



Topographic and Magnetometer Survey for PO-0179

Methodology Report | Orleans Parish, Louisiana

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Draft

Coastal Protection and Restoration Authority of Louisiana



Document Control

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Client Information

Client	Coastal Protection and Restoration Authority of Louisiana
Client Address	150 Terrace Avenue, Baton Rouge, LA 70802
Client Contact	Travis Moore

Revision History

Issue	Date	Status	Comments on Content	Prepared By	Checked By	Approved By
01	20191220	For Review	Awaiting client comments	DR/TH	DC	GS

Project Team

Initials	Name	Role
DR	Danielle Rung	Project Manager
GS	Greg Spiller	Operations Manager
DC	David Cormier, PLS	Professional Land Surveyor
TH	Tyler Hebert	Geoscientist

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1. Executive Summary

Fugro USA Land, Inc. (Fugro) was contracted by the Coastal Protection and Restoration Authority (CPRA) to provide topographic and magnetometer surveying services in support of the St. Catherine Island Marsh Creation and Shoreline Protection Project (PO-0179) located in Lake Pontchartrain Basin. This CPRA project is in partnership with the U.S. Department of the Interior, represented by the Fish and Wildlife Service, and is funded through the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA). This project was included on the 26th CWPPRA priority project list.

The primary purpose of the survey was to acquire supplemental survey data needed due to the adjustments of some project features.

Field work commenced on June 9, 2021, and the data collection was completed on June 14, 2021. The following report details the methodology and results of the aforementioned survey.

The survey data has been processed and compiled for submission in the following formats.

- Charts with Results
- CSV File of Topographic Data
- Digital Magnetometer Tracklines and Anomalies

The following can be found in the appendix of this document.

- Appendix with Drawings
- Appendix with Survey Control
- Appendix with Magnetometer Table
- Appendix with Field Notes
- Appendix with RTK Table

2. Project Overview

2.1 Project Location

The PO-0179 project is located in Orleans Parish, Louisiana in the Pontchartrain Basin. The areas that were surveyed are in the southeastern portion of Lake Pontchartrain, near the northern extent of Chef Menteur Pass.



Figure 1: The project area is located along Lake Pontchartrain near New Orleans, Louisiana. The red transect lines depict magnetometer and topographic transects. The yellow transect lines depict topographic transects.

2.2 Project Execution

The geophysical survey was executed over 3 days. Data acquisition commenced on June 9, 2021 and was completed on June 14, 2021.

2.3 Coordinate System

Horizontal Datum	Vertical Datum	Projection	Units
NAD83	NAVD88 G12B	Louisiana South Zone	US Survey Feet

3. Survey Methodology

3.1 Survey Control

The survey was held to monument E 3146. The coordinates for this monument were verified during this survey and are available in the data sheet located in Appendix B. The survey monument was approved by CPRA and is part of the Louisiana Coastal Zone (LCZ) Secondary Global Positioning System (GPS) Network for horizontal and vertical control.

This survey was conducted using GNSS technology with the vertical measurements referenced to ellipsoid GRS80. During post-processing, the ellipsoidal heights were transformed to NAVD88 orthometric heights using Geoid Model 12B.

3.2 RTK Survey

A total of 2,730 topographic survey data points were collected in support of this project. Each day, the survey crew assembled an RTK GNSS base station at surveying monument E 3146. A two-meter fixed height tripod was used to mitigate human error potentially introduced by incorrectly measuring the GNSS antenna height. The RTK GNSS base station unit was then initialized and a static GNSS session commenced.

The crew navigated along pre-plotted surveying transects and recorded topographic points spaced 25 feet apart or less, and at any abrupt changes in elevation greater than or equal to 6 inches. Fugro made every effort to collect data at the required shot spacing, however gaps may exceed 25 feet in areas where heavy vegetation prevented access or proper GNSS observations. Side shots were taken, as necessary, to pick up variations in topographic features (highs and lows), and other existing features such as platforms or other infrastructure which may affect project design implementation.

