<thead>
<tr>
<th>Item</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Location by stations</td>
<td></td>
</tr>
<tr>
<td>(b) Vegetation in project areas</td>
<td></td>
</tr>
<tr>
<td>(c) Debris and refuse in channel</td>
<td></td>
</tr>
<tr>
<td>(d) New construction or encroachments within right-of-way</td>
<td></td>
</tr>
<tr>
<td>(e) Extent of aggradation or degradation</td>
<td></td>
</tr>
<tr>
<td>(f) Condition of revetment</td>
<td></td>
</tr>
<tr>
<td>(g) Measures taken since last inspection</td>
<td></td>
</tr>
<tr>
<td>(h) Comments</td>
<td></td>
</tr>
</tbody>
</table>

Inspector's Report Sheet No. ______  Inspector ____________________________  Date: ____________________________  Superintendent ____________________________

EXHIBIT E  Sheet 1 of 2
INSTRUCTIONS FOR COMPLETING SHEET 1, EXHIBIT E

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 floodflow channel.

Item (c) Note nature and extent of debris and refuse that might cause problems in the revetment.

Item (d) Report any construction or encroachments that might affect the functioning of project works.

Item (e) Indicate any change in grade or alignment of the channel, either by deposition of sediment or by scour noticeable by visual inspection.

Item (f) Indicate any change that has taken place in the riprap such as disintegration of the rock, erosion, or movement of rock. Note the presence of vegetal growth through the riprap.

Item (g) Indicate maintenance measures that have been taken since the last inspection and their condition at the time of this inspection.

Item (h) Record opinion, if any, on contributory causes for conditions observed, also any observations not covered under any other item.

NOTE: One copy of the Inspector's report is to be delivered to the District Engineer immediately upon completion of the inspection, and one copy is to be submitted with the semi-annual report.
<table>
<thead>
<tr>
<th>Drawing File No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-4-3713</td>
<td>Sacramento River, California, Chico Landing to Red Bluff, Stone Protection Along Right and Left Banks, Sacramento River in Tehama County (16 sheets)</td>
</tr>
<tr>
<td>50-4-4412</td>
<td>Sacramento River, California, Chico Landing to Red Bluff, Stone Protection, Right Bank Sacramento River at Tehama (one sheet)</td>
</tr>
<tr>
<td>50-4-4479</td>
<td>Sacramento River, California, Chico Landing to Red Bluff, Stone Protection Repair, Site No. 7 Under PL 99/84 (one sheet)</td>
</tr>
<tr>
<td>6-4-2125</td>
<td>Sacramento River, California, Chico Landing to Red Bluff, Stone Protection, Left Bank Sacramento River, Mile 218.3 Left (one sheet)</td>
</tr>
<tr>
<td>50-4-4545</td>
<td>Sacramento River Tehama County, California, Emergency Repairs, Levee and Bank Protection Restoration, Sacramento River, Deer Creek and Antelope Creek PL 99/84 (two sheets)</td>
</tr>
<tr>
<td>50-4-4696</td>
<td>Sacramento River, Tehama County, California, Flood Damage Repairs, Right Bank, 2 Miles Upstream of Woodson Bridge Associated Almond Orchards Property, PL 99/84 (one sheet)</td>
</tr>
<tr>
<td>50-4-4706</td>
<td>Sacramento River, California, Chico Landing to Red Bluff, Stone Protection, Vicinity Mile 185.3 (Hickman Site) (eight sheets)</td>
</tr>
<tr>
<td>50-4-4891</td>
<td>Sacramento River, California, Chico Landing to Red Bluff, Bank Protection, Left Bank Sacramento River, Butte County (three sheets)</td>
</tr>
<tr>
<td>50-4-4971</td>
<td>Sacramento River, California, Chico Landing to Red Bluff, Bank Protection, Left Bank Sacramento River, Site Mile 208.4 and Mile 213.1 (five sheets)</td>
</tr>
<tr>
<td>50-4-4984</td>
<td>Sacramento River, Tehama County, California, Emergency Repairs, Bank Protection, Restoration, PL 84/99 (three sheets)</td>
</tr>
<tr>
<td>50-4-5043</td>
<td>Sacramento River, California, Chico Landing to Red Bluff, Bank Protection, Various Locations, Right and Left Banks Sacramento River, Mile 196.0 to Mile 231.0 (14 sheets)</td>
</tr>
<tr>
<td>50-4-5522</td>
<td>Sacramento River, Tehama County, Project Bank Protection Repair, American Almond Orchards, River Mile 220.4, PL 84/99 (one sheet)</td>
</tr>
<tr>
<td>50-4-5402</td>
<td>Sacramento River, California, Chico Landing to Red Bluff, Bank Protection - Units 4A and 4B, Various Sites Between Miles 204.9 and 242.0 (33 sheets)</td>
</tr>
</tbody>
</table>

EXHIBIT F  
Sheet 1 of 1
TO: District Engineer  
Sacramento District, Corps of Engineers  
650 Capitol Mall  
Sacramento, California 95814  

DATE: (Within 10 days following 15 April or 1 November)  

Dear Sir:  

The semi-annual report for the period (15 April to 31 October 19__) (1 November 19__ to 14 April 19__), Sacramento River Bank Protection Project, is as follows:  

a. The Physical condition of the protective works is indicated by the Inspector's reports, copies of which are inclosed, and is 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 following:  

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

b. During this report period major high water periods occurred as follows:  

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Maximum Elevation</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

EXHIBIT G  
Sheet 1 of 2
Comments on the behavior of the protective works during high water periods are as follows:

(Superintendent's log of high water observations)

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

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

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

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

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

f. The financial statement of operations for the current report period follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Labor</td>
</tr>
<tr>
<td>1. Inspection</td>
<td></td>
</tr>
<tr>
<td>2. Maintenance</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
</tr>
</tbody>
</table>

Respectfully submitted,

(Typed name)
Superintendent
### LOCATION | ADDITION OR REVISION | DATE
--- | --- | ---
1-04 | Add subparagraph a. | Jul 1984
Exhibit C | Add copy of letter of transfer dated 22 Dec 1982 | Jul 1984
Exhibit F | Add Drawing No. 50-4-5581 | Jul 1984
1-04 | Add subparagraphs e, f, g, h, i, and j | 8 Apr 2010
Exhibit C | Add copy of acceptance letter dated 7 Jan 1964 | 8 Apr 2010
Exhibit C | Add copy of acceptance letter dated 10 Feb 1964 | 8 Apr 2010
Exhibit C | Add letter of acceptance dated 11 Dec 1968 | 8 Apr 2010
Exhibit C | Add letter of acceptance dated 9 Feb 1971 | 8 Apr 2010
Exhibit C | Add letter of acceptance dated 4 Jan 1972 | 8 Apr 2010
Exhibit C | Add copy of letter of acceptance dated 25 Nov 1974 | 8 Apr 2010
Exhibit C | Add copy of letter of acceptance dated 11 Dec 1974 | 8 Apr 2010
Exhibit C | Add copy of letter of acceptance dated 24 Nov 1975 | 8 Apr 2010
Exhibit C | Add copy of letter of acceptance dated 29 Jan 1976 | 8 Apr 2010
Exhibit C | Add copy of letter from Butte County dated 5 Aug 1976 regarding site mile 202.4 | 8 Apr 2010
Exhibit C | Add copy of letter of acceptance dated 20 Aug 1976 | 8 Apr 2010
Exhibit C | Add copy of acceptance letter dated 27 Dec 1978 | 8 Apr 2010
Exhibit C | Add copy of acceptance letter dated 27 Jul 1979 | 8 Apr 2010
Exhibit C | Add copy of acceptance letter dated 8 Feb 1983 | 8 Apr 2010
Exhibit C | Add copy of transfer letter dated 26 Feb 1985 | 8 Apr 2010
Exhibit C | Add copy of transfer letter dated 3 Jan 1986 | 8 Apr 2010
Front Matter | Add copy of Tabulation of sites dated Aug 1991 | 8 Apr 2010
1-04 | Add subparagraph k | 3 Jun 2010
EXCERPT OF MINUTES OF MEETING
OF THE RECLAMATION BOARD
March 1, 1962

ASSURANCES -
a. COUNTY OF TEHAMA -
   (Sacramento River, Chico Landing to Red Bluff)

ASSURANCE AGREEMENT wherein The Reclamation Board agrees to
acquire, without cost to Tehama County, all lands, easements
and rights of way for project construction; and wherein
County of Tehama agrees to maintain and operate completed
project works and to hold and save the United States and the
State of California free from claims for damages resulting
from construction.

Motion was made by Mr. Madigan, seconded by Mr. McCormack
and carried unanimously that the assurance agreement with the County
of Tehama be approved and the President and Secretary were authorized
to execute same for and on behalf of the Board.

STATE OF CALIFORNIA
COUNTY OF SACRAMENTO
Office of The Reclamation Board

I, HOWARD J. SULLIVAN, Assistant Secretary of The Reclama-
tion Board, do hereby certify that the above and forgoing is a true
and correct extract of minutes of meeting of The Reclamation Board
held March 1, 1962.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed
the official seal of The Reclamation Board, this 7th day of March, 1962.

HOWARD J. SULLIVAN
Assistant Secretary
January 7, 1964

Refer to:

7001.65.301
4130.65.301

Cont # 62-74
Spec # 2898

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

Dear Sir:

Reference is made to your letter of December 11, 1963, concerning transfer to the State of California of bank protection work at Site 8, River Mile 183.4, Site 9, River Mile 183.9, Site 10, River Mile 187.0, Site 11, River Mile 188.6 and Site 12, River Mile 189.7, left bank, on the Sacramento River Chico Landing to Red Bluff Project in accordance with Specification No. 2898.

The Reclamation Board, at its meeting of January 3, 1964, formally accepted the above referred to bank protection work for operation and maintenance.

Sincerely yours,

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

JHMacC:gg
February 10, 1964

Refer to: 4130.65.301

Cont 63-74

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

Dear Sir:

Reference is made to your letter of 17 January, 1964, concerning transfer to the State of California of bank protection work at Site No. 6, River Mile 169.0, left bank and Site No. 7, River Mile 169.8, right bank, between Chico Landing and Red Bluff. This work was completed in accordance with Specification No. 2898.

The Reclamation Board, at its meeting of February 6, 1964, formally accepted the above referred to bank protection work for operation and maintenance.

Sincerely yours,

A. E. McCOLLAM
General Manager

JHMacC:gg

Copies to Northern
Barsdale
Denson 2
The Reclamation Board
State of California
1416 Ninth 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 Specifications No. 3155, Contract No. DA-04-167-CIVENG-66-102, Drawing No. 50-4-4006.

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 112. Sacramento River Flood Control Project. Copies will be furnished your office at a later date.

Sincerely yours,

/s/ Crawford Young
CRAWFORD YOUNG
Colonel, CE
District Engineer
**OPERATION AND MAINTENANCE MANUAL FOR**
**SACRAMENTO RIVER, CALIFORNIA**
**CHICO LANDING TO RED BLUFF**
**BANK PROTECTION PROJECT**

<table>
<thead>
<tr>
<th>REVISIONS OR ADDITIONS</th>
<th>DATE</th>
</tr>
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<tbody>
<tr>
<td>Paragraph 1-04.b.------ add Contract No. DACW05-69-C-0011</td>
<td>December 1968</td>
</tr>
<tr>
<td>EXHIBIT B------------- add Drawing No. 50-4-4412</td>
<td>December 1968</td>
</tr>
<tr>
<td>EXHIBIT F------------- add letter of acceptance dated 11 December 1968</td>
<td>December 1968</td>
</tr>
</tbody>
</table>

1-04. 6. Bank protection, right bank of Sacramento River at Tehama at Mile 177.3 was accomplished under Contract No. DACW05-69-C-0011 by H. Karl Parker, Inc. and completed in November 1968. Specification No. 3559. Drawing No. 50-4-4412.

**EXHIBIT B**

<table>
<thead>
<tr>
<th>File No.</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>50-4-4412</td>
<td>Stone Protection, Right Bank Sacramento River at Tehama, in 1 sheet.</td>
</tr>
</tbody>
</table>
THE RECLAMATION BOARD
STATE OF CALIFORNIA

DEC 11 1968
4130.65.300

District Engineer
Corps of Engineers
U. S. Army
650 Capitol Mall
Sacramento, California 96814

Dear Sir:


The Reclamation Board, at its meeting of December 6, 1968, formally accepted the above referred to work for operation and maintenance.

Sincerely yours,

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

EXHIBIT F
# REVISIONS OR ADDITIONS

<table>
<thead>
<tr>
<th>ADDITIONS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Paragraph 1-04 b. ---- Add Contract No. DACW05-70-0086</td>
<td>November 1970</td>
</tr>
<tr>
<td>EXHIBIT B --------------- Add Drawing No. 6-4-2125</td>
<td>November 1970</td>
</tr>
<tr>
<td>EXHIBIT F --------------- Add letter of acceptance dated 9 February 1971</td>
<td>November 1970</td>
</tr>
</tbody>
</table>

1-04. b. Bank protection, left bank of Sacramento River at Woodson Bridge, Mile 218.3, was accomplished under Contract No. DACW05-70-C-0086, by James L. Ferry and Sons, and completed on 12 June 1970. Specification No. 5694, Drawing No. 6-4-2125.

## EXHIBIT B

<table>
<thead>
<tr>
<th>File No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-4-2125</td>
<td>Stone Protection, left bank Sacramento River, Mile 218.3, in 1 sheet.</td>
</tr>
</tbody>
</table>
District Engineer
U. S. Army Corps of Engineers
650 Capitol Mall
Sacramento, California  95814

Dear Sir:

Reference is made to your letter of September 17, 1970, concerning transfer to the State of California of a portion of the Sacramento River Bank Protection Project for maintenance and operation. The transferred site was as follows:

Site Mile 218.3, Left Bank (Woodson Bridge)

This work was constructed in conformance with Specification No. 3694, Contract No. DACW05-70-C-0086, Drawing No. 6-4-2125.

The Reclamation Board at its meeting of October 9, 1970, formally accepted the above-referred to work for operation and maintenance.

Sincerely yours,

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

<table>
<thead>
<tr>
<th>REVISIONS</th>
<th>DATE</th>
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<tbody>
<tr>
<td>Paragraph 1-04b</td>
<td></td>
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<tr>
<td>(November 1970) --- Changed to 1-04c</td>
<td>January 1972</td>
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<tr>
<td>Added to 1-04c, Mile 218.3 (Site Mile 166.4)</td>
<td>January 1972</td>
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<thead>
<tr>
<th>ADDITIONS</th>
<th>DATE</th>
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<tbody>
<tr>
<td>*Paragraph 1-04d ----- Add Contract No. DACW05-72-0019</td>
<td>January 1972</td>
</tr>
<tr>
<td>EXHIBIT B ----- Add Drawing No. 50-4-4706</td>
<td>January 1972</td>
</tr>
<tr>
<td>EXHIBIT F ----- Add letter of acceptance dated 4 January 1972</td>
<td>January 1972</td>
</tr>
</tbody>
</table>

*This work was performed under the Sacramento River, Chico Landing to Red Bluff Bank Protection Project authorized by the Flood Control Act of 1958 (Public Law 85-500), 85th Congress, 1st Session.

