TFG FILES INVENTORY
DATE: 12-15-05

Box Number: N/A
Alternate Number: N/A
Other Identification: N/A

Contents Associated With

4. Contract #3, London Avenue Outfall Canal, 1110-2-150a Project Status

A000 6911

A0006911

ROUTING AND TRANSMITTAL SLIP Date 7/29/93

	TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1.	Baumy		
2.			
3.			
4.			
5.			

	Action		File		Note and Return
	Approval		For Clearance		Per Conversation
	As Requested		For Correction		Prepare Reply
	Circulate		For Your Information		See Me
	Comment		Investigate		Signature
	Coordination		Justify		

REMARKS

At Wednesday's Steering Committee Meeting, Jerard said that the NOD would be doing contracts 6 and 7. The OLD, by constructing the bridges, was going to exceed their 30% contributions and therefore would not be doing the work. In a letter to the OLD, I understand the Colonel also said that whoever designs should also construct. I guess we can proceed with our AE contract. (Contract 6)

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
Carl G.	Phone No.

5041-102

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

☆ U.S. GOVERNMENT PRINTING OFFICE 1990-255-041

A000 6911

Selection of the parallel protection plan alternative would require the preparation of a separate Detailed Design Memorandum, DDM, for the fronting protection system of this drainage structure.

59. Structural Design. The structural designs presented herein for the parallel protection plan comply with standard engineering practice and criteria set forth in Engineering Manuals and Engineering Technical Letters for civil works construction published by the Office, Chief of Engineers.

a. Structural Steel. The design of steel structures is in accordance with paragraph 52b above.

b. Reinforced Concrete. The design of reinforced concrete structures in in accordance with paragraph 52c above.

60. Design Criteria. The design grade elevations, tabulated below, are based on the still water level (SWL), plus 2 feet of freeboard and 6 inches of projected settlement.

Station Limits		Design Grade
0+00 to 120+08		EL. 14.4
120+42 to 127+15		EL. 14.1
127+85 to 152+50		EL. 14.0
152+50 to 158+50,	Transition from	EL. 14.0 to EL. 18.5, West Side
	Transition from	EL. 14.0 to EL. 18.0, East Side
158+50 to 159+70		EL. 18.5, West Side
		EL. 18.0, East Side

a. I-Wall Steel Sheet Piling. The structure of all steel sheet pile and reinforced concrete for the I-type floodwalls ~~were~~ based on the following cases: ARE TO BE

CASE I: Q-Case with water to still water level and a factor of safety, FS = 1.5

CASE II: Q-Case with water to still water level plus 2' of freeboard (top of wall) and a factor of safety, FS=1.0

CASE III: S-Case with water to still water level and a factor of safety, FS=1.2

CASE IV: Water at low pool level with lateral earth pressure, where applicable.

b. T-Wall Monoliths: The pile designs presented herein are based on the use of a pile test and are designed with a factor of safety = 2.0 - or 3.0 depending on economics The following loading conditions ~~were~~ anazlyzed: ARE TO BE

CASE I: Static water pressure to SWL, no wind, impervious sheet pile cut-off, no dynamic wave force (100% forces used).

located at approximate Sta. 49+88 that serves the Gregory Junior High School will be retained and have pedestrian gate openings provided where the bridge crosses the proposed floodwalls on both sides of the canal. All other remaining pedestrian bridges shall be removed and pedestrian sidewalks incorporated into the adjacent vehicular bridges. For typical sections and details of Pedestrian Gate Monolith, see Plates 28 and 29.

57. New Orleans Sewerage and Water Board Drainage Pumping Station No. 3. This pumping station is located just north of the intersection of N. Broad Avenue and London Avenue and marks the beginning of the London Avenue Outfall Canal. Being situated across the south end of the canal, the current level of flood protection is provided by the structure of the station itself. The walls of the discharge basin are then integrated with the earthen levee and floodwall system of the canal on the east and west sides to complete the system of flood protection. Increased flood protection across the front of the station will be provided by constructing a new concrete T-Wall with sluice gates immediately in front of the existing discharge basin. This new wall shall extend laterally between the discharge basin walls on either side and will be supported on 14" x 14" prestressed concrete piles. The discharge piles will be extended and tied into the sluice gates. Sluice gates shall also be provided in front of the existing flow diversion flood gate on the east side of the station which permits certain pumps within the station to pump either directly to Lake Pontchartrain or to divert discharge to N.O.S. & W.B. Pumping Station No. 5. The existing discharge basin walls, from the new fronting protection system to the proposed new swing gate monolith at the Southern Railroad bridge crossing, will be raised to the required elevation of 14.4 N.G.V.D.

Selection of the parallel protection plan alternative would require the preparation of a separate Detailed Design Memorandum, (DDM), for the fronting protection system of this drainage structure.

58. New Orleans Sewerage and Water Board Drainage Pumping Station No. 4. This pumping station is located on the east bank of London Avenue Outfall Canal at Prentiss Avenue. Being situated parallel with the flow of the canal, existing flood protection is provided by the earthen levee and floodwall system of the canal being linked with the foundation and building structure of the station.

Increased flood protection will be provided by constructing a new concrete T-wall with sluice gates, supported by 14" x 14" prestressed concrete piles, immediately in front of the existing discharge basin culverts. The existing discharge culverts will be extended to this new frontal protection system. The centrifugal pump discharge bay at the south end of the structure is to receive a new concrete wall facing against the existing building. This wall is to extend laterally between the walls of the discharge basin and vertically from the top of the existing discharge tubes up to the required elevation of 14.4 NGVD. A frontal protection system will also be provided with sluice gates immediately in front of this discharge basin.

CASE II: Static water pressure to SWL, no wind, pervious sheet pile cut-off, no dynamic wave force (100% forces used).

CASE III: Static water pressure with water level 2 feet above SWL, no wind, impervious sheet pile cutoff, no dynamic wave force (75% forces used)

CASE IV: Static water pressure with water level 2 feet above SWL, no wind, pervious sheet pile cutoff, no dynamic wave force (75% forces used).

CASE V: No water, no wind (100% forces used).

CASE VI: No water, wind from land side (75% forces used).

CASE VII: No water, wind from canal side (75% forces used).

c. Steel Gate Monoliths: The pile designs presented herein are based on the use of a pile test and are designed with a factor of safety = 2.0. The following loading conditions were analyzed:

CASE I: Gate closed, static water pressure to SWL, no wind, impervious sheet pile cutoff, no dynamic wave force (100% forces used).

CASE II: Gate closed, static water pressure to SWL, no wind, pervious sheet pile cutoff, no dynamic wave force (100% forces used).

CASE III: Gate closed, static water pressure with water level 2 feet above SWL, no wind, impervious sheet pile cut-off, no dynamic wave force (75% forces used).

CASE IV: Gate closed, static water pressure with water level 2 feet above SWL, no wind, pervious sheet pile cutoff, no dynamic wave force (75% forces used).

CASE V: Gate open, no wind, truck or train on land side edge of base slab (100% forces used).

CASE VI: Gate open, no wind, truck or train on canal side edge of base slab (100% forces used).

CASE VII: Gate open, wind from land side, truck or train on canal side edge of base slab (75% forces used).

CASE VIII: Gate open, wind from canal side, truck or train on land side edge of base slab (75% forces used).

61. Cathodic Protection and Corrosion Control. Cathodic protection and corrosion control for steel sheet piling, steel gates, corner plates and all other ferrous metal components of the parallel protection plan shall be provided as stated in paragraph 50.

17 Dec 91

WALTER BAUMY	Lead Structural Engineer CELMN-ED-DD	862-2656
N.D. Judlin	Corps of Engineers Project Manager	862-2626
BIFF BUCK	BUCK-KLEINPETER ING	486 7901
MICHAEL JACKSON	"	"
ALAN J FRANCINGUES	ORLEANS LEVEE DISTRICT ENGR.	243-4050
HARRY Collins	"	2434045
MAX HEARN	OLD	288 6000
Walter Baudier	Design Engr. Inc.	836-2155
W. EUGENE TICKNER	COE	862-2240
BOB FAIRLESS	COE	862-1930
C.A. WETHEEN, Jr	OLD	243-4054
Frank Mineo	OLD	243-4063

Name	Office	Telephone No.
Carl R. Guggenheimer	Engr. Div.- Des. Br.	X-2643
Robert J. Gaizenix	"	X 2761
Jim Richardson	Engr Div, F&M Br	X 1031
Jorge Romero	" " , DES Br	862-2645
William Gwynn	Eustis Engr	834-0157
John Holtgrave	Design Engineering, Inc	836-2155
Ed Cronic	Eustis ENGR.	834-0157
E. R. Medina	OLB	243-4052

17 Oct 91

LONDON AVE - MEETING OLD, etc.

Min Lev. 10.5 10.5 — Lake

300'
1500' Filmore & #4. (24 LF per day - progress)
↳ Finish in March.

10.5 R.E. Lee to Leon C. Simon.

10.5 min in London Ave

Memo #1 85 or 86 to 87 I-Wall Only.
Memo #2 At Bridges
Memo #3 Cost for 100 yr protection.

No construction or design currently scheduled - other than above.