Topographic data collected during the survey were uploaded to the Fugro database and Trimble Business Center for post-processing. The data were exported in a CSV digital file containing Point, Northing, Easting, Elevation, Description (PNEZD) information. These data were assembled into a table viewable in Appendix E. The data were also converted into CIMS format to be provided as a digital deliverable. All data from the topographic survey produced as deliverables were held to the coordinates of the project monument, E 3146.

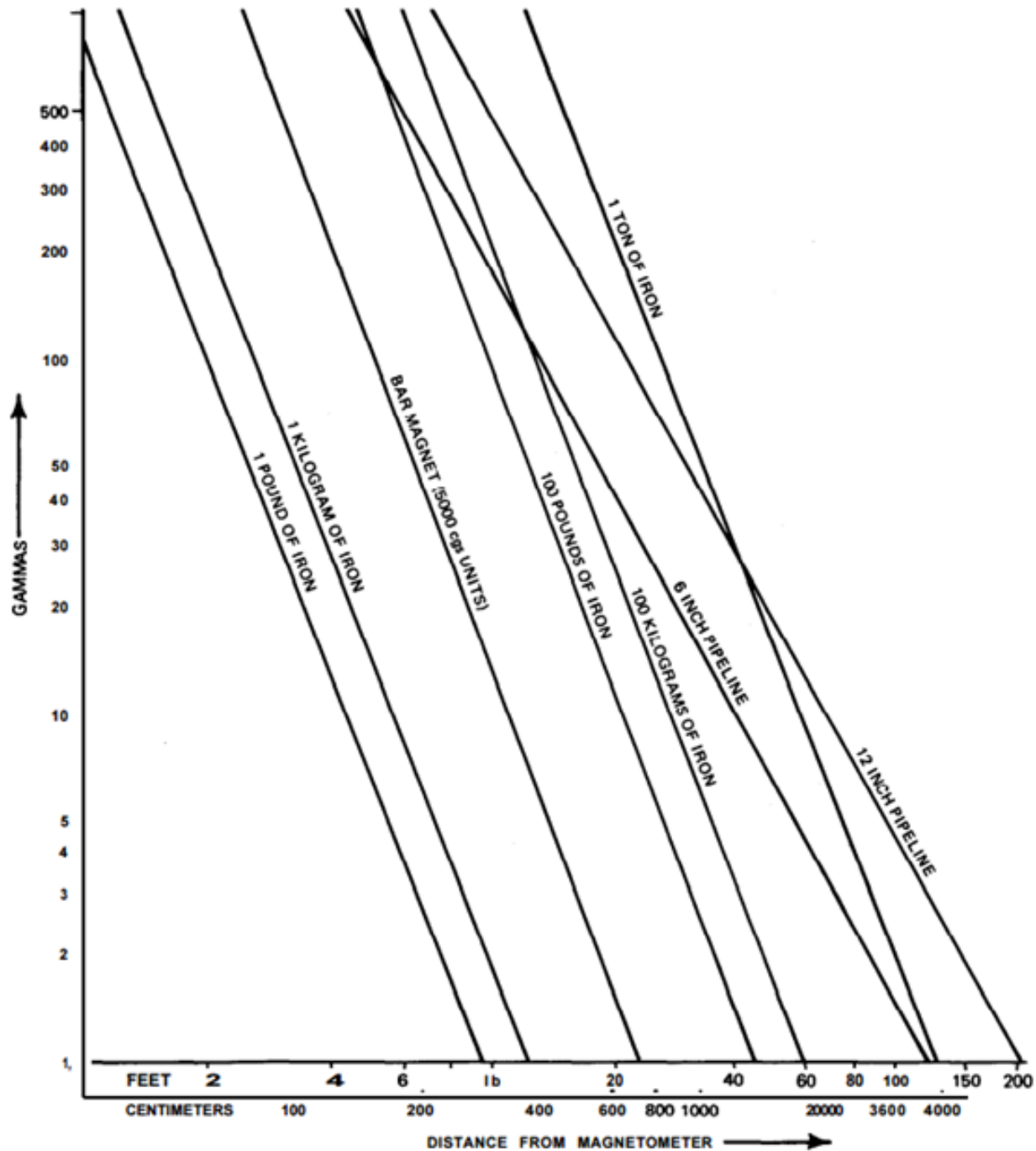
3.5 Magnetometer Survey

Fugro performed a magnetometer survey to identify the locations of ferrous debris and plausible pipelines that may impact future project operations within the survey area. Magnetometer data were collected using a Geometrics G-858 land magnetometer positioned with DGPS. A total of ~1.7 surveying line miles were collected across 17 track lines.