SECTION I

1-04. Construction data and contractor.

d. Bank protection, left bank of Sacramento River at (Hickman Site) Site Mile 185.3, was accomplished under Contract No. DACW05-72-C-0019, by H. Earl Parker, during the period from 14 September 1971 to 28 November 1971. Specification No. 4106. Drawing No. 50-4-4706.

EXHIBIT B

<table>
<thead>
<tr>
<th>DRAWING NO.</th>
<th>TITLE</th>
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</thead>
<tbody>
<tr>
<td>50-4-4706</td>
<td>Stone Protection, left bank Sacramento River, vicinity Site Mile 185.3 (Hickman Site) in 8 sheets</td>
</tr>
</tbody>
</table>
January 4, 1972

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

Refer to: 4130.65.300

Dear Sir:

Reference is made to your letter of November 26, 1971, concerning the transfer to the State of California for operation and maintenance a portion of the Sacramento River Bank Protection Project, Chico Landing to Red Bluff, Hickman Site, vicinity of River Mile 185.3, Tehama County, California.

The work completed on the Hickman Site was constructed in accordance with Specification No. 4106, Drawing No. 50-4-4706 and Contract No. DACW05-72-C-0019.

The Reclamation Board, at its regular meeting of December 17, 1971, formally accepted the Hickman Site for operation and maintenance, from the District Engineer. At the same meeting, the Reclamation Board transferred the Hickman Site to the Tehama County Flood Control and Water Conservation District for operation and maintenance.

Sincerely yours,

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

EXHIBIT F
Colonel James C. Donovan, District Engineer
Sacramento District
U. S. Army Corps of Engineers
650 Capitol Mall
Sacramento, CA 95814

Refer to: 4130.60.109

Dear Colonel Donovan:

Reference is made to your letter of November 21, 1972, concerning the transfer to the State of California, for maintenance and operation, a portion of the Sacramento River Bank Protection Project, Unit No. 21.

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 26.5, 28.0, 33.6, 34.7, 38.7, 43.1 Left Bank and Site Miles 16.0 and 40.9 Right Bank, Sacramento River.

The flood control work has been completed and was constructed in a workmanlike manner. This work has been constructed in conformance with Drawing No. 50-4-4487, Specification No. 3680, Contract No. DACW05-72-C-0046, insofar as could be determined visually.

The Reclamation Board at its regular meeting of December 15, 1972, formally accepted from the District Engineer for operation and maintenance, the completed work on the above-referenced sites.

Sincerely yours,

/s/ A. E. McCollam
A. E. McCOLLAM
Chief Engineer and
General Manager
# REVISIONS OR ADDITIONS

<table>
<thead>
<tr>
<th>Table of Contents</th>
<th>Revised General Procedures</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section III</td>
<td>Add paragraph 3-09</td>
<td>December 1975</td>
</tr>
<tr>
<td>Paragraph 1-04</td>
<td>Add subparagraph e and f</td>
<td>December 1975</td>
</tr>
<tr>
<td>EXHIBIT B</td>
<td>Add Drawing Nos. 50-4-4891 and 50-4-4971</td>
<td>December 1975</td>
</tr>
</tbody>
</table>

## SECTION I

1-04.

e. Stone protection, selective clearing, and bank sloping of the Sacramento River at Site Miles 194.0 and 196.3, Left Bank, (a portion of Sacramento River, Chico Landing to Red Bluff Bank Protection Project) was accomplished under Contract No. DACW05-73-C-0109 by Chandler Newman Construction Company during the period from 9 July 1973 to 4 January 1974. Specification No. 4451, Drawing No. 50-4-4891.

f. Stone protection and bank sloping on the left bank of the Sacramento River at Site Miles 208.4 and 213.1, a portion of the Chico Landing to Red Bluff Bank Protection Project, was accomplished under Contract No. DACW05-74-C-0093 by Carl J. Woods during the period from 11 July 1974 to 23 October 1974. Specification No. 4668, Drawing No. 50-4-4971.

### EXHIBIT B

<table>
<thead>
<tr>
<th>File No.</th>
<th>Title</th>
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<tbody>
<tr>
<td>50-4-4891</td>
<td>Bank Protection, Left Bank, Sacramento River, Butte County, in 3 sheets.</td>
</tr>
<tr>
<td>50-4-4971</td>
<td>Bank Protection, Left Bank, Sacramento River Site Mile 208.4 and Mile 213.1, in 5 sheets.</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Subject</th>
<th>Page</th>
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<tr>
<td>1-01</td>
<td>Authorization</td>
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<tr>
<td>1-02</td>
<td>Location</td>
<td>2</td>
</tr>
<tr>
<td>1-03</td>
<td>Description of the Project Works</td>
<td>2</td>
</tr>
<tr>
<td>1-04</td>
<td>Construction Data and Contractor</td>
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</table>

## SECTION II - LOCAL COOPERATION REQUIREMENTS

<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-01</td>
<td>Requirements of Local Cooperation</td>
<td>3</td>
</tr>
<tr>
<td>2-02</td>
<td>Assurances Provided by Local Interests</td>
<td>3</td>
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<tr>
<td>2-03</td>
<td>Acceptance by the State Reclamation Board</td>
<td>3</td>
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</table>

## SECTION III - MAINTENANCE AND OPERATION - GENERAL PROCEDURE

<table>
<thead>
<tr>
<th>Paragraph</th>
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<th>Page</th>
</tr>
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<tbody>
<tr>
<td>3-01</td>
<td>Reference to Approved Regulations</td>
<td>4</td>
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<tr>
<td>3-02</td>
<td>Intent of Regulations</td>
<td>4</td>
</tr>
<tr>
<td>3-03</td>
<td>Purpose of this Manual</td>
<td>4</td>
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<tr>
<td>3-04</td>
<td>Definitions</td>
<td>5</td>
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<tr>
<td>3-05</td>
<td>General Provisions of Regulations</td>
<td>5</td>
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<tr>
<td>3-06</td>
<td>Assistance to be Furnished by the District Engineer</td>
<td>6</td>
</tr>
<tr>
<td>3-07</td>
<td>Responsibilities of the Superintendent</td>
<td>7</td>
</tr>
<tr>
<td>3-08</td>
<td>Inspection Procedure</td>
<td>10</td>
</tr>
<tr>
<td>3-09</td>
<td>Environmental Values</td>
<td>11</td>
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</table>

## SECTION IV - FEATURES OF THE PROJECT SUBJECT TO FLOOD CONTROL REGULATIONS

<table>
<thead>
<tr>
<th>Paragraph</th>
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<tbody>
<tr>
<td>4-01</td>
<td>Project Works</td>
<td>12</td>
</tr>
<tr>
<td>4-02</td>
<td>Channels and Floodways</td>
<td>12</td>
</tr>
<tr>
<td>4-03</td>
<td>Special Instructions</td>
<td>15</td>
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## EXHIBITS

<table>
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<th>Subject</th>
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<tr>
<td>A</td>
<td>Federal Flood Control Regulations</td>
<td>1 &amp; 2</td>
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<tr>
<td>A-1</td>
<td>Location Map</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>&quot;As Constructed&quot; Drawings</td>
<td>Detached</td>
</tr>
<tr>
<td>C</td>
<td>Suggested Check List - Bank Protection Report</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>Suggested Semi-Annual Form</td>
<td>1 &amp; 2</td>
</tr>
<tr>
<td>E</td>
<td>Acceptance by the State Reclamation Board</td>
<td>1 &amp; 2</td>
</tr>
<tr>
<td>F</td>
<td>Sample Permit for Use of Right-of-Entry</td>
<td>1 thru 3</td>
</tr>
</tbody>
</table>

*(Revised December 1975)*
(e) That unauthorized vehicular travel is restricted.

(f) That encroachments are not being erected along the bank which would hinder travel by authorized patrol vehicles.

(g) Prevent the erection of structures on, additions to, or alterations of, the project works 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.

3-09. 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.

*(Revised December 1975)*
District Engineer  
Sacramento District  
U. S. Army Corps of Engineers  
650 Capitol Mall  
Sacramento, California 95814

Refer to: 4130.65.200

Dear Sir:

At its regular meeting of November 8, 1974, The Reclamation Board formally accepted from the District Engineer the completed flood control work on Unit No. I of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. The flood control work was transferred to the State of California by your letter of November 4, 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 Sites Miles 194.0 and 196.3 Left Bank, Sacramento River, in Butte County.

The work was constructed in a workmanlike manner and in conformance with Drawing No. 50-4-4891, Specification No. 4451, and Contract No. DACW 05-73-C-0109, insofar as could be determined visually.

Site Mile 196.3 sustained damage during the 1974 flood flows. It is my understanding that the Corps of Engineers will repair the damaged reach in the next contract under the Chico Landing to Red Bluff Bank Protection Project.

It is my understanding that when Butte County has accomplished the road relocation at Site Mile 194.0, the Corps of Engineers will provide additional stone protection and the extension of the site downstream to meet the high bank.

Sincerely yours,

/s/ A. E. McCollam  
A. E. McCOLLAM  
Chief Engineer and  
General Manager
December 11, 1974

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

Dear Sir:

Your letter of November 27, 1974 transferred Site Miles 208.4 and 213.1 on the left bank of the Sacramento River of the Chico Landing to Red Bluff Project to the Reclamation Board for operation and maintenance. The work accomplished at these two sites consisted of sloping portions of the riverbank and placement of stone revetment and was completed under Contract No. DACW05-74-C-0093 on November 6, 1974.

This is to advise you that the Reclamation Board accepted the completed works at its meeting of December 6, 1974 subject to the condition that the concrete vault will be removed from the river channel in the next unit of work in this project and that any damage to completed works which may be caused by the vault's existence will be repaired.

The contract documents required that the concrete vault at Site Mile 213.1 be removed from the river channel. This item of work was not accomplished. It is my understanding that the vault will be removed under the next forthcoming contract of the project. In the meantime, there is a probability that the vault's presence in the channel near the banks of the completed stone revetment may cause turbulence at high water flows and adversely affect the adjoining revetment and the unprotected bank above the revetment. I have been informally advised by your staff that if such an event occurs that remedial work will be initiated at the earliest convenient time.

My letter of March 14, 1974 contained comments regarding the plans and specifications for the proposed two sites. The letter requested that your staff reconsider the design criteria which limited the stone protection to a height of five feet above the low water elevation. The design was modified to increase the revetment height at Site Mile 208.4 and we compliment your decision. The criteria was not modified at Site Mile 213.1 and our
concern is particularly applicable not only to the potential erosion of the
unprotected portion of the bank but the difficulty of maintaining the
revetted portion of the bank from the unprotected bank which has slopes
varying from 1 on 1 to vertical with heights of 16 feet above the stone.

Sincerely yours,

/s/ A. E. McCollam
A. E. McCOLLAM
Chief Engineer and
General Manager
REVISIONS OR ADDITIONS | DATE
--- | ---
Section III - - - - Revised paragraph 3-09 | April 1977
Paragraph 1-04 - - - Add subparagraph g | April 1977
EXHIBIT B - - - - Add Drawing No. 50-4-5043 | April 1977
EXHIBIT F - - - - Add copy of letters of acceptance dated 24 November 1975, 29 January 1976 and 20 August 1976 | April 1977

SECTION I

1-04.

g. Stone protection, selective clearing, and bank sloping of the Sacramento River at Site Miles 194.0, 202.4, 207.0, 211.1 and 230.5, left bank and 202.0, 229.0 and 197.0, right bank, (a portion of Sacramento River, Chico Landing to Red Bluff Bank Protection Project, Unit No. 3) was accomplished under Contract No. DACW05-76-C-0014 by Luhr Brothers Inc., during the period from 1 August 1975 to 15 November 1976. Specification No. 4913, Drawing No. 50-4-5043.

EXHIBIT B

File No. | Title
--- | ---
50-4-5043 | Bank Protection, Left and Right Banks, Sacramento River, Various Sites, Butte County, in 3 sets, totaling
(e) That unauthorized vehicular travel is restricted.

(f) That encroachments are not being erected along the bank which would hinder travel by authorized patrol vehicles.

(g) Prevent the erection of structures on, additions to, or alterations of, the project works 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.

3-09. 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. Dead trees with wildlife value will be retained except where they constitute a hazard to existing flood control works.

*(Revised April 1977)*
District Engineer  
Sacramento District  
U. S. Army Corps of Engineers  
650 Capitol Mall  
Sacramento, California  95814

Dear Sir:

The Reclamation Board at its regular meeting of November 21, 1975, formally accepted from the District Engineer the completed flood control work on a portion of Unit No. 3 of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. The flood control work was transferred to the State of California by your letter of November 10, 1975.

The flood control work consisted of selective clearing, bank sloping, placement of stone bank protection, and such miscellaneous work as necessary to complete the construction at Sites Miles 194.0 and 230.5 Left Bank and Sites Miles 202.0 and 229.0 Right Bank, Sacramento River.

The work was constructed in a workmanlike manner and in conformance with Drawing No. 50-4-5043, Specification No. 4913, and Contract No. DACW 05-76-C-0014, insofar as could be determined visually.

Sincerely,

/s/ P. C. Walters  
P. C. WALTERS  
Chief Engineer and  
General Manager
District Engineer
Sacramento District
U. S. Army Corps of Engineers
650 Capitol Mall
Sacramento, CA 95814

Dear Sir:

The Reclamation Board at its regular meeting of January 23, 1976, formally accepted from the District Engineer the completed flood control work on a portion of Unit No. 3 of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. The flood control work was transferred to the State of California by your letter of January 12, 1976.

The flood control work consisted of selective clearing, bank sloping, placement of stone bank protection, and such miscellaneous work as necessary to complete the construction at Site Mile 197.0 Right Bank, Sacramento River.

The work was constructed in a workmanlike manner and in conformance with Drawing No. 50-4-5043, Specification No. 4913, and Contract No. DACW 05-76-C-0014, insofar as could be determined visually.

Sincerely,

/s/ P. C. Walters
P. C. WALTERS
Chief Engineer and
General Manager

EXHIBIT E
Sheet 2 of 3
Reclamation Board
State of California
1416 9th Street
Sacramento, California 95814

Attention: Burt Shurtleff

Gentlemen:

On July 29, 1976, an inspection was made of the construction work at Sites Miles 202.4, 207.0 and 211.1 Left Bank, Sacramento River, a portion of Unit No. 3 of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. Supervisors Madigan and Richter, property owners and County Public Works Staff were in attendance.

The Board concurs that the rock work was completed in accord with the plans and specifications with the possible exception or misunderstanding at site 202.4 where the slope above the rock was not all sloped as shown on the typical section of the plans. Mr. Peterson, a property owner directly involved, brought this to everyone's attention. Butte County asks that the sloping be done as shown on the plans.

The Board was concerned that the rock wasn't extended to the top of the admittedly erodable soil. Further concern was expressed when it was found Mr. Peterson wasn't allowed at project time to flatten the slopes or placed the additional protection at his expense. It would seem that this procedure warrants changing.