Bridges Gent Leon C. Simon
4.2 ~~to~~ 10.0
℄ Gent Blvd.

GDM - Floodproofing.

DOTD - Upgrade R.E. Lee - 2 - 2 lane Roadway.
Elev. ?

Flood Proofing - Entire Bridge @ ~~Centilly~~.

Most recent CDM by Burk address Bridges.

Neighborhood displacement requirements negated raised bridges. More house & building frontage road.

S&WB - (Burk) Wouldn't add new pile bents, ∴, wouldn't worsen head loss.

(~~DEI~~) S&WB no problem
Same # of bents
Low steel elevation, members remained same.

~~Parallel Bents~~ - S&WB objected, more head loss.

S&WB - no additional head loss.

(1) Set up job to protect Canal except gaps (cont 1, 2, 3)
ENVD Approval

(2)

(2) Bridge Gaps - 2 jobs (4, 5)
Need supplement

(3) P. S. - 2 jobs (6, 7)
Need supplement

Look at expediting Bridges & P.S.

Need OLD to look at including bridges with some IOT-Wad Contracts.

9 Sep 91

ORLEANS AVE CANAL

Contracts

1. Test Pile Program

2. Levee & I-Wall North of R.E. Lee Blvd. E&W sides of canal plus Harrison Ave. Bridge. PROJECT I-A

3. PHASE I-B - New Bridges at Filmore Ave & Robert E. Lee Blvd. Construct May 92 - May 93

4. PROJECT II-A - Levee & I-Wall south of Robert E. Lee to I-610, East side of canal only.

5. PROJECT II-B - T-wall, Filmore Ave to Robert E. Lee Blvd, west side of canal only.

6. PROJECT II-C - T-Wall, Sta. 30+90 to Filmore Ave, west side of canal only.

7. PROJECT II-D - I-wall, I-610 to sta. 30+00, west side of canal only.

8. PROJECT III - I-Wall capping and pumping station modifications.

ORLEANS AVE.

CELMN-ED-E
Effective Date:
17-Dec-91

* PRE-AWARD ACTIONS *

LEGEND
1st Line = Original Schedule
2nd Line = Current Schedule
3rd Line = Actual Schedule

A PROJECT/CONTRACT	B E.D. NO. PRJ ENGR $ RANGE	C ED-D REQ ROE, SURV & DESIGN BORINGS	D ED-F SOILS INPUT TO DES BR	E DESIGN REPORT TO LMV	F ED-D REQUEST BORROW BORINGS	G ED-D SEND P&S FOR LOCAL REVIEW	H ED-D SEND P&S FOR LMV REVIEW	I ED-D SEND R/W REQUEST TO RE	J RE SEND R/W REQUEST TO LOCALS	K RELOCTNS COMPLETE	L R/W AVAIL	M ED-D SEND PRE-ADV NOTICE TO CT	N ED-D SEND P&S TO CT	O ADVERTISE	P CONTRACT AWARD DATE	Q REMARKS
LAKE PONCHARTRAIN ORLEANS OUTFALL CANAL PILE TEST	Romero 100K-500K														Nov-91	Awarded for $604,000.
LAKE PONTCHARTRAIN ORLEANS OUTFALL CANAL PHASE IIB	Romero 5Mil-10Mi	N/A	N/A	N/A	N/A	15-Mar-91	28-Feb-92	31-Jan-92	Feb-92	10-Aug-92	10-Aug-92	27-Jul-92	10-Aug-92	31-Aug-92	30-Oct-92	T-Wall, west bank, R.E.Lee - Filmore.
LAKE PONTCHARTRAIN ORLEANS OUTFALL CANAL PHASE IA	Romero 1Mil-5Mil	N/A	N/A	N/A	N/A	17-Apr-92	26-Jun-92	28-Feb-92	Mar-92	9-Sep-92	9-Sep-92	26-Aug-92	9-Sep-92	30-Sep-92	30-Nov-92	Levees, east & west banks, R.E.Lee - Lakefront. Floodproof Harrison bridge.
LAKE PONTCHARTRAIN ORLEANS OUTFALL CANAL PHASE IID	Romero 1Mil-5Mil	N/A	N/A	N/A	N/A	19-Jun-92	28-Aug-92	10-Mar-92	Mar-92	10-Nov-92	10-Nov-92	27-Oct-92	10-Nov-92	1-Dec-92	1-Feb-93	I-Wall, west bank, P.S. No. 7 - Harrison.
LAKE PONTCHARTRAIN ORLEANS OUTFALL CANAL PHASE IB	Romero 1Mil-5Mil	N/A	N/A	N/A	N/A	23-Jul-92	1-Oct-93	15-Jan-93	Jan-93	13-Dec-93	13-Dec-93	28-Nov-93	13-Dec-93	3-Jan-94	1-Mar-94	Floodproof R.E.Lee & Filmore bridges.
LAKE PONTCHARTRAIN ORLEANS OUTFALL CANAL PHASE IIC	Romero 5Mil-10Mi	N/A	N/A	N/A	N/A	22-Jul-94	30-Sep-94	10-Dec-93	Dec-93	28-Nov-94	28-Nov-94	28-Nov-94	12-Dec-94	2-Jan-95	1-Mar-95	T-Wall, west bank, Harrison - Filmore.
LAKE PONTCHARTRAIN ORLEANS OUTFALL CANAL PHASE IIA	Romero 1Mil-5Mil	N/A	N/A	N/A	N/A	15-Jan-96	15-Apr-96	1-Oct-95	Oct-95	Jul-96	Jul-96	Jun-96	Jul-96	Aug-96	1-Oct-96	I-Wall, east bank, P.S. No. 7 - R.E.Lee.
LAKE PONTCHARTRAIN ORLEANS OUTFALL CANAL PHASE III	Romero 1Mil-5Mil	N/A	N/A	N/A	N/A	31-Aug-96	15-Nov-96	1-May-96	May-96	Feb-97	Feb-97	Jan-97	Feb-97	Mar-97	1-May-97	Fronting protection - P.S. No. 7, Misc I-Wall capping.

TABLE 9
LONDON AVENUE CANAL
SUMMARY OF ESTIMATED COST
PARALLEL PROTECTION PLAN
(Oct 88 Price Levels)

February 1992
Cost Estimate

Cost Acct. No.	Item	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount	Estimated Quantity	Unit Price	Estimated Amount ($)	
					$	$				
11	1	Mob & Demob	Lump Sum	L.S.		150,000	Lump Sum	–	150,000	▲ Change in quantity.
	2	Reinforced Concrete I-Wall	15,440	C.Y.	350.00	5,404,000	15440 CY	350.00	5,404,000	
	3	Reinforced Concrete T-Wall								▲ Change in Lump Sum cost due to more definitive scope & details.
		a. Stem	2,916	C.Y.	350.00	1,020,600	2,916 CY	350.00	1,020,600	
		b. Slab	4,356	C.Y.	200.00	871,200	4,356 CY	200.00	871,200	
	4	Steel Sheet Piling								* Includes $4,800,000 for TEMPORARY PUMPING SYST NOT PROVIDED ON ORIGINAL ESTIMATE.
		a. PZ-22	473,111	S.F.	12.00	5,677,332	485,578 SF ▲	12.00	5,826,936	
		b. Drive Existing PZ-27	47,250	S.F.		25,000	47,250 SF	3.00	141,750	
	5	12" x 53 Steel H-Piles	188,160	L.F.	21.00	3,951,360	189,470 LF ▲	21.00	3,978,870	
	6	Benefit Street Gate (2 Req'd)	2	EA.	90,000.00	180,000	2 EA	90,000	180,000	
	7	Southern R/R Gate (2 Req'd)	2	EA.	77,500.00	155,000	2 EA	77,500	155,000	
	8	Railroad Falsework (2 Req'd)	2	EA.	25,000.00	50,000	2 EA	25,000	50,000	
	9	Pedestrian Gate (2 Req'd)	2	EA.	10,000.00	20,000	2 EA	10,000	20,000	
	10	N. O. S&WB D.P.S. #3	Lump Sum	L.S.		2,300,000	Lump Sum	–	10,000,000 ▲ *}	+18,278,750
	11	N. O. S&WB D.P.S. #4	Lump Sum	L.S.		1,500,000	Lump Sum	–	12,078,750 ▲ *}	
	12	Bridge Modifications								
		a. Gentilly Blvd.	Lump Sum	L.S.		950,000	Lump Sum	–	1,320,000 ▲	+ 2.25 million
		b. Mirabeau Ave.	Lump Sum	L.S.		600,000	Lump Sum	–	1078,750 ▲	
		c. Filmore Ave.	Lump Sum	L.S.		575,000	Lump Sum	–	705,000 ▲	
		d. Robert E. Lee Blvd.	Lump Sum	L.S.		800,000	Lump Sum	–	955,000 ▲	
		e. Leon C. Simon Blvd.	Lump Sum	L.S.		675,000	Lump Sum	–	1,820,000 ▲	→ 1.1 million
	13	Inspection Trench	25,100	L.F.	8.00	200,800	31,533 LF ▲	8.00	252,264	
	14	Pedestrian Bridge Demolition	3	L.S.	30,000.00	90,000	Lump Sum	–	30,000 ▲	
	15	Existing Floodwall Demolition	Lump Sum	L.S.		575,000	Lump Sum	–	575,000	
	16	Structural Excavation	25,580	C.Y.	2.50	63,958	25,580 CY	2.50	63,950	
	17	Structural Backfill	15,785	C.Y.	5.00	78,925	15,785 CY	5.00	78,925	
	18	Riprap	6,169	Tons	20.00	123,380	6,169 TONS	20.00	123,380	
	19	Filter Fabric	15,006	S.Y.	4.00	60,024	15,006 SY	4.00	60,024	
	20	Semi-Compacted Clay Fill	40,128	C.Y.	10.00	401,280	40,128 CY	10.00	401,280	
02	21	Utility Modifications	Lump Sum	L.S.		325,000	Lump Sum	–	325,000	
			SUBTOTAL			$26,822,859			47,665,679	(20,842,820)
			25% CONTINGENCIES			6,705,715	25% on all but #10 & #11		6,396,732	
							15% on #10 & #11		3,311,813	
			TOTAL, CONSTRUCTION (R)			$33,529,000			57,374,224	
01	22	Lands & Damages I.D. Number 80915				2,861,000			2,861,000	
30		Engineering & Design (12%±)				4,023,000			5,720,000	
31		Supervision and Administration (10%±)				3,353,000			4766,776	
			TOTAL COST (R)			$43,800,000			70,722,000	$63.