The magnetometer data was processed and interpreted using the SonarWiz geophysics software suite. Layback values were applied to all magnetometer data. Deflections from the ambient magnetic field within the survey area were interpreted as anomalies. Interpretations recorded the position, duration, and amplitude of each anomaly. The geometry of each anomaly was also described in terms of monopole, dipole, or complex. The results from the interpretation were converted into the CIMS file format in accordance with the Scope of Work. A table was generated denoting the pertinent information for each magnetic anomaly and is viewable in Appendix C.

A total of 75 magnetic anomalies were identified and interpreted in the data set. All anomalies were interpreted to be associated with unidentified debris. None of the anomalies are interpreted to be associated with pipelines that are located within the survey area. The interpretation of possible pipelines is based on the presence of 1) a linear geographical distribution of magnetic anomalies exhibiting the amplitude expected for an object such as a pipeline, which also crossed all survey lines in a continuous linear pattern, 2) a permitted location of an existing pipeline as shown in either public or proprietary utilities databases, 3) obvious markings or surface infrastructure observed at the site that indicate the presence of subsurface infrastructure, or 4) a combination of these variables. Public databases used in this interpretation included the National Pipeline Mapping System (NPMS) and the Louisiana Strategic Online Natural Resources Information System (SONRIS). Fugro's proprietary pipeline Geographic Information Systems (GIS) database was also used to support interpretations. Satellite imagery was also consulted to verify the potential presence of surface features commonly associated with pipelines, such as maintained right-of-ways, linear trenches in marsh grass and vegetation, or distinctly color changes in vegetation forming linear patterns.

The differences observed in the interpreted anomalies within this report could be the result of several unique variables. The nomogram in Figure 4 provides a visual reference of the relationship between a ferrous object and the magnetic deflection generated by the object. The amplitude and signature width (duration) of a magnetic deflection are dependent on a variety of factors that include object size and orientation, ferrous content, and distance from the sensor (Breiner 1999). Due to the multitude of variables producing the interpreted anomalies, reliable conclusions drawn from magnetometer data alone can be limited. Extreme caution should always be taken when conducting operations in the vicinity of the locations of identified magnetic anomalies. A probing investigation is always recommended to accompany a magnetometer survey when anomalies are found in areas that will directly impact the project.



INSTRUCTIONS FOR USE:

To use the nomogram, select a given weight or type of object from among the diagonal labeled lines. Then choose a distance along the bottom line (abscissa) of the graph and follow a vertical line upwards from that distance until it intersects the diagonal line of the selected object. At that point, move horizontally to the left to a value on the vertical axis (ordinate) of the graph and read the intensity in gammas.

At a given distance, the intensity is proportional to the weight of the object. Therefore, for an object whose weight is not precisely that of the labeled lines, simply multiply the intensity in gammas by the ratio of the desired weight to the labeled weight on the graph. If the distance desired does not appear on the graph, remember that for a typical object the intensity is inversely proportional to the cube of the distance and for a long pipeline the intensity is inversely proportional to the square of the distance between magnetometer sensor and object. Due to the many uncertainties described herein, the estimates derived from this nomogram may be larger or smaller by a factor of 2 to 5 or perhaps more.

Figure 2: Nomogram taken from Brennan (1999).

3.8 Equipment/Survey System(s)

3.8.3 Geometrics G858 Land Magnetometer

For the detection of magnetic anomalies associated with ferrous objects (such as pipelines or other debris), Fugro used a Geometrics G-858 Cesium Vapor Magnetometer. The G-858 has delivered to the industry a cost-effective and compact magnetometer with the performance of a Cesium Vapor sensor. It is proven capable of detecting and mapping a wide range of ferrous hazards, including anchor chains, cables, pipelines, and other man-made debris.