The Board and Butte County acknowledge the rock work has been installed correctly and will be interested in receiving the maintenance manual. Butte County does not, however, accept maintenance of the sandy
August 5, 1976

banks above the rock or any damage to the bank protection which might result from erosion of these banks.

We appreciate your cooperation.

Sincerely,

Ward F. Cameron
Chairman, Board of Supervisors

cc: Pete Peterson, Peterson Ranch
    Bob Lackbaum, Newhall Land Company
District Engineer  
Sacramento District.  
U. S. Army Corps of Engineers  
650 Capitol Mall  
Sacramento, California  95814

Dear Sir:

The Reclamation Board at its regular meeting of August 13, 1976, formally accepted from the District Engineer the completed flood control work on a portion of Unit No. 3 of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. The flood control work was transferred to the State of California by your letter of August 3, 1976.

The flood control work consisted of selective clearing, bank sloping, placement of stone bank protection, and such miscellaneous work as necessary to complete the construction at Sites Miles 202.4, 207.0 and 211.1 Left Bank, Sacramento River.

The work was constructed in a workmanlike manner and in conformance with Drawing No. 50-4-5043, Specification No. 4913, and Contract No. DACW 05-76-C-0014, insofar as could be determined visually.

Sincerely,

/s/ John F. Wright  
for PAUL L. CLIFTON  
General Manager

EXHIBIT E  
Sheet 3 of 3
Gentlemen:

Reference is made to the joint inspection of 30 November and 1 December 1976, made for the purpose of transferring a portion of the Sacramento River Bank Protection Project (Unit 28) to the State of California for operation and maintenance. This flood control work consists of bank sloping and placement of stone protection on the Sacramento River left bank at Site Miles 12.9, 13.1, 14.9, 18.3, 18.6, 23.1, 25.1, 26.4, 26.7, 27.2, 32.1, and 34.1, and right bank at Site Miles 17.3, 17.7, 18.1, 19.1, 26.4, 27.0, 27.7, 32.3, 33.1, and 40.4, the irrigation facilities at Site Miles 40.3 left and 50.4 right and the Steamboat Slough left bank at Site Mile 24.8. The sites, as described on the inclosure, were completed on 21 November 1976 with the exception of the irrigation facilities, in accordance with Specification No. 4559, Contract No. DACW05-76-0015, drawing No. 50-4-4898.

The work was performed under the general authority of the Flood Control Act of 1960, 86th 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 banks contiguous, thereto, is transferred as of 2 December 1976 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. 102, 103, 104, 110, 111 and 112 Sacramento River Flood Control Project. Copies will be furnished your office at a later date.

Sincerely yours,

Donald M. O'Shei
Colonel, CE
District Engineer

Copy furnished:
DWR, ATTN: R Franson & Carl Klug
### Summary of Portion of Sacramento River Bank Protection Project Unit # 28

#### Sacramento River Right Bank

<table>
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<tr>
<th>Site Mile</th>
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<th>L.F.</th>
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<td>17.3</td>
<td>80+00 to 92+50</td>
<td>1250</td>
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<td>17.7</td>
<td>51+50 to 57+00</td>
<td>550</td>
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<tr>
<td>18.1</td>
<td>28+00 to 37+00</td>
<td>900</td>
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<tr>
<td>19.1</td>
<td>19+70 to 31+00</td>
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<td>26.4</td>
<td>285+50 to 292+50</td>
<td>700</td>
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<td>27.0</td>
<td>295+50 to 299+50</td>
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<tr>
<td>27.7</td>
<td>257+00 to 260+70</td>
<td>370</td>
</tr>
<tr>
<td>32.3</td>
<td>262+00 to 269+50</td>
<td>750</td>
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<td>33.1</td>
<td>222+80 to 229+50</td>
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<td>39+00 to 45+00</td>
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#### Sacramento River Left Bank

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<td>*12.9</td>
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<td>13.1</td>
<td>96+50 to 103+50</td>
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<td>14.9</td>
<td>32+00 to 36+00</td>
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<td>15.3</td>
<td>8+50 to 15+50</td>
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<td>18.6</td>
<td>1+00 to 5+30</td>
<td>430</td>
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<td>23.1</td>
<td>0+00 to 5+00 AH</td>
<td>500</td>
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<td>111+07 to 112+07 BK</td>
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<td>126+50 to 134+00</td>
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<td>27.2</td>
<td>102+50 to 107+00</td>
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<td>32.1</td>
<td>11+53 to 19+61</td>
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#### Steamboat Slough Left Bank

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<td>*24.8</td>
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*Extended*
DEC 27 1978

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

Dear Sir:

The Reclamation Board at its regular meeting of December 14, 1978, formally accepted from the District Engineer the completed flood control work on a portion of Units Nos. 4A and 4B of the Sacramento River Chico Landing to Red Bluff Bank Protection Project. The flood control work was transferred to the State of California by your letter of November 15, 1978.

The flood control work consisted of selective clearing, shaping the river bank, placement of stone bank protection, and such miscellaneous work as necessary to complete the construction at Sites Miles 215.3, 226.3 and 231.2 Right Bank, and Sites Miles 233.9, 238.1, 239.8 and 242.0 Left Bank, Sacramento River.

The work was constructed in a workmanlike manner and in conformance with Drawing No. 50-4-5402, Specification No. 5412, and Contract No. DACW 05-78-C-0026, insofar as could be determined visually.

Sincerely,

[Signature]

ELDON E. RINEHART
General Manager

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
Jul 27, 1979

Colonel Paul F. Kavanaugh  
District Engineer  
Sacramento District  
U. S. Army Corps of Engineers  
650 Capitol Mall  
Sacramento, CA 95814

Dear Colonel Kavanaugh:

The Reclamation Board at its regular meeting of July 20, 1979, formally accepted the completed flood control work which was transferred to the State of California by your letter of June 19, 1979. This work is a portion of Units Nos. 4A and B of the Sacramento River Chico Landing to Red Bluff Bank Protection Project.

The flood control work was constructed in a workmanlike manner and in conformance with File No. 50-4-5402, Specification No. 5412, and Contract No. DACW05-78-C-0026, insofar as could be determined visually, at Site Mile 204.9 Right Bank and the upstream 500-foot extension of Site Mile 242 Left Bank, Sacramento River.

Sincerely,

Eldon E. Rinehart  
ELDON E. RINEHART  
General Manager

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED
SACRAMENTO RIVER
CHICO LANDING TO RED BLUFF
BANK PROTECTION

---

Revisions or Additions

| Paragraph 1-04 | Add subparagraph a | July 1984
| EXHIBIT #F   | Add Drawing No. 50-4-5581 | July 1984
| EXHIBIT #C   | Add copy of letter of transfer dated December 22, 1982 | July 1984

---

SECTION I

1-04.

a. Bank sloping, stone protection and selective clearing on the bank of the Sacramento River at Site Mile 215.0R of Unit 5 of the Chico Landing to Red Bluff Project was accomplished under Contract No. DACW05-82-C-0096 by Carl J. Woods Construction, Inc.

Specification No. 6537 Drawing No. 50-4-5581.

EXHIBIT #F

File No. Title
50-4-5581 Sacramento River, Chico Landing to Red Bluff, Bank Protection, Site Mile 215.0 R, in 3 sheets.
DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT CORPS OF ENGINEERS
650 CAPITOL MALL
SACRAMENTO, CALIFORNIA  95814

ATTN: SPKCO-0

22 December 1982

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

Gentlemen:

This is in regard to the joint inspection of 17 December 1982, made for the
purpose of transferring a portion of the Sacramento River, Chico Landing to
Red Bluff Bank Protection Project, Unit No. 5 to the State of California for
operation and maintenance.

The flood control work consists of shaping the river bank and placement of
stone bank protection on the Sacramento River right bank at Site Mile 215.0
and tree and shrub planting. The work was completed on 17 December 1982 in
accordance with Specification No. 6537 Drawing No. 50-4-5581, Contract No.
DACW05-62-C-0096.

The work was performed under the general authority of the Flood Control Act
of 1958, 85th Congress, 2nd Session (PL 85-500, 3 July 1958) and by the 1976
Water Resources Development Act, 94th Congress, 2nd Session (PL 94-587) and
now meets the requirements of the Sacramento River, Chico Landing to Red
Bluff Bank Protection Project. Therefore, said flood control work together
with the waterway banks contiguous thereto, and planting are transferred as
of 17 December 1982 to the State of California for operation and
maintenance. However, the plantings will be maintained by this office until
1 March 1983.

This portion of the project work will be added by amendment to the Operation
and Maintenance manual, Sacramento River, Chico Landing to Red Bluff Bank
Protection Project. Copies will be furnished your office at a later date.
Interim guideline for vegetation maintenance is attached.

Sincerely,

Henry Lee
Lieutenant Colonel, CE
Acting District Engineer
INTERIM GUIDE LINE FOR VEGETATION MAINTENANCE

(1) After each flood season (15 April), the plant basins should be restored to original condition to permit watering until the fall of 1984.

(2) From May through October of each year watering will be required in an amount to maintain sufficient water in the root zone of trees and shrubs to maintain growing conditions during the growing season.

(3) Grass and weeds should be hoed and pulled in a 5-foot radius around trees and shrubs to maintain a fire guard.

(4) Apply 1/2 lb. of 11-5-4 fertilizer in the area of the basin around each tree between the dates April 1 and 15 for 1983 and 1984. Do not place fertilizer so that it will touch the stem of the tree. Apply 1/4 lb. of the fertilizer for each shrub. Rake fertilizer lightly into the soil.

(5) Delay pruning until the winter of 1983; after that date lower limbs of the trees shall be removed from the main trunk to a point 5 feet above the ground, except shrubs.

(6) Tree stakes and ties should be checked at intervals to prevent girdling. The ties should be loosened as the tree expands, or replaced as old ties break. Sufficient looseness should be left in the tie to permit movement and growth of the trees. Remove stakes when the trees no longer need support (probably 1984).

(7) If some trees expire, replacement will not be necessary as sufficient trees were planted with expectation that some would die.
FEB 8 1993

Colonel Arthur E. Williams  
District Engineer  
Sacramento District  
U. S. Army Corps of Engineers  
650 Capitol Mall  
Sacramento, CA  95814

Dear Colonel Williams:

Reference is made to your letter of December 22, 1982, concerning the transfer to the State of California for operation and maintenance, a portion of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project, Unit No. 5.

The flood control work consisted of selective clearing, bank sloping, placement of stone bank protection, and such miscellaneous work as necessary to complete the construction at Site Mile 215.0 Right Bank, Sacramento River.

The work was constructed in a workmanlike manner and in conformance with Drawing No. 50-4-5581, Specification No. 6537, and Contract No. DACW 05-82-C-0096, insofar as could be determined visually.

The Reclamation Board at its regular meeting of January 21, 1983, formally accepted from the District Engineer, for operation and maintenance, the completed work on the above-referenced site.

Sincerely,

[Signature]

ELDON E. RINEHART  
General Manager

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED
SECTION I

1-04

b. Emergency bank protection restoration on the banks of the Sacramento River at Site Miles 197.0R (upstream end), 208.4L, 219.4L, 226.3R, and 240.0L, was accomplished under Contract No. DACW05-84-C-0043 by Carl J. Woods Construction, Inc.

Specification No. 6880A          Drawing No. 50-4-5597

EXHIBIT B

<table>
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<th>Title</th>
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<tbody>
<tr>
<td>50-4-5597</td>
<td>Sacramento River, Tehama, Glenn and Butte Counties, California, Project Bank Protection Repairs, in 4 sheets.</td>
</tr>
</tbody>
</table>
May 15, 1984

Navigation and Flood Control Unit

The Reclamation Board
State of California
1416 – 9th Street, Room 455-6
Sacramento, California 958114

Gentlemen:

You are hereby notified that the Corps of Engineers has completed emergency repairs to Sacramento River, Chico Landing to Red Bluff Project Bank Protection Sites under authority of Section 5 of the Flood Control Act of August 18, 1941, as amended (Public Law 99, 84th Congress, 1st Session). The work consisted of restoring bank protection at Site Miles 208.4 Left and 226.3 Right and was completed on February 23, 1984. Also bank protection was restored at Site Miles 197.0 Right, (Upstream End) 219.4 Left and 240.0 Left and was completed on May 3, 1984. The completed work was accomplished in accordance with Contract Number DACW05-84-C-0043 and Drawing Number 50-4-5597. The downstream end of Site Mile 197.0 Right will be restored later this year.

This work shall be maintained in accordance with the assurances which your board provided for the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. The completed work will be added by amendment to the Operation and Maintenance Manual for this Project. Copies will be furnished your office at a later date.

Sincerely,

Henry Lee
Lieutenant Colonel, CE
Acting Commander

Copy Furnished:
Commander, South Pacific Division, ATTN: SPDCO-C

RECEIVED
AUG 7 1985
TEHAMA COUNTY ROAD DEPARTMENT & FLOOD CONTROL DIST

EXHIBIT F
OPERATION AND MAINTENANCE MANUAL
CHICO LANDING TO RED BLUFF PROJECT
SACRAMENTO RIVER
BANK PROTECTION

<table>
<thead>
<tr>
<th>REVISIONS OR ADDITIONS</th>
<th>DATE</th>
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<tbody>
<tr>
<td>Paragraph 1-04</td>
<td>Add subparagraph c</td>
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<td>EXHIBIT B</td>
<td>Add Drawing No. 50-4-5719</td>
</tr>
<tr>
<td>EXHIBIT F</td>
<td>Add copy of letter of transfer dated November 19, 1984</td>
</tr>
</tbody>
</table>

SECTION I

1-04

c. Emergency bank protection restoration on the banks of the Sacramento River at Site Miles 197.0R and 234.0L was accomplished under Contract No. DACW05-84-C-0121 by Carl J. Woods Construction, Inc.

Specification No. 7220  Drawing No. 50-4-5719

EXHIBIT B

<table>
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<th>Title</th>
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<tr>
<td>50-4-5719</td>
<td>Sacramento River, Tehama and Glenn Counties, California, Project Bank Protection Repair, PL 84-99, in 4 sheets.</td>
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</table>

RECEIVED

AUG 7 1985

TEHAMA COUNTY
ROAD DEPARTMENT & FLOOD CONTROL DIST
DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
650 CAPITOL MALL
SACRAMENTO, CALIFORNIA 95814

November 19, 1984

Navigation and Flood Control Unit

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

Gentlemen:

You are hereby notified that the Corps of Engineers has completed emergency repairs to Sacramento River, Chico Landing to Red Bluff Project Bank Protection Sites under authority of Section 5 of the Flood Control Act of August 18, 1941, as amended (Public Law 99, 84th Congress, 1st Session). The work consisted of restoring bank protection at Sacramento River Site Miles 234.0 Left and 197.0 Right and was completed on November 2, 1984. The completed work was accomplished in accordance with Contract Number DACW05-84-C-0121 and Drawing Number 50-4-5719.