P/S #4 Prentiss St.	DM ('88)	Estimated New ('92)	Difference
	1,500,000	9,663,000*	(8,163,000)
Temp Pump	—	4,800,000	(4,800,000)
Discharge Pipes	64,750	? 2,602,000	(2,537,250)
Sluice Gates	550,000	? 1,150,000	(600,000)
Cofferdam	58,000	384,000	(326,000)
Dewatering	160,000	60,000	100,000
			8,163,250

P/S #3 Broad st	2,300,000	8,000,000*	(5,700,000)
Temp Pump	—	4,800,000	(4,800,000)
Discharge Pipes	500,000	1,280,000	(780,000)
Cofferdam	24,000	384,000	(360,000)
Sluice Gates	986,000	? 690,000	296,000
			5,650,000

* A 25% contingency was added to the estimated prices. Another 25% was added to the total contract prices.

P/S #4	DM ('88)	Estimated New ('92)	Difference
	1,500,000	9,663,000*	(8,163,000)
Temp Pump	—	4,800,000	(4,800,000)
Discharge Pipes	64,750	2,602,000	(2,537,250)
Sluice Gates	550,000	1,150,000	(600,000)
Cofferdam	58,000	384,000	(326,000)
Dewatering	160,000	60,000	100,000
			8,163,250

P/S #3	2,300,000	8,000,000*	(5,700,000)
Temp Pump	—	4,800,000	(4,800,000)
Discharge Pipes	500,000	1,280,000	(780,000)
Cofferdam	24,000	384,000	(360,000)
Sluice Gates	980,000	690,000	290,000
			5,650,000

* A 25% contingency was added to the estimated prices. Another 25% was added to the total contract prices.

P/S #4	DM ('88)	Estimated New ('92)	Difference
	1,500,000	9,663,000*	(8,163,000)
Temp Pump	—	4,800,000	(4,800,000)
Discharge Pipes	64,750	2,602,000	(2,537,250)
Sluice Gates	550,000	1,150,000	(600,000)
Cofferdam	58,000	384,000	(326,000)
Dewatering	160,000	60,000	100,000
			$8,163,250

P/S #3			
	2,300,000	8,000,000*	(5,700,000)
Temp Pump	—	4,800,000	(4,800,000)
Discharge Pipes	500,000	1,280,000	(780,000)
Cofferdam	24,000	384,000	(360,000)
Sluice Gates	980,000	690,000	290,000
			5,650,000

* A 25% contingency was added to the estimated prices. Another 25% was added to the total contract prices.

P/S #4	DM ('88)	Estimated New ('92)	Difference
	1,500,000	9,663,000*	(8,163,000)
Temp Pump	—	4,800,000	(4,800,000)
Discharge Pipes	64,750	2,602,000	(2,537,250)
Sluice Gates	550,000	1,150,000	(600,000)
Cofferdam	58,000	384,000	(326,000)
Dewatering	160,000	60,000	100,000
			$8,163,250

P/S #3	2,300,000	8,000,000*	(5,700,000)
Temp Pump	—	4,800,000	(4,800,000)
Discharge Pipes	500,000	1,280,000	(780,000)
Cofferdam	24,000	384,000	(360,000)
Sluice Gates	986,000	690,000	296,000
			5,650,000

* A 25% contingiency was added to the estimated prices. Another 25% was added to the total contract prices.

P/S #4	DM ('88)	Estimated New ('92)	Difference
	1,500,000	9,663,000*	(8,163,000)
Temp Pump	—	4,800,000	(4,800,000)
Discharge Pipes	64,750	2,602,000	(2,537,250)
Sluice Gates	550,000	1,150,000	(600,000)
Cofferdam	58,000	384,000	(326,000)
Dewatering	160,000	60,000	100,000
			$8,163,250

P/S #3	2,300,000	8,000,000*	(5,700,000)
Temp Pump	—	4,800,000	(4,800,000)
Discharge Pipes	500,000	1,280,000	(780,000)
Cofferdam	24,000	384,000	(360,000)
Sluice Gates	980,000	690,000	290,000
			$5,650,000

* A 25% contingency was added to the estimated prices. Another 25% was added to the total contract prices.

PROJECT: LONDON AVENUE OUTFALL CANAL
BUTTERFLY VALVE STRUCTURE

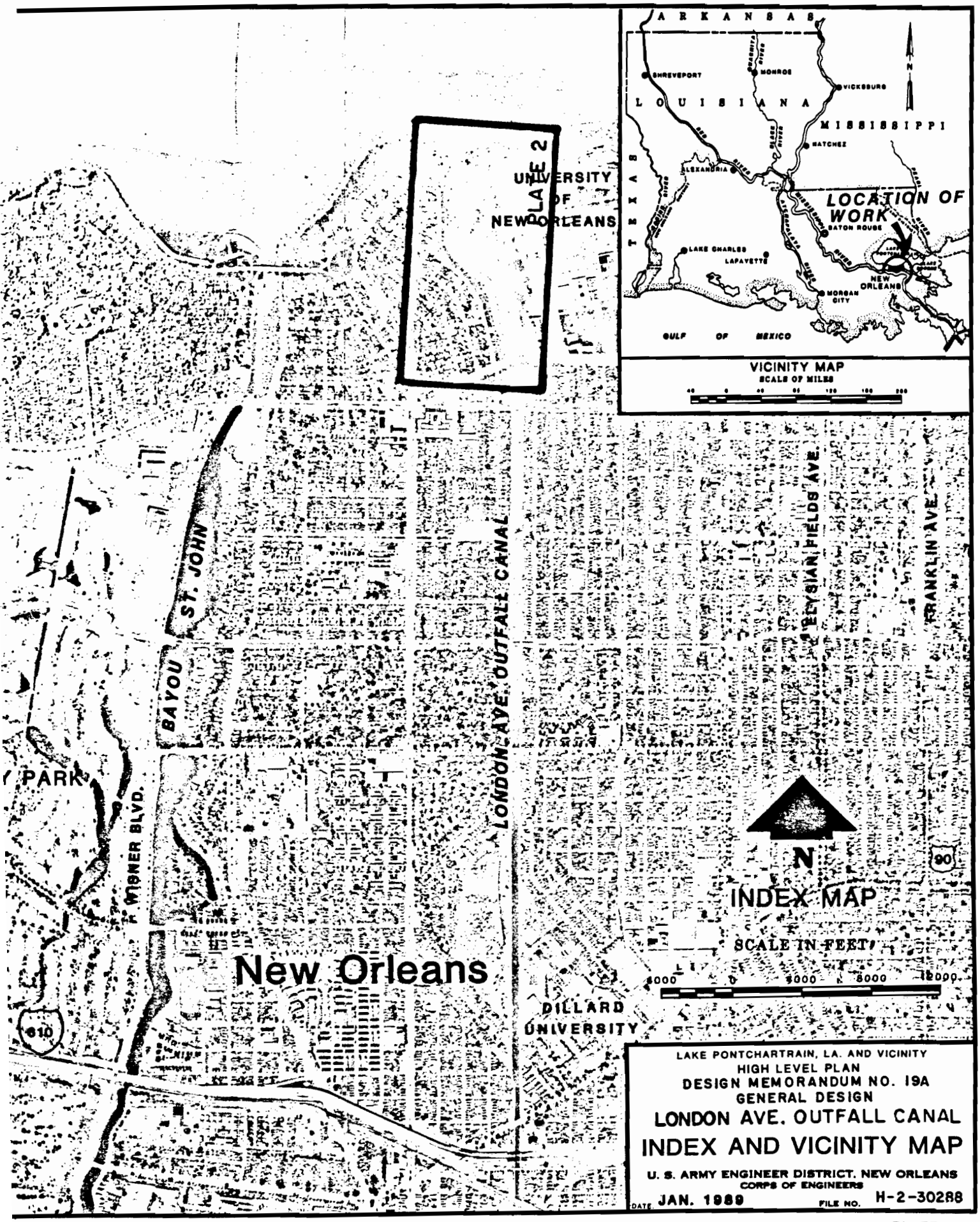
PROJECT NEED: Lake Pontcharain, La. and Vicinity, High Level Plan. The London Avenue Canal extends approximately 2.6 miles from the vicinity of Benefit Street to its intersection with Lake Pontchartrain. N.O.S.&W.B. Pumping Station Nos. 3 and 4 discharge directly into the canal and are located near Benefit St. and Filmore Avenue, respectively. Existing levees along the canal do not have sufficient height to protect the city from a Standard Project Hurricane. Parallel protection along the canal was investigated in the GDM and estimated to cost $ 43,800,000 which included a 25% contingency, E&D and S&A. Fronting protection was found to be substantially cheaper and is the recommended plan.

