



DEPARTMENT OF THE ARMY

VICKSBURG DISTRICT, CORPS OF ENGINEERS
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

REPLY TO
ATTENTION OF:

<http://www.mvk.usace.army.mil/>

CEMVK-PP-D (1110-2-1150a)

9 Mar 2001

MEMORANDUM THRU Commander, Mississippi Valley Division
ATTN: CEMVD-PM-E *MAH*

FOR Commander, HQUSACE, ATTN: CECW-PC
Washington, DC 20314-1000

SUBJECT: Pearl River in the Vicinity of Walkiah Bluff,
Mississippi and Louisiana, Project - Reimbursement of the
Non-Federal Share of the Cost of Repairs to the Weir

1. References:

a. Project Cooperation Agreement (PCA), 4 March 1998, for
subject project.

b. Senate Report 106-395 to the Energy and Water
Appropriations Act of 2001.

c. Electronic mail message, 24 January 2001, from
Mr. Michael Harden (CEMVD-PM-E) directing CEMVK to proceed with
the preparation of a letter report and amendment to the PCA for
subject project.

2. Purpose. Senate Report 106-395 to the Energy and Water
Appropriations Bill of 2001 states:

"The Committee is aware of emergency repairs to
the weir at the Pearl River in the vicinity of
Walkiah Bluff in Mississippi and Louisiana.
These repairs were the result of design
problems and were beyond the scope of the work
originally included as a part of the project
cooperation agreement. As a result, the non-
Federal sponsor should not have been required
to share in the cost of the emergency repairs.
Therefore, the Corps is directed to reimburse
the non-Federal sponsor for their share of the
construction costs associated with emergency
repairs in an amount not to exceed \$1,000,000."

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The purpose of this letter report is to document the activities, costs, and timeframes associated with the emergency repair work conducted as a part of this project. This documentation, in conjunction with Amendment No. 1 to the PCA, will form the basis for the reimbursement of funds to the non-Federal sponsors as directed by Congress.

3. Project Sponsors. The non-Federal sponsors for this project are the Mississippi Department of Environmental Quality; Mississippi Department of Wildlife, Fisheries and Parks; and Pearl River Basin Development District.

4. Description of the Project. The primary purpose of this project was to restore low flows in an 18-mile reach of the Pearl River and Holmes Bayou, thus providing a net gain in the wetland resource value. This reach extends along the Pearl River from near the head of Wilson Slough, down the Pearl River and Holmes Bayou, to the confluence of Holmes Bayou and the West Pearl River. The project was designed to restore low flows in the Pearl River system to the nearly equal distribution that existed on the Pearl River and Wilson Slough in the late 1970's. It was not intended to alter the flow distribution during average and high water events. Benefits resulting from the project include habitat unit gains in various wetland resource categories; i.e., freshwater mussels, fisheries, and wetland functional values. The project consists of a rock weir in the old bendway of the Pearl River above the inlet of Wilson Slough that would provide a 50/50 low-flow distribution between that bendway and the Pearl River; closures at four distributaries of the Pearl River below this bendway (Moore's Bayou, Icebox Bayou, Brier Patch Bayou, and an unnamed distributary); two very small closures; and construction of a pilot channel within the streambed of the Pearl River between the bendway and the outlet of Moore's Bayou. The original construction contract (DACW38-C-98-0021) was awarded on 17 June 1998, and the Notice to Proceed was issued on 23 June 1998. Construction was substantially complete, with the exception of reforestation, on 9 November 1998, and the project was turned over to the non-Federal sponsors for operation and maintenance. A final Operation and Maintenance Plan was never provided to the sponsors.

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5. Description of the Event That Caused the Problem.

a. In November 1998, high flows occurred on the Pearl River. At a meeting held on 30 November 1998, representatives of the Mississippi Department of Environmental Quality (one of the three non-Federal sponsors) reported that erosion on the left descending bank downstream of the weir was causing displacement of the riprap protection. A site investigation was conducted subsequent to the meeting to determine the extent of the problem. This investigation revealed there were erosion problems at the weir and closure in the old Pearl River Bendway.

b. These problems were recognized prior to final completion of the contract. Because these problems occurred within 3 weeks of the substantial completion of the project and high quality standards are our goal, it was determined that measures should be taken to correct these problems. On 15 December 1998, CEMVK issued the Notice to Proceed for a contract modification to repair minimal erosion.

c. On 28 December 1998, prior to the contractor remobilizing to the site, a man went through the weir in a canoe, the canoe struck a snag near the downstream end of the structure and overturned, and the man drowned. As a result, we were unable to initiate the corrective work since the accident was under investigation by the St. Tammany Parish Sheriff's Department and there were difficulties associated with the rescue attempts. During this time, conditions at the structure continued to deteriorate, resulting in erosion on the downstream end of the weir and flanking of the closure on the north end. The man's body was not recovered until 5 March 1999.

