ATTACHMENT III

JONATHAN DAVIS WETLANDS RESTORATION

PROJECT COMPLETION REPORT

PROJECT COMPLETION REPORT[1]

PROJECT NAME **Jonathan Davis Wetland Restoration Construction Unit #2**

CWPPRA/STATE PROJECT NO. **BA-20**

Report Date: **November 9, 2001** **BY:** **USDA - NRCS**

1. Project Managers/Contracting Officer:

DNR Project Manager	**Luke LaBas**	**Telephone**	**(225) 342-4102**
DNR Construction Project Manager	**John Hodnet**	**Telephone**	**(225) 342-7305**
DNR Monitoring Manager	**Darron Lee**	**Telephone**	**(985) 395-0990**
Federal Agency Project Manager	**John Jurgensen**	**Telephone**	**(318) 473-7694**
Federal Agency Contracting Officer	**Charles Phillips**	**Telephone**	**(318) 473-7796**

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

The project is located in the Barataria Basin, east of Lake Salvador and is bounded on the north by the Pailet Canal, on the east by Louisiana Highway 301, on the south by Bayou Perot and Bayou Rigolettes, and on the west by the Gulf Intracoastal Waterway. The project is located in part of T16S-R22E Section 1 and part of T16S-R23E Section 2. This project is intended to counter wetland loss in the Jonathan Davis Project Area that has been caused by a number of factors. Increased water exchange, saltwater intrusion, tidal scour, and shoreline erosion along Bayous Perot and Rigolettes are the major problems affecting the area.

This project will be completed in multiple construction contracts. To date, two phases of construction have been completed, and two additional construction contracts will be required to complete the project. **This project completion report is representative of only that portion of the work completed in Construction Unit #2.** The work completed in Construction Unit #2 is located southeastern portion of the project area.

This project consisted of the installation of one steel sheet pile weir at Site 22 located at the upper end of the access canal paralleling LA Highway 301 and 1,385 linear feet of canal bank stabilization in this same canal. Also 2,400 linear feet of shoreline stabilization was in the base bid. An additional 1,000 linear feet of shoreline stabilization was included with Additive Item A, and an additional 567 linear feet of shoreline stabilization was included with Additive B, for a total of 3,967 linear feet of shoreline stabilization. The award was for the base bid and Additives A & B. All of the shoreline stabilization work occurred on the north bank of Bayou Rigolettes starting at the access canal where Site 22 is located and proceeding west.

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

All of the rock riprap used in construction of this project was COE R-400 gradation. Both the shoreline and canal stabilization sections placed rock with a 6' top width and 3:1 side slopes. The canal stabilization sections were constructed to an elevation of +3.0 and the shoreline stabilization sections were constructed to an elevation of +3.5 (NAVD 88). All rock sections were constructed on a geotextile fabric. Settlement plates were installed along the canal section of the rock riprap. The weir at Site 22 consists of steel sheet pile wing walls constructed to a top elevation of +2.0 with a 25' open bay in the center. The open bay has a rock riprap invert at –1.0 elevation. For additional information see attached "AS BUILT" plans.

tual Benefited Acres

4. **Key project cost elements**

	CWPPRA Project Cost Estimates**	Cost Incurred as of Construction Completion
Construction	**THIS INFORMATION WILL BE COMPLETED WHEN ALL PHASES OF THE CONSTRUCTION FOR THIS PROJECT IS COMPLETED**	
E & D		
Landrights		
Monitoring		
O & M		
Total		