STATUS: Design Branch is currently beginning preparation of DDM input for fronting protection, located in the canal between Lakeshore Dr. and Leon C. Simon. The structure consists of 8 - 28 ft. wide gated bays, each containing an eccentrically pinned, vertical "butterfly valve" gate. The gates are designed for flow - induced operation, to automatically open or close as the direction of flow changes. WES is currently performing model studies to address performance, structural and mechanical concerns regarding the gate.

SCHEDULE:

DDM	Jun 89 - Jan 91
Model Test	Feb 89 - Jun 90
P&S	Aug 90 - Sep 91
CONSTRUCTION	Nov 91 - Jan 95

COST: $ 15,000,000 which includes a 25% contingency, WES model study, E&D, and S&A.



LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
DESIGN MEMORANDUM NO. 19A
GENERAL DESIGN

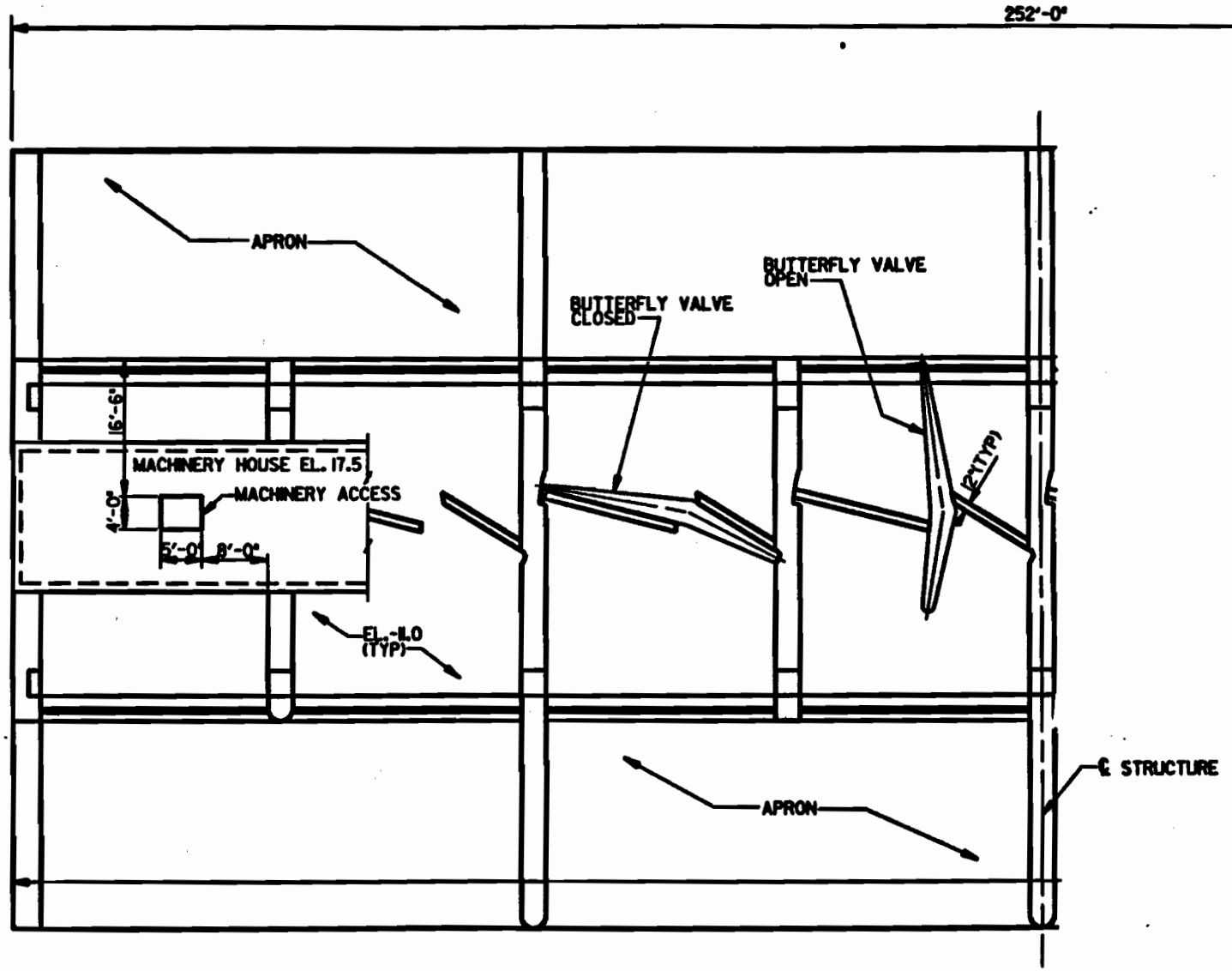
LONDON AVE. OUTFALL CANAL
INDEX AND VICINITY MAP

U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS

DATE JAN. 1989 FILE NO. H-2-30288

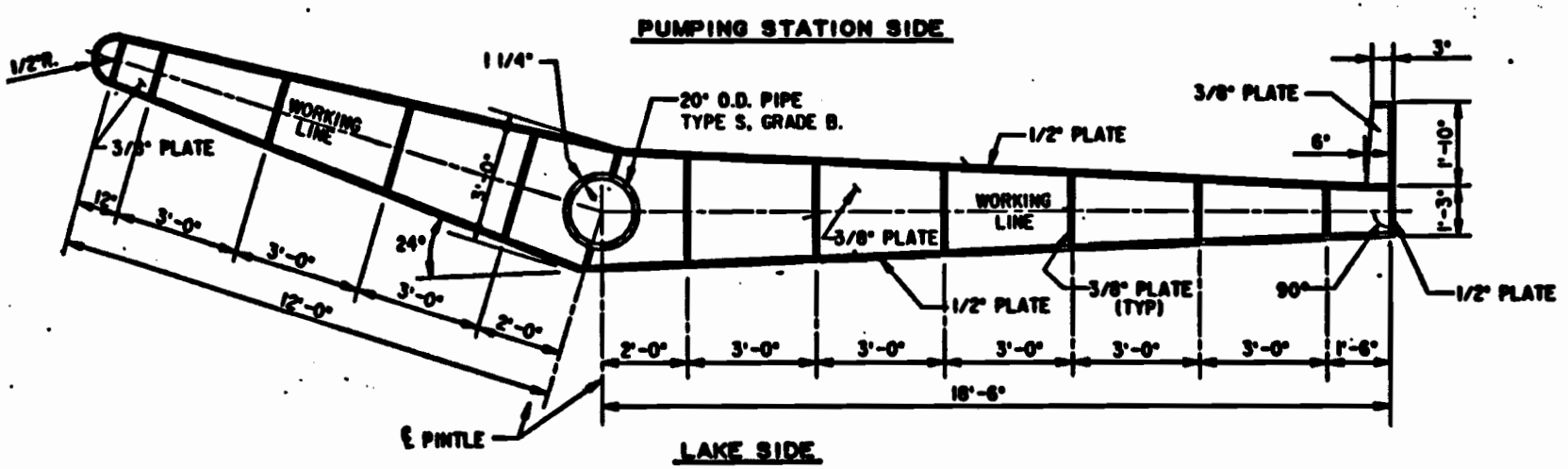
PLATE 1

LAKE SIDE



PUMPING STATION SIDE

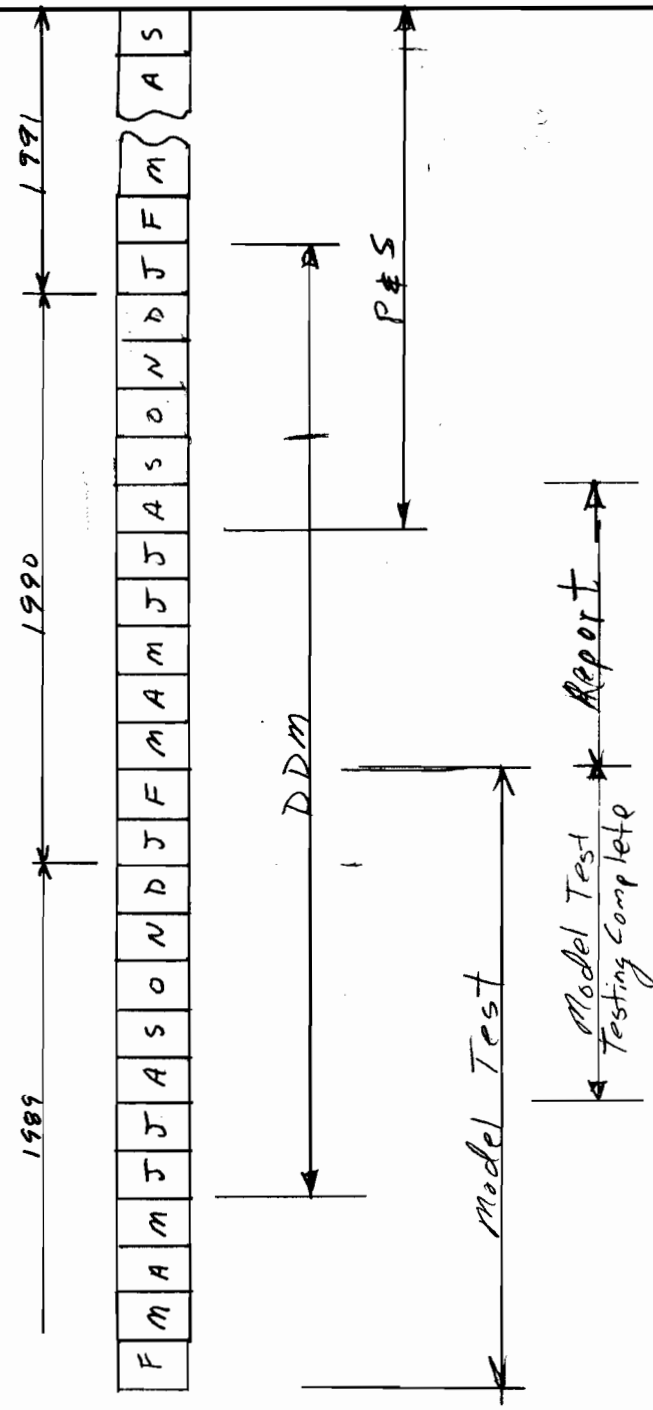
PLAN


PUMPING STATION SIDE
1/2"R.
11/4"
20" O.D. PIPE
TYPE S, GRADE B.
3/8" PLATE
WORKING LINE
1/2" PLATE
3/8" PLATE
6"
3"
1'-10"
1'-3"
3/8" PLATE
WORKING LINE
3/8" PLATE
1/2" PLATE
3/8" PLATE (TYP)
90°
1/2" PLATE
12"
3'-0"
3'-0"
3'-0"
3'-0"
2'-0"
12'-0"
24°
2'-0"
3'-0"
3'-0"
3'-0"
3'-0"
3'-0"
1'-6"
18'-6"
℄ PINTLE
LAKE SIDE

SECTION (A)

COMPUTATION SHEET

PROJECT	PAGE OF	COMPUTED BY	DATE
SUBJECT		CHECKED BY	DATE



Pump ~~Station~~
Filmore to Robert
E. Leon. ≈ 3500 LF
$ 5-7 million

Filmore to (≈ 1500 LF)
Mirabeau
≈ $2-3 mil
Also get pile test results for other jobs

TABLE 9
LONDON AVENUE CANAL
SUMMARY OF ESTIMATED COST
PARALLEL PROTECTION PLAN
(Oct 88 Price Levels)

Cost Acct. No.	Item	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
					$	$
11	1	Mob & Demob	Lump Sum	L.S.		150,000
	2	Reinforced Concrete I-Wall	15,440	C.Y.	350.00	5,404,000
	3	Reinforced Concrete T-Wall				
		a. Stem	2,916	C.Y.	350.00	1,020,600
		b. Slab	4,356	C.Y.	200.00	871,200
	4	Steel Sheet Piling				
		a. PZ-22	473,111	S.F.	12.00	5,677,332
		b. Drive Existing PZ-27	47,250	S.F.		25,000
	5	12" x 53 Steel H-Piles	188,160	L.F.	21.00	3,951,360
	6	Benefit Street Gate (2 Req'd)	2	EA.	90,000.00	180,000
	7	Southern R/R Gate (2 Req'd)	2	EA.	77,500.00	155,000
	8	Railroad Falsework (2 Req'd)	2	EA.	25,000.00	50,000
	9	Pedestrian Gate (2 Req'd)	2	EA.	10,000.00	20,000
	10	N. O. S&WB D.P.S. #3	Lump Sum	L.S.		2,300,000
	11	N. O. S&WB D.P.S. #4	Lump Sum	L.S.		1,500,000
	12	Bridge Modifications				
		a. Gentilly Blvd.	Lump Sum	L.S.		950,000
		b. Mirabeau Ave.	Lump Sum	L.S.		600,000
		c. Filmore Ave.	Lump Sum	L.S.		575,000
