2022 CPRA Coastal Industry Week

Coastal Construction Project Forecast – Partner Led

Virtual Meeting Via Zoom Webinar Platform

April 4th, 2022
3:00pm – 4:30pm CST

Zoom URL:	https://us06web.zoom.us/j/89874018397
Meeting ID:	898 740 18397
Conference Line:	USA (816) 423-4282
Conference Code:	955438

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

II. Upcoming Restoration Projects to be Bid for Construction (3:05 pm – 3:45 pm)

- **a.** Upcoming Ducks Unlimited Projects (Contracted by Ducks Unlimited): *Brad Lambert, Ducks Unlimited*
- **b.** PO-0075/PO-0133 LaBranche Marsh Creation Project (Contracted by NRCS): *Nick McCoy, NRCS*
- **c.** BA-0206 Northeast Turtle Bay Marsh Creation Project & Critical Area Shoreline Protection: *Nick McCoy, NRCS*
- **d.** Lake Pontchartrain Shoreline Protection Project (Contracted by Tangipahoa Parish): *Erin Rooney, HDR Engineering, Inc.*
- **e.** Bayou Terre Aux Boeufs Ridge Restoration Phase II (Contracted by St. Bernard): *Alex Boudreau, Royal Eng. & Consultants*
- **f.** Upcoming Vermilion Parish Projects (Contracted by Vermilion): *Nick Sonnier, Sellers & Associates, Inc.*

III. Upcoming Risk Reductions Projects to be Bid for Construction (3:45 pm – 4:15 pm)

- **a.** Butch Hill Pump Station (Contracted by Lafourche Par. & NLLD): *Dwayne Bourgeois, NLLD; Dillon Baronne, Lafourche Par.*
- **b.** Upcoming LAILD Projects (Contracted by LAILD): *Myr. Tim Kerner Jr., Town of Jean Lafitte; Miles Garriott, Evans-Graves Eng., Inc.*
- **c.** Upcoming SLLD Projects (Contracted by SLLD): *Windell Curole, SLLD*

IV. Upcoming Recreational Use Projects to be Bid for Construction (4:15 pm – 4:20 pm)

- **a.** Bucktown Construction Projects (Contracted by Jefferson Parish): *Lauren Averill, Jefferson Parish*

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

VI. Adjourn

Update on DU Projects – CPRA Industry Day

Brad Lambert, PE

Regional Engineer - South Louisiana

michaelfurtman.com

Notes/ Overview

- Different from other presentations
  - Less detail
  - Smaller projects
- Thanks to CPRA
  - Allowing us to participate
  - Being a partner on these projects
- List of projects (9)
- Project types/details
- Locations

Types of Projects

- Water Control Structures
  - Apache – Falgout Canal
  - Cameron Prairie NWR
  - Marsh Island Refuge
  - Bayou Sauvage NWR
  - Continental Ecobale

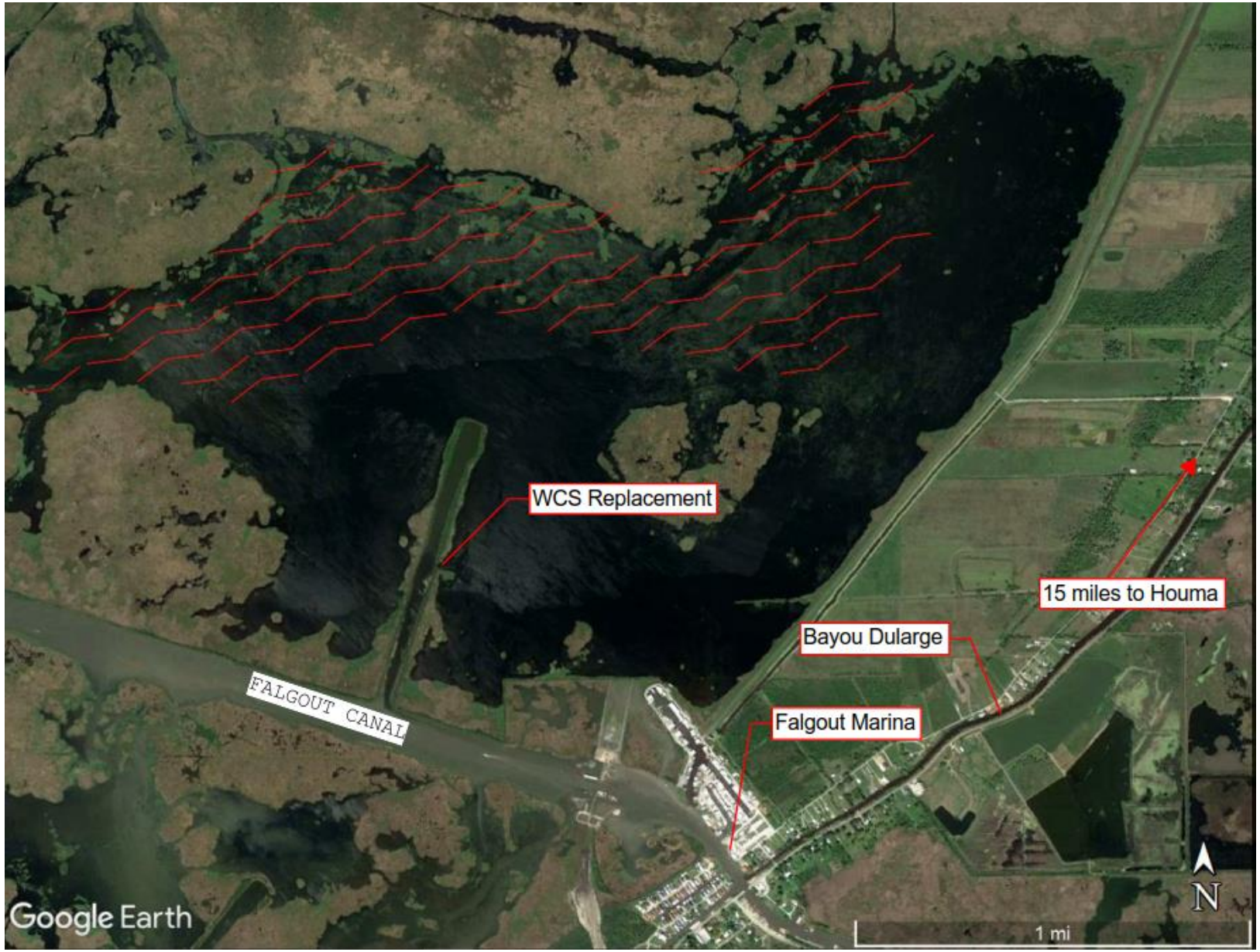
- Crevasses
  - Pass-a-Loutre WMA / Delta NWR

- Earthen Terraces
  - Port Fourchon
  - Broussard Estates
  - Apache – Falgout Canal

Goal = Completion by June 30, 2023

Upcoming DU Projects – Water Control Structures / Terraces

- Apache – Falgout Canal
  - Falgout Canal area / Apache Property
  - Terrebonne Parish
  - Salinity control / flooding stress
  - Vinyl sheet pile bulkhead with two 48” flap gates
  - Riprap scour protection
  - Removal of old structure
  - 21,000 L.F. of terraces
  - Bid Fall 2022



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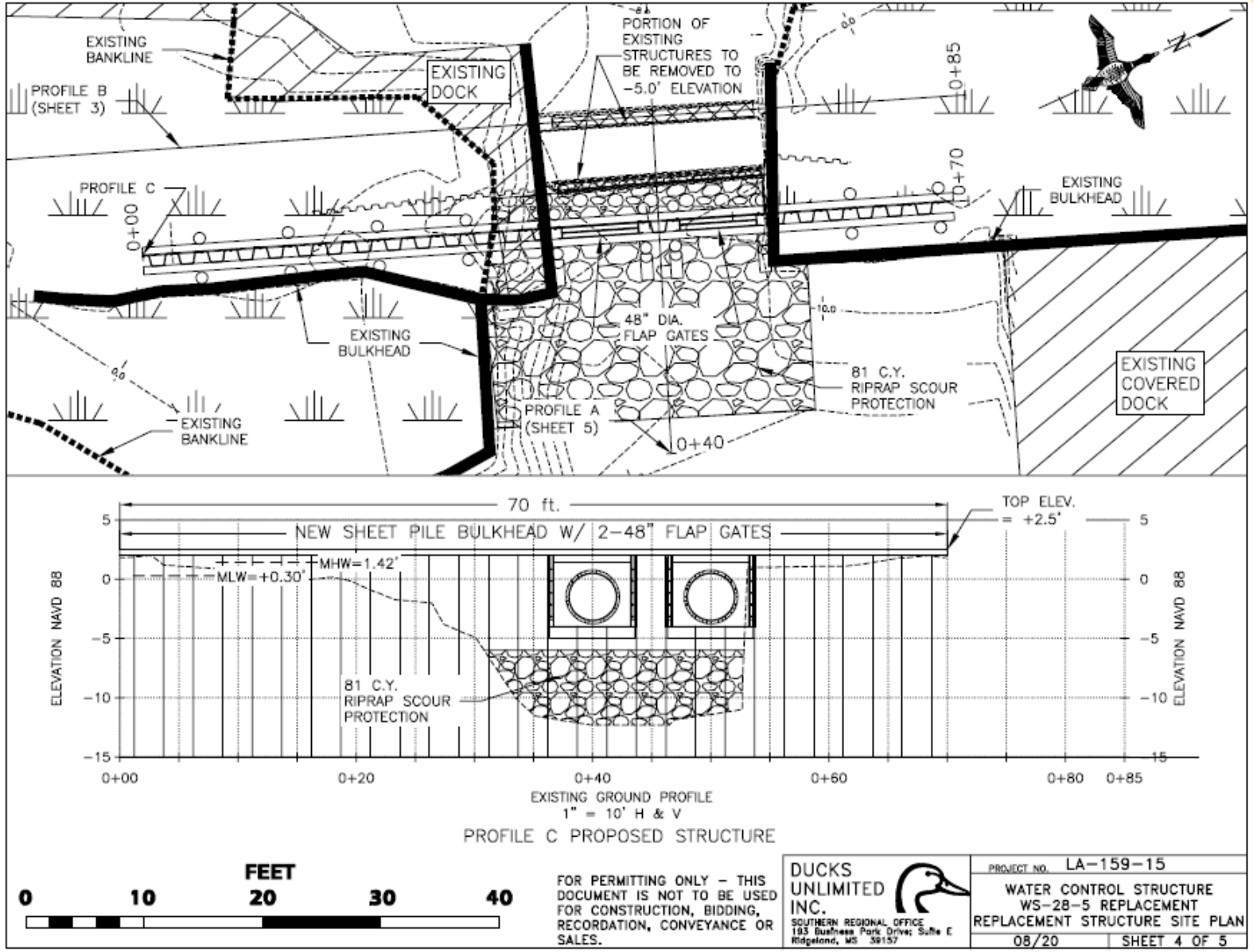
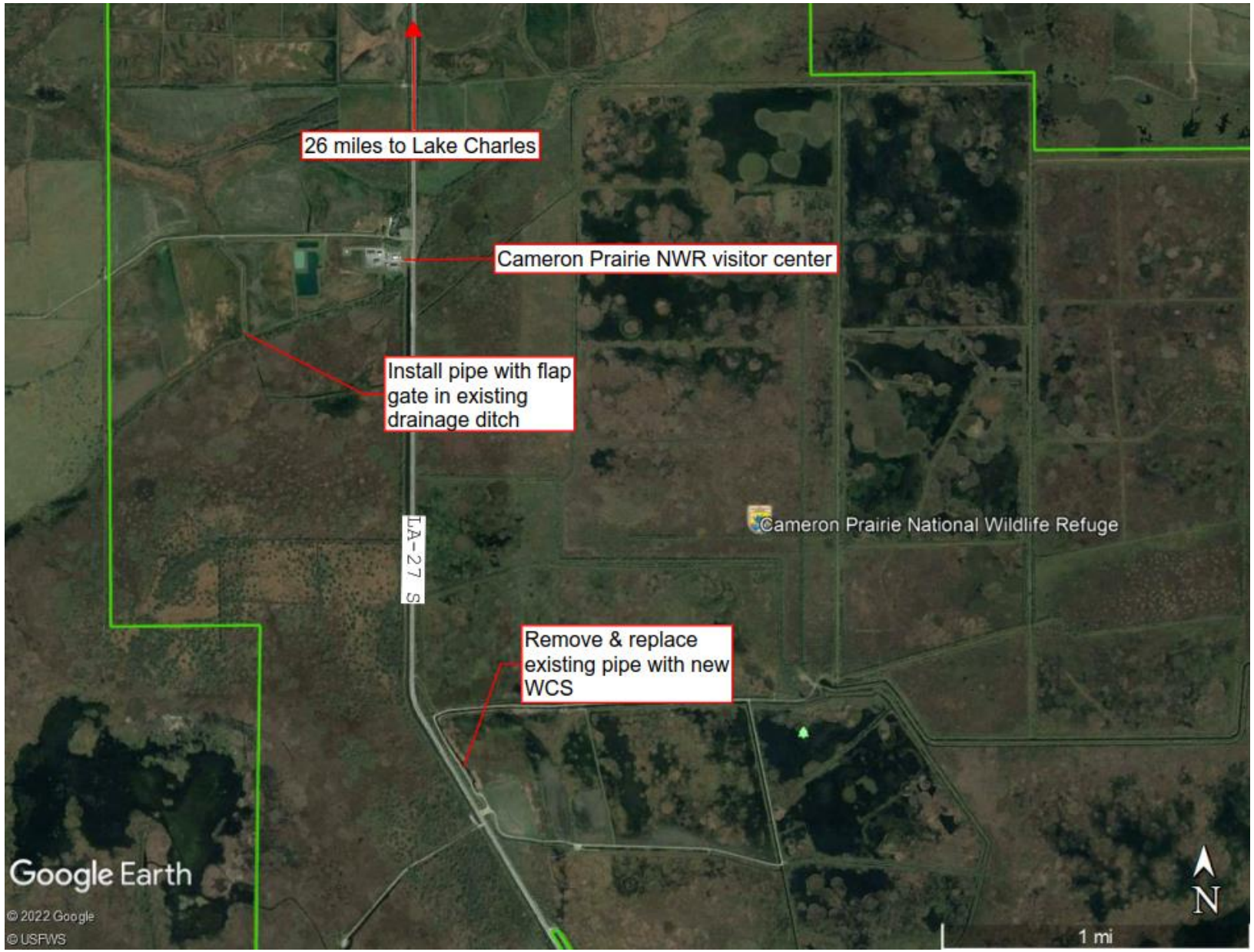


Upcoming DU Projects – Water Control Structures

- Cameron Prairie NWR in Cameron Parish
  - USFWS
  - 42” pipe with flap gate through existing drainage ditch
  - Aluminum stoplog riser with 48” pipe to replace currently inefficient pipe
  - Bid Winter 2022/2023



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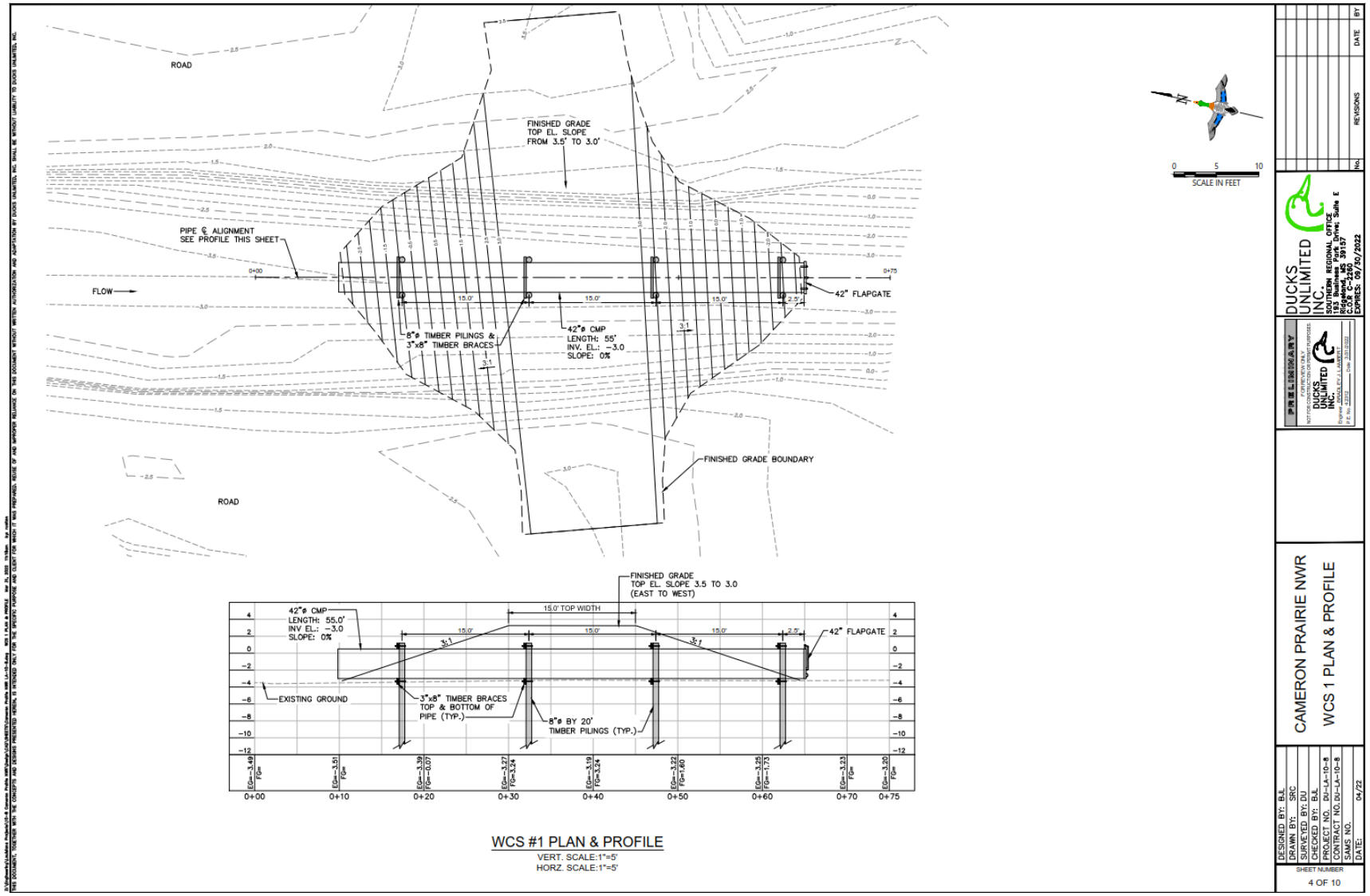

Upcoming DU Projects – Water Control Structures

- Marsh Island Refuge in Iberia Parish
  - LDWF
  - Marsh management
  - 2 structures – sheet pile bulkhead
    - 1 – stoplog risers and combination flap gates
    - 1 – stoplog bays only
  - Walkways
  - Removal of old structures
  - Bidding 2022/2023?

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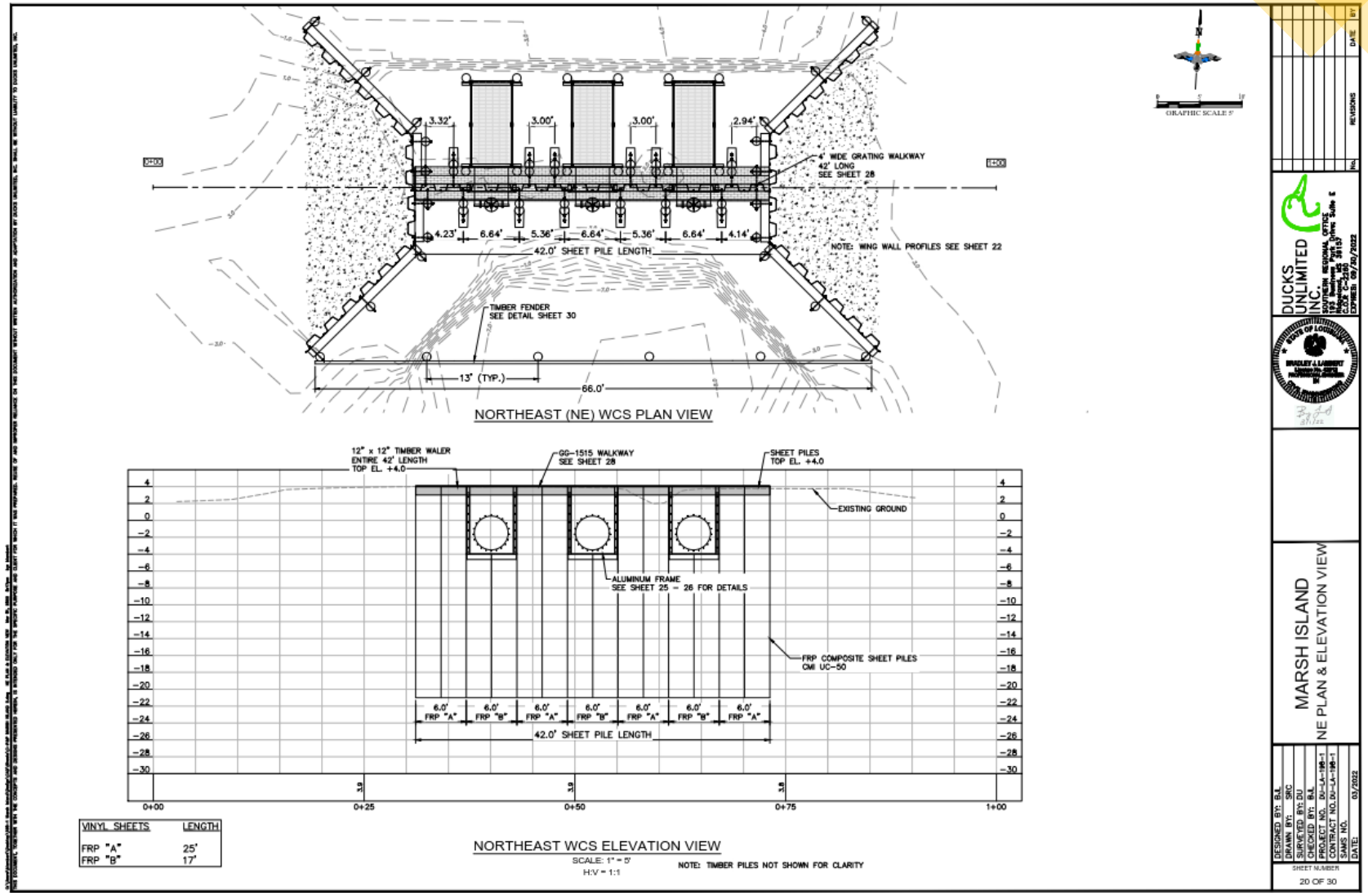

Upcoming DU Projects – Water Control Structures

- Bayou Sauvage NWR in Orleans Parish
  - USFWS
  - Increase drainage capacity from west north of I-10
  - 2 structures
  - Aluminum stoplog risers with 48” pipes
  - Walkways
  - Removal of old structure
  - Bid Spring 2023

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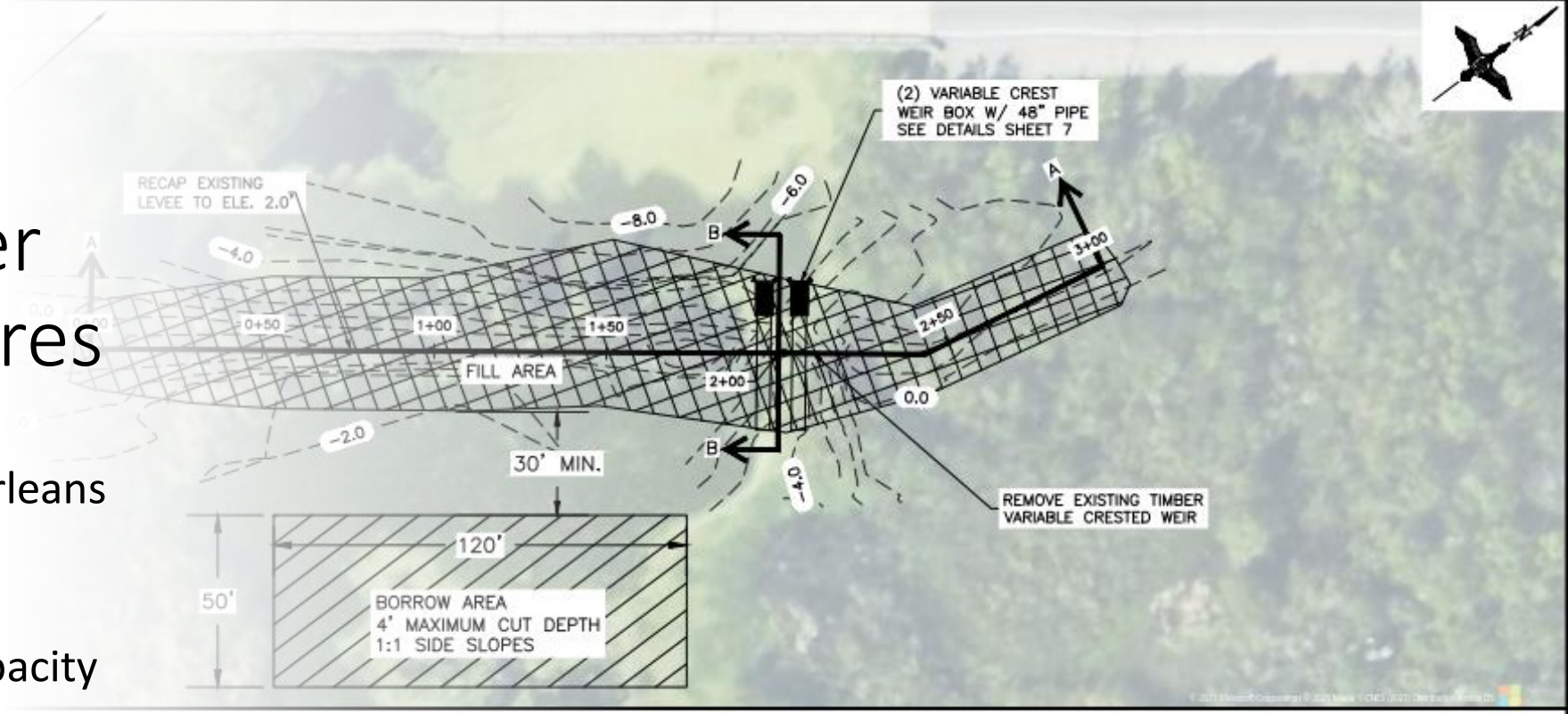

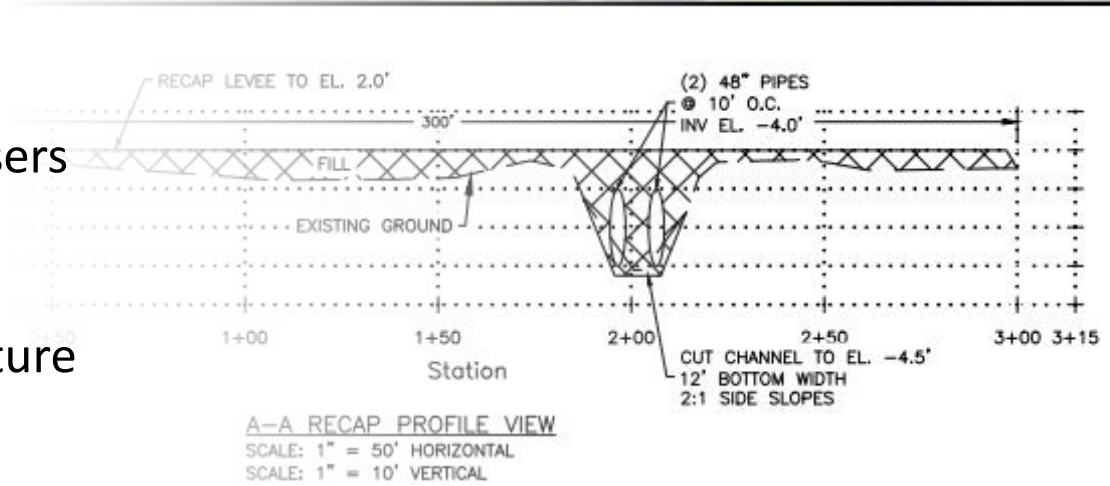

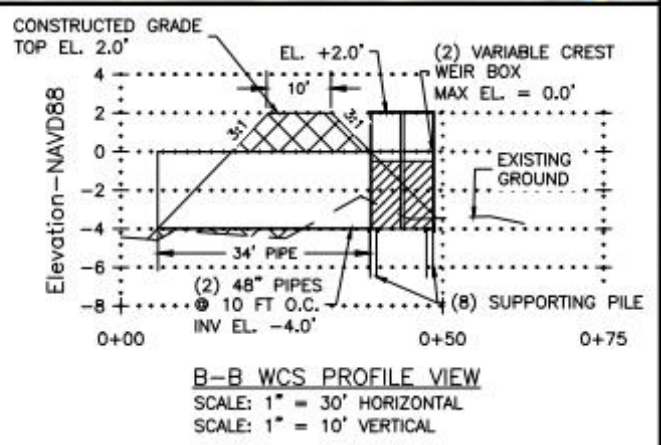

Upcoming DU Projects – Water Control Structures

- Continental Land & Fur in Terrebonne Parish
  - Contain floating marsh while allowing/reducing tidal exchange
  - EcoBale “breakwater structure”
  - Timber pile supported
  - Bid Fall 2022

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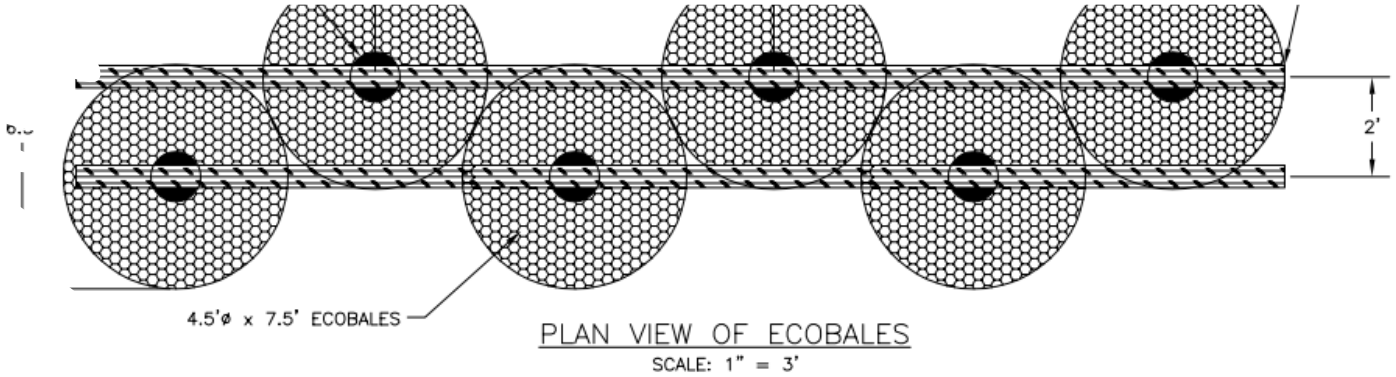

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TICAL CONTROL IS NAVD88 (GEOID12A). BASED ON TRIMBLE RTX CENTERPOINT
ED SOLUTION FROM CORS DATA COLLECTED AT AUTONOMOUS BASE POSITION.

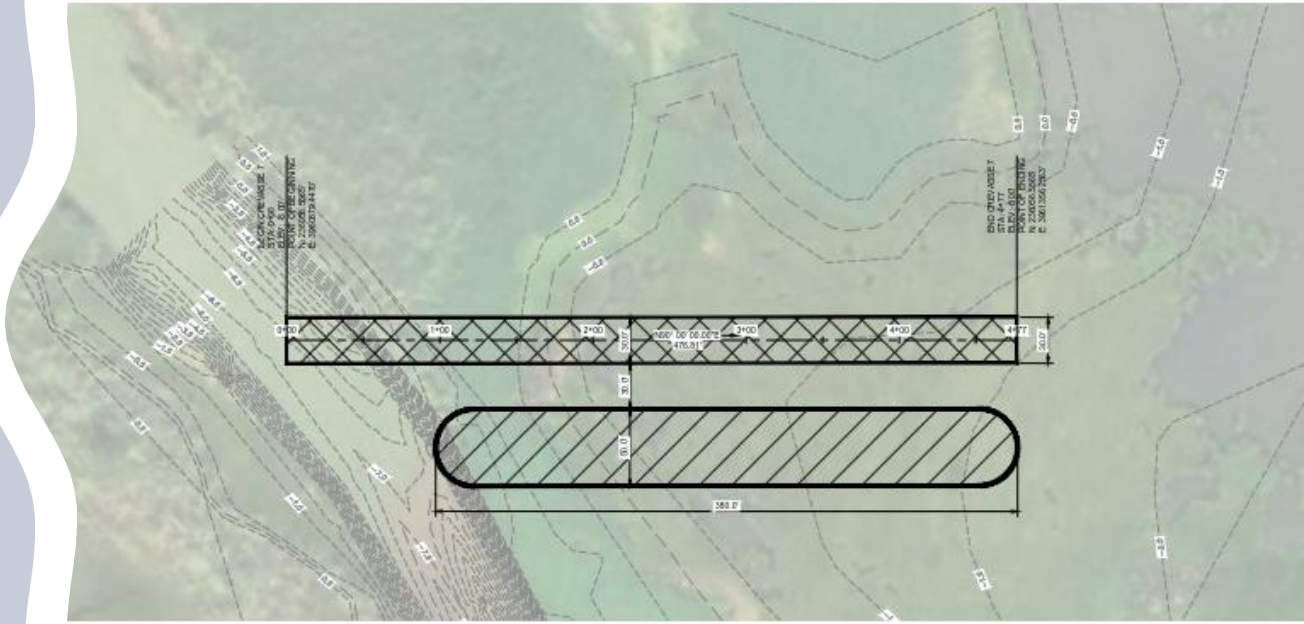
SERVED AT THE TIME OF SURVEY ARE SHOWN ON THE DRAWING; HOWEVER,
IES IN DRAWING IS NOT ASSURANCE THAT OTHER UTILITIES DO NOT EXIST ON
TRACTOR'S RESPONSIBILITY TO CALL THE NATIONAL 811 "CALL BEFORE

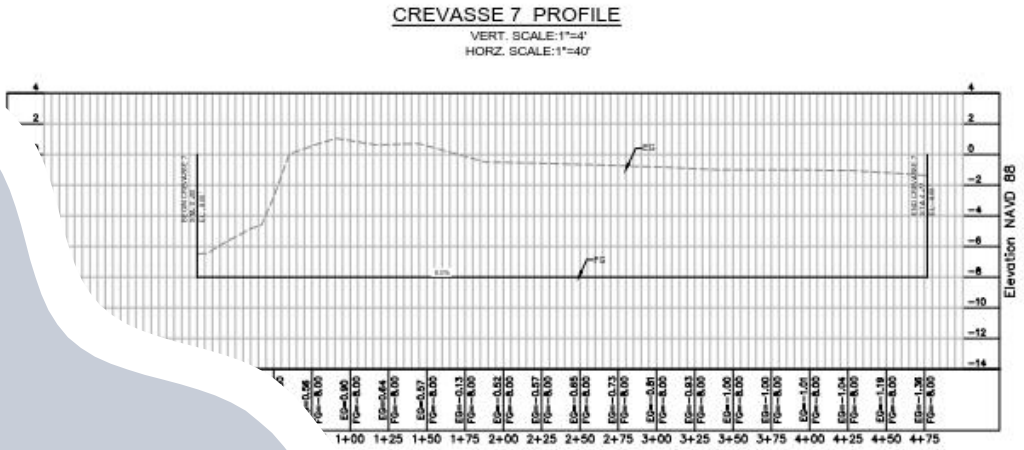
Upcoming DU Project - Crevasses

- Delta NWR / Pass-a-Loutre WMA
  - LDWF & USFWS
  - Mechanically dredged crevasses
  - Open cut through high banks to open water areas to introduce river sediment
  - Bid Winter 2022/2023

Upcoming DU Project - Crevasses

- Delta NWR / Pass-a-Loutre WMA in Plaquemines Parish
  - LDWF & USFWS
  - Mechanically dredged crevasses
  - Open cut through high banks to open water areas to introduce river sediment
  - Bid Winter 2022/2023





Upcoming DU Project - Terraces

- Port Fourchon in Lafourche Parish
  - 53,000 L.F. of earthen terraces
  - “Living shoreline” component as part of the project
  - Recreate old ridge features near Port Fourchon
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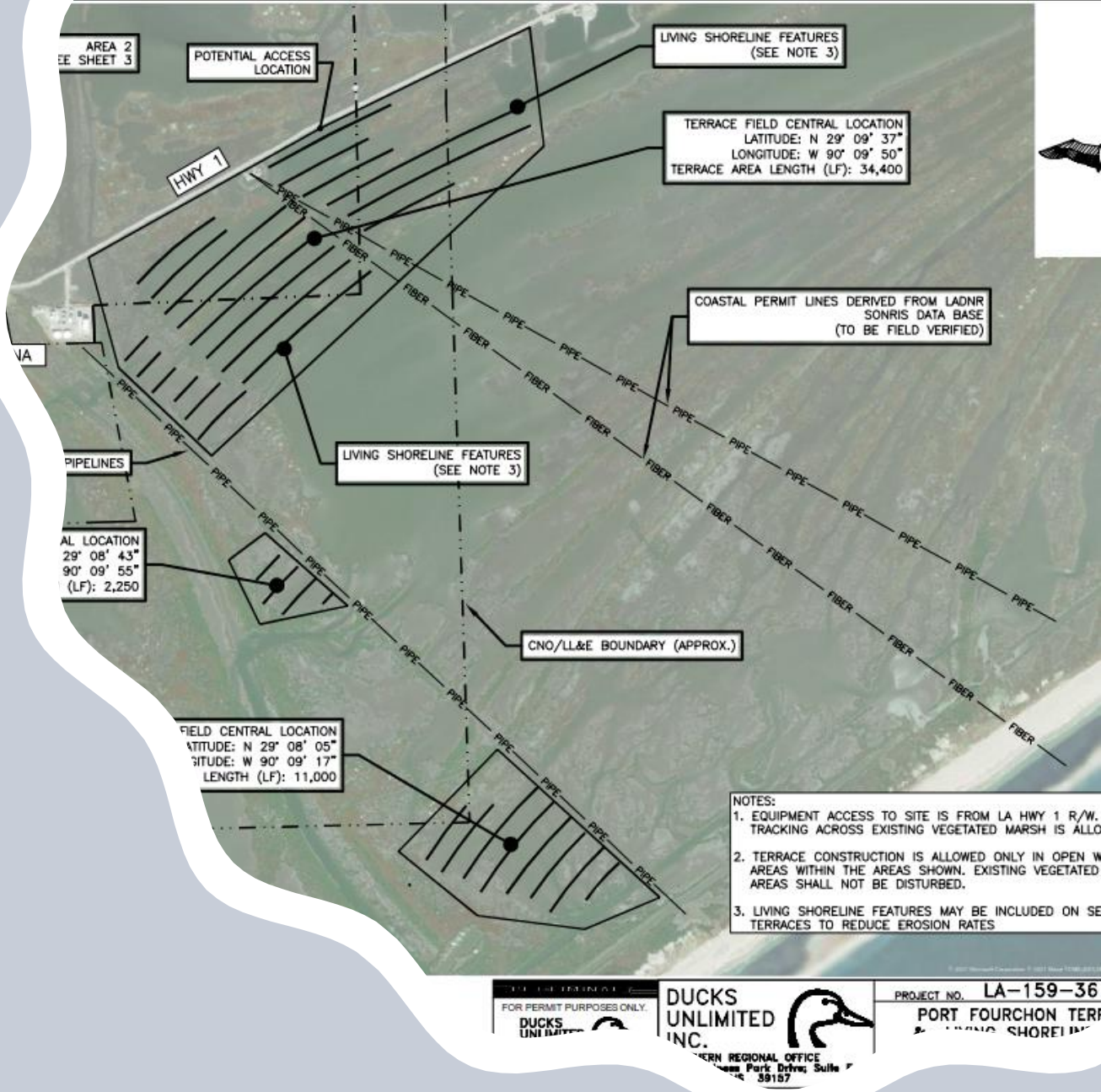
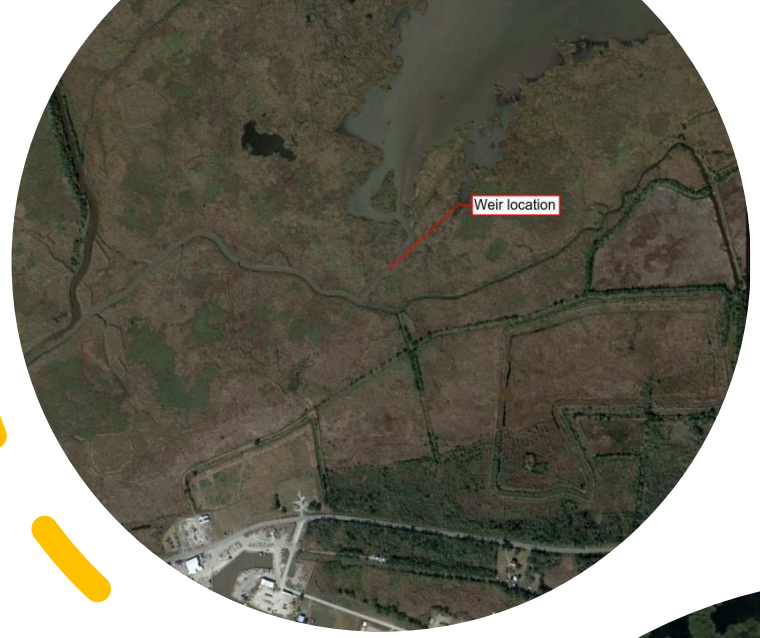


Upcoming DU Project – Terraces / Rock Weir

- Broussard Estates in Vermilion Parish
  - 24,000 L.F. of terraces to reduce open water wave energy
  - One rock riprap weir to reduce large tidal exchange
  - 2 separate projects bid Fall 2022



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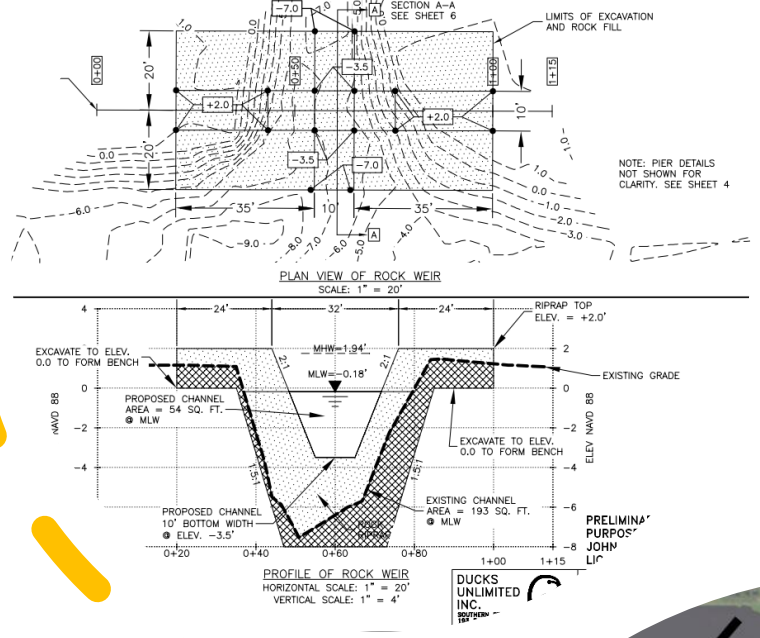

DU Mission

“Ducks Unlimited Conserves, Restores, and Manages Wetlands and Associated habitats for North America’s Waterfowl. These Habitats also Benefit other Wildlife and People.”