6. Timing of Emergency Work

a. Once the body was recovered and the Sheriff's Department cleared the area, we were able to consider the repairs needed to ensure the project would function as intended. By letter, 16 March 1999, we requested additional non-Federal funds to pay for contractor activities subsequent to 15 December 1998 to temporarily stabilize the structure and provide minimal assistance with the rescue. In this same letter, we recognized that the scope of the repairs was beyond that reasonable for a

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contract modification. Therefore, it was determined that the original contract should be brought to closure and a new construction contract should be advertised and awarded.

b. By this time, the deterioration to the structure was severe, resulting in a very serious situation. The structure no longer served the purpose for which it was constructed. Continued erosion at the structure during subsequent high water events would serve to further its deterioration and possibly the loss of the entire structure. This would have resulted in additional costs to the Federal Government and our non-Federal project sponsors. In addition, exposed sheet piling could have potentially posed a serious safety problem for recreational boaters. Lastly, construction at the site was limited to low-flow conditions to meet both constructibility and endangered species concerns.

c. By letter, 26 March 1999, we relieved the sponsors of their operation and maintenance responsibilities until the structure could be repaired. By letter, 31 March 1999, we requested additional non-Federal funds to initiate the engineering and design of the repair work. By letters, 19 July and 13 September 1999, we requested non-Federal funds for construction of the project. The following tabulation lists the non-Federal funds requested which were associated with the repair of the structure.

Date of Request	Non-Federal Funds Requested (\$)	Date Received
16 March 1999	70,000	31 March 1999
31 March 1999	62,500	7 April 1999
19 July 1999	525,000	20 July 1999
13 September 1999	320,000	14 September 1999
TOTAL	977,500	

7 Description of the Emergency Work Accomplished.

a. Investigations revealed the weir location and entrance created flow conditions across the weir that were not uniform and the head differential across the structure was higher than anticipated. The repair work consisted of:

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(1) Extending the weir upstream and making the slope
through the weir more gradual.

(2) Modifying the entrance to the weir to improve the
entrance flow conditions into the weir.

(3) Reinforcing the riprap downstream of the weir.

(4) Adding a stone toe dike downstream of the weir to
protect the riverbank. This will be underwater during most flow
conditions.

(5) Reforesting the bank on the weir side of the
structure.

(6) Extending the sheet pile through the flanked area to
the existing high ground and then rebuilding and reforesting the
flanked area.

(7) Lowering the elevation of the closure and providing
a more gradual slope downstream of the closure.

b. The structure as originally designed (encl 1) and the
repaired structure (encl 2) are illustrated on the enclosed maps.

c. Additional lands were required for these repairs. We
requested and received approximately 2.7 additional acres from
the Bogue Chitto National Wildlife Refuge. The contract to
perform the repairs (DACW38-99-C-0063) was awarded on
15 September 1999 and the Notice to Proceed was issued on
20 September 1999. The contract was completed on 13 December
1999.

8. Cost Allocated to the Emergency Repairs. The total cost of
the repair work is \$3,753,151.20. The following is a breakdown
of the costs.

Item	Cost (\$)
Construction	3,343,785.75
Planning Engineering and Design	257,770.49
Construction Management	151,594.96
TOTAL	3,753,151.20

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Of this amount, the final non-Federal share (25 percent) under the original PCA would be \$938,287.80. This is \$39,212.20 less than their total contributions for the repair work of \$977,500.00.

9. Breakdown of Federal and Non-Federal Costs

Item	Prior to Reimbursement for Repairs (\$)	After Reimbursement for Repairs (\$)
Estimated Federal Cost	6,701,358.85	7,639,646.65 <u>a/</u>
Estimated Non-Federal Cost	1,984,069.62	1,045,781.82
Cash	1,893,973.86	955,686.06
Other	90,095.76	90,095.76
Estimated Total Project Cost	8,685,428.47 <u>b/</u>	8,685,428.47 <u>b/</u>

a/ Excludes repair costs of \$3,753,151.20 from cost sharing. The total project cost which is subject to cost sharing is \$4,183,127.27.

b/ Includes total study costs of \$749,150 which are not cost shared.

