(A0VO 4785)

CEMVN-ED-TM 27 June 01

MEMORANDUM FOR

CEMVN-ED-F

CEMVN-ED-C CEMVN-ED-G

SUBJECT: Review of Plans and Specifications for London Avenue Outfall Canal, Fronting Protection at Pumping Station No. 3, New Orleans, LA

- 1. The Orleans Levee Board entered into a contract with a local engineering firm to prepare plans and specifications for the subject project. The enclosed plans and specifications are being submitted by the firm to meet their final input submittal requirement.
- 2. Please provide a cursory review of these final plans and specifications to detect and correct errors or conflicts and return them, along with your comments, at the earliest practicable date, but not later than 27 July 01. All major comments must be addressed in the responding memorandum. Only minor comments should be marked in the specifications or on the drawings. Responses to comments that the A-E did not concur with are attached for your use, all other comments should have been incorporated.
- 3. A meeting will be scheduled with the AE to resolve any final comments prior to BCOE certification.
- 4 The estimated cost is approximately \$8,000,000, beginning in fiscal year 02.
- 5 Charge all review work to labor code L57652.
- 6 Points of contact are Mr. Darryl Bonura, X-2653 or Mr. Fred Young, X-1939.

JORGE R. ROMERO, P.E. Functional Team Leader (FTL)

Encls:

Geotech Br - 1 cy plans & specs Cost Engr Br - 1 cy plans & specs

Gen Engr Br – 5 cys plans & specs (1-Elec, 1-Mech, 1-Gen & Env Des, 1-Mtrl, 1-Specs)

## Studdard, Charles A MVN

From:

Studdard, Charles A MVN

Sent:

Tuesday, August 07, 2001 2:51 PM

To:

Bonura, Darryl C MVN

Cc:

Bivona, John C MVN

Subject: REVIEW OF LONDON AVENUE CANAL FRONTING PROTECTION AT PUMPING STATION NO. 3-

---ED-96-017

Tracking: Recipient

**Delivery** 

Bonura, Darryl C MVN Delivered: 8/7/01 2:51 PM Bivona, John C MVN Delivered: 8/7/01 2:51 PM

1. Our review comments for this project are inserted below.

- 2. The AE's preliminary estimated cost of \$8,850,000 is reasonable for this project.
- 3. Allow 730 calendar days (2 years) to complete the work, including adverse weather time. That allowed time is based on similar work in the area.

**Andy Studdard** 

Item No.	Item Description	Unit	Quantity	Unit Price	Amount
Front	5	No. 3			<del></del>
1	Mobilization & Demobilization	Lump	Lump Sum	\$300,000.00	\$300,000.00
2	Removal of Exist. Base Slab (12" Thick)	Sq.Yd.	800.0	\$10.00	\$8,000.00
3	Removal of Exist. Base Slab (Thk. Varies	Sq.Yd.	200.0	\$10.00	\$2,000.00
4	Removal of Exist. Retaining Walls	Sq.Yd.	1,000.0	\$10.00	\$10,000.00
5	Removal of Exist. Butterfly Gates and and Equipment	Each	2.0	\$2,000.00	\$4,000.00
6	Removal of Exist. Stop Log Structures at Lake Gate	Lump	Lump Sum	\$5,000.00	\$5,000.00
7	Removal of Exist. Sewer Force Main	Lump	Lump Sum	\$12,000.00	\$12,000.00
8	Removal of Exist. Constant Duty Discharge Piping	Lump	Lump Sum	\$2,000.00	\$2,000.00
9	Removal of Exist. Vacuum Pumps and Associated Machinery and Piping	Lump	Lump Sum	\$5,000.00	\$5,000.00
10	Removal of Horizontal Pump Discharge Piping	Each	5.0	\$4,000.00	\$20,000.00
11	Removal of Exist. Asphaltic Concrete	Sq.Yd.	100.0	\$10.00	\$1,000.00
12	Base Course	Cu.Yd.	18.3	\$40.00	\$730.40
13	Granular Material Backfill	Cu.Yd.	5,500.0	\$10.00	\$55,000.00
14	Select Material	Cu.Yd.	1,000.0	\$10.00	\$10,000.00
15	Temporary Earth Retaining Structure*	Lump	Lump Sum	\$1,500,000.00	\$1,500,000.00
16	Excavation	Cu.Yd.	3,200.0	\$9.00	\$28,800.00
17	Temporary Sheet Pile Dam (PZ-40)	Sq.Ft.	5,160.0	\$10.00	\$51,600.00
18	Temporary Butterfly Gates (5'-6" Sq.)	Each	4.0	\$15,000.00	\$60,000.00
19	Pile Load Test	Each	2.0	\$15,000.00	\$30,000.00
20	6" Thk. Reinforced Concrete Paving	Sq.Yd.	200.0	\$22.00	\$4,400.00
21	8" Thk. Reinforced Concrete Paving	Sq.Yd.	475.0	\$30.00	\$14,250.00
22	Steel Sheet Pile (Cut-Off Walls)(PZ-22)	Sq.Ft.	4,451.5	\$15.00	\$66,772.50
23	Steel Sheet Pile (Cut-Off Walls)(PSA-23)	Sq.Ft.	521.4	\$15.00	\$7,821.00
24	Steel Sheet Pile (Cut-Off Walls)(ZB-270)	Sq.Ft.	135.3	\$15.00	\$2,029.50
25	Steel Sheet Pile (Cut-Off Walls)(CZ-95)	Sq.Ft.	4.5	\$15.00	\$67.50
26 Source	Foundation Piling (HP 14x73) e: Pepper Associate, Inc.:ehp	Ln.Ft.	25,410.0	\$25.00 <sub>s</sub>	\$635,250.00 Sta3estimate:page 1
27	Steel Pipe Piles (12" ø)	Ln.Ft.	1,400.0		\$28,000.00

