2022 CPRA Coastal Industry Week

Coastal Construction Project Forecast – CPRA Led

Center for River Studies
100 Terrace Avenue
Baton Rouge, LA 70802

April 5th, 2022
3:00pm – 4:30pm CST

Zoom URL:  https://us06web.zoom.us/j/83085942497
Meeting ID:  830 859 42497
Conference Line:  USA (816) 423-4282
Conference Code:  955438

I. Opening Remarks (3:00 pm – 3:05 pm)

II. Re-Cap from Coastal Industry Week Webinars (3:05 – 3:15)

III. Upcoming Restoration Projects to be Bid for Construction (3:15 pm – 4:15 pm)
   a. BS-0032 Mid Breton Landbridge Marsh Creation & Terracing: Chris Scalco, CPRA
   b. PO-0194 LaBranche Shoreline Protection Project: Chris Scalco, CPRA
   c. BS-0038 Breton Landbridge Marsh Creation West: Alex Holston, CPRA
   d. CS-0078 No Name Bayou Marsh Creation and Nourishment: Joanne Tribou, CPRA
   e. CS-0085 Long Point Bayou Marsh Creation Project: Kazi Sadid, CPRA
   f. PO-0178 Bayou LaLoutre Ridge Restoration: Kazi Sadid, CPRA
   g. TE-0134 West Fourchon Marsh Creation & Nourishment: Thomas McLain, CPRA
   h. TE-0139 Terrebonne Basin Ridge and Marsh Creation – Bayou Terrebonne Increment: Thomas McLain, CPRA

IV. Upcoming Recreational Use Projects to be Bid for Construction (4:15 pm – 4:20 pm)
   a. WHARF Phase I: Joe Wyble, CPRA
   b. Des Allemands Boat Launch: Joe Wyble, CPRA
   c. Chitimacha Boat Launch: Joe Wyble, CPRA

V. Additional Questions and Discussion (4:20 pm – 4:30 pm)

VI. Adjourn
Project Overview

- CWPPRA PPL 27
- Federal Sponsor: USFWS
- Plaquemines Parish
- 514 Acres of Marsh Creation/Nourishment
- 22,000 LF of Earthen Terracing
- 5 Miles Avg. Pump Distance (Lake Lery)
Project Features

Earthen Containment Dikes & CMFE

- Crown Elevation: +5.0’ (-0.5’)
- Crown Width: 5.0’
- Side Slopes: 4H:1V
- Total ECD Length: 48,300 LF
- Interior Borrow
- Half Total LF (24,150 LF) to be Gapped/Degraded after Acceptance of MCA’s
Project Features

Terrace Fields

- Crown Elevation: +3.0’ (+0.5’) Max.
- Crown Width: 10’
- Side Slopes: 5H:1V
- Terrace Length: 500 LF each
- Total LF: 22,000 LF
- Spacing: 250 ft CL to CL
Project Features

Borrow Area (Lake Lery)

- 2.5 Miles Northwest of Delacroix Island
- Mudline EL: -6.0’
- 14’ NAVD88 Cut Depth
- Majority Fat Clay mixed with Lean Clay and Organic Clay with some Silt Pockets
- 3 Avoidance Areas
- 8 Pilings to be removed and disposed
- 1 Sunken boat to be removed and disposed
- Approx. 3.4M CY Available (150 Acres)
Existing Infrastructure, Dredge Pipeline & Equipment Access Route

<table>
<thead>
<tr>
<th>Pipeline</th>
<th>Depth of Cover (ft.)</th>
<th>Size (in.)</th>
<th>Product</th>
</tr>
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<tbody>
<tr>
<td>Southern Natural Gas</td>
<td>0 - 9.5</td>
<td>20</td>
<td>Gas</td>
</tr>
<tr>
<td>Southern Natural Gas</td>
<td>3.5 - 6.0</td>
<td>26</td>
<td>Gas</td>
</tr>
<tr>
<td>Southern Natural Gas</td>
<td>4.5 - 11.0</td>
<td>20</td>
<td>Liquid</td>
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<tr>
<td>LA Land &amp; Exploration</td>
<td>1.5 - 9.0</td>
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<td>Unknown</td>
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<tr>
<td>Gulf South</td>
<td>0 - 6.5</td>
<td>Unknown</td>
<td>Gas</td>
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<tr>
<td>Colonial</td>
<td>6.5 - 7.0</td>
<td>20</td>
<td>Liquid</td>
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<tr>
<td>Gulf South</td>
<td>0.5 - 5.3</td>
<td>Unknown</td>
<td>Gas</td>
</tr>
<tr>
<td>Unknown (P &amp; A)</td>
<td>1 - 8.8</td>
<td>8</td>
<td>Plugged</td>
</tr>
</tbody>
</table>

