

APPROPRIATION TITLE: Construction General - Local Protection (Flood Control) - Construction

PROJECT: Lake Pontchartrain, Louisiana, and Vicinity (Hurricane Protection) (Continuing)

LOCATION: The project is located in St. Charles, Jefferson, Orleans, St. Bernard, and St. Tammany Parishes in southeast Louisiana in the general vicinity of New Orleans adjacent to Lake Pontchartrain.

AUTHORIZATION: Flood Control Act of 1965 and Water Resources Development Act of 1974.

BENEFIT TO COST RATIO: The remaining benefit-remaining cost ratio is 9.3 to 1 at 3-1/8 percent. The benefit to cost ratio for the fiscal year for which Congress appropriated initial construction funds (FY 1967) was 17.6 to 1. The benefit to cost ratio is based on the project functioning independently.

SUMMARIZED FINANCIAL DATA		Accum. % of Est. Fed. Cost	STATUS: (1 January 1986)	PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Total Appropriation Requirement	\$511,000,000		Entire Project	68	Sep 2006 2/
Future Non-Federal Reimbursement \$	28,000,000		New Orleans East Unit	83	Dec 1993
Estimated Federal Cost (Ultimate)	483,000,000		New Orleans West Unit	0	Sep 2006
Estimated Non-Federal Cost	207,000,000		Mandeville Unit	0	Indefinite 3/
Reimbursement:			Chalmette Unit	89	Sep 1991
Hurricane Protection	\$ 28,000,000		2/ Excludes Mandeville Unit which has an		
Cash Contribution	114,498,000		indefinite completion date.		
Other	64,502,000		3/ Completion schedule indefinite until		
Total Estimated Project Cost	\$690,000,000		financial support is furnished by local		
Allocations to 30 September 1985	161,238,000		interests.		
Conference Allowance for FY 1986	25,000,000				
Allocation for FY 1986	19,870,000 1/				
Allocations to Date	181,108,000	36			
Allocation Requested for FY 1987	16,000,000	39			
Scheduled Balance to Complete after FY 1987	311,288,000				
Unscheduled Balance to Complete After FY 1987	2,604,000				

1/ Reflects \$3,800,000 reduction assigned as savings and slippage and \$1,330,000 transfer from the project.

Division: Lower Mississippi Valley

District: New Orleans

Region: Lower Mississippi
Lake Pontchartrain, LA, and Vicinity (Hurricane Protection)

4 1/2 100

PHYSICAL DATA

Levees: Average height: 16 feet
Length: 80 miles

Drainage Structures: 9

Dam Closures: 2

Floodwalls: 17.9 miles

Pumping Plant: 1

Floodgates: 2

Control Valve Structures: 3

JUSTIFICATION: The lowlands in the Lake Pontchartrain tidal basin are subject to tidal overflow. The Greater New Orleans Metropolitan Area which lies in this basin will continue its rapid economic development in the future years even though severe damages have resulted from several hurricanes in the past years. Hurricane damages result from surges entering Lake Pontchartrain from Lake Borgne through natural tidal passes at the Rigolets and Chef Menteur Pass and the Inner Harbor Navigation Canal. The surges are intensified by local wind effects and the combination of waves and surges causing overtopping of the protective works along the shores of Lake Pontchartrain. The eastern portion of the area is also subject to flooding by surges and waves that move directly from Lake Borgne and overtop the existing inadequate protective system seaward of the developed land areas. As a result, residences and industrial and commercial establishments suffer damage, business activities are disrupted, lives are endangered, and hazards to health are created. Hurricanes much more severe than any of record are possible. In the event of the occurrence of such a severe hurricane, catastrophic property damage and loss of human life would be experienced. Local interests have requested protection against these threats to life and property. Hurricane Betsy, in September 1965, caused extensive damage and flooding of urban areas of the New Orleans area to depths of up to 10 feet. Hurricane Camille occurred in the project area in August 1969 and flooded areas along the Inner Harbor Navigation Canal. Extensive flooding and overtopping of levees would have occurred in the project area in September 1974 if Hurricane Carmen had continued on its predicted course. In 1985, Hurricane Juan caused extensive flooding in the St. Charles Parish area. The Lake Pontchartrain hurricane protection project will provide protection from similar occurrences. However, flooding also occurred in St. John the Baptist Parish which will not be protected by the project.