Itêm No.	Item Description	Unit	Quantity	Unit Price	Amount
Front	ng Protection - Drainage Pumping Station	1 No. 3			8/7/01
28	Round Timber Piles	Ln.Ft.	510.0	\$15.00	\$7,650.00
29	Concrete Sabilization Slab (6" Thick)	Sq.Yd.	1,028.6	\$6.00	\$6,171.60
30	Concrete Sabilization Slab (18" Thick)	Sq.Yd.	38.0	\$18.00	\$683.28
31	Concrete Sabilization Slab (25" Thick)	Sq.Yd.	74.7	\$24.00	\$1,792.80
32	Reinforced Conc. (Base Slabs)	Cu.Yd.	1,723.0	\$300.00	\$516,894.00
33	Reinforced Conc. (Walls)	Cu.Yd.	280.0	\$400.00	\$111,984.00
34	Reinforced Conc. (Roofs)	Cu.Yd.	3,648.6	\$400.00	\$1,459,456.00
35	Structural Metalwork	Lbs.	63,580.0	\$1.25	\$79,475.00
36	Dewatering System	Lump	Lump Sum	\$60,000.00	\$60,000.00
37	Roadway Work	Lump	Lump Sum	\$25,000.00	\$25,000.00
38	Temporary Detours and Barricades	Lump	Lump Sum	\$10,000.00	\$10,000.00
39	Aluminum Handrail and Posts	Ln.Ft.	816.0	\$25.00	\$20,400.00
40	Aluminum Bar Grating	Sq.Ft.	910.0	\$20.00	\$18,200.00
41	24"ø Weld. Steel Fresh Water Flush Pip	Ln.Ft.	120.0	\$250.00	\$30,000.00
42	8" ø C.I. Pipe w/Metal Support Brackets	Ln.Ft.	100.0	\$100.00	\$10,000.00
43	2" ø P.V.C. Pipe	Ln.Ft.	50.0	\$100.00	\$5,000.00
44	Welded Steel Discharge Adapter Pipe (Reducer, 12'-0" dia. to 11'-9" dia.)	Lbs.	70,219.0	\$1.20	\$84,262.80
45	Welded Steel Discharge Adapter Pipe (Reducer, 13'-4" ø to 11'-9"ø)	Lbs.	85,654.0	\$1.30	\$111,350.20
46	Pipe Saddles for Welded Steel Discharge	Each	5.0	\$6,000.00	\$30,000.00
47	Aluminum Manhole w/Ladder	Each	5.0	\$3,000.00	\$15,000.00
48	Sluice Gates (81"x96") w/Electric Motor Operator	Each	4.0	\$60,000.00	\$240,000.00
49	Sluice Gates (108"x96") w/Electric Motor Operator	Each	6.0	\$85,000.00	\$510,000.00
50	Vacuum Pump Upgrade	Each	2.0	\$80,000.00	\$160,000.00
51	Area Lighting and Electrical Controls	Lump	Lump Sum	\$140,000.00	\$140,000.00
52	Site Drainage Pumps & Piping	Lump	Lump Sum	\$32,000.00	\$32,000.00
53	Temporary 48" I.D. Dry Weather Flow Pi	Ln.Ft.	180.0	\$500.00	\$90,000.00
s Spure	Concrete Deck Over Sution Basin	Lump	Lump Sum	\$50,000.00	Sta3estimate:page 2 \$50,000:00

Itém No.	Item Description	Unit	Quantity	Unit Price	Amount
Front S-2	projection - Drainage Pumping Station Security Chain Link Fence	No. 3. Ln.Ft.	300.0	\$10.00	\$3,080.001
S-3	Modifications to Marigny Canal	Lump	Lump Sum	\$50,000.00	\$50,000.00
	\$6,742,040.58 \$674,204.06				
	\$7,416,244.64				
Item No.	Item Description RELOCATIONS	Unit	Quantity	Unit Price	Amount
1	S&WB Electric Manhole	Each	2.0	\$6,000.00	\$12,000.00
2	Relocation of S&WB Electric Feeders	Ln.Ft.	1,200.0	\$80.00	\$96,000.00
3	Relocation of 48"ø Sewer Force Main	Ln.Ft.	810.0	\$500.00	\$405,000.00
4	Relocation of 48"ø Constant Duty Discharge	Ln.Ft.	120.0	\$500.00	\$60,000.00
	\$573,000.00 \$57,300.00				
	\$630,300.00				
	\$7,416,244.64 \$630,300.00				
	\$8,046,544.64				
	<u>\$804,654.46</u>				

TOTAL - Estimated Construction Cost: \$8,851,199.10

Source: Pepper Associate, Inc.:ehp

Sta3estimate:page 3

<sup>\*</sup> Revised from \$400,000 to \$1,500,000 based on preliminary design performed by P&A. Increase in probable cost is partially due to increase in length of sewer force main relocation.