**** Most recent estimate from CWPPRA Project estimates Report produced by USACOE.**

5. **Items of Work**

Item No.	Work	Est. Quantity	Unit	Est. Unit Price	Est. Amount	Final Quant.	Bid Unit Price	Final Amount	% Over /Under
1	Mobilization and Demobilization	1	Job	L.S.	$30,000	1	$15,000.00	$15,000.00	0.0%
2	Pollution Control	1	Job	L.S.	$10,000	1	$4,200.00	$4,200.00	0.0%
3	Steel Sheet Piling	1426	S.F.	$24	$34,224	1426	$35.20	$50,195.20	0.0%
4	Rnd. Timber Piling, 50 ft	7	EA	$800	$5,600	7	$880.00	$6,160.00	0.0%
5	Rock Riprap, 400#	9,035	Tons	$36	$325,260	11019	$33.50	$369,136.50	22.0%
6	Metal Fabrication, Warning Sign Supports	2	EA	$500	$1,000	2	$990.00	$1,980.00	0.0%
	Metal Fabrication, Settlement Plates	2	EA	$900	$1,800	2	$1,000.00	$2,000.00	0.0%
8	Metal Fabrication, Site 22	1	Job	$10,000	$10,000	1	$13,200.00	$13,200.00	0.0%
9	Geotextile	12,895	S.Y.	$4.50	$58,028	13663.82	$3.00	$40,988.46	6.0%
10	Construction Surveying	1	Job	$16,000	$16,000	1	$7,000.00	$7,000.00	0.0%
11	Contractor Quality Control	1	Job	$8,000	$8,000	1	$5,000.00	$5,000.00	0.0%
Additive A									
12	Rock Riprap, 400#	2,380	Tons	$42	$99,960	4229	$33.50	$141,671.50	77.7%
13	Geotextile	3,445	S.Y.	$6.00	$20,670	4159	$3.00	$12,477.00	20.7%
14	Construction Surveying	1	Job	$4,000	$4,000	1	$1,500.00	$1,500.00	0.0%
15	Contractor Quality Control	1	Job	$1,500	$1,500	1	$1,000.00	$1,000.00	0.0%
Additive B									
16	Rock Riprap, 400#	1,435	Tons	$42	$60,270	2239	$33.50	$75,006.50	56.0%
17	Geotextile	1,960	S.Y.	$6.00	$11,760	2155	$3.00	$6,465.00	9.9%
18	Construction Surveying	1	Job	$2,000	$2,000	1	$1,000.00	$1,000.00	0.0%
19	Contractor Quality Control	1	Job	$500	$500	1	$500.00	$500.00	0.0%
				Original Est. Amount $700,571.50					
Modification #2				Original Bid Amount			$594,110.20		
20	Temporary Signs Site 22A	6	EA	$500	$3,000	4	$800.00	$3,200.00	-33.3%
							Final Contract Amount	**$757,680.16**	

6. **Construction and construction oversight**

Prime construction contractor	**Bertucci**
Subcontractor	**JAG**
Original construction contract	**$594,110.20**
Change orders	**$3,200.00**
Over/Under runs	**$160,369.96**
Final construction contract	**$757,680.16**

Const. oversight contractor	**ABMB Engineers, Inc.**	**Final amt.**	**$76,195.66**
Cons. O.S./Admin. agency	**NRCS**	**Est. amt.**	**$79,199.50**

. **Major equipment used.**

Spud barge AB-11 with Bucyrus Erie 71B Dragline
Spud barge AB-4 with Bucyrus Erie 88B Dragline
Spud barge BB-105 with 3400 Linkbelt Hydraulic Excavator
Spud barge KS-112 with 2800 Linkbelt
Spud barge FS-117 with 220 Komatsu Excavator
Spud barge KS-418 with 3400 Linkbelt
M.V. Julie Marie Tug
M.V. Brad C Tug
Various rock barges

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

The contractor mobilized on the site and started by performing surveys to locate the shoreline dike and access channels. Excavation of the access channel for the shoreline segment of the construction began. Surveys continued to locate the placement of the rock revetment, the access channel for site 22A, and the rock dike for site 22A. Upon completion of the access channel excavation along the shoreline segment, the contractor began grubbing, placing geotextile and rock riprap within this segment.

While still placing rock on the shoreline segment, the contractor began excavation of the access channel along Site 22A from the bayou to the Site 22 structure location. Geotextile and rock riprap was then placed for the entire length of the Site 22A segment.

Construction of the structure at Site 22 began after the completion of the rock placement. This structure was the last item of the construction to be completed.

9. Construction change orders and field changes.

Modification #1 adjusted the performance time of the contract. This was done to accurately reflect the anticipated weather days in the months when the construction would be taking place due to the time of the year in which the notice to proceed was issued. This was a no cost change modification.

2. Modification #2 added temporary warning signs to the work at site 22A and the shoreline segments. This was needed to protect boaters from hitting the spoil that was placed in Bayou Rigolettes as a result of the excavation for floatation need to access the work.

3. A section of Site 22A (canal bank stabilization) rock riprap was shifted to the west in an area where the contractor had excavated the floatation channel too close to the existing bank (see "As Builts").