Brad Lambert

Ducks Unlimited

Regional Engineer

Lafayette, LA

blambert@ducks.org

Questions?

michaelfurtman.com

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LaBranche Marsh Creation Project PO-75/133

Nick McCoy, P.E.
Design Engineer

April 2022

United States Department of Agriculture

Natural Resources Conservation Service

CPRA

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Outline

- Project Location
- Schedule
- Layout of Marsh Creation Areas
- Layout of Borrow Areas
- Other Features
- Summary of Bid Quantities

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Project Location

INFO	DESCRIPTION
LOCATION	Pontchartrain Basin, St. Charles Parish
FUNDING	CWPPRA – Natural Resources Conservation Service (NRCS) Sponsored
PROJECT TYPE	Marsh Creation

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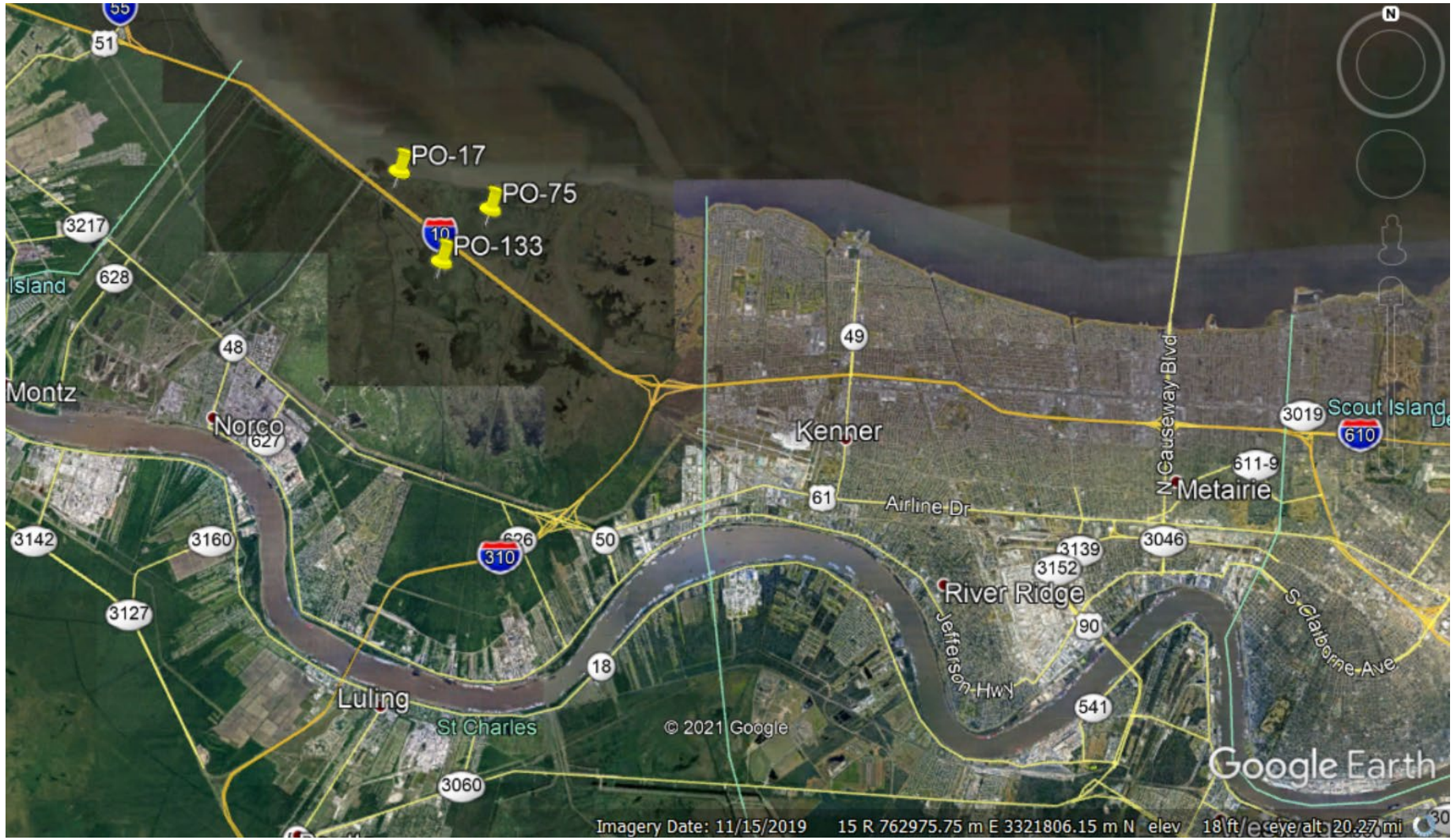
Project Location



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Schedule

- Phase 2 Funding: Complete
- Permitting: Complete
- Landrights/Servitude Agreements: Finalized
- Advertisement: Spring 2022

  sam.gov
- Construction Duration: 526 days (includes 96 weather days)

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Layout of Marsh Creation Areas

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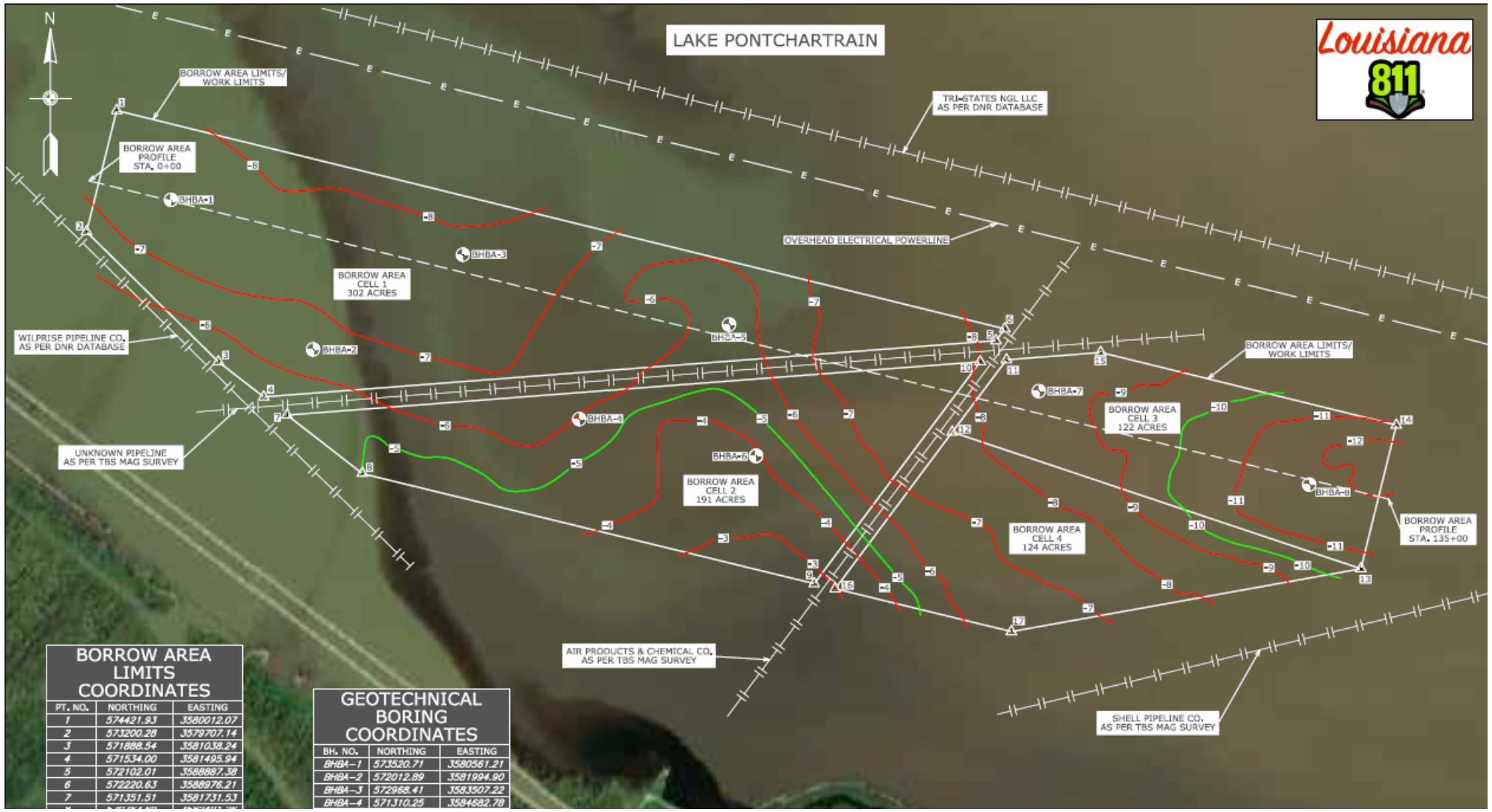
Layout of MCA Borrow Areas



BORROW AREA LIMITS COORDINATES

PT. NO.	NORTHING	EASTING
1	574421.93	3580012.07
2	573200.28	3579707.14
3	571888.54	3581038.24
4	571534.00	3581495.94
5	572102.01	3588887.38
6	572220.63	3588976.21
7	571351.51	3581731.53

GEOTECHNICAL BORING COORDINATES

BH. NO.	NORTHING	EASTING
BHBA-1	573520.71	3580561.21
BHBA-2	572012.89	3581994.90
BHBA-3	572968.41	3583507.22
BHBA-4	571310.25	3584682.78

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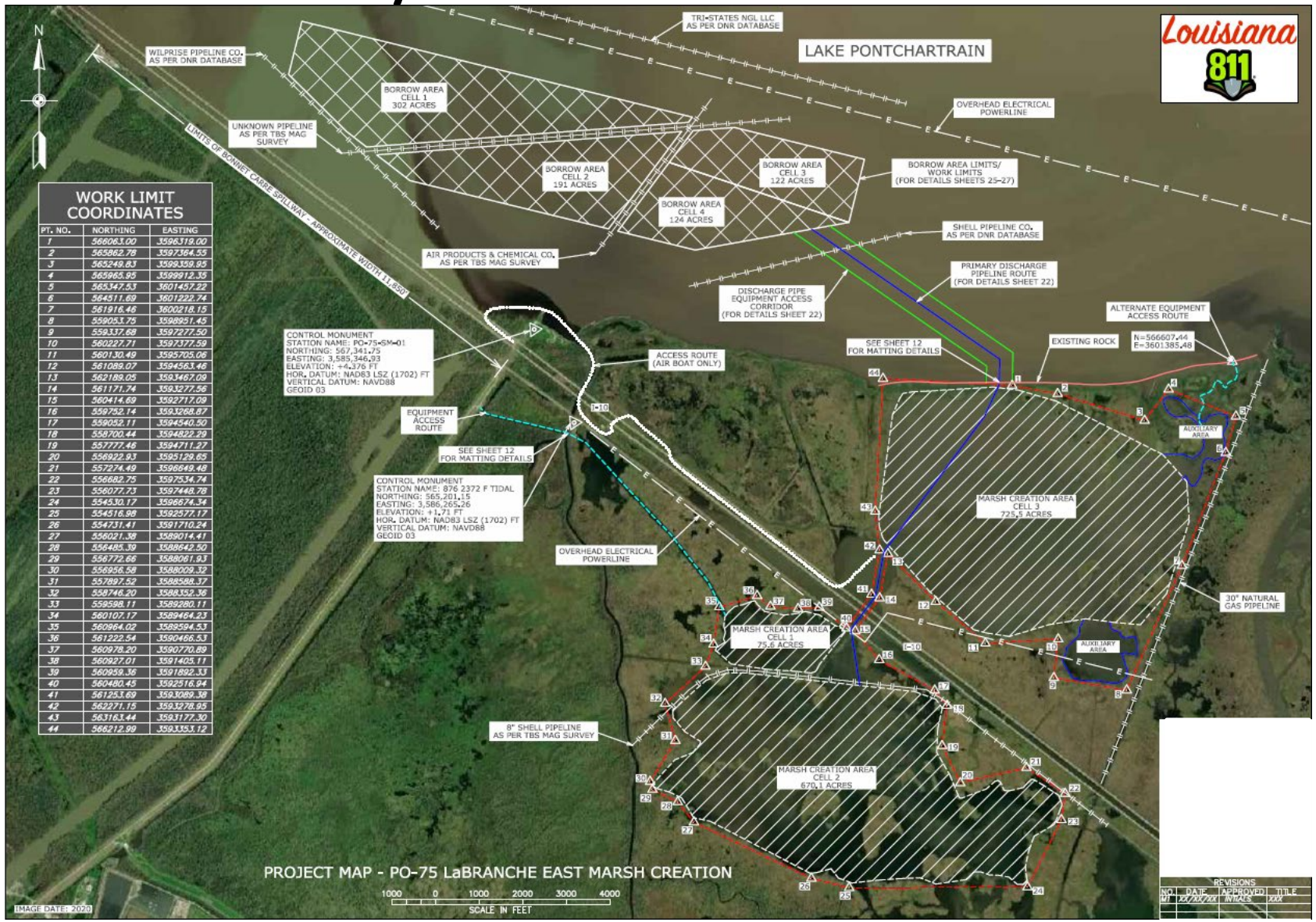
Proximity of Borrow Area to MCA



WORK LIMIT COORDINATES		
PT. NO.	NORTHING	EASTING
1	566063.00	3596319.00
2	565862.78	3597364.55
3	565249.83	3599359.95
4	565965.95	3599912.35
5	565347.53	3601457.22
6	564511.69	3601222.74
7	561916.46	3600218.15
8	559053.75	3598951.45
9	559337.68	3597277.50
10	560227.71	3597377.59
11	560130.49	3595705.06
12	561089.07	3594563.46
13	562189.05	3593467.09
14	561171.74	3593277.56
15	560414.69	3592717.09
16	559752.14	3593268.87
17	559052.11	3594540.50
18	558700.44	3594822.29
19	557777.46	3594711.27
20	556922.93	3595129.65
21	557274.49	3596649.48
22	556682.75	3597534.74
23	556077.73	3597448.78
24	554530.17	3596674.34
25	554516.98	3592577.17
26	554731.41	3591710.24
27	556021.38	3589014.41
28	556485.39	3588642.50
29	556772.66	3588061.93
30	556956.58	3588009.32
31	557897.52	3588588.37
32	558746.20	3588352.36
33	559598.11	3589280.11
34	560107.17	3589464.23
35	560964.02	3589594.53
36	561222.54	3590466.53
37	560978.20	3590770.89
38	560927.01	3591405.11
39	560959.36	3591892.33
40	560480.45	3592516.94
41	561253.69	3593089.38
42	562271.15	3593278.95
43	563163.44	3593177.30
44	566212.99	3593353.12

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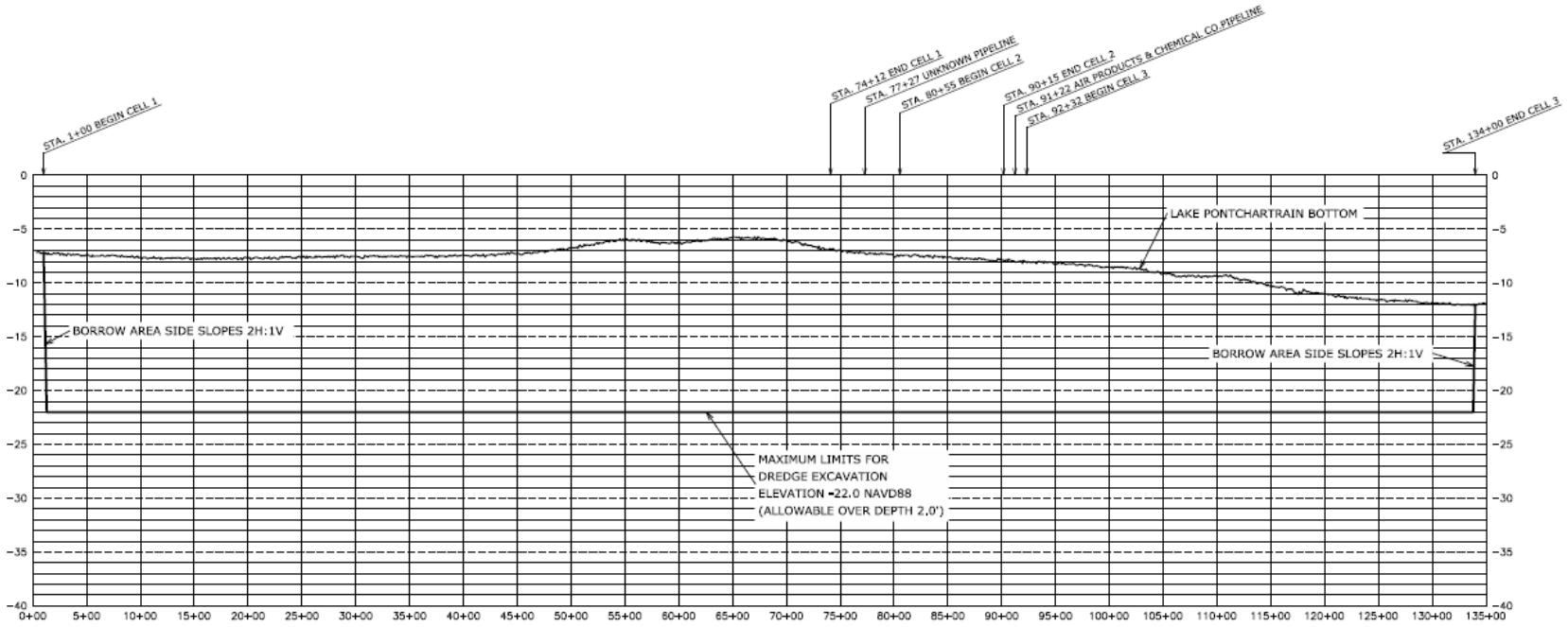
Profile of Borrow Area



BORROW AREA PROFILE – STA. 0+00 to STA. 135+00

- Maximum Limits for Dredge Excavation –35.0' NAVD88 (Allowable Over Depth 2.0')

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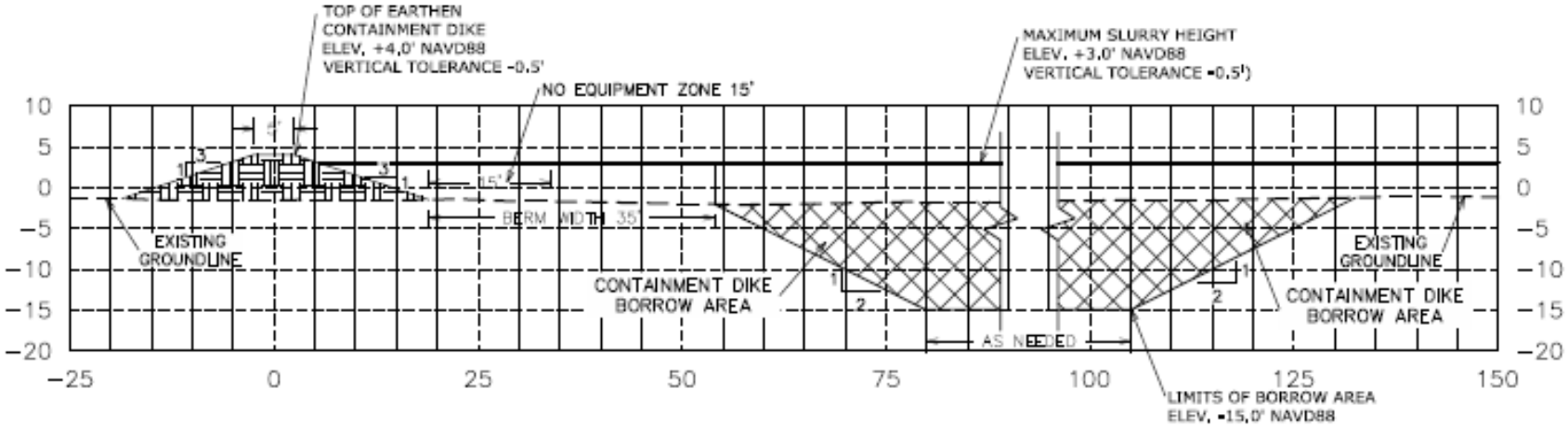
Typical Section of Earthen Containment Dike



TYPICAL CROSS SECTION – EARTHEN CONTAINMENT DIKE

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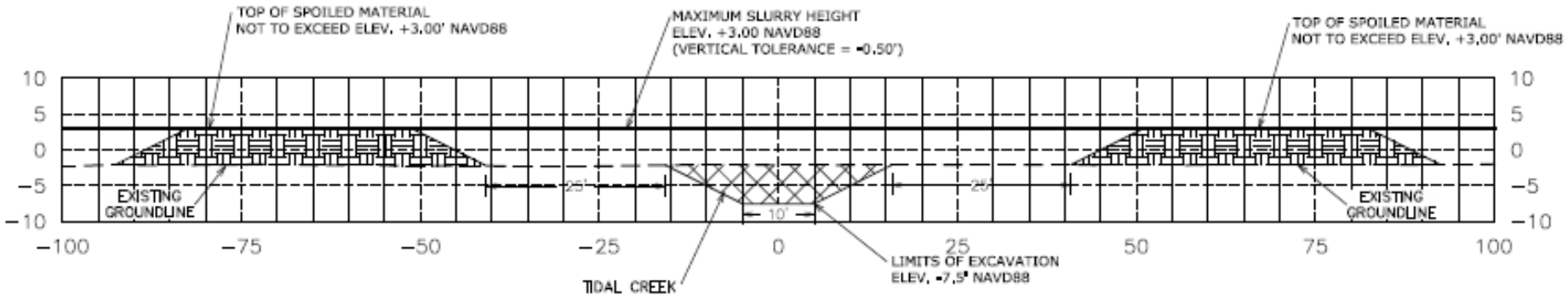
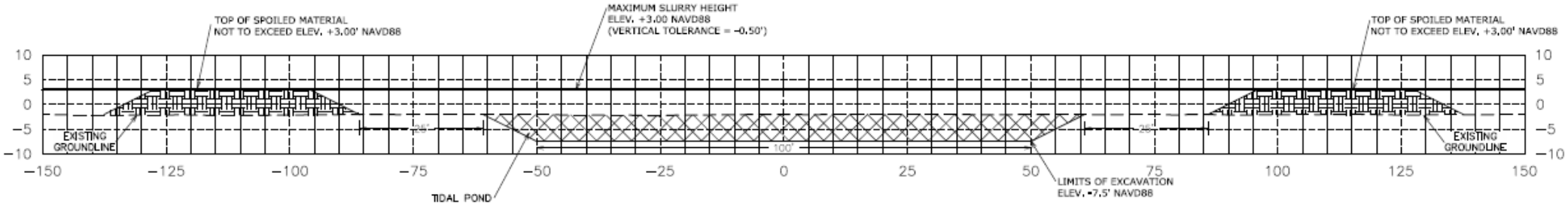
Tidal Creek and Tidal Pond



TYPICAL CROSS SECTION – TIDAL CREEK

NOTE:
TIDAL PONDS SHALL BE RECTANGLE IN SHAPE WITH DIMENSIONS OF 435' x 100', EACH POND SHALL BE ABOUT 1 ACRE IN SURFACE AREA.



TYPICAL CROSS SECTION – TIDAL POND

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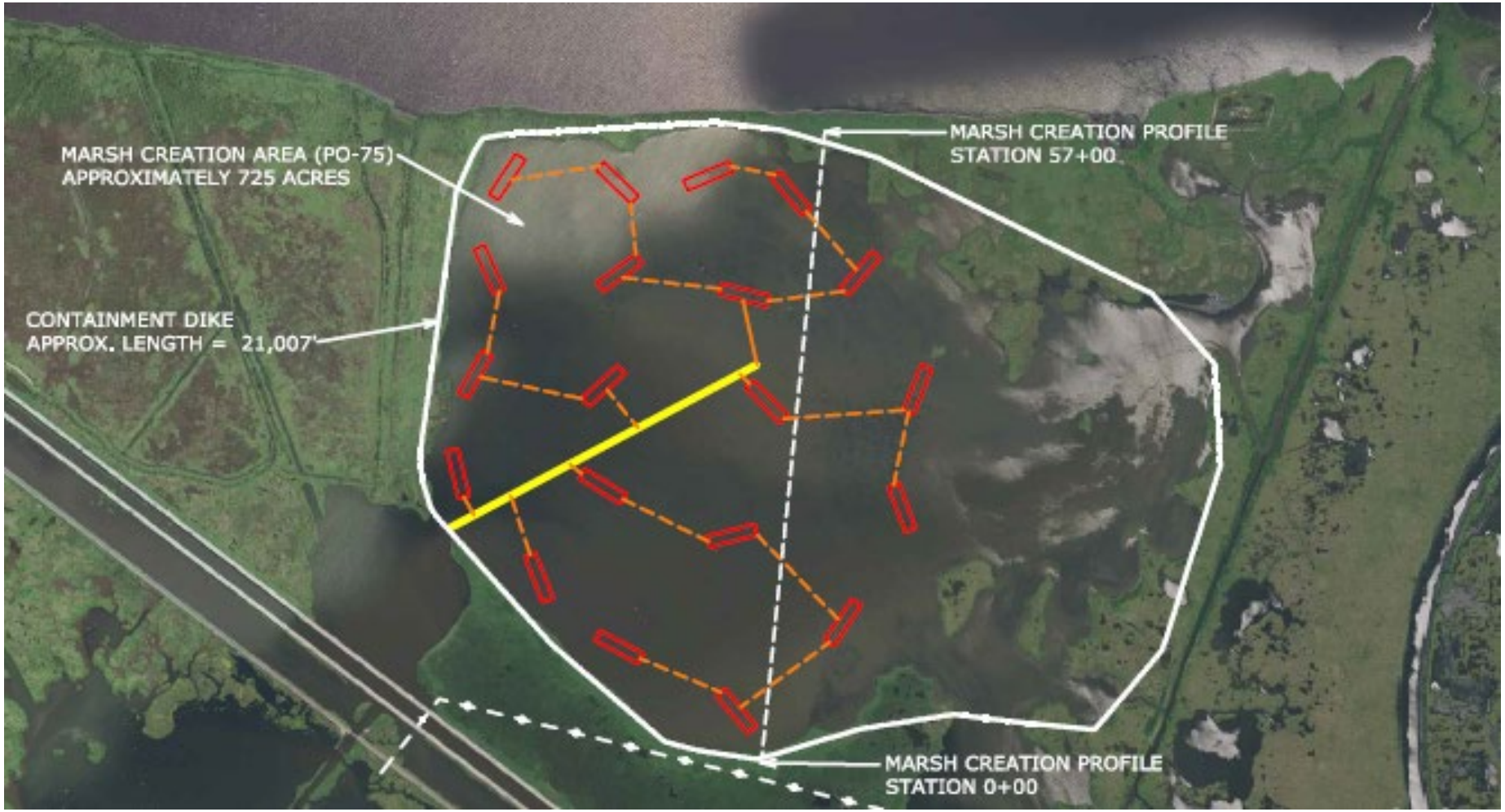
Tidal Creek and Tidal Pond



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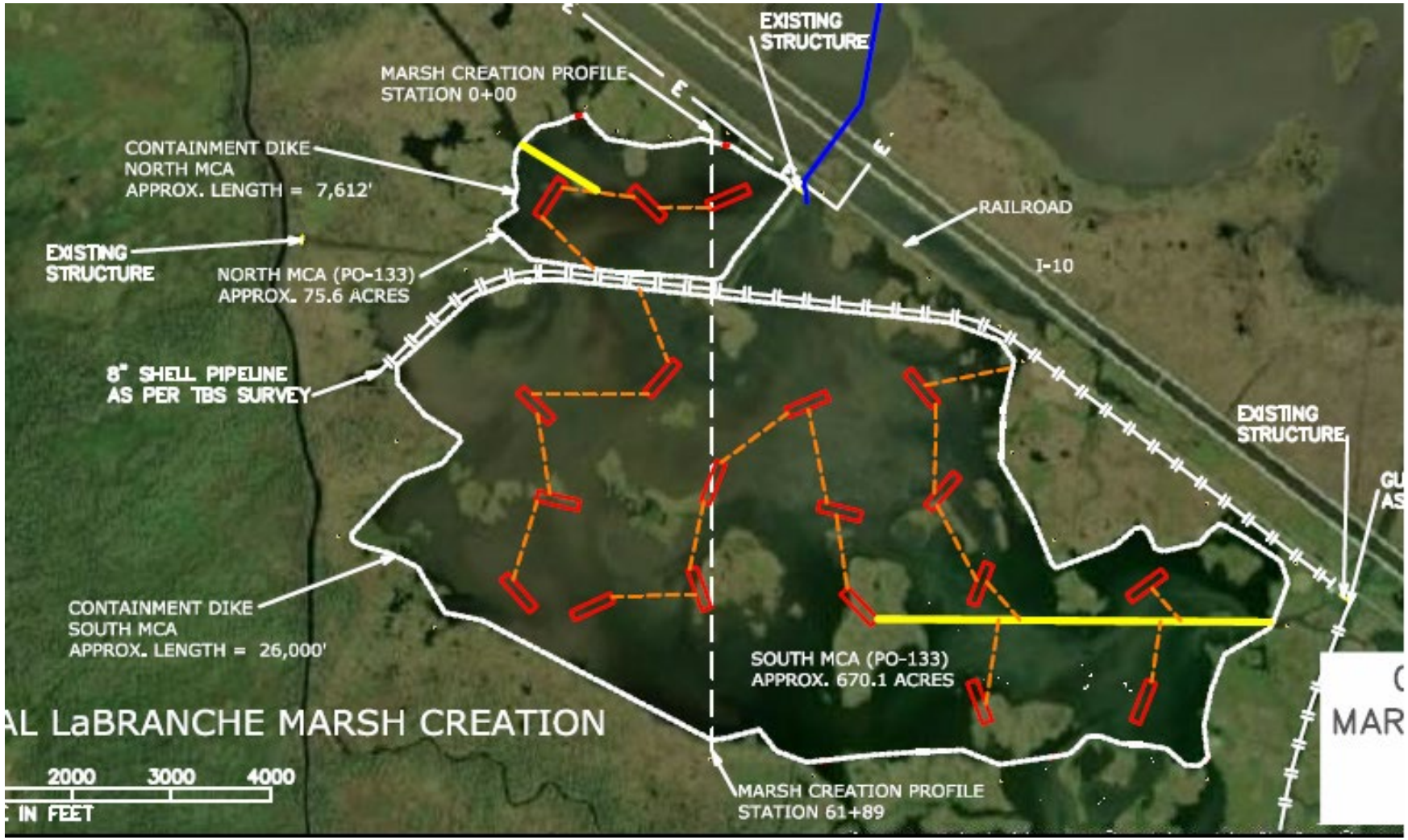

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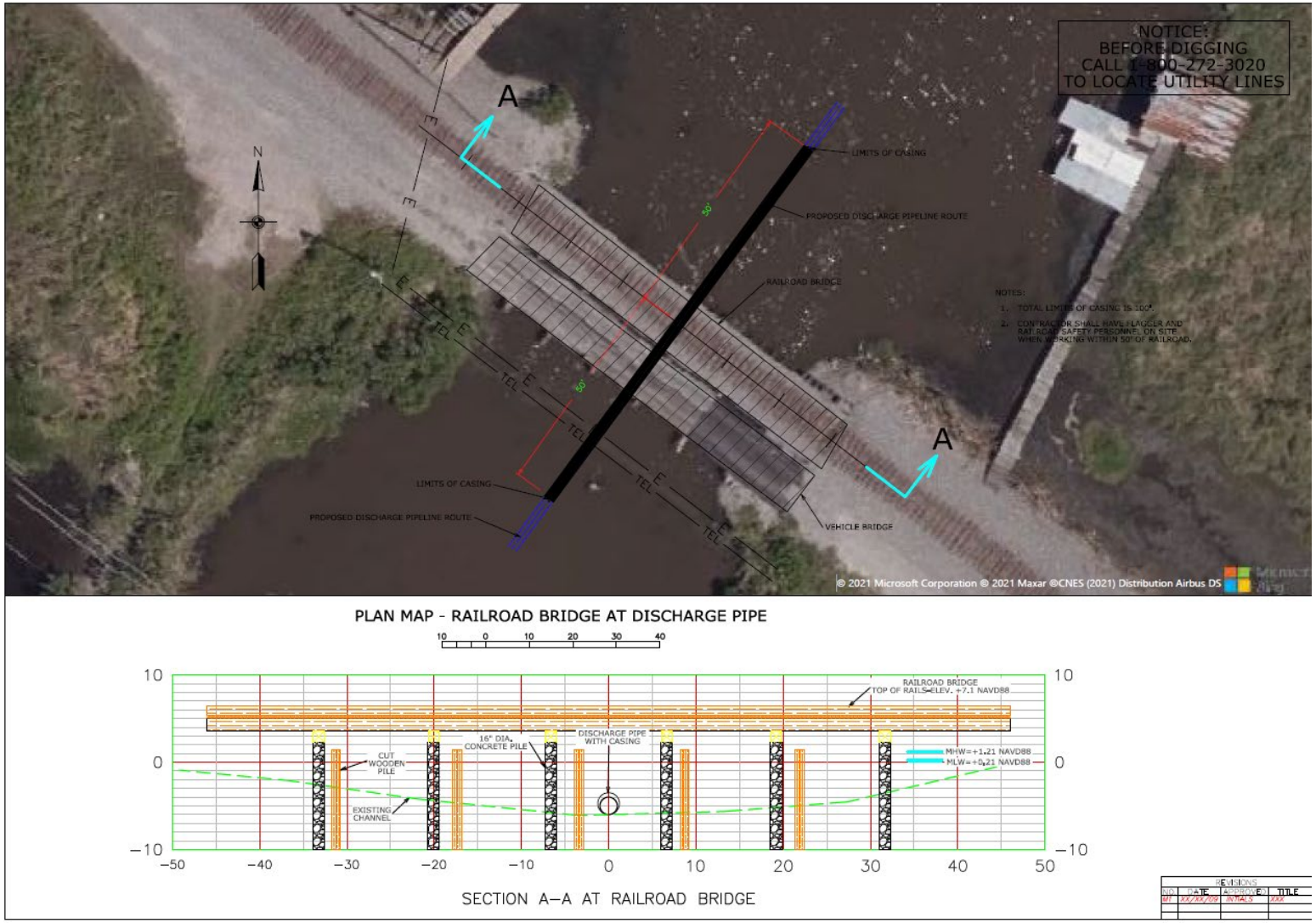
Crossing Railroad



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Bid Quantities

Item No.	Work	Spec No.	Quantity	Unit
1	Mobilization/Demobilization	8	1	LS
2	Construction Surveys	7	1	LS
3*	Marsh Creation	423	6,153,026	CY
4	Identification Markers or Plaques, Staff Gauges	93	80	EA
5	Excavation, Tidal Creeks & Ponds	21	1	LS
6*	Containment Dikes	421	54,618.060	LF
7	Lighted Buoys	93	43	EA
8*	Geotextile	95	695	SY
9	Field Office		1	LS
Bid Item Number with * are estimated quantities				

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United States Department of Agriculture

Natural Resources Conservation Service

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USDA is an equal opportunity provider and employer.

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NorthEast Turtle Bay Marsh Creation Project & Critical Area Shoreline Protection BA-206

Nick McCoy, P.E.
Project Engineer

April 2022

USDA United States Department of Agriculture

Natural Resources Conservation Service

Trigon

FENSTERMAKER

COASTAL PROTECTION AND RESTORATION AUTHORITY CPRA

Project Outline

- Project Information
- Project Schedule
- Project Location
- Layout of Marsh Creation areas
- Layout of Borrow Areas
- Summary of Bid Quantities

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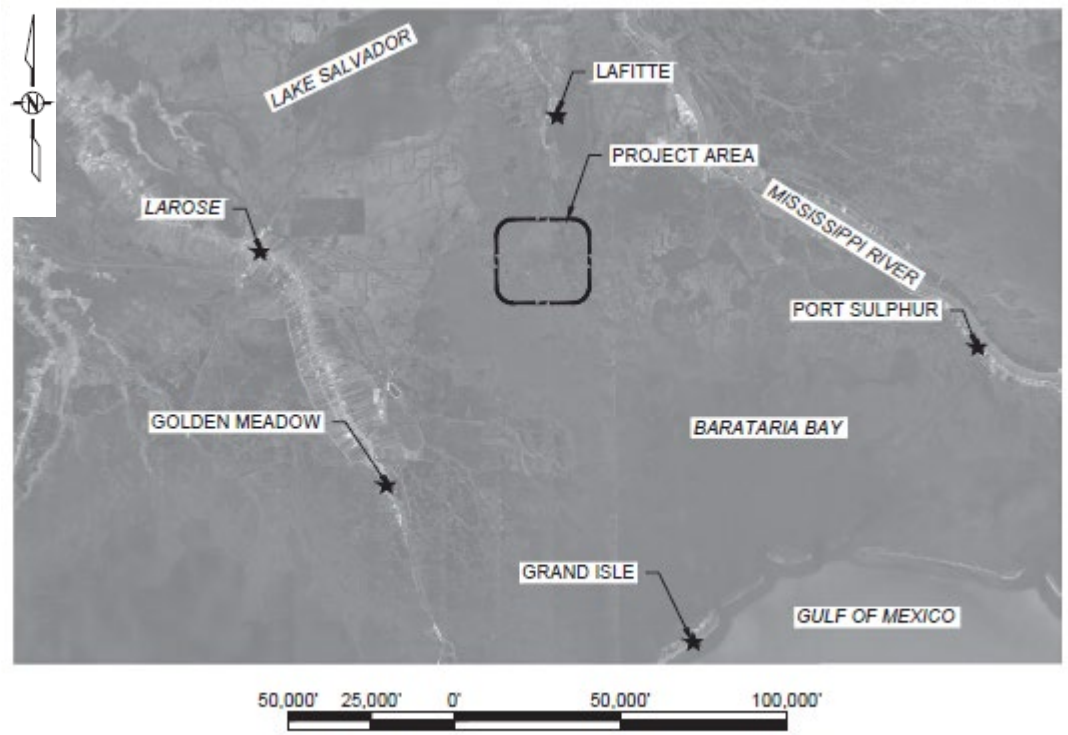
General Project Information

INFO	DESCRIPTION
LOCATION	Barataria Basin, Jefferson Parish
FUNDING	CWPPRA – Natural Resource Conservation Service (NRCS) Sponsored
PROJECT TYPE	Marsh Creation



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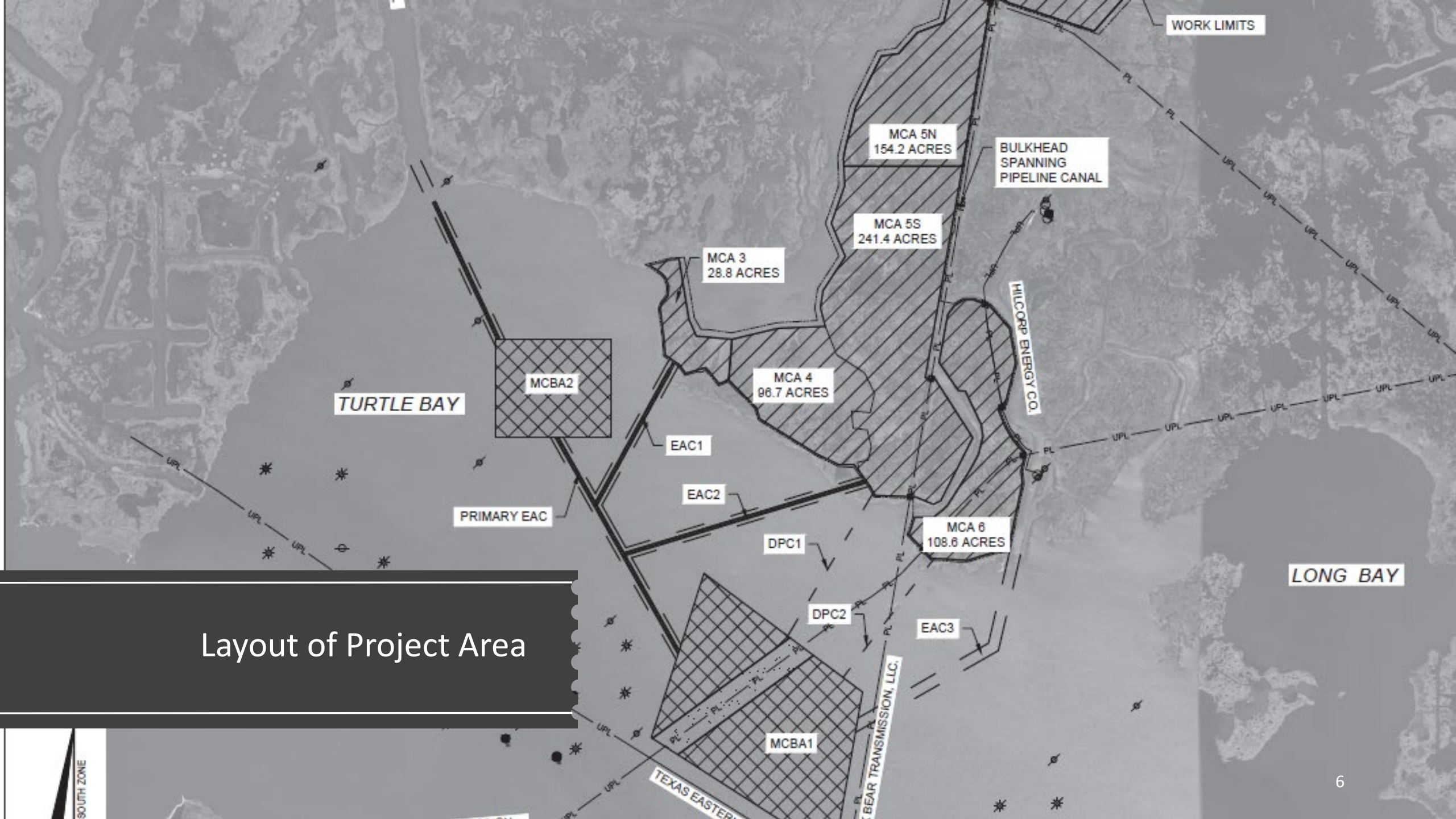
Project Schedule

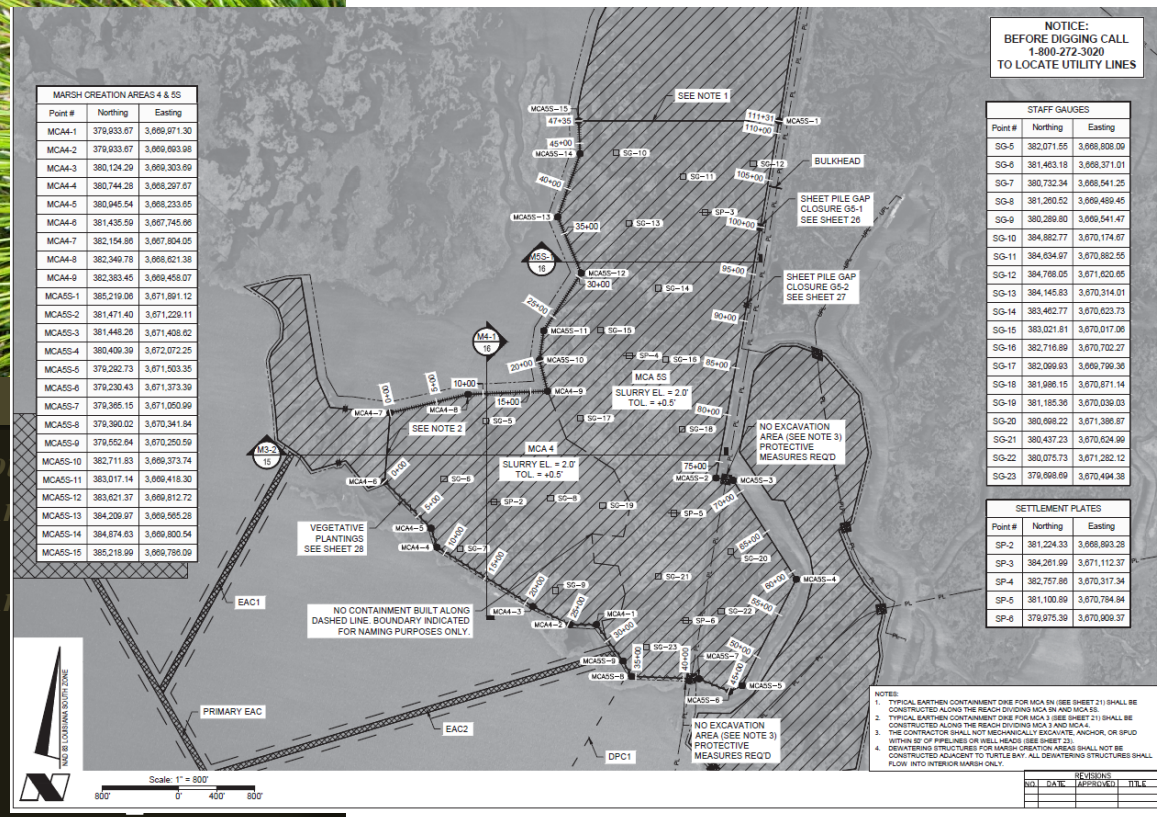
- Phase 2 Funding: Complete
- Permitting: In-Progress
- Land rights/Servitude Agreements: In-Progress
- Advertisement: Spring 2023
- sam.gov
- Construction Duration: 316 days (includes 53 Weather Days)