The average annual benefits are as follows:

Benefits	Amount (1 October 1985)
Flood Control	\$210,306,000
Total Annual Benefits	\$210,306,000

Lake Pontchartrain, LA, and Vicinity (Hurricane Protection)

FISCAL YEAR 1987: The requested amount of \$16,000,000 will be applied as follows:

<u>New Orleans East Unit</u>	
<u>Complete:</u>	
New Orleans Lakefront Levee	
IHNC to London Avenue	\$ 520,000
New Orleans Lakefront Levee	
London Avenue to West End	310,000
Citrus Lakefront Levee	
IHNC to Paris Road	1,540,000
New Orleans East Back Levee	
Sta. 770 to 1007	1,900,000
New Orleans East Lakefront Levee	
Paris Road to Southpoint (Levee)	4,860,000
Surveys and Layouts	90,000
Engineering and Design	2,000,000
Supervision and Administration	537,000
Subtotal	\$11,757,000
<u>New Orleans West Unit</u>	
Engineering and Design	1,400,000
Supervision and Administration	150,000
Subtotal	\$ 1,550,000
<u>Chalmette Unit</u>	
<u>Complete:</u>	
Station 278 to 355 (2nd Lift)	\$ 1,450,000
<u>Initiate and Complete:</u>	
North of Florida Ave., Floodwall Capping	370,000
Station 9+80 and 65+00 (Final Enlgt)	220,000
Pipeline Canals and Gap Closure (1st Enlgt)	180,000
Surveys and Layouts	60,000
Engineering and Design	213,000
Supervision and Administration	200,000
Subtotal	\$ 2,693,000
Grand Total	\$16,000,000

Lake Pontchartrain, LA, and Vicinity (Hurricane Protection)

4 FEB 1986

Construction of the New Orleans East Back Levee, New Orleans Lakefront Levee, Citrus Lakefront Levee, and New Orleans East Lakefront Levees will provide a higher degree of interim protection to the New Orleans East Unit. Construction of Stations 278 to 355 and 9+80 to 65+00, Floodwall Capping North of Florida Ave, and Pipeline Canals and Gap Closures will provide a higher degree of interim protection to the Chalmette Unit.

NON-FEDERAL COST: Local interests are to bear 30 percent of the first cost to include the fair market value of all lands, easements, and rights-of-way, including borrow and disposal areas, necessary for construction of the hurricane features and to accomplish all necessary alterations and relocations to roads, railroads, pipelines, cables, wharves, drainage structures, and other facilities made necessary by the construction works.

Lands and Damages	\$ 41,954,000
Relocations	22,548,000
Cash Contributions:	
Based on 30 percent of total project	114,498,000
Reimbursement: Hurricane Protection	28,000,000
Total	\$207,000,000

Local interests are required to operate and maintain all features of the project works. The annual cost to local interests for operation and maintenance is estimated at \$1,153,000 including \$63,000 for material replacements.

In addition, local interests, through the combined efforts of the State of Louisiana, local levee and drainage districts, and parish police juries, have spent an estimated \$25,366,000 between 1930-1963, based on the best cost records available, to improve and maintain the hurricane protection system existing prior to project authorization. Available costs of record are tabulated below:

Combination of State of Louisiana and Lake Borgne Levee District and Chalmette Back	
Levee District on the Chalmette Back Levee Protection Systems	\$ 4,410,000
Orleans Levee District Board	12,010,000
Port of New Orleans (levees along Industrial Canal)	924,000
Pontchartrain Levee District	5,022,000
Fourth Drainage District of Jefferson Parish	3,000,000
Total	\$25,366,000

Lake Pontchartrain, LA, and Vicinity (Hurricane Protection)

4 FEB 1986

A very severe hurricane, Betsy, occurred in the project area in September 1965, just prior to the authorization of the project in October 1965. Considerable damage was done to many of the existing levees, and local interests immediately instituted an accelerated rehabilitation program, with the view of restoring and strengthening existing protection prior to succeeding hurricane seasons. Only work performed by local interests after project authorization, which conforms to the project design criteria and alignment, is considered as work-in-kind in lieu of cash contribution.

