

PROJECT COMPLETION REPORT¹

PROJECT NAME

**Penchant Basin Natural Resources Plan,
Increment 1**

CWPPRA/STATE PROJECT NO.

TE-34

Report Date: July 19, 2012

BY: Charles Slocum

1. Project Managers/Contracting Officer:

CPRA Project Manager	Bill Feazel	Telephone	(225) 247-2089
CPRA Construction Project Manager	Brian Babin	Telephone	(985) 447-0956
CPRA Monitoring Manager	Jason Curole	Telephone	
Federal Agency Project Manager	John Jurgensen/ Quin Kinler	Telephone	(318) 473 7694 (225) 382-2047
Federal Agency Contracting Officer	Ralph Broome	Telephone	(318) 473-7781

2. Location and description of projects as approved for construction by Task Force.

The project is bounded on the north by the Gulf Intracoastal Waterway (GIWW), the east by a north/south line from Lake DeCade to the GIWW, the south by Lake Merchant and Lost Lake, and to the west by a north/south line from Lost Lake to Avoca Island in Terrebonne Parish, Louisiana.

The project includes about 6,529 feet of foreshore rock dike (shoreline protection) along the southern bank of Bayou Chene at its intersection with Bayou Penchant and approximately 35 acres of marsh creation. Two freshwater introduction structures, consisting of a) sheet pile structure with 10-48" flap gates in Superior Canal and b) sheet pile weir with 10' boat bay opening and six 5' x 5' flap gated at Brady Canal, will be constructed to improve freshwater conveyance from Bayou Penchant into the central Terrebonne marshes. On the north bank of Bayou Decade extending from Lake decade to Turtle Bayou (12,000ft) an earthen embankment will be maintained and from Voss Canal to Lost Lake (14,000 ft) an earthen embankment will be constructed to 4.0 feet NAVD88 with 6:1 side slopes and rock armoring on the south-face. Within the embankment, a sheet pile weir with a 10 ft wide boat bay, will be constructed at each of two existing channels that intersect Bayou Decade.

3. Final, as-built features, boundaries and resulting acreage (use attachments if necessary).

Approximately 14,500 linear feet of earthen embankment armored with rock riprap along with an access floatation channel along the north bank of Bayou DeCade. Within this reach of Bayou DeCade, two sheet pile water control structures were installed at sites #4, #5, each with boat bays. Two sheet pile water control structures with 6 Aluminum flap gates each was installed, one at Brady Canal with a 10' boat bay and the other at Superior Canal without a boat bay. Additionally approximately 30 acres of marsh creation was included in the project at the Mouth of Penchant Bayou. This consists of construction of approximately 4,813 linear feet of containment dikes and 187,000 cubic yards of hydraulic dredged fill placement for marsh creation. Protecting the marsh creation area and acting as containment for the dredge fill, 6,667 linear feet of rock dike was installed at the Mouth of Penchant.

The exact location and construction dimensions of the project can be seen in the attached "As-Built" drawings

¹To be filled out at construction completion by either the CPRA Construction Project Manager or the Federal Agency Contracting Officer depending on which organization had lead role for construction of project. (Except for some items under # 13).

Actual Benefitted Acres 675 acres

4. Key project cost elements

(MIPR # = 83179326)	CWPPRA Project Cost Estimates**	Cost Incurred as of Construction Completion
Construction	\$ 9,723,048.00	\$ 10,020,307.91
E & D	\$ 1,977,131.92	\$ 1,977,131.92
Landrights	\$ 56,148.72	\$ 56,148.72
Monitoring	\$ 855,145.00	\$ 582,568.57
O & M	\$ 1,855,804.00	\$ 3,533.13
Total	\$ 14,467,277.64	\$ 12,639,690.25