*Note 1: Dredge Pipeline will float over existing Pipelines
## Summary of Estimated Quantities

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Unit</th>
<th>Estimated Quantity</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>MOBILIZATION AND DEMOBILIZATION</td>
<td>LS</td>
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<td>2</td>
<td>SURVEYS</td>
<td>LS</td>
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<td>3</td>
<td>GRADE STAKES</td>
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<td>43</td>
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<td>4</td>
<td>INTRUMENTED SETTLEMENT PLATES</td>
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<td>5</td>
<td>PILE REMOVAL</td>
<td>EA</td>
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<td>6</td>
<td>BOAT REMOVAL</td>
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<td>7</td>
<td>EARTHEN CONTAINMENT DIKES</td>
<td>LF</td>
<td>48,300</td>
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<td>8</td>
<td>EARTHEN CONTAINMENT DIKE DEGRADATION</td>
<td>LF</td>
<td>24,150</td>
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<td>9</td>
<td>EARTHEN TERRACES</td>
<td>LF</td>
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<tr>
<td>10</td>
<td>HYDRAULIC DREDGING - MARSH CREATION AREA 1</td>
<td>CY</td>
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<td>HYDRAULIC DREDGING - MARSH CREATION AREA 2</td>
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<td>12</td>
<td>HYDRAULIC DREDGING - MARSH CREATION AREA 3</td>
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<td>13</td>
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<td>14</td>
<td>HYDRAULIC DREDGING - MARSH CREATION AREA 5</td>
<td>CY</td>
<td>527,100</td>
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</table>

TOTAL MARSH CREATION VOLUME NEEDED = 3.0M CY
Schedule

- Phase 2 Approval: January 2021
- Construction Permit: Submitted April 2021
- Anticipated Bid Advertisement: Summer 2022
- Construction Duration: 552 days
LaBranche Shoreline Protection Project

PO-0194
Project Overview

- Design: Moffatt & Nichol
- Funding Source: Surplus
- St. Charles Parish
- Rock Shoreline Protection
- Temporary Access Excavation (Side Casted)
- Beneficial Use Material
Project Features

Rock Shoreline Protection Layout

- Total Length: 13,000 LF
- 7 Fish Dips
- 4 Access Channels & Flotation Channel Excavation
- 20 Lighted Temporary Warning Signs
Project Features

Temporary Access & Flotation Channel Excavation

• 14,000 CY Access Channels
• 164,000 CY Flotation Channel
• Backfilled prior to Demob.
Rock Breakwater

- 10,000 CY LWA
- 39,000 Tons 440# Armor Stone
  - Crown Elevation: +3.0’
  - Crown Width: 5.0’
  - Side Slopes: 3H:1V, 1.5H:1V
- 82,000 CY Beneficial Use
  - Crown Elevation: +2.5’
  - Side Slopes: 6H:1V
### Summary of Estimated Quantities

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<tr>
<th>Item No.</th>
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<tbody>
<tr>
<td>1</td>
<td>MOBILIZATION AND DEMOBILIZATION</td>
<td>LS</td>
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<tr>
<td>2</td>
<td>SURVEYS</td>
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<td>3</td>
<td>GEOTEXTILE COMPOSITE</td>
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<td>4</td>
<td>LIGHTED TEMPORARY WARNING SIGNS</td>
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<td>5</td>
<td>EXCAVATION - TEMPORARY ACCESS &amp; FLOTATION CHANNELS</td>
<td>CY</td>
<td>178,000</td>
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<tr>
<td>6</td>
<td>BACKFILL - TEMPORARY ACCESS &amp; FLOTATION CHANNELS</td>
<td>CY</td>
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<td>7</td>
<td>LIGHTWEIGHT AGGREGATE</td>
<td>CY</td>
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<td>8</td>
<td>440# ROCK ARMOR STONE</td>
<td>TON</td>
<td>35,000</td>
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</tbody>
</table>
Schedule

- Construction Permit: Submitted March 2022
- Anticipated Bid Advertisement: Fall 2022
- Construction Duration: 365 days
Breton Landbridge Marsh Creation West (BS-0038)
Presentation Overview

General Project Information
Project Layout, Plan View Drawings
Typical Sections, Construction Details
Notable Quantities
Schedule
General Project Information

- Breton Sound, Plaquemines Parish
- CWPPRA – National Oceanic and Atmospheric Administration’s National Marine Fisheries Services (NOAA/NMFS) Sponsored
- Marsh Creation
Project Layout
Plan View – MCAs 1, 2, and 3
Plan View – MCAs 4 and 7
Typical Sections – MCAs 1 & 2
Typical Sections – MCAs 3 & 4
Typical Sections – MCA 7
Typical Sections – BA & EAC/DPC
### Notable Quantities

