CPRA Industry Update

Restore or Retreat: Working for our Coast
Thursday, May 19, 2016

Rudy Simoneaux, P.E.
Manager, Engineering Division
Who We Are
The CPRA Board

- Governor’s Advisory Commission on Coastal Protection, Restoration and Conservation
- State Senate Designee
- State House of Representative Designee

7 Representatives from Coastal Area
- Southeast Louisiana Flood Protection Authority – East
- Lafourche Parish
- Pontchartrain Levee District
- South Lafourche Levee District
- St. Mary Levee District
- St. Bernard Parish
- Representative West of the Atch. River

Levee Boards
The CPRA

• CPRA is the implementation and enforcement arm of the CPRA Board

• Present format was established in 2009, name changed from OCPR to CPRA in 2012

• Executive Director, Michael Ellis
  Deputy Executive Director, Jason Lanclos

• Employs approximately 165 people

• CPRA is charged with developing and implementing the comprehensive coastal protection and restoration plan for the Board, including both a Master Plan that is updated every five years and an Annual Plan which is submitted to the Louisiana Legislature for approval every year.
Accomplishments (Since 2007)

- $18B secured for protection and restoration projects
- 30,637 acres of land benefited
- 274 miles of levee improvement
- 52 miles of barrier islands and berms constructed or under construction
- 112.3 million cubic yards of fill utilized
- 20 parishes with constructed projects
Opportunities for Work
Engineering, Surveying, and Geotechnical Services – Professional Services

*Title 39, Public Procurement Code*

- Generally, these services are acquired through a Request for Solicitation of Interest and Qualifications (RSIQ) process and a Professional Services Contract is awarded to one or more contractors or may be project-specific.

- The RSIQ is posted on the following websites:
  - **CPRA:** [www.coastal.la.gov/doing-business-with-cpra](http://www.coastal.la.gov/doing-business-with-cpra)
  - **DNR:** [www.dnr.louisiana.gov/contracts](http://www.dnr.louisiana.gov/contracts)

   A contractor can be placed on an email list to receive notice an RSIQ posting by contacting Gloria Tigner at [gloria.tigner@la.gov](mailto:gloria.tigner@la.gov)
Environmental Science - Consulting Services

Title 39, Public Procurement Code

- These services are acquired through a Request for Proposal (RFP) process and a Consulting Services Contract is awarded to one or more contractors or may be project-specific.

- The RFP is posted on the following websites:
  - CPRA: www.coastal.la.gov/doing-business-with-cpra
  - DNR: www.dnr.louisiana.gov/contracts
  - LaPac: http://wwwprd1.doa.louisiana.gov/osp/lapac/pubmain.cfm

A contractor can be placed on a pre-qualified offers list through the Office of Contractual Review at:
http://www.doa.la.gov/Pages/osp/PC/pql.aspx
Project Construction Services

Title 38, Public Bid Law

- CPRA utilizes the Office of Facility Planning and Control to assist with the advertisement/bid process.

- Advertisements are posted on the following websites:
  - FPC: [https://wwwcfprd.doa.louisiana.gov/fpc/bid/view_advertisement_select.cfm](https://wwwcfprd.doa.louisiana.gov/fpc/bid/view_advertisement_select.cfm)

A contractor can be placed on an email list to receive notice of a construction advertisement by emailing [cpra.bidding@la.gov](mailto:cpra.bidding@la.gov)
For smaller projects, the **Office of State Purchasing** handles the advertisement/bid process for CPRA.

Advertisements are posted on the following websites:

- **DNR**: [www.dnr.louisiana.gov/contracts](http://www.dnr.louisiana.gov/contracts)
- **LaPac**: [http://wwwprd1.doa.louisiana.gov/osp/lapac/pubmain.cfm](http://wwwprd1.doa.louisiana.gov/osp/lapac/pubmain.cfm)

A contractor can be placed on an email list to receive notice an advertisement by registering with the Office of State Purchasing. Information can be found at: [www.doa.louisiana.gov/osp/vendorcenter/docs/vendorguide.pdf](http://www.doa.louisiana.gov/osp/vendorcenter/docs/vendorguide.pdf)
Useful Tools

- CPRA Website
  - Advertisements
  - Project “Hotlist”
Near Term Opportunities for Design
• **RESTORE Planning and Design**
  • West Grand Terre Beach Nourishment and Stabilization
  • Golden Triangle Marsh Creation
  • Biloxi Marsh Living Shoreline

