

# JOINT PUBLIC NOTICE

January 11, 2015

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS  
NEW ORLEANS DISTRICT  
REGULATORY FUNCTIONS  
BRANCH  
P.O. BOX 60267  
NEW ORLEANS, LA 70160

STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL  
QUALITY  
OFFICE OF ENVIRONMENTAL  
SERVICES  
P.O. BOX 4313  
BATON ROUGE, LA 70821-4313

STATE OF LOUISIANA  
DEPARTMENT OF NATURAL  
RESOURCES  
OFFICE OF COASTAL  
MANAGEMENT  
P.O. BOX 44487  
BATON ROUGE, LA 70804-4487

Phone (504) 862-2548  
Fax (504) 862-2574

Phone (225) 325-8125  
Fax (225) 325-8250

Phone (225)-342-1076  
Fax (225) 342-9439

CORPS REVIEWER:  
Johnny Duplantis

DEQ REVIEWER:  
Elizabeth Hill

OCM REVIEWER:  
Nicole Dandurand

COE NUMBER:  
MVN-1999-03719-WPP

WQC NUMBER:  
990804-04

CUP NUMBER:  
P20130446

## PROPOSED LEVEE AND FLOODGATE CONSTRUCTION IN TERREBONNE PARISH

**NAME OF APPLICANT:** Terrebonne Levee and Conservation District.

**DESCRIPTION:** Proposed construction of a 12' (NAVD) levee and a 180' floodgate in Falgout Canal. The levee will connect the existing levee systems on the westbank of Bayou Dularge. Approximately 1,128,596 cubic yards dirt fill and 22,340 cubic yards of rock will be required. Additionally, 54,050 linear feet of terraces will be constructed. Approximately 233 acres of nonvegetated waterbottoms, 32 acres of wetland and 10 acres of upland habitat may be impacted as a result of this proposed project.

This project was posted on Public Notice previously on July 31, 2013. TLCD has since modified the proposal and added a mitigation plan to mitigate for the impacted wetlands.

**LOCATION:** Approximately 12.4 miles south-southwest of Houma, Louisiana. Sections 13 and 24, T19S, R16E, P.O.B. of north section at Latitude 29° 25' 13"N / Longitude -90° 46' 55"W, flood gate at Latitude 29° 24' 56"N / Longitude -90°47' 20"W, and P.O.E. at Latitude 29° 24' 27"N / Longitude -90° 47'20"W, in Terrebonne Parish. The Project is located within the West Central Louisiana Watershed, USGS Catalog Unit 08090302.

Louisiana Department of Environmental Quality (LDEQ) water quality certification is required. Concurrent with processing of this application, the LDEQ is reviewing this application under Section 401 of the Clean Water Act and in accordance with Louisiana Revised Statutes of 1950, Title 30, Chapter 11, Part IV, Section 2074 A (3) to determine if the work would comply with State water quality standards and other applicable provisions of the CWA. By virtue of an agreement between the USACE and the LDEQ, this public notice is also issued for the purpose of advising all known interested persons that there is pending before the LDEQ a decision on

water quality certification under such act. Comments concerning this application for water quality certification in Louisiana must be submitted, using the applicant's name, to: State of Louisiana, Department of Environmental Quality, Attn: Jamie Phillippe, P.O. Box 4313, Baton Rouge, LA 70821-4313. The public comment period extends 30 days from the publication date of this notice. A copy of the public notice with a description of the work is available for review between 8:00 a.m. and 4:30 p.m. weekdays at the LDEQ office at 602 North 5th Street, Baton Rouge, Louisiana 70802. Copies may be obtained upon payment of the cost of printing. The LDEQ may conduct a public hearing to consider all comments concerning water quality if requested in writing. A request for a public hearing must contain the following information: the name, mailing address, application number, or other recognizable reference to the application; a brief description of the interest of the requester, or of persons represented by the requester; and a brief description of how the application, if granted, would adversely affect such interest.

The comment period for the Department of the Army Permit and the Louisiana Department of Environmental Quality WQC will close **20 days** from the date of this joint public notice. Written comments, including suggestions for modifications or objections to the proposed work, stating reasons thereof, are being solicited from anyone having interest in this permit and/or this WQC request and must be mailed so as to be received before or by the last day of the comment period. Letters concerning the Corps of Engineers permit application must reference the applicant's name and the Permit Application Number, and be mailed to the Corps of Engineers at the address above, **ATTENTION: REGULATORY BRANCH**. Similar letters concerning the Water Quality Certification must reference the applicant's name and the WQC Application number and be mailed to the Louisiana Department of Environmental Quality at the address above.

The application for this proposed project is on file with the Louisiana Department of Environmental Quality and may be examined during weekdays between 8:00 a.m. and 5:00 p.m. Copies may be obtained upon payment of costs of reproduction.

### **Corps of Engineers Permit Criteria**

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers is soliciting comments from the public, federal, state, and local agencies and officials, Indian Tribes, and other interested parties in order to consider and

evaluate the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to make, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

No properties listed on the National Register of Historic Places are near the proposed work. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, prehistorical, historical sites, or data. Copies of this notice are being sent to the State Archeologist and the State Historic Preservation Officer.

Our initial finding is that the proposed work would neither affect any species listed as endangered by the U.S. Departments of Interior or Commerce, nor affect any habitat designated as critical to the survival and recovery of any endangered species. Utilizing Standard Local Operating Procedure for Endangered Species in Louisiana (SLOPES), dated October 22, 2014, between the U.S. Army Corps of Engineers, New Orleans and U.S. Fish and Wildlife Service, Ecological Services Office, the Corps has determined that the proposed activity would have no effect on any listed species.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The applicant's proposal would result in the destruction or alteration of 32 acre(s) of EFH utilized by various life stages of red drum and penaeid shrimp. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

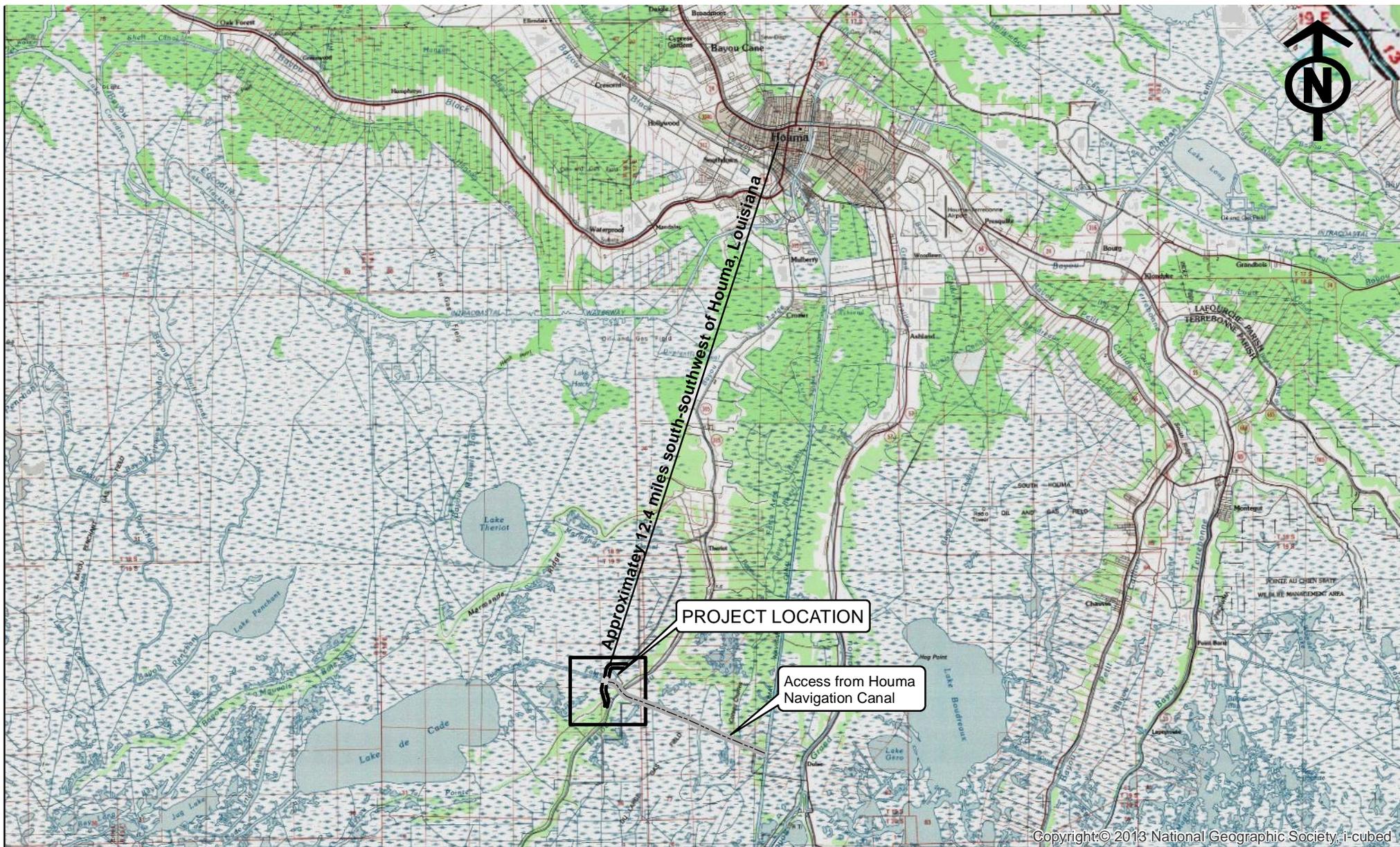
If the proposed work involves deposits of dredged or fill material into navigable waters, the evaluation of the probable impacts will include the application of guidelines established by the Administrator of the Environmental Protection Agency. Also, a certification that the proposed activity will not violate applicable water quality standards will be required from the Department of Environmental Quality, Office of Water Resources before a permit is issued.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

