Project Completion Report

LAKE CHAPEAU SEDIMENT INPUT AND HYDROLOGIC RESTORATION
TERREBONNE PARISH, LOUISIANA
TE-0026

Prepared By:

DELTA COAST CONSULTANTS, LLC
4924 Hwy. 311 - Houma, LA 70360

Date:  October 1, 2018
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</table>
Project Completion Report

Project Name: Lake Chapeau Sediment Input and Hydrologic Restoration Project
CPRA/State Project No.: TE-0026
Report Date: October 1, 2018
By: Delta Coast Consultants

Project Managers/Contracting Officer/Construction Inspector

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPRA Project Manager</td>
<td>Brian Babin</td>
<td>(985) 447-0956</td>
</tr>
<tr>
<td>Sr. Project Manager</td>
<td>David Boudreaux</td>
<td>(985) 655-3108</td>
</tr>
<tr>
<td>Project Inspector</td>
<td>Randall Poincot</td>
<td>(985) 860-3270</td>
</tr>
</tbody>
</table>

Location and Description of Project

The Lake Chapeau Sediment Input and Hydrologic Restoration Project (TE-0026) involved the degradation of the TE-26 Structure No. 4 and removal of existing timber piles, signage, and steel barricade system. This project was located in Terrebonne Parish, Louisiana along the west bank of Four League Bay bordering Point au Fer Island. A construction inspector was required on site for the duration of the project which took approximately (3) days.

Final As-Built Features

The Lake Chapeau Sediment Input and Hydrologic Restoration Project (TE-0026) consisted of the degradation of the TE-26 Structure No. 4 and removal of existing timber piles, signage, and steel barricade system. The “As-Built” plans submitted show the pre-construction and post-construction elevations of the project area.

Items of Work

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Final Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mobilization/Demobilization</td>
<td>1</td>
<td>LS</td>
<td>$80,000.00</td>
<td>$80,000.00</td>
</tr>
<tr>
<td>2</td>
<td>Topographic and Bathymetric Surveying</td>
<td>1</td>
<td>LS</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
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<tr>
<td>3</td>
<td>Pre-Construction Hazard Safety</td>
<td>1</td>
<td>LS</td>
<td>$20,000.00</td>
<td>$20,000.00</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td></td>
<td></td>
<td></td>
<td>$130,000.00</td>
</tr>
</tbody>
</table>
## Construction and Construction Oversight

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Lake Chapeau Weir No. 4 Removal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime Construction Contractor</td>
<td>Leblanc Marine, LLC</td>
</tr>
<tr>
<td>Subcontractor</td>
<td>N/A</td>
</tr>
<tr>
<td>Original Construction Contract</td>
<td>$130,000.00</td>
</tr>
<tr>
<td>Change Orders</td>
<td>N/A</td>
</tr>
<tr>
<td>Over/Under Runs</td>
<td>N/A</td>
</tr>
<tr>
<td>Damages</td>
<td>N/A</td>
</tr>
<tr>
<td>Total Construction Contract Cost</td>
<td>$130,000.00</td>
</tr>
</tbody>
</table>

Construction Oversight Contractor   Delta Coast Consultants, LLC  Amt.  $15,000.00  
Construction OS/Admin Agency       CPRA

## Major Equipment Used

1. Tug Boat  
2. Crane  
3. Excavator  
4. Crew Boat  
5. Barges

## Construction Sequences and Activities

1. Cut and removed steel barricade system off the TE-Structure No. 4.  
2. Removed existing timber piles and signage.  
3. Moved northern portion of rip-rap into the channel to create access for the barge.  
4. Rip-rap was relayed to the placement area.  
5. Moved remaining rip-rap into the channel.  
6. Removed geotextile liner and placed it on barge.  
7. As-built survey was performed.

## Safety and Accidents

Excellent safety record with no accidents reported.

## Side Scan Sonar

This is a category of sonar system that is used to efficiently create an image of water bottoms. This is accomplished by the sonar device emitting a pulse down towards the water bottom perpendicular to the path of the marine vessel that has this device mounted to it. The acoustic
reflections from the water bottom are recorded in a series of cross-track slices, and when stitched together these slices form an image of the water bottom.

The image below represents the water bottom of weir No. 4 after construction was completed on the degradation of the rock weir. The side-scan sonar survey was performed on September 11, 2018 and was conducted with a Klein 3900 (445kHz, 900kHz Side-scan Sonar interfaced with RTK GPS and Hypack v2017. The data was post processed in Chesapeake Sonar Wiz v6.

The targets on the image represent undulations of the water bottom that are higher in elevation than the adjacent bottom. However, none of these targets appear to be at an elevation that is above the plan design elevation of -8.0. Therefore, based on the as-built survey data that the contractor submitted to us for review and on this side-scan sonar survey, the project has been completed in accordance with the design grades for this project.