**SUMMARY OF ESTIMATED QUANTITIES**

<table>
<thead>
<tr>
<th>ITEM No.</th>
<th>DESCRIPTION</th>
<th>UNIT</th>
<th>ESTIMATED QUANTITY¹</th>
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<tbody>
<tr>
<td>1</td>
<td>MOBILIZATION/DEMOBILIZATION (TS-100)</td>
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<td>CONSTRUCTION SURVEYS (TS-200)</td>
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<td>3</td>
<td>GRADE STAKES (TS-220)</td>
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<td>4</td>
<td>SETTLEMENT PLATES (TS-270)</td>
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<td>5</td>
<td>EARTHEN CONTAINMENT DIKE (TS-300)</td>
<td>LF</td>
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<td>LAKE DIKE (TS-301)</td>
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<td>EQUIPMENT ACCESS DREDGING (TS-360)</td>
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<td>8</td>
<td>MARSH FILL (TS-400)</td>
<td>CY</td>
<td>2,158,530</td>
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<td>9</td>
<td>DREDGE PIPELINE FOR EROSION CONTROL (TS-1120)</td>
<td>LF</td>
<td>13,375</td>
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1. WHERE THE QUANTITY OF WORK WITH RESPECT TO ANY ITEM IS COVERED BY A UNIT PRICE, SUCH QUANTITIES ARE ESTIMATED QUANTITIES TO BE USED WHEN COMPARING BIDS AND THE RIGHT IS RESERVED BY THE OWNER TO INCREASE/DECREASE SUCH QUANTITIES UP TO 25% WITHOUT ADJUSTMENT OF THE UNIT PRICE AS MAY BE NECESSARY TO COMPLETE THE WORK AS DESCRIBED IN THESE PLANS AND SPECIFICATIONS AND/OR REMAIN WITHIN FUNDING LIMITS.
Schedule

• Phase 2 Grant: Approved, funding applied for

• Permitting: Submitted, under review

• Landrights/Servitude Agreements: 4th Quarter 2022

• Advertisement: 1st Quarter 2023

• Construction Duration: 522 days
No Name Bayou Marsh Creation and Nourishment Project

(CS-78)
General Project Information

- Project Location: Calcasieu Basin, Cameron Parish
- Project Funding Source: CWPPRA
- Federal Sponsor: NOAA/NMFS
95% Design Project Layout

- Borrow Area – Calcasieu Lake
- Marsh Creation Area – south of Calcasieu Lake/Cameron Creole Watershed Levee
- Max pump distance = 5.5 miles
- Borrow Area equipment access from Calcasieu Ship Channel
- Calcasieu Lake contains Public Oyster Seed Grounds
Borrow Area

- 369 Acres
- Adjacent to CS-54 borrow area
- -6.0’ to -7.0’ EL.
- -13’ EL. cut depth with 3.0’ overdredge
- 5,448,620 available cubic yards
- 2 wells – no excavation zone (R250’)
- 1 unknown pipeline – 500 foot no excavation offset
Marsh Creation Area

- 539 acres
- 19,500 LF Earthen Containment Dike
- External ECD borrow along western edge
- 1-42" Cheniere Creole Pipeline – 150’ no excavation zone for ECD
- Grade stakes, settlement plates, and instrumented settlement plates proposed
Marsh Creation Area

- **CMFE = 1.5' +0.5'**
- **2,120,000 CY Fill**
- **Earthen Containment Dike**
  - Crown width = 5.0'
  - Crown EL. = 2.5' +0.5'
  - Side slopes = 1V:4H
  - Exterior primary borrow along western edge of MCA
Cameron Creole Watershed Levee Crossing
### Estimated Quantities

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Unit</th>
<th>Estimated Quantities</th>
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<tbody>
<tr>
<td>1</td>
<td>Mobilization/Demobilization</td>
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<td>2</td>
<td>Surveys</td>
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<td>4</td>
<td>Settlement Plates</td>
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<td>5</td>
<td>Instrumented Settlement Plates</td>
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<tr>
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<td>Earthen Containment Dikes</td>
<td>LF</td>
<td>19,450</td>
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<tr>
<td>7</td>
<td>Hydraulic Dredging and Marsh Fill</td>
<td>CY</td>
<td>2,120,000</td>
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Schedule

• Phase 2 Funding Approval – December 2021
• Permitting – In Progress
• Bid Package – In Progress
• Bid Advertisement – Fall/Winter 2022
• Anticipated Construction Duration – 537 days
Long Point Bayou Marsh Creation Project (CS-0085)