You are requested to communicate the information contained in this notice to any other parties whom you deem likely to have interest in the matter.

Darrell S. Barbara  
Chief, Western Evaluation Section  
Regulatory Branch

Attachments



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**VICINITY MAP**



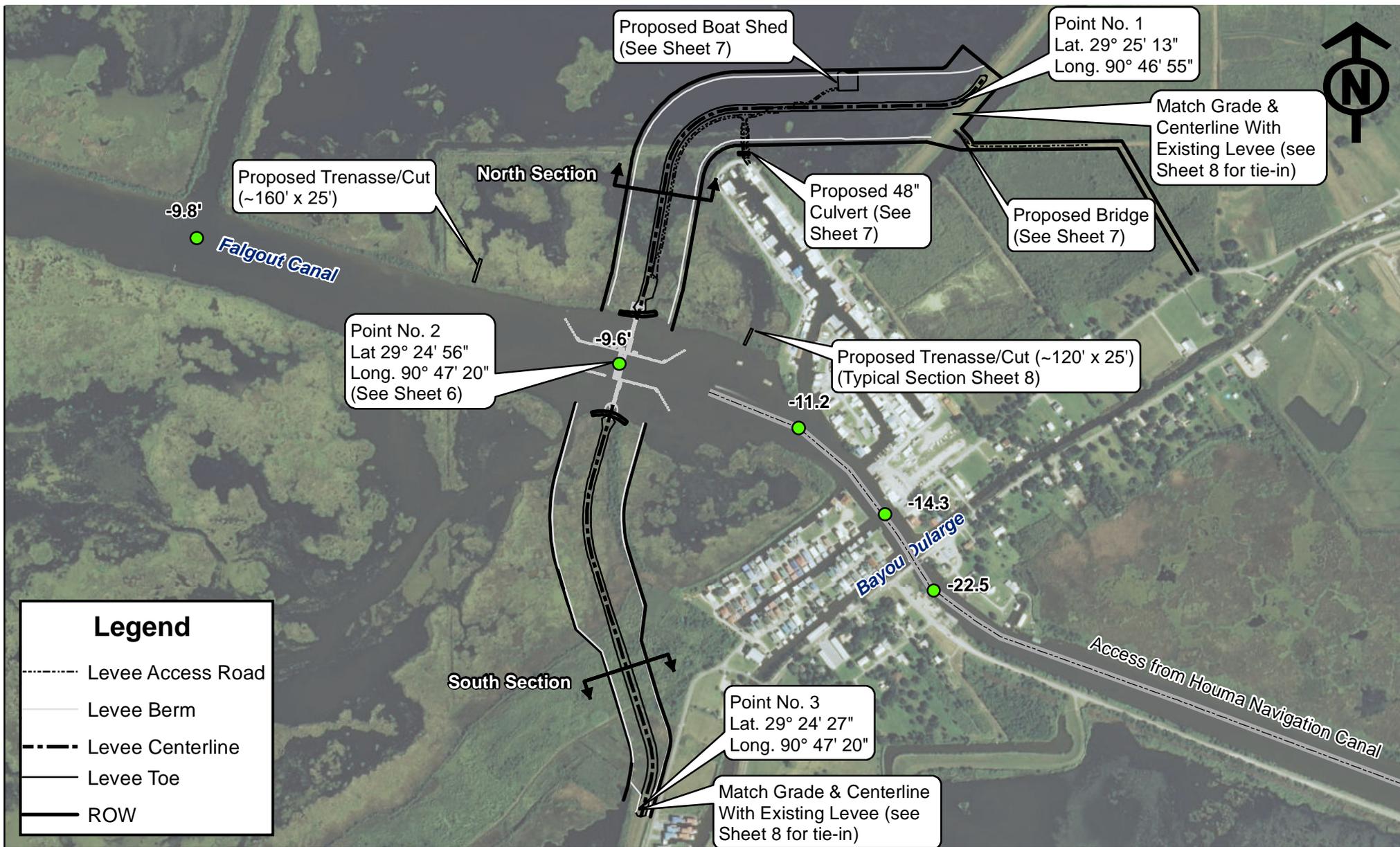
**TERREBONNE LEVEE AND CONSERVATION DISTRICT  
FALGOUT CANAL LEVEE AND STRUCTURE  
SECTIONS 13 & 24, T19S-R16E  
TERREBONNE PARISH, LOUISIANA**

Date: 03/20/13	Drawn By: CDL	Sheet No.: 1 OF 8
Scale: 1"=3 mi	Approved By: LB/OPF	File No.: 147183

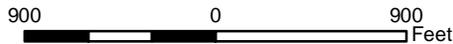
Revisions		
Revision No.:	Date:	Notes:
2	11/12/13	Levee Alignment
3	07/02/14	Levee Alignment/Elev.
4	11/03/15	Culverts, Boat Shed



Shaw Coastal, Inc.  
(A CB&I Company)  
197 Elysian Drive  
Houma, LA 70363



**PLAN VIEW**



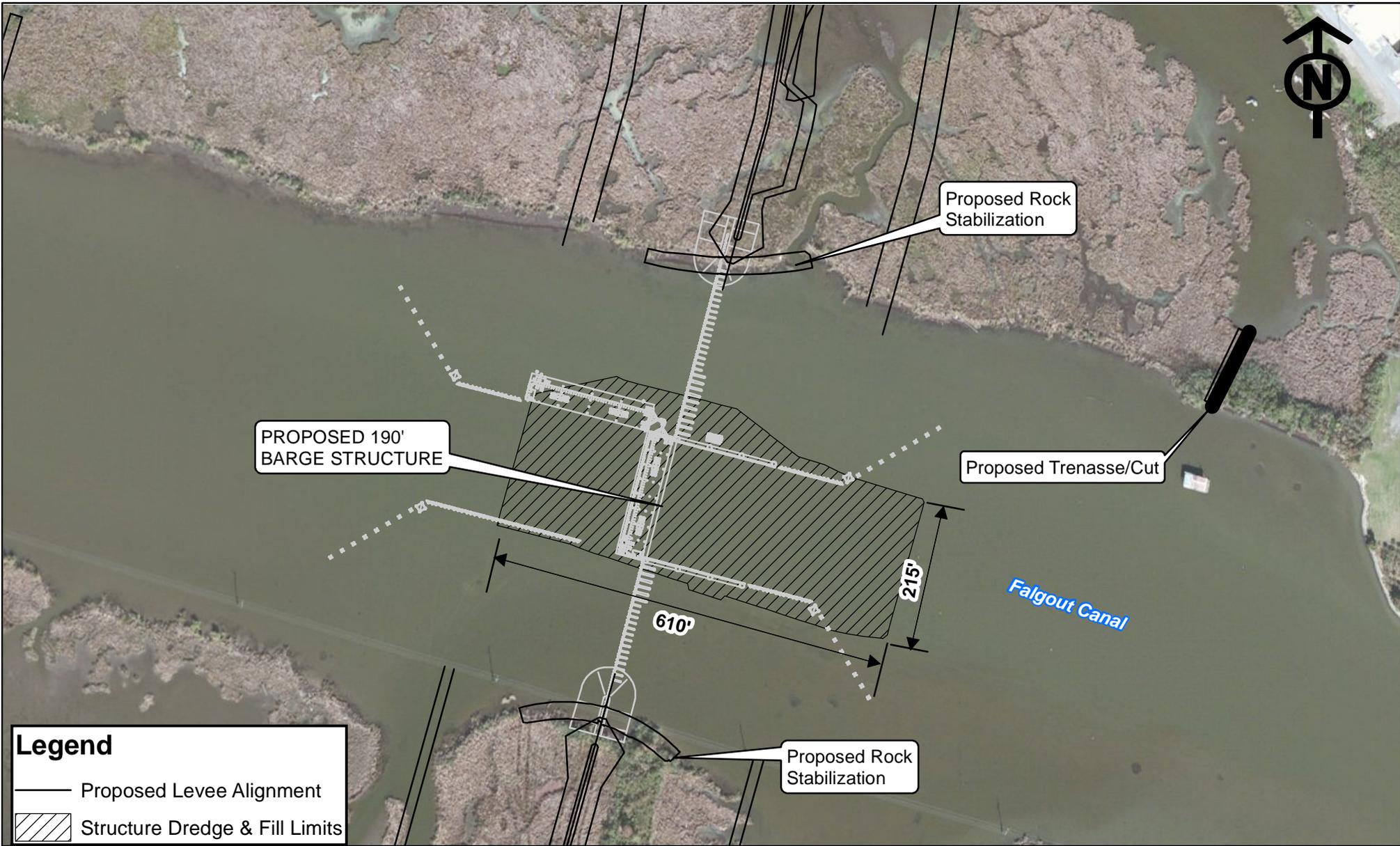
**TERREBONNE LEVEE AND CONSERVATION DISTRICT  
FALGOUT CANAL LEVEE AND STRUCTURE  
SECTIONS 13 & 24, T19S-R16E  
TERREBONNE PARISH, LOUISIANA**