The non-Federal sponsors contributed \$1,292,554.00 in cash toward the original contract and \$977,500.00 for the repair work, for a total contribution of \$2,270,054. Based on the above breakdown of costs, the non-Federal sponsors are entitled to an estimated refund of \$336,867.94 for the original contract and \$977,500.00 for the repair work.

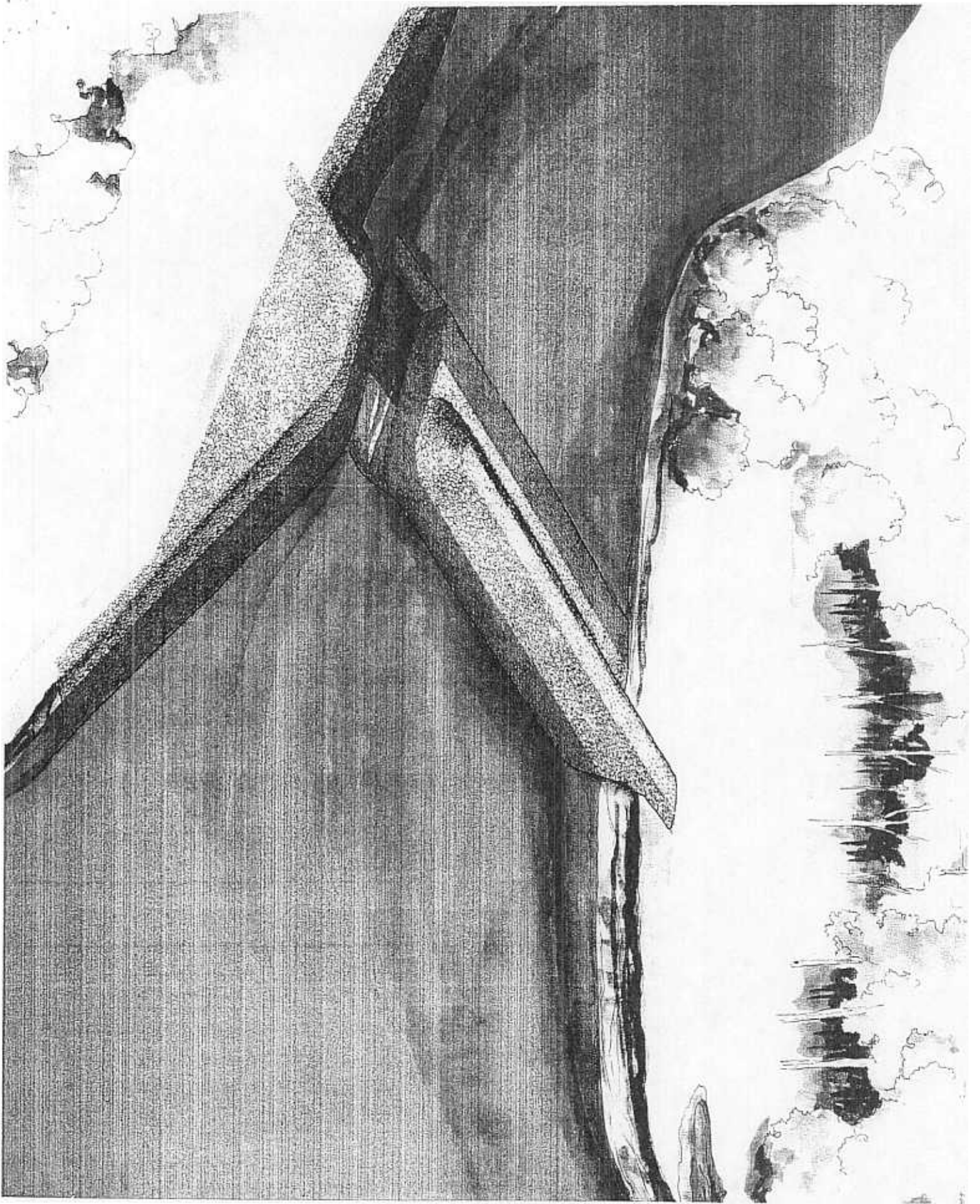
10. Required National Environmental Protection Act Documentation. An Environmental Assessment was prepared to evaluate the effects of the repair work. Based on this evaluation, a Finding of No Significant Impact was executed on 30 August 1999.