CAMERON PARISH, LOUISIANA
## General Project Information

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<th>DESCRIPTION</th>
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<tr>
<td>LOCATION</td>
<td>Calcasieu Sabine Basin, Cameron Parish</td>
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<tr>
<td>FUNDING</td>
<td>Natural Resource Damage Assessment (NRDA) funds - LOSCO</td>
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<tr>
<td>PROJECT TYPE</td>
<td>Marsh Creation Project</td>
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</tbody>
</table>
The USACE, New Orleans District, will solicit and contract the Calcasieu River and Pass Maintenance Dredging.
Typical Sections - MCA
Typical Sections – Ponds and Tidal Channel
Equipment Access Corridor
• Dredge pipe shall be placed at the land/water interface in Long Point Bayou with the top of pipe above MHW
• Timber mat shall be placed when/if the dredge pipe and/or the construction equipment crosses over the existing marsh
Typical Section – Calcasieu Ship Channel

- Detailed drawing and specification for Calcasieu Ship Channel dredging will be provided in the USACE contract document
Notable Quantities

- The volume dredged from the Lower Calcasieu Ship Channel is higher than the volume required for the MCA
- The dredging quantity in the lower CSC varies year to year and ranged between 2.5 and 4 MCY in recent years
- Hydraulic dredging quantity is based on the Borrow Area (Calcasieu Ship Channel) cut volumes
- The owner reserves the right to adjust the quantities 25% higher or lower without adjustment of the unit price
Schedule

Funding: 2006 Calcasieu River Oil Spill NRDA

Permitting: In progress

Landrights/Servitude Agreements: In progress

Advertisement: Summer 2022

Contract Award: August 2022

Contract Completion: 22 June 2023*
*Contract for Mile 5-17 typically take 8 to 12 months to complete.

Construction Duration:
• Approx. 300 days
Bayou La Loutre Ridge Restoration Project (PO-0178)

ST. BERNARD PARISH, LOUISIANA

KAZI SADID, P.E.
## General Project Information

<table>
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<tr>
<th>INFO</th>
<th>DESCRIPTION</th>
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<tr>
<td>LOCATION</td>
<td>Pontchartrain Basin, St. Bernard Parish</td>
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<tr>
<td>FUNDING</td>
<td>Natural Resource Damage Assessment (NRDA) funds (proposed)</td>
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<tr>
<td>PROJECT TYPE</td>
<td>Ridge Restoration Project</td>
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</table>
• This project will restore approximately 5.25 miles or 27,741 linear feet of earthen ridge along the south bank of Bayou La Loutre

• Recommended access to the project site is from the north via the MRGO
Typical Sections

- The materials will be borrowed from Bayou La Loutre dredging down to the elevation -10 feet NAVD88
- The top elevation, the crest width, and the side slopes of the ridge are +5.0 ft NAVD88, 15 feet, and 5H:1V, respectively.
Material will be placed on the existing remnant of the ridge at a ground elevation ranging between 0.8 to 1.8 feet.

Sonar Contact C3 is required for avoidance with a 100 ft. buffer zone.
Plan View – Earthen Ridge 2

- Existing oak trees within the footprint of the ridge and 4 inches or more in the trunk diameter will be protected during the construction by building safety fence around them with a radius equal to the crown of the tree.
**Plan View – Earthen Ridge 3 and 4**

- The bottom width of the borrow area shall not extend beyond the thalweg of the bayou.
No evidence of existing pipeline is found in the project site. The unverified pipeline shown on the plan is from the NPMS database.
Notable Quantities

- Temporary grass seeding will be done immediately after construction of each reach.
- Additional Vegetative plantings under the construction contract include seashore paspalum (4” Containers, 6 Rows @ 3’ Apart, 3’ Spacing) and smooth cordgrass (Plugs, 3 Rows @ 3’ Apart, 3’ Spacing).

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Unit</th>
<th>Estimated Quantity</th>
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<tbody>
<tr>
<td>1</td>
<td>Mobilization And Demobilization</td>
<td>Lump Sum</td>
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<tr>
<td>2</td>
<td>Earthen Ridge</td>
<td>Linear Foot</td>
<td>27,741</td>
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<td>3</td>
<td>Settlement Plates</td>
<td>Each</td>
<td>14</td>
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<tr>
<td>4</td>
<td>Temporary Grass Seeding</td>
<td>Lump Sum</td>
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<td>5</td>
<td>Construction Surveys</td>
<td>Lump Sum</td>
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<td>6</td>
<td>Vegetative Plantings</td>
<td>Lump Sum</td>
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Schedule

Funding: Natural Resource Damage Assessment (NRDA) funds

Permitting: In progress

Landrights/Servitude Agreements: In progress

Advertisement: Fall 2022

Contract Award: Spring 2023

Contract Completion: Fall 2023

Construction Duration:
• Approx. 285 days
West Fourchon Marsh Creation Project (TE-0134)