STATUS OF LOCAL COOPERATION: Assurances are required for the two independently justified plans.

1. Chalmette Area Plan:

a. Orleans Levee District: New agreements of assurances covering all local cooperation requirements and a deferred payment plan as authorized by Public Law 93-251 were executed on 30 March 1976. These assurances were accepted on behalf of the United States on 7 December 1977.

b. St. Bernard Parish Police Jury and Lake Borgne Basin Levee District: New joint agreements of assurances covering all local cooperation requirements and a deferred payment plan as authorized by Public Law 93-251 were executed on 2 April 1976. These assurances were accepted on behalf of the United States on 7 December 1977.

2. High Level Plan:

a. Orleans Levee District: For the Barrier Plan, new agreements of assurances covering all local cooperation requirements and a deferred payment plan as authorized by Public Law 93-251 were executed on 30 March 1976. These assurances were accepted on behalf of the United States on 7 December 1977. Amended assurances for the High Level Plan were executed by the local sponsor on 29 May 1985 and accepted by the United States on 21 June 1985.

b. St. Tammany Parish: The Louisiana Office of Public Works executed an act of assurance dated 8 November 1976 agreeing to fulfill all local cooperation requirements for that portion of the project in St. Tammany Parish. These assurances were accepted on behalf of the United States on 7 December 1977. Amended assurances for the High Level Plan are required; however, due to failure of the local sponsor to agree to the items of local cooperation, this portion of the project has an indefinite completion date.

Lake Pontchartrain, LA, and Vicinity (Hurricane Protection)

4 FEB 1986

c. Pontchartrain Levee District: New agreements of assurances covering all local cooperation requirements and a deferred payment plan as authorized by Public Law 93-251 were executed on 20 September 1976. On 8 November 1976, the Louisiana Office of Public Works agreed to lend financial assistance above \$100,000 to the Pontchartrain Levee District for that portion of the Barrier Plan which is the responsibility of that levee district. These assurances were accepted on behalf of the United States on 7 December 1977. Amended assurances have been submitted and are under negotiation for the St. Charles Parish portion of the project.

d. Jefferson Levee District: As of 1 January 1979, the State of Louisiana formed the Jefferson Levee District and assigned to it responsibility for Jefferson Parish levees on the east bank of the Mississippi River. These levees were previously the responsibility of the Pontchartrain Levee District. Amended assurances have been submitted and are under negotiation for the Jefferson Parish portion of the project.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$511,000,000 is a decrease of \$108,000,000 from the latest estimate (\$619,000,000) submitted to Congress. This change includes decreases of \$36,197,000 for adjustments in the estimated inflation allowance through the construction period; \$75,503,000 based on more detailed planning of construction which includes \$3,795,000 for Engineering and Design and \$2,409,000 for Supervision and Administration; \$3,004,000 for actual contract awards; \$700,000 due to underruns in contract quantities; and \$269,000 based on the actual cost of completed work. These decreases were offset by increases of \$22,000 for contract modifications and \$7,651,000 due to a reanalysis of Federal and non-Federal cost sharing requirements.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT AND COMPLIANCE WITH CLEAN WATER ACT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 17 January 1975. By Court Order dated 30 December 1977, a revised Environmental Impact Statement was ordered. A draft revised Environmental Impact Statement for the High Level Plan and reevaluation report which documents the proposal to adopt that plan instead of the barrier plan was released to the public and filed with the Environmental Protection Agency on 16 December 1983. The final revised Environmental Impact Statement was filed with the Environmental Protection Agency on 7 December 1984.

The provisions of Section 404 of the Clean Water Act have been met by a Statement of Findings signed by the District Engineer on 20 August 1975 for the majority of the project. The provisions of Section 404 of the Clean Water Act for work after 1 October 1981 have been met for the Chalmette Unit by a Supplemental Section 404(b)(1) Evaluation Report signed by the District Engineer on 15 November 1982; for the New Orleans East Unit by a Supplemental Section 404(b)(1) Evaluation Report signed by the District Engineer on 18 November 1983, and for the New Orleans West/Mandeville Unit by a Supplemental Section 404(b)(1) Evaluation Report signed by the District Engineer on 18 November 1983. A Public Notice was issued for the High Level Plan on 21 March 1984 and certification from the State of Louisiana was received on 29 June 1984.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1966 and for construction in FY 1967.