As of 6-16-2014

** Most recent estimate from Cost Share Agreement.

5. Item of Work

Item No.	Work	Estimated Quantity	Unit	Estimated Unit Price	Estimated Amount	Unit Bid Price	Bid Amount	Final Quantity	Final Amount	% Over/Under	
1	Mobilization and Demobilization	1	Job	\$750,000.00	\$750,000.00	\$160,000.00	\$160,000.00	1	\$160,000.00	100.00%	
2	Pollution Control	1	Job	\$40,000.00	\$40,000.00	\$50,000.00	\$50,000.00	1	\$50,000.00	100.00%	
3	Construction Surveys	1	Job	\$90,000.00	\$90,000.00	\$195,000.00	\$195,000.00	1	\$195,000.00	100.00%	
4	Piling, Steel Sheets	13,642	SF	\$47.50	\$647,995.00	\$41.00	\$559,322.00	13,642	\$559,322.00	100.00%	
5	Piling, Round Timber, 50 ft	77	EA	\$1,500.00	\$115,500.00	\$1,200.00	\$92,400.00	77	\$92,400.00	100.00%	
6	Excavation, Site Work	1	Job	\$25,000.00	\$25,000.00	\$90,000.00	\$90,000.00	1	\$90,000.00	100.00%	
7	Excavation, Access Floatation , Mouth of Penchant	1	Job	\$550,000.00	\$550,000.00	\$350,000.00	\$350,000.00	1	\$350,000.00	100.00%	
8	Excavation, Marsh Creation	220,000	CY	\$6.00	\$1,320,000.00	\$7.00	\$1,540,000.00	187,000.47	\$1,309,003.29	85.00%	
9	Earthfill, Earthen Embankment, Bayou DeCade	14,285	LF	\$60.00	\$857,100.00	\$52.00	\$742,820.00	14,285	\$742,820.00	100.00%	
10	Earthfill, Containment Dike	4,813	LF	\$30.00	\$144,390.00	\$25.00	\$120,325.00	4,813	\$120,325.00	100.00%	
11	Rock Riprap, R150	32,090	Tons	\$65.00	\$2,085,850.00	\$61.00	\$1,957,490.00	32,090	\$1,957,490.00	100.00%	
12	Rock Riprap, R300	42,409	Tons	\$65.00	\$2,756,585.00	\$62.00	\$2,629,358.00	41,576	\$2,577,712.00	98.04%	
13	Water Control Gates, 5 ft by 5 ft	12	EA	\$15,000.00	\$180,000.00	\$9,000.00	\$108,000.00	12	\$108,000.00	100.00%	
14	Metal Fabrication, Settlement Plates	7	EA	\$2,500.00	\$17,500.00	\$2,500.00	\$17,500.00	7	\$17,500.00	100.00%	
15	Metal Fabrication and Installation, Sheet Pile Cap, Rails, & Appurtenances	1	Job	\$80,000.00	\$80,000.00	\$150,000.00	\$150,000.00	1	\$150,000.00	100.00%	
16	Identification Markers or Plaques, Permanent Warning Signs	45	EA	\$2,800.00	\$126,000.00	\$2,000.00	\$90,000.00	45	\$90,000.00	100.00%	
17	Identification Markers or Plaques, Staff Gages	18	EA	\$2,000.00	\$36,000.00	\$600.00	\$10,800.00	18	\$10,800.00	100.00%	
18	Contractor Quality Control	1	Job	\$75,000.00	\$75,000.00	\$40,000.00	\$40,000.00	1	\$40,000.00	100.00%	
19	Geotextile	69,501	SY	\$8.00	\$556,008.00	\$7.50	\$521,257.50	69,501	\$521,257.50	100.00%	
				Total Estimate	\$10,452,928.00	Total Bid	\$9,424,272.50	Sub-Total	\$9,141,629.79		
M 1	Includes buy American Act into the Contract - NO COST										
							Total Modification #1		\$0.00		
M 2	To change vendors code for payment processing - NO COST										
							Total Modification #2		\$0.00		
M 3	Purpose to eliminate the geotextile from face of rock dike and to change work limits from 10' to 20'										
20	Geotextile Removed	1	Job			\$20,539.66	\$20,539.66	1	\$20,539.66	100.00%	
							Total Modification #3		\$20,539.66		