11. Based on the information provided above, funds in the amount of \$977,500.00 will be reimbursed to the sponsor for the cost of the repairs.

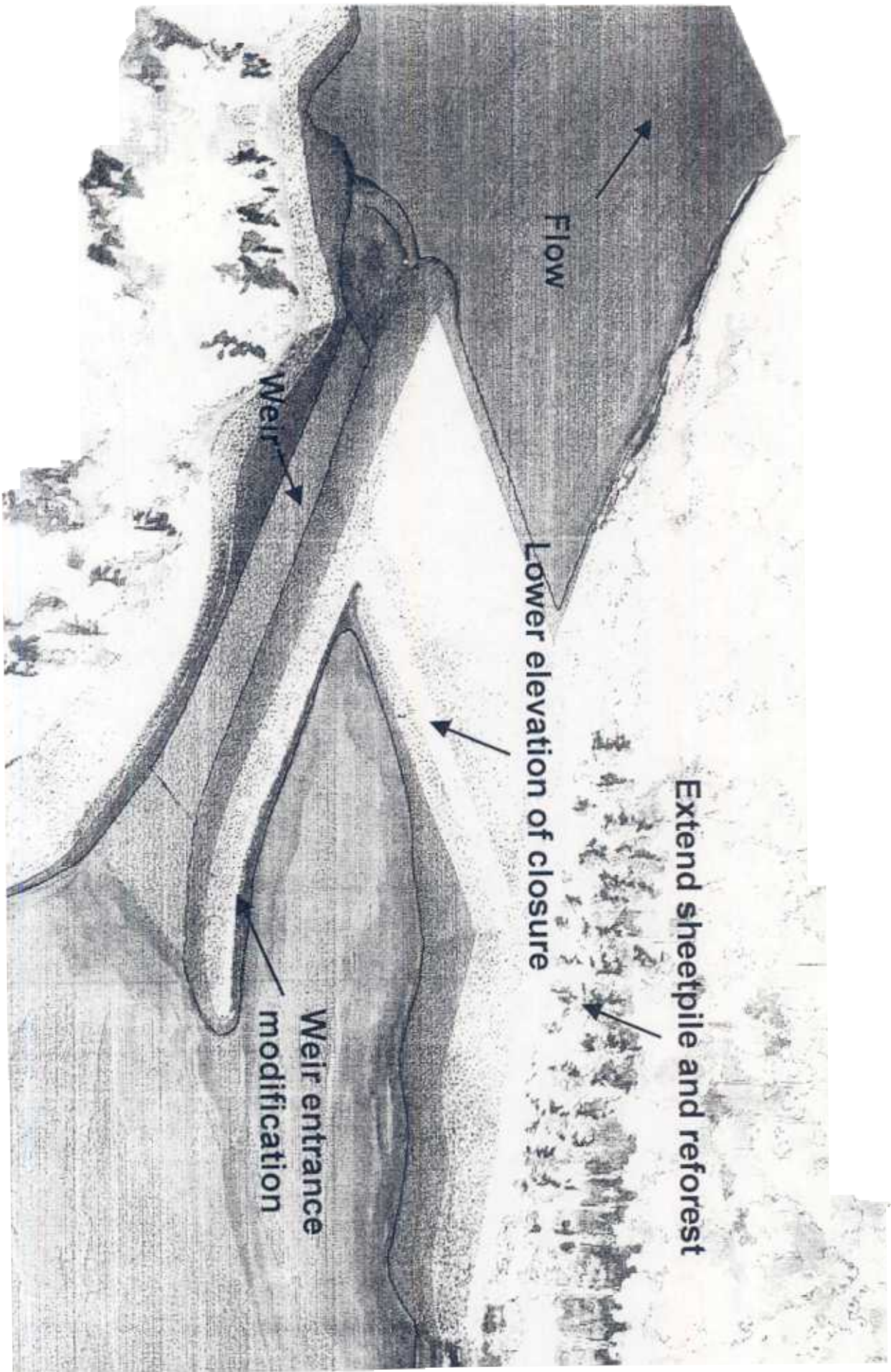


ROBERT CREAR
Colonel, Corps of Engineers
Commanding

2 Encls



encl



3.

encl 2