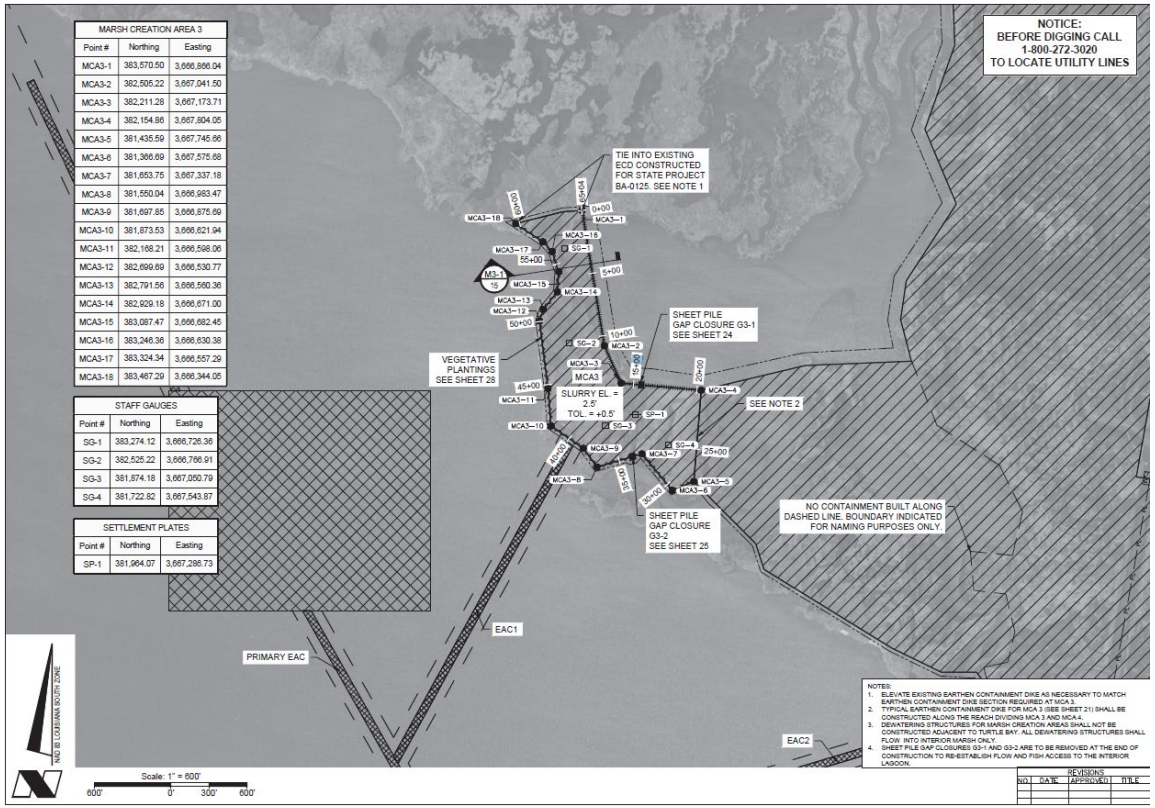
Project Location

Layout of Project Area

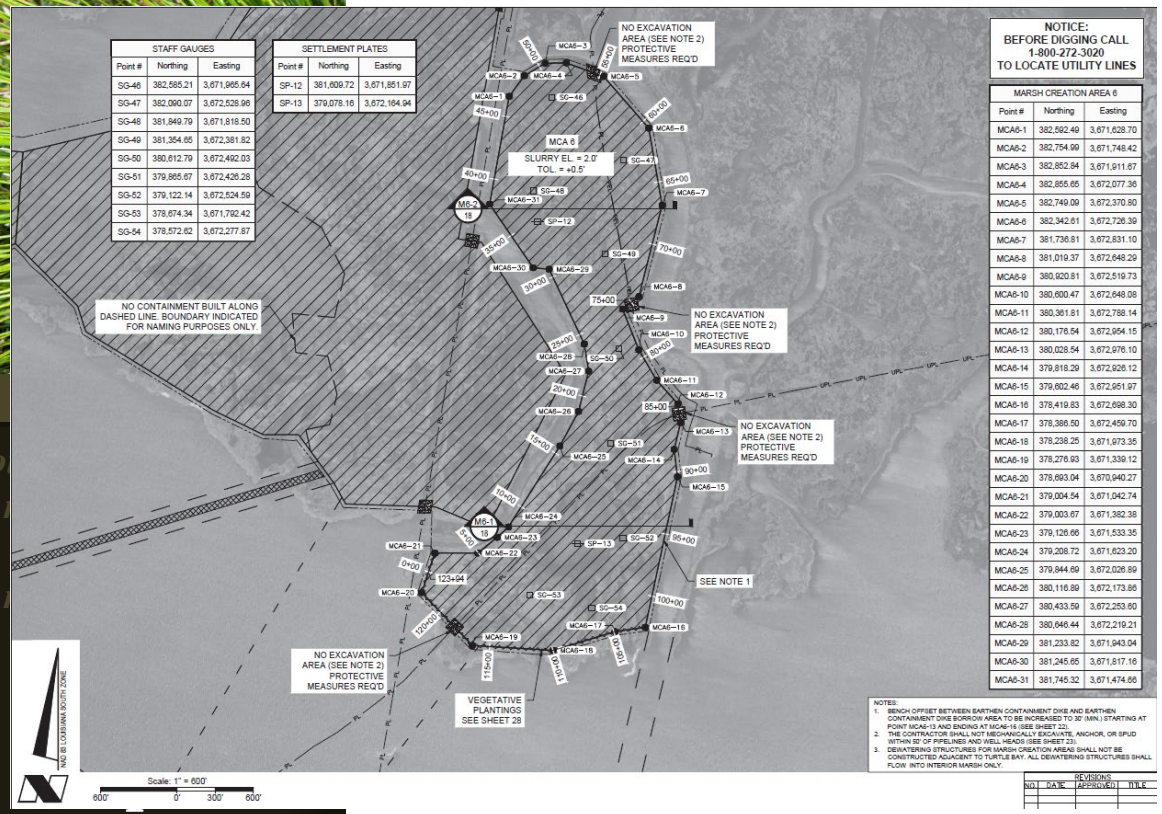


Layout of Marsh Creation Areas





Layout of Marsh Creation Areas



STAFF GAUGES		
Point #	Northing	Easting
SG-46	382,585.21	3,671,965.64
SG-47	382,090.07	3,672,528.96
SG-48	381,849.79	3,671,818.50
SG-49	381,354.65	3,672,381.82
SG-50	380,612.79	3,672,492.03
SG-51	379,865.67	3,672,426.28
SG-52	379,122.14	3,672,524.59
SG-53	378,674.34	3,671,792.42
SG-54	378,572.62	3,672,277.87

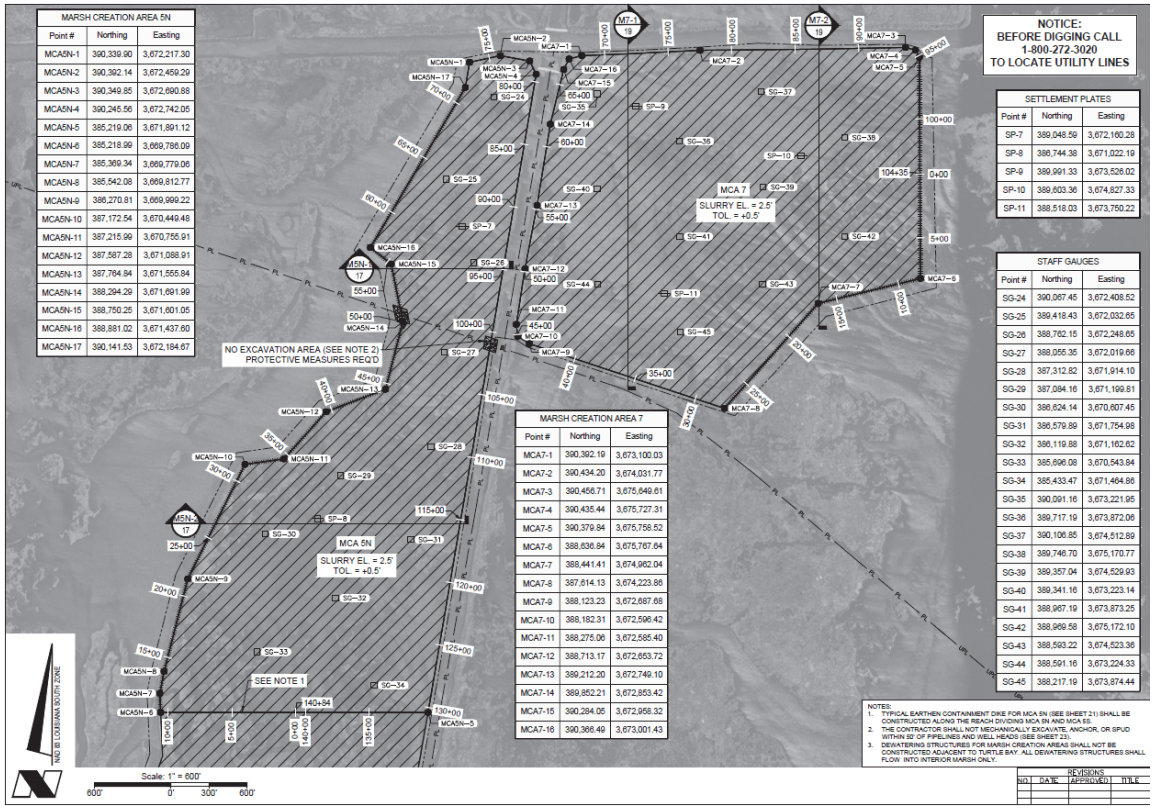
SETTLEMENT PLATES		
Point #	Northing	Easting
SP-12	381,609.72	3,671,851.97
SP-13	379,078.16	3,672,164.94

MARSH CREATION AREA 6		
Point #	Northing	Easting
MCA6-1	382,592.49	3,671,628.70
MCA6-2	382,754.99	3,671,748.42
MCA6-3	382,852.84	3,671,911.67
MCA6-4	382,855.65	3,672,077.36
MCA6-5	382,749.09	3,672,370.80
MCA6-6	382,342.61	3,672,726.39
MCA6-7	381,736.81	3,672,831.10
MCA6-8	381,019.37	3,672,648.29
MCA6-9	380,920.81	3,672,519.73
MCA6-10	380,600.47	3,672,648.08
MCA6-11	380,361.81	3,672,788.14
MCA6-12	380,176.54	3,672,954.15
MCA6-13	380,028.54	3,672,976.10
MCA6-14	379,818.29	3,672,926.12
MCA6-15	379,602.46	3,672,951.97
MCA6-16	378,419.83	3,672,698.30
MCA6-17	378,386.50	3,672,459.70
MCA6-18	378,238.25	3,671,973.35
MCA6-19	378,276.93	3,671,339.12
MCA6-20	378,693.04	3,670,940.27
MCA6-21	379,004.54	3,671,042.74
MCA6-22	379,003.67	3,671,382.38
MCA6-23	379,126.66	3,671,533.35
MCA6-24	379,208.72	3,671,623.20
MCA6-25	379,844.69	3,672,026.89
MCA6-26	380,116.89	3,672,173.86
MCA6-27	380,433.59	3,672,253.60
MCA6-28	380,646.44	3,672,219.21
MCA6-29	381,233.82	3,671,943.04
MCA6-30	381,245.65	3,671,817.16
MCA6-31	381,745.32	3,671,474.66

NOTES:
1. BENCH OFFSET BETWEEN EARTHEN CONTAINMENT DIKE AND EARTHEN CONTAINMENT DIKE BORROW AREA TO BE INCREASED TO 30' (MIN.) STARTING AT POINT MCA6-13 AND ENDING AT MCA6-16 (SEE SHEET 22).
2. THE CONTRACTOR SHALL NOT MECHANICALLY EXCAVATE, ANCHOR, OR SPUD WITHIN 50' OF PIPELINES AND WELL HEADS (SEE SHEET 23).
3. DEWATERING STRUCTURES FOR MARSH CREATION AREAS SHALL NOT BE CONSTRUCTED ADJACENT TO TURTLE BAY. ALL DEWATERING STRUCTURES SHALL FLOW INTO INTERIOR MARSH ONLY.

REVISIONS

NO.	DATE	APPROVED	TITLE



MARSH CREATION AREA 5N		
Point #	Northing	Easting
MCA5N-1	390,339.90	3,672,217.30
MCA5N-2	390,392.14	3,672,459.29
MCA5N-3	390,349.85	3,672,690.88
MCA5N-4	390,245.56	3,672,742.05
MCA5N-5	385,219.06	3,671,891.12
MCA5N-6	385,218.99	3,669,788.09
MCA5N-7	385,369.34	3,669,779.06
MCA5N-8	385,542.08	3,669,812.77
MCA5N-9	386,270.81	3,669,999.22
MCA5N-10	387,172.54	3,670,449.48
MCA5N-11	387,215.99	3,670,755.91
MCA5N-12	387,587.28	3,671,088.91
MCA5N-13	387,764.84	3,671,555.84
MCA5N-14	388,294.29	3,671,691.99
MCA5N-15	388,750.25	3,671,601.05
MCA5N-16	388,881.02	3,671,437.60
MCA5N-17	390,141.53	3,672,184.67

MARSH CREATION AREA 7		
Point #	Northing	Easting
MCA7-1	390,392.19	3,673,100.03
MCA7-2	390,434.20	3,674,031.77
MCA7-3	390,456.71	3,675,649.61
MCA7-4	390,435.44	3,675,727.31
MCA7-5	390,379.84	3,675,758.52
MCA7-6	388,636.84	3,675,767.64
MCA7-7	388,441.41	3,674,962.04
MCA7-8	387,614.13	3,674,223.86
MCA7-9	388,123.23	3,672,687.68
MCA7-10	388,182.31	3,672,596.42
MCA7-11	388,275.06	3,672,585.40
MCA7-12	388,713.17	3,672,653.72
MCA7-13	389,212.20	3,672,749.10
MCA7-14	389,852.21	3,672,853.42
MCA7-15	390,284.05	3,672,958.32
MCA7-16	390,366.49	3,673,001.43

SETTLEMENT PLATES		
Point #	Northing	Easting
SP-7	389,048.59	3,672,160.28
SP-8	386,744.38	3,671,022.19
SP-9	389,991.33	3,673,526.02
SP-10	389,603.36	3,674,827.33
SP-11	388,518.03	3,673,750.22

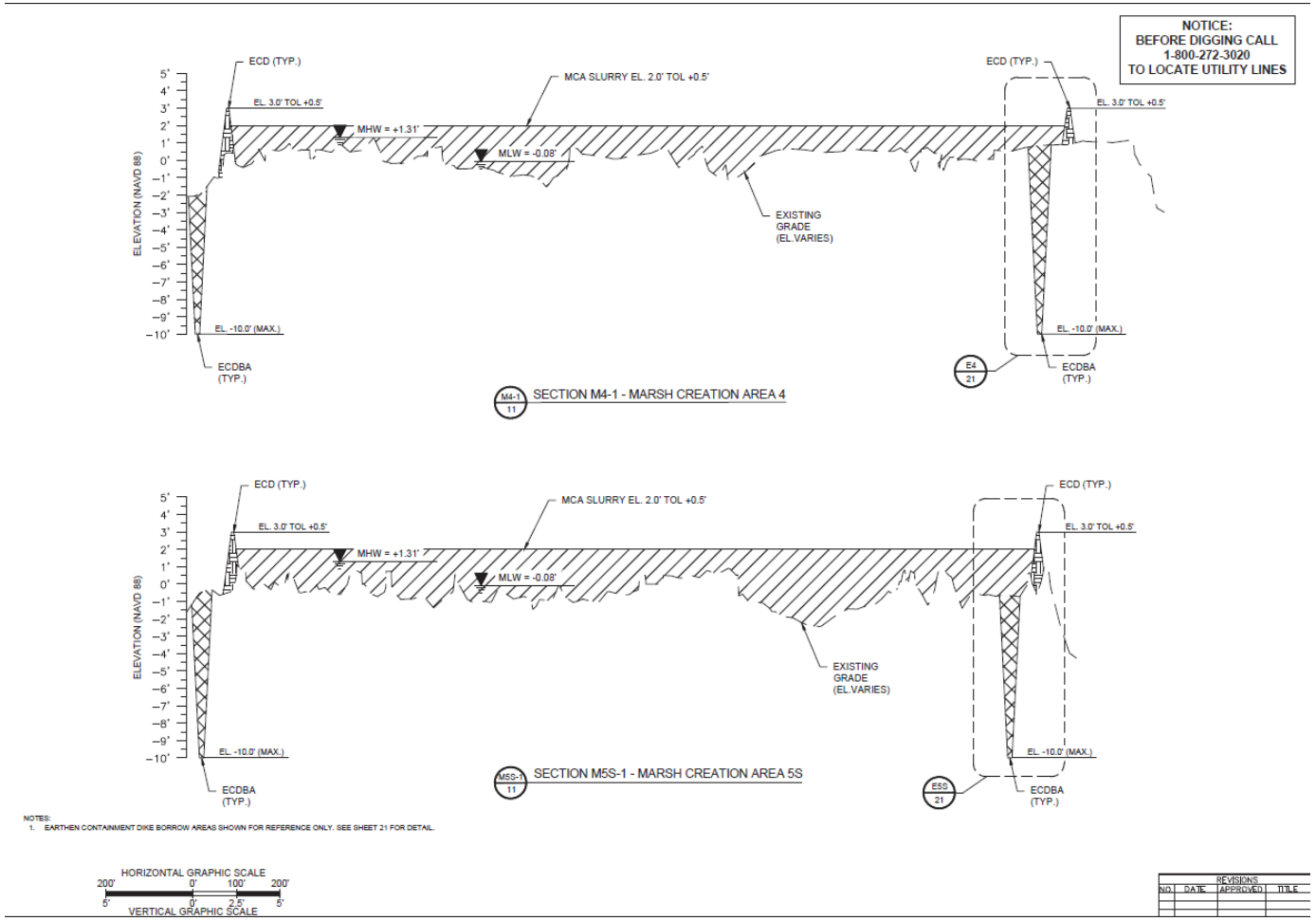
STAFF GAUGES		
Point #	Northing	Easting
SG-24	390,067.45	3,672,408.52
SG-25	389,418.43	3,672,032.65
SG-26	388,762.15	3,672,248.65
SG-27	388,055.35	3,672,019.66
SG-28	387,312.82	3,671,914.10
SG-29	387,084.16	3,671,199.81
SG-30	386,624.14	3,670,607.45
SG-31	386,579.89	3,671,754.96
SG-32	386,119.88	3,671,162.62
SG-33	385,696.08	3,670,543.84
SG-34	385,433.47	3,671,464.86
SG-35	390,091.16	3,673,221.95
SG-36	389,717.19	3,673,872.06
SG-37	390,106.85	3,674,512.89
SG-38	389,746.70	3,675,170.77
SG-39	389,357.04	3,674,529.93
SG-40	389,341.16	3,673,223.14
SG-41	388,967.19	3,673,873.25
SG-42	388,969.58	3,675,172.10
SG-43	388,593.22	3,674,523.36
SG-44	388,591.16	3,673,224.33
SG-45	388,217.19	3,673,874.44

NOTES:
1. TYPICAL EARTHEN CONTAINMENT DIKE FOR MCA 5N (SEE SHEET 21) SHALL BE CONSTRUCTED ALONG THE REACH DIVIDING MCA 5N AND MCA 5S.
2. THE CONTRACTOR SHALL NOT MECHANICALLY EXCAVATE, ANCHOR, OR SPUD WITHIN 50' OF PIPELINES AND WELL HEADS (SEE SHEET 23).
3. DEWATERING STRUCTURES FOR MARSH CREATION AREAS SHALL NOT BE CONSTRUCTED ADJACENT TO TURTLE BAY. ALL DEWATERING STRUCTURES SHALL FLOW INTO INTERIOR MARSH ONLY.

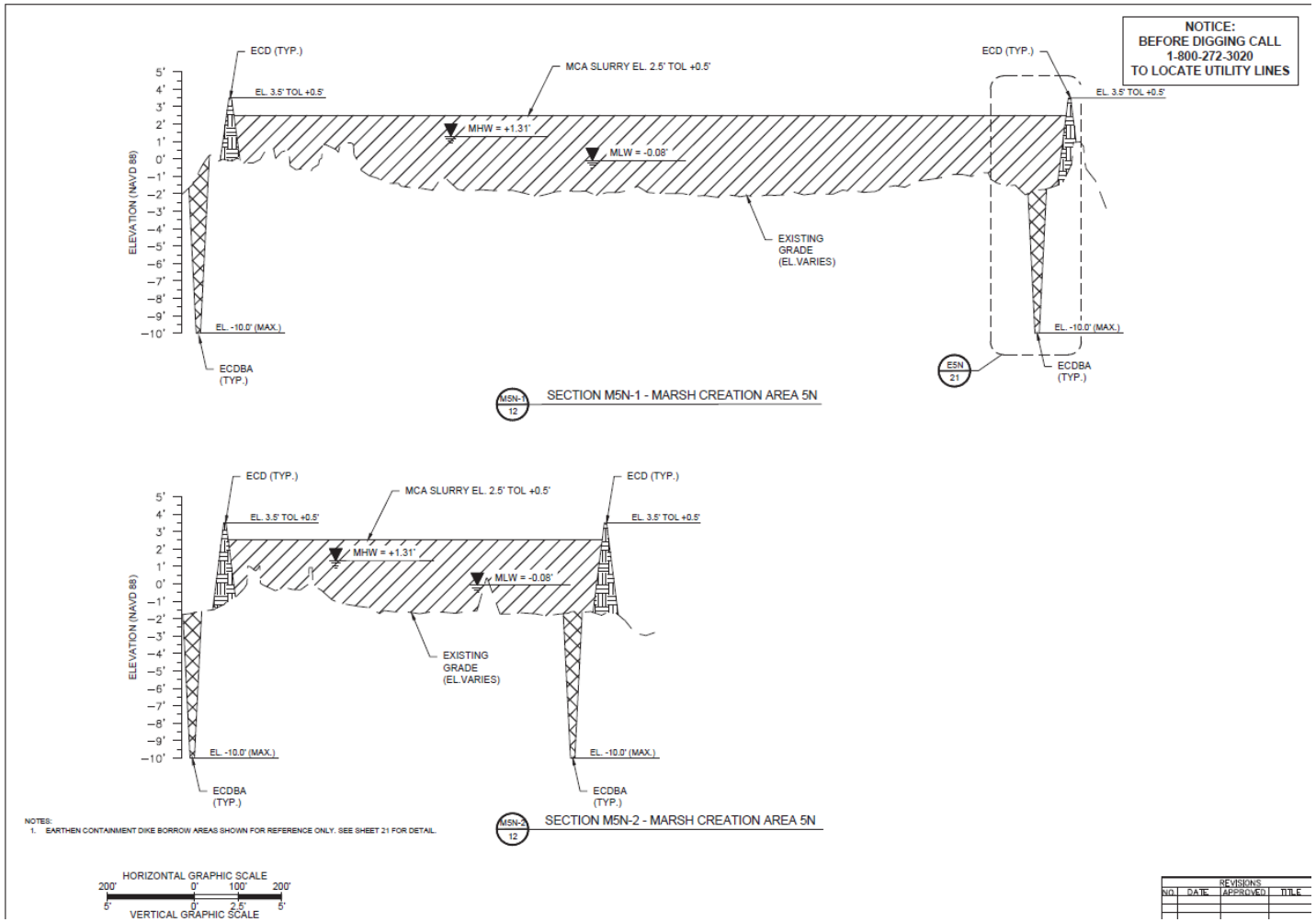
REVISIONS

NO.	DATE	APPROVED	TITLE

Typical Section of Marsh Creation Areas



Typical Section of Marsh Creation Areas



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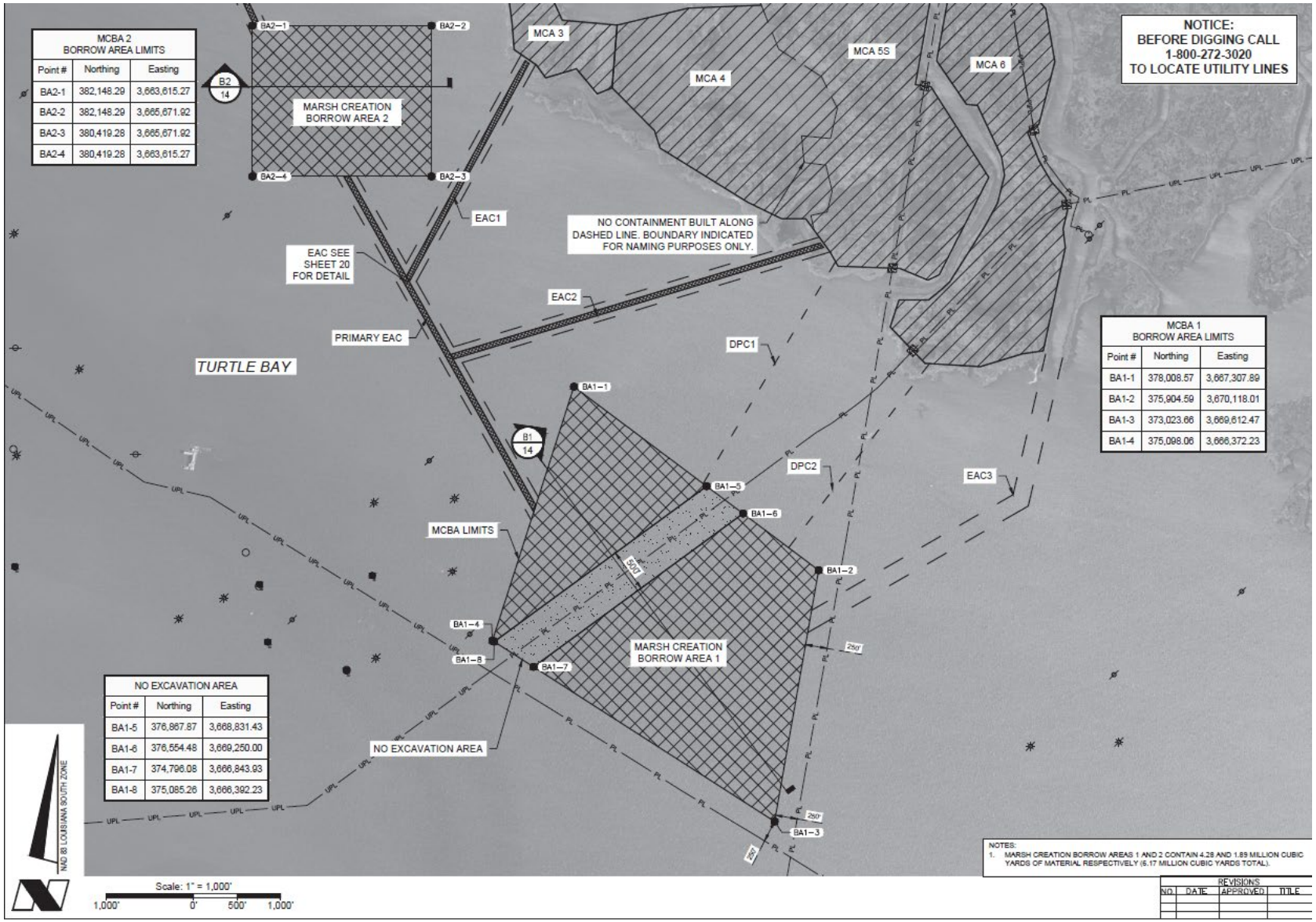
Layout of Borrow Area



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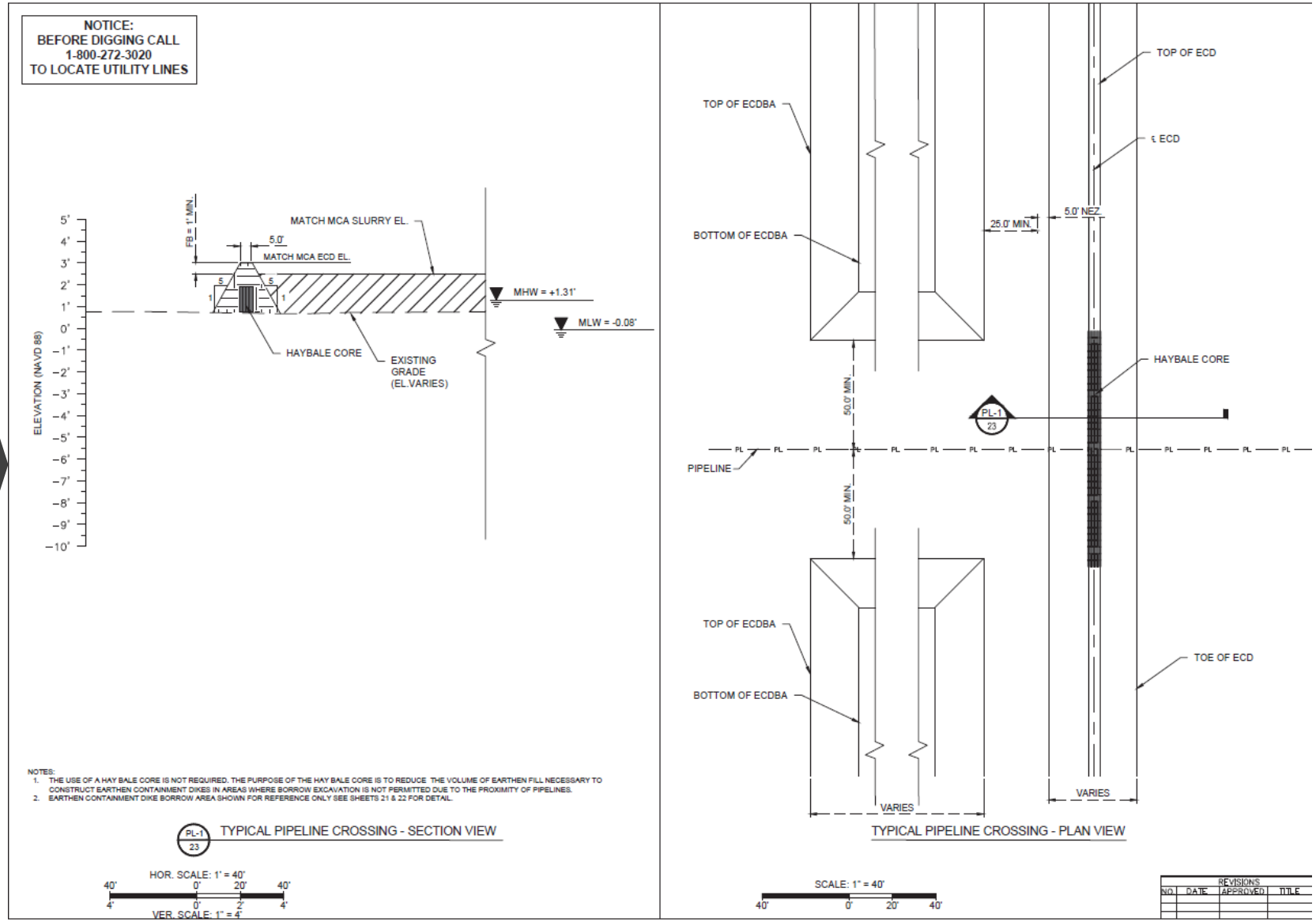
Pipeline Crossing



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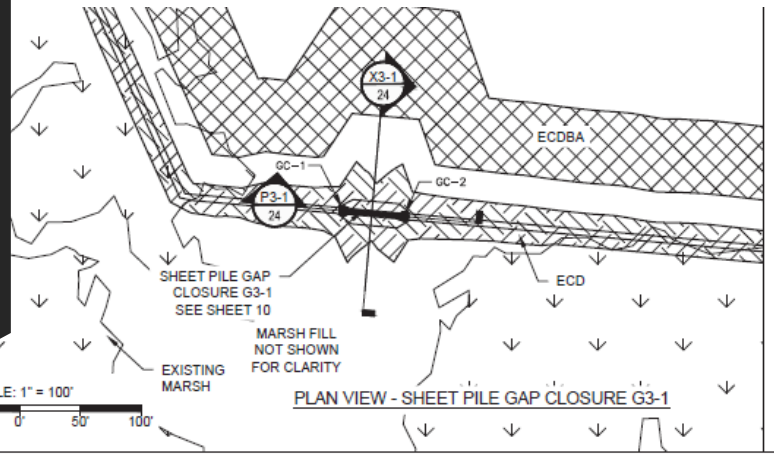
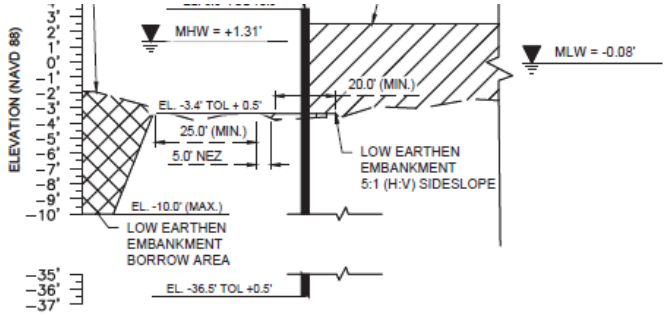
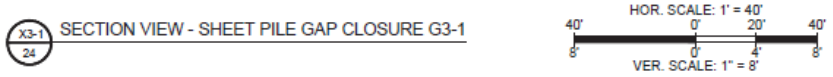
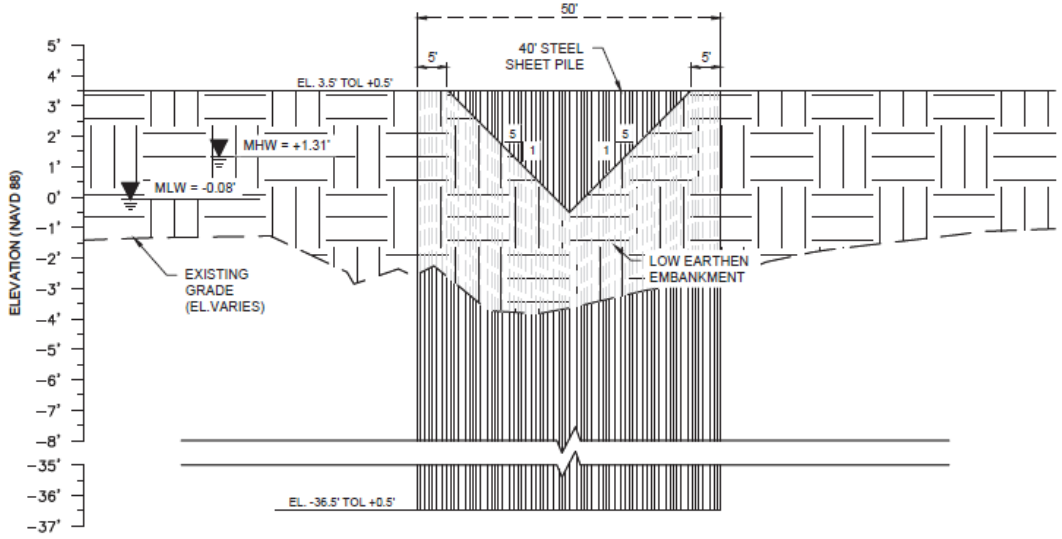
Sheet Pile Installation









NOTES:
1. SHEET PILE GAP CLOSURE G3-1 IS TO BE REMOVED AT THE END OF CONSTRUCTION TO RE-ESTABLISH FLOW AND FISH ACCESS TO THE INTERIOR LAGOON.

NOTICE:
BEFORE DIGGING CALL
1-800-272-3020
TO LOCATE UTILITY LINES

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ECD Bayside Plantings

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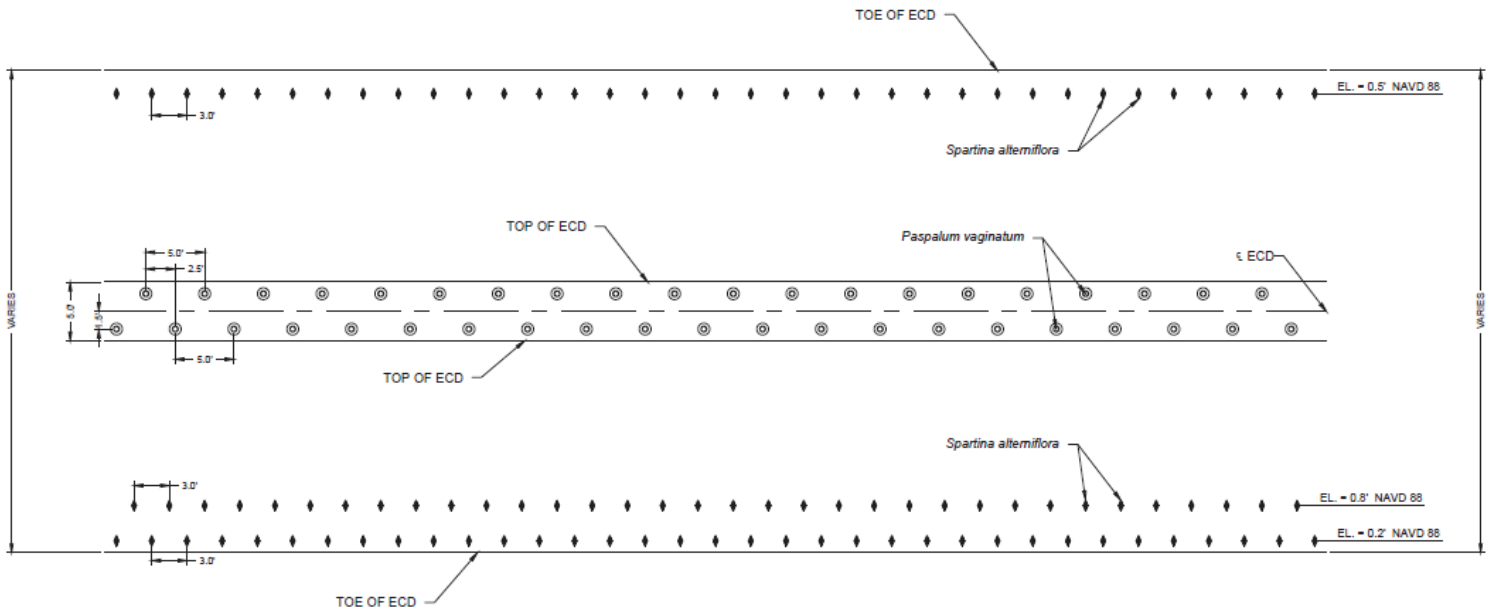
BEFORE DIGGING CALL
1-800-272-3020
TO LOCATE UTILITY LINES

MARSH SIDE



BAY SIDE

EARTHEN CONTAINMENT DIKE PLANTING DETAIL

NOTES:
1. SEE CONSTRUCTION SPECIFICATION 436 COASTAL WETLAND PLANTS FOR DETAILS.

Bid Quantities

Bid Schedule					
Item No.	Work	Quantity	Unit	Unit Price	Amount
1	Mobilization/Demobilization	1	LS		
2	Field Office	1	LS		
3*	Temporary Lighted Warning Buoys	38	EA		
4	Access Dredging	1	LS		
5	Construction Surveys	1	LS		
6*	Marsh Creation (incl dike backfill)	2,798,566	CY		
7*	Sheet Pile Gap Closures	9,600	SF		
8*	Containment Dikes	58,800	LF		
9*	Settlement Plates	13	EA		
10*	Vegetative Plantings (Spartina alterniflora)	11,020	EA		
11*	Vegetative Plantings (Paspalum vaginatum)	4,410	EA		
* Bid Item are Estimated Quantities					

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Water Air Plants
Animals People Soil
Water Air Plants
Animals People

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United States Department of Agriculture

Natural Resources Conservation Service

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USDA is an equal opportunity provider and employer.

Lake Pontchartrain Shoreline Protection Project

Tangipahoa Parish, Louisiana

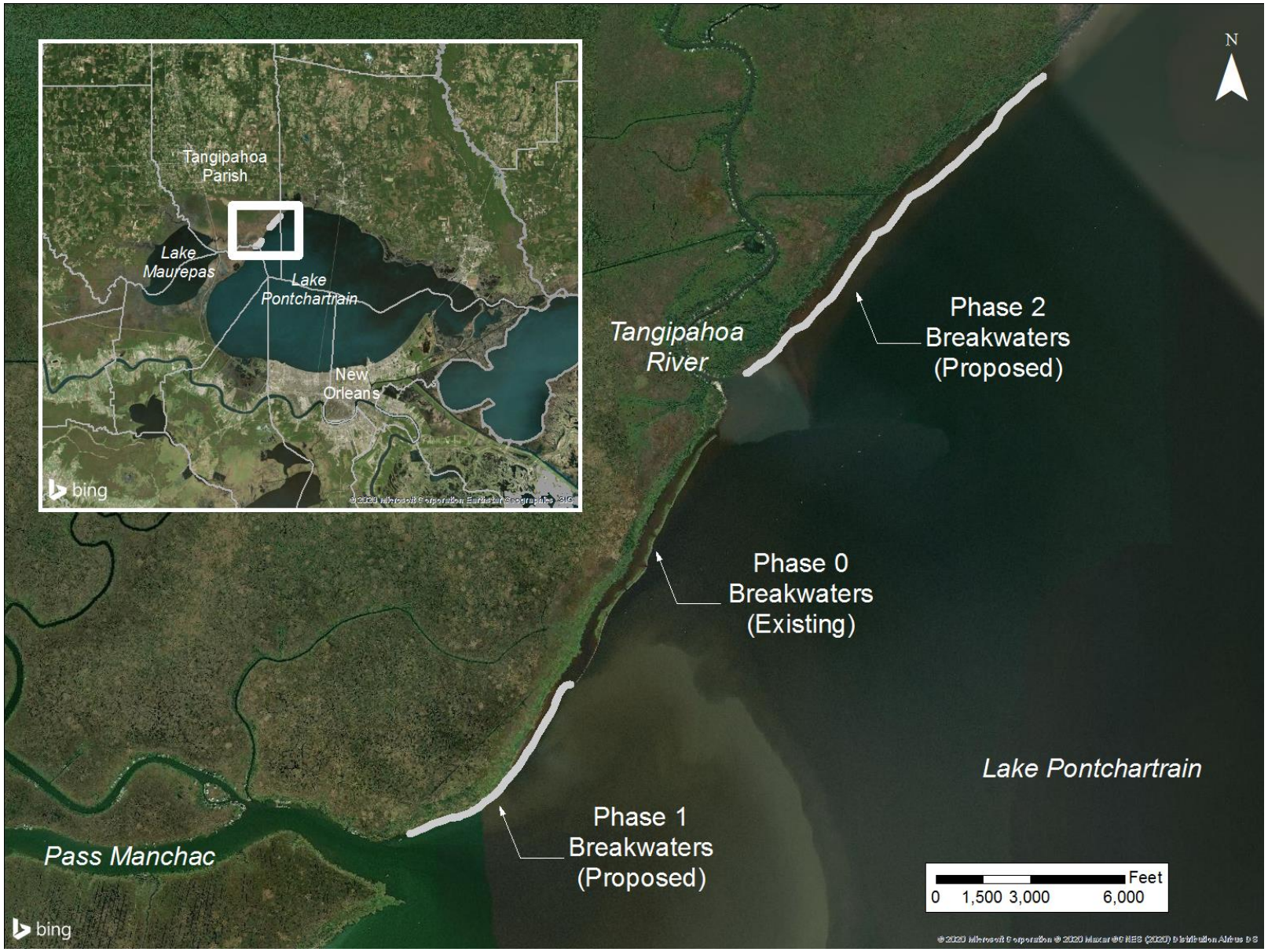
HDR Engineering, Inc.