Lake Pontchartrain, LA, and Vicinity (Hurricane Protection)

HISTORICAL CHANGES IN BASELINE FEDERAL COST ESTIMATE:

Division: Lower Mississippi Valley
District: New Orleans

Project: Lake Pontchartrain, Louisiana, and Vicinity
(Hurricane Protection)

Item	Estimates Presented to Congress (\$1,000)				
	Original Baseline (1) (Oct 1965)	Cumulative Changes (2)	Last (3) 619,000 2/	Incremental Change (4) -108,000 1/ -36,197 -75,503	Current (5) 511,000 1/ 2/
Federal Cost (Price Level)	65,784				
Reason for Change:		(553,216) 2/			
a. Price Escalation		387,828			
b. Design Changes		61,743			
c. Additional Function Added Under General Authorization		0			
d. Authorized Modification		140,599			
e. Post-Contract Award and Other Estimating Adjustments		-38,923			
f. Schedule Changes		0		3,700 3/	
g. Sundry		1,969		0	
h. Real Estate		0		0	

1/ Includes a decrease of \$36,197 for adjustments in the estimated inflation allowance through the construction period.

2/ Includes an allowance for estimated inflation through the construction period.

3/ Reflects decreases of \$3,004 for actual contract awards, \$700 due to underruns in contract quantities, and \$269 based on the actual cost of completed work. These decreases were offset by increases of \$22 for contract modifications and \$7,651 due to a reanalysis of Federal and non-Federal cost-sharing requirements.

Lake Pontchartrain, LA, and Vicinity (Hurricane Protection)

4 FEB 1986

APPROPRIATION TITLE CONSTRUCTION, GENERAL		CLASSIFICATION, FLOOD CONTROL-LOCAL PROTECTION RCS-DAEN-CUB-13			
		SUMMARY CONSTRUCTION PROGRAM (PB-1)			
	PROJECT COST ESTIMATE	TOTAL COST TO 30 SEP 1985	CURRENT FISCAL YEAR 1986	BUDGET FISCAL YEAR FY 1987	BALANCE TO COMPLETE AFTER FY 1987
BARRIER UNIT	18,583,000	18,583,000	0	0	0
LANDS & DAMAGES	735,000	735,000	0	0	0
CHANNELS & CANALS	765,000	765,000	0	0	0
LEVEES&FLOODWALLS	1,898,000	1,898,000	0	0	0
PERM OP EQUIP	4,000	4,000	0	0	0
ENGR & DESIGN	14,313,000	14,313,000	0	0	0
SUPERVISION & ADMIN	863,000	863,000	0	0	0
NEW ORL. EAST UNIT	315,736,000	144,286,000	26,294,000	13,327,000	131,829,000
LANDS & DAMAGES	36,127,000	26,094,000	0	0	2,833,000
RELOCATIONS	17,940,000	14,052,000	1,384,000	0	2,564,000
LEVEES&FLOODWALLS	189,694,000	72,237,000	18,201,000	10,790,000	58,466,000
PUMPING PLANTS	29,135,000	8,983,000	4,000,000	0	7,147,000
ENGR & DESIGN	36,070,000	15,403,000	2,000,000	2,000,000	16,667,000
SUPERVISION & ADMIN	21,770,000	5,512,000	769,000	537,000	14,952,000
NEW ORL. WEST UNIT	255,944,000	4,900,000	1,526,000	1,550,000	247,899,000
LANDS & DAMAGES	2,180,000	1,140,000	0	0	1,040,000
RELOCATIONS	670,000	0	0	0	670,000
LEVEES&FLOODWALLS	207,454,000	0	0	0	207,454,000
PUMPING PLANTS	25,000,000	3,400,000	1,430,000	1,400,000	18,665,000
ENGR & DESIGN	28,640,000	270,000	150,000	150,000	28,670,000
SUPERVISION & ADMIN	20,000,000	0	0	0	20,000,000
MOBILE UNIT	2,756,000	152,000	0	0	2,604,000
LEVEES&FLOODWALLS	2,281,000	0	0	0	2,281,000
ENGR & DESIGN	272,000	140,000	0	0	132,000
SUPERVISION & ADMIN	223,000	12,000	0	0	211,000
CHALMETTE UNIT	98,981,000	77,082,000	1,813,000	2,083,000	15,183,000
EFFECTIVE DATE	01 JAN 86	BIVN, LOWER MISSISSIPPI DIST, NEW ORLEANS DISTRICT	UNLL REGION, LOWER MISSISSIPPI BASIN, COASTAL LOUISIANA	PROJECT, LK PONTCH & VIC HURR PROT	