This work shall be maintained in accordance with the assurances which your Board provided for the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. The completed work will be added by amendment to the Operation and Maintenance Manual for this Project. Copies will be furnished your office at a later date.

Sincerely,

Arthur E. Williams
Colonel, Corps of Engineers
District Engineer

Copy Furnished:

Commander, South Pacific Division, ATTN: SPDCO-C
DWR, ATTN: M. Luttrell

RECEIVED
AUG 7 1985
TEHAMA COUNTY
ROAD DEPARTMENT & FLOOD CONTROL DIST
EXHIBIT F
1 of 1
OPERATION AND MAINTENANCE MANUAL
CHICO LANDING TO RED BLUFF PROJECT
UNIT NO. 6
SACRAMENTO RIVER
BANK PROTECTION

REVISIONS OR ADDITIONS

| Paragraph 1-04 | Add subparagraph d | JULY 1985 |
| EXHIBIT B      | Add Drawing No. 50-4-5591 | JULY 1985 |
| EXHIBIT F      | Add copy of letters of transfer dated September 24, 1984 | JULY 1985 |

SECTION I

1-04

d. Bank sloping, stone protection and selective clearing on the bank of the Sacramento River at Site Miles 209.5R and 227.5L of Unit 6 of the Chico Landing to Red Bluff project was accomplished under Contract No. DACW05-83-C-0120 by Nordic Trucking, Inc.

Specification No. 6762 Drawing No. 50-4-5591

EXHIBIT B

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

September 24, 1984

Navigation and Flood Control Unit

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

Members of the Board:

This is in regard to the joint inspection of August 30, 1984 made for the purpose of transferring a portion of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project, Contract Number 6, to the State of California for operations and maintenance.

The flood control work consists of shaping the river bank and placement of stone bank protection on the Sacramento River right bank at Site Mile 209.5; on the left bank at Site Mile 227.5 and tree and shrub planting. The work was completed on August 30, 1984 in accordance with Contract Number DACW05-83-C-0120, Specification Number 6762, Drawing Number 50-4-5591, and subsequent change orders.

The work was performed under the general authority of the Flood Control Act of 1958, 85th Congress, 2nd Session (PL-85-500, 3 July 1958) and by the 1976 Water Resources Development Act, 94th Congress, 2nd Session (PL 94-587) and now meets the requirements of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. Therefore, said flood control work together with the waterway banks contiguous thereto, and plantings are transferred as of August 30, 1984 to the State of California for operations and maintenance.

As you know, provisions have been made by change order to anticipate future erosion at Site Mile 209.5 right. Along the upstream 700+ feet of this site, additional rock was windrowed at the toe of the bank, in the existing slough bed. If additional erosion occurs, this windrow of rock is intended to launch down the eroding bank. Additionally, bank protection is proposed immediately upstream of the site in Reach 4 of the comprehensive bank protection plan under the subject project.

EXHIBIT F
1 of 2
This portion of the project work will be added by amendment to the Operation and Maintenance Manual, Sacramento River, Chico Landing to Red Bluff Bank Protection Project. Copies will be furnished your office at a later date. An interim guideline for vegetation maintenance is attached.

Sincerely,

Albert E. McCollam, Jr.
Lieutenant Colonel, Corps of Engineers
Acting District Engineer

Attachment

Copies Furnished:

Commander, South Pacific Division, ATTN: SPDCO-C
Commander, USACE, ATTN: DAEN-CWO-0, Washington, D.C. 20314
DWR, ATTN: M. Luttrell
DWR, ATTN: D. Meixner
February 26, 1985

Navigation and Flood Control Unit

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

Members of the Board:

This is in regard to the joint inspection of February 6, 1985 made for the purpose of transferring a portion of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project, Contract Number 7, to the State of California for operation and maintenance.

The flood control work consists of shaping the riverbank and placement of stone bank protection on the Sacramento River right bank at Site Mile 241.0, on the left bank at Site Miles 237.5, 237.7, and 237.9, and tree and shrub planting. The work was completed on February 15, 1985 in accordance with Contract Number DACW05-84-C-0105, Specification Number 7195, and Drawing Number 50-4-9717.

The work was performed under the general authority of the Flood Control Act of 1958, 85th Congress, 2nd Session (PL.85-500, 3 July 1958) and by the 1976 Water Resources Development Act, 94th Congress, 2nd Session (PL 94-587) and now meets the requirements of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. Therefore, said flood control work, together with the waterway banks contiguous thereto, and plantings are transferred as of February 15, 1985 to the State of California for operation and maintenance. In addition, the existing rock revetment between and adjacent to Sites 237.5, 237.7, and 237.9 left bank are to be maintained to preserve the integrity of the new work.
This portion of the project work will be added by amendment to the Operation and Maintenance Manual, Sacramento River, Chico Landing to Red Bluff Bank Protection Project. Copies will be furnished your office at a later date. An interim guideline for vegetation maintenance is attached.

Sincerely,

Arthur E. Williams
Colonel, Corps of Engineers
District Engineer

Attachment

Copies Furnished:
Commander, South Pacific Division, ATTN: SHDCO-C with Attachment
Commander, USACE, ATTN: DAEN-GWO-0, Washington, D.C. 20314 with Attachment
DWR, ATTN: M. Luttropp with Attachment
NRR, ATTN: D. Maixner with Attachment

cc: w/o attach

Engr Div (Civ Des Sec D - Pahl)
Valley Res Ofc (Cameron)
Prog Dev (Osborne)
E & A Br (Kalal)
Ops Br

The Reclamation Board/Sacramento River/Rompala/N&FCU

PS Form 3811, Jun. 1979
RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL
Navigation and Flood Control Unit

The Reclamation Board
State of California
1415 - 9th Street, Room 435-6
Sacramento, California 95814

Members of the Board:

This is to advise you that the warning sign installed at Site Mile 241.0 right bank, Sacramento River, Chico Landing to Red Bluff Project is considered part of the completed work transferred to the State of California on February 15, 1985 and shall be maintained in accordance with assurances previously executed by your Board.

Sincerely,

Wayne J. Scholl
Colonel, CS
District Engineer

Copies Furnished:
Commander, South Pacific Division, ATTN: SPOCO-0
DEP: ATTN: G. Snow
DWR: ATTN: J. Angel

cc:
Engineering Div, Civ Dec Sec D-(PAHL)
Valley Res. Ofc., Cameron
Prog Dev (OSBORNE)
F & A Br (KALAL)
C-O Div
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Chico Landing to Red Bluff
Tabulation of Sites
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<td>1-04</td>
<td>Add subparagraph a.</td>
<td>Jul 1984</td>
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<td>Add copy of letter of transfer dated 22 Dec 1982</td>
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<td>Exhibit F</td>
<td>Add Drawing No. 50-4-5581</td>
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</tr>
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<td>Add subparagraphs e, f, g, h, i, and j</td>
<td>8 Apr 2010</td>
</tr>
<tr>
<td>Exhibit C</td>
<td>Add copy of acceptance letter dated 7 Jan 1964</td>
<td>8 Apr 2010</td>
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<td>Add letter of acceptance dated 11 Dec 1968</td>
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<td>Exhibit C</td>
<td>Add copy of letter from Butte County dated 5 Aug 1976 regarding site mile 202.4</td>
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<td>Add copy of letter of acceptance dated 20 Aug 1976</td>
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<td>Exhibit C</td>
<td>Add copy of transfer letter dated 3 Jan 1986</td>
<td>8 Apr 2010</td>
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<td>Front Matter</td>
<td>Add copy of Tabulation of sites dated Aug 1991</td>
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<td>1-04</td>
<td>Add subparagraph k</td>
<td>3 Jun 2010</td>
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d. Bank sloping, stone protection and selective clearing on the bank of the Sacramento River at Site Miles 209.5R and 227.5L of Unit 6 of the Chico Landing to Red Bluff Project was accomplished under Contract no. DACW05-83-C-0120 by Nordic Trucking, Inc. Specification No. 6762, Drawing No. 50-4-5591.

e. Bank protection, right bank of Sacramento River at Tehama Mile 177.3 was accomplished under Contract No. DACW05-69-C-0011 by H. Earl Parker, Inc. and completed in November 1968. Specification No. 3559. Drawing No. 50-4-4412.

f. Bank protection, left bank of Sacramento River at Woodson Bridge, Mile 166.4, was accomplished under Contract No. DACW05-70-C-0086 by James L. Ferry and Sons, and completed on 12 June 1970. Specification No. 3694. Drawing No. 6-4-2125.

g. Bank protection, left bank of Sacramento River at (Hickman Site) Site Mile 185.3, was accomplished under Contract No. DACW05-72-C-0019 by H. Earl Parker, during the period from 14 September 1971 to 28 November 1971. Specification No. 4106. Drawing No. 50-4-4706.

h. Stone protection, selective clearing, and bank sloping of the Sacramento River at Site Miles 194.0 and 196.3, Left Bank, (a portion of Sacramento River, Chico Landing to Red Bluff Bank Protection Project) was accomplished under Contract No. DACW05-73-C-0109 by Chandler Newman Construction Company during the period from 9 July 1973 to 4 January 1974. Specification No. 4451. Drawing No. 50-4-4891.

i. Stone protection and bank sloping on the left bank of the Sacramento River at Site Miles 208.4 and 213.1, a portion of the Chico Landing to Red Bluff Bank Protection Project, was accomplished under Contract No. DACW05-74-C-0093 by Carl J. Woods during the period from 11 July 1974 to 23 October 1974. Specification No. 4668. Drawing No. 50-4-4971.

j. Stone protection, selective clearing, and bank sloping of the Sacramento River at Site Miles 194.0, 202.4, 207.0, 211.1 and 230.5 left bank and 202.0, 229.0 and 197.0, right bank, (a portion of Sacramento River, Chico Landing to Red Bluff Bank Protection Project, Unit No. 3) was accomplished under Contract No. DACW05-76-C-0014 by Luhr Brothers Inc., during the period from 1 August 1975 to 15 November 1976. Specification No. 4913, Drawing No. 50-4-5043.

k. Stone protection, bank sloping and tree and shrub planting along the Sacramento River, right bank at Site Mile 241.0, and left bank at Site Miles 237.5, 237.7 and 237.9 was accomplished under Contract No. DACW05-84-C-0105, and completed on February 15, 1985. Specification No. 7195, Drawing No. 50-4-5717.
OCT 16 1979

Mr. Larry Coleman
Tehama County Flood Control and
Water Conservation District
Route 1, Box 4
Gerber, CA 96035

Dear Mr. Coleman:

The Corps of Engineers is revising the Operation and Maintenance Manual for the Sacramento River, Chico Landing to Red Bluff Bank Protection Project.

The basic change they are making is to allow vegetation to grow through the stone blanket providing it is not detrimental to the integrity of the revetment.

We are enclosing a copy of these changes and ask for your comments by October 25, 1979. If we do not hear from you by that date, we will assume you have no comments.

Sincerely,

[Signature]

G. Donald Meixner, Program Manager
Flood Control Activities,
Reclamation Board Authority

Enclosure
TEHAMA COUNTY FLOOD CONTROL
AND
WATER CONSERVATION DISTRICT

ROUTE 1, BOX 4
GERBER, CALIFORNIA 96035

October 22, 1979

Mr. G. Donald Meixner, Program Manager
Flood Control Activities
Reclamation Board Authority
Department of Water Resources
P.O. Box 388
Sacramento, CA., 95802

Dear Mr. Meixner:

This District certainly has no objection to allowing vegetation to grow through stone blanket, however, I am concerned that the excerpts of Pages 18 through 21 are not from the Operation and Maintenance Manual furnished this District for Sacramento River, California, Chico Landing to Red Bluff Bank Protection Project. Our copy contains 16 pages plus exhibits and the instructions relating to inspections is substantially different in some areas.

Could you please forward a complete copy for review and comment.

Sincerely,

Lawrence A. Coleman
County Director of
Water Resources

LAC/mb
"The improved channel or floodway shall be thoroughly inspected immediately following each major high water period. As soon as practicable thereafter, all snags and other debris shall be removed and all damage to banks, riprap, deflection dikes and walls, drainage outlets, or other flood control structures repaired."

A discussion of special conditions pertaining to these requirements are as follows:

a. **Periodic Inspections.** The purpose of the channel and floodway inspections is to insure that no new conditions develop that may impair the effectiveness of the project. It is intended that these inspections disclose all conditions which in any way affect the stability of the structures and their functioning. At each inspection, particular attention will be given the following:

1. Location, extent and size of vegetation.

2. Unauthorized operations within the flood-flow channel right-of-way, such as excavations, buildings and other structures, levees, bank protection, or training dikes.

3. Rubbish and industrial waste disposal.

4. Changes in the channel bed such as aggradation or degradation, which would interfere with free-flow from side drainage structures or induce local meanders that would scour the banks.
(5) Upstream operations of any nature that would affect flow conditions in the river.

(6) Condition of project facilities.

During the inspection it should be determined if the following provisions are being adhered to:

(1) That brush, vines and other growth that has established itself in the rock revetment does not displace or cause the revetment to be washed out or fail;

(2) That all caves, slough, burrows, holes, slips, or other damaged portions of the banks have been repaired;

(3) That all irrigation and drainage structures within the project works are in good condition;

(4) That no revetment work or riprap has been displaced, washed out or removed.

Inspections should be made at the times specified below:

(1) During the month of October, which is prior to the beginning of the flood season.

(2) Immediately following each major high water period.

(3) In the absence of high water, at periods not exceeding 90 days.

(4) At intermediate times as necessary.
b. **Semi-annual Report.** The semi-annual reports should be submitted within a ten day period prior to 1 June and 1 December of each year and should include all dated copies of reports of inspections made during the period of report.

c. **Special Instructions.** The main feature of the project work consists of bank protection, and the following are supplemental instructions for maintenance:

1. Where scour, wash, settlement or failure of a portion of the originally provided stone protection has been noted, or where inspection indicates such damage may result during the next flood or high water period, the scour or wash shall be filled with earth free from brush, roots, sod or other unsuitable material and additional stone shall be placed upon the earth fill to bring the stone protection to its original section. In case of emergency and when stone is not available, sand bags or bags filled with gravel may be used for temporary repair measures.

2. When permanent repair of the stone protection is made, the stone used shall, as far as possible, be similar to the kind and gradation as originally used.

3. In the event an inspection reveals that due to scour, settlement or other causes, stone protection on the bank is required beyond the limits of the original construction or in reaches of bank protection not originally provided with such protection, local interests will provide additional sloping of the bank and placement of stone protection as needed to protect completed work. The work shall be done in a manner acceptable under standard engineering practice.
(4) Brush, vines and other growth may be allowed to grow through the stone blanket in the event the natural growth displaces the revetment or, in the opinion of the State/Federal inspectors becomes detrimental to the integrity of the revetment, the growth shall be cut and removed.