Tangipahoa PARISH GOVERNMENT

April 4, 2022

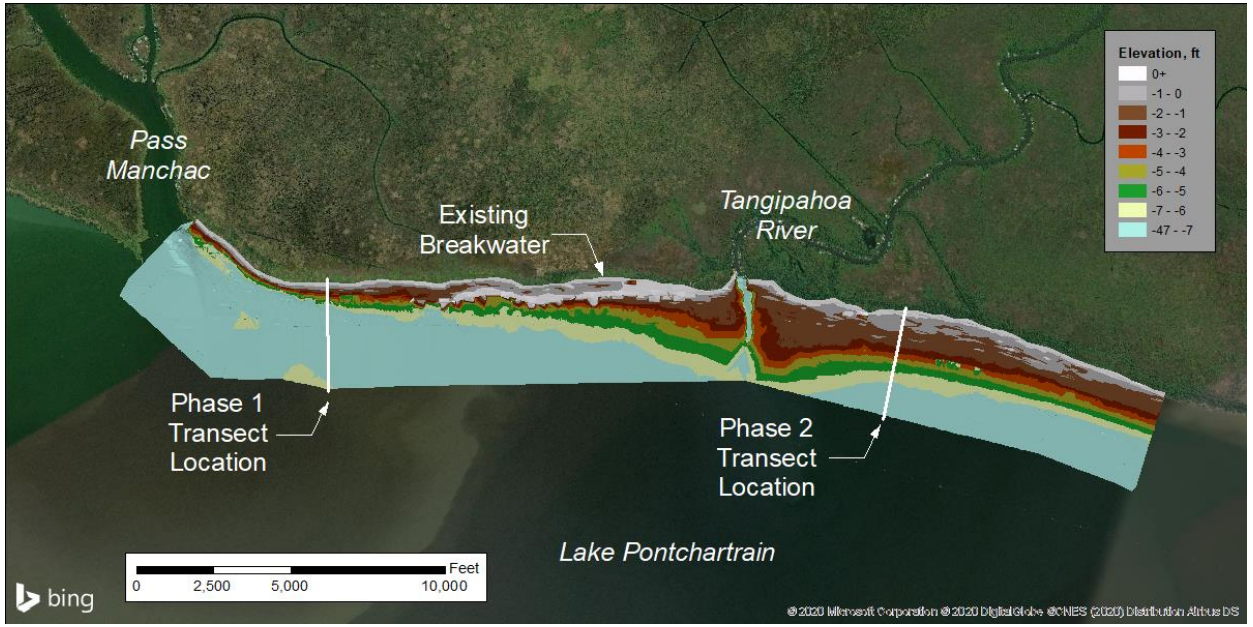
Project Location

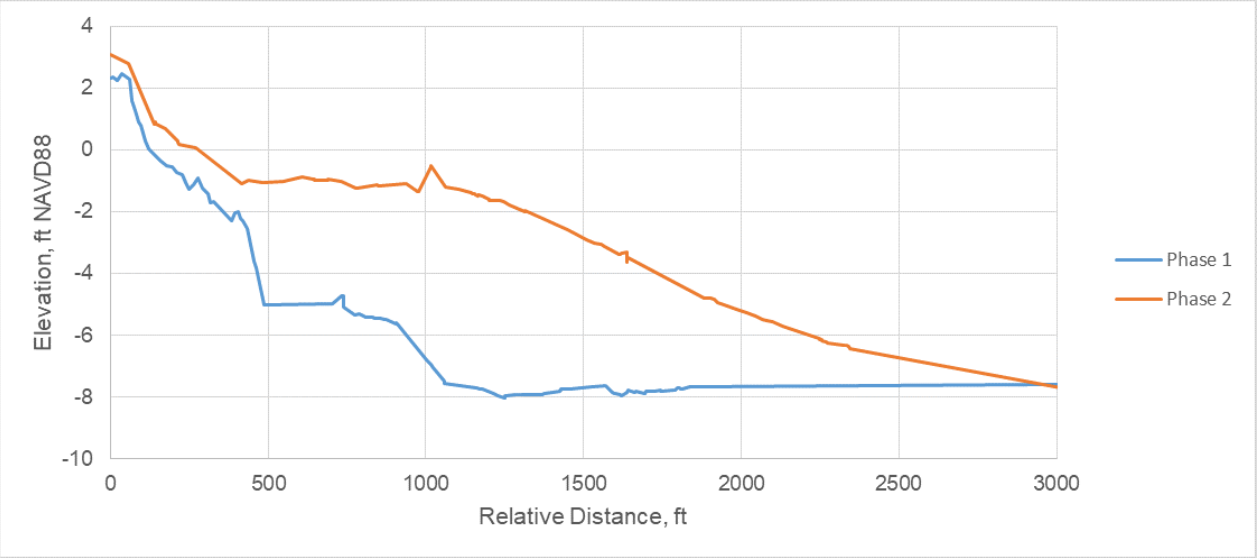
- Includes Phase 1 and 2 Breakwaters
- Phase 1: Pass Manchac to Existing Breakwaters (1.4 miles)
- Phase 2: Tangipahoa River to Parish Line (2.6 miles)



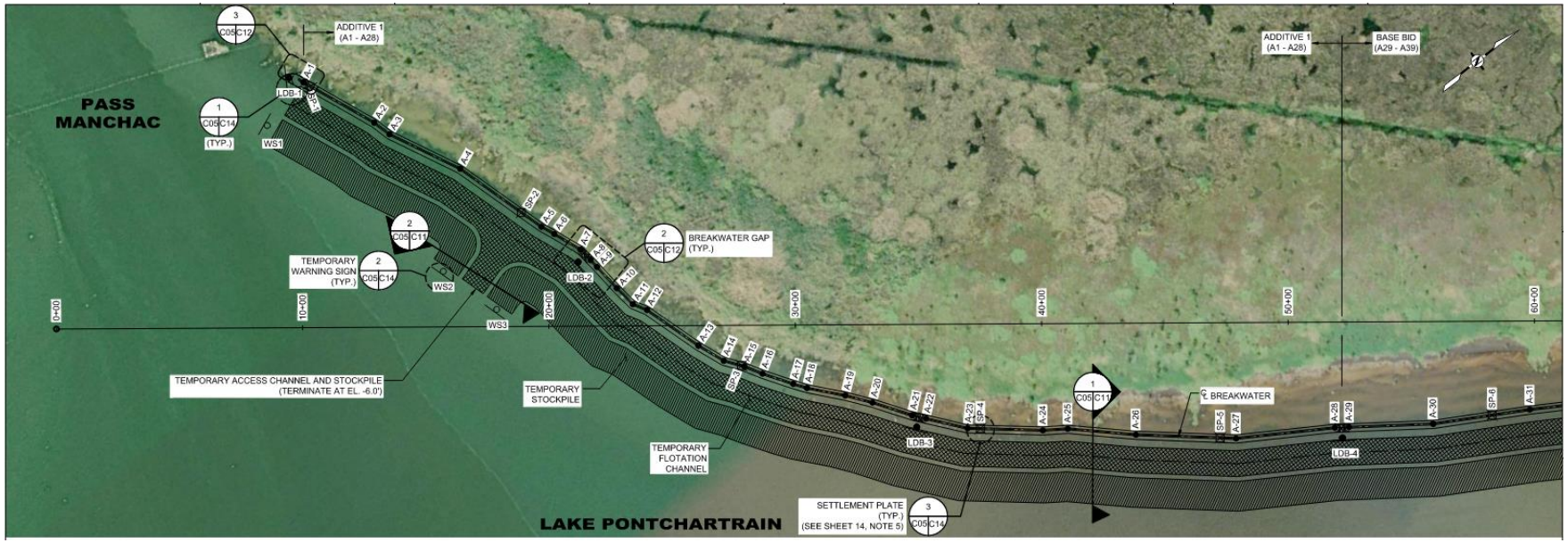
Existing Elevations (Approx.)

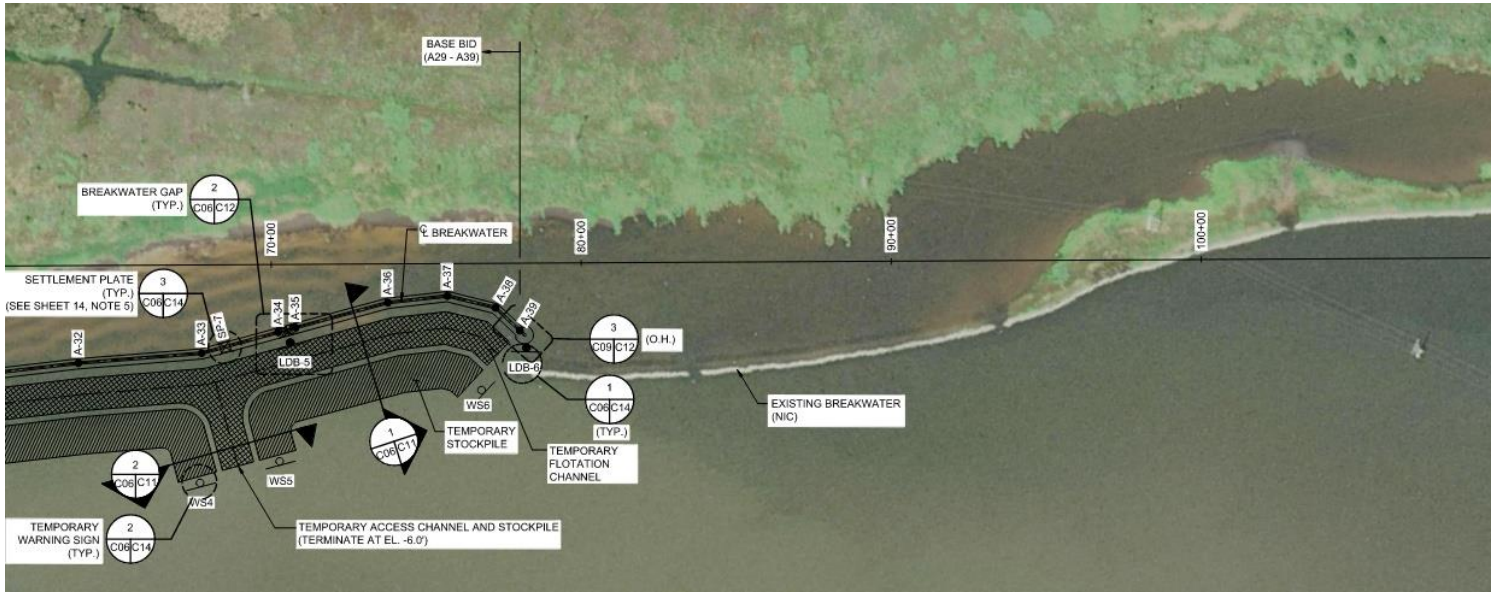
- Phase 2 has shallower existing grade





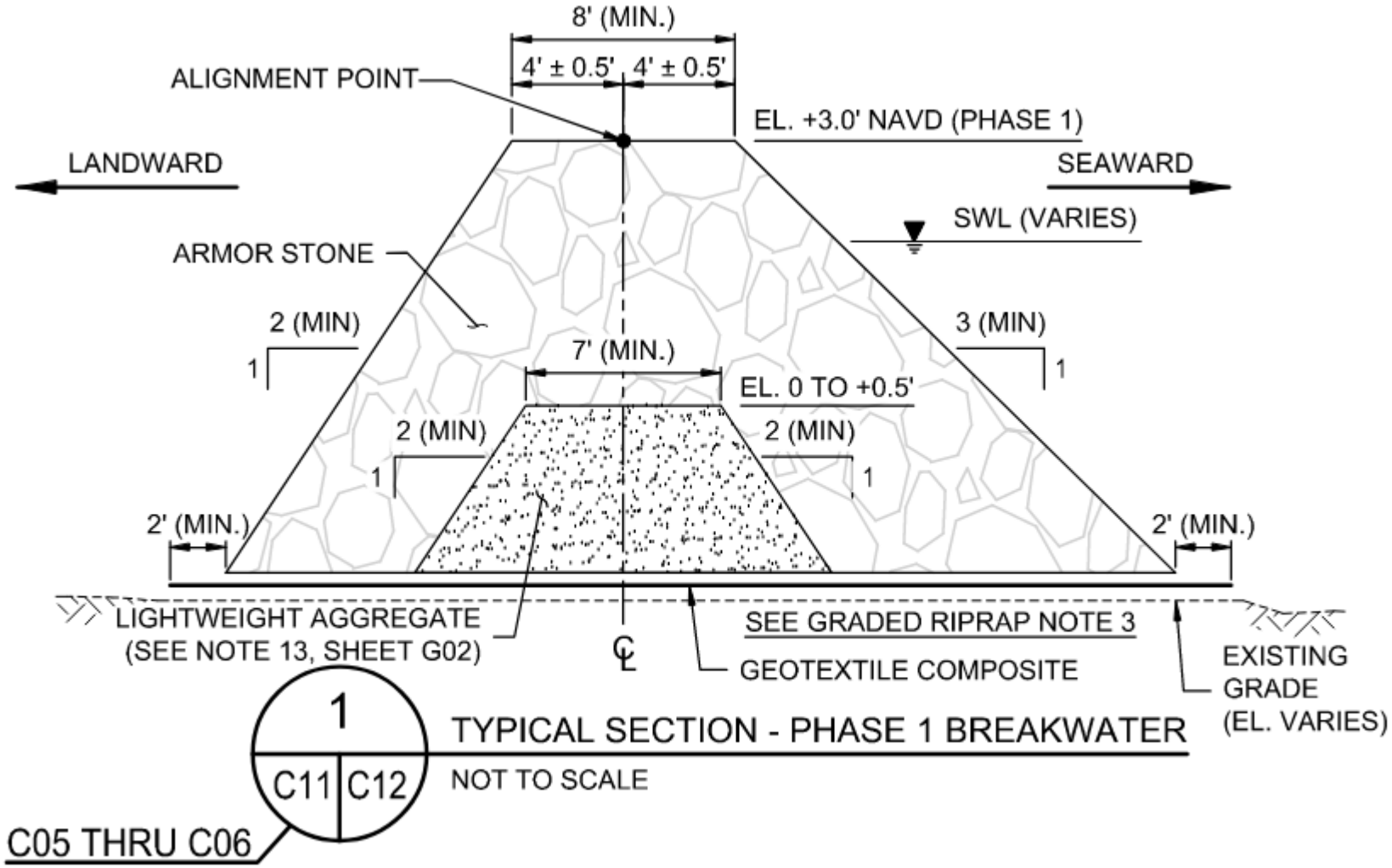
Phase 1 Breakwater



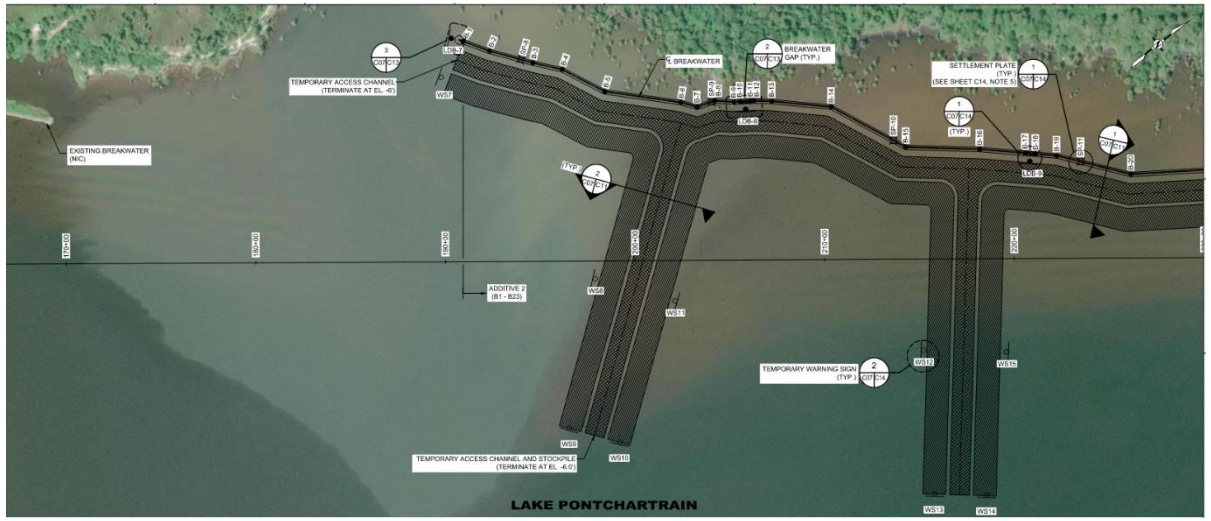


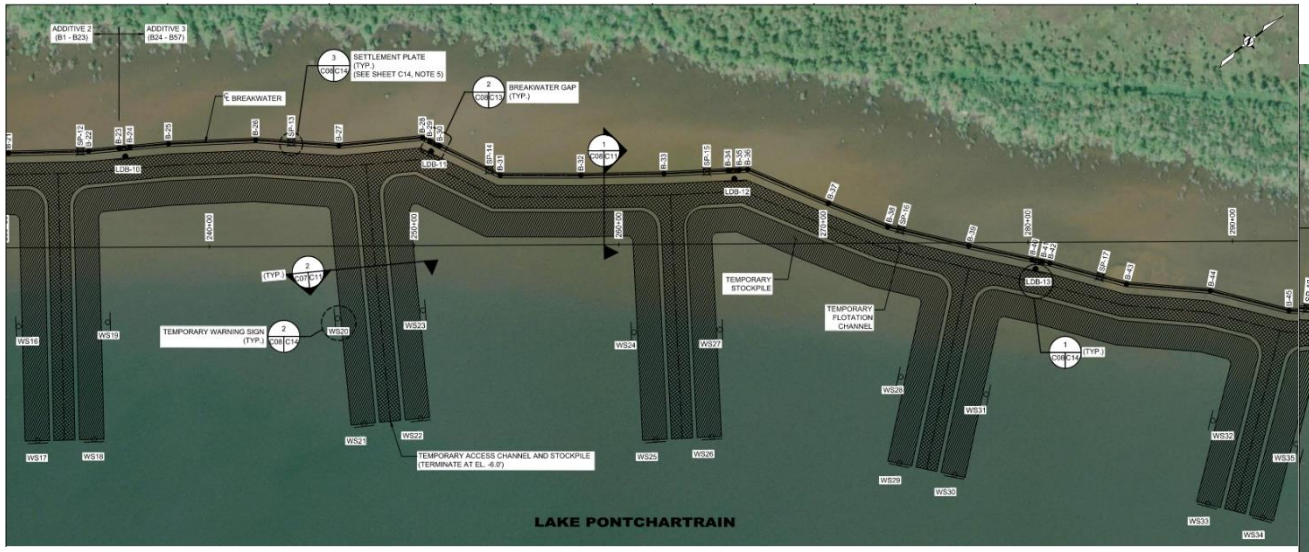
Phase 1 Breakwater

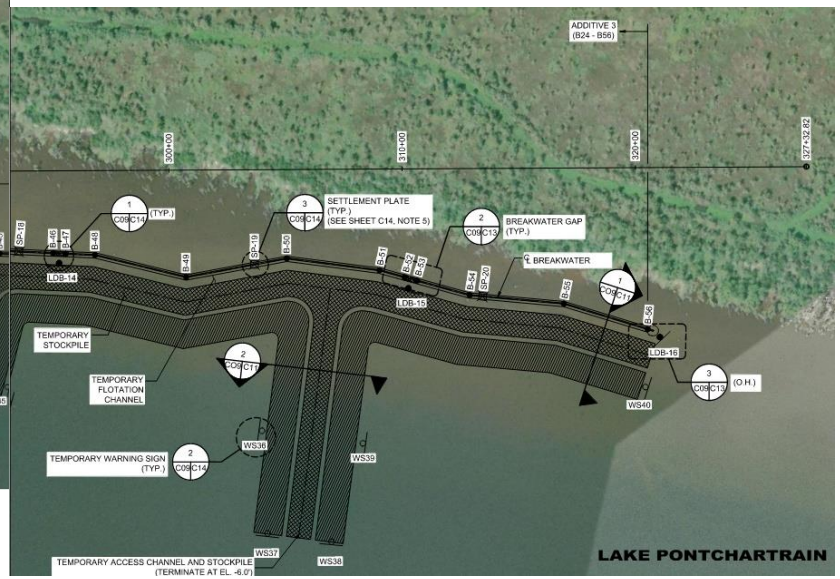
- 250 lb gradation
- Enclosed lightweight aggregate



Phase 2 Breakwater

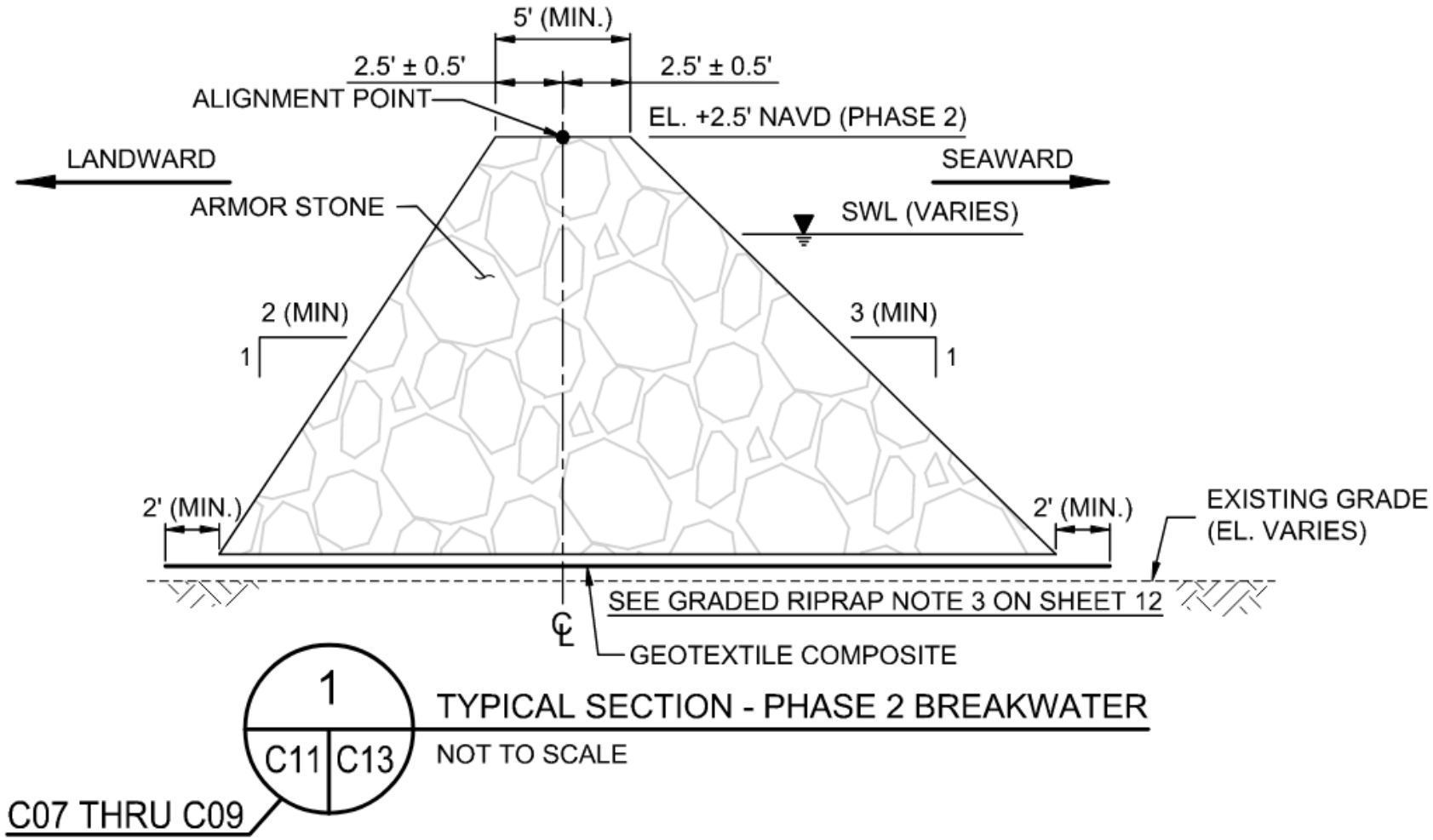






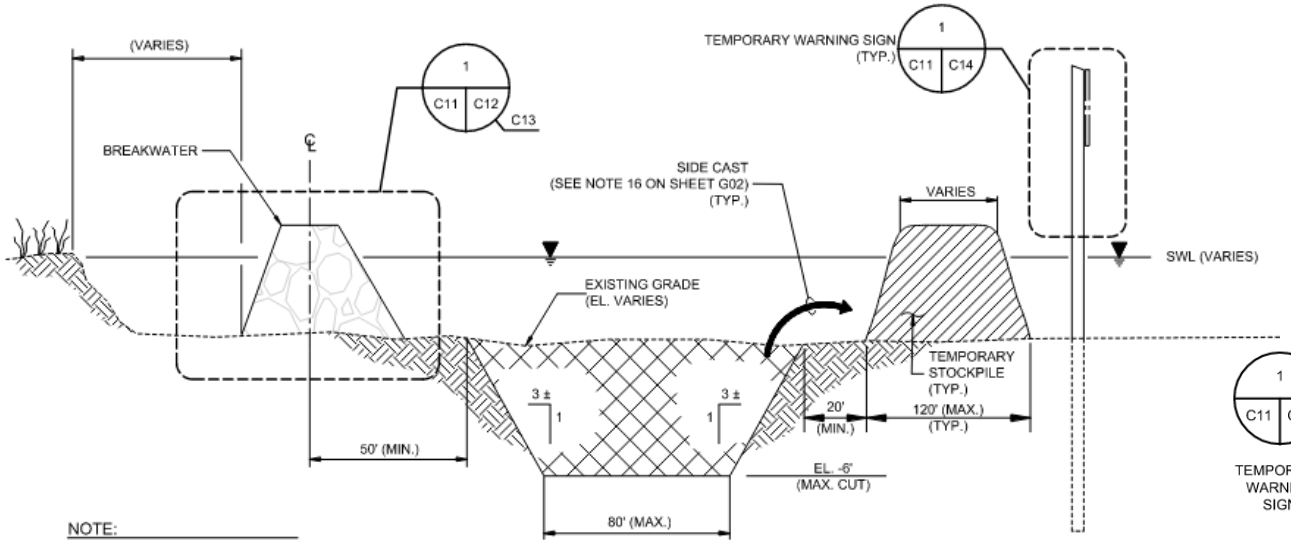
Phase 2 Breakwater

- 250 lb gradation



Optional Access and Flotation Channels

Optional Access and Flotation Channels



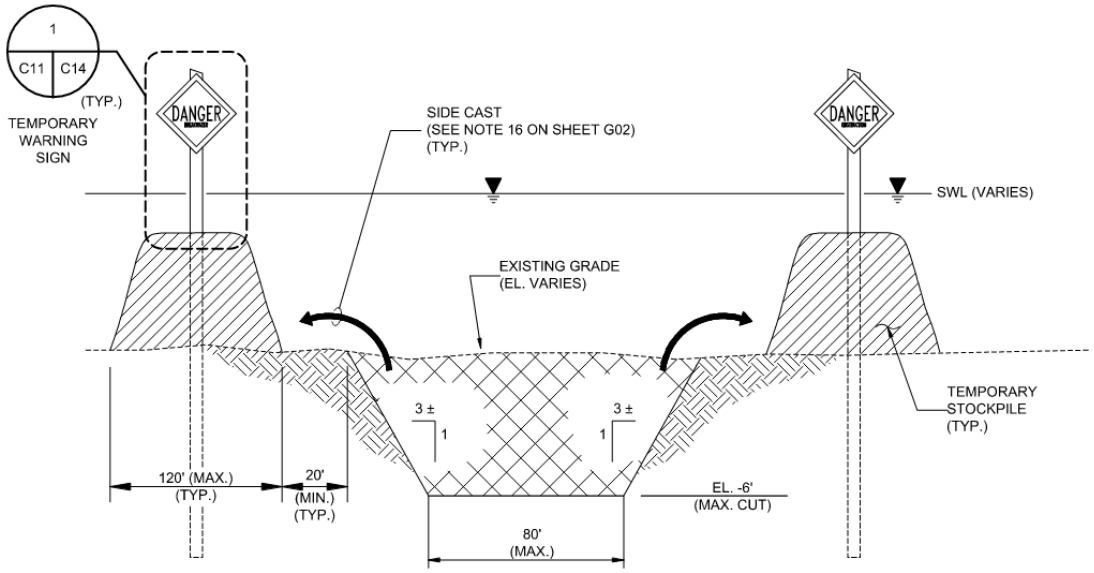
NOTE:

1. FOR CLARITY, EXISTING TREES AND NATURAL TIMBER DEBRIS NOT SHOWN. SEE NOTE 9 ON SHEET G02.

1
C05 C11
C06 THRU C09

TYPICAL SECTION - BREAKWATER/ TEMPORARY FLOTATION CHANNEL

NOT TO SCALE



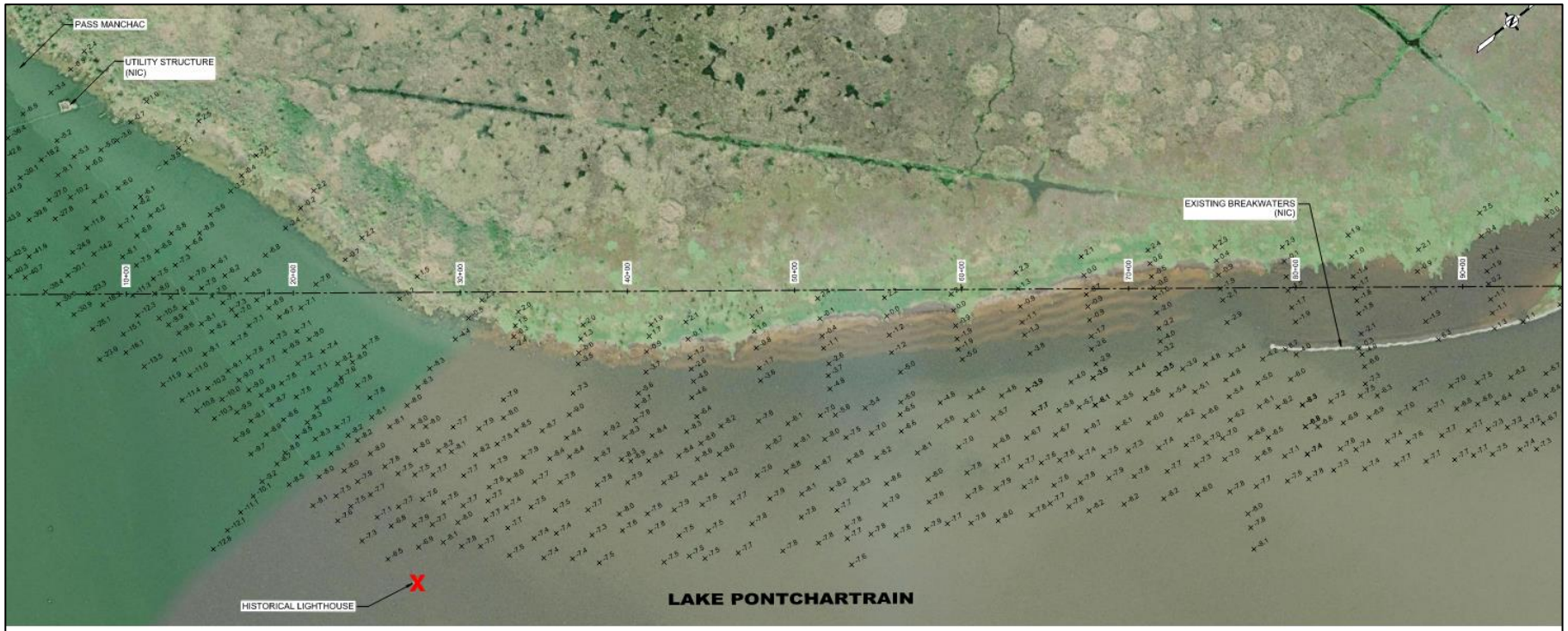
2
C05 C11
C06 THRU C09

TYPICAL SECTION - TEMPORARY ACCESS CHANNEL

NOT TO SCALE

Historic Lighthouse

- Must be avoided



1 C01 C02 ENLARGED EXISTING SITE PLAN I

600 0 600 1200

SCALE IN FEET

Preliminary (95%) Bid Quantities

BASE BID: PHASE 1			
ITEM		QUANTITY	UNIT
A-1	Mobilization/Demobilization	1	LS
A-2	Topographic and Bathymetric Surveying	1	LS
A-3	Pre-Construction Hazard Survey	1	LS
A-4	Aerial Photography	1	LS
A-5	Excavate/Backfill Access/Flotation Channels	24,000	CY
A-6	Geotextile Composite	11,100	SY
A-7	Armor Stone	18,000	TONS
A-8	Settlement Plates	3	EA
A-9	Lighted Daybeacons	3	EA
A-10	Encapsulated Lightweight Aggregate	3,600	CY

ADDITIVE BID 2: PHASE 2			
ITEM		QUANTITY	UNIT
C-1	Topographic and Bathymetric Surveying	1	LS
C-2	Pre-Construction Hazard Survey	1	LS
C-3	Aerial Photography	1	LS
C-4	Excavate/Backfill Access/Flotation Channels	134,000	CY
C-5	Geotextile Composite	13,600	SY
C-6	Armor Stone	18,000	TONS
C-7	Settlement Plates	6	EA
C-8	Lighted Daybeacons	3	EA

ADDITIVE BID 1: PHASE 1 CONTINUATION			
ITEM		QUANTITY	UNIT
B-1	Topographic and Bathymetric Surveying	1	LS
B-2	Pre-Construction Hazard Survey	1	LS
B-3	Aerial Photography	1	LS
B-4	Excavate/Backfill Access/Flotation Channels	29,000	CY
B-5	Geotextile Composite	18,900	SY
B-6	Armor Stone	36,000	TONS
B-7	Settlement Plates	4	EA
B-8	Lighted Daybeacons	3	EA
B-9	Encapsulated Lightweight Aggregate	6,600	CY

ADDITIVE BID 3: PHASE 2 CONTINUATION			
ITEM		QUANTITY	UNIT
D-1	Topographic and Bathymetric Surveying	1	LS
D-2	Pre-Construction Hazard Survey	1	LS
D-3	Aerial Photography	1	LS
D-4	Excavate/Backfill Access/Flotation Channels	203,000	CY
D-5	Geotextile Composite	25,700	SY
D-6	Armor Stone	34,000	TONS
D-7	Settlement Plates	9	EA
D-8	Lighted Daybeacons	10	EA

Current Project Status

- Awaiting permit
- Bidding 3rd/4th Quarter 2022

Contract Days	
Base Bid	100
Alt No. 1	100
Alt No. 2	100
Alt No. 3	150

Bayou Terre Aux Boeufs Ridge Restoration Phase II

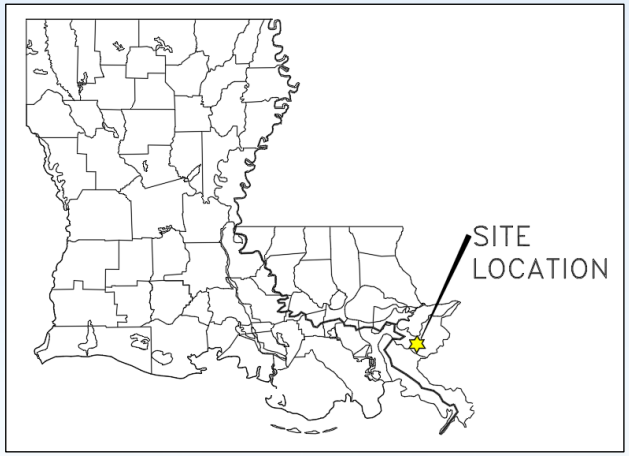
Alex Boudreau, P.E.
April 04, 2022

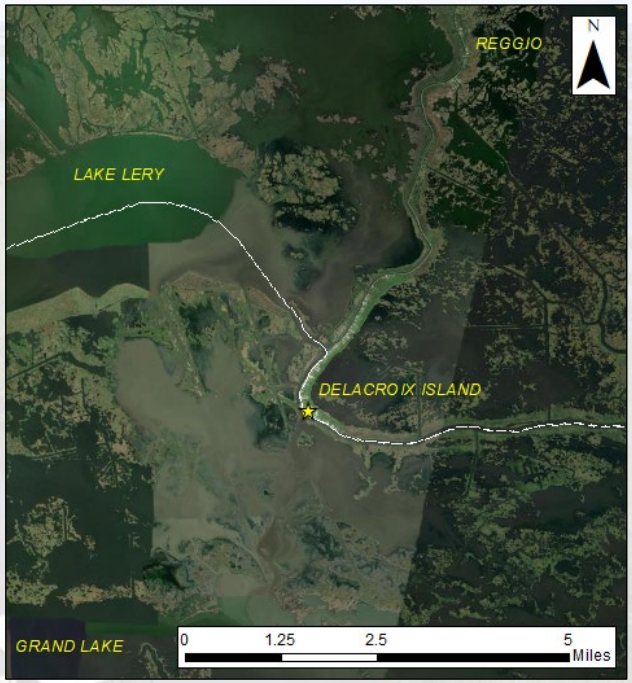
Presentation Overview

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

General Project Information

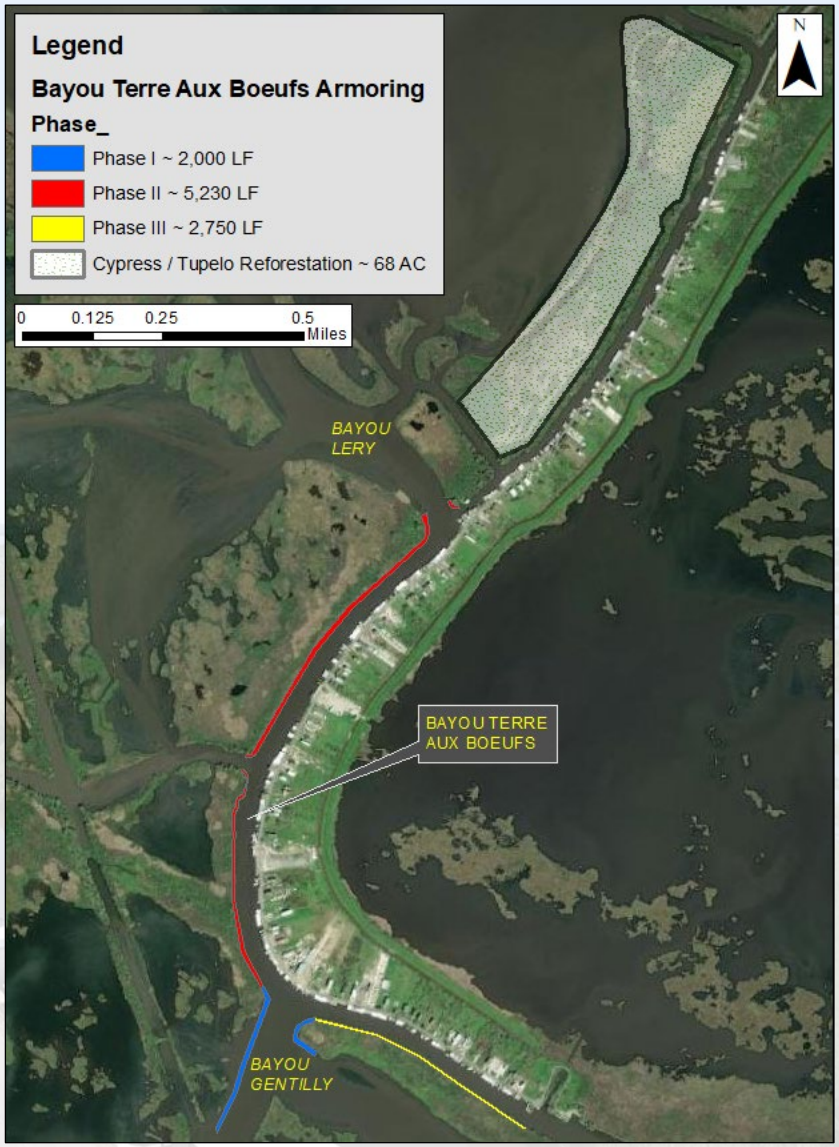
- Location
  - Boundary of St. Bernard and Plaquemines Parishes at Delacroix Island
    - Project technically lies in Plaquemines Parish; however, SBPG is investing due to benefits to its community
- Funding
  - RESTORE Act, CPRA Surplus, and NFWF
- Project Type
  - Shoreline stabilization via placement of riprap along 5,230 linear feet of Bayou Terre aux Boeufs
  - Ridge restoration via reforestation up to 68 acres





Project Layout

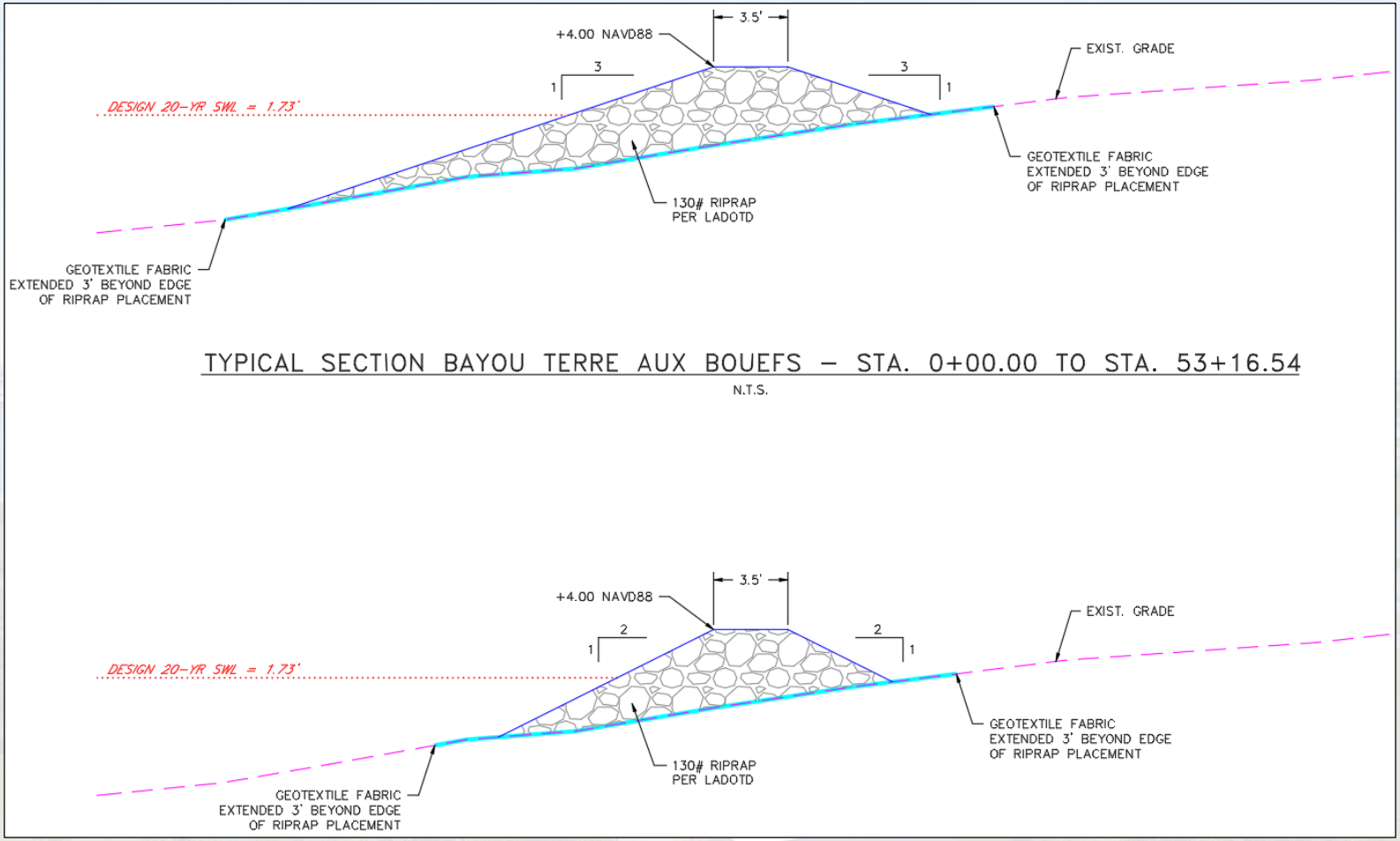
- Riprap placement for Phase II picks up from end of construction for Phase I and resumes riprap revetment from Bayou Gentilly to Bayou Lery
- Reforestation of ~ 68-acre marsh cell creation in 2016 via project BS-0017