LAFOURCHE PARISH, LOUISIANA
## General Project Information

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<th>DESCRIPTION</th>
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<td>LOCATION</td>
<td>Lafourche Parish, Adjacent to Port Fourchon</td>
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<tr>
<td>FUNDING</td>
<td>CWPPRA (PPL24): Phase 2 Construction Funded Jan. 2020</td>
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<tr>
<td>PROJECT TYPE</td>
<td>Marsh Creation Project</td>
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</table>
Up to 802 Acres of Marsh Creation

3 Marsh Creation Areas

2 Borrow Sources being Considered

Offshore Borrow
  - Current Design
  - 8 Mile Avg. Pump Distance

Bayou Lafourche/Floatation Canal
  - CPRA, NOAA, GLPC are Coordinating to ensure Project Goals can be met with Bayou Lafourche Borrow Source
  - Sampling Complete
  - Testing/Analysis Underway

Material Characteristics/Available Quantity will Guide Borrow Area Selection
  - Borrow Area Selection Late Spring/Early Summer 2022

Only 1 Borrow Source will be Bid
Marsh Creation Areas

- Up to 802 Acres of Marsh Creation
  - MCA 1: 331 Acres
    - Avg. Bottom Elevation: -0.63’
    - Construction Fill Elevation: +2.0’- 0.5’
    - Approx. 1,064,700 CY
  - MCA 2: 206 Acres
    - Avg. Bottom Elevation: -0.21’
    - Construction Fill Elevation: +2.0’- 0.5’
    - Approx. 594,400 CY
  - Additional MCA: 206 Acres
    - Avg. Bottom Elevation: +0.13’
    - Construction Fill Elevation: +2.0’- 0.5’
    - Approx. 568,700 CY

*Construction Target Elevations Subject to Change Pending Bayou Lafourche Geotechnical Analysis
Earthen Containment Dikes

- Crown Elevation: +3.0’ + 0.5’
- Crown Width: 5’
- Side Slopes: 1V:4H
- Total ECD LF: 54,624 LF
- Interior Borrow
- Some Gapping/Degrading Required After Acceptance of MCA’s

MCA 1
- ECD Length: 18,414 LF

MCA 2
- ECD Length: 18,710 LF

Additional MCA
- ECD Length: 17,500 LF
- Semi-Confined Being Considered
Typical Section – Offshore Borrow Area

- 3.5 Miles South West of West Belle Pass
- 8 Mile Average Pump Distance
- Directly Adjacent to TE-52/TE-143 Borrow Area/Hopper Disposal Area
- Very Similar Material to TE-52 West Belle Pass MC Project
- Homogenous High Plasticity Clay Interspersed with Silt Streaks, Lenses, Seams, Pockets, and Thin Layers
- Approximately 30 ft of Water Depth in BA
- Existing Bottom Elevation Ranges from -28 ft to -34 ft (NAVD88 Geoid12a)
- 20-ft Cut Depth with 5-ft Disturbance Area
- Borrow Area Contains Approx. 7.5M CY
Typical Section – Bayou Lafourche/Floatation Canal Borrow Area

- Bayou Lafourche is a USACE-Maintained Navigation Channel
- Bottom Elev. Maintained to -25’ (-27.5’ with Advanced Maint.)
- Recently Authorized to increase Dredging Template to -30.0’ with an additional 2.5’ Advanced Maintenance
- -32.5’ Max Bottom Elev.
- Intent would be to dredge Belle Pass, Bayou LaFourche (up to intersection with Flotation Canal), and Flotation Canal to same Dredging Template
- Final Decision on Borrow Source after completion of Geotechnical Analysis
Verified Pipelines within Marsh Creation Area Footprint

- 2 − 16” Kinetica (Active)
- 12” LIG (Active)
- 6” Kinder Morgan (Plugged and Abandoned)
Existing Infrastructure – Offshore Borrow

LEGEND

- MARSH CREATION AREA (MCA)
- BORROW AREA (BA)
- DREDGE PIPELINE CROSSING CORRIDOR
- DREDGE PIPELINE CORRIDOR CENTERLINE (DPC CL)
- EQUIPMENT ACCESS ROUTE (EAR)
- PIPELINE (P)
- SURVEY MONUMENT
- WELL
Existing Infrastructure – Bayou Lafourche Borrow

- Multiple Pipelines Crossing Bayou Lafourche
- No Plans to Relocate any Pipelines at this Time
  - Excavation Buffers Planned at this Time
Quantities