(5) All access roads should be maintained in such a manner as to allow inspection and maintenance vehicles to travel over them during non-flood periods. A twenty foot right-of-way strip shall be maintained at the top of the bank for inspection and maintenance work. No encroachments shall be allowed in this twenty foot strip without prior approval of the State Reclamation Board.

d. Proposed Improvements or Alterations. Drawings or prints or proposed improvements or alterations to the existing Flood Control Works must be submitted for approval to the District Engineer, Sacramento District, Corps of Engineers, Sacramento, California, sufficiently in advance of the proposed construction to permit adequate study and consideration of the work. Drawings or prints, in duplicate, showing any improvements or alterations as finally constructed should be furnished to the Corps of Engineers after completion of the work.

e. Environmental Values. Vegetation preserved as a part of selective clearing 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 project works.
JAN 09 1980

Colonel Paul F. Kavanaugh
District Engineer
Sacramento District
U. S. Army Corps of Engineers
650 Capitol Mall
Sacramento, CA 95814

Dear Colonel Kavanaugh:

We have received your letter of September 26, 1979, regarding the up-dating and revisions to the Operation and Maintenance Manual for the Sacramento River, Chico Landing to Red Bluff project, and have the following comments:

Page 19, Paragraph 3

"Inspections should be made at the times specified below:

(1) During the month of October, which is prior to the beginning of the flood season.

(2) Immediately following each major high water period.

(3) In the absence of high water, at periods not exceeding 90 days.

(4) At intermediate times as necessary."

Comment: It is our understanding that the above schedule applies to the maintaining agency. With present funding, the Department's inspection of the revetment sites is conducted once a year, generally during August, and by boat. Additional inspections are conducted at specific sites when, following a major high water period, the Department is notified of a specific problem at the site.

Page 21, Paragraph 1

"(4) Brush, vines and other growth may be allowed to grow through the stone blanket in the event the natural growth displaces the revetment or, in the opinion of the State/Federal inspectors becomes detrimental to the integrity of the revetment, the growth shall be cut and removed."
Comment: Special Instructions (1) on page 20 states that "where scour, wash, settlement or failure of a portion of the originally provided stone protection has been noted, ... additional stone shall be placed ... to bring the stone protection to its original section." In other words, when displaced, the stone blanket should be repaired. We recommend that the same provision apply to displacement of the stone blanket by vegetation. As such, we recommend the aforementioned paragraph be revised as follows:

(4) Trees, shrubs, bushes, vines and other growth may be allowed to grow through the stone blanket. Revetment displaced by the vegetation shall be repaired as soon as practical after observing the displacement. If in the opinion of the State/ Federal inspector, the vegetation jeopardises the integrity of the bank being protected by the revetment, the vegetation shall be trimmed and/or removed as directed by the State/Federal inspector.

Page 21, Paragraph 2

"(5) All access roads should be maintained in such a manner as to allow inspection and maintenance vehicles to travel over them during non-flood periods. A twenty foot right-of-way strip shall be maintained at the top of the bank for inspection and maintenance work. No encroachments shall be allowed in this twenty foot strip without prior approval of the State Reclamation Board."

Comment: This paragraph is part of the present manual (Section 4-03, a. (5) and (6) ), and except for editing, it is not being revised. However, we recommend that the second sentence be revised as follows:

A twenty-foot right of way strip shall be retained adjacent to the top of the bank to facilitate compliance with the aforementioned Special Instructions, including the maintenance of vegetation and related inspections.

The key word change is the substitution of "retained" for "maintained". To us, the term "maintained" implies a requirement to keep the strip clear of vegetation for inspection of the revetment from a vehicle on the bank, while the word "retained" means having the strip available for the particular uses when needed. Recognizing it is intended that (1) this strip in Units 4A and 4B be
revegetated under Corps Specification No. 5724, and (2) our future annual maintenance inspection (and perhaps the maintaining agency inspections) will be conducted from a boat, keeping this 20-foot strip clear is incongruous. It should be understood that, in the event of future repair of a revetment site, the work may necessitate damage or removal of vegetation within the 20-foot strip.

Sincerely,

Original signed by
Eldon E. Rinehart

ELDON E. RINEHART
General Manager

cc: Clay Castleberry, Director
Department of Public Works
County of Butte
7 County Center Drive
Oroville, CA 95965

Lawrence A. Coleman
County Director of Water Resources
County of Tehama
Route 1, Box 4
Gerber, CA 96035

bcc: Lee Carter
Richard Goodnight
Ed Littrell
Department of Fish and Game

CLGregory: jm
7 October 1980


Division Engineer, South Pacific
ATTN: SPDCO-0


2. Inclosed for review and approval is a draft of a revised Operation and Maintenance Manual for the subject project. The manual has been revised to incorporate work completed in July 1979, to allow vegetation to grow in revetment, and to clarify other subjects as suggested by the project sponsor, the State Reclamation Board. The format of the manual has also been changed as suggested by the Reclamation Board.

3. Upon approval, the revised manual will be issued to the Reclamation Board and the previously issued manual will be rescinded.

FOR THE DISTRICT ENGINEER:

Incl (dupe)
Draft O&M Manual

GEORGE C. WEDDELL
Chief, Engineering Division
SPDCO-O (7 Oct 80) 1st Ind  
SUBJECT: Sacramento River, California, Chico Landing to Red Bluff Bank  
Protection Project - Operation and Maintenance Manual

DA, South Pacific Division, Corps of Engineers, 630 Sansome Street, Room 1216,  
San Francisco, CA 94111 17 February 1981

TO: District Engineer, Sacramento, ATTN: SPKED-F

1. Subject draft is approved.

2. Minor typos marked on page 7 and Exhibit E. of returned copy.

FOR THE DIVISION ENGINEER:

[Signature]

DAVID L. FULTON  
Chief, Construction-Operations Division
Mr. Eldon E. Minehart, General Manager  
The Reclamation Board  
1416 Ninth Street, Room 335-18  
Sacramento, California 95814

Dear Mr. Minehart:

Enclosed are two copies of the revised Operation and Maintenance Manual for the Chico Landing to Red Bluff project and one set of "As Constructed" drawings for Unit 4 of this project. The manual has been revised to reflect the completion of the Unit 4 work, to allow vegetation to grow in revetment in accordance with previous agreements, and to clarify other subjects as suggested in your 9 January 1980 letter. Copies of this manual and the "As Constructed" drawings are also being furnished to the State Department of Water Resources. The previously issued manual dated May 1964, and revisions thereto, is rescinded.

Sincerely,

GEORGE C. WEDDELL  
Chief, Engineering Division

2 Incls  
1. O&M Manual (2 cys)  
2. Drawings (fwd sep)
MAY 19 1981

Mr. Lawrence A. Coleman,  
Engineer and Manager  
Tehama County Flood Control and  
Water Conservation District  
Route 1, Box 4  
Gerber, CA 96035

Dear Sir:

Enclosed for your information and use is a copy of the revised Operation and Maintenance Manual for the Chico Landing to Red Bluff Bank Protection Project and a set of "As Constructed" drawings for Unit No. 4 of this project.

Numerous changes have been made to the manual and it should be reviewed closely by your maintenance staff. The previously issued manual, dated May 1964, and revisions thereto, is rescinded and should be discarded.

Sincerely,

G. Donald Meixner  
Program Manager  
Flood Control Activities  
Reclamation Board Authority

Enclosure
AGREEMENT BETWEEN
THE UNITED STATES OF AMERICA
AND
THE STATE OF CALIFORNIA
FOR
LOCAL COOPERATION ON THE SACRAMENTO
RIVER, CHICO LANDING TO RED BLUFF,
CALIFORNIA, PROJECT

This agreement entered into this _____ day of _________, 1982, by and between the UNITED STATES OF AMERICA (hereinafter called the "Government"), represented by the Contracting Officer executing this agreement, and the STATE OF CALIFORNIA (herein after called the "State"), represented by The California State Reclamation Board, WITNESSETH THAT:

WHEREAS, the Sacramento River, Chico Landing to Red Bluff, California, Project (hereinafter called the "Project") was authorized by the Flood Control Act of 1958 (Public Law 85-500), 85th Congress, 1st Session; and

WHEREAS, the Water Resources Development Act of 1976 (Public Law 94-587), 94th Congress, 2nd session, states that the Secretary of the Army, acting through the Chief of Engineers, shall continue studies and construction of bank protection works pursuant to the project for the Sacramento River, Chico Landing to Red Bluff, California, authorized by the Flood Control Act of 1958, notwithstanding the completion of the remaining ten sites proposed for construction at the time of enactment of this Act; and

WHEREAS, the State hereby represents that it has the authority and capability to furnish the non-Federal cooperation required by the Federal legislation authorizing the Project and by other applicable law;

NOW THEREFORE, the parties agree as follows:

1. The State agrees that upon notification that the Government will commence construction of the Sacramento River, California, Chico Landing to Red Bluff Project in accordance with Federal legislation authorizing such Project, Public Law 85-500 as supplemented by Public Law 94-587, the State shall, in consideration of the Government commencing construction of such Project, fulfill the requirements of non-Federal cooperation specified in such legislation, to wit:

a. Provide, without cost to the United States, all lands, easements, and rights-of-way necessary for the Project;

b. Hold and save the United States free from damages due to construction, operation, and maintenance of the project except damages due to the fault or negligence of the Government or its contractors;

c. Maintain and operate the project, or integral parts thereof, in accordance with regulations prescribed by the Secretary of the Army. Section 208-10, Title 33 of the Code of Federal Regulations, contains regulations for the operation and maintenance of local flood protection works approved by the Secretary of the Army in accordance with authorities contained in Section 3 of the Flood Control Act of 22 June 1936 (49 Stat. 1571), as amended and supplemented;
d. Enact and enforce zoning regulations to prevent the erection of future improvements within the flood plain of the Sacramento River, from Keswick Dam downstream to the upper end of the Sacramento River Flood Control Project levees;

e. Undertake all relocations and alterations of roads, bridges, buildings, irrigation facilities, and other utilities which are necessary for the construction and operation of the project;

f. Comply with Section 601 of Title VI of the Civil Rights Act of 1964 (P.L. 88-352) that no person shall be excluded from participation in, denied the benefit of, or be subjected to discrimination in connection with the project on the grounds of race, creed, or national origin;

g. Assure that, in conjunction with acquiring rights-of-way, affected persons will be adequately informed of the benefits, policies, and procedures described in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646), and in accordance with Section 210 and 305 of said Act and implementing regulations, assure that:

(1) Fair and reasonable relocation payments and assistance shall be provided to or for displaced persons, as are required to be provided by a Federal agency under Sections 202, 203 and 204 of the Act;

(2) Relocation assistance programs offering the services described in Section 205 of said Act shall be provided to such displaced persons;

(3) Within a reasonable period of time prior to displacement, decent, safe, and sanitary replacement dwellings will be available to displaced persons in accordance with Section 205(c)(3) of said Act;

(4) In acquiring real property, it will be guided, to the greatest extent practicable under State Law, by the land acquisition policies in Section 301 and the provisions of Section 302 of said Act; and

h. Assume responsibility and pay damages, if necessary, in the event there is a failure to perform in accordance with the terms of this agreement and any other applicable provisions of Section 221 of Public Law 91-611.

2. The State hereby gives the Government a right to enter, at reasonable times and in a reasonable manner, upon land which the State owns or controls, for access to the Project for the purpose of inspection, and for the purpose of repairing and maintaining the Project, if such inspection shows that the State for any reason is failing to repair and maintain the Project in accordance with the assurances hereunder and has persisted in such failure after a reasonable notice in writing by the Government delivered to the California State Reclamation Board. No repair and maintenance by the Government in such event shall operate to relieve the State of responsibility to meet its obligations as set forth in Paragraph 1 of this Agreement, or to preclude the Government from pursuing any other remedy at law or equity.
IN WITNESS WHEREOF, the parties hereunto have executed this contract on the day and year first above written.

THE UNITED STATES OF AMERICA

By: [Signature]
Colonel, Corps of Engineers
District Engineer
Contracting Officer

FOR THE SECRETARY OF THE ARMY
DATE: [Signature]

THE STATE OF CALIFORNIA

By: [Signature]
The Reclamation Board
GENERAL MANAGER

DATE: SEPTEMBER 15, 1982
CERTIFICATE OF AUTHORITY

I, David B. Anderson, do hereby certify that I am one of the attorneys for the Reclamation Board, that the Board is a legally constituted public body with full authority and legal capability to perform the terms of the agreement between the United States of America and the State in connection with the Sacramento River, Chico Landing to Red Bluff, California Project and to pay damages, if necessary, in the event of the failure to perform in accordance with Section 221 of Public Law 91-611 and that the person who has executed the contract on behalf of the Board has acted within his or her statutory authority.

IN WITNESS WHEREOF, I have made and executed this Certificate this 15th day of September, 1982.

By: [Signature]
Attorney for the Reclamation Board.
DECLARATION OF FINANCIAL ABILITY

I, Eldon E. Rinehart, General Manager of the State Reclamation Board, do hereby declare that the Board, under the laws of the State of California, is financially capable of meeting the construction, operation and maintenance costs of the Project.

I further declare that The Reclamation Board Activities Program fund will be used for the purpose of construction, operation and maintenance of the Project. There were $1,356,000 allocated to the fund for this fiscal year. As of this day there is a balance of $1,133,000 on hand in that fund.

Dated this 15TH day of SEPTEMBER, 1982.

By: Eldon E. Rinehart
General Manager, The Reclamation Board

Sacramento River, Chico Landing
to Red Bluff, California
CERTIFICATE OF APPROVAL

I, the undersigned Attorney at Law, as legal counsel for The Reclamation Board which has undertaken to act as local sponsor of the Sacramento River, Chico Landing to Red Bluff Project, hereby certify that I have reviewed the contract dated the ______ day of ________________, 1982, between the United States of America and the State of California and have approved said contract and the provisions contained therein, both as to form and substance, including, but not limited to, those provisions whereby the State of California has agreed to pay damages, if necessary, in the event of failure to perform in accordance with Section 221 of Public Law 91-611.

IN WITNESS WHEREOF, I have made and executed this Certificate this 15th day of September, 1982.

By: ____________________________
   Attorney for the Reclamation Board.
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<td>Sacramento River, Chico Landing to Red Bluff California, Site Mile 209.5R and 227.5L, in 6 sheets.</td>
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Sacramento River, Chico Landing to Red Bluff Project,
California—Additions to O & M Manual

TO Chief, C-O Division FROM Chief, Engr Div DATE 12 July 1985 CMT1

Ms. Seavey/wf/3334

1. Enclosed are two copies of additions to the operation and maintenance manual for the Sacramento River, Chico Landing to Red Bluff project. The additions reflect completed emergency bank protection restoration under authority of Section 5 of the flood control act of August 18, 1941, as amended (Public Law 99, 84th Congress, 1st Session).

2. A copy of the additions has been furnished the Division Engineer. Copies of the additions and "As-Constructed" drawings have been furnished to the State Reclamation Board and the State Department of Water Resources.

2 Encls (dupe)

GEORGE C. WEDDELL
Chief, Engineering Division

cc (wo/encls):
Civ Des Br
Civ Des Sec D
1. Enclosed are two copies of an addition to the operation and maintenance manual for the Sacramento River, Chico Landing to Red Bluff project. The addition reflects completed construction work for Unit 6 of the Chico Landing to Red Bluff project.