10. Pipeline and other utility crossings.

Structure	Owner	Rep. To Contact
NONE		

11. Safety and Accidents.

One accident was recorded in the Job Diary. A worker smashed his fingers off loading settlement plates from a boat to the barge. First aid was administer to the worker, and he returned to work the same day. The contractor's employees had to be reminded to wear their hard hats and life vests on several occasions.

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

See attached NRCS Supplement

CONSTRUCTION SPECIFICATIONS

List any significant items in the construction specifications which caused problems, need clarification or changes for future contracts of this nature.

DESCRIPTION OF ITEM IN SPECIFICATIONS	RECOMMENDATIONS FOR FUTURE CONTRACTS
1. Final grade of any type dike at final inspection.	The specification needs to explicitly state the following: The allowable vertical tolerance of the placed (rock riprap, earth dike, etc.) shall be to the grade as shown in the plans plus 0.5 feet at the time of final inspection and acceptance.
2. Contractor Quality Control – Requirements for daily QC reports	The Items of work need to expand on Section 6 Records of the National Spec. to include the following: In addition to any tests, the contractor shall provide to the Inspector each day at the job site a daily quality control report for the previous days activities that includes the following items: Date Report No. Weather Conditions Quantities of Work Performed A narrative description of the work performed with the location and the equipment and labor used to perform the work. Materials delivered to job site Any safety items Personnel on site and hours worked (supervisory, skilled, and unskilled) Equipment on site and hours operated General comments Signed by Contractor QC representative. These daily reports shall be inclusive of the work, equipment, personnel, etc. of the prime contractor and any and all subcontractors on the job site.

GENERAL COMMENTS

List any significant items which worked well and should be repeated or which caused problems, need clarification or changes for future contracts of this nature.

DESCRIPTION OF ITEM	RECOMMENDATIONS FOR FUTURE CONTRACTS
1.Geotextile quantity computations	Typically geotextile is installed in 300' length panels for rock dike construction. When estimating the quantities of geotextile, the designer should break the segment up into 300' lengths and then size the panel for the widest foot print within that length. Segments should also be broken at channels, etc. An additional 5% should be added to the total estimated quantity to account for the differential settlement that occurs along the dike.

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

Bid I.D. (Construction, 50-7217-1-4)	Date
Bid Opening	12/15/00
Construction Contract Award	1/23/01
Preconstruction Conference	2/15/01
Notice to Proceed	2/19/01
Mobilization	3/6/01
Construction Start	3/6/01
Construction Completion	5/24/01
Final Acceptance	5/29/01

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

Other significant Project Dates

	Date
Project Implementation closeout**	This item will be completed when all phases of the project are constructed
Start of Preconstruction Monitoring***	
Preconstruction Aerial Photography Acquisition***	
Monitoring Plan Completion***	

** Final implementation closeout is made by either the DNR Project Manager or the Federal Agency Contracting Officer depending on which organization had lead role for construction of project.

*** To be completed by DNR Project Manager.

NRCS SUPPLEMENT TO COMPLETION REPORT

CONTRACT ADMINISTRATION

List any significant problems encountered in the administration of the construction contract and recommended solution for future contract of like nature.

DESCRIPTION OF PROBLEM ENCOUNTERED	RECOMMENDATIONS FOR FUTURE CONTRACTS
1. There were significant quantity variations encountered on this contract. The concern is that the CO must be informed in order that the Government does not allow work to be performed in excess of available funds.	The COTR will monitor closely the quantities during construction and report weekly to the CO. Any potential over/under runs will be noted in the weekly reports. Also the Design Section will provide to the COTR in the design folder the estimated quantities of rock, geotextile, etc. by like reach or structure. This will provide the COTR a better basis to determine if quantities are running under or over the estimates early on in the construction process.
2. This particular contract utilized an engineering firm to perform the quality assurance requirements. The CO was different for the construction contract and QA contract. This caused some limited difficulties in timely communication of needed actions to the QA contractor.	Recommend in the future, that if possible, the same CO be utilized for both construction contract and the QA contract that will be overseeing the construction.

CONSTRUCTION PLANS

List any items pertinent to the plans which caused problems, need clarification or changes for future contracts of this nature.

DESCRIPTION OF ITEM IN PLANS	RECOMMENDATIONS FOR FUTURE CONTRACTS
1. Change the location of the conspicuity tape on the weir cap of sheet pile weirs.	Show the location of the conspicuity tape at the top of the weir cap.