		d. Robert E. Lee Blvd.	Lump Sum	L.S.		800,000
		e. Leon C. Simon Blvd.	Lump Sum	L.S.		675,000
	13	Inspection Trench	25,100	L.F.	8.00	200,800
	14	Pedestrian Bridge Demolition	3	L.S.	30,000.00	90,000
	15	Existing Floodwall Demolition	Lump Sum	L.S.		575,000
	16	Structural Excavation	25,580	C.Y.	2.50	63,958
	17	Structural Backfill	15,785	C.Y.	5.00	78,925
	18	Riprap	6,169	Tons	20.00	123,380
	19	Filter Fabric	15,006	S.Y.	4.00	60,024
	20	Semi-Compacted Clay Fill	40,128	C.Y.	10.00	401,280
02	21	Utility Modifications	Lump Sum	L.S.		325,000
			SUBTOTAL			$26,822,859
			25% CONTINGENCIES			6,705,715
			TOTAL, CONSTRUCTION (R)			$33,529,000
01	22	Lands & Damages I.D. Number 80915				2,861,000
30		Engineering & Design (12%±)				4,023,000
31		Supervision and Administration (10%±)				3,353,000
			TOTAL COST (R)			$43,800,000

Contract #2

13000 LF I-WALL
1000 LF T-WALL
4 GATE MONOLITHS & GATES
SECTIONS UNDER INTERSTATE 10
RIP RAP IN SOME PORTIONS OF CANAL

Contract #1

7000 LF OF I-WALL or T-WALL

Contract #3

5700 CF I-WALL
5700 CF I-WALL OR T-WALL

Contract #4

Bridges @ Gentilly & Leon C. Simon
18 mos

Contract #5

Bridges @ Mirabeau, Filmore & Robert E. Lee
18 MOS

Contract #6

Pump Station Fronting Protection
12 mos

Contract #7

"
12 mo

8 Aug 91

LONDON AVENUE
PARALLEL PROTECTION

Project Documents

1. GDM presented I-wall along entire canal, presented T-wall on east side between sta 53+20 and Robert E. Lee (6000 ft), swing gates at Southern Railroad's bridge, bottom roller gates at Benefit St., fronting protection at the 2 pumping stations, and bridge modification at the 5 remaining vehicular bridges.

2. Areas requiring further evaluation:
   a. 2 pumping stations.
   b. 5 vehicular bridges.
   c. T-wall areas.
   d. I-wall on east side between Leon C. Simon and lake.
   e. I-wall on west side between Robert E. Lee and lake.
   f. Siphon at pumping station.
   g. Interim protection during construction.
   h. Site access for construction.
   i. Existing R/W along canal.
   j. Constructuion/Design Documents scheduling.
   k. Relocations coordination.

3. Supplement to GDM needed for:
   a. 5 vehicular bridges.
   b. 2 pumping stations.
   c. Construction/Design Documents scheduling.
   d. Levee between Robert E. Lee and lake on west side and Leon C. Simon and lake on east side.
   e. Siphon accomodation.

4. P&S requirements for I-wall construction(18,000 lf):
   a. Update surveys (latest are probably from 1986)
   b. Fly new aerial photos.
   c. Locate existing R/W lines.
   d. Request R/W for construction.
   e. Coordinate relocations with owners.
   f. Construction sequence to maximize site access and provide interim protection during construction.
   g. Perform P&S design for subject reaches.