Side Scan Sonar Image of Removed Weir #4
## Significant Construction Dates:

<table>
<thead>
<tr>
<th>ACTION</th>
<th>Lake Chapeau Weir No. 4 Removal Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>BID I.D.</td>
<td>Construction</td>
</tr>
<tr>
<td>Bid Opening</td>
<td>June 7, 2018</td>
</tr>
<tr>
<td>Construction Contract Award</td>
<td>July 24, 2018</td>
</tr>
<tr>
<td>Preconstruction Conference</td>
<td>August 3, 2018</td>
</tr>
<tr>
<td>Notice to Proceed</td>
<td>August 1, 2018</td>
</tr>
<tr>
<td>Mobilization</td>
<td>August 16, 2018</td>
</tr>
<tr>
<td>Construction Start</td>
<td>August 17, 2018</td>
</tr>
<tr>
<td>Construction Completion</td>
<td>August 19, 2018</td>
</tr>
<tr>
<td>Final Acceptance</td>
<td>September 14, 2018</td>
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</table>
Appendix A
As-Built Survey
LEBLANC MARINE, LLC
AS-BUILT SURVEY (08/20/2018)

LAKE CHAPEAU SEDIMENT INPUT AND HYDROLOGIC RESTORATION PROJECT - 2018 MAINTENANCE EVENT
PROJECT NO. TE-0026

TERREBONNE PARISH, LA

VICTINY MAP (N.T.S.)
NOTES

1. ALL HORIZONTAL COORDINATES ARE BASED ON LOUISIANA SOUTH ZONE - NAD83 HPGN (2011) EPOCH:2010.0000 DATUM, US SURVEY FOOT AS DERIVED FROM OPUS SOLUTIONS OBTAINED ON ESTABLISHED PROJECT CONTROL POINT 080818TJR1R.

2. ELEVATIONS ARE BASED ON NAVD 88 US SURVEY FEET (GEOID12B) AS DERIVED FROM SAID OPUS SOLUTIONS ON CONTROL POINT 080818TJR1R.

3. HYDROGRAPHIC SURVEY DATA ACQUIRED PERFORMED WITH AN ODOM MKIII 24/200kHz TRANSDUCER INTEGRATED WITH RTK.

4. ADDITIONAL SURVEY DATA WAS OBTAINED USING RTK POLING METHODS.

5. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.

LEBLANC MARINE, LLC
AS-BUILT SURVEY
LAKE CHAPEAU SEDIMENT INPUT AND
HYDROLOGIC RESTORATION PROJECT

PRE-CONSTRUCTION SURVEY
(08/08/2018)
AS-BUILT SURVEY
(08/20/2018)
TEMPLATE (-8.0 FT. ELEVATION)

DATE: 08/20/2018
J Og# 2181031
PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC - 202 JACOBS RUN, SCOTT, LA 70583

LEMTA MARINE, LLC
AS-BUILT SURVEY
LAKE CHAPEAU SEDIMENT INPUT AND
HYDROLOGIC RESTORATION PROJECT

PRE-CONSTRUCTION SURVEY
(08/08/2018)
AS-BUILT SURVEY
(08/20/2018)
TEMPLATE (-8.0 FT. ELEVATION)

DATE: 08/20/2018
J Og# 2181031
PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC - 202 JACOBS RUN, SCOTT, LA 70583

LEMTA MARINE, LLC
AS-BUILT SURVEY
LAKE CHAPEAU SEDIMENT INPUT AND
HYDROLOGIC RESTORATION PROJECT

PRE-CONSTRUCTION SURVEY
(08/08/2018)
AS-BUILT SURVEY
(08/20/2018)
TEMPLATE (-8.0 FT. ELEVATION)

DATE: 08/20/2018
J Og# 2181031
PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC - 202 JACOBS RUN, SCOTT, LA 70583
Appendix B

Construction Inspection Reports
# Field Observation Report

## Owner Information

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Lake Chapeau Sediment Maintenance</th>
<th>Date</th>
<th>8/17/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project #</td>
<td>2018.035</td>
<td>Time</td>
<td>6:30-7:30</td>
</tr>
<tr>
<td>Client</td>
<td>CPRA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor</td>
<td>Patrel Construction</td>
<td>Weather (High/Low)</td>
<td>73°-84°</td>
</tr>
<tr>
<td>Notice to Proceed</td>
<td></td>
<td>Rain fall</td>
<td>Cloudy/Rain</td>
</tr>
<tr>
<td>Contract day</td>
<td></td>
<td>Conditions</td>
<td>4-10 East</td>
</tr>
<tr>
<td>Days in Contract</td>
<td></td>
<td># of Workers Present</td>
<td>10</td>
</tr>
</tbody>
</table>

## Equipment on Site

<table>
<thead>
<tr>
<th>Description</th>
<th>Tug</th>
<th>Barges</th>
<th>Crane</th>
<th>Excavator</th>
<th>Crew Boat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

## Description of Work Performed Today

- Cut and removed metal pipes.
- Pulled wooden piles. One pile broke 2' below mudline in center of channel.
- Moved Northern portion of Rip-Rap in channel to create access for barge.
- Rip-Rap had to be relayed to placement area.