• **Sediment Diversions**
Golden Triangle Marsh Creation

Cost: Category 1: $4,347,733
Sponsor: State of Louisiana
Project Status: Planning
Purpose: This project would include the engineering and design for marsh restoration within the Golden Triangle, a narrow band of brackish marsh directly east of New Orleans between Lake Borgne and the confluence of the Mississippi River Gulf Outlet and the Gulf Intracoastal Waterway.
West Grand Terre Beach Nourishment and Stabilization

Map: Gulf Coast Ecosystem Restoration Council

Mississippi River Delta
West Grand Terre Beach Nourishment and Stabilization

- **Barrier Island Restoration**
- **Cost:** Category 1: $7,259,216
- **Sponsor:** State of Louisiana
- **Project Status:** Planning

**Purpose:** This planning project includes the engineering and design for the restoration of West Grand Terre Barrier Island, which seeks to enhance dune and back-barrier marsh habitat in order to provide storm surge and wave attenuation, thereby addressing coastal erosion, diminished storm surge protection, and subsidence of basic barrier marshes.

Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
Mid-Basin Sediment Diversion Program

Mid Barataria Sediment Diversion

- 75,000 peak flow

- Location: Myrtle Grove

- In 2014-2015, project progressed through preliminary design (~30%):
  - Sites surveys, geotechnical investigation/analysis, preliminary hydraulics analysis, project layout, limited VE study

- Project Features:
  - 300-foot bottom width channel
  - 3 open-channel inlets with gated structure
  - 7 bay gated back structure
  - Highway and railroad modifications
  - Pump station
Mid-Basin Sediment Diversion Program

Mid Barataria Sediment Diversion
Mid-Basin Sediment Diversion Program

*Mid Breton Sediment Diversion*

- USACE (2010) Integrated Feasibility Study and Supplementary EIS Recommendations:
  - 35,000 cfs peak flow
  - Location: Vicinity of White Ditch (RM59)

- 2013 Report – Hydrodynamic and Sediment Transport Modeling using Flow 3-D for Siting and Optimization of the LCA Medium Diversion at White Ditch Recommendations:
  - 35,000 cfs peak flow
  - Location: Vicinity of Bertrandville (RM68); modified based on river hydraulics and sediment supply
Mid-Basin Sediment Diversion Program

Mid Breton Sediment Diversion

LOUISIANA COASTAL AREA:
MEDIUM DIVERSION AT WHITE DITCH

LCA WHITE DITCH
PROPOSED LOCATIONS

Legend

- Proposed Structure Locations
- Project Boundary

DISCLAIMER - While the United States Army Corps of Engineers, hereinafter referred to as USACE, has made a reasonable effort to ensure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guarantee, either express or implied, as to the content, sequence, accuracy, completeness or correctness of any of this data provided herein. USACE, its officers, agents, employees, or servants shall assume no liability for any errors, omissions, or occurrences in the information provided regardless of how caused. The user should make his own independent investigation of the maps and data furnished hereunder. USACE makes no representations or warranties as to the content, accuracy, or completeness of the maps and data furnished hereunder and assumes no liability for any omissions made or actions taken or not taken by the user of the maps and data furnished hereunder. By using these maps and associated data the user does so entirely at his own risk and expressly acknowledges that he/she is aware of and agrees to be bound by this disclaimer and agrees to indemnify and hold harmless the USACE, its officers, agents, employees or servants in any claim whatsoever for any damages of any nature whatever that may result from or may be caused in any way by the use of the maps and associated data.
Collaborative Delivery Analysis

Design-Bid-Build

Owner

Designer

Builder

1

2

3

Design-Build

Owner

Designer/Builder

Design-Build

Owner

Designer/Builder

CMAR

Owner

Designer

CM

Trade Subcontractors

Working Relationship

Contractual Relationship
Industry Market Sounding

• Intended to obtain the Engineering and Construction industry input on Collaborative Delivery

• Focused on Progressive DB and CMAR

• Includes diversion project background, features, and construction costs

• Topics of inquiry include:
  • Company background and experience
  • Preference in delivery models
  • Interest and capacity
  • Risk allocation
  • Design and construction innovation
Upcoming Construction
Lost Lake Marsh Creation and Hydrologic Restoration (TE-72)
Project Information