Date: 03/20/13	Drawn By: CDL	Sheet No.: 2 OF 8
Scale: 1"=800'	Approved By: LB/OPF	File No.: 147183

Revisions		
Revision No.:	Date:	Notes:
2	11/12/13	Levee Alignment/Cuts
3	07/02/14	Levee Alignment/Elev.
4	11/03/15	Boat Shed, Bridge, etc



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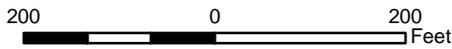


**Legend**

— Proposed Levee Alignment

▨ Structure Dredge & Fill Limits

**PLAN VIEW - BARGE STRUCTURE**



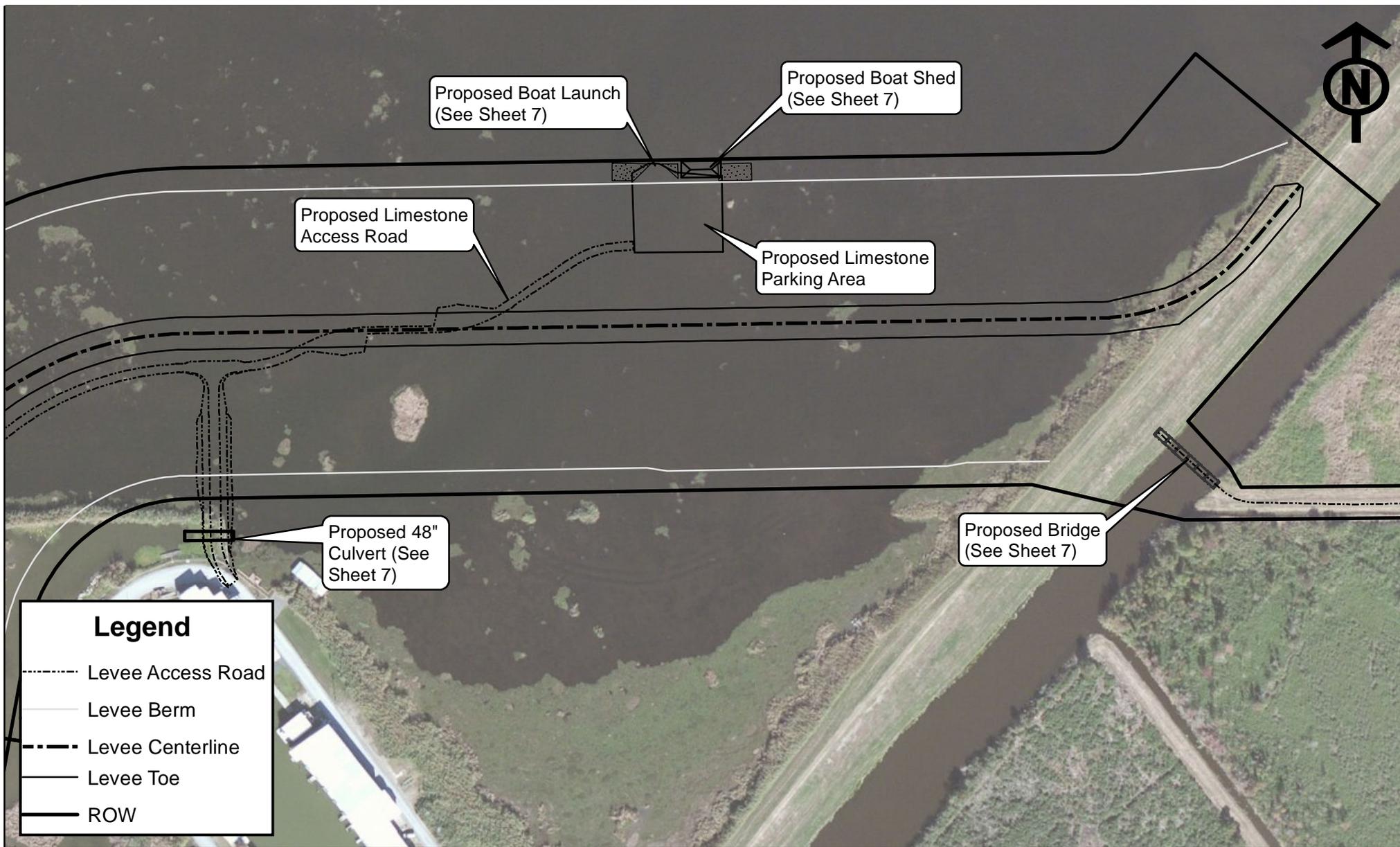
**TERREBONNE LEVEE AND CONSERVATION DISTRICT  
FALGOUT CANAL LEVEE AND STRUCTURE  
SECTIONS 13 & 24, T19S-R16E  
TERREBONNE PARISH, LOUISIANA**

Date: 03/20/13	Drawn By: CDL	Sheet No.: 3 OF 7
Scale: 1"=200'	Approved By: LB/OPF	File No.: 147183

Revisions		
Revision No.:	Date:	Notes:
2	11/12/13	Levee Alignment
3	07/02/14	Levee Alignment/Elev.
4	11/03/15	Boat Shed, Bridge, etc



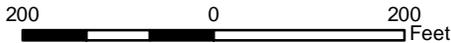
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**Legend**