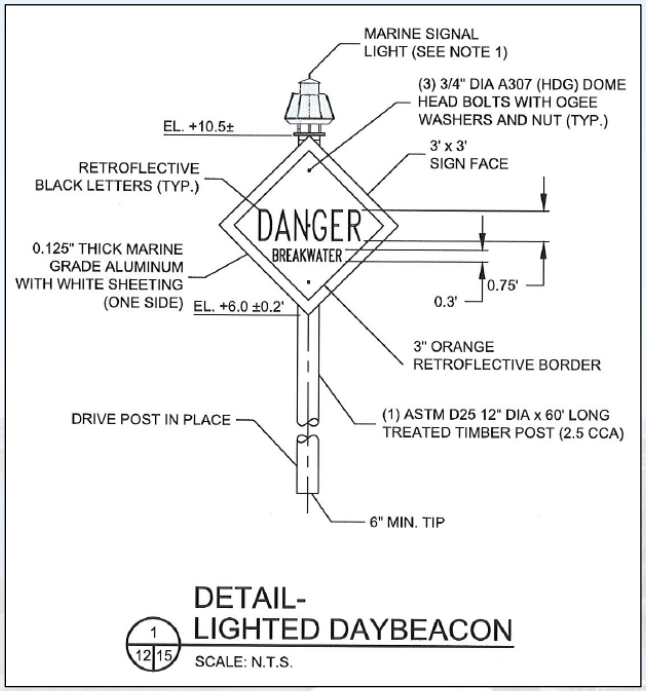
Phase I Construction

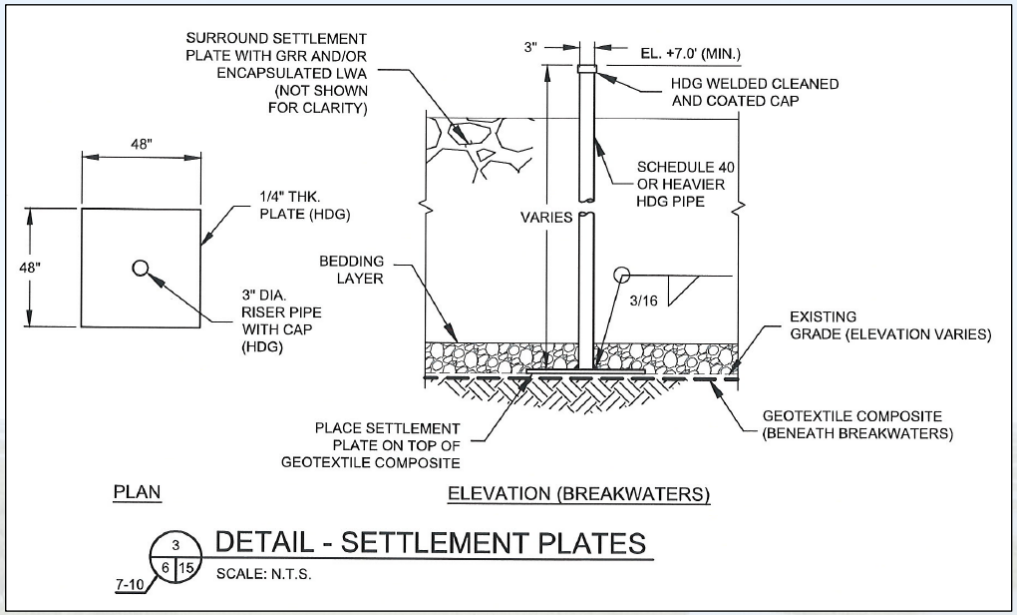
- 2,000 LF of armoring
  - 130# stone (14,356 tons)
  - Geotextile (11,787 SY)
  - Warning Signs (5)
- Construction Fee
  - $1.92M
- Construction Duration
  - Allowed 75 calendar days
  - Completed in ~30 days

Typical Sections



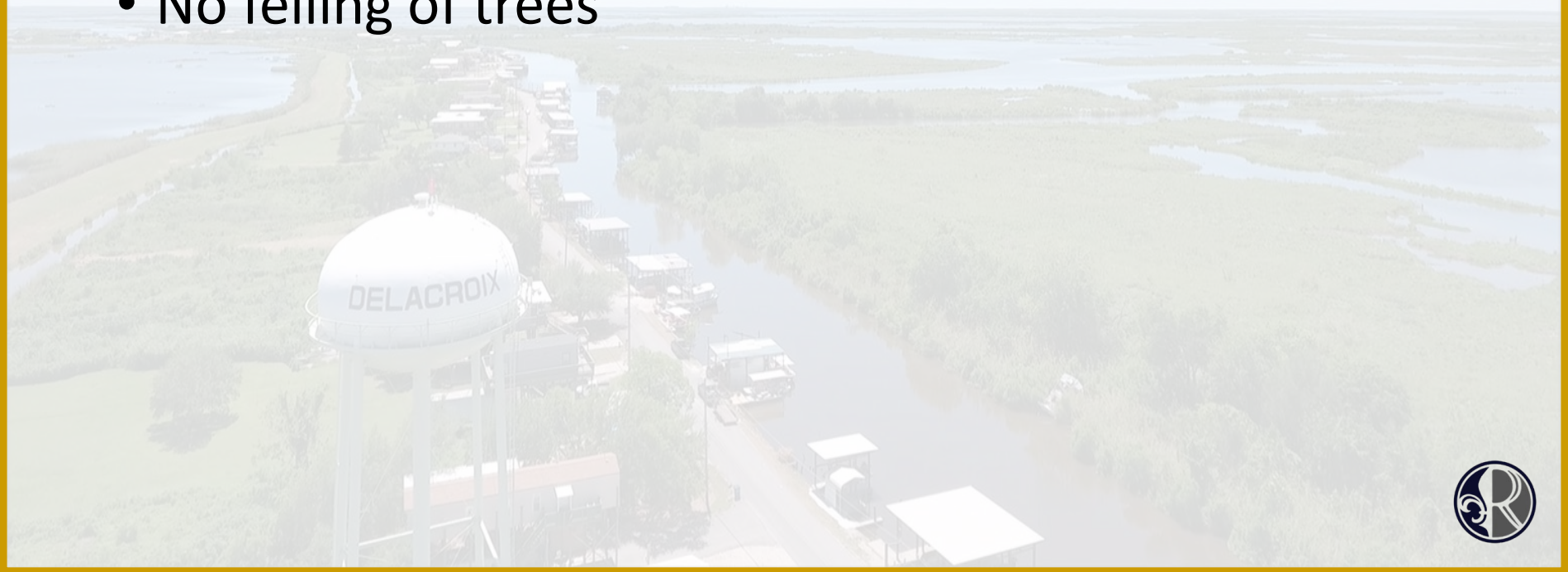
Typical Sections





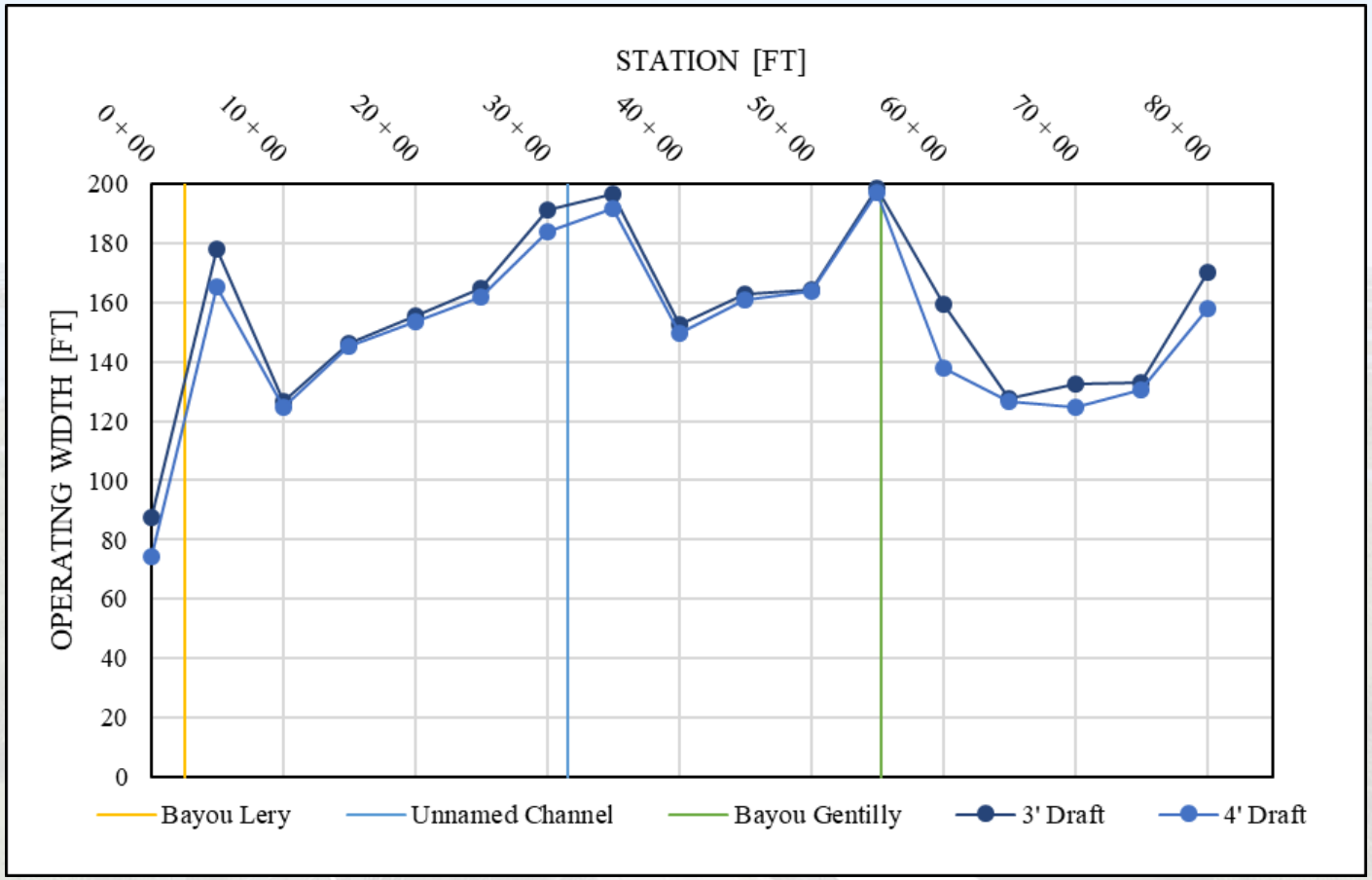
Construction Considerations (1)

- No access dredging to be permitted
  - For Phase I construction, contractor elected to light load barge. Rock barges were ferried through Breton Sound and arrived at site via Bayou Gentilly.
- No felling of trees



Construction Considerations (2)

- Minimal impacts to local boat traffic



Notable Quantities

- Anticipated Base Bid

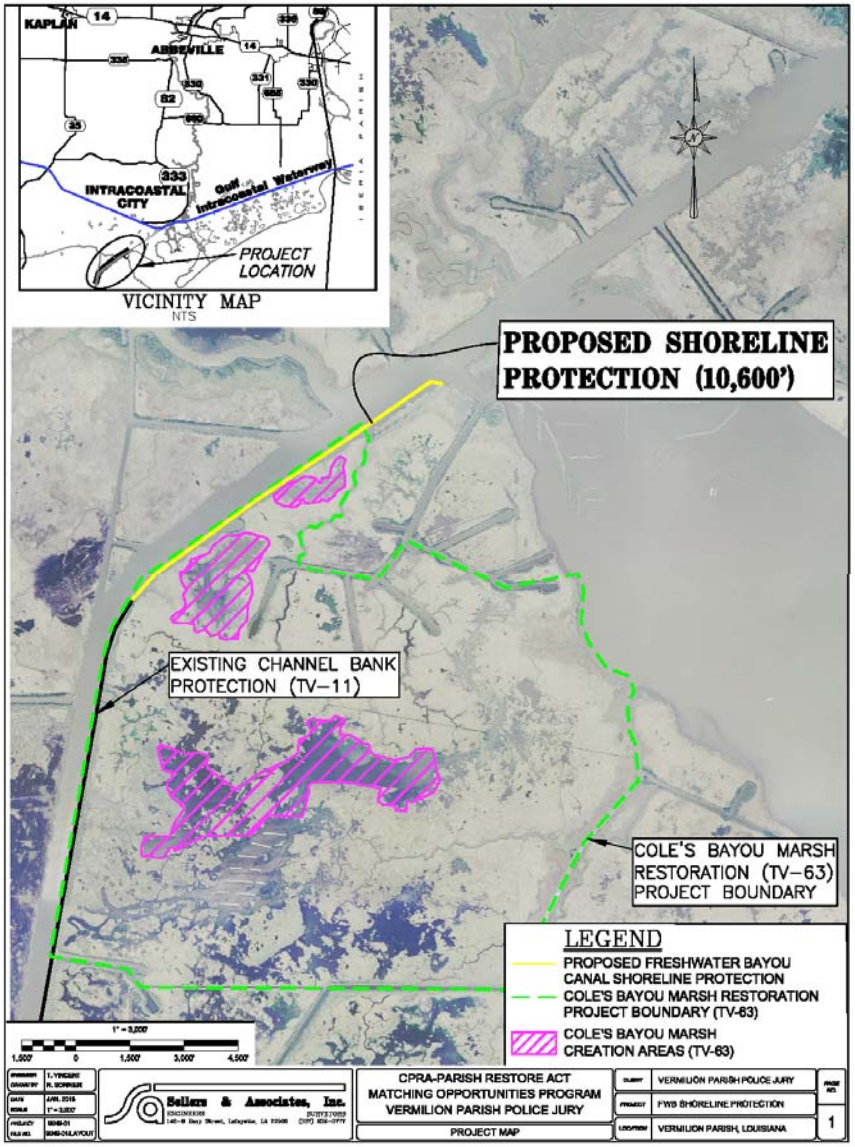
Item No.	Item Description	Estimated Quantity	Unit of Measure
1	Mobilization/Demobilization	1	LS
2	Riprap	18,200	TON
3	Geotextile fabric	24,500	SY
4	Warning Signs	5	EA
5	Settlement Plates	3	EA
6	Surveys	1	LS
7	Vegetative Plantings	TBD	EA

- Additive Alternate (Phase III south of Bayou Gentilly)

Item No.	Item Description	Estimated Quantity (MAX)	Unit of Measure
8	Riprap	17,900	TON
9	Geotextile fabric	14,750	SY
10	Warning Signs	3	EA
11	Settlement Plates	2	EA
12	Surveys	1	LS

Schedule

- Funding: Secured
- Permitting: Complete
- Landrights/servitude agreements: Complete
- Advertisement: 3rd Quarter 2022
- Construction Duration
  - Base Bid: 100 days
  - Alternates: To be assessed in future



CPRA-PARISH MATCHING PROGRAM RESTORE FWB SHORELINE PROTECTION PROJECT (TV-0079)

10,600' FORESHORE ROCK DIKE

CONSTRUCTION BUDGET: $4,500,000

ESTIMATED PROJECT BID DATE: JULY 2022

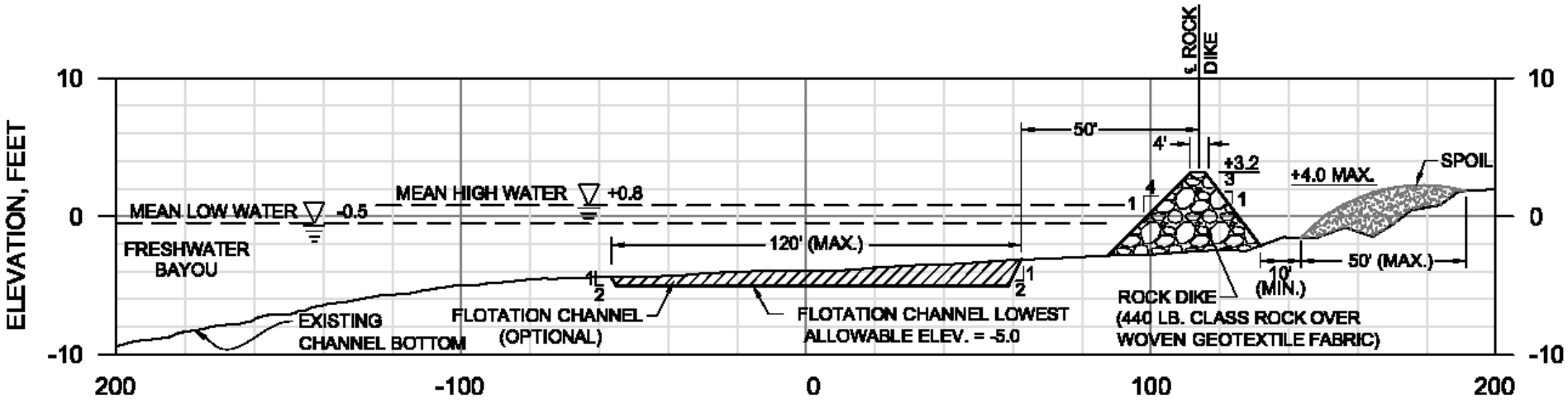
CONSTRUCTION CONTRACT TIME: 180 CALENDAR DAYS

Vermilion Parish

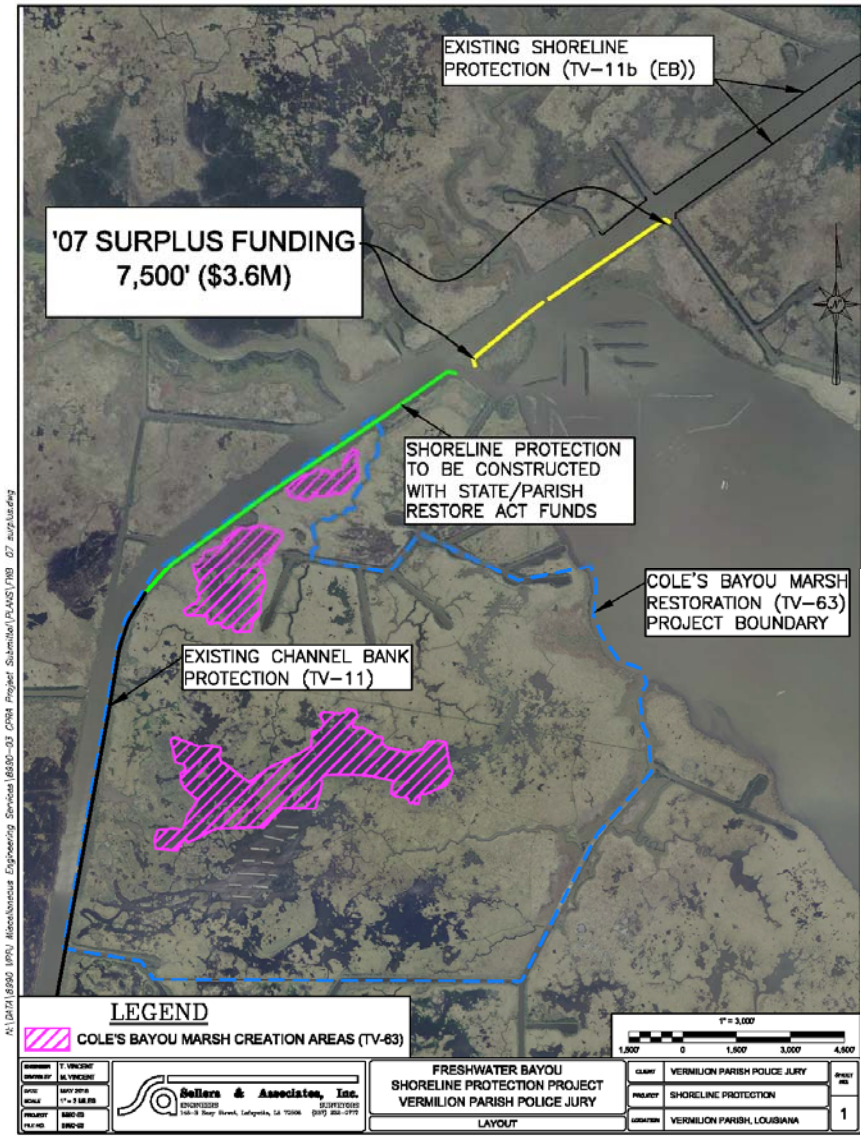
CPRA-PARISH MATCHING PROGRAM
RESTORE FRESHWATER BAYOU SHORELINE PROTECTION PROJECT (TV-0079)

SUMMARY OF ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY
101	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	1
201	BANK STABILIZATION SURVEYS	LUMP SUM	1
301	FLOTATION CHANNELS	LUMP SUM	1
610	WOVEN GEOTEXTILE FABRIC	SQ. YARDS	53,200
702	440 LB. CLASS ROCK	TONS	77,100



ROCK DIKE TYPICAL SECTION



STATE SURPLUS FY '07 SURPLUS FRESHWATER BAYOU SHORELINE PROTECTION PROJECT (TV-0082)

7,500' FORESHORE ROCK DIKE

CONSTRUCTION BUDGET: $3,100,000

ESTIMATED PROJECT BID DATE: JUNE 2022

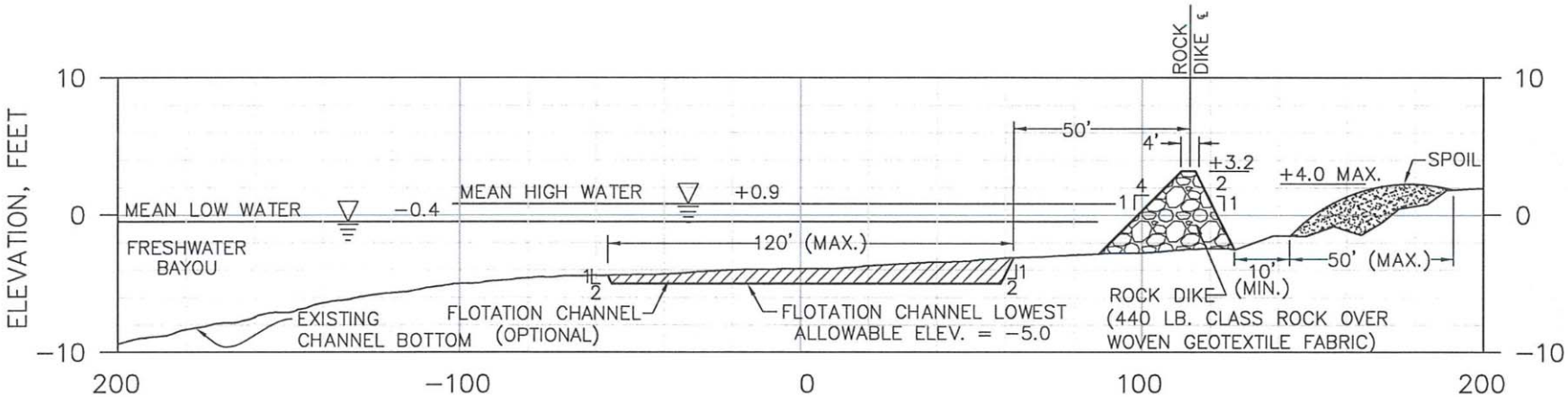
CONSTRUCTION CONTRACT TIME: 180 CALENDAR DAYS

Vermilion Parish

STATE SURPLUS FY '07
SURPLUS FRESHWATER BAYOU SHORELINE PROTECTION PROJECT (TV-0082)

SUMMARY OF ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY
101	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	1
201	CONSTRUCTION SURVEYS	LUMP SUM	1
301	FLOTATION CHANNELS	LUMP SUM	1
610	WOVEN GEOTEXTILE FABRIC	SQ. YARDS	29,000
702	440 LB. CLASS ROCK	TONS	43,800
1000	PERMANENT WARNING SIGN (UNLIGHTED)	EACH	3
1001	PERMANENT WARNING SIGN (LIGHTED)	EACH	8



ROCK DIKE TYPICAL SECTION

NORTH VERMILION BAY SHORELINE PROTECTION PROJECT (TV-0077)

16,000’ FORESHORE ROCK DIKE

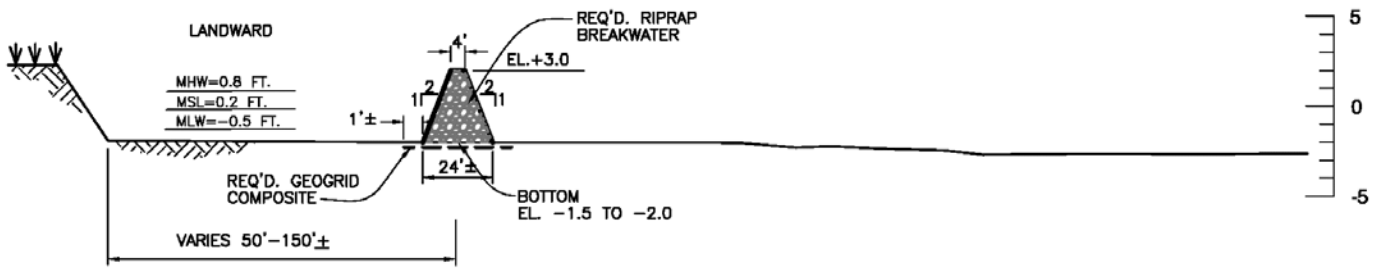
CONSTRUCTION BUDGET: $8,800,000

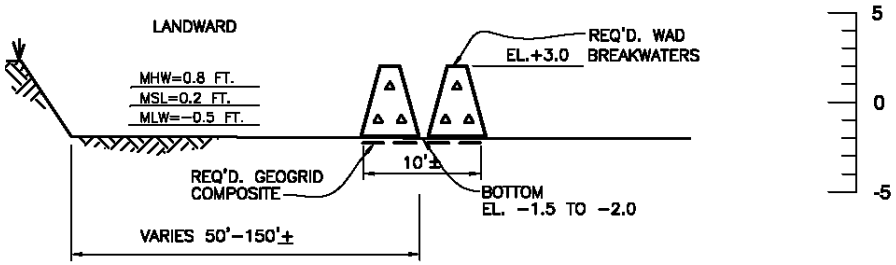
ESTIMATED PROJECT BID DATE: OCTOBER 2022

CONSTRUCTION CONTRACT TIME: 210 CALENDAR DAYS

Vermilion Parish

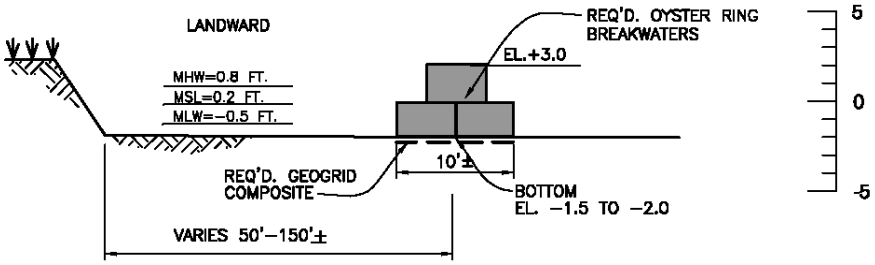
NORTH VERMILION BAY SHORELINE PROTECTION PROJECT (TV-0082)





TYPICAL SECTION WAD

N.T.S.



TYPICAL SECTION OYSTER RING

N.T.S.

Butch Hill Pump Station Rehabilitation & Basin Drainage Improvements

Lafourche Parish Government

&

North Lafourche Levee District

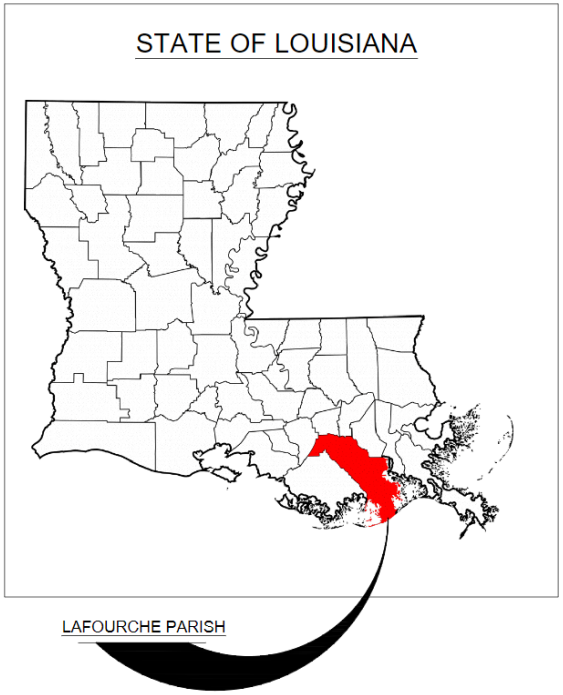
Dwayne Bourgeois
CPRA Board Member & NLLD Executive Director
Dillon Baronne, Director LPG, Dept of Public Works
April 4, 2022

committed to **our coast**

Presentation Overview

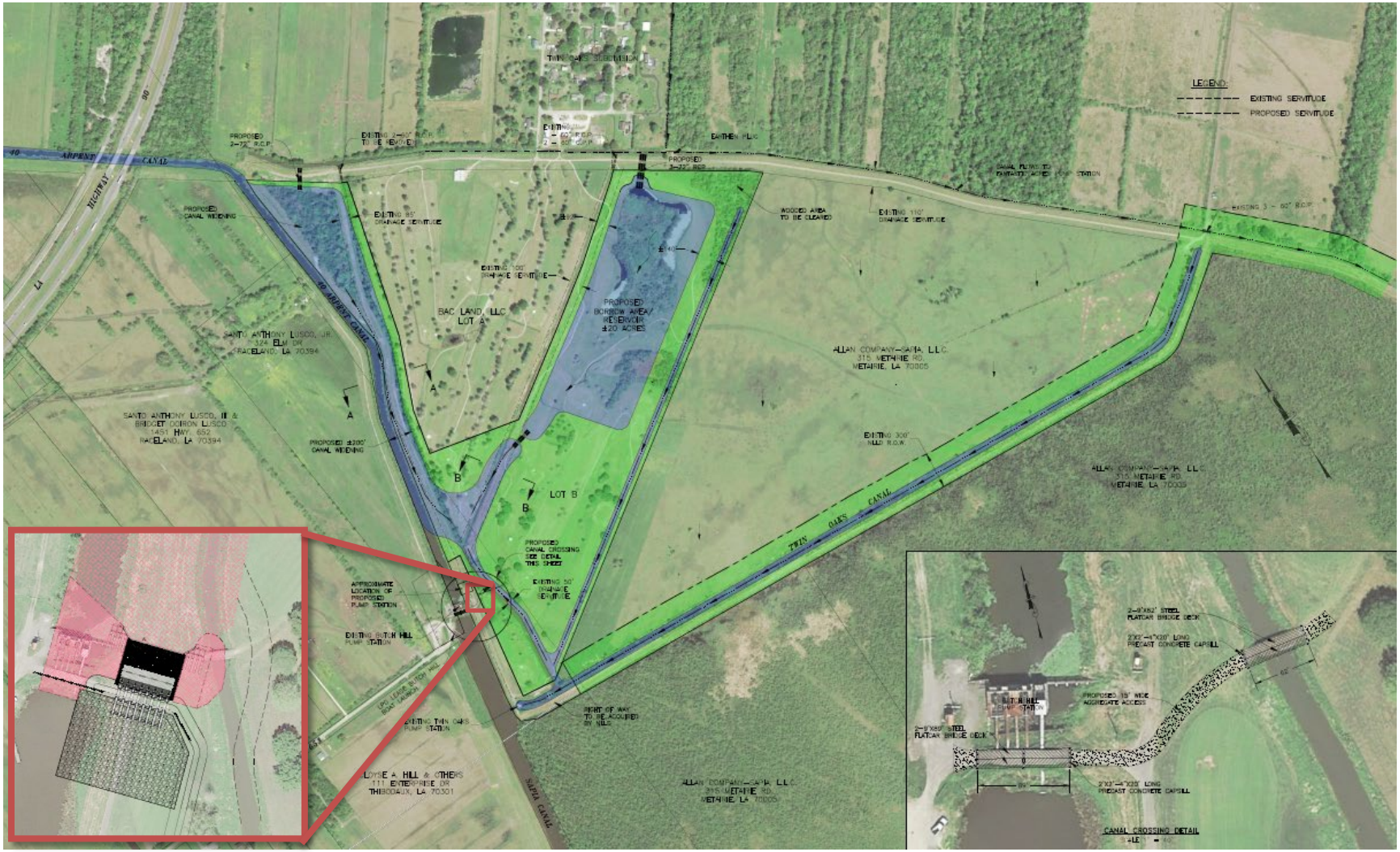
- General Project Information
- Project Layout
- Typical Sections
- Notable Quantities
- Schedule

General Project Information

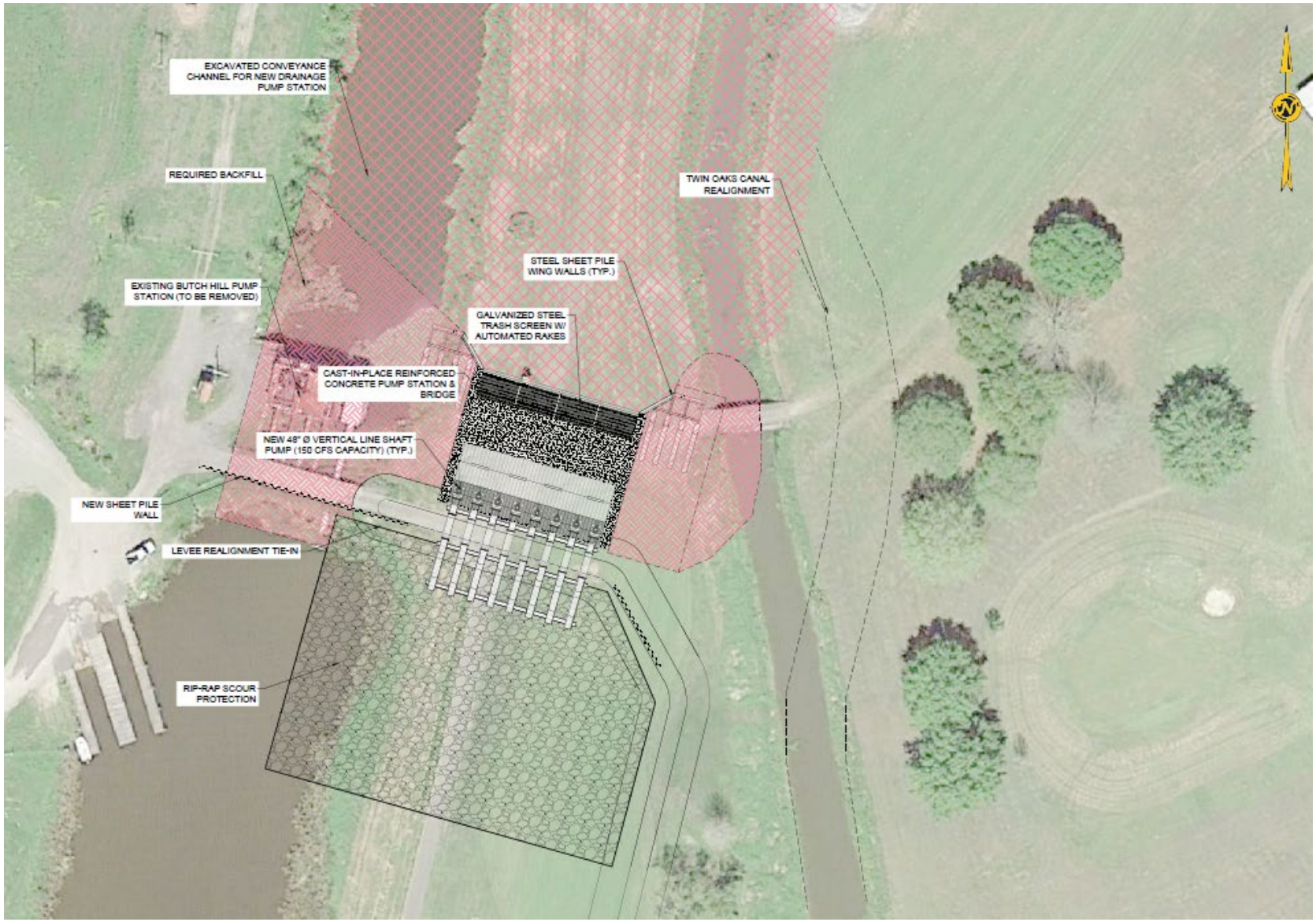


INFO	DESCRIPTION
LOCATION	Raceland - Lafourche Parish
FUNDING	Capital Outlay / Local Funds
PROJECT TYPE	Levee and drainage improvements and construction of a new drainage pump station.

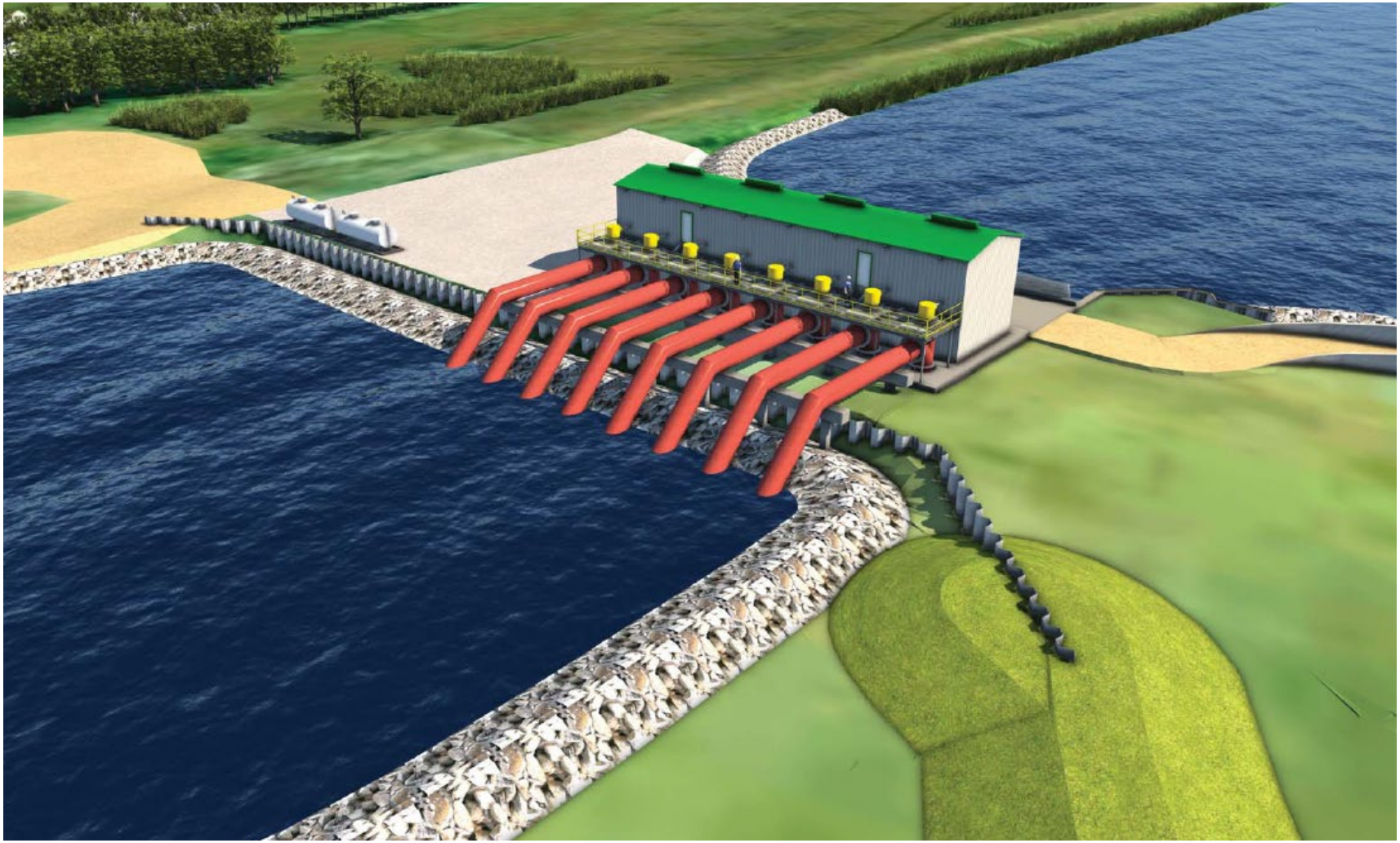
Project Layout – Conveyance & Levee Improvements



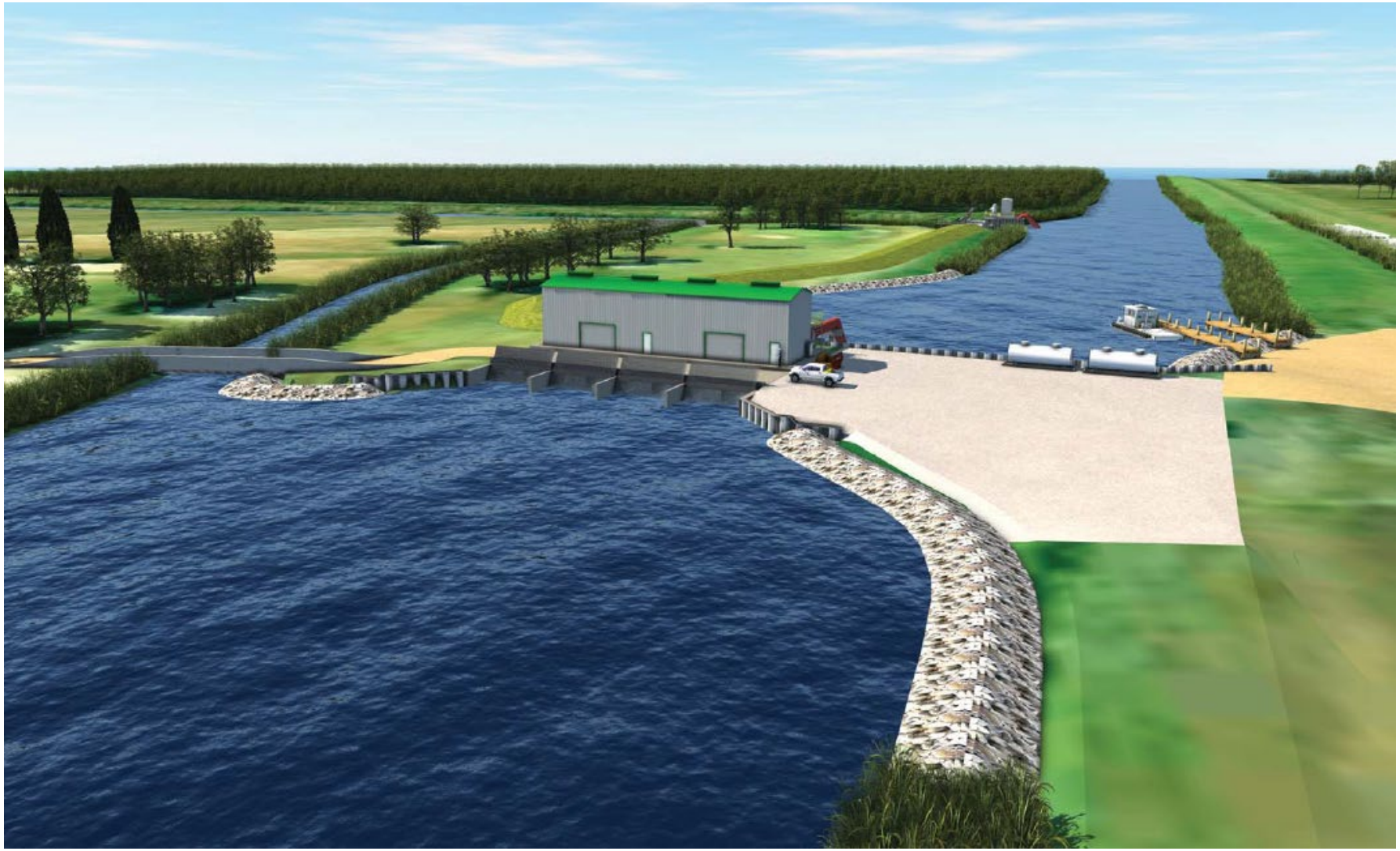
Project Layout – New 1,200 cfs Pump Station