3.8.5 Trimble R8 RTK Surveying System

The Trimble R8 GNSS receiver delivers reliable, precise positioning in the most challenging surveying environments through the exploitation of the proprietary R-Track™ technology. This feature compensates for intermittent signal loss and enables extended precision operation throughout brief RTK correction signal interruption. The R8 receiver boasts a horizontal accuracy of 1 cm and a vertical accuracy of 2 cm when operating in kinematic mode.

3.8.6 Trimble Business Center (TBC) Software

Trimble TBC is a comprehensive software solution that streamlines the workflows for surveying and GIS deliverables. The software enables the user to create projects with a wide range of coordinate systems, post-process static GNSS data, adjust traverses, and complete networks. The capabilities of the software also extend from the planning phase through deliverable generation, enabling a seamless work flow that optimizes project efficiency.

3.8.7 SonarWiz Geophysical Processing Software Suite

SonarWiz is a proprietary software suite produced by Chesapeake Technology purpose built for processing and analyzing sonar data. SonarWiz enables the user to import a variety of file types from different geophysical instruments. Processing features include gain manipulation, lay-back calculation, and a full suite of mapping tools.

4. QHSSE

Fugro adhered to the implemented Quality, Occupational Health & Safety, and Environmental Management System to satisfy the needs of its customers, employees, all the shareholders and the community at large to continually improve performance of the company in the areas of Quality, Health, Safety, Security and Environment (QHSSE).

The QHSSE Management Systems implemented by Fugro comply with the requirements of the following recognized international standards:

ISO 9001:2015 ▪ ISO 14001:2015 ▪ ISO 45001:2018

The QHSSE strategy of Fugro is based on the following principles:

- Take responsibility for our own and each other's safety
- Plan our work to prevent unsafe situation
- Improve by learning from our experiences
- Suppliers and Subcontractors support our vision and principles
- We are all empowered to stop unsafe acts

Fugro also strives to prevent wasteful and inefficient operations, avoid damage to property and equipment, show respect for the environment, and, foremost, to protect the safety and well-being of all employees. Fugro employees will acquire all safety training as specified in the contract.

- The schedule of safety meetings and drills for this project will include but is not limited to
- Pre-job safety meetings
- Pre-job vessel health, safety, and environmental orientation
- Job Hazard Analysis (JHA)
- Daily tailgate safety meetings prior to each day's operations
- When a new procedure or piece of equipment is introduced, including a written Task Risk Assessment (TRA)
- Document a Near Miss accident or Injury

Fugro ensures compliance with all applicable rules, regulations, orders, standards and interpretations promulgated under the Occupational Safety and Health Act (1997) and all other applicable laws, ordinances, rules, regulations and orders of anybody having jurisdiction over safety and health of persons or property or the protection of same to protect them from injury, illness, damage or loss.

Fugro ensures that Personal Protective Equipment (PPE) will be utilized and maintained in accordance with the written PPE program. Training in the proper use, maintenance and inspection of PPE is provided to all Fugro employees prior to beginning work. Fugro will supply all required PPE required at the work site.

5. Contact Information

By use of these specific contact points, Fugro ensures quality control and prompt action with respect to all project-related issues.

Greg Spiller: For all corporate, legal, and contractual issues, geophysical interpretations, bathymetric survey, and final project responsibility.

David Cormier, PLS: For all operational QA/QC issues related to positioning and land survey.