- Levee Access Road
- Levee Berm
- - - - - Levee Centerline
- Levee Toe
- ROW

**PLAN VIEW**



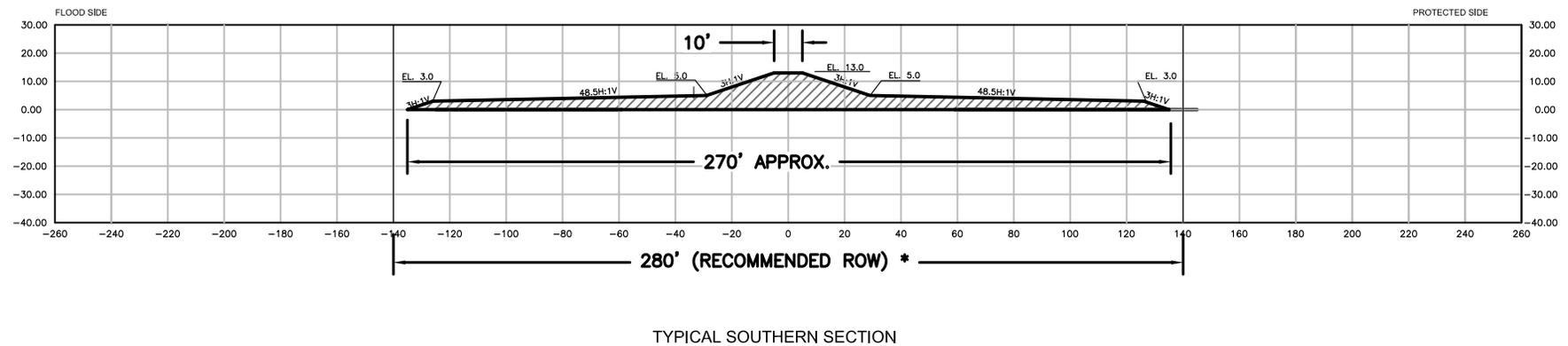
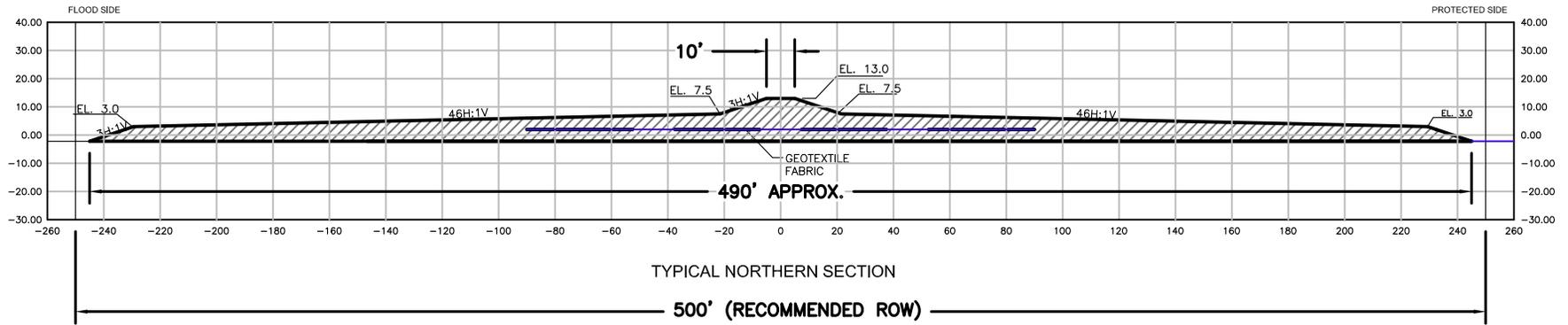
**TERREBONNE LEVEE AND CONSERVATION DISTRICT  
FALGOUT CANAL LEVEE AND STRUCTURE  
SECTIONS 13 & 24, T19S-R16E  
TERREBONNE PARISH, LOUISIANA**

Date: 03/20/13	Drawn By: CDL	Sheet No.: 4 OF 8
Scale: 1"=800'	Approved By: LB/OFP	File No.: 147183

Revisions		
Revision No.:	Date:	Notes:
2	11/12/13	Levee Alignment/Cuts
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4	11/03/15	Boat Shed, Bridge, etc



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\* The southern levee right of way reduces from 500' to approximately 160' in order to tie-in to the existing levee system.

### TYPICAL LEVEE SECTIONS

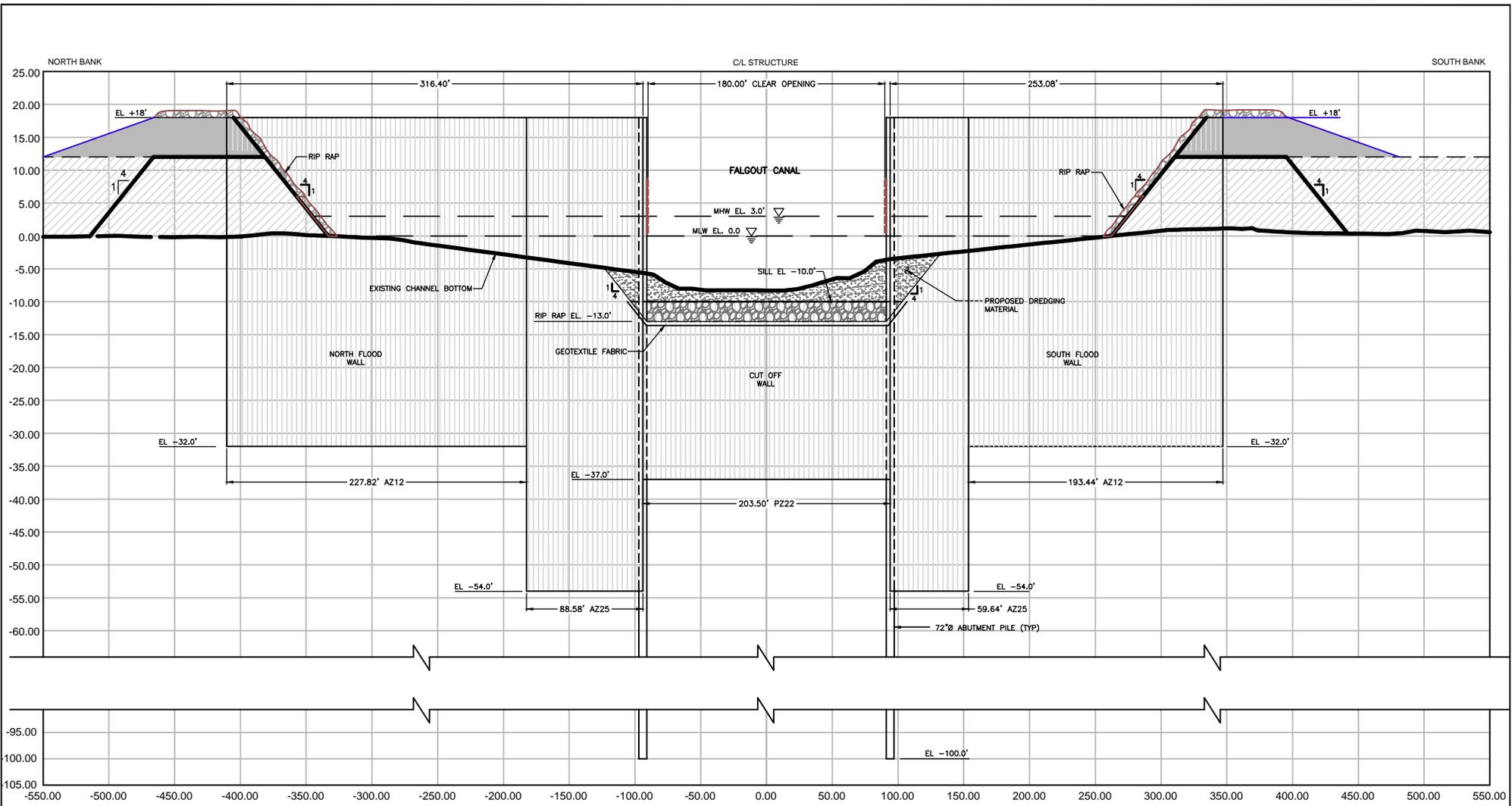
### TERREBONNE LEVEE AND CONSERVATION DISTRICT FALGOUT CANAL LEVEE AND STRUCTURE SECTIONS 13 & 24, T19S-R16E TERREBONNE PARISH, LOUISIANA

Date: 03/20/13	Drawn By: CDL	Sheet No.: 5 of 8
Scale: See Sections	Approved By: LB/OPF	File No.: 147183

Revisions:	
No.:	Date:
1	04/24/13
2	11/12/13
3	07/02/14
4	11/03/15



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TYPICAL STRUCTURE SECTION

TERREBONNE LEVEE AND CONSERVATION DISTRICT  
 FALGOUT CANAL LEVEE AND STRUCTURE  
 SECTIONS 13 & 24, T19S-R16E  
 TERREBONNE PARISH, LOUISIANA

Date:	03/06/13
Scale:	See Sections

Drawn By:	CDL
Approved By:	LB/OPF

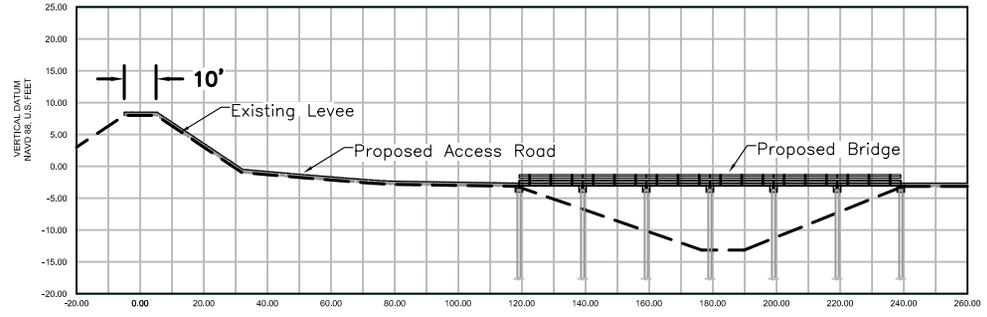
Sheet No.:	6 of 8
File No.:	147183

Revisions:	
No.:	Date:
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4	11/03/15