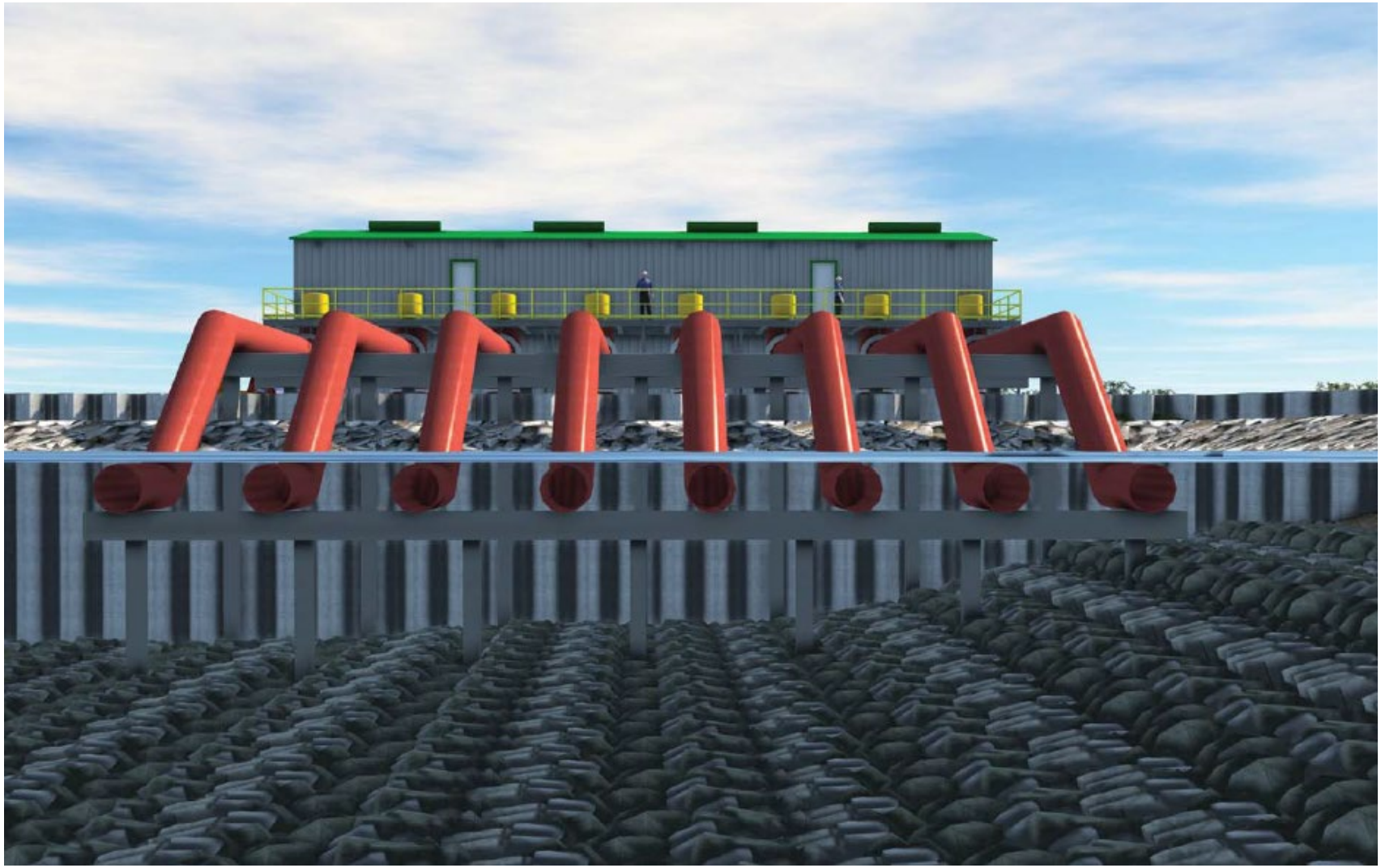
Project Layout – Pump Station Rendering



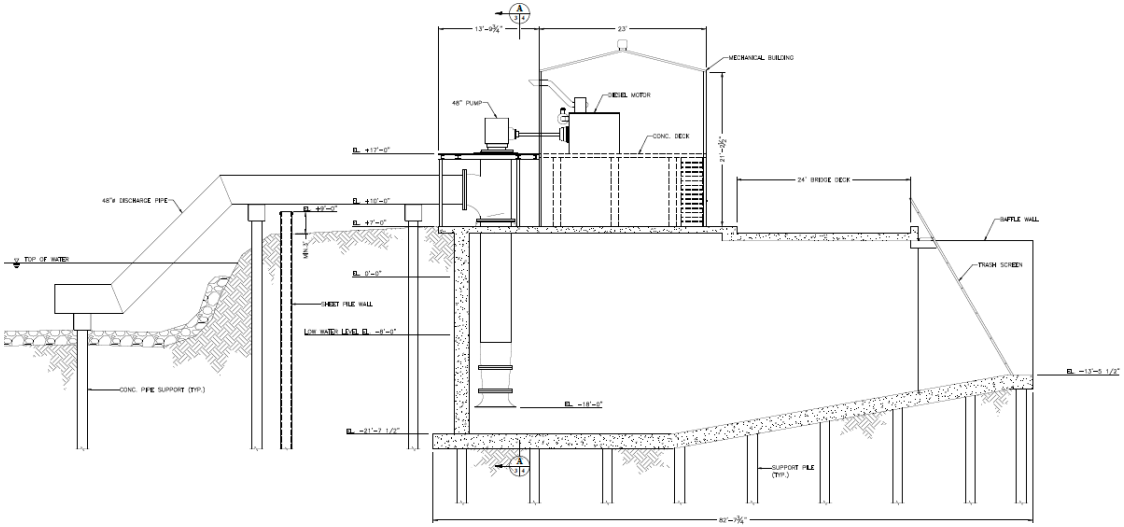
Project Layout – Pump Station Rendering

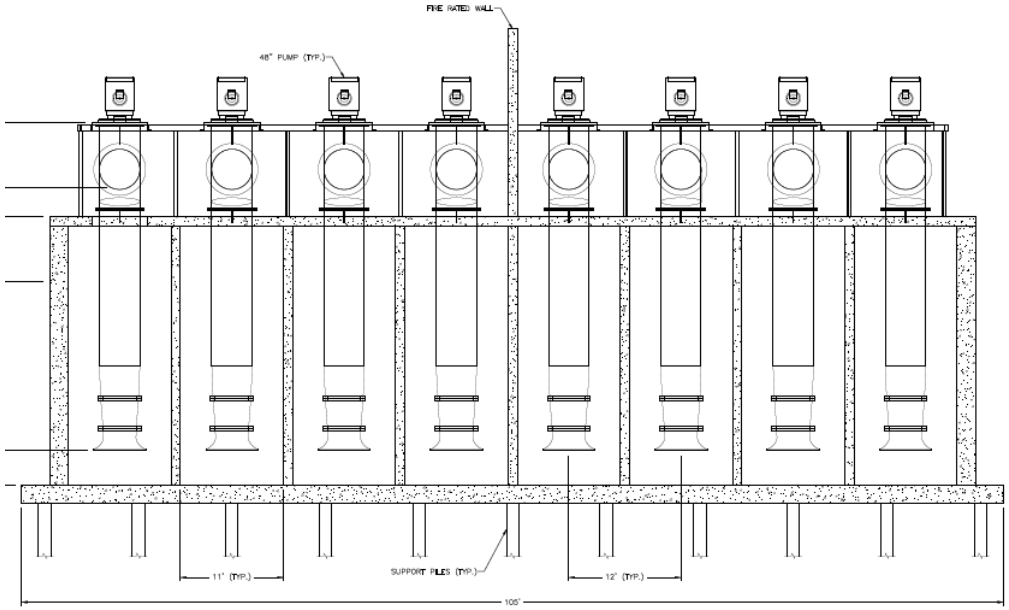


Project Layout – Pump Station Rendering



Typical Sections





Pump Station Estimated Quantities

Item No.	Item Description	Quantity	Unit
201-01-00100	Clearing and Grubbing	1	LS
203-01-00100	General Excavation (Net Section)	10017	CY
203-03-00100	Embankment (Net Section)	2518	CY
203-08-00100	Geotextile Fabric (General)	3602	SY
401-01-00100	Aggregate Surface Course (Net Section) (Driveways, Parking Areas, and Access Roads)	193	CY
705-06-00500	Chain Link Fence (8-Foot Height) w/ 3 Barbed Wire Strands	300	LF
711-01-04020	Riprap (Class 55Lb.) (36” Thick)	1722	SY
713-01-00100	Temporary Signs and Barricades	1	LS
727-01-00100	Mobilization	1	LS
739-01-00100	Hydro-Seeding	2	AC
740-01-00100	Construction Layout	1	LS
804-01-00300	Concrete Piles (16" Square)	8640	LF
804-03-02000	Steel Pipe Piles (36"x0.5" Plumb and Batter)	1920	LF
805-01-00900	Structural Steel Reinforced Concrete (Class A1) (Pump Station)	1909	CY
NS-01	Steel Sheet Pile Wall (NZ26)	9433	SF
NS-02	Steel Sheet Pile Wall (NZ14)	13772	SF
NS-03	Vertical Line Shaft Pump	8	EA
NS-04	500 HP, Tier 3 Diesel Engine with PTO	4	EA
NS-05	Right Angle Gear Drive (Ratio 4:1)	8	EA
NS-06	Structural Steel	18441	LBS
NS-07	Discharge Pipe System	501	LF
NS-08	Exterior Signage	1	LS
NS-09	Trash Rack	2267	SF
NS-10	Grating	1322	SF
NS-11	10-Foot Double Gates for Chain Link Fence (8-Foot Height) (3 Barbed Wire Strands)	2	DBLG
NS-12	Double Wall Diesel Tank	2	EA
NS-13	500 HP Horizontal Electric Motor (1,800 RPM)	4	EA
NS-14	1000kW Diesel Generator	2	EA

Schedule

- Pump Station Design Phase Completion: September 2022
- Levee & Detention Pond Design Completion: August 2022
- Permitting: In Progress
- Landrights/Servitude Agreements: Being Finalized
- Advertisement: **Fall 2022**
- Construction Duration: 600 days

Lafitte Tidal Protection Lower Lafitte (Orange Street) Basin (B-0224)

Mayor Tim Kerner, Jr.
Miles Garriott, Program Manager
Lafitte Area Independent Levee District
April 4, 2022

committed to **our coast**

Presentation Overview

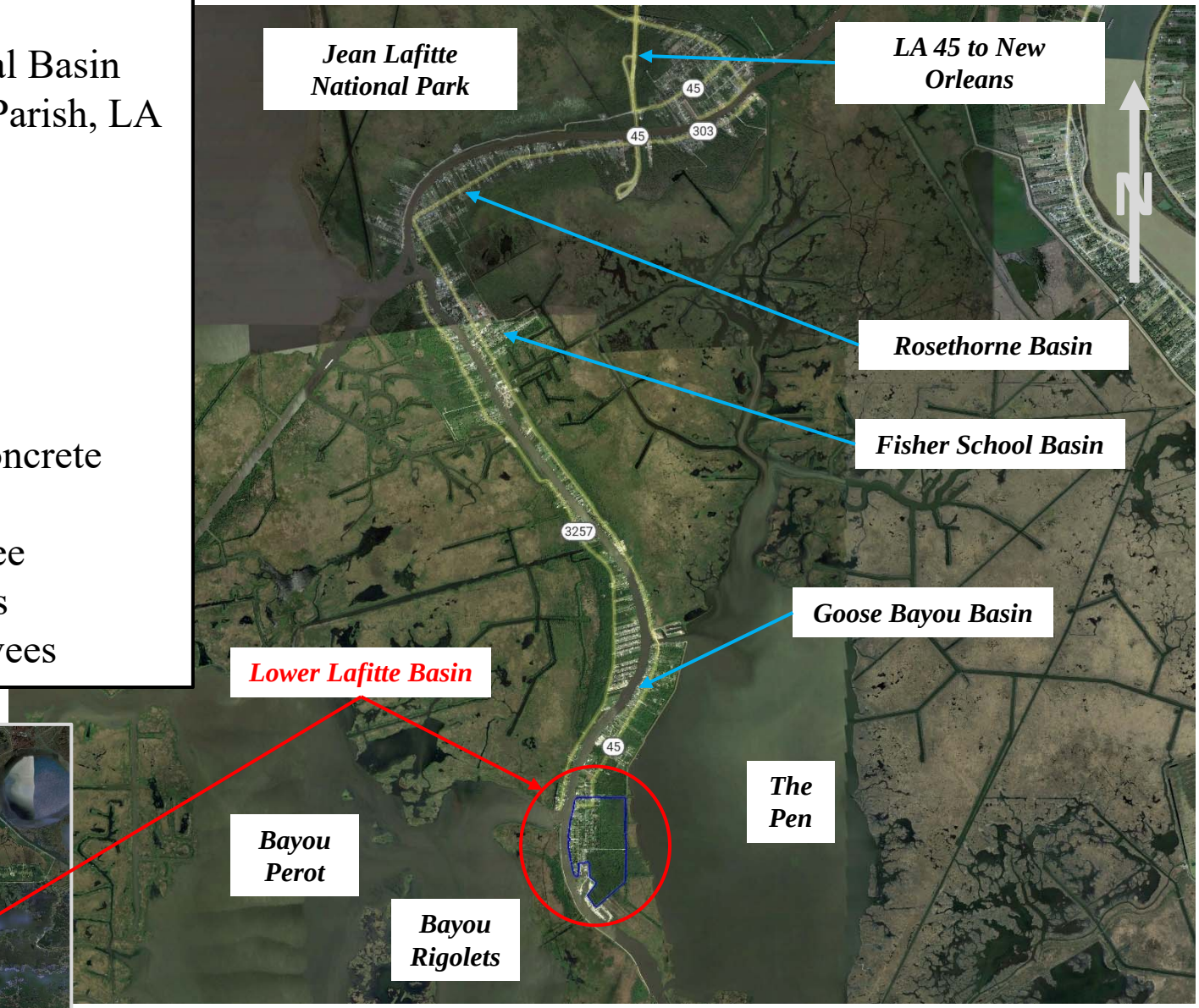
- Project Overview
- Project Layout
- Existing Conditions
- Typical Floodwall Sections
- Typical Levee Sections
- Gate Details
- Summary of Bid Quantities
- Project Schedule

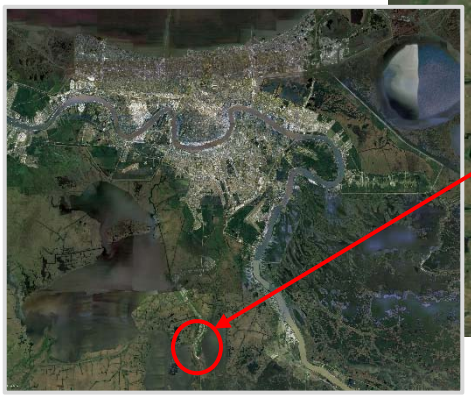
Project Overview

Project Location:
- Lower Lafitte Tidal Basin
- Lafitte, Jefferson Parish, LA

Funding Source:
- Capital Outlay

Project Details:
- Tidal Protection
  - Sheet Pile/Concrete Floodwalls
  - Existing Levee Modifications
  - Proposed Levees

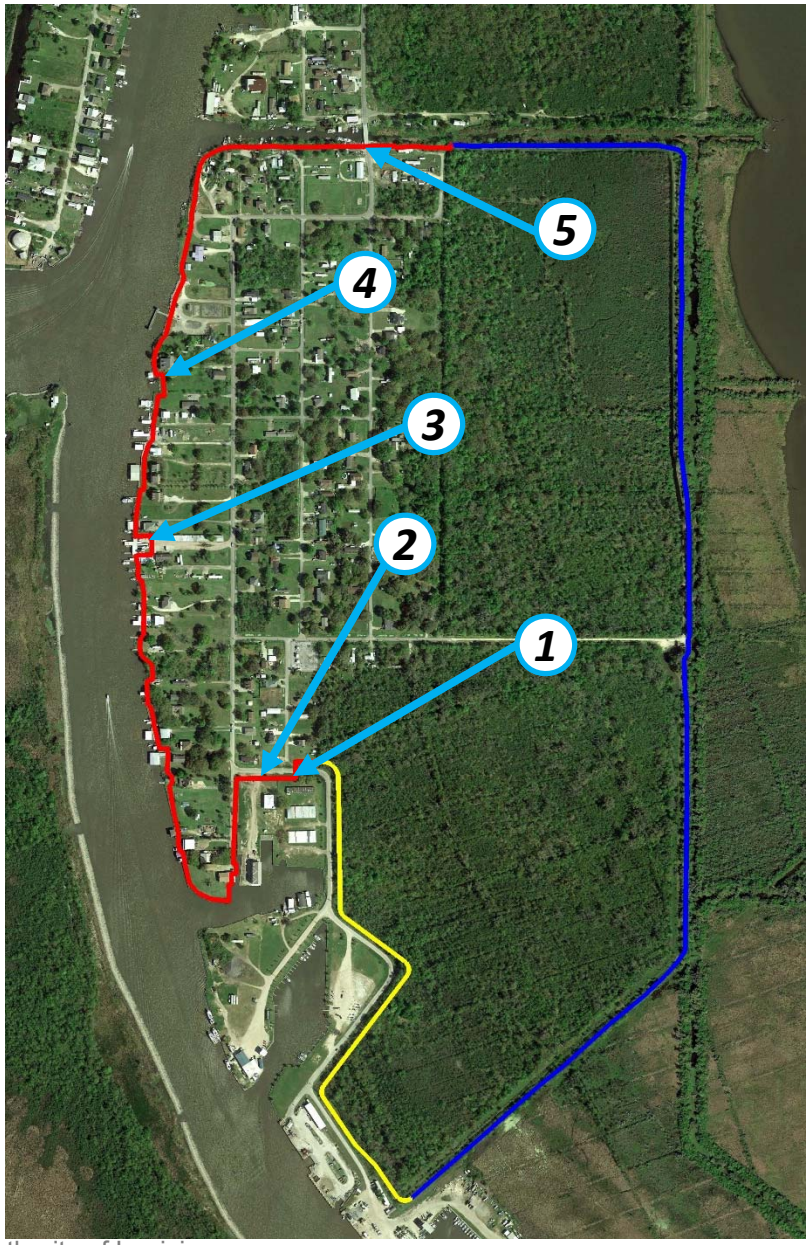




Project Layout

Project Features:

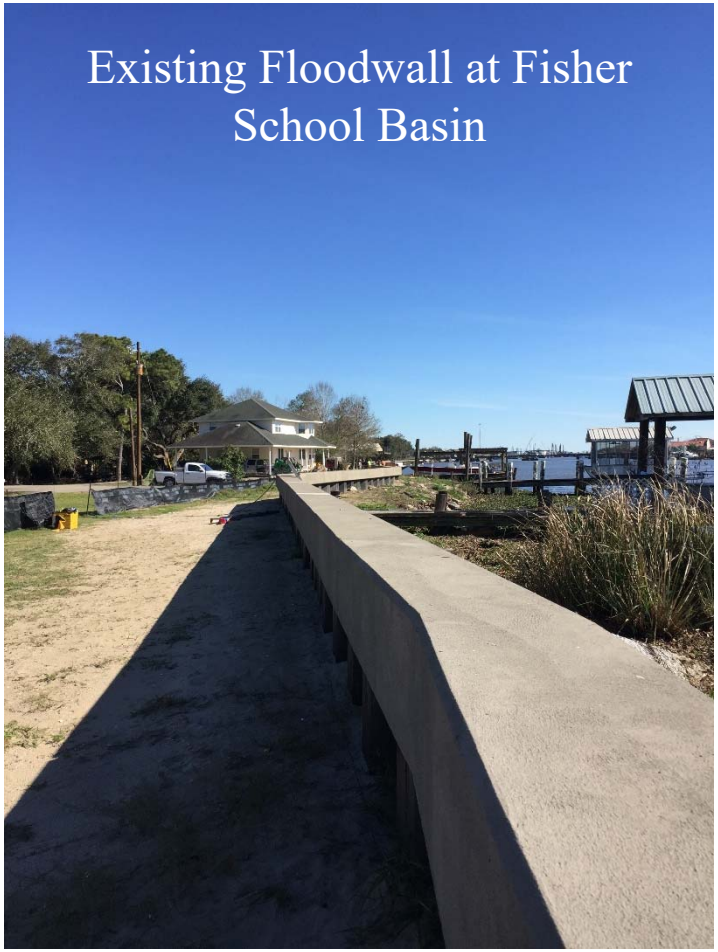
- Protected Area: 280 Acres
- Proposed 17,300 LF of Flood Protection
- 7,100 LF of Flood Wall
  7,300 LF of Modified Levee
- 2,900 LF of Proposed Levee
- Proposed Gates/Access Points
  1. 25’ Swing Gate at LA 45
  2. 25’ Swing Gate at Jean Lafitte Condominiums
  3. 20’ Roller Gate and Storage Monolith at Bundy’s Seafood
  4. 16’ Swing Gate near 5600 Jean Lafitte Blvd
  5. Opening in System for LA 45 access



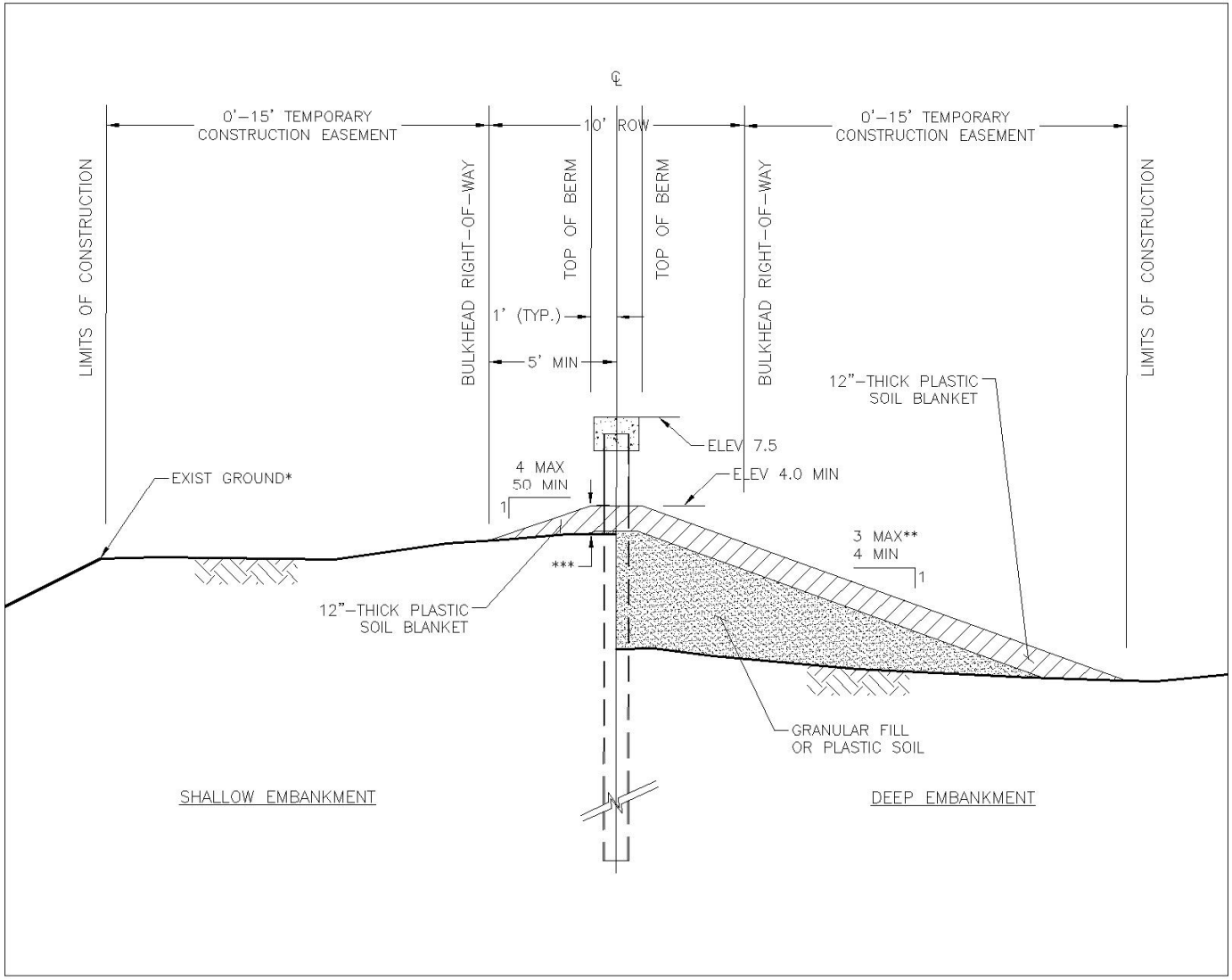
Existing Conditions

Project Alignment:
Stakeout of wall alignment investigated during the design. Individual land owners and business owners were contacted to provide input of levee crossing each individual property.

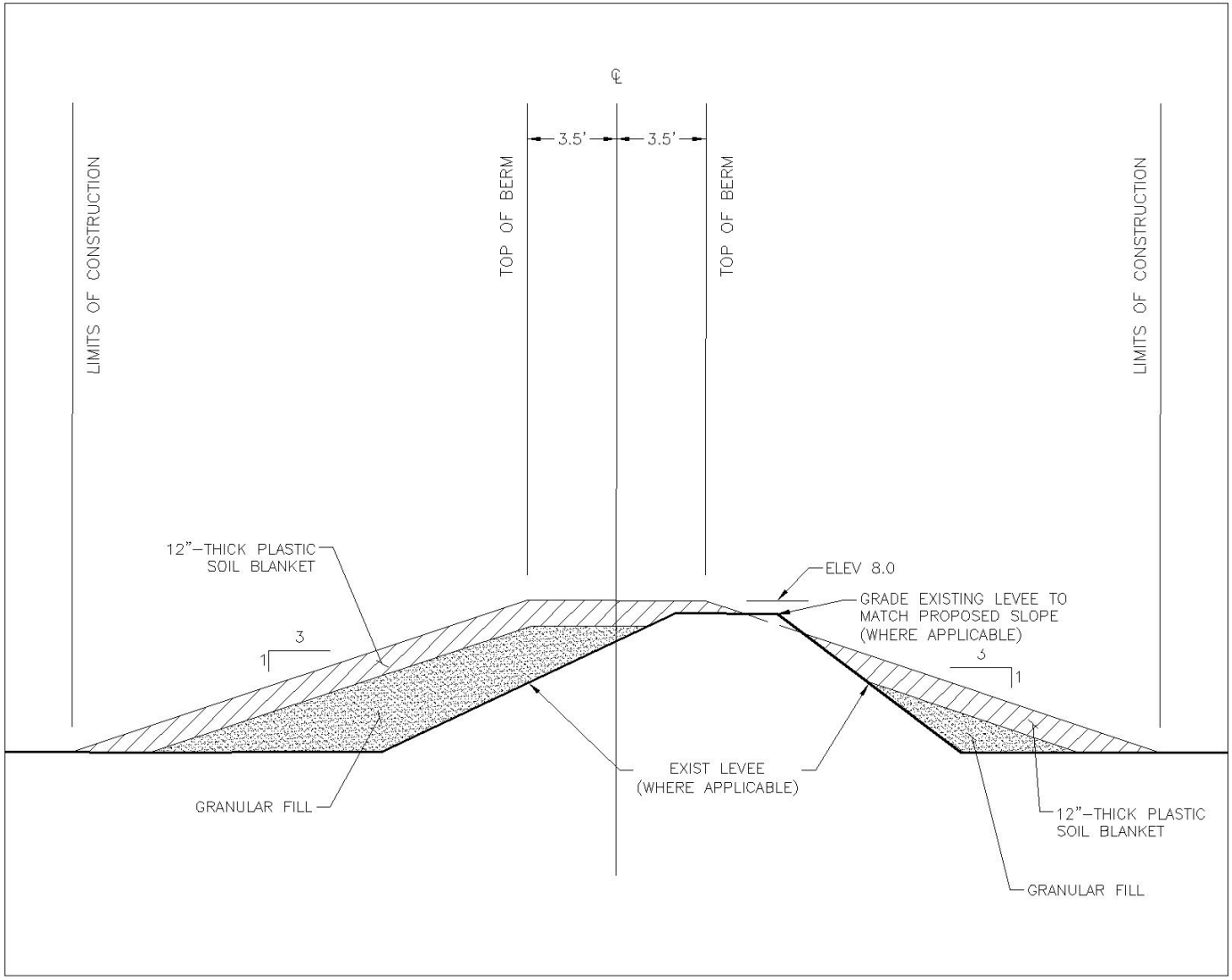
Existing Conditions



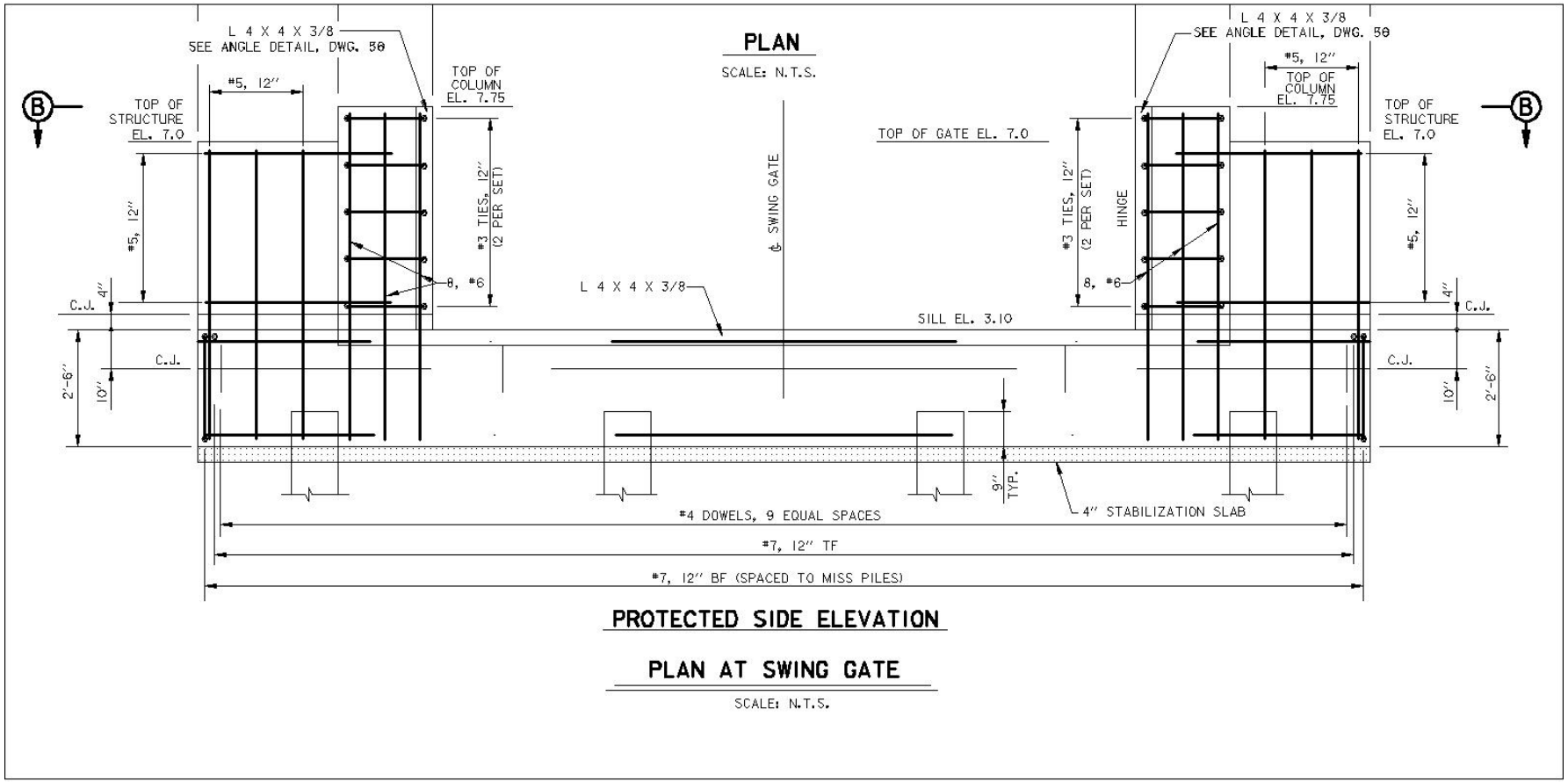
Typical Floodwall Section



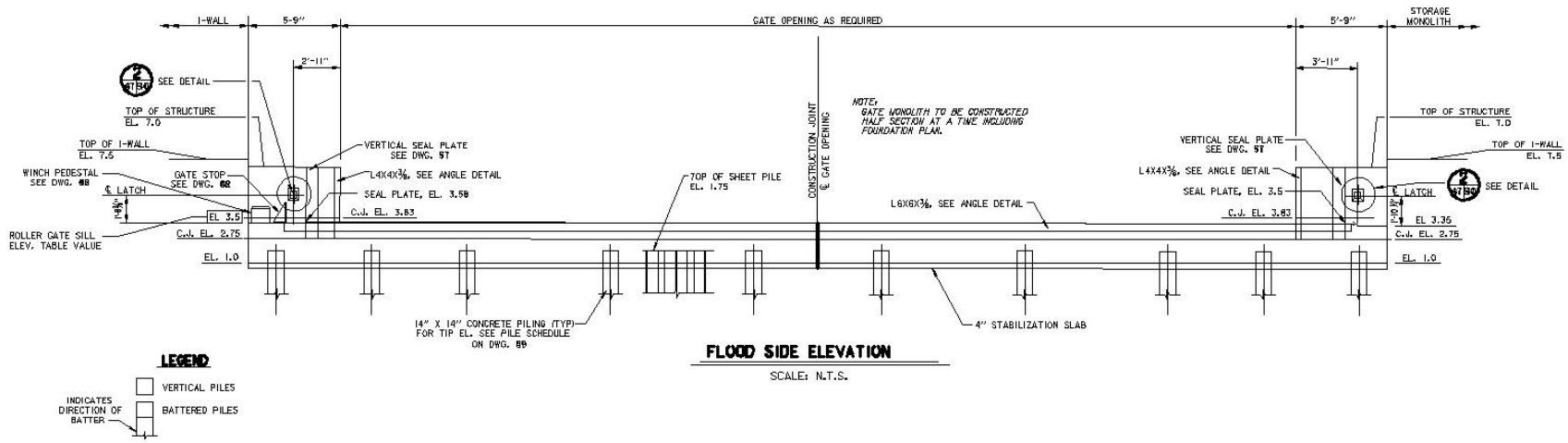
Typical Levee Section



Swing Gate Profile View

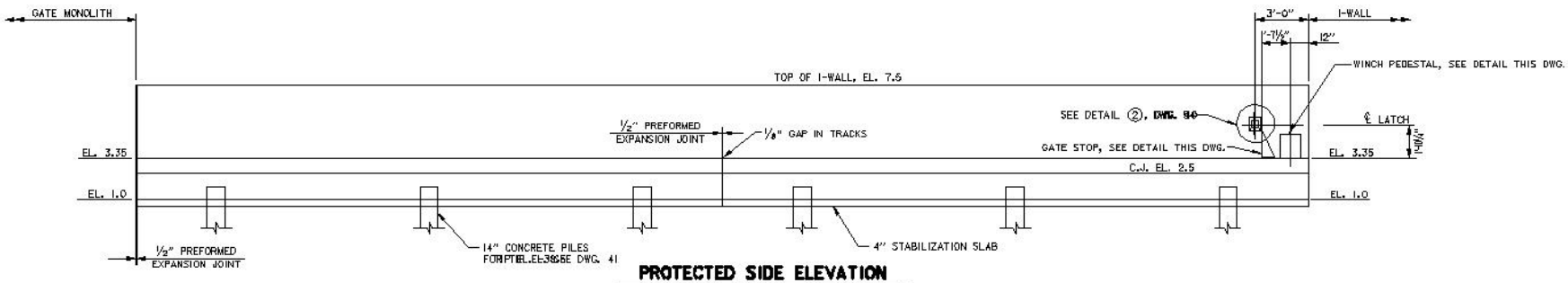


Roller Gate Profile View



FLOOD SIDE ELEVATION

SCALE: N.T.S.



PROTECTED SIDE ELEVATION

Summary of Bid Quantities

DESCRIPTION	QUANTITY	UNIT
UTILITY MODIFICATIONS	1	LS
CLEARING AND GRUBBING	1	LS
REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LS
REMOVAL OF CONCRETE SLABS AND ASPHALT	1	LS
GENERAL EXCAVATION	1	CY
EMBANKMENT	13,550	CY
NON-PLASTIC EMBANKMENT (NET SECTION)	25,400	CY
TURBIDITY CURTAIN	220	LF
SILT FENCE	35,580	LF
CRUSHED STONE BACKFILL	1	CY
SAFETY FENCE	17,530	LF
RIPRAP	0.1	TON
GEOTEXTILE FABRIC	1	SY
SODDING AND FERTILIZING	4,110	SY
HYDRO-SEEDING	56,150	SF
FIELD OFFICE TRAILER	1	LS
PRESTRESSED CONCRETE PILE (12"X12")	588	LF
PRESTRESSED CONCRETE PILE (14"X14")	540	LF
PERMANENT SHEETING (STEEL) (PZC-13)	110,619	SF
PERMANENT SHEETING (STEEL) (PZC-28)	8,606	SF
STRUCTURAL CONCRETE (BULKHEAD)	670	CY
STRUCTURAL CONCRETE (I-WALL)	60	CY
STRUCTURAL CONCRETE (GATE SLAB)	120	CY
STRUCTURAL CONCRETE (GATE WALLS & COLUMN)	20	CY
STRUCTURAL CONCRETE (4" THICK STABILIZATION SLAB)	20	CY
SWING GATE (16' OPENING)	1	LS
SWING GATE (25' OPENING)	2	LS
BOTTOM ROLLER GATE (20' OPENING)	1	LS
CLEANING AND PAINTING (STEEL SHEET PILING)	140,830	SF
CLEANING AND PAINTING (FLOODGATES)	820	SF
PUMP STATION DISCHARGE PIPES ADJUSTMENT (ORANGE STREET PUMP STATION)	1	LS
PUMP STATION DISCHARGE PIPES ADJUSTMENT (MARRERO STREET PUMP STATION)	1	LS
SEWER SERVICE DISCHARGE PIPE	40	EA
SAW-CUTTING PORTLAND CEMENT CONCRETE PAVEMENT OR ASPHALT (FULL DEPTH)	229	LF
DRAINAGE PIPE THROUGH BULKHEAD	25	EA
EXPLORATORY EXCAVATION (POTHOLING)	15	EA

Schedule

- Permitting: In Progress
- Landrights/Servitude Agreements: In Progress
- Advertisement: Winter 2022
- Construction Duration: ~500 days
  (Late 2022 – Mid 2024)

Lafitte Tidal Protection Goose Bayou/Pen Levee Basin

Mayor Tim Kerner, Jr.
Miles Garriott, Program Manager
Lafitte Area Independent Levee District
April 4, 2022

Ida Project Area Flood Damage

Proposed Project Features

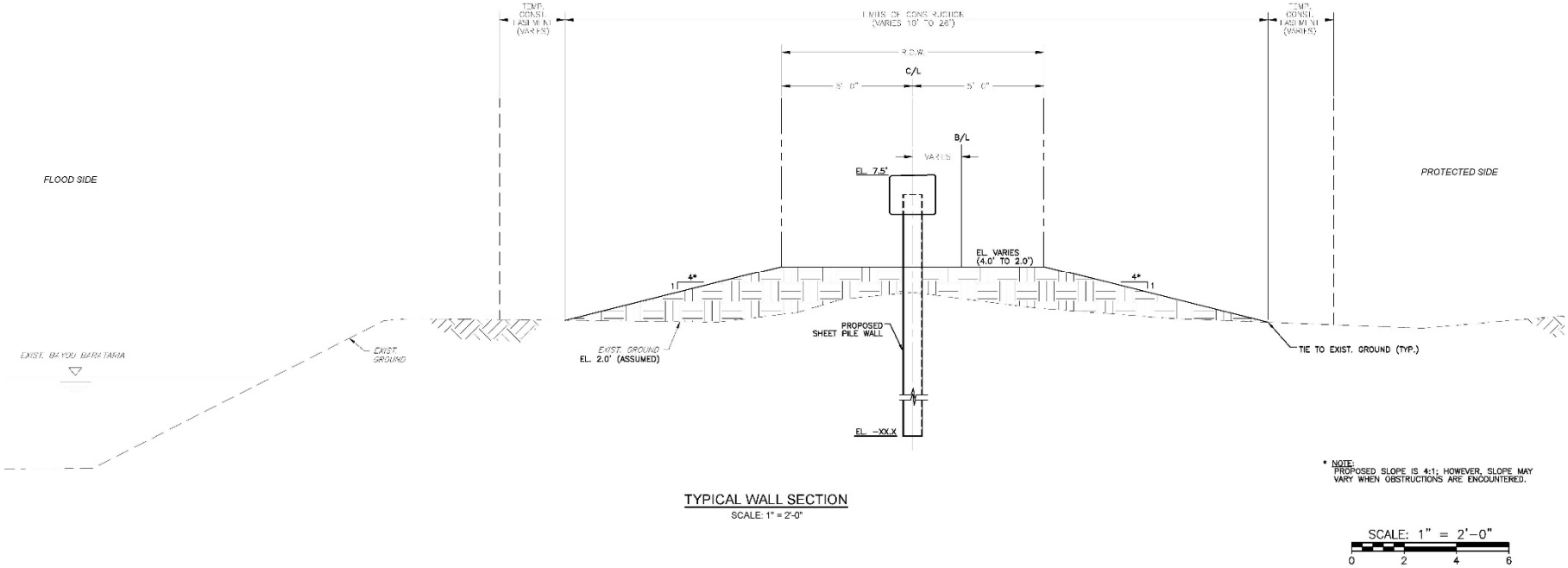
Project Features:

- Proposed Flood Protection 14,515 LF
- Seven Flood Gates
- Existing Back Levee 10,037 LF
- Total Area Protected 364 Acres

LAFITTE TIDAL PROTECTION
GOOSE BAYOU/PEN LEVEE BASIN

SCALE: 1" = 300'

Typical Bulkhead Section

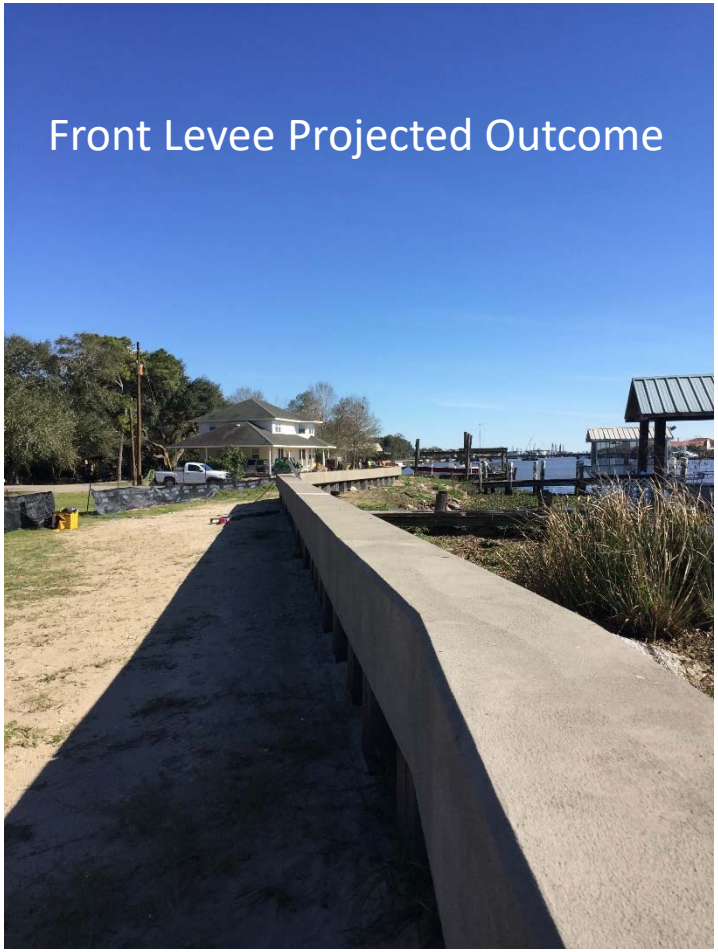


Proposed Project Features

Project Alignment:
Stakeout of wall alignment investigated during the design. Individual land owners and business owners were contacted to provide input of levee crossing each individual property.