M 4	needed as a result of rock riprap below the required excavation limits on the Brady Canal site hindering installation of the sheet pile									
6A	Excavation, Site Work	1	Job			\$2,784.08	\$2,784.08	1	\$2,784.08	100.00%
							Total Modification #4		\$2,784.08	
M 5	this mod allows for government provided signs to be installed at the Mouth of Penchant and the marsh creation area.									
21	Sign Installation	1	Job			\$1,992.00	\$1,992.00	1	\$1,992.00	100.00%
							Total Modification #5		\$1,992.00	
M 6	To remove unforeseen wooden structure at the Superior Canal site hindering installation of the sheet pile structure									
6B	Excavation, Site Work	1	Job			\$26,999.00	\$26,999.00	1	\$26,999.00	100.00%
							Total Modification #6		\$26,999.00	
M 7	To install PVC pipe markers at the mouth of Penchant and the marsh creation area									
22	Mod #7 Install PVC Post	1	Job			\$5,176.44	\$5,176.44	1	\$5,176.44	100.00%
							Total Modification #7		\$5,176.44	
M 8	To add CLIN item to allow for payment of delay claim and to allow for overrun and underrun quantities for contract close out									
11A	Rock Riprap R150	2,338	Tons			\$61.00	\$142,618.00	2,338	\$142,618.00	100.00%
19A	Geotextile	9,674	SY			\$7.50	\$72,555.00	9,674	\$72,555.00	100.00%
23	Checklist Delay Claim	1	Job			\$17,635.48	\$17,635.48	1	\$17,635.48	100.00%
							Total Modification #8		\$232,808.48	
							Final Contract Price		\$9,431,929.45	

6. Construction and construction oversight

Prime construction contractor	The Delaney Group, Inc.
Subcontractor	Luhr Bros
Subcontractor	Frisco
Subcontractor	Inland Marine
Subcontractor	BS Equipment
Subcontractor	Frogco
Subcontractor	Southwind Dredging
Original construction contract	\$ 9,424,272.50
Change orders	\$ 290,299.66
Under runs	(\$ - 282,642.71)
Final construction contract	\$ 9,431,929.45

Const. oversight contractor	N/A	Const. amt.	\$ N/A
Cons. O.S./Admin. agency	NRCS	Est. amt.	\$ N/A

7. Major equipment used.

Manitowoc 4600
Linkbelt 240 Track Hoe Excavator
Cat 320 LL Marsh Buggy Excavator
Cat 324 LL Marsh Buggy Excavator
American HC60 Terex Crane
Caterpillar 345D Excavator
Kobelcosk 160LC Excavator
Linkbelt 318 Crane
John Deere 240D Marsh Buggy Excavator

ALBOB Tug Boat
Tug Danny Joe
Bayou Lady Tug Boat
S/V I Tug Boat
Ellicott 570 12" Suction Dredge
Frisco II Spud Barge
Frisco III Spud Barge
Frisco IV Spud Barge
Frisco V Deck Barge

JMC Spud Barge
RG-426 Spud Barge
GD-2012 Spud Barge
L-401 Spud Barge
Rooster Spud Barge
LIL JB Spud Barge
LL-101 Supply Barge

8. Discuss construction sequences and activities, problems encountered, solutions to problems, etc.

Excavate floatation and place spoil as required for access floatation on Bayou Penchant then Construct approximately 4,813 linear feet of earth containment for marsh creation areas.

Place about 6,667 linear feet of rock containment dike for approximately 30 acres of marsh creation and dredge approximately 187,000 cubic yards.

Excavate and place spoil as required for access floatation on Bayou Decade and construct approximately 14,500 linear feet of earthen embankment armored with rock riprap.