2. A copy of the addition has been furnished the Division Engineer. Copies of the addition and "As-Constructed" drawings have been furnished to the State Reclamation Board and the State Department of Water Resources.

Encl (dupe)

cc (wo/encls):
Civ Des Br
Civ Des Sec D

GEORGE C. WEDDELL
Chief, Engineering Division
AUG 5 1985

Mr. Larry Coleman
Tehama County Flood Control and
Water Conservation District
9380 San Benito Avenue
Gerber, CA  96035

Dear Mr. Coleman:

Enclosed are two copies of additions to the operation and
maintenance manual for the Sacramento River, Chico Landing
to Red Bluff project, and one set of "As Constructed" draw-
ings for two different contracts. The additions and draw-
ings reflect completed emergency repairs by the Corps of
Engineers.

The work shall be maintained in accordance with the assur-
ance your County provides to The Reclamation Board.

If you have any questions, please contact Cliff Gregory at
(916) 445-7330.

Sincerely,

RAYMOND E. BARSCH
General Manager

Enclosures

RECEIVED
AUG 7 1985
TEHAMA COUNTY
ROAD DEPARTMENT &
FLOOD CONTROL DIST
OPERATION AND MAINTENANCE MANUAL
FOR
SACRAMENTO RIVER, CALIFORNIA
CHICO LANDING TO RED BLUFF
BANK PROTECTION PROJECT
RESCINDED
Revised MARCH 1981
U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA
CORPS OF ENGINEERS
U. S. ARMY

OPERATION AND MAINTENANCE MANUAL
SACRAMENTO RIVER, CALIFORNIA
CHICO LANDING TO RED BLUFF
BANK PROTECTION PROJECT

Sacramento District
Corps of Engineers
U. S. Army
May 1964
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Section III ---- Revised paragraph 3-09 April 1977

Paragraph 1-04 ---- Add subparagraph g April 1977

EXHIBIT B --------- Add Drawing No. 50-4-5043 April 1977

INTRODUCTION

1-01. Authorization. The Sacramento River, Chico Landing to Red Bluff bank protection project was authorized by the Flood Control Act of 1958, (P.L. 85-500, 3 July 1958, 85th Congress, 1st Session) which reads in part as follows:

"The project for flood protection on the Sacramento River from Chico Landing to Red Bluff, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document No. 272, 84th Congress, at an estimated cost of $1,560,000."

House Document No. 272, 84th Congress, 2nd Session, Report of the Chief of Engineers to the Secretary of the Army for transmission to Congress, reads in part:

"After due consideration . . . . I concur in the views and recommendations of the Board. . . ."

Report of the Board of Engineers Rivers and Harbors to the Chief of Engineers, Department of the Army, in House Document No. 272, reads in part:

". . . . the Board of Engineers for Rivers and Harbors concurs generally in the views and recommendations of the Division Engineer. . . . After consideration of the information now available, the Board is of the opinion that the proposed levees should not be constructed at this time. . . . The Board accordingly recommends that the existing project for flood control on the Sacramento River be extended to Keswick Dam for the purpose of zoning the area below the dam, and that the project be modified by the construction of bank protection and incidental channel improvements between Chico Landing and
Red Bluff, generally in accordance with the plans of the District Engineer and with such modifications thereof as in the discretion of the Chief of Engineers may be advisable; . . . subject to the condition that only such work be constructed as is found economically justified at the time of construction in the light of conditions then prevailing along the river, . . ."

Authorizing legislation passed in 1959 by the State of California is contained in Section 12643.2, of the State Water Code. The State of California adopted the project and accepted the responsibility of local cooperation.

1-02. Location. The Chico Landing to Red Bluff Bank Protection Project, as covered by this manual, lies in Tehama County along the right and left banks of the Sacramento River between Corning and Red Bluff. As shown on EXHIBIT A-1, there are seven sites designated as Sites No. 5 to No. 12, inclusive.

1-03. Description of the Project Works. The project works covered by this manual include the following:

a. The revetted banks at seven sites as indicated on the vicinity map of EXHIBIT A-1.

b. Access roads to the seven bank protection sites.

c. Intermittent irrigation and drainage structures as shown on the "As Constructed" drawings of EXHIBIT B.

1-04. Construction Data and Contractor. Construction required by the Corps of Engineers to provide stone protection was accomplished under Contract No. DA-04-167-CIVENG-63-74 by Eugene Luhr & Company during the period from 3 June 1963 to 6 March 1964. Specification No. 2898, Drawing No. 50-4-3713.

b. Bank protection, right bank of Sacramento River at Tehama at Mile 177.3 was accomplished under Contract No. DACW05-69-C-0011 by H. Earl Parker, Inc. and completed in November 1968. Specification No. 3559. Drawing No. 50-4-4412.

C. Bank protection, left bank of Sacramento River at Woodson Bridge, Mile 218.3, was accomplished under Contract No. DACW05-70-C-0036, by James L. Ferry and Sons, and completed on 12 June 1970. Specification No. 3694. Drawing No. 6-4-2125.

d. Bank protection, left bank of Sacramento River at (Hickman Site) Site Mile 185.3, was accomplished under Contract No. DACW05-72-C-0019, by H. Earl Parker, during the period from 14 September 1971 to 28 November 1971. Specification No. 4105. Drawing No. 50-4-4705.
SEcr'ION II

LOCAL COOPERATION REQUIREMENTS

2-01. Requirements of Local Cooperation. House Document No. 272, Eighty-fourth Congress, Second Session, requires local interests to (a) furnish without cost to the United States, all necessary lands, easements, and rights-of-way for construction of the project; (b) hold and save the United States free from damages due to the construction works; and (c) maintain the works after completion, in accordance with regulations prescribed by the Secretary of the Army. The State of California by Legislation amended in 1955 has agreed to furnish the required cooperation.

2-02. Assurances Provided by Local Interests. Section 12657 of the State Water Code states:

"12657. Except as otherwise provided in Chapters 1 and 2 of this part, the Reclamation Board shall give assurances satisfactory to the Secretary of War that local cooperation required by Section 3 of the Act of Congress approved December 22, 1944 (Public, numbered 534, Seventy-eighth Congress, Second Session), and Section 2 of the Act of Congress approved August 18, 1941, (Public, numbered 228, Seventy-eighth Congress, First Session), will be furnished by the State in connection with the flood control projects authorized and adopted in Sections 12648, 12650, 12651, 12652, 12654 and 12656.5 and on any flood control projects on any stream flowing into or in the Sacramento Valley of the San Joaquin Valley hereafter approved and authorized by Congress."

2-03. Acceptance by the State Reclamation Board. Responsibility for operating and maintaining the seven bank protection sites (6 to 12, inclusive) was officially accepted by the Reclamation Board of the State of California by letters dated 7 January 1964 and 10 February 1964, see EXHIBIT E.
SECTION III

MAINTENANCE AND OPERATION - GENERAL PROCEDURE

3-01. Reference to Approved Regulations. This manual is submitted in accordance with provisions of Title 33 - Navigation and Navigable Waters, Chapter II, Corps of Engineers, Department of the Army, Part 208 - Flood Control Regulations, Maintenance and Operation of Flood Control Works, as of 1 January 1962, a copy of which is included as EXHIBIT A, Sheets 1 and 2.

3-02. Intent of Regulations. The general intent of the regulations approved by the Secretary of the Army is stated in paragraph 208.10(a)(1) as follows: "The structures and facilities constructed by the United States for local flood protection shall be continuously maintained in such a manner and operated at such times and for such periods as may be necessary to obtain the maximum benefits."

3-03. Purpose of this Manual. In view of the large number of local flood protection projects authorized by Congress and the repetitious nature of regulations to govern maintenance and operation of each individual project, and in order that local interests may be fully aware of the extent of the obligations assumed by them in furnishing assurances of local cooperation for projects to be constructed in the future, the general regulations described above were established by the Secretary of the Army. The general regulations approved by the Secretary of the Army, August 1944, were intended to be sufficiently broad in scope and general in nature as to be applicable to all flood-protection projects for which such regulations are required by law.

Section 208.10(a)(10) of the regulations read as follows: "The Department of the Army will furnish local interests with an Operation and Maintenance Manual for each completed project, or separate useful part thereof, to assist them in carrying out their obligations under this part." This manual has, therefore, been prepared to furnish local interests with information on the project works and advise as to the details of the operation and maintenance requirements applicable to this particular project, to state procedure required by the Department of the Army, and to indicate satisfactory methods of flood-fighting operations and emergency repairs. The project works are to be maintained and operated in accordance with the Flood Control Regulations referred to above and interpretations thereof contained herein.
3-04. Definitions. As used hereinafter, the term "Superintendent" shall be defined to mean the agency or person appointed by the local agency to be directly in charge of an organization (either the State, County or local reclamation district, as the case may be) which will be fully responsible for the continuous maintenance and inspection of the project works. The term "District Engineer" shall be defined to mean the District Engineer of the U. S. Army Engineer District, Sacramento, or his authorized representative. The term "right bank" or "left bank" shall be defined to mean the right or left bank or side, respectively, of a stream or channel when facing downstream.

3-05. General Provisions of Regulations. In addition to that quoted in paragraph 3-02 above, the general provisions of the Flood Control Regulations, contained in paragraph 208.10(a)(2), to 208.10(a)(9), both inclusive, are quoted as follows:

"(2) The State, political subdivision thereof, or other responsible local agency, which furnished assurance that it will maintain and operate flood control works in accordance with regulations prescribed by the Secretary of the Army, as required by law, shall appoint a permanent committee consisting of, or headed by an official hereinafter called the "Superintendent", who shall be responsible for the development and maintenance of, and directly in charge of an organization responsible for the efficient operation and maintenance of all structures and facilities during flood periods and for continuous inspection and maintenance of the project works during periods of low water, all without cost to the United States.

(3) 

(4) No encroachment or trespass which will adversely affect the efficient operation or maintenance of the project works shall be permitted upon the rights-of-way for the protective facilities.

(5) No improvement shall be passed over, under or through the walls, levees, improved channels or floodways, nor shall any excavation or construction be permitted within the limits of the project right-of-way, nor shall any change be made in any features of the works without prior determination by the District Engineer of the Department of
the Army or his authorized representative that such improvements, excavation, construction, or alteration will not adversely affect the functioning of the protective facilities. Such improvements or alterations as may be found to be desirable shall be constructed in accordance with standard engineering practice. Advice regarding the effect of proposed improvements or alterations on the functioning of the project and information concerning methods of construction acceptable under standard engineering practice shall be obtained from the District Engineer, or, if otherwise obtained, shall be submitted for his approval. Drawings or prints showing such improvements or alterations as finally constructed shall be furnished the District Engineer after completion of the works.

(6) It shall be the duty of the Superintendent to submit a semi-annual report to the District Engineer covering inspection, maintenance, and operation of the protective works.

(7) The District Engineer or his authorized representative shall have access at all times to all portions of the protective works.

(8) Maintenance measures or repairs which the District Engineer deems necessary, shall be promptly taken or made.

(9) Appropriate measures shall be taken by local authorities to insure that the activities of all local organizations operating public or private facilities connected with the protective works are coordinated with those of the Superintendent's organization during flood periods."

3-06. Assistance to be Furnished by the District Engineer. The District Engineer will:

a. Furnish to local interests "As Constructed" drawings of the project works at the time they are transferred.

b. Make periodic inspections of the project works and notify local interests of any repairs or maintenance measures which the District Engineer deems necessary in addition to measures taken by the Superintendent.

c. Submit to the Office, Chief of Engineers, all cases of noncompliance with full details thereof for determination of corrective measures to be taken.
d. Make prior determination that any proposed encroachment, improvement, excavation, or construction within the right-of-way, or alteration of the project works, will not adversely affect the functioning of the protective facilities, and to furnish the Superintendent with an approval thereof in writing.

3-07. Responsibilities of the Superintendent. In line with the provisions of the Flood Control Regulations, the general duties of the Superintendent include the following:

a. Training of Key Personnel. Key personnel shall be trained in order that regular maintenance work may be performed efficiently and to insure that unexpected problems related to flood control may be handled in an expeditious and orderly manner. The Superintendent should have available the names, addresses, and telephone numbers of all his key men and a reasonable number of substitutes. These key men should, in turn, have similar data on all of the men who will assist them in the discharge of their duties. The organization of key men should include the following:

(1) An assistant to act in the place of the Superintendent in case of his absence or indisposition.

b. Files and Records. The Superintendent shall maintain a file or reports, records, and drawings concerning the project works, readily available at all times to the District Engineer.

c. Encroachment or trespass on Right-of-Way. In accordance with the provisions of Flood Control Regulations 208.10(a)(4), no encroachment or trespass which will adversely affect the efficient operation or maintenance of the project works shall be permitted on the rights-of-way for the protective facilities. The Superintendent will, therefore, cause notices to be posted at conspicuous places along the project right-of-way directing public attention to this regulation. The Superintendent shall arrange for the prosecution of offenders under local ordinances and report action taken to the State Reclamation Board.

d. Permits for Right-of-Entry or Use of Portion of Right-of-Way. Permits for temporary right-of-entry or use of portion of the right-of-way shall not be issued without prior determination by the State Reclamation Board sufficiently in advance of issuance to permit adequate study and consideration and determination of conditions to be embodied in the permit document. Executed copies, in triplicate, of the permit document as issued shall be furnished the State Reclamation Board. See EXHIBIT F for sample permit of right-of-entry.

e. Permits for Improvements or Construction within the Project Right-of-Way. All requests for permits for construction of any
improvements of any nature within the limits of the project right-of-way shall be referred to the District Engineer through the State Reclamation Board for determination that such construction will not adversely affect the stability, safety, and functioning of the protective facilities, and for definition of conditions under which permit should be granted. These conditions will include, among others, the following items.

(1) That all work shall be performed:

(a) In accordance with standard engineering practice and in accordance with plans and specifications approved by the District Engineer or his authorized representative; drawings or prints of proposed improvements or alterations to the existing flood control works must be submitted for approval to the State Reclamation Board sufficiently in advance of the proposed construction to permit adequate study and consideration of the work.

(b) To the satisfaction of the District Engineer.

(2) After completion of the work, "As Constructed" drawings or prints, in duplicate showing such improvements as finally constructed shall be furnished the District Engineer.

f. Maintenance.

(1) Flood Control Regulations, paragraph 208.10(b)(1) are quoted in part as follows:

"(b)(1) Maintenance. The Superintendent shall provide at all times such maintenance as may be required to insure serviceability of the structures in time of flood. Measures shall be taken to . . . exterminate burrowing animals, and to provide for . . . . . . removal of wild growth and drift deposits, and repair of damage caused by erosion or other forces . . . . Immediate steps will be taken to correct dangerous conditions disclosed by such inspections. Regular maintenance repair measures shall be accomplished during the appropriate season as scheduled by the Superintendent."
(2) Full responsibility for making the repairs and the methods used is placed on the Superintendent, but the experience and facilities of the District Engineer will be available to him for advice and consultation.