4 FEB 1986

APPROPRIATION TITLE CONSTRUCTION, GENERAL	CLASSIFICATION, FLOOD CONTROL-LOCAL PROTECTION RCS-DAEN-CUB-13				
	SUMMARY CONSTRUCTION PROGRAM (PB-1)				
	PROJECT COST ESTIMATE	TOTAL COST TO 30 SEP 1985	CURRENT FISCAL YEAR 1986	BUDGET FISCAL YEAR FY 1987	BALANCE TO COMPLETE AFTER FY 1987
LANDS & DAMAGES	8,912,000	8,912,000	0	0	0
RELOCATIONS	3,532,000	3,532,000	0	0	0
LEVEES&FLOODWALLS	70,450,000	53,535,000	1,340,000	2,550,000	13,024,000
PERM OF EQUIP	21,000	21,000	0	0	0
ENGR & DESIGN	7,480,000	7,057,000	200,000	213,000	0
SUPERVISION & ADMIN	6,180,000	3,602,000	273,000	200,000	2,009,000
FED AND NON-FED					
TOTAL COST - SCHED	698,000,000	245,012,000	29,893,000	17,840,000	397,455,000
UNDELIVERED ORDERS	0	1,893,000	-1,893,000	0	0
TOTAL OBLIGATIONS	0	246,905,000	27,990,000	17,840,000	397,455,000
FEDERAL FUNDS					
TOTAL COST - SCHED	511,000,000	158,901,000	22,297,000	16,000,000	313,892,000
UNDELIVERED ORDERS	0	1,893,000	-1,893,000	0	0
TOTAL OBLIGATIONS	0	160,794,000	20,404,000	16,000,000	313,892,000
NON-FEDERAL FUNDS					
TOTAL COST - SCHED	179,000,000	86,111,000	7,486,000	1,840,000	83,563,000
UNDELIVERED ORDERS	0	0	0	0	0
TOTAL OBLIGATIONS	0	86,111,000	7,486,000	1,840,000	83,563,000

966

EFFECTIVE DATE 01 JAN 86
 DIST. NEW ORLEANS DISTRICT
 UMLL REGION, LOWER MISSISSIPPI BASIN,
 LOWER MISSISSIPPI BASIN, COASTAL LOUISIANA
 PROJECT, LE PONTCH & VIC MARR
 PROT

4 FEB 1986

APPROPRIATION TITLE CONSTRUCTION, GENERAL	CLASSIFICATION, FLOOD CONTROL-LOCAL PROTECTION RCS-DAEN-CUB-13				
	SUMMARY CONSTRUCTION PROGRAM (PB-1)				
	METHOD OF FINANCING	PROJECT COST ESTIMATE	TOTAL COST TO 30 SEP 1985	CURRENT FISCAL YEAR 1986	BUDGET FISCAL YEAR FY 1987
FED AND NON-FED					
ALLOCATIONS			247,349,000	27,356,000	
UNOFC CARRYOVER PFY			0	534,000	
TOTAL AVAIL FOR OBL			0	27,890,000	
APPROPRIATION REQUIRED				17,840,000	397,455,000(2)
FEDERAL FUNDS					
ALLOCATIONS			161,238,000	19,870,000(1)	
UNOFC CARRYOVER PFY			0	534,000	
TOTAL AVAIL FOR OBL			0	20,404,000	
APPROPRIATION REQUIRED				16,000,000	313,892,000
NON-FEDERAL FUNDS					
CONTRIBUTIONS			86,111,000	7,486,000	
UNOFC CARRYOVER PFY			0	7,486,000	
TOTAL AVAIL FOR OBL			0	1,840,000	
CONTRIBUTION REQUIRED				1,840,000	83,563,000
FUTURE FEDERAL REQUIREMENTS					
FISCAL YEAR 1988					
FISCAL YEAR 1989					
FISCAL YEAR 1990					
FISCAL YEAR 1991					
REMAINING BALANCE					
FUTURE NON-FED REQUIREMENTS					
FISCAL YEAR 1988					
FISCAL YEAR 1989					
FISCAL YEAR 1990					
FISCAL YEAR 1991					
REMAINING BALANCE					