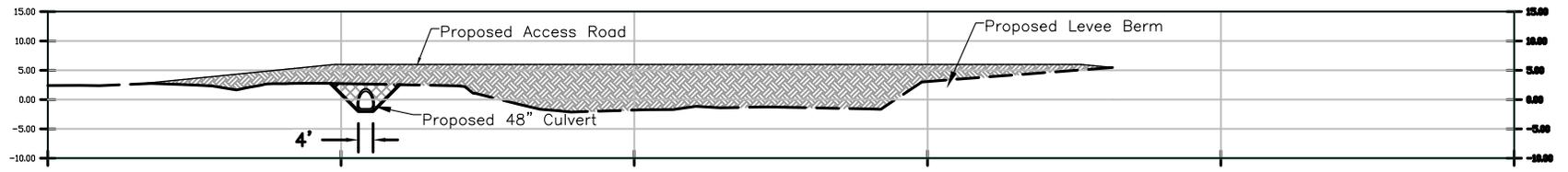


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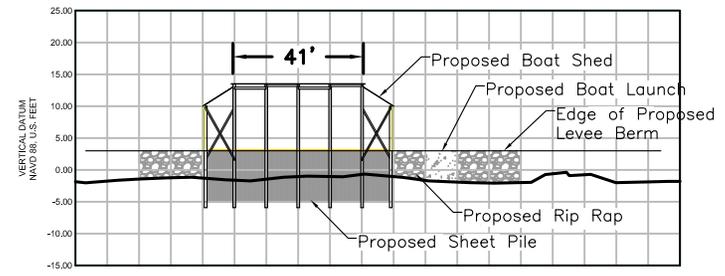
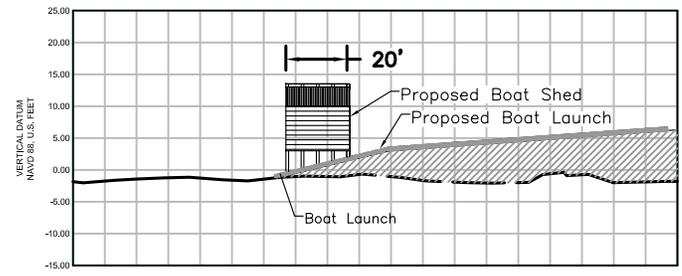
NOTE: PILING AND SHEET PILE LENGTHS FOR BRIDGE AND BOAT SHED WILL BE DETERMINED DURING ADDITIONAL GEOTECHNICAL ANALYSIS.



TYPICAL BRIDGE SECTION



TYPICAL CULVERT SECTION



TYPICAL BOATSHED AND LAUNCH SECTION

TYPICAL LEVEE SECTIONS

TERREBONNE LEVEE AND CONSERVATION DISTRICT  
FALGOUT CANAL LEVEE AND STRUCTURE  
SECTIONS 13 & 24, T19S-R16E  
TERREBONNE PARISH, LOUISIANA

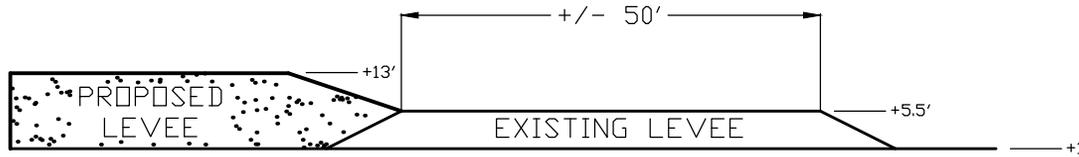
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Scale: See Sections	Approved By: LB/OPF	File No.: 147183

Revisions:	
No.:	Date:
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2	11/12/13
3	07/02/14
4	11/03/15

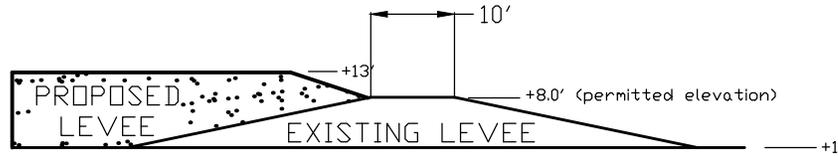
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No.:	Date:
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3	07/02/14
4	11/03/15



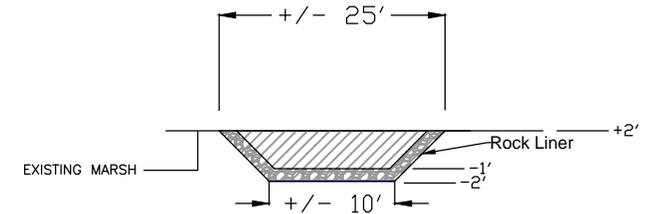
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**Northern Levee Tie-In  
(NOT TO SCALE)**



**Southern Levee Tie-In  
(NOT TO SCALE)**



**Typical Trenasse/Cut Section  
(NOT TO SCALE)**

**NOTES:**

APPROXIMATELY 900,000 CUBIC YARDS OF MATERIAL WILL BE HAULED IN FROM APPROVED, NON-WET BORROW PITS FOR THE LEVEE CONSTRUCTION.

APPROXIMATELY 24,500 CUBIC YARDS OF MATERIAL WILL BE DREDGED FROM FALGOUT CANAL TO CONSTRUCT THE STRUCTURE.

APPROXIMATELY 680 CUBIC YARDS OF MATERIAL WILL BE DREDGED FOR THE TRENASSES/CUTS FOR IMPOUNDMENT. APPROXIMATELY 340 CUBIC YARDS OF ROCK WILL BE USED TO LINE THE TRENASSES TO PREVENT EROSION.

APPROXIMATELY 22,000 CUBIC YARDS OF RIP RAP WILL BE USED FOR THE STRUCTURE AND STABILIZATION.

APPROXIMATELY 30.5 ACRES OF WETLANDS AND 31.5 ACRES OF WATERBOTTOMS WILL BE IMPACTED BY THIS ACTIVITY.

NO CONSTRUCTION WORK WILL BE PERFORMED OUTSIDE OF THE LEVEE RIGHT OF WAY.