(3) All repairs shall be made in accordance with standard engineering practice, to line and grade and in accordance with details shown on the construction drawings for the project works, copies of which are included in EXHIBIT 3. No change or alteration shall be made in any feature of the project works without prior determination by the District Engineer that such alteration will not adversely affect the stability and functioning of the protective facilities. Plans and specifications of all changes or alterations that may be proposed by the Superintendent shall be submitted to the District Engineer for investigation and approval before prosecution of the work.

g. Reports.

(1) Semi-Annual Report. In accordance with the provisions of the Flood Control Regulations, paragraph 203.10(a)(6), the Superintendent shall submit within a 10-day period following 1 December and 1 June of each year, a semi-annual report to the District Engineer covering inspection, maintenance, and operation of the protective works. This report will present a statement of:

(a) The physical conditions of the protective works as summarized from the logs of inspection.

(b) Flood behavior of the protective works, and flood-fighting activities during the period.

(c) Prosecutions for encroachment or trespass.

(d) Permits issued for right-of-way or use of right-of-way.

(e) Permits issued for improvements or construction within the project right-of-way.

(f) Maintenance measures taken; nature, date of construction, and date of removal of temporary repairs; date of permanent repairs.
(g) Fiscal statement of cost and maintenance and operation for the period.

A suggested form for submission of the semi-annual report is included as EXHIBIT D, Sheets 1 and 2.

3-08. Inspection Procedure. Since the enactment of State Legislation of Chapter 1523, 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 as of 1 January 1962 (Title 33) and reports its findings to the local agency, the State Reclamation Board and the District Engineer of the U. S. Army Engineer District, Sacramento. The 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 authorized projects 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 project works of the responsible maintaining agency:

Personnel of the State Department of Water Resources make a detailed inspection of the bank protection in the spring and fall of each year and note 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 be removed from the rock revetment.

(b) That all caves, slough, burrows, holes, slips, or other damaged portions of the banks have been repaired.

(c) That all irrigation and drainage structures within the project works are in good working condition.

(d) That no revetment work or riprap have been displaced, washed out or removed.
(e) That unauthorized vehicular travel is restricted.

(f) That encroachments are not being erected along the bank which would hinder travel by authorized patrol vehicles.

(g) Prevent the erection of structures on, additions to, or alterations of, the project works 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.

3-09. 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. Dead trees with wildlife value will be retained except where they constitute a hazard to existing flood control works.

*(Revised April 1977)
SECTION IV
FEATURES OF THE PROJECT SUBJECT TO FLOOD CONTROL REGULATIONS

4-01. Project Works. Construction along the Sacramento River, as covered by this manual, consists of seven revetted bank sites at various locations between Corning and Red Bluff, access roads, irrigation and drainage structures. For further details see the drawings of EXHIBIT B.

4-02. Channels and Floodways.

a. Description. The channel of this project extends along the Sacramento River from river mile 169 to 190, a distance of 21 miles. Improvement consisted mostly of providing bank protection at seven sites. Regulations regarding inspection, maintenance, and operation of channels and floodways will be found in paragraphs 4-02b and c of this manual.

b. Inspection.

(1) Pertinent Requirements of the Code of Federal Regulations. Flood Control Regulations, Para. 205.10(g) (1) are quoted in part as follows:

"(g) Channels and floodways . . . (1) Maintenance. Periodic inspections of improved channels and floodways shall be made by the Superintendent to be certain that:

(iv) Banks are not being damaged by rain or wave wash, and that no sloughing of banks has occurred;

(v) Riprap sections and deflection dikes and walls are in good condition;

(vi) Approach and egress channels adjacent to the improved channel or floodway are sufficiently clear of obstructions and debris to permit proper functioning of the project works.

Such inspections shall be made prior to the beginning of the flood season and otherwise at intervals not to exceed 90 days. Immediate steps will be taken to remedy any adverse conditions disclosed by such inspections. . ."
(2) The purpose of the flood-flow channels inspection is to insure that conditions which affect the channel capacity will remain the same, as originally existing and that no new conditions develop that may affect the stability of the project structures. At each inspection required by Par. 208.10(g)(1) of the Flood Control Regulations, particular attention will, therefore, be given the following:

(a) Location, extent and size of vegetal growth.

(b) Unauthorized operations within the flood-flow channel right-of-way, such as excavations, buildings and other structures, levees, bank protection, or training dikes.

(c) Rubbish and industrial waste disposal.

(d) Changes in the channel bed such as aggradation or degradation, which would interfere with free-flow from side drainage structures or induce local meanders that would scour the banks.

(e) Operations of any nature upstream from the project that would affect flow conditions within the limits of the flood control project.

(f) Condition of project structure.

1. Channel walls;
   - - - - - - - - - - - - - -

2. Fencing.
   a. Injuries to post, fencing or barbed wire.
   b. Damage to galvanizing.

3. Earth fills:
   a. Settlement.
   b. Erosion of both slopes.
c. Excessive seepage or saturation area back of fills.
d. Condition of bank protection - concrete or stone blanket.

4. Right-of-way:
a. Presence of dumped refuse.
b. Encroachment or trespass.

(3) No excavation within the limits of this unit of the Chico Landing to Red Bluff Project will be permitted unless an excavation permit has been approved by the State Reclamation Board.

(4) If any work is done to improve flow conditions in the Chico Landing to Red Bluff Project no work will be permitted unless an excavation permit has been approved by the State Reclamation Board.

(5) The intent of these inspections is to disclose all conditions which in any way affect the stability of the structures and their functioning for the control of floods. Each inspection report should note and comment on any repair measures that have been taken since the last inspection. In making these inspections, the check sheets included as EXHIBIT C shall be followed.

c. Maintenance.

(1) Pertinent Requirements of the Code of Federal Regulations, Flood Control Regulations, Par. 205.10(g)(1) are quoted in part as follows:

"... Immediate steps will be taken to remedy any adverse conditions disclosed by such inspection ... ."

(2) Shoaling or aggradation at the inlets or outlets of side drainage structures may render them inoperative. It is, therefore, imperative that all drains be kept open and unobstructed at all times.
(3) Dumped rock of other suitable types of protection should be placed at locations found by experience to be critical trouble points, with a view to stabilizing the channel alignment and preserving the general uniformity of the bank lines.

(4) Sediment and debris plugs or other obstructions should be removed from the channel to prevent any tendency for the flows to be deflected within the channel. The heavy material likely to accumulate in the new channel at the mouths of tributaries should be removed to keep the channel clear.

(5) The channel and right-of-way shall be kept reasonably clear of debris, refuse matter, or industrial wastes.

4-03. Special Instructions.

a. Revetment Work. Due to the fact that the main feature of this project work consists of stone protection, the provisions of paragraph 4-02(b)(v) are expanded to include the following:

(1) Where scour, wash, settlement or failure of a portion of the originally provided stone protection has been noted, or where inspection indicates such damage may result during the next flood or high water period, the scour or wash shall be filled with earth free from brush, roots, sod or other unsuitable material and additional stone shall be placed upon the earth fill to bring the stone protection to its original section. In case of emergency and when stone is not available, sand bags or bags filled with gravel may be used for temporary repair measures.

(2) When permanent repair of the stone protection is made, the stone used shall, as far as possible, be similar to the kind and gradation as originally used, and shall be placed to the thickness as shown on the drawings of EXHIBIT B.

(3) In the event an inspection reveals that due to scour, settlement or other causes, stone protection on the bank is required beyond the limits of the original construction or in reaches of bank protection
not originally provided with such protection, local interests will provide additional sloping of the bank and placement of stone protection as needed to protect completed work. The work shall be done in a manner acceptable under standard engineering practice.

(4) Trees and brush should not be allowed to grow through the stone blanket. Trees and brush in the stone blanket should be cut or sprayed with proper herbicides when necessary.

(5) All access roads should be maintained in such a manner as to allow inspection and maintenance vehicles to travel over them during non-flood periods. A twenty foot right-of-way strip shall be maintained at the top of the bank for inspection and maintenance work.

(6) No encroachments shall be allowed in this twenty foot strip without prior approval of the State Reclamation Board.
EXHIBIT A

FEDERAL FLOOD CONTROL REGULATIONS
§ 2060 Local flood protection works; maintenance and operation of structures and facilities.

(1) The structures and facilities constructed by the United States to provide local flood protection shall be continuously maintained in such a manner and operated at such times and for such purposes as may be necessary to obtain the maximum benefits.

(2) Such State, political subdivision thereof, or other responsible local agency, which furnished assurance that it will continue and operate flood control works in accordance with regulations prescribed by the Secretary, or the Secretary’s authorized representative, or the Secretary’s authorized representative, shall appoint a permanent committee consisting of or headed by an official hereinafter called the "Superintendent," who shall be responsible for the development and maintenance of, and directly in charge of, an organization responsible for the efficient operation and maintenance of all of the structures and facilities during flood periods and for continuous inspection and maintenance of the project works curing periods of low water, all without cost to the United States.

(3) A reserve supply of materials needed during a flood emergency shall be kept on hand at all times.

(4) No encroachment, or trespass which will adversely affect the efficient operation or maintenance of the project works shall be permitted upon the right-of-way for the protective facilities.

(5) No improvement or alteration shall be passed over, under, or through the walls, levees, improved channels or floodways, nor shall any excavation or construction be permitted within the limits of the project works except for such minor changes as may be made in any feature of the works without prior determination by the District Engineer of the Department of the Army or his authorized representative that such improvement, excavation, construction, or alteration will not adversely affect the functioning of the protective facilities. Such improvements or alterations as may be found to be desirable and permitted under the above determination shall be constructed in accordance with standard engineering practice. Advice regarding the effect of proposed improvements or alterations on the functioning of the project and information concerning methods of construction and maintenance acceptable under standard engineering practice shall be obtained from the District Engineer or, if otherwise obtainable, shall be submitted for his approval. Drawings or prints showing such improvements or alterations shall be finally constructed shall be furnished the District Engineer after completion of the work.

(6) It shall be the duty of the Superintendent to submit a semiannual report to the District Engineer covering inspection, maintenance, and operation of the protective works.

(7) The District Engineer or his authorized representative shall make inspections at all times to all portions of the protective works.

(8) Maintenance measures or repairs which the District Engineer deems necessary shall be promptly taken or made.

(9) Appropriate measures shall be taken to prevent fires to insure that the activities of all local organizations operating public or private facilities connected with or used by the protective works are coordinated with those of the Superintendent’s organization during flood periods.

(10) The Department of the Army will furnish local organizations with an Inspection and Maintenance Manual for each completed project, or separate useful part thereof, in carrying out their obligations under this part.

(b) Laws and regulations. The Superintendent shall provide at all times such maintenance as may be required to insure the usefulness of the structures in time of flood. Measures shall be taken to promote the growth of sod, external burrowing animals, and to provide for routine mowing of the grass and weeds, removal of wild growth and drift deposits, and repair of damage caused by erosion or other factors. Where practicable, measures shall be taken to retard bank erosion by planting of willows or other suitable growth on areas riverside of the levees. Periodic inspections shall be made by the Superintendent to insure that the structure and maintenance measures are being effectively carried out and, further:

(i) No unusual activity, sloughing, or material loss of grade or levee cross section has occurred.

(ii) No casing has occurred on either the land side or the river side of the levee which might affect the stability of the levee section.

(iii) No seepage, saturated areas, or sand boils are occurring.

(iv) No vegetation or weeds which are harmful to the levee are permitted to remain.

(v) No revetment work or riprap has been displaced, washed out, or removed.

(vi) No action is being taken, such as burning grass and weeds during inappropriate seasons, which will retard or destroy the growth of sod.

(vii) Access roads to and on the levee are being properly maintained.

(viii) Castle guards and gates are in good condition.

(ix) Crown of levee is shaped so as to drain readily, and roadway thereon, if any, in well maintained.

(x) There is no unauthorized grazing or weave over bottom of levee.

(xi) Encroachments are not being made on the levee right-of-way which might endanger the structure or hinder its proper and efficient functioning during times of flood

Such inspections shall be made immediately prior to the beginning of the flood season; immediately following each major high water period, and otherwise at intervals not exceeding 90 days, and such intermediate times as may be necessary to insure the best possible care of the levee. Immediate steps will be taken to correct dangerous conditions disclosed by such periodic maintenance repair measures shall be accomplished during the appropriate season as scheduled by the Superintendents.

(2) Operations. During flood periods the levee shall be continuously to locate possible sand boils or unusual weariness of the landward slope and to be certain that:

(i) There are no indications of slides or sloughing.

(ii) Wave wash or scouring action is not occurring; and

(iii) No low reaches of levee exist which may be overtopped;

(3) Water and soil. No levee exist which might endanger the structure.

Appropriate measures will be taken to insure the availability of adequate labor and materials to meet all contingencies. Immediate steps will be taken to control any condition which endangers the levee and to repair the damaged section.

(c) Flood insurance (1) Maintenance. Periodic inspections shall be made by the Superintendent of the levee by:

(i) No seepage, saturated areas, or sand boils are occurring;

(ii) No unusual activity, sloughing, or material loss of grade or levee cross section has occurred.

(iv) No vegetation or weeds which are harmful to the levee are permitted to remain;

(v) No revetment work or riprap has been displaced, washed out, or removed.

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(viii) Castle guards and gates are in good condition.

(x) Crown of levee is shaped so as to drain readily, and roadway thereon, if any, in well maintained.

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(ii) Wave wash or scouring action is not occurring; and

(iii) No low reaches of levee exist which may be overtopped;

(3) Water and soil. No levee exist which might endanger the structure.
in levels shall be inspected frequently during floods to ascertain whether neces-
sary steps are being taken to ensure their safety. Immediate steps shall be taken to cor-
correct any adverse condition.