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Work or Material</th>
<th>Quantity</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mobilization/Demobilization</td>
<td>1</td>
<td>LS</td>
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<tr>
<td>2</td>
<td>Marsh Creation &amp; Nourishment (w/dike backfill)*</td>
<td>2,227,744</td>
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<td>3</td>
<td>Nesting Bird Abatement (DPL Beach Crossing)</td>
<td>10</td>
<td>Day</td>
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<td>3</td>
<td>Containment Dikes</td>
<td>54,624</td>
<td>LF</td>
</tr>
<tr>
<td>4</td>
<td>Settlement Plates</td>
<td>9</td>
<td>Each</td>
</tr>
<tr>
<td>5</td>
<td>Instrumented Settlement Plates</td>
<td>6</td>
<td>Each</td>
</tr>
<tr>
<td>6</td>
<td>Construction Surveys</td>
<td>1</td>
<td>LS</td>
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</tbody>
</table>

- Marsh Creation Volume based on Gulf Borrow Source. Bayou Lafourche Borrow Material may alter Design Quantity
- Pay on the Cut
- Nesting Bird Abatement may not be Required with Bayou Lafourche Borrow Area
- Schedule of Bid Items will be Updated after Borrow Source is Finalized
Schedule

Construction Funding Status:
- Received Jan. 2020

Permit Status:
- JPA Submitted March 2022
- Both Borrow Sources Permitted

Bayou Lafourche Borrow Area Analysis:
- Bayou Lafourche Sampling Complete
- Geotechnical Testing/Analysis Underway

Anticipated Bid Advertisement:
- Q4 2022/Q1 2023*

Bid Options
- Gulf Borrow: Bid by CPRA
- Bayou Lafourche Borrow Option: Bid by Greater Lafourche Port Commission

Contract Duration:
- 375 Days*

*Subject to Change with Bayou Lafourche Borrow Geotech Analysis Results
Terrebonne Basin Ridge and Marsh Creation (TE-0139)

TERREBONNE PARISH, LOUISIANA
General Project Information

<table>
<thead>
<tr>
<th>INFO</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>LOCATION</td>
<td>Madison Bay, Terrebonne Parish</td>
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<tr>
<td>FUNDING</td>
<td>Natural Resource Damage Assessment (NRDA)</td>
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<tr>
<td>PROJECT TYPE</td>
<td>Marsh Creation and Ridge Restoration</td>
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</table>
~1,429 ac. of Marsh Creation
~54,000 LF of Ridge Restoration
~8,800 LF of Articulated Concrete Block Mat
Plan View – Borrow Area
Typical Section – Borrow Area
Equipment Access Corridor - South BA
Equipment Access Corridor - North BA
Typical Sections – Access Corridor

TYPICAL SECTION - EQUIPMENT ACCESS AND DREDGE PIPELINE ROUTE
Plan View - MCA
Typical Sections – MCA 1, 2, 3 (with ER)
Typical Sections – MCA 4 (with ER)
Typical Sections – MCA 5 (with ER)
Typical Sections – MCA 6 (with ER)
Typical Sections – Ridge Segment 1B
Typical Sections – Earthen Ridge
### Estimated Project Quantities

#### Summary of Estimated Quantities:
- ~9.0M cubic yards fill
- ~66,000 linear feet of ECD
- ~54,000 linear feet of Earthen Ridge
- ~8,800 linear feet of 9” Articulated Concrete Block Mat (ACBM)
  - With up to an additional 10,009 linear feet of 6” ACBM via additive alternate

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION</th>
<th>TECHNICAL SPECIFICATION</th>
<th>UNIT</th>
<th>ESTIMATED QUANTITY</th>
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<tr>
<td>1</td>
<td>Mobilization and Demobilization</td>
<td>(TS-100)</td>
<td>LUMP SUM</td>
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<td>Construction Surveys</td>
<td>(TS-210)</td>
<td>LUMP SUM</td>
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<td>LINEAR FOOT</td>
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<td>(TS-305)</td>
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<td>16</td>
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<td>17</td>
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<td>CUBIC YARDS</td>
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<td>18</td>
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<td>21</td>
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<td>(TS-400)</td>
<td>CUBIC YARDS</td>
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<td>22</td>
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<td>CUBIC YARDS</td>
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<td>23</td>
<td>Articulated Concrete Block Mats</td>
<td>(TS-750)</td>
<td>LINEAR FOOT</td>
<td>8,811</td>
</tr>
</tbody>
</table>
Schedule

Funding: NRDA

Permitting: In progress

Landrights/Servitude Agreements: In progress

Anticipated Advertisement: Q3/Q4

Construction Duration:
• Approx. 820 days

Pre-solicitation meeting – Planned for end of April 2022
NRDA Recreational Use Project Update

BA-0234 WHARF PHASE 1
BA-0237 DES ALLEMANDS BOAT LAUNCH
TV-0084 CHITIMACHA BOAT LAUNCH
WHARF* Phase 1- Project Overview

