

Mr. Guggenheimer/ds/2643

CELMN-ED-DD

24  
14 Jan 88

MEMORANDUM FOR: President, Mississippi River Commission,  
ATTN: CEMRC-ED-TS

SUBJECT: Phasing in of new I-wall design criteria into NOD's  
design/construction program

Enclosed are minutes of the meeting held at the New Orleans  
District on 6 Jan 88 to discuss the subject. Approval of  
the enclosed minutes is recommended.

FOR THE COMMANDER:

Encls

FREDERIC M. CHATRY  
Chief, Engineering Division

GUGGENHEIMER  
CELMN-ED-DD

JUDLIN  
CELMN-ED-D

PICCIOLA  
CELMN-ED-F

HARRINGTON  
CELMN-ED-S

SOILEAU  
CELMN-ED-H

SHELTON  
CELMN-ED-P

CHATRY  
CELMN-ED

(60)

## MINUTES OF MEETING

**SUBJECT:** Minutes of Meeting held on 6 January 1988 at the New Orleans District with representatives of LMVD to discuss phasing-in of new I-wall design criteria into NOD's design/construction program

1. A meeting was held on January 6, 1988 at the New Orleans District between representatives from the New Orleans District and LMVD. A list of the attendees is attached.
2. The meeting was begun by Mr. Chatry who welcomed everyone and stated that the purpose of the meeting was to discuss NOD's plans for phasing in new design criteria for levees and floodwalls. He stated that all changes carry some disruption to the ongoing program. However, it was our intention to implement these changes in such a way that would minimize disruption to ongoing work.
3. Mr. Bayley then expressed how he welcomed this opportunity to meet and discuss everyone's concerns. He agreed with Mr. Chatry's comments and expressed his interest in gaining information that would clear up questions concerning the subject at hand.
4. The meeting was then turned over to Mr. Judlin who proceeded with a presentation which discussed the present program and NOD's plan for phasing in the new design criteria into the design/construction program. He handed out a table (copy attached) which summarized information relative to this subject and included a recommendation concerning implementation of the new design criteria. His presentation began with the Lake Pontchartrain Hurricane Protection project, in particular the Outfall Canals. A brief description was given of design problems associated with the canals and the considerations for protection that were being reviewed. Information was also presented concerning local interests design and construction activities that were in progress. It was stated that, at present, our preliminary designs were finding that the recommended protection would probably involve fronting protection (control valve structures) for Orleans and London Avenue Canals and paralleling floodwalls along the 17th Street Canal. Mr. Judlin proceeded with a similar discussion for the St. Charles Parish Levee - North of Airline Highway and the Jefferson Parish Lakefront Levee.
5. LMVD representatives agreed with NOD recommendations but did have some comments. It was stated that the Jefferson Parish Lakefront Levee was presently being reviewed and several comments would be made concerning the levee design. A brief discussion then followed concerning the recurved floodwall alternative. Local interest have stated their opposition to this alternative because of the barrier it provides along the lakefront. The potential for savings as a result of applying the new design criteria is also low. Following these comments was a brief discussion concerning the St. Charles - Jefferson Parish Return Levee. It was stated that the DM would not be looked at again for the new criteria.

MINUTES OF MEETING

6. Discussion proceeded for each remaining project as shown on the attached table. NOD stated that floodwall alternatives would be reviewed as deemed necessary during the P&S stage to determine if a change in the selected alternative shown in a DM would be needed. If a change were determined necessary, a supplement to the DM would be prepared. Mr. Bayley stated that it was important to document such changes by a supplement to the original design document so that the record would be properly documented for future reference.

7. No other questions or comments were made concerning NOD's recommendations. It was agreed to adjourn this portion of the meeting until the afternoon. At that time a discussion on freeboard was scheduled.

8. During the afternoon session, some discussion followed concerning technical considerations related to loading conditions used for cantilevered I-wall designs and adequate factors of safety. This discussion was not continued because it was related to specific technical problems which could be more appropriately addressed at a future meeting.

9. Concerning freeboard, a question was raised as to why 3 feet was provided for the St. Charles-Jefferson Parish Return Levee and only 2 feet in other areas and for other projects. It was stated that design considerations (potential for loss of trees presently serving as wave breakers) and a regulation which allowed for higher freeboard in heavily populated areas were the main justification used in deciding to use 3 feet of freeboard. Mr. Chatry stated that LMVD should comment on the matter of freeboard in reviewing the various GDM's, and NOD would respond.