**NOTES**

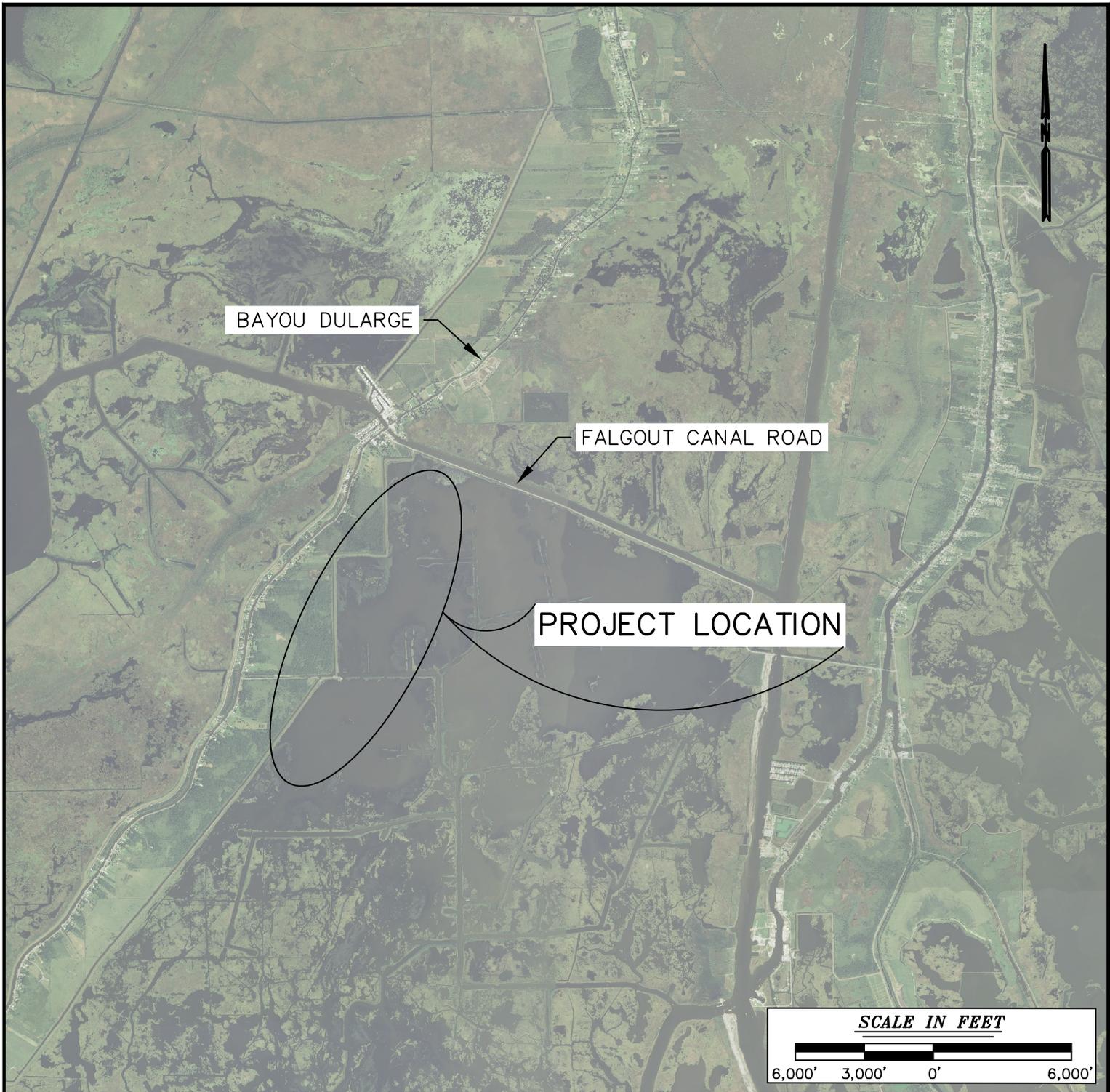
**TERREBONNE LEVEE AND CONSERVATION DISTRICT  
FALGOUT CANAL LEVEE AND STRUCTURE  
SECTIONS 13 & 24, T19S-R16E  
TERREBONNE PARISH, LOUISIANA**

Date: 03/06/13	Drawn By: CDL	Sheet No.: 8 of 8
Scale:	Approved By: LB/OFP	File No.: 147183

Revisions:	
No.:	Date:
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3	07/02/14
4	11/03/15



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Houma, LA 70363



LAT: 29°22'52.22"N  
 LON: 90°47'33.96"W

VICINITY MAP

MITIGATION PLAN FOR FALGOUT CANAL FLOOD STRUCTURE  
 AND CONNECTING LEVEES  
 LOCATED IN SEC. 24,25,35,36, T19S-R16E  
 TERREBONNE PARISH, LOUISIANA



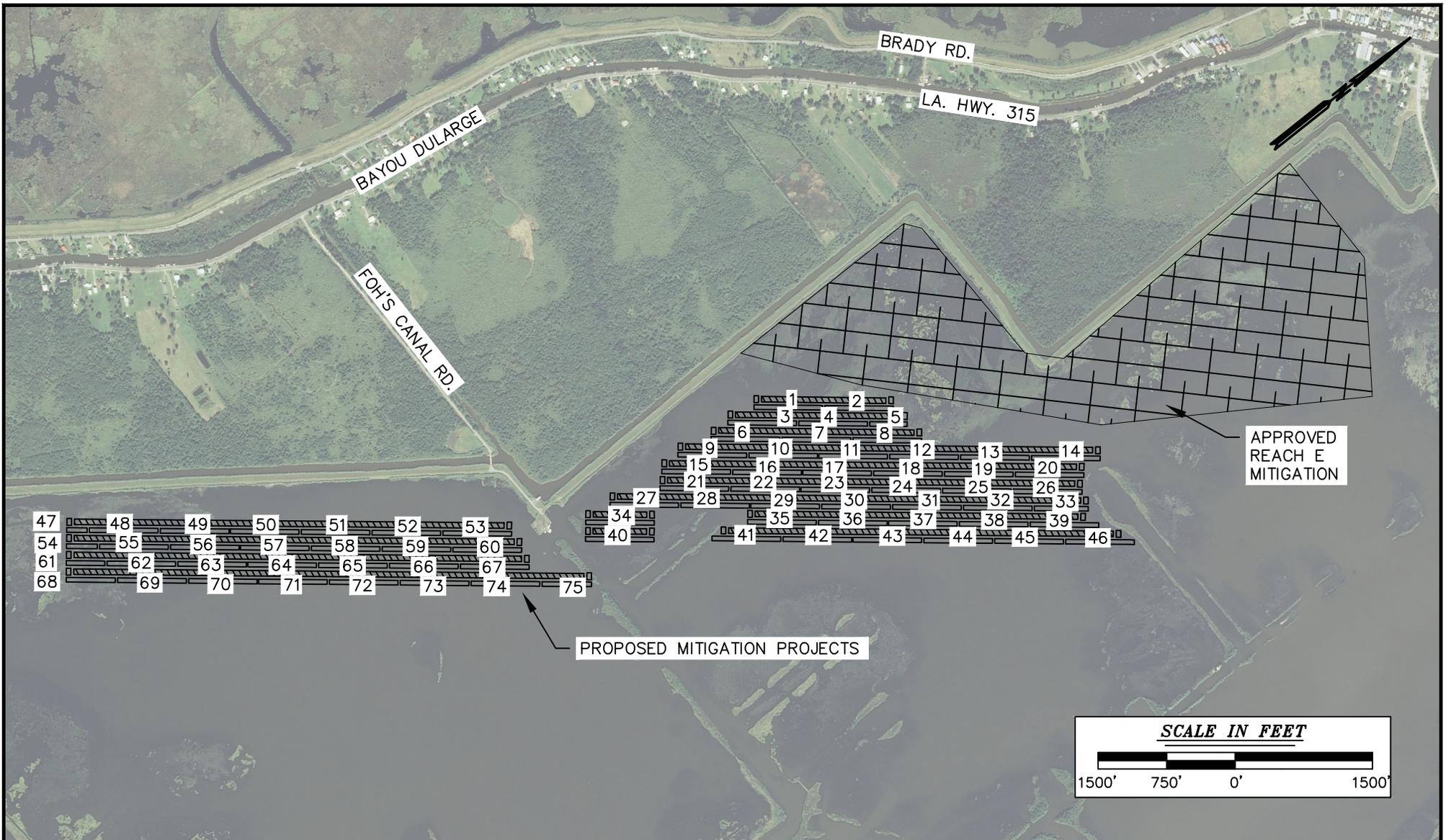
**DELTA COAST**  
 CONSULTANTS, LLC

102 WILSON AVE. - HOUMA, LA 70364

PHONE: 985-655-3100 www.deltacoastllc.com FAX: 985-262-4567

**APPLICANT: TERREBONNE PARISH LEVEE AND  
 CONSERVATION DISTRICT**

DATE: 7/23/2015  
 SHEET 1 OF 4



NOTE: ALL AIRBOAT ACCESS SHALL BE THROUGH OPEN WATER.

PLAN VIEW

MITIGATION PLAN FOR FALGOUT CANAL FLOOD STRUCTURE AND CONNECTING LEVEES  
 LOCATED IN SEC. 24,25,35,36, T19S-R16E  
 TERREBONNE PARISH, LOUISIANA