Fugro USA Land, Inc. 226 Dulles Drive Lafayette, LA 70506			
Operations Manager	Greg Spiller	337.268.3336	g.spiller@fugro.com
Technical and Business Development Manager	David Cormier, PLS	337.268.3293	d.cormier@fugro.com

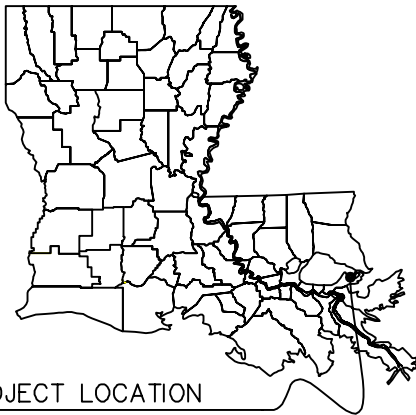
Appendices

Appendix A

Drawings

VICINITY MAP
NOT TO SCALE

N



PROJECT LOCATION
ORLEANS PARISH

LAKE PONTCHARTRAIN



NOTES:
PROFILES ARE GENERATED FROM WEST TO EAST AND FROM NORTH TO SOUTH.
ELEVATIONS SHOWN ARE REFERENCED TO NAVD88 GEOID 12B.

LEGEND

- DENOTES TRANSECT LINE
- DENOTES PROJECT FEATURES
- DENOTES SURVEY POINT

PRELIMINARY
THIS DOCUMENT SHALL NOT BE RECORDED
FOR ANY PURPOSE AND SHALL NOT BE USED
OR VIEWED OR RELIED UPON AS A FINAL
SURVEY DOCUMENT.

COASTAL PROTECTION & RESTORATION AUTHORITY

**ST. CATHERINE ISLAND MARSH CREATION
AND SHORELINE PROTECTION**
TRANSECTS
ORLEANS PARISH, LOUISIANA

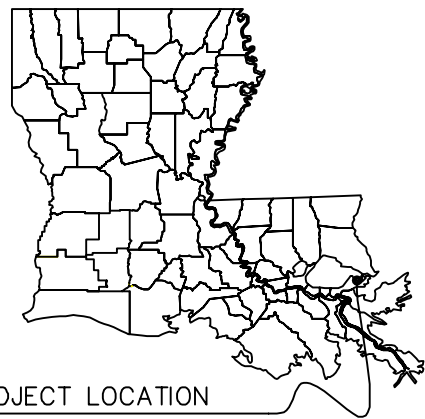
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226 DULLES DR, SUITE 110 LAFAYETTE, LA 70506 (337) 237-1300 LA RPLS FIRM #VF.000079

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IN FEET

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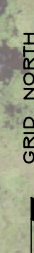
VICINITY MAP
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PROJECT LOCATION
ORLEANS PARISH