- (1) REFLECTS \$3,200.0 REDUCTION ASSIGNED AS SAVINGS AND SLIPPAGE AND \$1,330.0 TRANSFER FROM THE PROJECT.
 (2) INCLUDES \$2,604.0 FOR UNSCHEDULED WORK.

EFFECTIVE DATE 01 JAN 86
 DIST. NEW ORLEANS DISTRICT
 UMLL REGION, LOWER MISSISSIPPI BASIN,
 LOWER MISSISSIPPI BASIN, COASTAL LOUISIANA
 PROJECT, LE PONTCH & VIC MARR
 PROT

4 FEB 1986

967

APPROPRIATION TITLE CONSTRUCTION, GENERAL	CLASSIFICATION, RCS-DAEN-CUB-13	FLOOD CONTROL - LOCAL PROTECTION			
	SUMMARY CONSTRUCTION PROGRAM (PB-1)				
PROJECT COST ESTIMATE	TOTAL COST TO 30 SEP 1985	CURRENT FISCAL YEAR 1986	BUDGET FISCAL YEAR FY 1987	BALANCE TO COMPLETE AFTER FY 1987	
NON-FEDERAL COSTS					
CASH CONTRIBUTIONS	114,498,000	29,240,000	6,162,000	1,840,000	77,256,000
OTHER COSTS					
LANDS & DAMAGES	41,954,000	38,881,000	0	0	3,073,000
RELOCATIONS	22,548,000	17,990,000	1,324,000	0	3,234,000
TOTAL NON-FED COSTS	179,000,000	86,111,000	7,486,000	1,840,000	83,563,000
TOTAL FED(CORPS) & N/F	690,000,000	245,012,000	29,693,000	17,840,000	397,455,000

896

EFFECTIVE DATE: 01 JAN 86
 DIVISION: LOWER MISS. VALLEY
 DISTRICT: NEW ORLEANS DISTRICT
 REGION: LOWER MISSISSIPPI
 BASIN: COASTAL LOUISIANA
 PROJECT: LK PONTCH & VIC
 HURR PROT

4 FEB 1986

APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Larose to Golden Meadow, Louisiana (Hurricane Protection) (Continuing)

LOCATION: The project is located in Lafourche Parish, Louisiana, about 28 miles southwest of New Orleans and about 25 miles inland from the Gulf of Mexico along Bayou Lafourche, south of the Gulf Intracoastal Waterway extending from Larose to Golden Meadow, a distance of about 16 miles.

AUTHORIZATION: Flood Control Act of 1965.

BENEFIT TO COST RATIO: The remaining benefit-remaining cost ratio is 7.4 to 1 at 3-1/4 percent. The benefit to cost ratio for the fiscal year for which Congress appropriated initial construction funds (FY 1972) was 1.4 to 1. The benefit to cost ratio is based on the project functioning independently.

SUMMARIZED FINANCIAL DATA	Accum. % of Est. Fed. Cost	STATUS: (1 January 1986)	PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost	\$64,000,000	Entire Project	50	Apr 2000
Estimated Non-Federal Cost	27,400,000			
Cash Contribution	\$13,860,000			
Other	13,540,000			
Total Estimated Project Cost	\$91,400,000			
Allocations to 30 September 1985	37,967,000			
Conference Allowance for FY 1986	3,000,000			
Allocation for FY 1986	3,450,000 1/			
Allocations to Date	41,417,000	65		
Allocation Requested for FY 1987	3,500,000	70		
Scheduled Balance to Complete after FY 1987	19,083,000			
Unscheduled Balance to Complete after FY 1987	0			

1/ Reflects \$330,000 transfer to the project, and \$120,000 anticipated transfer to the project.

696

Division: Lower Mississippi Valley

District: New Orleans

Region: Lower Mississippi

4 FEB 1986

Larose to Golden Meadow, LA (Hurricane Protection)