• Location: Westwego Airport Site, Lapalco Blvd. & Van Ness Drive, Westwego

• Project Lead: City of Westwego

• Design Firm: APTIM

• Approved Budget: $995K (NRDA Funding)

*Wetlands Harbor Activities Recreational Facility
WHARF Phase 1 - Project Features

- 1,034 x 12’ wooden boardwalk
- (4) prefab steel rest shelters (2 ea. 10’ x 10’ & 12’ x 20’)
- (2) treated wood fishing piers (ea. 12’ x 40’)
- 1,376’ aluminum handrails for boardwalks & piers
- (14) aluminum lighting poles (16’ tall on 3’ concrete pedestals)
- ~275’ x 8’ sidewalk (4” thick)
WHARF Phase 1 - Quantities/Schedule

- Currently at ~85% E&D
  - Bid Adv. Summer 2022 (pending permit receipt)
  - CON Duration ~270 days (Est.)

- Project POC: Westwego Mayor’s Office
  (Robert Billiot, Mayor)
  (504) 347-5745

<table>
<thead>
<tr>
<th>Feature</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>Light Poles &amp; Concrete Pedestal</td>
<td>16</td>
</tr>
<tr>
<td>2” Conduit for Electrical Wiring</td>
<td>1,200 LF</td>
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<tr>
<td>Wooden Boardwalk</td>
<td>1,176 LF</td>
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<tr>
<td>30” Timber Piles</td>
<td>7,140 LF</td>
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<tr>
<td>Aluminum Handrails</td>
<td>1,376 LF</td>
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<tr>
<td>Metal Roof</td>
<td>680 SF</td>
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<tr>
<td>Shelters</td>
<td>4</td>
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<tr>
<td>4” Concrete Sidewalk</td>
<td>169 SY</td>
</tr>
<tr>
<td>Mob, Site Layout, Contingency</td>
<td>LS</td>
</tr>
</tbody>
</table>
Des Allemands Boat Launch - Project Overview

- Location: LA-632 and Bayou Des Allemands, St. Charles Parish
- Project Lead: St. Charles Parish
- Design Firm: Duplantis Design Group (DDG)
- Approved Budget: $1.84M (NRDA Funding)
Des Allemands-Project Features

Boat Launch Access

- 4,873' x 22' limestone access road from LA-632 (480' paved asphalt at turnoff; crown Width: 5.0')
- Asphalt parking lot, ≤60 vehicle/trailer spaces & 16 single car spaces (4 ADA-compliant)
- (2) paved access roads (est. 260' x 30' each) on either side of parking lot to access launch ramps
Des Allemands-Project Features

**Boat Launch/Fishing Piers**

- (4) concrete boat launch ramps (est. 90' × 12') with adjacent 14,400-ft² maneuvering area
- (3) 50' × 8' (400-ft²) treated wood docks
- (2) 100' × 7' treated wood fishing piers
- (2) 4' wide ADA-compliant concrete walkway (est. 270' per walkway) for foot traffic from fishing piers to parking area
Des Allemands- Estimated Quantities

Access Road (Preliminary)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
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<tbody>
<tr>
<td>1</td>
<td>Geogrid TX7 Option 1 Single layer¹</td>
<td>15791</td>
<td>SY</td>
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<tr>
<td>2</td>
<td>Asphalt Road (4&quot; Thick)</td>
<td>14648</td>
<td>SY</td>
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<tr>
<td>3</td>
<td>Roadway Excavation (includes Haul Off) (Assume 30&quot;)</td>
<td>13160</td>
<td>CY</td>
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<tr>
<td>4</td>
<td>Right of Way Clearing and Grubbing (25' offset)</td>
<td>8.61</td>
<td>ACRES</td>
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<tr>
<td>5</td>
<td>Fine Grading and Compaction</td>
<td>15791</td>
<td>SY</td>
</tr>
<tr>
<td>6</td>
<td>Entrance/WPA Culverts (24&quot; RCP, including DOTD Permit)</td>
<td>104</td>
<td>LF</td>
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<tr>
<td>7</td>
<td>Roadway Type 1 Catch Basins</td>
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<td>8</td>
<td>Culverts- (18&quot; RCP) Cross Drains @ 500' O.C.</td>
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<td>9</td>
<td>Grassing, Seeding at Road Shoulder (Hydro Seed)</td>
<td>2.87</td>
<td>ACRES</td>
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<td>10</td>
<td>Roadway Timber Poles with Cobra Fixture @ 150' O.C.</td>
<td>27</td>
<td>EA</td>
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<td>11</td>
<td>Relocation of Existing Light Poles by Entergy</td>
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<td>12</td>
<td>Roadway Signage</td>
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<td>13</td>
<td>Ditch Excavation Roadway (includes Haul Off)</td>
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<td>CY</td>
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<td>14</td>
<td>Plastic Pavement Striping (4&quot; Wide, Solid)</td>
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<tr>
<td>15</td>
<td>72&quot; Culverts</td>
<td>128</td>
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Des Allemands - Estimated Quantities