Proposed Project Features

Existing Back Levee



Summary of Bid Quantities

ITEM	DESCRIPTION	QTY	UNIT
100-01	*UTILITY MODIFICATIONS*	1	LS
201-01	*CLEARING AND GRUBBING*	1	LS
202-01	*REMOVAL OF STRUCTURES AND OBSTRUCTIONS AND RIPRAP*	1	LS
202-02	*REMOVAL OF CONCRETE SLABS*	1	LS
202-03	*REMOVAL OF RCP PIPE*	58	LF
203-03	*EMBANKMENT (NET SECTION)*	3,869	CY
203-04	*NONPLASTIC EMBANKMENT (NET SECTION)*	1,329	CY
204-01	*TURBIDITY CURTAIN*	1,000	LF
204-06	*SILT FENCE*	14,000	LF
701-01	*REINFORCED CONCRETE PIPE (15")*	58	LF
702-01	*CATCH BASIN (CB-01)*	1	EA
705-01	*SAFETY FENCE*	14,000	LF
706-02	*CONCRETE DRIVE (8" THK) (with WWF REINF.)*	1,166	SY
714-02	*SODDING AND FERTILIZING*	14,800	SY
717-02	*HYDRO-SEEDING*	31,376	SY
722-01	*PROJECT SITE LABORATORY (EQUIPPED)*	1	LS
803-01-A	*PERMANENT SHEETING (STEEL) (PZC-13)*	199,863	SF
803-02	*CLEANING AND PAINTING (STEEL SHEET PILING)*	247,470	SF
804-01-B	*PRESTRESSED CONCRETE PILE (14"X14")*	2,692	LF
805-01-A	*STRUCTURAL CONCRETE (BULKHEAD)*	2,193	CY
805-01-B	*STRUCTURAL CONCRETE (I-WALL)*	92	CY
805-01-C	*STRUCTURAL CONCRETE (GATE SLAB)*	177	CY
805-01-D	*STRUCTURAL CONCRETE (GATE WALL)*	20	CY
805-02	*STRUCTURAL CONCRETE (4" THK STABILIZATION SLAB)*	29	CY
807-01.A	*SWING GATE (25' OPENING)*	6	EA
807-01.B	*SWING GATE (20' OPENING)*	1	EA
S-001	*18" DRAINAGE PIPE THRU BULKHEAD*	20	EA
S-002	*24" DRAINAGE PIPE THRU BULKHEAD*	20	EA
S-003	*SEWER SERVICE DISCHARGE PIPE*	83	EA
S-004	SAW-CUTTING PORTLAND CEMENT CONCRETE PAVEMENT (FULL DEPTH)	1,090	LF

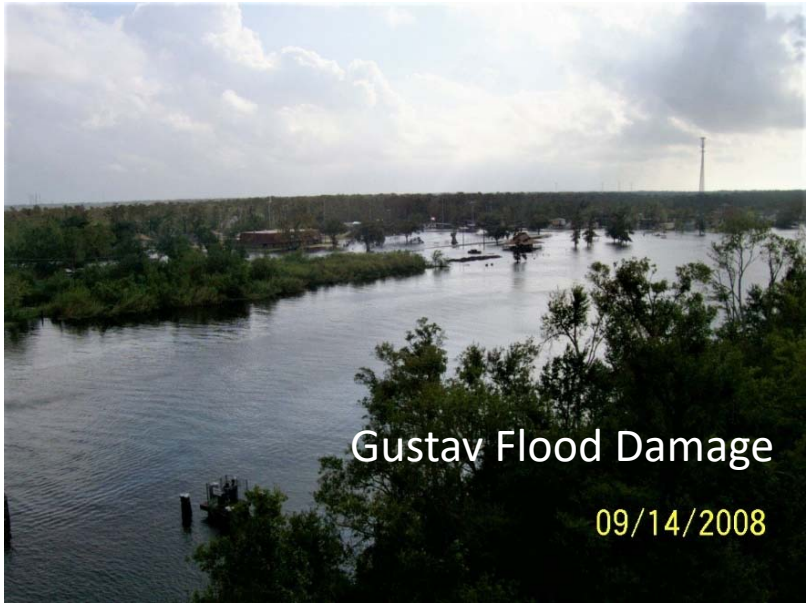
Schedule

- Permitting: In Progress
- Landrights/Servitude Agreements: In Progress
- Advertisement: Winter 2022
- Construction Duration: 500 days

Lafitte Tidal Protection Rosethorne Basin – Phase II

Mayor Tim Kerner, Jr.
Miles Garriott, Program Manager
Lafitte Area Independent Levee District
April 4, 2022

Project Area Flood Damage

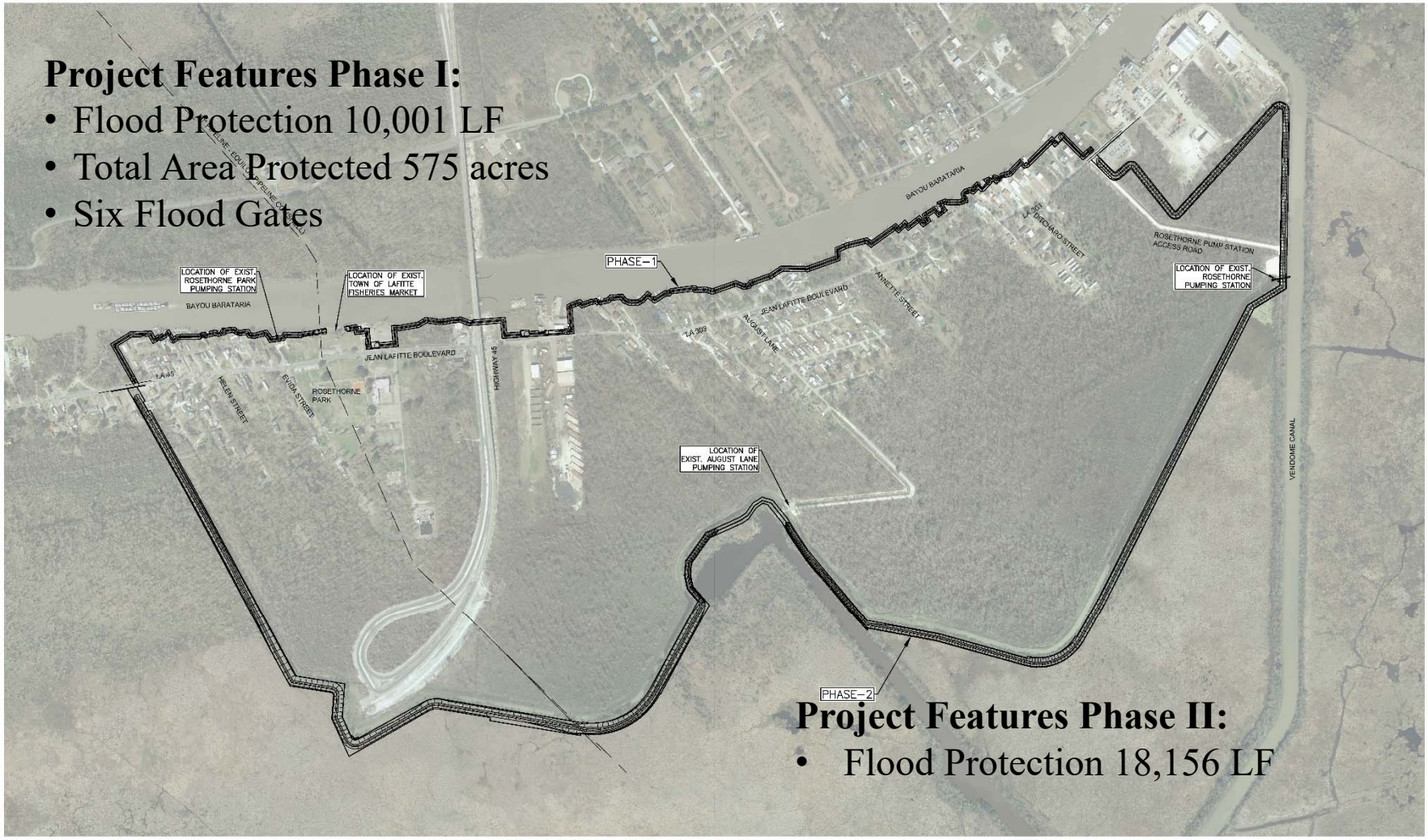


Flood Fighting Effort

Rosethorne area has been flooded by storm surge many times in the past decade.

Every year, local residents have to make an extensive effort to protect their homes and businesses with sand bag installation.

Proposed Project Features



LAFITTE TIDAL PROTECTION
ROSETHORNE BASIN
(PHASE-1 AND PHASE-2)

SCALE: 1" = 400'
400' 0 400' 800' 1200'

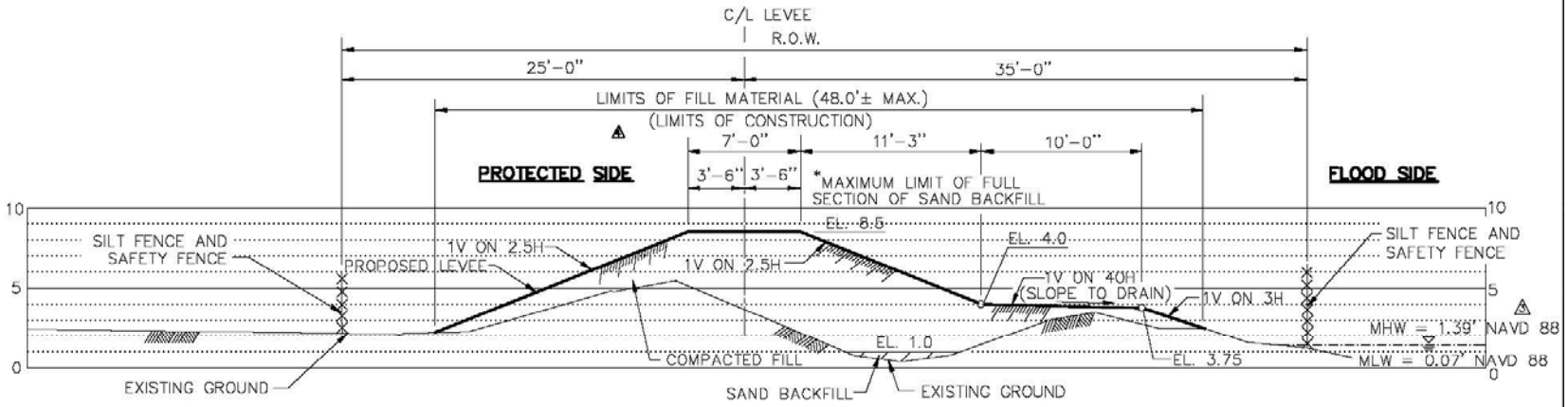
Noted Basin Structures

Project Features:
Jules Nunez Lafitte Fisheries Market
Rosethorne Park
Approximately 800 residents

Access Roads:
Jean Lafitte Boulevard (LA 45) is the only hurricane evacuation route for the area and only accessible link to the Intracoastal Bridge crossing Bayou Barataria.
Jean Lafitte Boulevard also, is a critical internal road that provides access to the important infrastructure such as cell phone towers, drainage pump stations, sewerage lift statins and sewerage treatment plant.

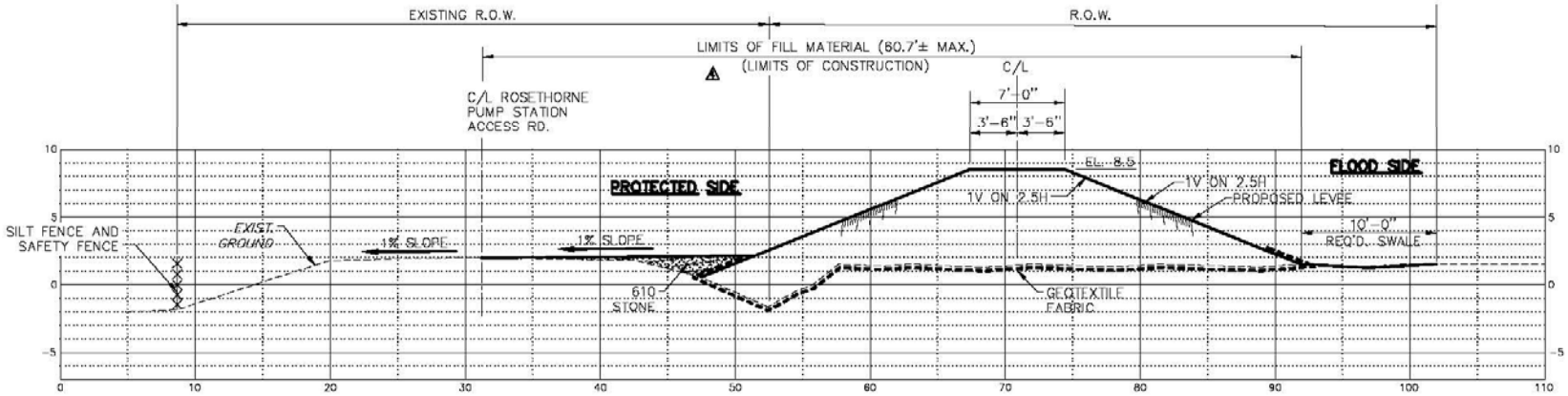
Similar Final Product

Typical Earthen Levee Section Phase II



TYPICAL EARTHEN LEVEE SECTION (PHASE 2)

SCALE: 1" = 10'-0"
STA. 0+50.00 TO STA. 76+70.00
STA. 84+65.00 TO STA. 146+40.88
STA. 146+66.54 TO STA. 179+27.88



TYPICAL EARTHEN LEVEE SECTION (PHASE 2)

SCALE: 1" = 12'-0"
STA. 179+27.88 TO STA. 181+55.51

Summary of Bid Quantities Phase II

ITEM	DESCRIPTION	QTY	UNIT
100-01	*UTIL* ITY MODIFICATIONS	1	LS
201-01	*CLEARING AND GRUBBING*	1	LS
202-01	*REMOVAL OF STRUCTURES AND OBSTRUCTIONS*	1	LS
202-02	*REMOVAL OF CONCRETE SLABS AND ASPHALT*	1	LS
203-01	*GENERAL EXCAVATION*	17,286	CY
203-03	*EMBANKMENT (NET SECTION)*	129,689	CY
203-04	*NONPLASTIC EMBANKMENT (NET SECTION)*	25,203	CY
204-01	*TURBIDITY CURTAIN*	1,000	LF
204-06	*SILT FENCE*	36,290	LF
302-01	CRUSHED STONE BACKFILL	10	CY
705-01	*SAFETY FENCE*	1,000	LF
711-03	*RIPRAP*	2,322	TON
711-04	*GEOTEXTILE FABRIC*	2,127	SY
714-01	*SODDING AND FERTILIZING*	1,011	SY
717-01	*HYDRO-SEEDING AND FERTILIZING*	31	ACRE
722-03	FIELD OFFICE TRAILER	1	LS
803-01	*PERMANENT SHEETING (STEEL) (PZC-13)*	58,134	SF
805-01	*STRUCTURAL CONCRETE (BULKHEAD)*	124	CY
811-01	*CLEANING AND PAINTING (STEEL SHEET PILING)*	44,882	SF
S-001-A	PUMP STATION DISCHARGE PIPES ADJUSTMENT (ROSETHORNE PUMP STATION)	1	LS
S-001-B	PUMP STATION DISCHARGE PIPES ADJUSTMENT (AUGUST LANE PUMP STATION)	1	LS
S-002	SEWER SERVICE DISCHARGE PIPE	3	EA
S-003	SAW-CUTTING PORTLAND CEMENT CONCRETE OR ASPHALT PAVEMENT (FULL DEPTH)	142	LF

Schedule

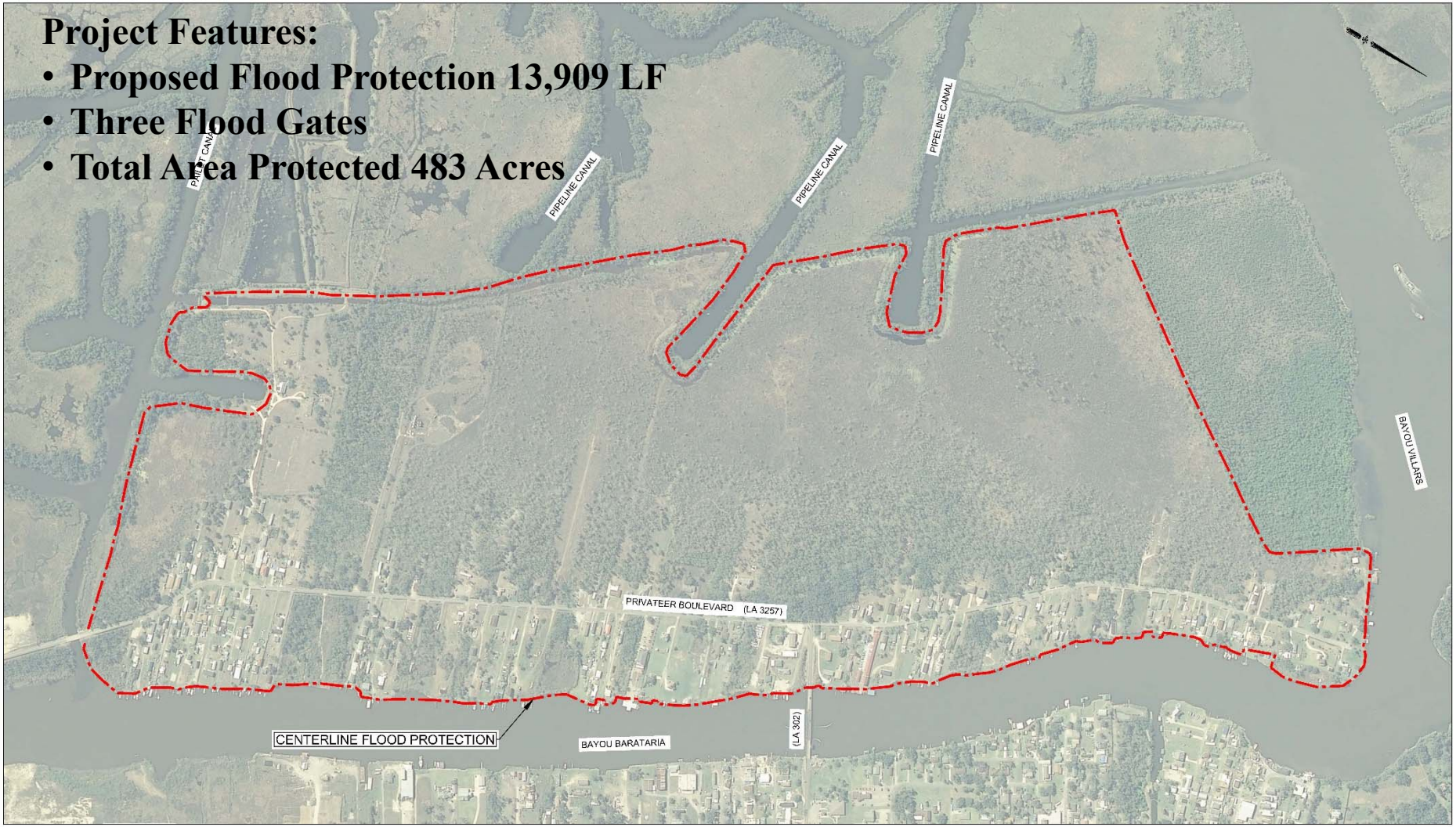
- Construction Funds: Have Been Secured
- Permitting: In Progress
- Landrights/Servitude Agreements: On Going
- Advertisement: Summer 2022
- Construction Duration: 600 days

Lafitte Tidal Protection Pailet Levee Basin

Mayor Tim Kerner, Jr.
Miles Garriott, Program Manager
Lafitte Area Independent Levee District
April 4, 2022

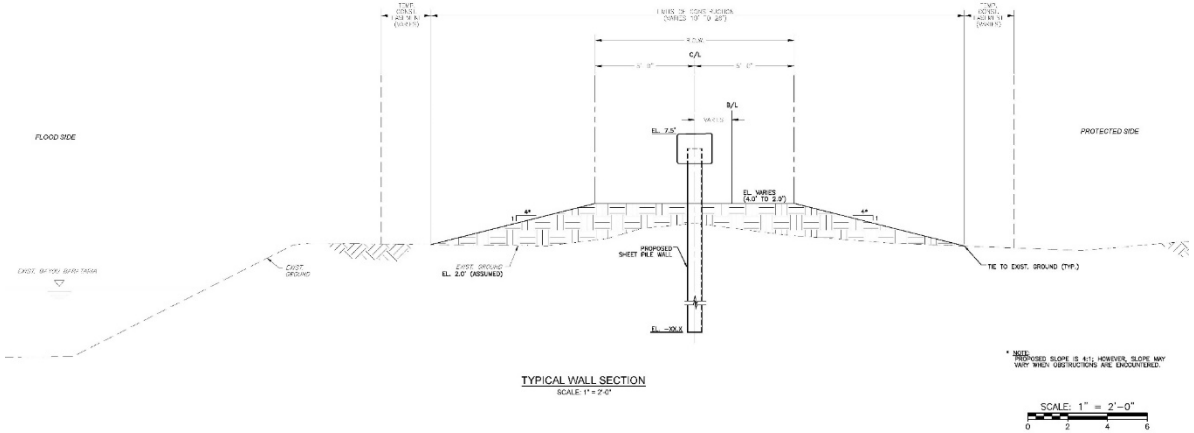
Project Area Flood Damage

Proposed Project Features

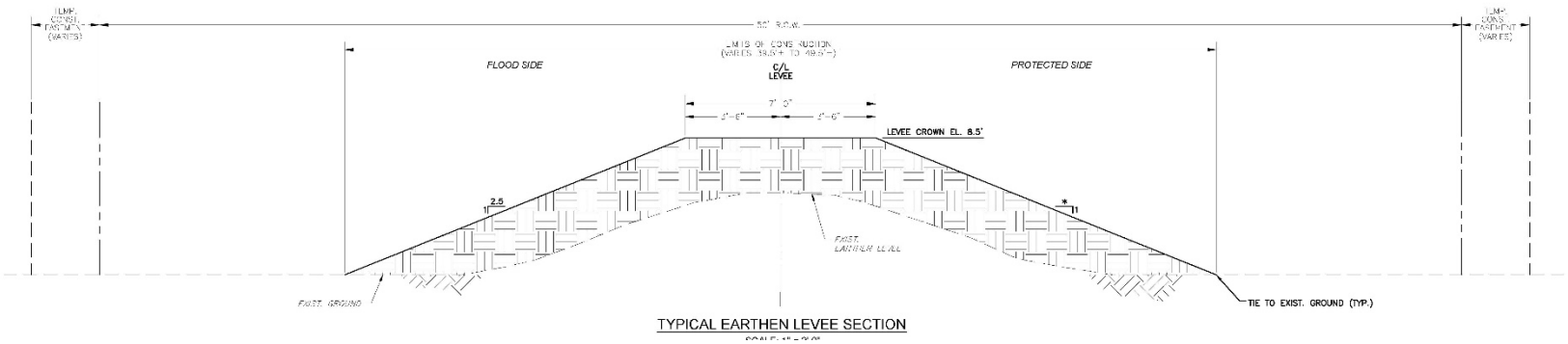


LAFITTE TIDAL PROTECTION
PAILET BASIN

Typical Bulkhead Section



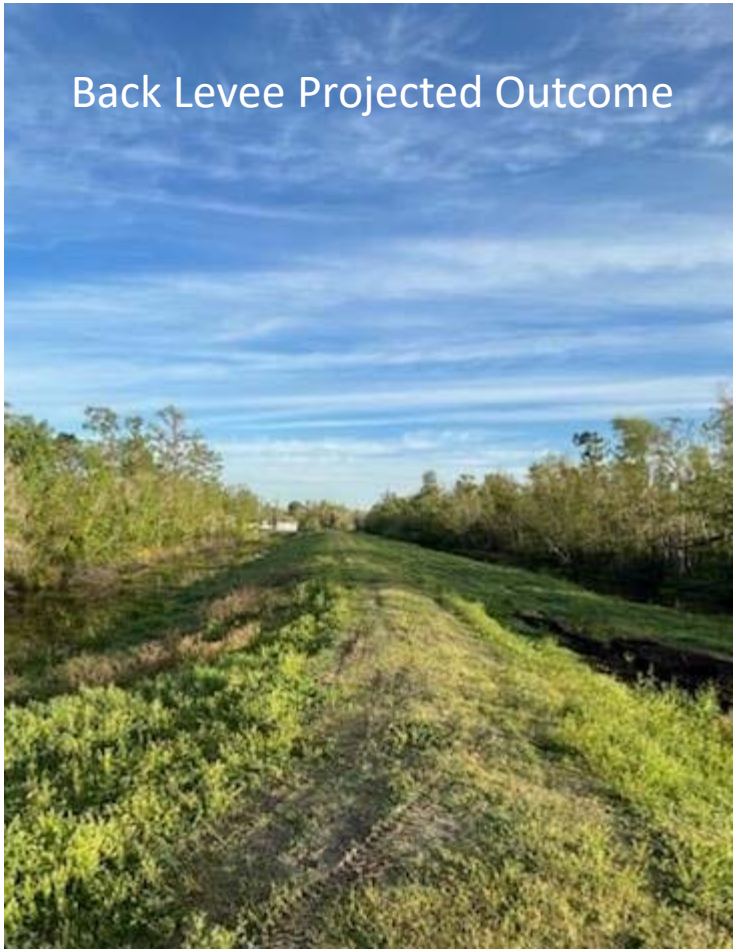
Typical Levee Section



Proposed Project Features

Project Alignment:
Stakeout of wall alignment investigated during the design. Individual land owners and business owners were contacted to provide input of levee crossing each individual property.

Proposed Project Features



Summary of Bid Quantities

ITEM	DESCRIPTION	QTY	UNIT
100-01	*UTILITY MODIFICATIONS*	1	LS
201-01	*CLEARING AND GRUBBING*	1	LS
202-01	*REMOVAL OF STRUCTURES AND OBSTRUCTIONS*	1	LS
202-02	*REMOVAL OF CONCRETE SLABS*	1	LS
203-03	*EMBANKMENT (NET SECTION)*	129,633	CY
204-01	*TURBIDITY CURTAIN*	1,000	LF
204-02	*SILT FENCE*	53,500	LF
705-01	*SAFETY FENCE*	26,750	LF
706-02	*CONCRETE DRIVE (8" THK) (with WWF REINF.)*	280	SY
711-01	*RIPRAP*	882	TON
714-01	*SODDING AND FERTILIZING*	12,000	SY
717-01	*HYDRO-SEEDING*	142,207	SY
722-01	*PROJECT SITE LABORATORY (EQUIPPED)*	1	LS
803-01-A	*PERMANENT SHEETING (STEEL) (PZC-13)*	188,606	SF
803-02	*CLEANING AND PAINTING (STEEL SHEET PILING)*	199,375	SF
804-01-A	*PRESTRESSED CONCRETE PILE (14"X14")*	1,128	LF
805-01-A	*STRUCTURAL CONCRETE (BULKHEAD)*	1,094	CY
805-01-B	*STRUCTURAL CONCRETE (I-WALL)*	37	CY
805-01-C	*STRUCTURAL CONCRETE (GATE SLAB)*	54	CY
805-01-D	*STRUCTURAL CONCRETE (GATE WALL)*	10	CY
805-02	*STRUCTURAL CONCRETE (4" THK STABILIZATION SLAB)*	10	CY
807-01	*SWING GATE (25' OPENING)*	1	LS
807-02	*SWING GATE (15' OPENING)*	1	LS
807-02-A	*BOTTOM ROLLER GATE (10' OPENING)*	1	LS
S-001	*EXPLORATORY EXCAVATION (POTHOLING)*	5	EA
S-002	*24" DRAINAGE PIPE THRU BULKHEAD*	19	EA
S-003	SEWER SERVICE DISCHARGE PIPE	20	EA
S-004	SAW-CUTTING PORTLAND CEMENT CONCRETE PAVEMENT (FULL DEPTH)	345	LF
S-005	PUMP STATION MODIFICATION	1	LS

Schedule

- Permitting: In Progress
- Landrights/Servitude Agreements: In Progress
- Advertisement: Winter 2022
- Construction Duration: 500 days

PICCIOLA & ASSOCIATES, INC.

PROJECT REPORT

CIVIL ENGINEERS • LAND SURVEYORS • NAVAL ARCHITECTS • MARINE ENGINEERS

J.C. PICCIOLA, II, P.E., L.S. • M.J. PICCIOLA, III, P.E.

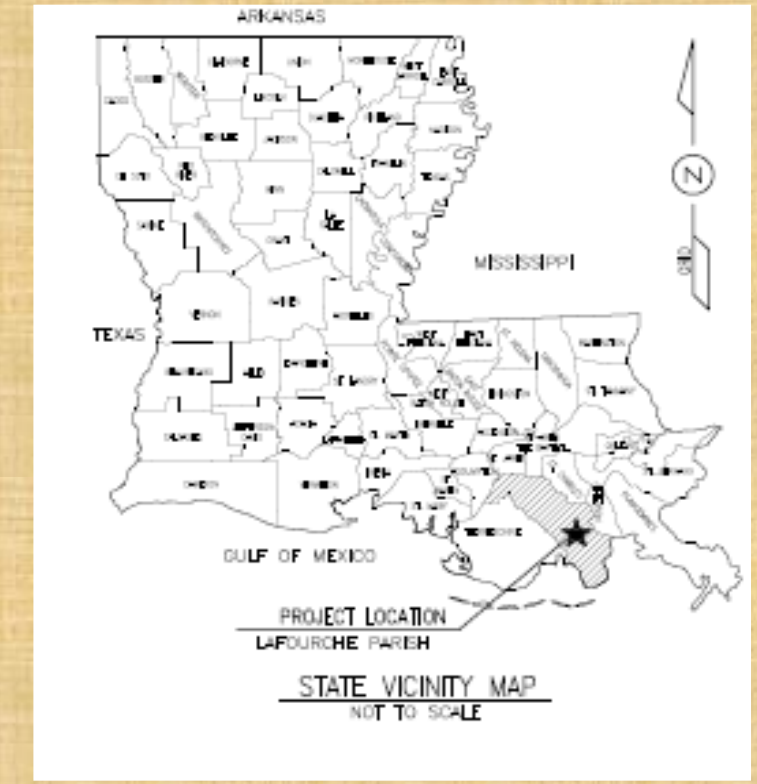
Interim Levee Improvements – Section E-North Elevate Southwest Corner to Northeast Corner, & Borrow Pit Excavation

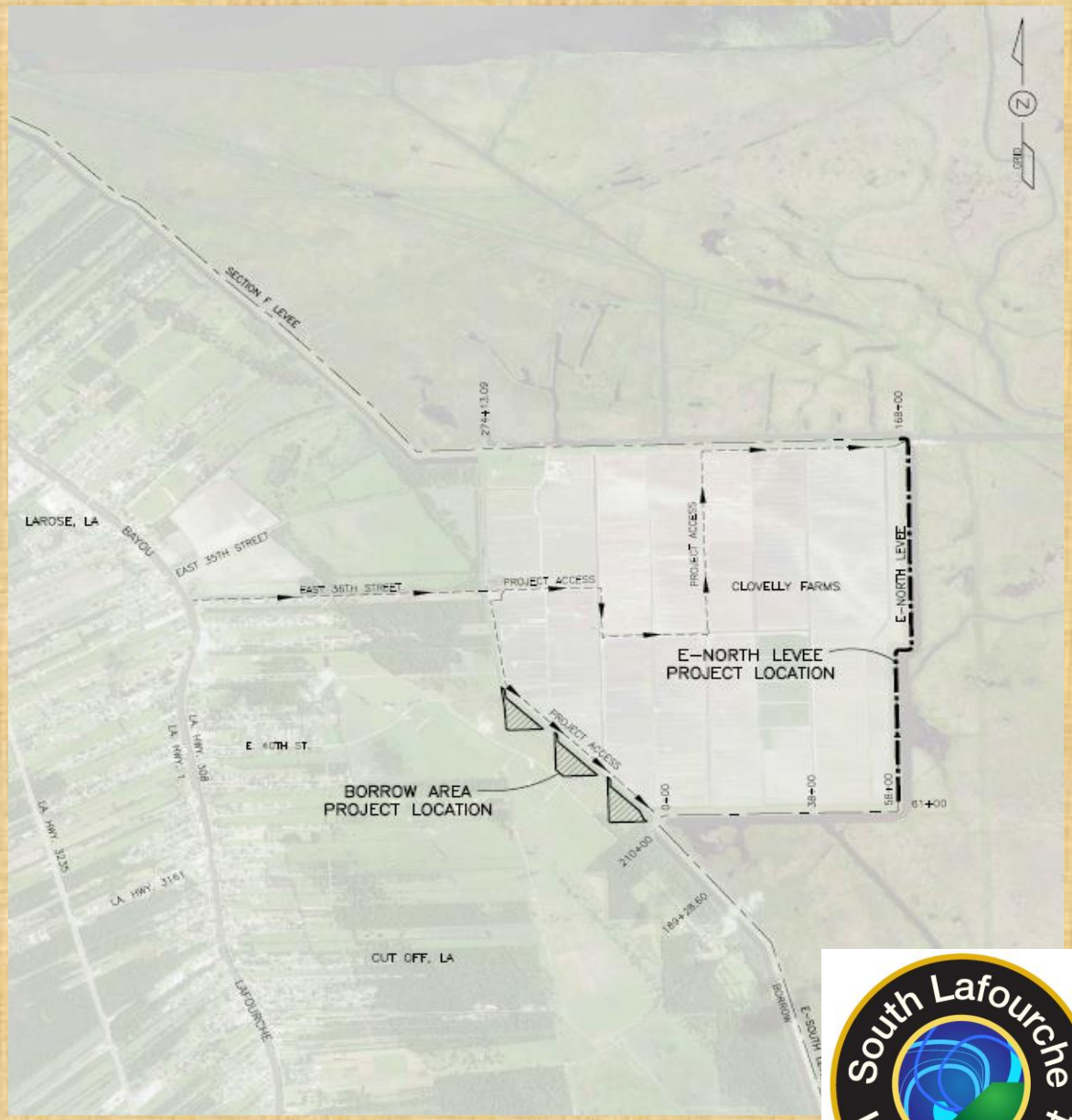
Marco Picciola, P.E.
April 01, 2022

Presentation Overview

- General Project Information
- Project Layout
- Typical Sections
- Notable Quantities
- Cost Estimate
- Schedule

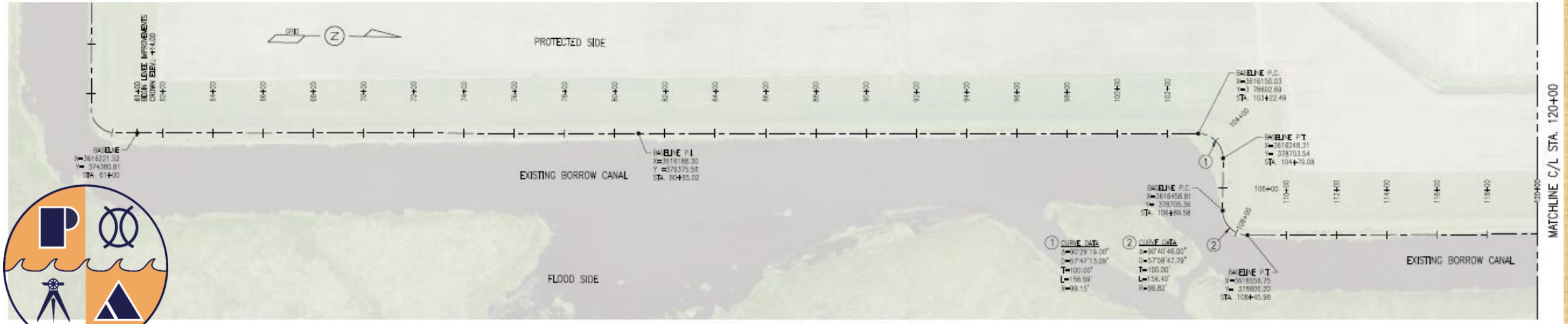
General Project Information





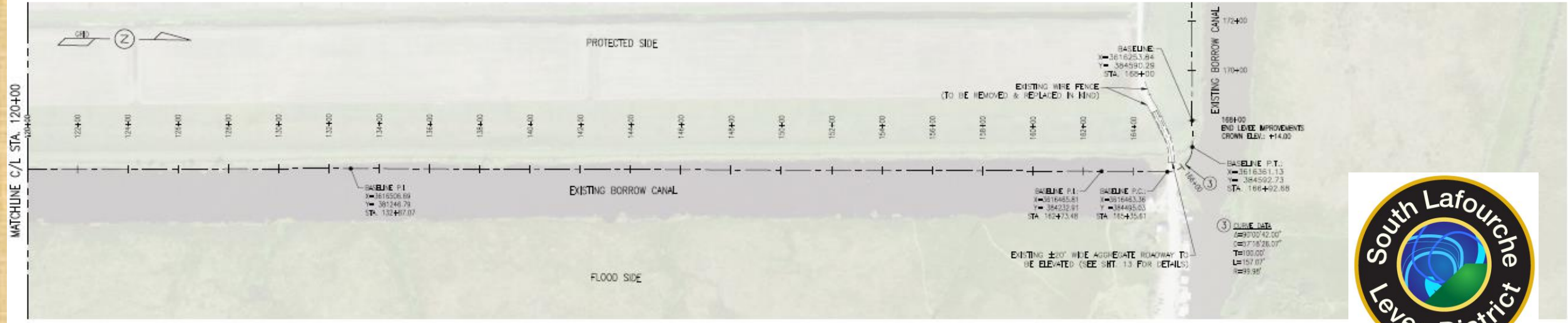
- Location: Lafourche Parish
- Funding: South Lafourche Levee District
- Project Type: Excavation of Borrow Pit, Elevation of Existing Levee Section

Project Layout



E–NORTH SITE PLAN – STA. 61+00 TO 120+00

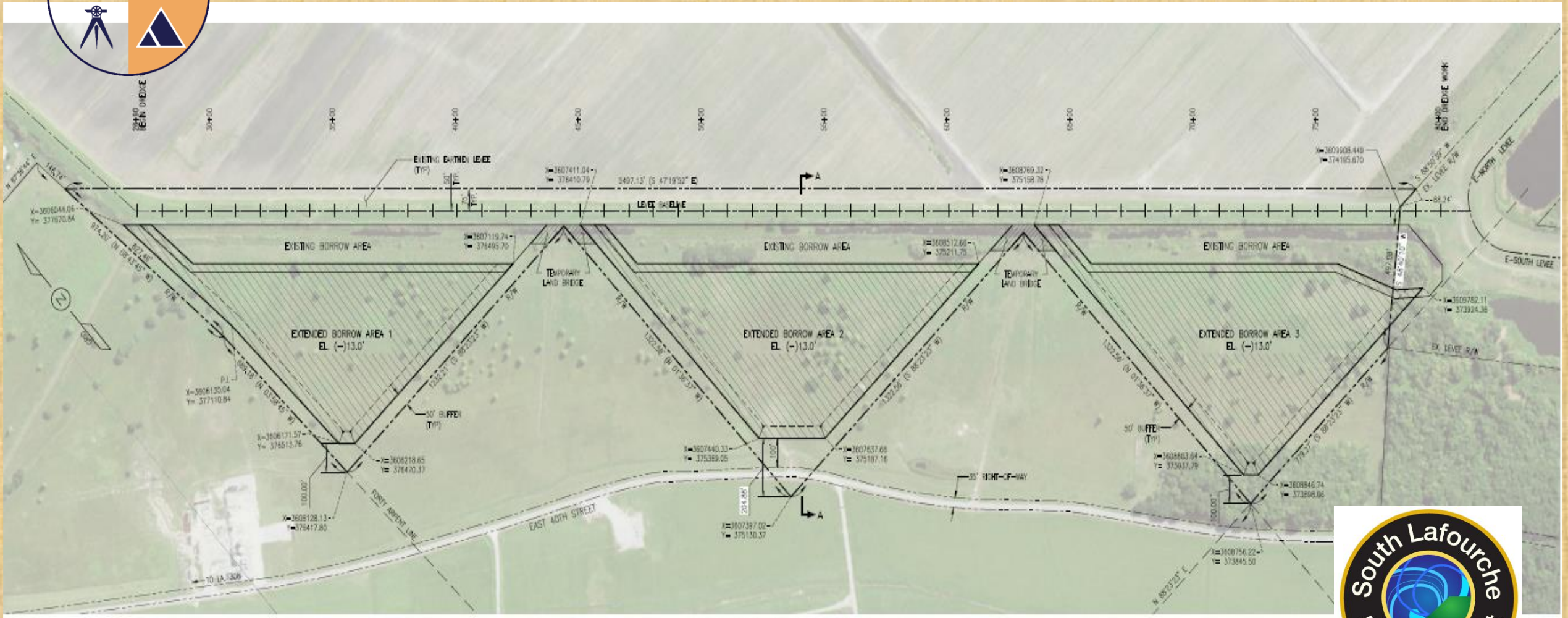
SCALE: 1" = 200'



E–NORTH SITE PLAN – STA. 120+00 TO 168+00

SCALE: 1" = 200'

Project Layout

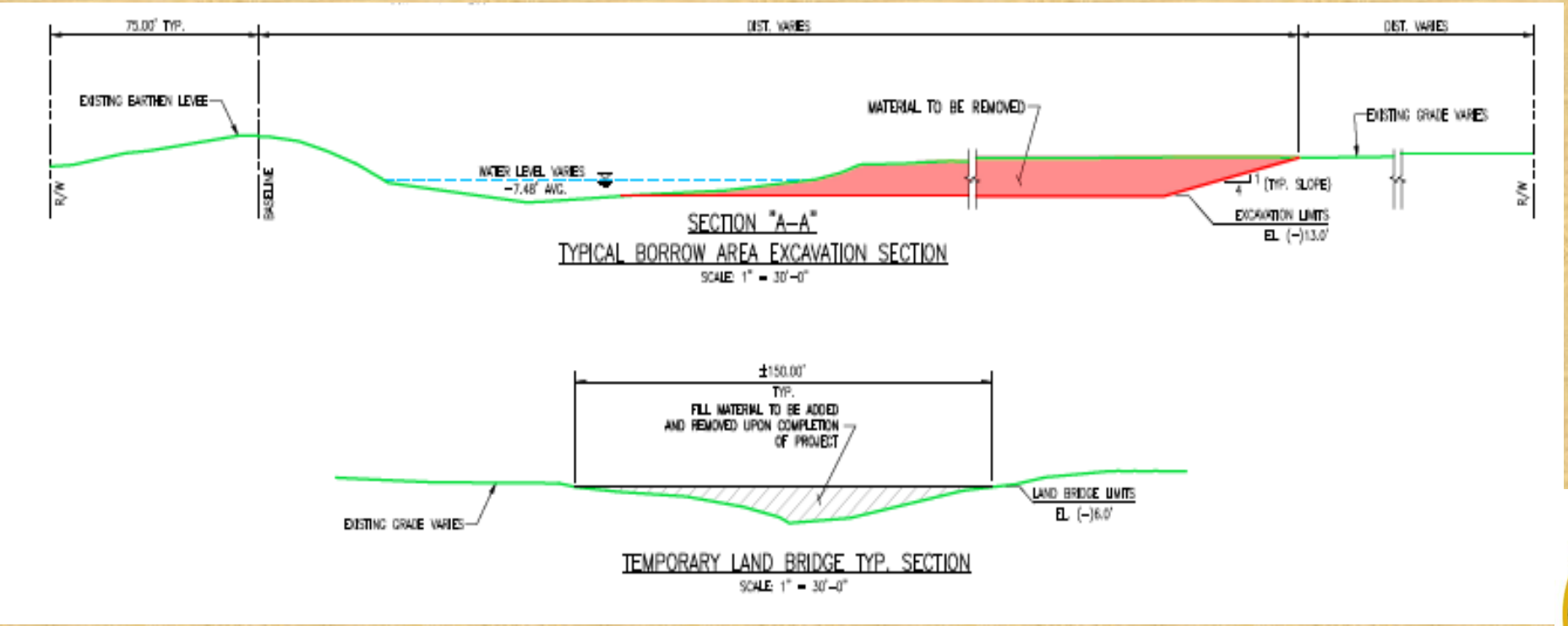


BORROW AREA–SITE PLAN

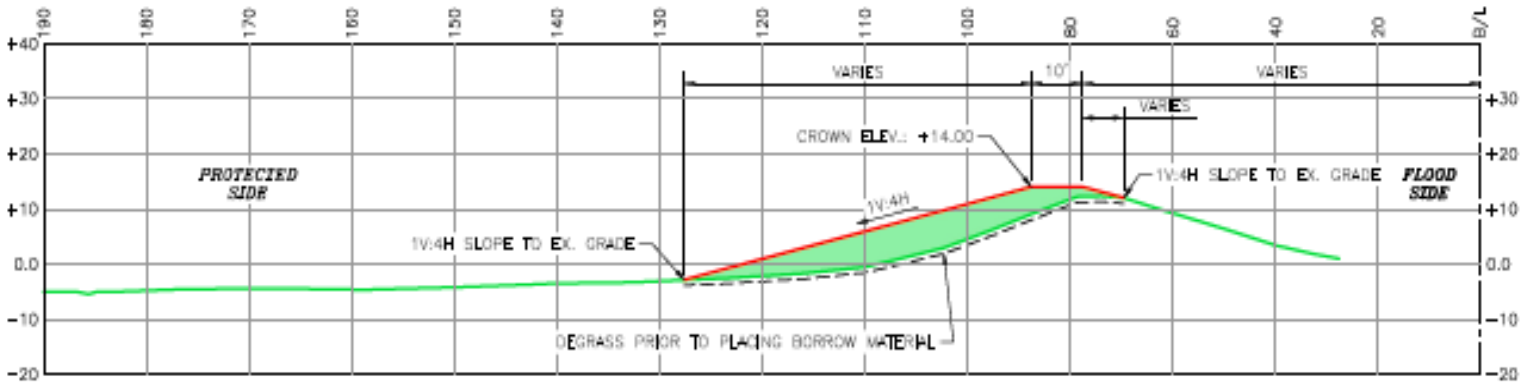
200 0 200

SCALE: 1" = 200'

Typical Sections- Borrow Pit



Typical Sections - Levee Sections



LEVEE IMPROVEMENT – TYPICAL SECTION

SCALE: 1" = 20'

EXISTING GRADE DERIVED FROM TOPOGRAPHIC SURVEYS CONDUCTED BY PICCIOLA & ASSOCIATES, INC. IN OCT. – DEC., 2021.