LAKE PONTCHARTRAIN



LEGEND

- DENOTES TERRACE TRANSECT LINE
- DENOTES PROJECT FEATURES
- DENOTES SURVEY POINT

COASTAL PROTECTION & RESTORATION AUTHORITY

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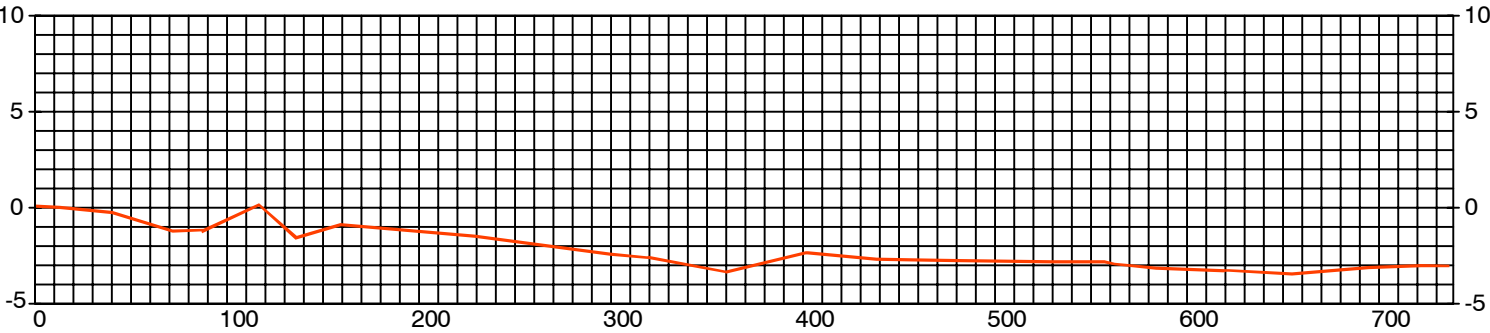
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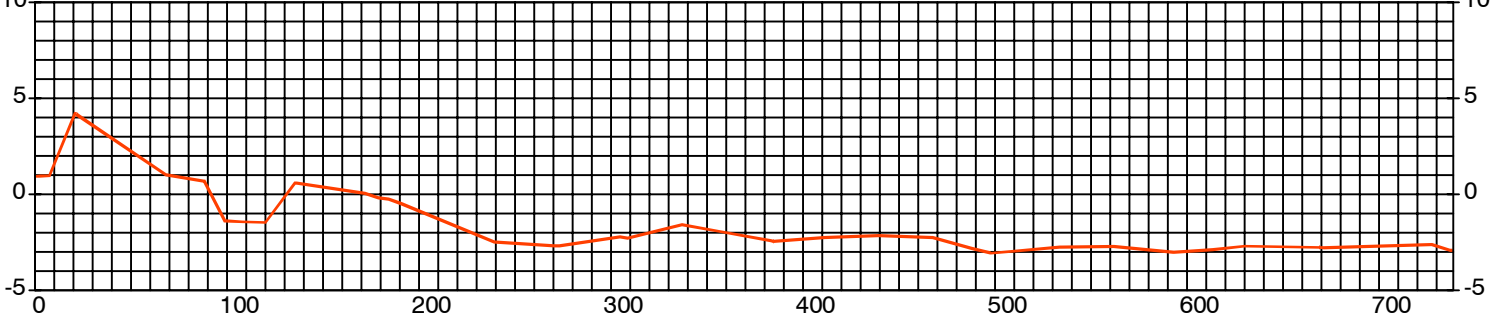
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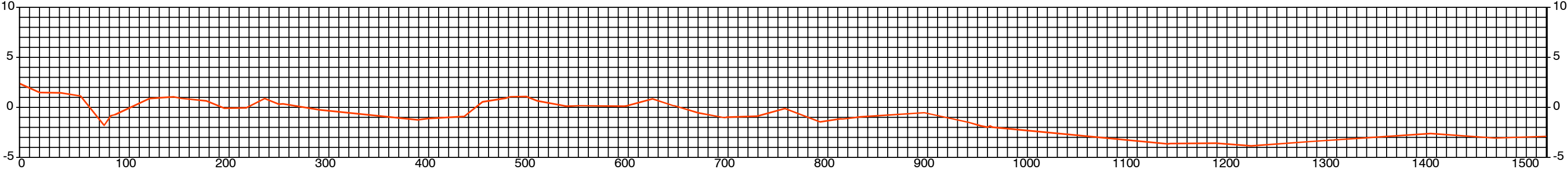
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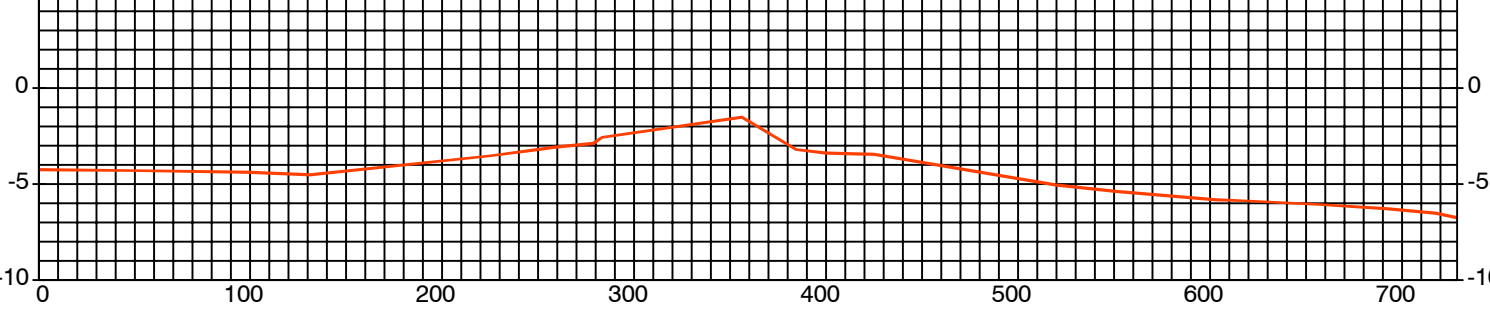
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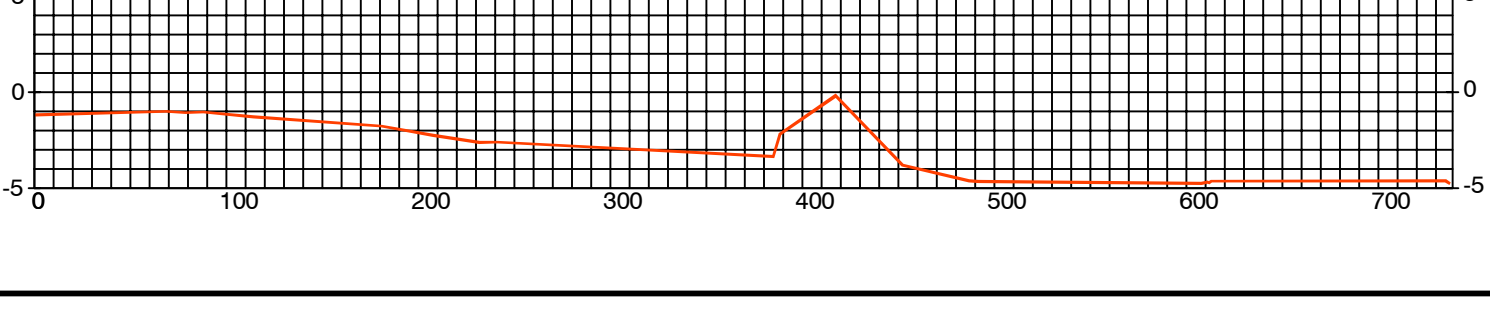
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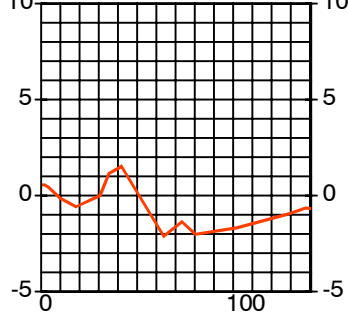