**ATTENDANCE RECORD**



DATE(S) <i>6 Jan 88</i>	SPONSORING ORGANIZATION	LOCATION <i>NOD</i>
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**PURPOSE** Implementation of New Criteria on Design of Cantilever Sheet Piling Walls

**PARTICIPANT REGISTER \***

NAME	ORGANIZATION	TELEPHONE NUMBER
<i>Walter D. Juddlin</i>	<i>CELMN-ED-D</i>	<i>2760</i>
<i>William R. Hill</i>	<i>CELMVED-A</i>	<i>634 5824</i>
<i>Victor M. Agostinelli</i>	<i>CELMV-ED-TS</i>	<i>634-5932</i>
<i>Roland J. Dubuisson</i>	<i>CELMV-ED-T</i>	<i>634-5919</i>
<i>James B. Miskelley</i>	<i>CELMV-ED-TD</i>	<i>634-5922</i>
<i>Lawrence H. Gault</i>	<i>CELMV-ED-GS</i>	<i>634-5937</i>
<i>Richard B. Jackson</i>	<i>CELMV-ED-GS</i>	<i>634-5918</i>
<i>PHILIP NAPOLITANO</i>	<i>CELMN-ED-ES</i>	<i>862-2977</i>
<i>Rodney Picciola</i>	<i>CELMN-ED-F</i>	<i>862-2975</i>
<i>GERRY SATTERLEE</i>	<i>CELMN-ED-FD</i>	<i>862-1000</i>
<i>CARL R. GUGGENHEIMER</i>	<i>CELMN-ED-DD</i>	<i>862-2643</i>
<i>Jorge A. Romero</i>	<i>CELMN-ED-DD</i>	<i>862-2645</i>
<i>D. Jenn Shultz</i>	<i>CELMN-ED-SP</i>	<i>862-2614</i>
<i>Willis O. Newton</i>	<i>CELMN-CD-QR</i>	<i>862-2928</i>
<i>JAY COMBE</i>	<i>CELMN-ED-HC</i>	<i>862-2480</i>
<i>TRU ROSSER</i>	<i>CELMV-VE/ED-TS</i>	<i>634 5936</i>
<i>RON BURKHART</i>	<i>CELMV-ED-TL</i>	<i>634 5930</i>
<i>TERRAL BROUSSARD</i>	<i>CELMN-ED-PA</i>	<i>504)862-2596</i>
<i>Gerard Brantley</i>	<i>CELMN-ED-PF</i>	<i>862-2775</i>
<i>BOB FAIRLESS</i>	<i>CELMN-ED-PM</i>	<i>862-1930</i>
<i>Jack E. Bardwell</i>	<i>CELMV-ED-ID</i>	<i>634-5925</i>
<i>C W SOLEAU</i>	<i>LMVED-H</i>	<i>-2420</i>
<i>Frank N. Johnson</i>	<i>CELMV-ED-TS</i>	<i>634-5935</i>

\* If you wish to be furnished a copy of the attendance record, please indicate so next to your name.