LONDON AVE

DESIGN STATUS

1. GDM presented I-Wall Design, 1 Roller Gate, 1 Rail Road Gate, T-Wall for parallel protection.

Areas not settled
Site Access
Interim Protection during construction
R/W Requests & R/W Locations

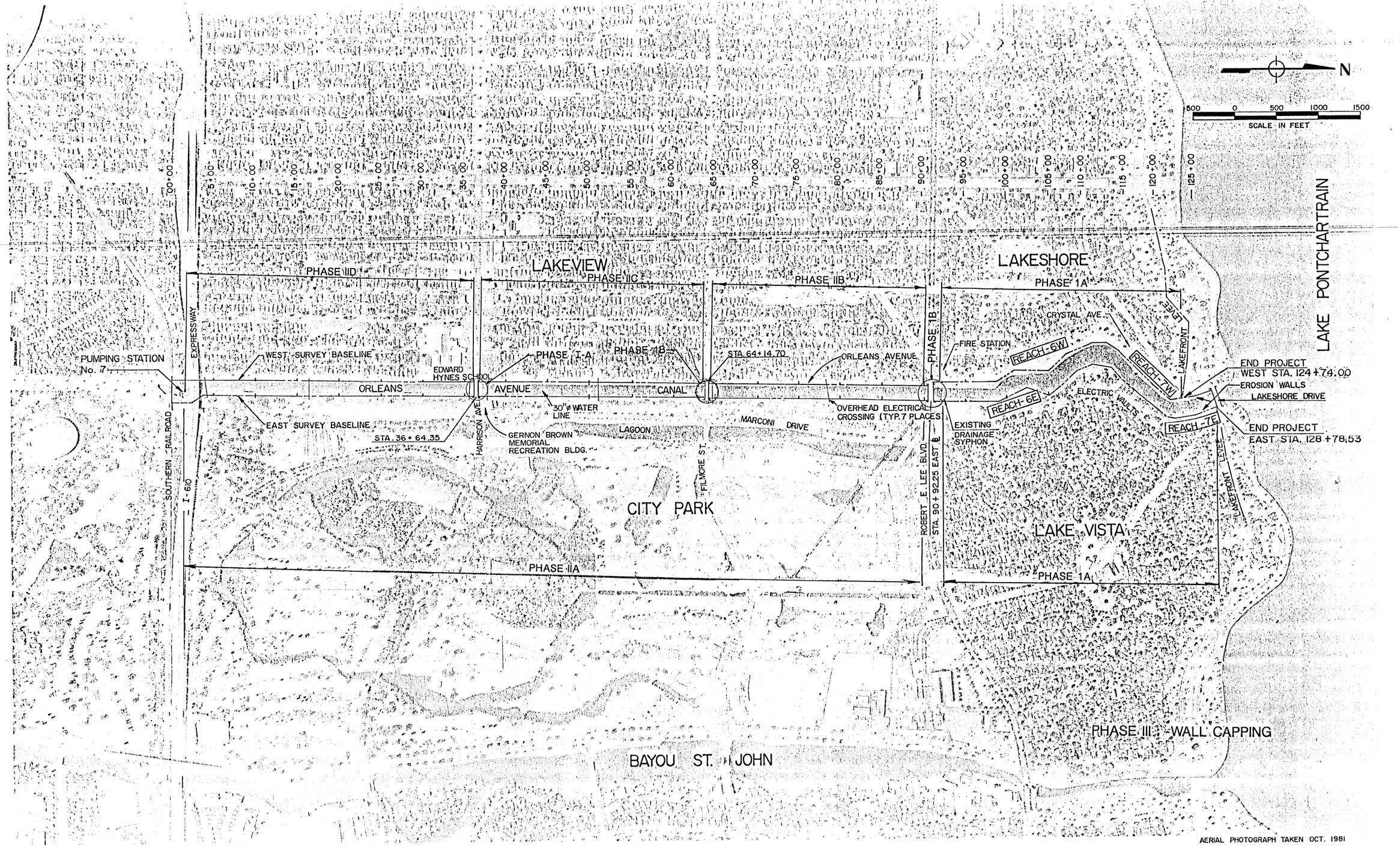
Known areas needing re-evaluation
(a) T-Wall Reach
(b) I-Wall - Leon C. Simon to Lake
I-Wall Robert E Lee to Leon C Simon on West Side of Canal.
(c) Schedule for Construction

2. Design Supplement needed ~~for~~:
(a) Bridges (except 2 above).
(b) Pump Station Mod.
(c) Siphon Area

3. FUNDING AVAILABILITY BY OF CORPS & LEVEE BOARD

4. RELOCATIONS need Coord.

5.



AERIAL PHOTOGRAPH TAKEN OCT. 1981

No	DATE	REMARKS
		REVISIONS

No	DATE	REMARKS
		REVISIONS

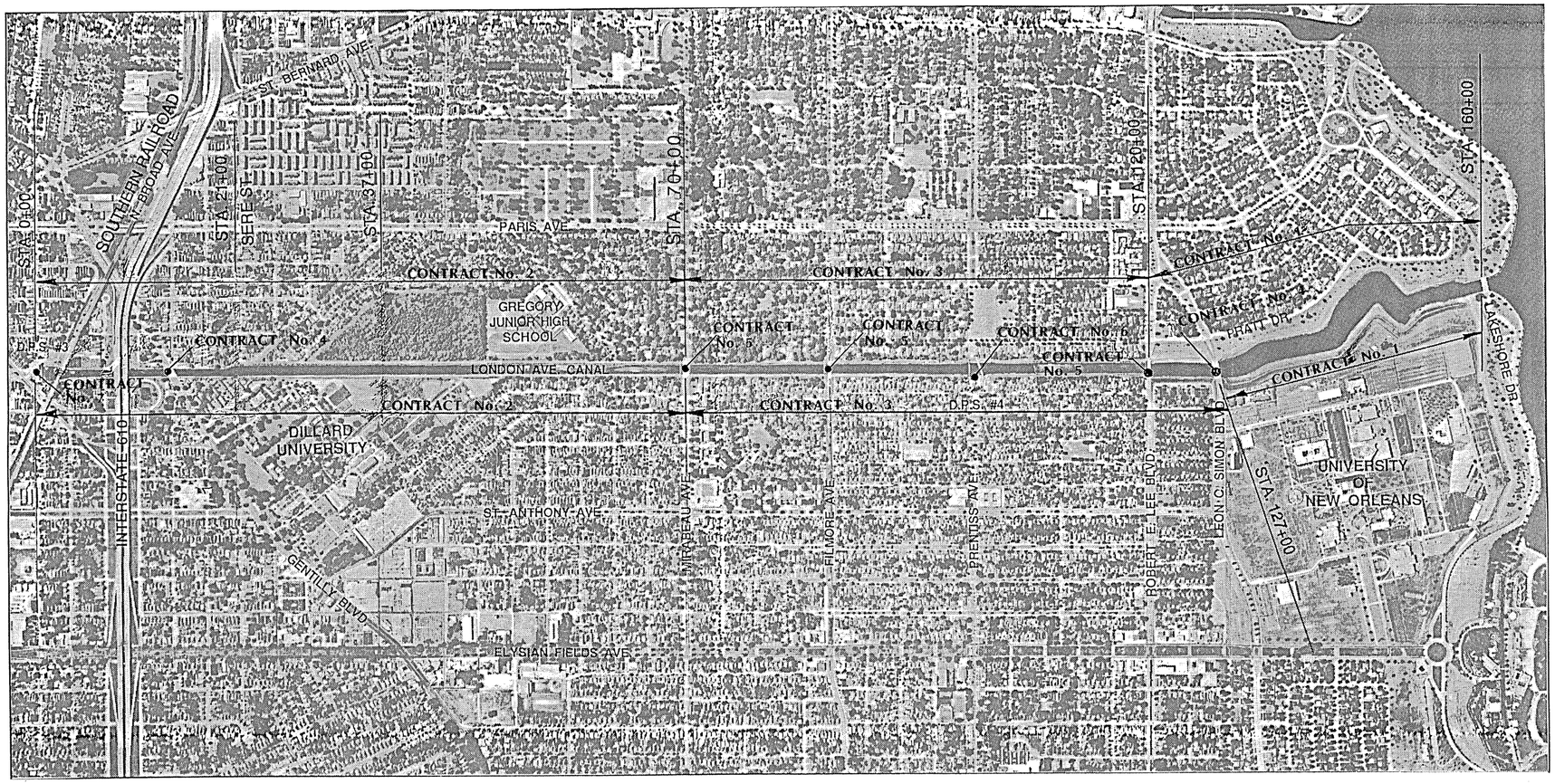
DESIGN ENGINEERING INC.
3330 West Esplanade Ave. S.
Suite 205
Metairie, LA 70002
(504) 836-2155

DESIGNED BY: T.M.S.
CHECKED BY:
DRAWN BY: C.V.N.
CHECKED BY: D.A.S.
APPROVED BY: J.W.H.
DATE: JUNE, 1991

STAMP

BOARD OF LEVEE COMMISSIONERS
ORLEANS LEVEE DISTRICT
PHASE I-A
ORLEANS AVE CANAL-FLOOD PROTECTION IMPROVEMENT PROJECT
AERIAL PROJECT MAP

JOB No. 1006 I-A
SCALE 1" = 500'
SHEET NUMBER 3 OF



Cont. No.	Description	Construction Time	Approx. Construction Cost
1	Parallel Protection Robert E. Lee to Lake	12 Months	$ 3.0 MIL
2	Parallel Protection Pump Station No. 3 to Mirabeau Ave.	24 Months	$ 8.8 MIL
3	Parallel Protection Mirabeau Ave. to Leon C. Simon Blvd.	24 Months	$ 13.0 MIL
4	Flood Proofing Bridges Leon C. Simon & Gentilly Blvds.	18 Months	$ 2.1 MIL
5	Flood Proofing Bridges Robert E. Lee Blvd., Filmore & Mirabeau Aves.	18 Months	$ 2.5 MIL
6	Flood Proofing Pump Station No. 4.	15 Months	$ 2.2 MIL
7	Flood Proofing Pump Station No. 3.	15 Months	$ 3.4 MIL

TOTAL APPROX. CONSTRUCTION COST $35.0 MIL

LONDON AVE. OUTFALL CANAL
ORLEANS PARISH

PARALLEL PROTECTION PLAN
DESIGN AND CONSTRUCTION SCHEDULES

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

DESIGNED BY: X	PLOT SCALE:	PLOT DATE:	CADD FILE: conspheasl.dgnX
DRAWN BY: X	X	X	FILE NO.
CHECKED BY: X	DATE: X		X

PLATE

Schedule Name : LONDON AVE. P&S SCHEDULE
Responsible : WALTER BAUMY, CELMN-ED-DD, X2656
As-of Date : 14-Jan-91 Schedule File : C:\TL3\DATA\CONTRACT

CONTRACT #1 Levee - Lake to Robert E. Lee.