PROPOSED LEVEE DESIGN SECTION

REQUIRED FILL MATERIAL

Project Quantities

SUMMARY OF ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
201-01-00100	CLEARING AND GRUBBING	ACRE	43
202-03-00100	RELOCATION OF FENCE	EACH	2
203-01-00100	GENERAL EXCAVATION	CUBIC YARD	565,801
203-03-00100	EMBANKMENT (NET SECTION)	CUBIC YARD	159,622
401-02-00100	AGGREGATE SURFACE COURSE (12" THICK) (ADJUSTED VEHICULAR MEASUREMENT)	CUBIC YARD	176
727-01-00100	MOBILIZATION	LUMP SUM	1
740-01-00100	CONSTRUCTION LAYOUT	LUMP SUM	1

ESTIMATED DREDGE VOLUME (BORROW PIT):
565,801 CU. YDS. (NET)

ESTIMATED FILL VOLUME (LEVEE IMPROVEMENTS):
158,236 CU. YDS. (NET) (STA. 61+00 TO 168+00)

ESTIMATED LEVEE CROSSOVER FILL VOLUME:
1,386 CU. YDS. (NET)

Schedule

- Design : Being Finalized
- Advertisement: Summer of 2022
- Land rights/ Servitude Agreements: Being Finalized
- Construction Duration: 365 days

Contact Information

- Windell Curole
  - Email: wcurole@slld.org
- SLLD Office Phone Number:
  - (985) 632-7554
- Joseph Picciola, P.E.
  - Email: joep@picciola.com
- Ben Hodson, General Manager
  - Email: ben@picciola.com
- Marco Picciola, P.E.
  - Email: marc@picciola.com
- Picciola & Associates Office Phone Number:
  - (985) 632-5786

PICCIOLA & ASSOCIATES, INC.

PROJECT REPORT

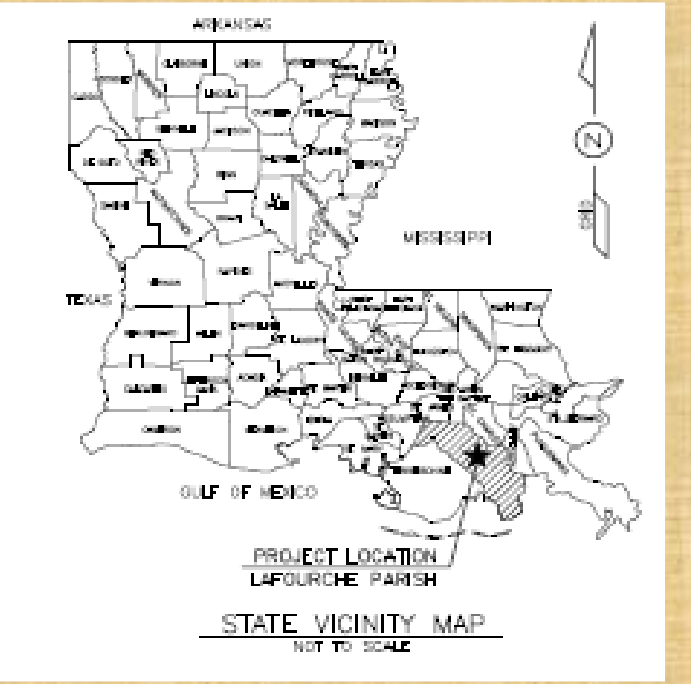
CIVIL ENGINEERS • LAND SURVEYORS • NAVAL ARCHITECTS • MARINE ENGINEERS

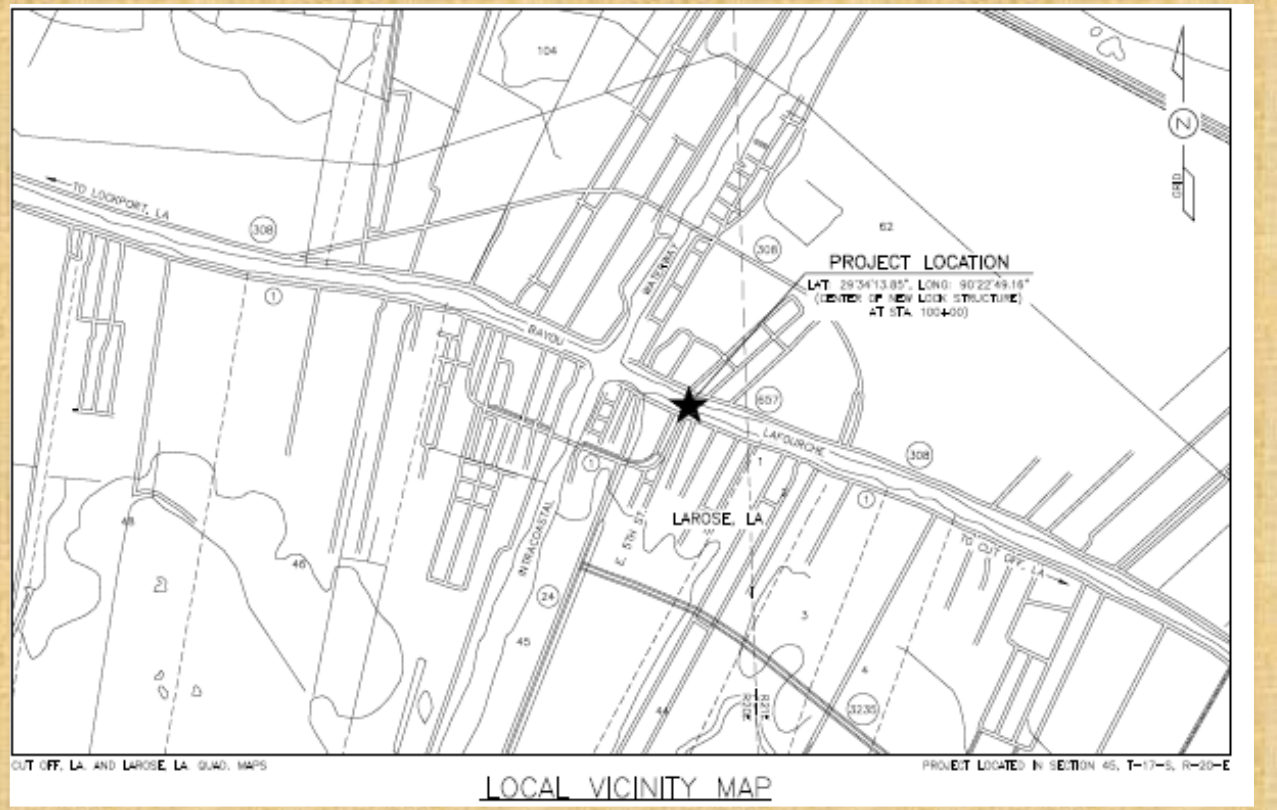
J.C. PICCIOLA, II, P.E., L.S. • M.J. PICCIOLA, III, P.E.

Larose Lock Structure

Marco Picciola, P.E.
April 01, 2022

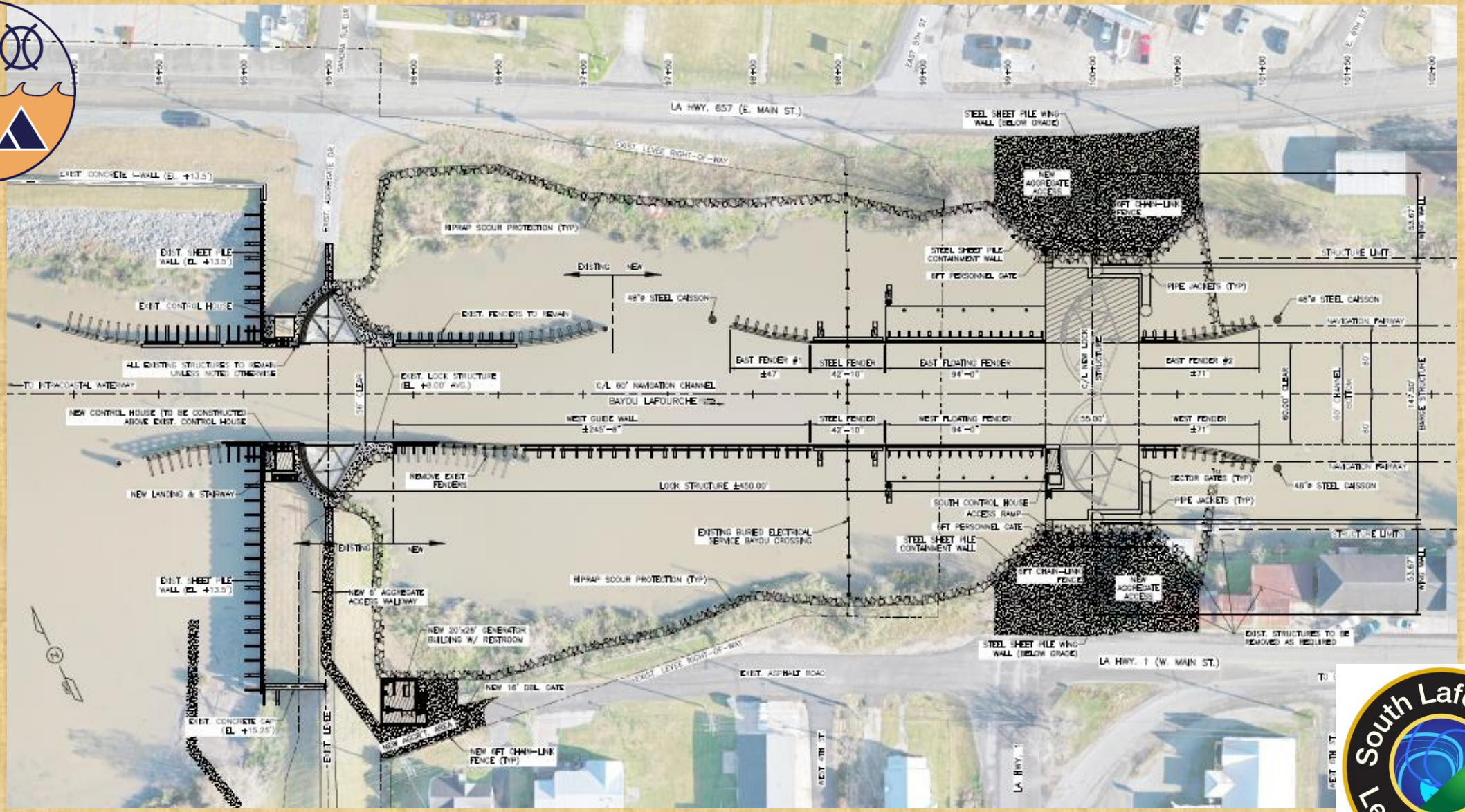
General Project Information





- Location: Lafourche Parish
- Funding: South Lafourche Levee District
- Project Type: Construction of a Lock Structure

Project Layout – Proposed Site Plan



Schedule and Cost Estimate

- Design : Being Finalized
- Cost Estimate: 25 million
- Permitting: In Process
- Advertisement: Summer of 2022
- Land rights/ Servitude Agreements: In Process
- Construction Duration: 365 days

Contact Information

- Windell Curole
  - Email: wcurole@slld.org
- SLLD Office Phone Number:
  - (985) 632-7554
- Joseph Picciola, P.E.
  - Email: joep@picciola.com
- Ben Hodson, General Manager
  - Email: ben@picciola.com
- Marco Picciola, P.E.
  - Email: marc@picciola.com
- Picciola & Associates Office Phone Number:
  - (985) 632-5786

CPRA COASTAL INDUSTRY DAY

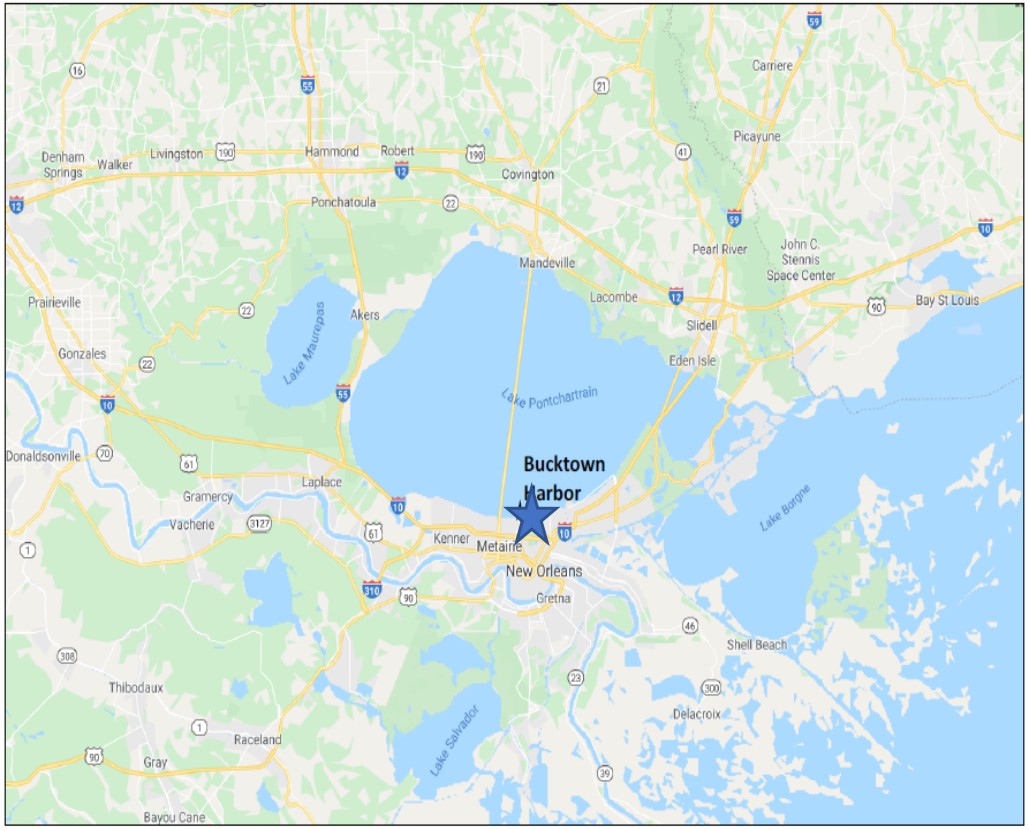
2022-23
BUCKTOWN CONSTRUCTION PROJECTS

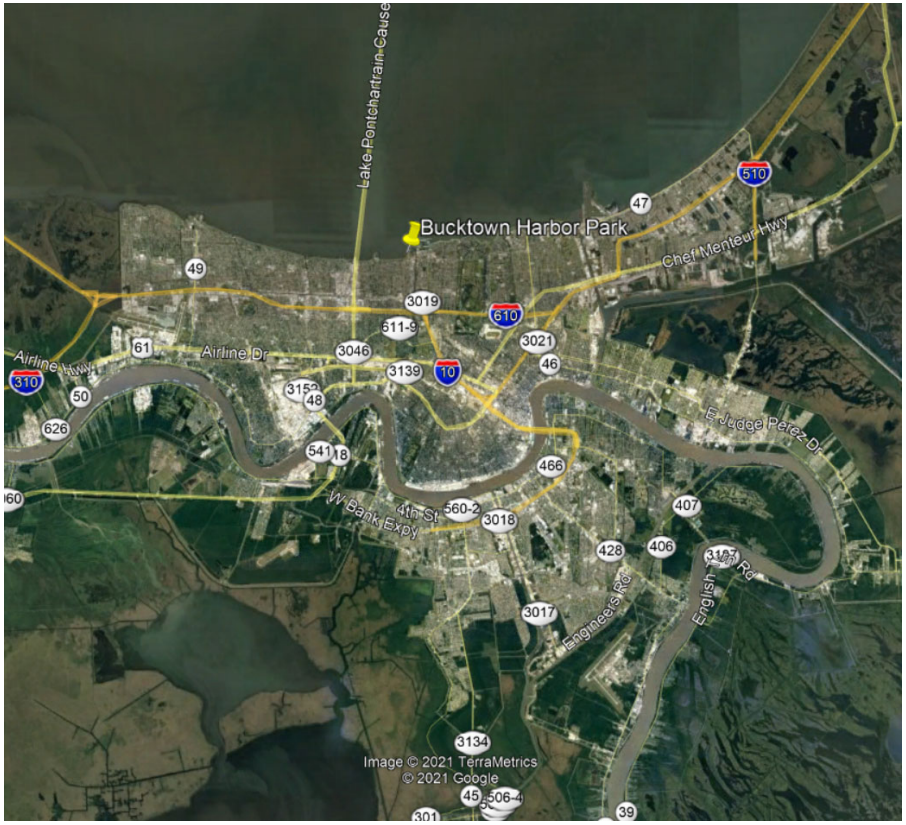
DISTRICT 5, METAIRIE, LA
JEFFERSON PARISH,

LAUREN AVERILL, P.E.

APRIL 4, 2022

Bucktown, Metairie, LA

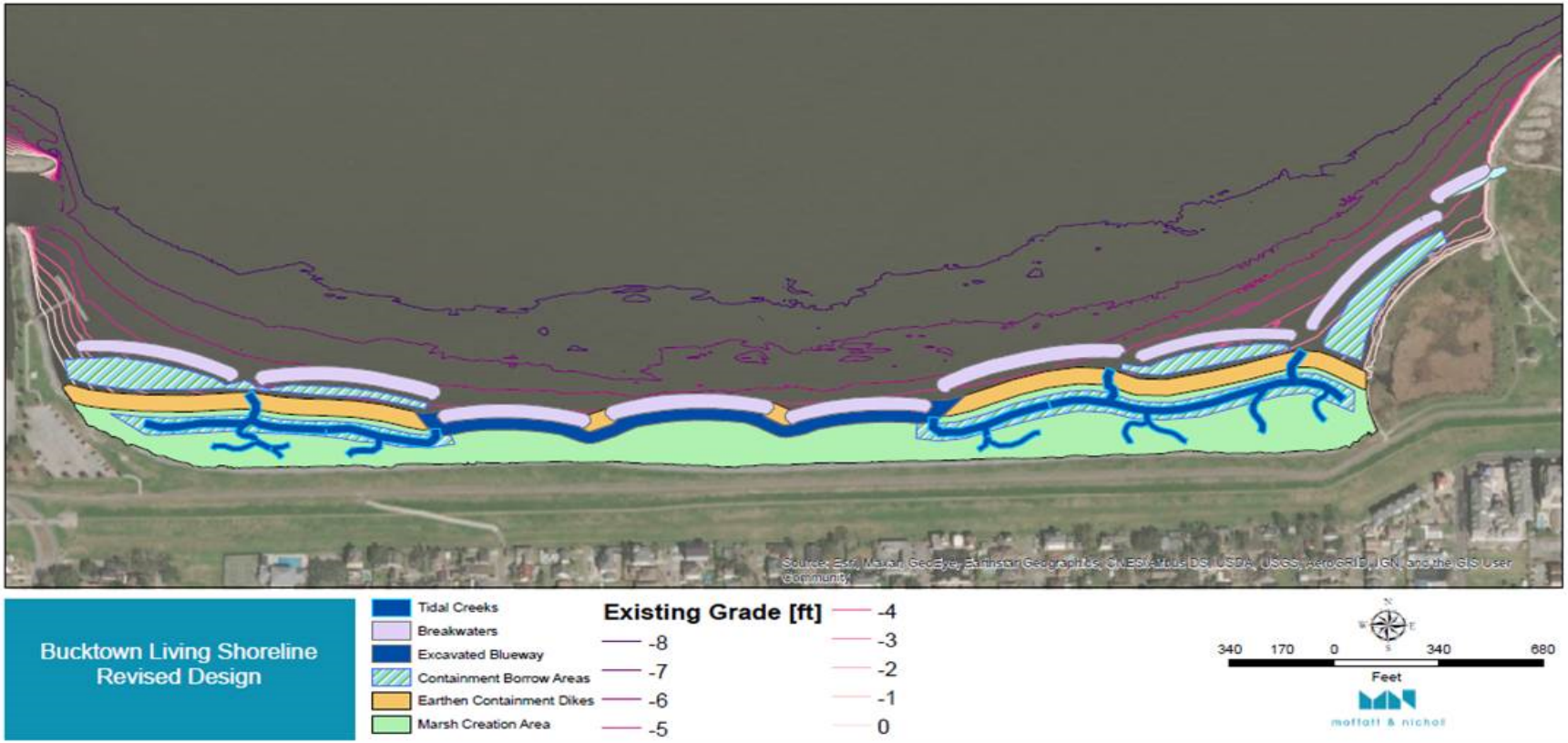




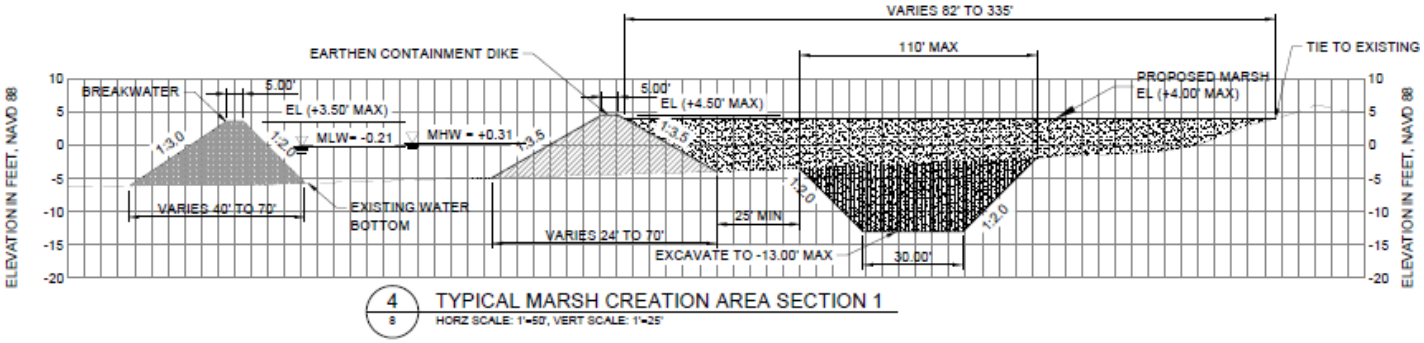
Project Locations

1

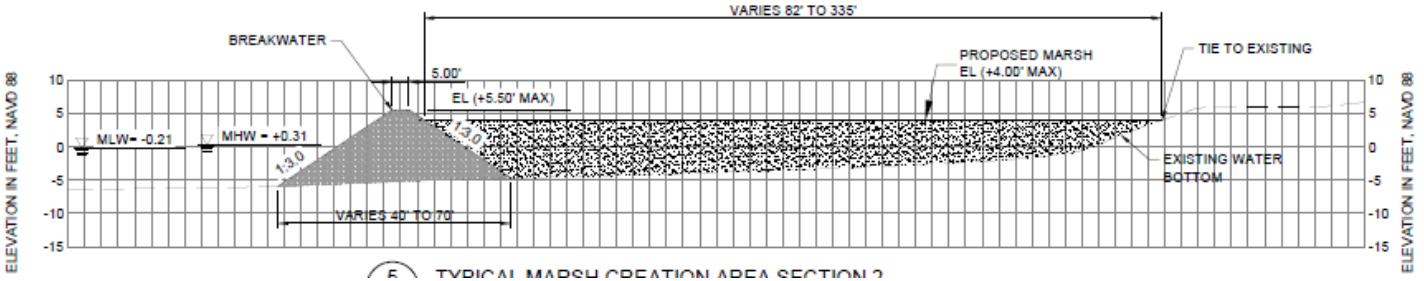
BUCKTOWN LIVING SHORELINE PROJECT



Project Section

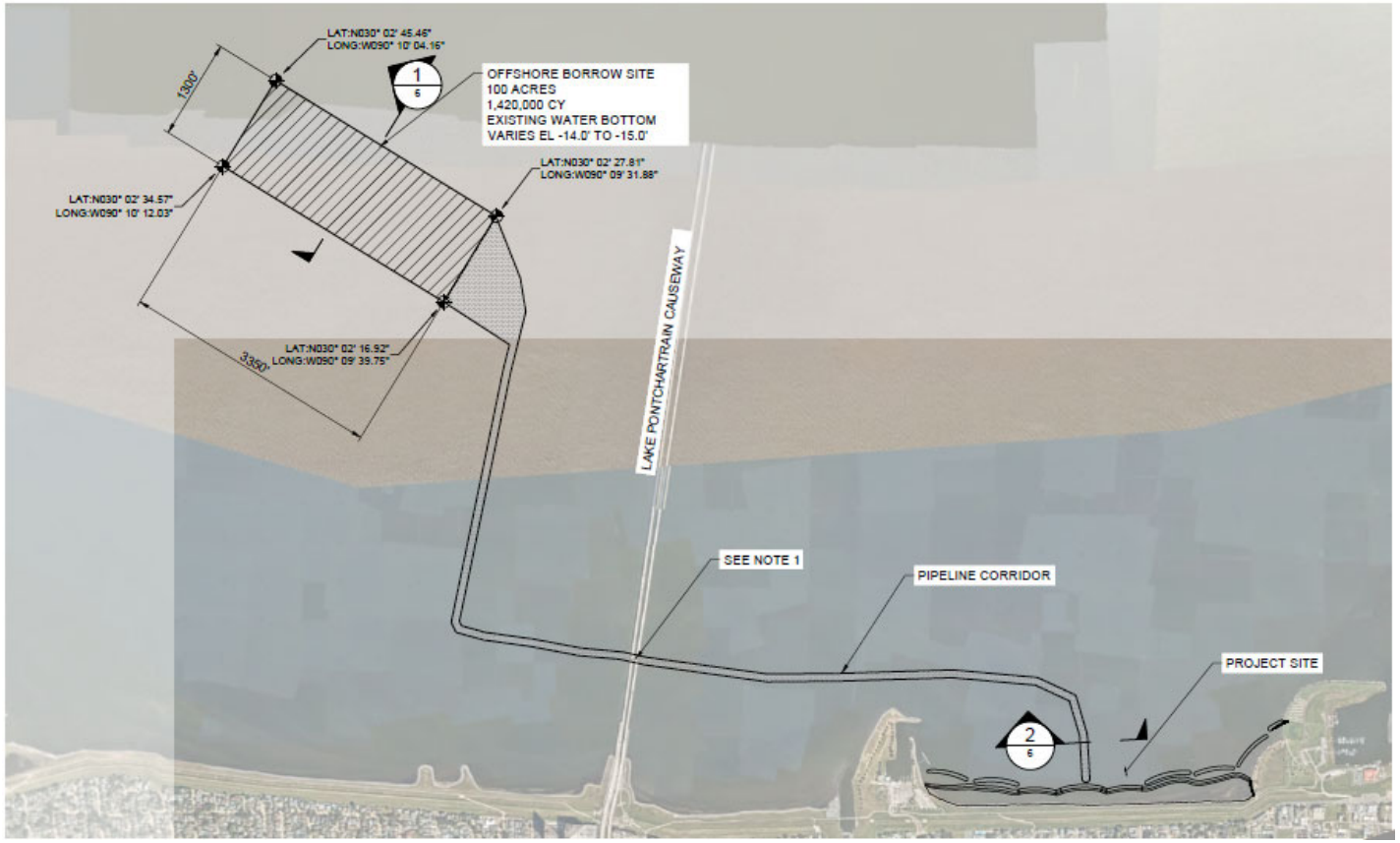


4 TYPICAL MARSH CREATION AREA SECTION 1
8
HORZ SCALE: 1"=50', VERT SCALE: 1"=25'



5 TYPICAL MARSH CREATION AREA SECTION 2

Project Layout & Borrow Area



Quantity Estimates

Shoreline protection		
Rip Rap	26,000	tons
Recycled concrete	30,600	tons
Geotextile Fabric	25,000	Square Yards
Hydraulic Dredging/Marsh Creation excavation	392,700	cubic yards
Containment Dike borrow excavation	67,500	cubic yards
Tidal Creeks and blueway excavation	25,500	cubic yards

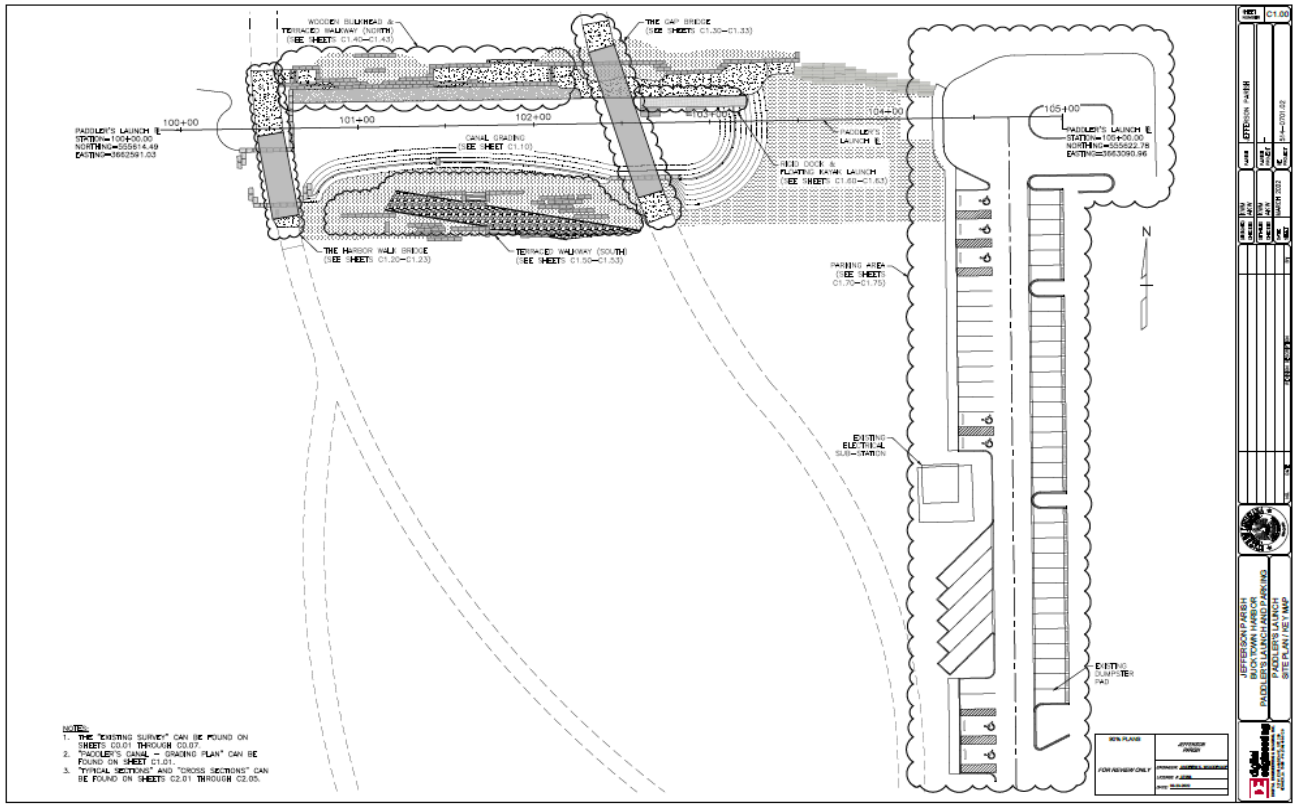
Anticipated schedule

- Permitting: In process
- Advertisement estimated September 2022
- Construction start estimate November 2022
- Construction Duration Phase 1: 9 months
- Construction Phase 2: 1 month

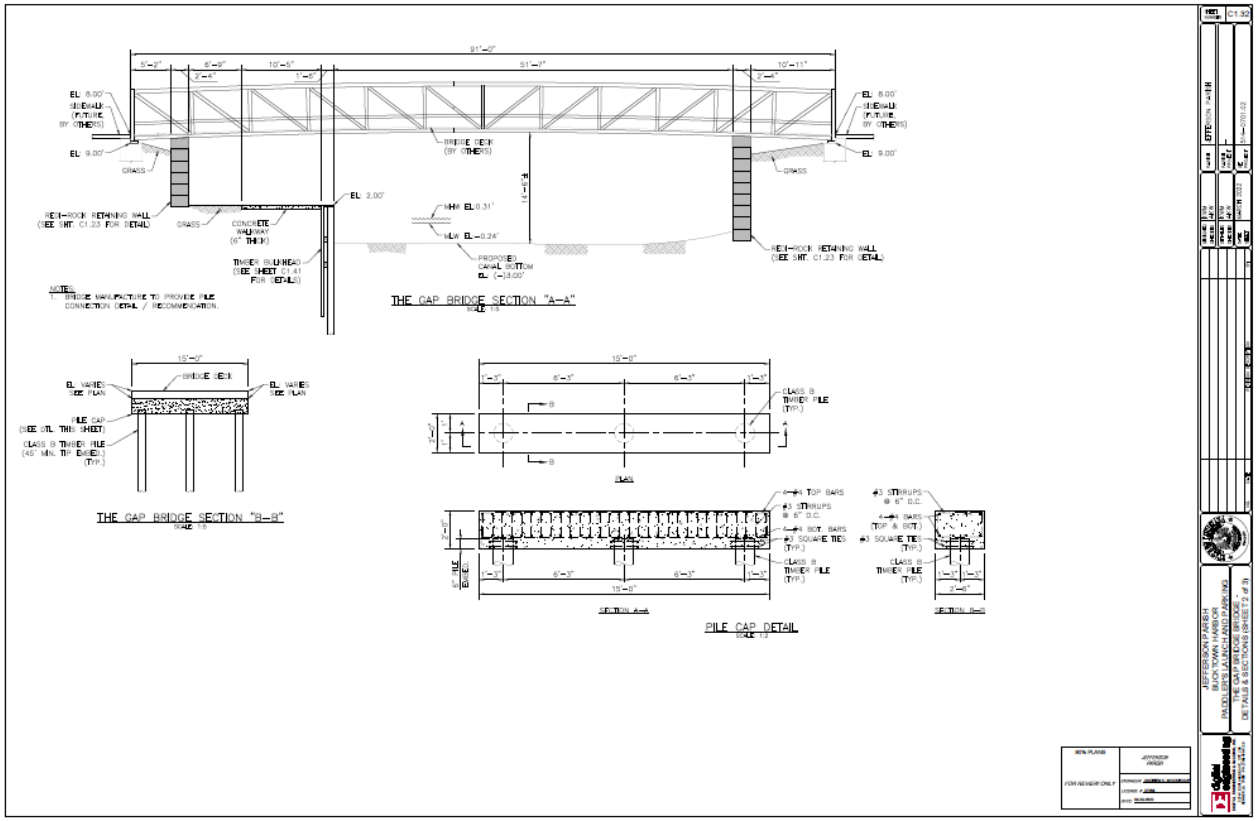
2

BUCKTOWN PADDLERS CANAL & KAYAK LAUNCH

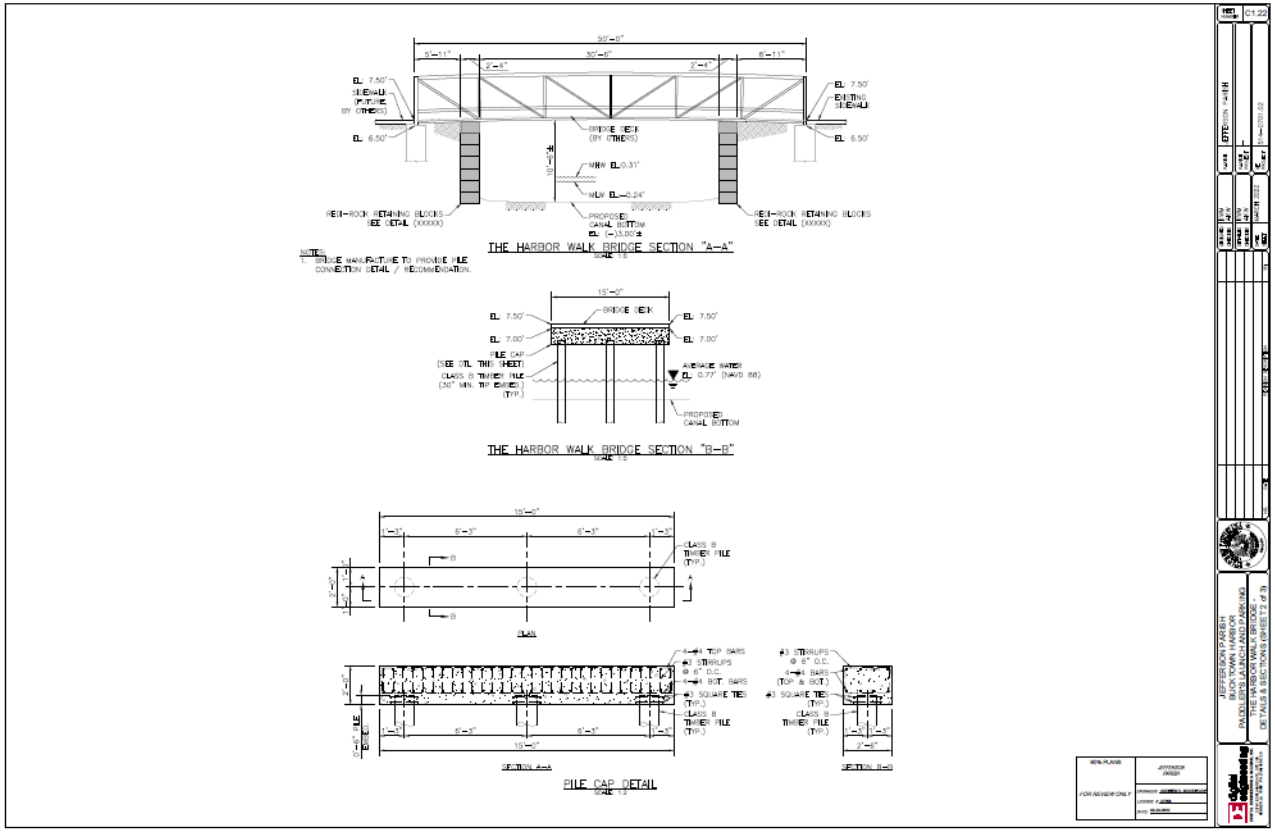
Project Layout



Gap Bridge Sections & Details



Harbor Bridge sections & Details



Quantity Estimates

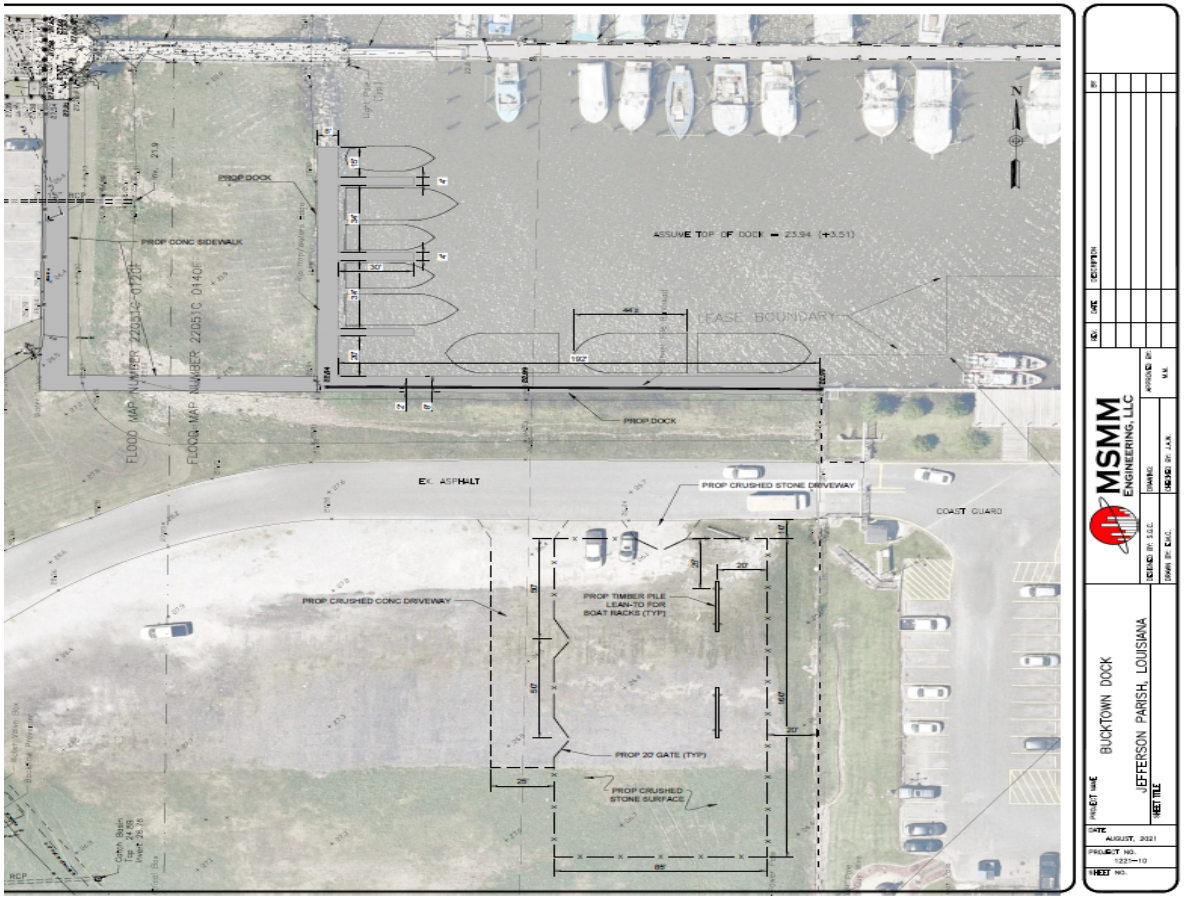
Item No.	Item Description	Unit	Quantity
1	Pre-Construction Video & Photo	LS	1
2	Construction Layout & Staking	LS	1
3	Mobilization & Demobilization	LS	1
4	Storm Water Pollution Prevention	LS	1
5	Seeding	LS	1
6	Wheel Stops	EA	50
7	Geogrid	SY	3,200
8	Geotextile	SY	3,200
9	610 Limestone	CY	1,000
10	ADA Striping & Signage	LS	1
11	Wooden Bulkhead Sheeting	SF	2,560
12	Wooden Bulkhead Anchors	EA	36
13	Asphaltic Concrete (4" Thick)	SY	2,270
14	Excavation & Embankment	CY	4,000
15	Redi-Rock Modular Blocks	SF	1,995
16	Debris Removal	LS	1
17	Rigid Dock (6' wide)	LF	60
18	Timber Piles	EA	48
19	Kayak Launch Assist Equipment	LS	1
20	French Drain (Parking Lot)	LF	305
21	Concrete Curb and Gutter	LF	1,133
22	Concrete Walkways	SY	520
23	Granular Fill	CY	100
24	The Gap Bridge	LS	1
25	Harbor Walk Bridge	LS	1

Anticipated schedule

- Bid Advertisement estimated September 2022
- Construction start estimate October 2022
- Construction Duration Phase 210 days

3

MARINA TRANSIENT SLIPS AND OFFLOADING DOCK



Quantity Estimates

Item	Description of Item	Unit	Estimated Quantity
Lay-Down Yard Area			
	6' High Chain Link Fence	LF	430
	Fence Slats for Privacy (on Coast Guard Side only)	LS	1
	16' Double Swing Gates	EA	3
	6" Thick Crushed Stone Surface (Surface Area = 1935 SY)	CY	340
	Geotextile Fabric	SY	1,935
	Geogrid	SY	1,935
	Timber Pile Lean-To (2 sets)	LS	1
Hard Surface Area Between Coast Guard Drive and Dock			
	Miscellaneous Grading & Embankment	LS	1
	6" Thick Crushed Stone Base (Surface Area = 975 SY)	CY	175
	3" Thick Superpave Asphaltic Concrete Binder Course	SY	975
	2.5" Thick Superpave Asphaltic Concrete Wearing Course	SY	975
	Geotextile Fabric	SY	975
	Geogrid	SY	975
	Concrete Header Adjacent to Dock (Concrete Cap on Timber Piles)	LF	200
Transient & Flexible Dock			
	Composite Dock Including Piles, Beams & Decking	SF	2560
	Miscellaneous Dredging	LS	1
	Concrete Sidewalk from Parking Lot to Dock	SY	135

Anticipated schedule

- Advertisement estimate: October 2022
- Construction start estimate: December 2022
- Construction Duration Phase: 2 months

Questions?

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laverill@jeffparish.net Office (504)736-6654