# PROPOSED PLAN FOR PHASING-IN NEW I-WALL DESIGN CRITERIA INTO NOD'S DESIGN/CONSTRUCTION PROGRAM

<u>PROJECT/ITEM</u>	<u>STATUS</u>	<u>SCHEDULED AWARD DATE</u>	<u>LOCAL INTEREST ACTIVITY</u>	<u>RECOMMENDATION AS TO NEW CRITERIA</u>
<b>LAKE PONTCHARTRAIN, LA. AND VICINITY</b>				
ORLEANS AVE. OUTFALL CANAL	GDM SCHED MAR 88 (JUN 88)*	OCT 89	PBS TO CURRENT CRITERIA RESOLVING COMMENTS PHASE I ROBERT E. LEE TO L. PONT. (95% COMP.) PHASE II ROBERT E. LEE TO PUMP. STA. (50% COMP.)	RECOMMEND ADOPTION HIGH POTENTIAL FOR SAVINGS
17TH STREET OUTFALL CANAL	GDM SCHED MAY 88 (AUG 88)*	JAN 90	CONSTRUCTION PARTIALLY COMPLETE AT PUMPING STATION PBS 50% COMP. ORLEANS SIDE PUMP. STA. TO HAMMOND HWY. PBS HAMMOND HWY. TO LAKE READY FOR BIDS (BEEPAGE)	RECOMMEND ADOPTION HIGH POTENTIAL FOR SAVINGS
LONDON AVE. OUTFALL CANAL	GDM SCHED AUG 88 (SEP 88)*	JUN 90	FEASIBILITY REPORT COMPLETE REPORT DID NOT SATISFY OUR OLD CRITERIA COORDINATING WITH OUR GDM	RECOMMEND ADOPTION HIGH POTENTIAL FOR SAVINGS
ST. CHARLES PARISH LEVEE NORTH OF AIRLINE HWY.	GDM SCHED JUN 88 (AUG 88)*	JAN 89	NONE	RECOMMEND INVESTIGATION POTENTIAL FOR SAVINGS UNKNOWN
JEFFERSON PARISH LAKEFRONT LEVEE	GDM SUB DEC 87	MAY 88	NONE	DO NOT ADOPT LOW POTENTIAL FOR SAVINGS
<b>NEW ORLEANS TO VENICE, LA.</b>				
REACH "A"	GDM SUB DEC 87	APR 88 1ST CONT.-ALL LEVEE	NONE	RECOMMEND REVIEW IN PBS PHASE SHORT SECTION AT PORT SULPHUR
WEST RIVER LEVEE HURRICANE PROTECTION	GDM APPROVED	FEB 88	NONE	RECOMMEND REVIEW IN PBS PHASE SHORT REACHES IN SUBSEQUENT CONTRACTS
<b>MISSISSIPPI RIVER LEVEES</b>				
WESTWEGO	DESIGN REPORT APPROVED	INDEFINITE R/W PROBLEMS	NONE	RECOMMEND REVIEW IN PBS PHASE SHORT REACHES
JACKSON - THALIA PHASE II	DESIGN REPORT APPROVED	SEP 88	NONE	RECOMMEND REVIEW IN PBS PHASE 1500 FT (TERPSICHORE TO THALIA)
GRETN A - PHASE I	DESIGN REPORT APPROVED	JUL 88	NONE	RECOMMEND REVIEW IN PBS PHASE SHORT REACHES
GRETN A - PHASE II	DES. REPT. BEING PREPARED (NONE)*	APR 89	NONE	RECOMMEND ADOPTION POTENTIAL FOR SAVINGS UNKNOWN
AVONDALE	DES. REPT. BEING PREPARED (NONE)*	JUN 89	NONE	RECOMMEND ADOPTION POTENTIAL FOR SAVINGS UNKNOWN
<b>ATCHAFALAYA BASIN</b>				
W 124	DESIGN REPORT SCHED. JAN 88 (NONE)*	JAN 89	NONE	NEW CRITERIA USED
WEST BANK HURRICANE PROTECTION	ADV. SUPPL. SCHED. NOV 88 (NONE)*	N/A	LOCALS TO DESIGN AND BUILD FLOODWALL MISS. RIVER TO HARVEY PUMP. STA.	FURNISH NEW CRITERIA TO LOCALS

( ) \* = ESTIMATED SLIPPAGE IF NEW DESIGN IS IMPLEMENTED

CEMRC-ED-TS (CELMN-ED-DD/26 Jan 88) 1st End

Mr. Johnson/jm/5935

SUBJECT: Phasing in of new I-wall design criteria into NOD's design/construction program

DA, Mississippi River Commission, CE, Vicksburg, MS 39180-0080

22 FEB '88

FOR: Commander, New Orleans District, ATTN: CELMN-ED-DD

1. The minutes of the meeting held on 6 Jan 88 to discuss the subject design criteria are approved subject to the following comments which are furnished for record purposes.

a. Para 5, Minutes. It was agreed that on the Jefferson Parish Lakefront Levee (GDM 17), that the tie-in I-wall sheetpile penetrations would be reanalyzed using the new criteria.

b. Table Attached to minutes. In addition to Item W-124, CELMN-ED indicated that Item E-105 in the Atchafalaya Basin was being designed based on the new criteria.

c. Revision of the minutes to reflect the above comments is not necessary.

2. Additional guidance concerning design water elevations and allowable wall deflection is furnished.

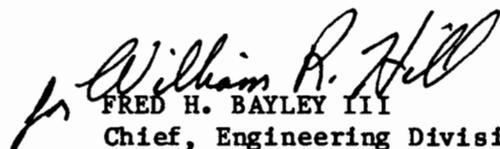
a. Water Elevations (Loading Cases). The following additional loading case should be added to guidance furnished in para 3 of CEMRC-ED-GS memorandum, 23 Dec 87, subject: Sheet Pile Wall Design Criteria, under the Q Case heading:

F.S.=1.00 with water to still water elevation plus 2.0 feet for hurricane protection levees.

b. Deflections. After discussions among CELMV and CELMN Engineering Divisions staff members on 14 Jan 88, it was determined that CELMN presently evaluates deflections on a case by case basis considering all design parameters instead of complying with an arbitrary 3 inch maximum deflection criteria. With this understanding it was concluded that the current CELMN practice concerning wall deflections is in compliance with guidance furnished in paragraph 4 of CEMRC-ED-GS memorandum, 23 Dec 87, subject: Sheet Pile Wall Design Criteria.

FOR THE PRESIDENT OF THE COMMISSION:

3 Encls  
nc

  
FRED H. BAYLEY III  
Chief, Engineering Division