Launch/Piers (Preliminary)

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<th>DESCRIPTION</th>
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<tr>
<td>1</td>
<td>Geogrid TX7 Option 1 Single layer¹</td>
<td>12697</td>
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<td>2</td>
<td>Asphalt Boat Parking Lot (4&quot; Thick)</td>
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<td>3</td>
<td>Concrete Boat Launch</td>
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<tr>
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<td>Asphalt Component of Boat Ramp</td>
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<td>Fill Sand for Boat Ramp</td>
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<td>Wooden Dock</td>
<td>752</td>
<td>LF</td>
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<td>7</td>
<td>Fine Grading and Compaction</td>
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<td>Rip Rap</td>
<td>13.23</td>
<td>TON</td>
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<td>Boat Parking Lot Excavation (includes Haul Off)</td>
<td>13193</td>
<td>CY</td>
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<td>10</td>
<td>Right of Way Clearing and Grubbing - Parking Lot (25' Offset)</td>
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<td>ACRES</td>
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<td>11</td>
<td>Pre-cast Parking Stops</td>
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<td>Handicap Parking Signs</td>
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<td>Grassing, Seeding at Lot Perimeter (15' Offset)</td>
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<td>Site Lighting With Cobra Fixtures</td>
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<td>EA</td>
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<td>15</td>
<td>Drainage Ditches Along Sides of Parking Area</td>
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<td>CY</td>
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<td>16</td>
<td>Pavement Striping</td>
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<td>LF</td>
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<td>17</td>
<td>Sidewalks Over Levee to Launch (ADA Slopes)</td>
<td>911</td>
<td>SF</td>
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<td>18</td>
<td>Temporary PZ-27 Sheet Pile (For Dewatering)</td>
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<td>19</td>
<td>Dry Fire Hydrant</td>
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<td>20</td>
<td>DNR Fill Costs for Water Bottoms</td>
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<td>CY</td>
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<td>21</td>
<td>Muck Out 4' at Drainage Canal (Exist. EL -4') (Includes Haul)</td>
<td>217</td>
<td>CY</td>
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</table>

¹ Single layer geogrid is the primary choice for the project.
Des Allemands- Schedule

• Currently in E&D
  – Geotech/surveys underway
  – Permitting in progress

• CON to involve 3 stages:
  1. Access Road: Apr 2023 – Apr 2024
  2. Parking/Launch Surcharge: Apr 2023 – Apr 2024
     (3 mo. to place; 6-9 mo. for compaction)

• Project POC: Carla Chiasson
  St. Charles Parish Grants Officer
  (985) 783-5165
  cchiasson@stcharlesgov.net
Chitimacha Boat Launch- Project Overview

- Location: LA-236 and Bayou Teche, Jeanerette
- Project Lead: Chitimacha Tribe of Louisiana
- Design Firm: C.J. Savoie Consulting Engineers
- Approved Budget: $650K
Chitimacha-Project Features

• 50,880-ft² paved parking lot with >22 vehicle + trailer spaces

• 160' × 30' paved boat ramp from parking lot to Bayou Teche

• (2) treated wood docks totaling 3,360 ft²
**Chitimacha - Estimated Cost**

*Quantities under development*

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<th>Preliminary Cost Est.</th>
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<td>Site Clearing</td>
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<tr>
<td>Excavation and Embankment</td>
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<td>Road and Parking Aggregate</td>
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<td>Boat Ramp &amp; Abutment Paving</td>
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<td>Vinyl Sheet Pile Bulkhead</td>
<td>$134,400</td>
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<td>Dock Framing &amp; Timber Decking</td>
<td>$41,300</td>
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<td>Signage &amp; Security Lighting</td>
<td>$24,500</td>
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<tr>
<td>Mobilization</td>
<td>$5,000</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$579,262</strong></td>
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</table>
Chitimacha- Schedule

• Currently in Preliminary E&D
  – Geotech collection complete (report in progress)
  – Topo surveys scheduled
  – Recommendations, revised costs, alternative layouts to be provided upon completion of geotech/survey analysis
• E&D/Permitting Duration ~150 days from layout selection (est.)
• Bid Adv. ~Oct 30 (Est.)
• CON Duration ~120 days (Est.)

• Project POC: Kim Walden
  Cultural Director, Chitimacha Tribe of LA
  (337) 923-9923
  kim@chitimacha.gov
Connecting People to the Coast