Design		Review-Award		Construct	
2-Jan-92	6-Jun-92	9-Jun-92	20-Jan-93	21-Jan-93	8-Feb-94

CONTRACT #3 F/W - Mirabeau Ave to Leon C. Simon

Design		Review-Award		Construct	
11-Sep-92	25-Jun-93	28-Jun-93	8-Feb-94	9-Feb-94	18-Mar-96

CONTRACT #2 F/W - P/S #3 to Mirabeau Ave

Design		Review-Award		Construct	
2-Jan-92	10-Sep-92	11-Sep-92	23-Apr-93	26-Apr-93	1-Jun-95

CONTRACT #4 Bridges - Gentilly & Leon C. Simon

Design		Review-Award		Construct	
28-Jun-93	1-Nov-93	2-Nov-93	14-Jun-94	15-Jun-94	22-Jul-96

Schedule Name : LONDON AVE. P&S SCHEDULE
Responsible : WALTER BAUMY, CELMN-ED-DD, X2656
As-of Date : 14-Jan-91 Schedule File : C:\TL3\DATA\CONTRACT

CONTRACT #7 Pump Station

Design		Review-Award		Construct	
19-Sep-94	30-Mar-95	31-Mar-95	7-Nov-95	8-Nov-95	6-Jun-97

CONTRACT #6 Pump Station

Review-Award		Construct	
19-Sep-94	1-May-95	2-May-95	6-Jun-97

Design	
14-Mar-94	16-Sep-94

CONTRACT #5 Bridges - Robert E. Lee, Mirabeau, Filmore

Design		Review-Award		Construct	
2-Nov-93	11-Mar-94	14-Mar-94	19-Oct-94	20-Oct-94	26-Nov-96

HURRICANE AND FLOOD PROTECTION PROJECTS

BOARD OF COMMISSIONERS

ORLEANS LEVEE DISTRICT

LONDON AVENUE CANAL (300 YR. PROTECTION)

PROJECT STATUS REPORT

APRIL, 1991

BASED ON DRAFT 8E-4 (REV. 5/16/91)

PROJECT NAME AND PHASE	PROJECT NUMBER	PROPOSED BUDGET	ACT./EST. START DATE	ACT./EST. COMPL. DATE	REMARKS
PHASE IB-1	2049				100 YR. INTERIM PARALLEL PROTECTION AT DEFICIENT LOCATIONS (BIDS HAVE BEEN RECEIVED - LOW BID = $865,376 3/5/91)
DS.,GT.,TS.,SV.,AD.,CO.,RI.:		$100,000	---	COMPLETED	
CONSTRUCTION:		$950,000	MAY 1991	OCT. 1991	
PHASE IB-2					EARTHEN LEVEE IMPROVEMENTS NORTH OF ROBERT E. LEE BLVD.
DS.,GT.,TS.,SV.,AD.,CO.,RI.:		$100,000	---	APR. 1991	
CONSTRUCTION:		$1,200,000	JUL. 1991	OCT. 1991	
PHASE I-A					BRIDGE MODIFICATIONS (4), FLOODWALL AT PUMPING STATION NO. 4, AND FLOODGATES AT 2 BRIDGES
DS.,GT.,TS.,SV.,AD.,CO.,RI.:		$550,000	JUL. 1991	SEP. 1994	
CONSTRUCTION:		$4,440,000	JAN. 1993	JUN. 1994	
PHASE III					300 YR. PARALLEL PROTECTION 70% U.S.A.C.E., 30% O.L.B.
DS.,GT.,TS.,SV.,AD.,CO.,RI.:		$3,300,000	JUL. 1994	JUL. 1996	
CONSTRUCTION:		---	OCT. 1996	OCT. 1999	
SUM OF PHASES IB-1, IB-2, II, IA, AND III:		$10,640,000			

NOTES:

1. DS.,GT.,TS.,SV.,AD.,CO.,RI.: INCLUDES:
   A) PLANNING AND DESIGN
   B) GEOTECHNICAL ANALYSIS
   C) TESTING
   D) SURVEYING
   E) ADMINISTRATION
   F) COORDINATION
   G) RESIDENT INSPECTION
2. CONSTRUCTION COST INCLUDES A 15% CONTINGENCY FACTOR.
3. BUDGET PERIOD FOR FY 92 (JULY, 1991) AND BEYOND.
4. ESTIMATED TOTAL PROJECT CONSTRUCTION COST IS $76,354,386 INCLUDING U.S.A.C.E. PARTICIPATION.

LONSTAT8.WR1 (Revised 5/17/91)

Prepared By: DESIGN ENGINEERING, INC.

HURRICANE AND FLOOD PROTECTION PROJECTS

BOARD OF COMMISSIONERS
ORLEANS LEVEE DISTRICT

ORLEANS AVENUE CANAL
PROJECT STATUS REPORT

APRIL, 1991 *BASED ON DRAFT 8E-4 (REV. 5/16/91)*

PROJECT NAME AND PHASE	PROJECT NUMBER	PROPOSED BUDGET	ACT./EST. START DATE	ACT./EST. COMPL. DATE	REMARKS
PHASE I-A	24807				PARALLEL PROTECTION NORTH OF ROBERT
PL.,DS.,GT.,TS.,SV.,AD.,CO.,RI.:		$470,000	---	JAN. 1993	E. LEE BLVD. AND MODIFICATIONS TO
CONSTRUCTION:		$2,750,000	DEC. 1991	JAN. 1993	HARRISON AVE. BRIDGE
PHASE I-B	24814				MODIFICATIONS TO ROBERT E. LEE BLVD.
PL.,DS.,GT.,TS.,SV.,AD.,CO.,RI.:		$207,000	MAY 1991	APR. 1994	AND FILMORE AVE. BRIDGES
CONSTRUCTION:		$1,210,000	JAN. 1993	APR. 1994	
PHASE II-A	24811				PARALLEL PROTECTION (I-WALL) FROM
PL.,DS.,GT.,TS.,SV.,AD.,CO.,RI.:		$420,000	---	OCT. 1996	PUMPING STATION NO. 7 TO ROBERT E.
CONSTRUCTION:		$2,480,000	JUL. 1995	OCT. 1996	LEE BLVD. - EAST SIDE
PHASE II-B	24815				PARALLEL PROTECTION (T-WALL) FROM
PL.,DS.,GT.,TS.,SV.,AD.,CO.,RI.:		$450,000	---	MAY 1993	FILMORE AVE. TO ROBERT E. LEE BLVD.
CONSTRUCTION:		---	NOV. 1991	MAY 1993	- WEST SIDE (USACE AMT=$8,470,000)
PHASE II-C	24816				PARALLEL PROTECTION (T-WALL) FROM
PL.,DS.,GT.,TS.,SV.,AD.,CO.,RI.:		$1,345,000	MAY 1991	JAN. 1996	SOUTH OF HARRISON AVE. (STA. 30+00)
CONSTRUCTION:		$8,000,000	FEB. 1994	JAN. 1996	TO FILMORE AVE. - WEST SIDE
PHASE II-D	24817				PARALLEL PROTECTION (I-WALL) FROM
PL.,DS.,GT.,TS.,SV.,AD.,CO.,RI.:		$390,000	JUN. 1991	DEC. 1992	PUMPING STATION NO. 7 TO STA. 30+00
CONSTRUCTION:		$2,260,000	FEB. 1992	DEC. 1992	- WEST SIDE
PHASE III	24813				I-WALL CAPPING AND MODIFICATIONS
PL.,DS.,GT.,TS.,SV.,AD.,CO.,RI.:		$480,000	JAN. 1992	APR. 1994	TO PUMPING STATION NO. 7
CONSTRUCTION:		$2,791,000	MAR. 1993	APR. 1994	
TEST PILE PROGRAM	24818				DRIVE AND LOAD TEST PILES FOR
PL.,DS.,GT.,TS.,SV.,AD.,CO.,RI.:		$30,000	FEB. 1991	OCT. 1991	ENTIRE ORLEANS AVE. CANAL FLOOD
CONSTRUCTION:		$300,000	JUN. 1991	OCT. 1991	PROTECTION PROJECT
R/W ACQUISITION		$350,000	AUG. 1991		
SUM OF ABOVE PROJECTS:		$23,933,000			

NOTES:

1. PL.,DS.,GT.,TS.,SV.,AD.,CO.,RI. INCLUDES:
   A) PLANNING AND DESIGN
   B) GEOTECHNICAL ANALYSIS
   C) TESTING
   D) SURVEYING
   E) ADMINISTRATION
   F) COORDINATION
   G) RESIDENT INSPECTION
2. CONSTRUCTION COST INCLUDES A 10% CONTINGENCY FACTOR.
3. BUDGET PERIOD FOR FY 92 (JULY, 1991) AND BEYOND.
4. TOTAL PROJECT COST WITH U.S.A.C.E. PARTICIPATION IS $31,500,000.