(2) Operation. Competent operators shall be on duty at all times. Repair, removal of
equipment from the plant shall be made during off-flood seasons insofar as prac-
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ticable.
**EXHIBIT B**

"As Constructed"

**Drawings**

(See separate folder for the following drawings)

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<tr>
<th>File No.</th>
<th>Title</th>
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<tbody>
<tr>
<td>50-4-3713</td>
<td>Stone Protection along Right &amp; Left Banks, Sacramento River in Tehama County, in 16 sheets.</td>
</tr>
<tr>
<td>50-4-4412</td>
<td>Stone Protection, Right Bank Sacramento River at Tehama, in 1 sheet.</td>
</tr>
<tr>
<td>6-4-2125</td>
<td>Stone Protection, left bank Sacramento River, Mile 215.3, in 1 sheet.</td>
</tr>
<tr>
<td>50-4-4706</td>
<td>Stone Protection, left bank Sacramento River, vicinity Site Mile 102.3 (Hickman Site) in 8 sheets</td>
</tr>
<tr>
<td>50-4-4891</td>
<td>Bank Protection, Left Bank, Sacramento River, Butte County, in 3 sheets.</td>
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<tr>
<td>50-4-4971</td>
<td>Bank Protection, Left Bank, Sacramento River Site Mile 208.4 and Mile 213.1, in 5 sheets.</td>
</tr>
<tr>
<td>50-4-5043</td>
<td>Bank Protection, Left and Right Banks, Sacramento River, Various Sites, Butte County, in 3 sets, totaling</td>
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</tbody>
</table>
EXHIBIT C

SUGGESTED CHECK LIST

BANK PROTECTION REPORT
SUGGESTED CHECK LIST
BANK PROTECTION REPORT

Date __________________________

Inspected __________________________

Report number of places requiring maintenance work opposite each item listed below. A separate report should be submitted describing the necessary maintenance work for each location.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Settlement, caving or sloughing</td>
</tr>
<tr>
<td>2.</td>
<td>Condition of stone protection</td>
</tr>
<tr>
<td>3.</td>
<td>Growth of brush or trees in stone blanket</td>
</tr>
<tr>
<td>4.</td>
<td>Condition of access roads</td>
</tr>
<tr>
<td>5.</td>
<td>Unauthorized traffic or grazing</td>
</tr>
<tr>
<td>6.</td>
<td>Unauthorized encroachment on rights-of-way</td>
</tr>
<tr>
<td>7.</td>
<td>Unauthorized excavation</td>
</tr>
<tr>
<td>8.</td>
<td>Accumulations of drift, trash or debris</td>
</tr>
<tr>
<td>9.</td>
<td>Other items not included above</td>
</tr>
</tbody>
</table>

EXHIBIT C
EXHIBIT D

SUGGESTED SEMI-ANNUAL REPORT FORM
TO: The District Engineer
U. S. Army Engineer
District, Sacramento
650 Capitol Avenue
Sacramento, California

Sir:

The semi-annual report for the period (1 May 19__ to 31 October 19__) (1 November 19__ to 30 April 19__) Stone Protection, Tehama County, 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. The inspections have indicated (no) or (the following) encroachments or trespasses upon the project right-of-way.

c. (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.

d. 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.)

EXHIBIT D
Sheet 1 of 2
e. The fiscal statement of the Superintendent's operations for the current report period is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Labor</th>
<th>Material</th>
<th>Equipment</th>
<th>Overhead</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>1. Inspection</td>
<td></td>
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<tr>
<td>2. Maintenance</td>
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<tr>
<td>3. Flood fighting Operations</td>
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<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Respectively submitted,

Superintendent of Works
EXHIBIT E

ACCEPTANCE BY THE STATE RECLAMATION BOARD
Dear Sir:

The Reclamation Board at its regular meeting of November 21, 1975, formally accepted from the District Engineer the completed flood control work on a portion of Unit No. 3 of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. The flood control work was transferred to the State of California by your letter of November 10, 1975.

The flood control work consisted of selective clearing, bank sloping, placement of stone bank protection, and such miscellaneous work as necessary to complete the construction at Sites Miles 194.0 and 230.5 Left Bank and Sites Miles 202.0 and 229.0 Right Bank, Sacramento River.

The work was constructed in a workmanlike manner and in conformance with Drawing No. 50-4-5043, Specification No. 4913, and Contract No. DACW 05-76-C-0014, insofar as could be determined visually.

Sincerely,

/s/ P. C. Walters
P. C. WALTERS
Chief Engineer and
General Manager
District Engineer  
Sacramento District  
U. S. Army Corps of Engineers  
650 Capitol Mall  
Sacramento, CA 95814

Dear Sir:

The Reclamation Board at its regular meeting of January 23, 1976, formally accepted from the District Engineer the completed flood control work on a portion of Unit No. 3 of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. The flood control work was transferred to the State of California by your letter of January 12, 1976.

The flood control work consisted of selective clearing, bank sloping, placement of stone bank protection, and such miscellaneous work as necessary to complete the construction at Site Mile 197.0 Right Bank, Sacramento River.

The work was constructed in a workmanlike manner and in conformance with Drawing No. 50-4-5043, Specification No. 4913, and Contract No. DACW 05-76-C-0014, insofar as could be determined visually.

Sincerely,

/s/ P. C. Walters  
P. C. WALTERS  
Chief Engineer and  
General Manager
District Engineer
Sacramento District
U. S. Army Corps of Engineers
650 Capitol Mall
Sacramento, California 95814

Dear Sir:

The Reclamation Board at its regular meeting of August 13, 1976, formally accepted from the District Engineer the completed flood control work on a portion of Unit No. 3 of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. The flood control work was transferred to the State of California by your letter of August 3, 1976.

The flood control work consisted of selective clearing, bank sloping, placement of stone bank protection, and such miscellaneous work as necessary to complete the construction at Sites Miles 202.4, 207.0 and 211.1 Left Bank, Sacramento River.

The work was constructed in a workmanlike manner and in conformance with Drawing No. 50-4-5043, Specification No. 4913, and Contract No. DACW 05-76-C-0014, insofar as could be determined visually.

Sincerely,

/s/ John F. Wright
for PAUL L. CLIFTON
    General Manager

EXHIBIT E
Sheet 3 of 3
District Engineer
Corps of Engineers
U. S. Army
650 Capitol Mall
Sacramento, California 96814

Dear Sir:


The Reclamation Board, at its meeting of December 6, 1968, formally accepted the above referred to work for operation and maintenance.

Sincerely yours,

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

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

Dear Sir:

Reference is made to your letter of December 11, 1963, concerning transfer to the State of California a bank protection work at Site 8, River Mile 183.4, Site 9, River Mile 183.9, Site 10, River Mile 187.0, Site 11, River Mile 188.6 and Site 12, River Mile 189.7, left bank, on the Sacramento River Chico Landing to Red Bluff Project in accordance with Specification No. 2898.

The Reclamation Board, at its meeting of January 3, 1964, formally accepted the above referred to bank protection work for operation and maintenance.

Sincerely yours,

A. E. McCollam /s
A. E. McCollam
General Manager

EXHIBIT E
Sheet 1 of 2
February 10, 1964

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

Dear Sir:

Reference is made to your letter of 17 January 1964, concerning transfer to the State of California of bank protection work at Site No. 6, River Mile 169.0, left bank and Site No. 7, River Mile 169.8, river bank, between Chico Landing and Red Bluff. This work was completed in accordance with Specification No. 2896.

The Reclamation Board, at its meeting of February 6, 1964, formally accepted the above referred to bank protection work for operation and maintenance.

Sincerely yours,

A. E. McCollam /s
A. E. MCCOLLAM
General Manager

EXHIBIT E
Sheet 2 of 2
EXHIBIT F

SAMPLE PERMIT FOR USE
OF RIGHT-OF-ENTRY
December 11, 1974

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

Dear Sir:

Your letter of November 27, 1974 transferred Site Miles 208.4 and 213.1 on the left bank of the Sacramento River of the Chico Landing to Red Bluff Project to the Reclamation Board for operation and maintenance. The work accomplished at these two sites consisted of sloping portions of the riverbank and placement of stone revetment and was completed under Contract No. DACW05-74-C-0093 on November 6, 1974.

This is to advise you that the Reclamation Board accepted the completed works at its meeting of December 6, 1974 subject to the condition that the concrete vault will be removed from the river channel in the next unit of work in this project and that any damage to completed works which may be caused by the vault’s existence will be repaired.

The contract documents required that the concrete vault at Site Mile 213.1 be removed from the river channel. This item of work was not accomplished. It is my understanding that the vault will be removed under the next forthcoming contract of the project. In the meantime, there is a probability that the vault’s presence in the channel near the banks of the completed stone revetment may cause turbulence at high water flows and adversely affect the adjoining revetment and the unprotected bank above the revetment. I have been informally advised by your staff that if such an event occurs that remedial work will be initiated at the earliest convenient time.

My letter of March 14, 1974 contained comments regarding the plans and specifications for the proposed two sites. The letter requested that your staff reconsider the design criteria which limited the stone protection to a height of five feet above the low water elevation. The design was modified to increase the revetment height at Site Mile 208.4 and we compliment your decision. The criteria was not modified at Site Mile 213.1 and our
concern is particularly applicable not only to the potential erosion of the unprotected portion of the bank but the difficulty of maintaining the revetted portion of the bank from the unprotected bank which has slopes varying from 1 on 1 to vertical with heights of 16 feet above the stone.

Sincerely yours,

/s/ A. E. McCollam
A. E. McCOLLAM
Chief Engineer and
General Manager
November 25, 1974

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

Refer to: 4130.65.200

Dear Sir:

At its regular meeting of November 8, 1974, The Reclamation Board formally accepted from the District Engineer the completed flood control work on Unit No. 1 of the Sacramento River, Chico Landing to Red Bluff Bank Protection Project. The flood control work was transferred to the State of California by your letter of November 4, 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 Sites Miles 194.0 and 196.3 Left Bank, Sacramento River, in Butte County.

The work was constructed in a workmanlike manner and in conformance with Drawing No. 50-4-4891, Specification No. 4451, and Contract No. DACW 05-73-C-0109, insofar as could be determined visually.

Site Mile 196.3 sustained damage during the 1974 flood flows. It is my understanding that the Corps of Engineers will repair the damaged reach in the next contract under the Chico Landing to Red Bluff Bank Protection Project.

It is my understanding that when Butte County has accomplished the road relocation at Site Mile 194.0, the Corps of Engineers will provide additional stone protection and the extension of the site downstream to meet the high bank.

Sincerely yours,

/s/ A. E. McCollam
A. E. McCOLLAM
Chief Engineer and
General Manager
January 4, 1972

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

Refer to: 4130.65.300

Dear Sir:

Reference is made to your letter of November 26, 1971, concerning the transfer to the State of California for operation and maintenance a portion of the Sacramento River Bank Protection Project, Chico Landing to Red Bluff, Hickman Site, vicinity of River Mile 185.3, Tehama County, California.

The work completed on the Hickman Site was constructed in accordance with Specification No. 4106, Drawing No. 50-4-4705 and Contract No. DACW05-72-C-0019.

The Reclamation Board, at its regular meeting of December 17, 1971, formally accepted the Hickman Site for operation and maintenance, from the District Engineer. At the same meeting, the Reclamation Board transferred the Hickman Site to the Tehama County Flood Control and Water Conservation District for operation and maintenance.

Sincerely yours,

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

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

Dear Sir:

Reference is made to your letter of September 17, 1970, concerning transfer to the State of California of a portion of the Sacramento River Bank Protection Project for maintenance and operation. The transferred site was as follows:

Site Mile 218.3, Left Bank (Woodson Bridge)

This work was constructed in conformance with Specification No. 3694, Contract No. DACW05-70-C-0086, Drawing No. 6-4-2125.

The Reclamation Board at its meeting of October 9, 1970, formally accepted the above-referred to work for operation and maintenance.

Sincerely yours,

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

(Name of Levee Commission or City)

(Location)

Permission is hereby granted to:

(Name of Firm or Individual)  (Address)

TO: (Describe in these spaces the proposal, including kind and type of construction, purpose intended, location by stationing. Indicate passageway provided by means of gates, etc. Use separate sheets if necessary, identifying each by reference herein.)

Provided that:

Upon termination or expiration of this permit (whether by voluntary relinquishment by the grantee, by revocation by the grantor or otherwise) the grantee shall remove all structures, improvements, or appurtenances which may have been erected or constructed under this permit, and shall repair or replace any portion of the flood protection structure or right-of-way which may have been damaged by his operations (including grading and seeding, or sodding, if necessary), to the satisfaction of the grantor.

The structure or operation for which this permit is issued shall be maintained by the grantee in such manner as shall not injure or damage the flood protection structure, or interfere with its operation and maintenance in accordance with regulations of the Secretary of the Army.

The structure or operation covered by this permit may be damaged, removed or destroyed by the grantor in time of flood emergency if such action is determined by the grantor to be necessary in order to preserve life or property or prevent damage or impairment to the use or safety of the flood protection structure, and the grantor shall not be liable to the grantee for such damage or destruction.
Unless otherwise specifically provided herein, this permit may be cancelled at any time by the grantor upon 10 days written notice mailed to the address shown above. During such 10-day period, (or such other period as may be provided herein), the grantee will be permitted to remove any property or improvements installed under this permit, and to repair or replace any damage to the flood protection right-of-way or structures resulting from his use or operations. At the end of such period, the grantor shall have the right to possess and dispose of any such property or improvements remaining upon its right-of-way, and may proceed to repair or replace any such damage, and the grantee herein shall be liable to the grantor for the full cost of such repairs or replacements.

The construction, installation and maintenance of the structure or structures covered by this permit shall be subject to inspection by representatives of the grantor and the United States at all reasonable times.

In the event the work covered by this permit consists of or includes major construction, the cost of inspection thereof by the grantor and/or the United States shall be paid by the applicant.

Grantee agrees that it will not use the area or facilities covered by this permit, or permit such area to be used, for any purpose other than is specifically covered by this permit.

(Use these spaces for special conditions applicable to this permit.)

This permit shall not be valid until approved by the district engineer of the U. S. Army Engineer District, Sacramento, or his authorized representative.

Terms of this permit are hereby accepted

Approved:

EXHIBIT F
Sheet 2 of 3
REGULATIONS GOVERNING ISSUANCE OF PERMITS FOR USE OF
RIGHTS-OF-WAY FOR FLOOD PROTECTION PROJECTS

As the flood protection works and rights-of-way are owned by the Local Interests and will be operated and maintained by them in accordance with the Regulations of the Secretary of the Army, and issuance of any permits to use any part of the rights-of-way will be handled by the Local Interests, with the restriction that no such permits may be issued without the approval of the District Engineer, as stated in Paragraph No. 208.10(a) General, (5) of the Regulations, a copy of which is attached hereto.

Applications for use of the rights-of-way should be addressed to the City or Levee Commission having jurisdiction over the local flood protection project. The City or Levee Commission will then forward the application to the District Engineer, of the U. S. Army Engineer District, Sacramento, California, with its recommendation, with reasons for such recommendation. It is suggested that the application and recommendations be forwarded with a draft copy of the permit, in order that all objectionable features may be eliminated prior to its proffer to the applicant as this may prevent misunderstandings and arguments. If for any reason it is desired to forward the permit itself without this intervening step, five copies of the proposed permit should be included on which is stated the exact use of the rights-of-way, for which permission is being requested, together with any condition or restriction of the permit. The permit should be signed by the applicant and an official of the Local Interests. A drawing, sketch or detail plans as may be required to show the exact location, nature of work and proposed method of construction should be attached to each copy of the permit. If the permit is approved by the District Engineer, three copies will be returned. This will enable each party concerned to have a copy of the approved permit.

In any case where a permit is requested for any purpose which might cause disfigurement or damage to the flood protection rights-of-way or structure in its erection, use, or removal, it is suggested that the applicant be required to post a bond of sufficient amount to protect the Local Interests from any cost of repair or removal, and to guarantee faithful performance of the permit conditions. In such cases the permit should state the amount and conditions of the bond.

In cases involving major construction or other work which may directly affect the flood protection structure, it will be necessary that the United States inspect the work and the Local Interests may also desire to inspect it. As stated in the permit form, such inspection will be at the expense of known financial security, arrangements should be made with the grantee for an advance deposit or bond to cover such costs.

There is attached hereto a copy of a permit form which has been successfully used by a number of cities and levee committees.

EXHIBIT F
Sheet 3 of 3