**APPLICANT:** TERREBONNE PARISH LEVEE AND CONSERVATION DISTRICT

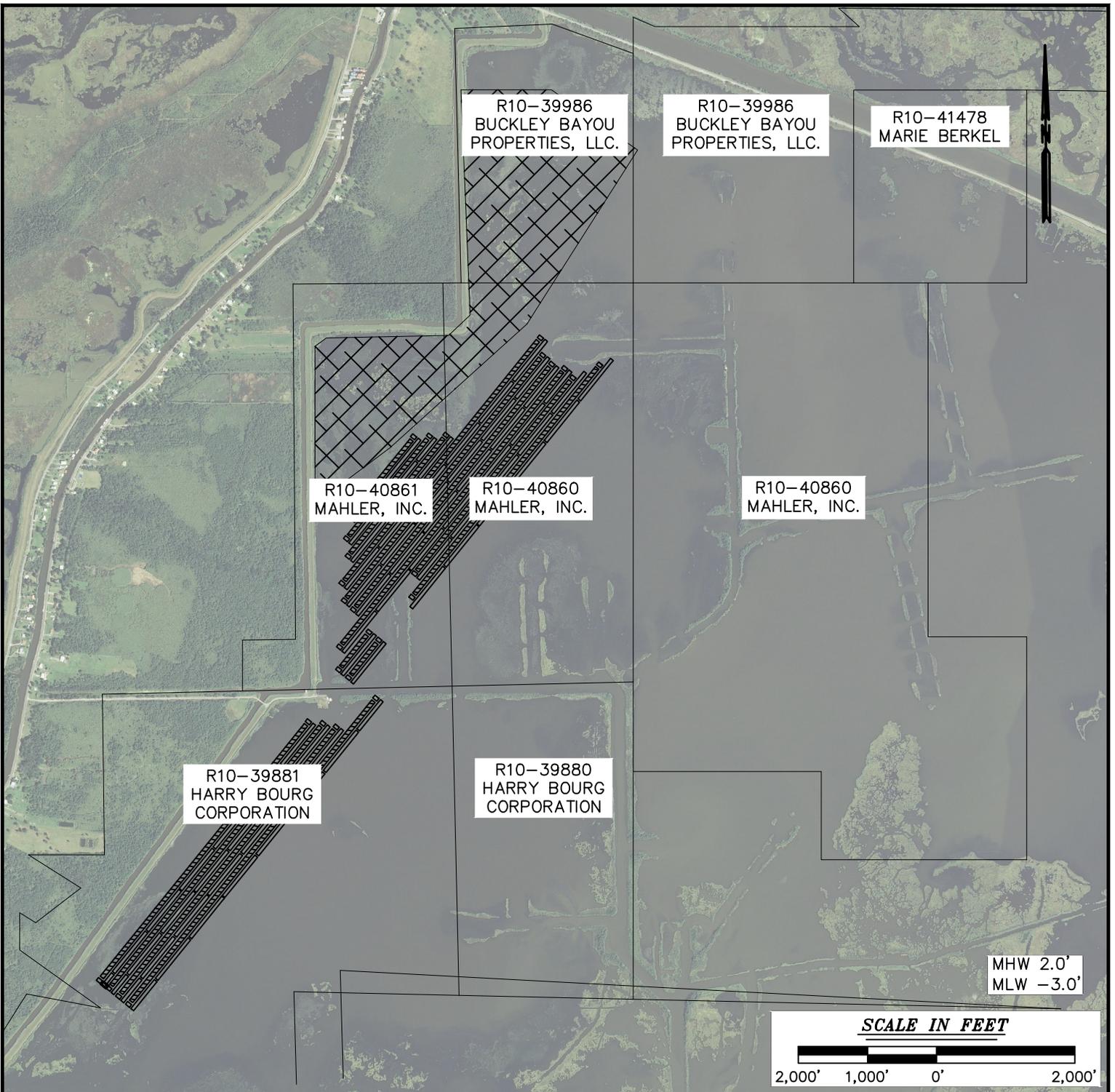
DATE: 7/23/2015  
 SHEET 2 OF 4



**DELTA COAST CONSULTANTS, LLC**

102 WILSON AVE. - HOUMA, LA 70364  
 PHONE: 985-655-3100 www.deltacoastllc.com FAX: 985-262-4567

FILE: P:\2014\2014.001\170 - FALGOUT CANAL FLOODGATE\DWG\A\_14001\_REACH E MITIGATION2015\_7\_21.DWG



LAT: 29°22'52.22"N  
LON: 90°47'33.96"W

**OVERALL PROJECT PLAN VIEW 2**

MITIGATION PLAN FOR FALGOUT CANAL FLOOD STRUCTURE  
AND CONNECTING LEVEES  
LOCATED IN SEC. 24,25,35,36, T19S-R16E  
TERREBONNE PARISH, LOUISIANA



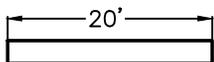
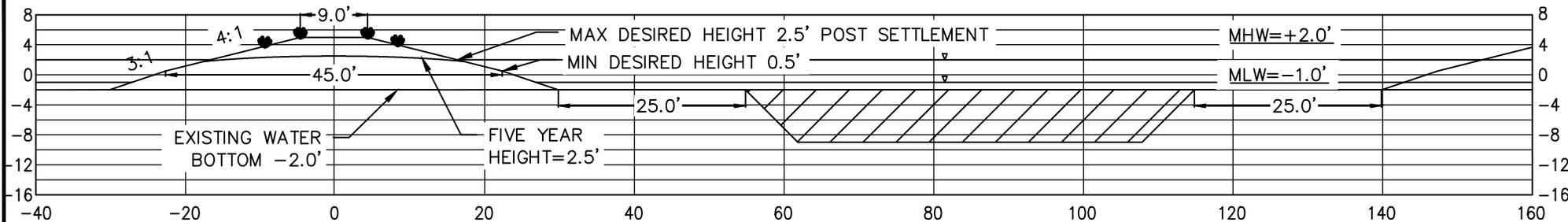
**DELTA COAST  
CONSULTANTS, LLC**

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PHONE: 985-655-3100 www.deltacoastllc.com FAX: 985-262-4567

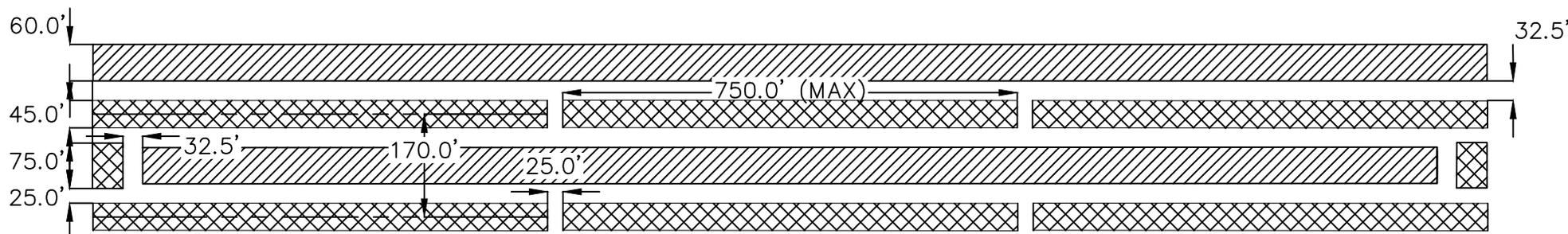
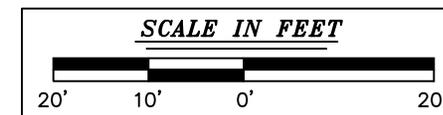
**APPLICANT: TERREBONNE PARISH LEVEE AND  
CONSERVATION DISTRICT**

DATE: 7/23/2015  
SHEET 3 OF 4



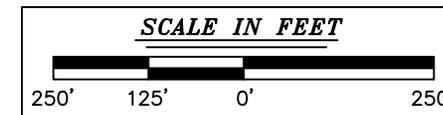
BUGGY WIDTH = ± 20 FEET

TYPICAL MARSH TERRACE CREATION FILL SECTION



LEGEND

-  PROPOSED EXCAVATION
-  PROPOSED PROPOSED FILL



NOTE: TERRACES WILL BE CONSTRUCTED TO +5.0' AND ALLOWED TO SETTLE TO +2.5'.

PLAN VIEW

MITIGATION PLAN FOR FALGOUT CANAL FLOOD STRUCTURE AND CONNECTING LEVELS  
 LOCATED IN SEC. 24,25,35,36, T19S-R16E  
 TERREBONNE PARISH, LOUISIANA



102 WILSON AVE. - HOUMA, LA 70364  
 PHONE: 985-655-3100 www.deltacoastllc.com FAX: 985-262-4567

APPLICANT: TERREBONNE PARISH LEVEE AND CONSERVATION DISTRICT

**MITIGATION PLAN  
FOR  
FALGOUT CANAL FLOOD STRUCTURE AND CONNECTING LEVEES**

Prepared for:  
Terrebonne Levee and Conservation District



220 Clendenning Rd.  
Houma, LA 70363

**July 24, 2015**

Prepared By:



102 Wilson Ave.  
Houma, LA 70364

## **Introduction**

The Terrebonne Levee and Conservation District (TLCD) proposes the following mitigation plan to offset the unavoidable impacts associated with Falgout Canal Flood Structure and the connecting levees. This plan has been prepared for the United States Army Corps of Engineers (USACE) Permit Number MVN 1999-03719-WPP and Louisiana Department of Natural Resources (LADNR) Permit P20130446. This plan demonstrates the offset of approximately 35 acres of impacts associated with the above permits.