- Base Bid: 3,200,000 CY; 465 acres (four fill sites)
- Additive Bid: 330,000 CY; 37 acres (one fill site)
- Earthen Containment Dikes: 58,474 LF
- Earthen Terraces: 30,000 LF
- Borrow Area: Lost Lake
- Maximum Pump Distance: 5.0 miles
Project Features
Estimated Schedule

- Construction: Funding available
- Land Rights: Completed
- Permits: Modification being Processed
- Advertise Bid - June 2016
- Construction Duration = 384 days for Base Bid; 37 days for Add Bid
Oyster Bayou Marsh Restoration (CS-59)
Project Information

- Base Bid: 4,114,400 CY; 605 acres (three fill sites)
- Earthen Containment Dikes: 45,000 LF
- Earthen Terraces: 17,550 LF
- Borrow Area: Gulf of Mexico
- Maximum Pump Distance: 5.5 miles
**Project Features**

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**NOTES:**

1. COORDINATES ARE IN FEET BASED ON LOUISIANA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83).
2. DATE OF AERIAL MAPPING: 2012.
3. EARThEN TERRACES SHALL BE CONSTRUCTED TO AVOID EXISTING VEGETATED WETLANDS.
4. LOCATIONS OF PIPELINES ARE APPROXIMATE, CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO EXCAVATION.
5. AFTER PRECONSTRUCTION SURVEY, THE CONTRACTOR SHALL PROVIDE A REVISED EARThEN TERRACE LAYOUT TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
6. PONDS SHALL BE CONTAINED BY NATURAL FEATURES TO THE EXTENT POSSIBLE, CONTAINMENT IS NOT SHOWN NEAR MARSH, EXISTING MARSH SHALL BE USED AS CONTAINMENT WHERE POSSIBLE.
7. THE CONTRACTOR SHALL NOT EXCAVATE WITHIN 50 FEET OF ANY PIPELINE WITHOUT WRITTEN PERMISSION FROM THE
Estimated Schedule

- Phase 2 Funding Request: Approved in January 2015
- Design: Complete
- Permitting: Complete
- Landrights/Servitude Agreements: Complete
- Advertisement: Late Spring 2016
Cameron-Creole Watershed Grand Bayou Marsh Creation (CS-54)
Project Information

- Base Bid: 3,054,760 CY; 617 acres (two fill sites)
- Earthen Containment Dikes: 39,600 LF
- Borrow Area: Calcasieu Lake
- Maximum Pump Distance: 4.3 miles
Project Features

BORROW AREA

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LEGEND

- Marsh Creation Area
- Borrow Area
- Dredge Pipeline Corridor - Option 1
- Dredge Pipeline Corridor - Option 2
- Levee Crossing
- Existing Water Control Structure
- Existing Plug
- Existing Well

NOTES:
1. The Borrow Area cut depth is approximately 10.0 feet with a maximum cut elevation of -10.0 feet.
2. The Borrow Area contains approximately 5.7 cubic yards of material.
3. Levee crossing location and dimensions are approximations and will be finalized before bidding.

COASTAL PROTECTION AND RESTORATION AUTHORITY

CAMERON-CREOLE WATERSHED GRAND BAYOU MARSH CREATION

BORROW AREA

STATE PROJECT NUMBER: CS-04
FEDERAL PROJECT NUMBER: CS-04
DATE: OCTOBER 2013
DRAWN BY: KIRTY CANDU
DESIGNED BY: ANITA CANTY
APPROVED BY: RUDOLPH RIZZONI, P.E.
SHEET 4 OF 13
Estimated Schedule

- Phase 2 Funding Request: Approved in January 2015
- Design: Complete
- Permitting: Complete
- Landrights/Servitude Agreements: Complete
- Advertisement: Summer 2016
Morganza to the Gulf - Reach L
Levee Rehabilitation Project
Project Information

- Rehabilitation of 2.2 mile reach of MTG levee system
- Current elevation 7-8 ft. NAVD 88; completed in 1990’s
- Improvements includes raising elevation to +10 ft. NAVD 88 and enhancing stability.
- Project also involves improvements to area pump station
- Compacted Fill: 225,000 CY
Project Features
Project Features

STA. 468+00 TO STA. 512+50 AND STA. 517+00 TO STA. 578+00

TYPICAL SECTION - LEVEE AND BORROW CANAL

N.T.S
Estimated Schedule

- Funding: Available (CDBG)
- Design: Substantially Complete
- Permitting: Complete
- Advertisement: Summer 2016
Thank You

Any Questions?