ORLSTAT8.WR1 (Revised 5/17/91)
Prepared By: DESIGN ENGINEERING, INC.

FEB MEETING ON MILESTONES AT OLD.

Contract 1 F&M 3 Apr 92 Needs survey. ROE
2 F&M 3 May 92

Need R/W determination.
~~is by 3 Apr~~

Survey - ready to move on at this point. Only waiting for ROE.

Assumptions for Design Effort.
1. COE providing survey work.
2. COE preparing memorandum for cost.
3. COE has schedule for construction.

COE GDM supplement. Bridges & P.S.'s
- Corps would be receptive to Lev Bd doing DM supplement.

Letter to Diffley will address these issues.

Name of Survey Contractor.
2 Locations S&WB, City. Verbal is OK
OK. Can start survey.

Levee Footprint. - OLD would like to see for R/W purposes.

~~Attn: OLD, CF: DEI~~

Probably revise Column E to about a year later.
No effect on remaining dates.

Borrow – Spillway ~~OR~~ Contractor Design

Review Time – DEI ~~too short~~.

DEI wants a contingency in schedule.
assumptions for making schedules,

Ms Dorn – can't fund interior drainage – letter.
D.J. – Lower priority.

Test Pile Program has been awarded.
Driven 21 test piles
Load Test 2 Compl at R.E. Lee
Setting 1 up @ Filmore
Complete Comp Test ~~on~~ 29 Mar 92.

✓ ~~[illegible]~~

Meet the last Thursday of each month.
Alternate location.
except ~~25~~ 24th in March.

OUTFALL CANALS 9:30-11:00 Wed, ENG DIV CONF ROOM

1. Letter to Levee Board dtd Nov 8, 1991.

2. M-CACES implementation.

3. We need status of levee & FW work being conducted at London Ave.

   We have not reviewed any levee construction permits, yet recently reviewed a swimming pool permit up the canal.

4. DEVELOP A WORK SCHEDULE.

5. WE NEED NEW SURVEYS ~~& DOCUMENT~~ AND AERIAL PHOTOS.
   → MAY NEED TO RE-ESTABLISH A BASELINE

6. Bridges & P/S's are Lump Sum
   Cofferdams are not included, if req'd for I-Wall.

   I-Wall & T-Wall Quantities are done - as a group. We would need time to break out into jobs.

7. What would be acceptable to NOSH at pump stations? We figured T-Walls and valves.

8. We need to do a DM supplement for the bridges & pump stations. How does this affect the M-CACES stuff now?

9. Burk & Assoc. did a report dated Apr 86. A GDM for Parallel Protection.

10. A 10' Siphon & other major utilities are only Line items.

9/9/91

8. London Ave. Manpower, for DM Supplement # P&S; and Construction Scheduling — 1/2 mm

9. London Ave. DM Supplement — Start between Oct 91 - Jan 92.

ENGR 12 mm (Time frame 6 mos.)

TECH 6 mm

10. London Ave P&S.

Assume 1 Contract for FY 92, Awarded in July of 92. Requires P&S to be out for local review by Jan 92.

~~Length = 3,000,000 / $500/ft ⇒ 6000 ft (Too long)~~

Price in DM = 27,000,000 − 5,000,000 (T-Walls) − 9,000,000 (Bridges & D/s)
= 13,000,0000 for 26,000 ft
≈ $500/ft

Assume Contract Between Mirabeau & Benefit Streets. I-Wall & T-Wall ≈ 14,000 LF

I-Wall 5000ft

15 Nov 91

Outfall Canals

London Ave — Takes into consideration the reduced pump capacities due to the high head.

Flowline — no pumping @ #3 for high stages.
some pumping @ #4 " " " .

18 Nov 91

Shoot for Clear Span Bridges (Bailey Bridge? Fairlane)
Price for Clear Span. vs Additional Piles.

Talk to traffic engr (N.O.) regarding taking the bridges out simultaneously.

14 Nov 91

[redacted] LONDON AVE

1986 Survey Data.
As-Built will be taken ~~Dec 91~~ Jan 92

CORPS DOES LONDON AVE.
All design & const COE.

Floodproofing — @ S&WB OK'D.

Frank Mineo
Mody & Masters — 17th St Canal Report.

COE makes schedules for design & construction.

Oct 92 — Earliest Advertisement?

November 8, 1991

Project Management Office

Mr. Robert S. Maloney, President
Board of Levee Commissioners
Orleans Levee District
Suite 202 - Administration Building
New Orleans Lakefront Airport
New Orleans, Louisiana 70126

Dear Mr. Maloney:

This is in response to your October 29, 1991, letter asking for our execution plan for the parallel protection along the London Avenue and Orleans Avenue outfall canals, a feature of the Lake Pontchartrain hurricane protection project.

We have recently received instructions from our headquarters that directs us to take the following actions:

a. Do no design or construction on fronting protection.

b. Continue design on parallel protection.

c. Submit an analysis of the increased Federal and non-Federal cost shares to implement parallel protection using specified Corps of Engineers techniques for the detailed estimates for parallel protection.

d. Do no construction on parallel protection prior to receipt of further instructions from headquarters. (We assume these instructions will follow consideration of our analysis of increased Federal and non-Federal cost.)

The foregoing can be summarized by saying the project plan is parallel protection; we can go ahead with the design, and we cannot construct parallel protection until our headquarters gives us further instructions based on a detailed cost analysis. This seems to preclude any construction on parallel protection on London Avenue and Orleans Avenue outfall canals in fiscal year 1992. I am aware that you have awarded a test pile contract

on Orleans Avenue outfall canal and we were to start construction of a piece of floodwall on that canal (Reach IIB) based on your plans and specifications this fiscal year. As of now, we cannot give you credit toward your share of the project for the test pile contract nor can we start the construction on Reach IIB. I will keep you informed of developments on these issues throughout the year.

As parallel protection is now the project plan, we will do the design. We will use our in-house forces and Architect-Engineer contractors, selected by our procedures, as needed. I realize you have started on the design of the parallel protection on the Orleans Avenue outfall canal, especially on the test pile program and the Reach IIB floodwall. These items will need to be coordinated separately by our staffs to determine the most efficient way of handling that design effort.

There may be other items that need to be discussed between our staffs, but generally, the design of the parallel protection will be a Corps of Engineers effort. We need to expedite any transfer of data or designs so we can take over the full design effort as soon as possible, preferably by the end of this calendar year.

If you require any detailed information, please call me directly, or contact the project manager, Dan Judlin, at 862-2626.

Sincerely,

Michael Diffley
Colonel, U.S. Army
District Engineer

Copy Furnished:
Mr. Harry Collins
Chief Engineer
Orleans Levee District

CELMN-ED
CELMN-ED-C
✓CELMN-ED-D
CELMN-ED-E
CELMV-ED-P

243-4000

The Board of Commissioners

OF THE

Orleans Levee District

SUITE 202 — ADMINISTRATION BUILDING
NEW ORLEANS LAKEFRONT AIRPORT

New Orleans, La.

70126

PROTECTING YOU
AND YOUR FAMILY

October 29, 1991

Colonel Michael Diffley
District Engineer
U.S. Army Engineer District, New Orleans
P. O. Box 60267
New Orleans, LA 70160

RE: PARALLEL PROTECTION, LONDON AND
ORLEANS AVENUE OUTFALL CANALS

Dear Colonel Diffley:

So that the Orleans Levee District may proceed with necessary planning for its role vis.a.vis the U.S. Army Corps of Engineers in the execution of the parallel protection as authorized by Congress it is essential that we be appraised of your plans with respect to the execution of said works to assure efficient execution of the program and avoid unnecessary duplication of effort.

While we assume that the U.S. Army Corps of Engineers will undertake its traditional role with respect to the future continued execution of parallel protection works we would appreciate your advice as to how you will proceed vis.a.vis the Orleans Levee District.

Sincerely,

Robert S. Maloney
President

RSM:HDC:drb-D15

xc: Dan Judlin, USACE

1. M-CACES
   a. I-Wall & T-Wall quantities are given in GDM. Cofferdam's may need to be done.
   b. Bridges & Pump Stations will require extra work, especially the bridges. We will have to assume fronting protection @ the pump stations.
   c. Major utilities such as the 10' Siphon need addressing.
2. Levee Board has done both earth & structural work recently. We have not reviewed any permits to determine the level and adequacy of that work.

3. Burk's GDM was done for interim protection & to ASCE "state of the art" criteria, not COE.

4. We will need survey's ASAP. We used Burk's from their GDM, these were probably taken between 1984 - 1986. The levee board may have more recent surveys.

5. I would like to get new aerial photos ASAP.

6. We need to start thinking about Real Estate concerns. ROE for surveys & construction. These can affect our schedules.