Install a water control structures at site # 5 then site # 4, each with boat bays, Construct a sheet pile water control structure with 6 aluminum flap gates and a 10' boat bay at Brady Canal and a sheet pile water control structure with 6 aluminum flap gates at Superior Canal, with no boat bay.

9. Construction change orders and field changes.

Modification #1: The purpose of this mod is to include the Buy American Act clause in the contract. Changes the Contract FAR clause 52.225.9 Buy American Act–Construction Materials (Feb 2009) to 52.225-11, Buy American Act Construction Materials under Trade Agreements Act (Aug 2009) . No additional cost due to this modification.

Modification #2: The purpose of this mod is to changes the contractors Vendor Code for payment processing. No additional cost for this modification

Modification #3: The purpose of this mod is to change the work limits on the rock dike along Bayou Decade from 10 feet to 20 feet and eliminates the geotextile on the face of the rock dike at the Mouth of Penchant. Add bid item 20 geotextile removal to the contract. The net cost increases this modification by \$20,539.66.

Modification #4: The purpose of this mod is to remove unknown rock structure below the excavation limits in the work area hindering the installation of the sheet piling at Brady Canal site. The net increase to bid item 6 for this modification is \$2,784.08.

Modification #5: The purpose of this mod is to install NRCS provided signs in the work area at the Mouth of Penchant and the marsh creation area. New bid item 21 increases the net contract amount by \$1,992.00 for this modification.

Modification #6: The purpose of this mod is needed as a result of removal unknown wooden structure in the work area at Superior Canal site hindering the installation of the sheet piling structure. The net increase to bid item 6 for this modification is \$26,999.00.

Modification #7: The purpose of this mod is to install additional PVC warning post, between the permanent warning signs, in the work area at the Mouth of Penchant and the marsh creation area. New bid item 22 increases the net contract amount by \$5,176.44 for this modification.

Modification #8: The purpose of this mod is to add line item to the contract to allow for billing of cost incurred due to claim of government delay and to zero out line items which have remaining quantity that will not be billed or had a quantity overrun to allow for contract closeout.

CLIN #8, quantity is decreased from 220,000 cy to 187,000.47 cy and value of this item is decreased from \$1,540,000.00 to \$1,309,003.29.

CLIN #11, quantity is increased from 32,090 tons to 34,428 tons and the value of this item is increased from \$1,957,490.00 to \$2,100,108.00.

CLIN #12, quantity is decreased from 42,409 tons to 41,576 tons and the value for this item is decreased from \$2,629,358.00 to \$2,577,712.00.

CLIN #19, is increased from 69,501 sy to 79,175 sy and the value of this item is increased from \$521,257.50 to \$593,812.50.

CLIN 23, is added to the contract to allow for claim payment, value is \$17,635.48.

The total contract value is decreased from \$9,481,763.68 to \$9,431,929.45.

10. Pipeline and other utility crossings.

<u>Structure</u>	<u>Owner</u>	<u>Rep. To Contact</u>
16" and 22" Pipelines	Shell	Mr. Kevin Arceneaux Office (985) 873-3429 Cell (985) 790-2868

11. Safety and Accidents.

NONE

12. Additional comments pertaining to construction, completed project, etc.

NONE

13. Significant Construction Dates: To be filled out by CPRA Construction Project Manager or Contracting Officer for construction for Agency responsible for construction.

	Date	Bid I.D.
Bid I.D. (Construction, Vegetation, etc.)	11/24/2009	AG-7217-S-10-0003
Bid Opening	2/12/2010	
Construction Contract Award	4/6/2010	AG-7217-C-10-0005
Preconstruction Conference	5/24/2010	
Notice to Proceed	5/25/2010	
Mobilization	6/2/2010	
Construction Start	6/9/2010	
Construction Completion	8-29-2011	
Final Acceptance	9/7/2010	

If different bids are taken, repeat this table to individually reflect each bid and attach tables.