## Additional Comments / Observations

- Excavator broke down at 3:30 pm.
- Rain @ 9:30-10:15
- Two Piles on north side left in place and two piles on southwest side left in place.

## Instructions / Directives Provided to Contractor

---

Submitted by (Delta Coast Consultants, LLC Field Representative)  
Date 8/17/2018
### OWNER INFORMATION

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Lake Chapeau Sediment Maintenance</th>
<th>Date</th>
<th>8/18/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project #</td>
<td>2018.035</td>
<td>Time</td>
<td>6:30-7:30</td>
</tr>
<tr>
<td>Client</td>
<td>CPRA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor</td>
<td>Patret Construction</td>
<td>Weather (High/Low)</td>
<td>75°-86°</td>
</tr>
<tr>
<td>Weather</td>
<td></td>
<td>Rain fall</td>
<td>Cloudy</td>
</tr>
<tr>
<td>Notice to Proceed</td>
<td></td>
<td>Conditions</td>
<td>4-10 South</td>
</tr>
<tr>
<td>Days in Contract</td>
<td></td>
<td># of Workers Present</td>
<td>6</td>
</tr>
</tbody>
</table>

### EQUIPMENT ON SITE

- 1 - Tug
- 4 - Barges
- 1 - Crane
- 1 - Excavator
- 1 - Crew Boat

### DESCRIPTION OF WORK PERFORMED TODAY

- Moved Rip-Rap into channel.
- Disposing liner on barge
- Retrieving liner on water and disposed on barge.

### ADDITIONAL COMMENTS / OBSERVATIONS

- Excavator repaired at 9:45am
- Two Piles on north side left in place and two piles on southwest side left in place.

### INSTRUCTIONS / DIRECTIVES PROVIDED TO CONTRACTOR

Randy Poincot  8/18/2018

Submitted by (Delta Coast Consultants, LLC Field Representative)  Date
**FIELD OBSERVATION REPORT**

**OWNER INFORMATION**

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Lake Chapeau Sediment Maintenance</th>
<th>Date</th>
<th>8/19/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project #</td>
<td>2018.035</td>
<td>Time</td>
<td>6:30-12:30</td>
</tr>
<tr>
<td>Client</td>
<td>CPRA</td>
<td>Weather (High/Low)</td>
<td>77°-84°</td>
</tr>
<tr>
<td>Contractor</td>
<td>Patriot Construction</td>
<td>Rain fall</td>
<td>Cloudy</td>
</tr>
<tr>
<td>Notice to Proceed</td>
<td></td>
<td>Conditions</td>
<td>4-10 West</td>
</tr>
<tr>
<td>Contract day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days in Contract</td>
<td></td>
<td># of Workers Present</td>
<td>6</td>
</tr>
</tbody>
</table>

**EQUIPMENT ON SITE**

- 1 - Tug
- 4 - Barges
- 1 - Crane
- 1 - Excavator
- 1 - Crew Boat

**DESCRIPTION OF WORK PERFORMED TODAY**

Moved Rip-Rap into channel.

disposing liner on barge

Retrieving liner on water and disposed on barge.

Removed last 4 Piles.

**ADDITIONAL COMMENTS / OBSERVATIONS**

Poled area for proper depth.

**INSTRUCTIONS / DIRECTIVES PROVIDED TO CONTRACTOR**

Randy Poincot

Submitted by (Delta Coast Consultants, LLC Field Representative) Date 8/19/2018
FIELD OBSERVATION REPORT

OWNER INFORMATION

Project Name: Lake Chapeau Sediment Maintenance
Project #: 2018.035
Client: CPRA
Contractor: Hydroterra
Notice to Proceed: 
Contract day: 
Days in Contract: 
Weather (High/Low): 75°-87°
Rain fall: Partly Cloudy
Conditions: 2-10 West
# of Workers Present: 2

EQUIPMENT ON SITE

1 - Crew Boat

DESCRIPTION OF WORK PERFORMED TODAY

Hydroterra performed survey of project site.

ADDITIONAL COMMENTS / OBSERVATIONS

INSTRUCTIONS / DIRECTIVES PROVIDED TO CONTRACTOR

Randy Poincot

Submitted by (Delta Coast Consultants, LLC Field Representative) 8/20/2018

CIVIL ENGINEERING • COASTAL ENGINEERING • SURVEYING • PROJECT MANAGEMENT
Appendix C
Side Scan Sonar Image
The targets on the image represent undulations of the water bottom that are higher in elevation than the adjacent bottom. However, none of these targets appear to be at an elevation that is above the plan design elevation of -8.0.