## **Project Description and Methodology**

In examining the potential areas for mitigation TLCD has set the area south Falgout Canal Road as a high priority. The area has been degraded extensively over last several decades due to elevated salinity in a once stable brackish environment. To complement its already robust plan of terrace construction in this area, TLCD has also developed a plan for the introduction of fresh water into this basin. This basin has been severed through construction of the Falgout Canal Road and this new introduction will certainly benefit the basin as well as the newly constructed terraces. For the purposes of this plan, TLCD wishes to add to the already permitted terraces by construction of 55.8 acres of new terraces which will serve a dual purpose. First, these terraces will satisfy the mitigation requirements of this project; and second, serve as a buffer to storm and wave energy in this basin.

Terraces will be created by using existing bay bottom sediment to form a baffle system of ridges at marsh elevation after settlement. Terraces will be constructed in a staggered gap formation to minimize fetch and promote transport of aquatic organisms. A backhoe shovel mounted on a marsh buggy will dredge a maximum of 7 feet into the substrate. The dredge material will be placed on top of the adjacent bottom forming the terrace, the top of which will be at an elevation of 5.0 foot NAVD 88, which will settle to 2.5 foot NAVD 88, level with the marsh surface after approximately five years of settlement. When possible, terraces will be dredged on alternating sides in order to avoid creating continuous canals which could cause increased scouring. Gaps will be placed between terraces at a

maximum distance of 750 feet in order to facilitate the settling of suspended soil particles.

### **Benefits and Objectives**

The combination of vegetative planting and marsh terracing is intended to:

- 1) Promote deposition and retention of suspended sediments;
- 2) Reduce turbidity;
- 3) Reestablish emergent marsh vegetation;
- 4) Reduce marsh fringe retreat by reducing fetch;
- 5) Increase fisheries production by increasing the length of marsh edge.

### **Baseline Information**

The marsh type in this area would be classified as brackish marsh experiencing deterioration by open water in majority of the areas. The site is characterized by shallow open water and remnant areas of degraded marsh. Open water comprises the majority of the proposed compensatory project with containment dikes abutting existing emergent wetlands. The area, and has been historically, water of the U.S. with adjoining jurisdictional wetlands.

### **Determination of Credits**

The project will offset the losses of 35.0± acres of brackish marsh by creating 55.8± acres of terraces. The proposed mitigation plan should be considered as an acceptable method of applying the “in lieu” mitigation fund for a sustainable project that allows maximum ratio of dollars to construction marsh creation. Since this permit has been evaluated under the previous mitigation policies, a factor of 1.5 times the amount of impacts should satisfy requirements and has been accepted for other projects within the Morganza to the Gulf alignment.

## **Mitigation Plan**

The project develops 55.8± acres of mitigation by constructing 54,050 linear feet of terraces in varying lengths in Sections 24,25,35, and 36 in T19S-R16E (see Attachment No. 1 Mitigation Plan Drawings). The terraces will create a marsh platform and also decrease further loss of wetland acres caused by shoreline erosion by dampening wind and wave energy. The terraces will be arranged in a linear formation in an effort to minimize the amount of marsh/open water edge, and to minimize fetch distances. The orientation of the system will be placed where possible within existing spoil banks to insure long term survival and to provide the maximum protection against the predominant southeasterly wave energy. Terraces will be constructed by depositing borrow material with a 25 ft-wide berm and a top width of 9 feet (top terrace elevation of 5.0 foot NAVD 88) to make a terrace with 3:1 side slopes. Post settlement elevations will be maintained at a minimum 45 foot wide marsh platform between 0.5 foot and 2.5 foot NAVD 88 (see attached Sheet 4 to 4 of the Mitigation Plan Drawings).

*Spartina alterniflora* (smooth cordgrass) will be planted on 10 foot centers on the mean high water and mean water lines on both sides of the terrace, at approximately 2.0 foot NAVD 88 and 1.25 foot NAVD 88 in elevation. The marsh grass is expected to cover the terraces fairly quickly, and then spread in to the shallow areas around the terraces over the course of ten years. The terraces will stop, or decrease, shoreline erosion and provide platforms for the plant growth as well as trap sediments. This project will convert areas of open water back to vegetated marsh, as well as compliment the freshwater introduction provided by the environmental structures planned in the Reach E project.

## **Monitoring requirements, Maintenance & Adaptive Management Plan**

The performance of the proposed terrace plan will be monitored by conducting site visits as well as spatial analysis to determine project performance in accordance with the established success criteria. The monitoring schedule will consist of post construction surveys and annual evaluation checks at one, two, and five year intervals. An “As Built” report and an annual monitoring report will be submitted to the regulatory stakeholders in a format to be determined. In the event that the proposed mitigation plan does not adequately meet the success

criteria that have been established by the natural resource agencies, the sponsor will take appropriate action to improve the performance of the mitigation project in order to meet the required success criteria. Furthermore, the sponsor shall construct these terraces with its own resources. This provides ability to quickly address any deficiencies. The conceptual mitigation plan lays the foundation for the adaptive management of the selected mitigation project.

### **Site Selection and Site Protection Instrument**

The mitigation project, selected, offsets unavoidable impacts in the same watershed proximal to the actual impacts. Shallow water area with proposed fresh water introduction should couple with the mitigation project to ensure long term success and viable plant growth. Mitigation servitudes acquired by TLCD in perpetuity will promote long-term protection of the mitigation project site.

### **Performance Standards**

The goal of the mitigation is to meet the wetland criteria as described in the Corps 1987 Wetlands Delineation Manual as well as applicable criteria that have been identified through the development of existing mitigation program. These criteria can be subdivided into initial, 2 year, and 5 year success criteria.

#### **1. Initial Success Criteria**

Initial placement of dredged material completed and at least 80% of the site is within “as-built” or initial construction elevation range. Resource agencies will review the Sponsor’s proposed initial construction elevation, but it will be the Sponsor’s responsibility to select the initial construction elevation based on the desired post-compaction, “functional terrace” elevation identified by the natural resource agencies.

#### **2. Year Two Success Criteria**

- a. After at least one full year following construction, no less than 90% of the terrace creation site is within the “functional terrace” elevation range (e.g., +2.5 ft NAVD 88+ 6 inches).

### 3. Year Five Success Criteria

- a. Five years after construction, at least 75% of the marsh creation remains within the target elevation range as determined by the natural resources agencies.

These criteria will be used to evaluate the performance of the mitigation plan. Performance against these metrics will be reported in the annual mitigation reports.

## **Financial Assurances and Long Term Protection**

As with other projects that are a part of Morganza to the Gulf, a state agency will provide the financial assurances for the project. The value of the financial assurance will be determined during the development of the site protection instrument. Land ownership shall be acquired by Terrebonne Levee and Conservation District through a flood protection and mitigation servitude. The Sponsor is the party responsible for long term and adaptive management. Terrebonne Levee and Conservation District has, both, the resources and the ability to monitor and maintain the project as specified in the success criteria.

## **Construction Notes and Plan Requirements**

1. As-built drawings will be submitted within 30 days of completion of this project to the Louisiana Department of Natural Resources, Office of Conservation, Pipeline Division, P. O. Box 94275 Baton Rouge, LA 70804, and to the Louisiana Department of Natural Resources, Coastal Management Division, P.O. Box 44487, Baton Rouge, LA 70804-4487.
2. Structures must also be marked/lighted in accordance with U.S. Coast Guard regulations.
3. In order to ensure the safety of all parties, the permittee shall contact the Louisiana One Call System (1-800-272-3020) a minimum of 48 hours prior to the commencement of any excavation (digging, dredging, jetting, etc.) or demolition activity.

4. Create terraces over 55.8 acres which will be planted with plugs, single springs, and/or trade gallon containers of smooth cordgrass (*spartina alterniflora*) or other acceptable vegetation. Planting rows will be located on the mean high water and mean water lines of terraces.
5. Airboats and marsh buggies will only be used in open water.
6. The USACE permit Number is MVN 1999-03719-WPP and Louisiana Department of Natural Resources (LADNR) Permit P20130446
7. Proposal to construct 54,050 linear feet of terraces (in varying lengths) in order to mitigate for the unavoidable impacts to 35± acres consisting of brackish marsh habitat caused by the construction of the Falgout Canal Flood structure and levee project. Approximately ± 203,416 cubic yards of material will be excavated and deposited for the construction of terraces.