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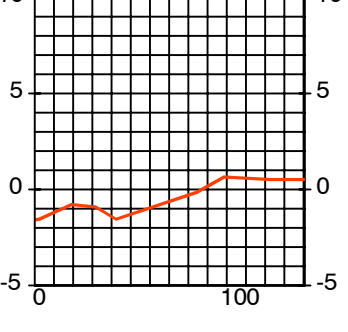
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TRANSECT 6



TRANSECT 7



LEGEND:

GROUND PROFILE

VERTICAL SCALE: 1" = 10'
HORIZONTAL SCALE: 1" = 100'

COASTAL PROTECTION & RESTORATION AUTHORITY

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TRANSECTS
ORLEANS PARISH, LOUISIANA

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GEODETIC DATUM: NAD83
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GRID UNITS: US SURVEY FEET

SCALE AS SHOWN

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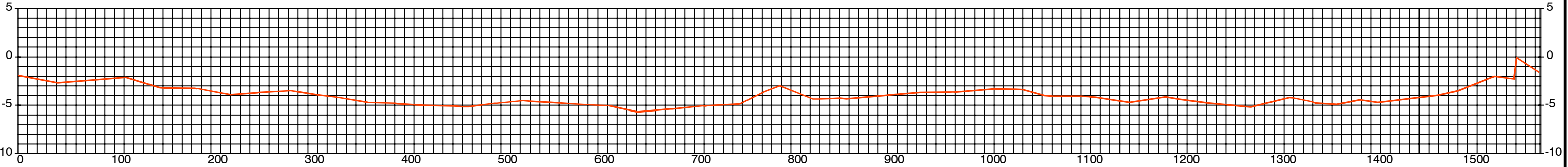
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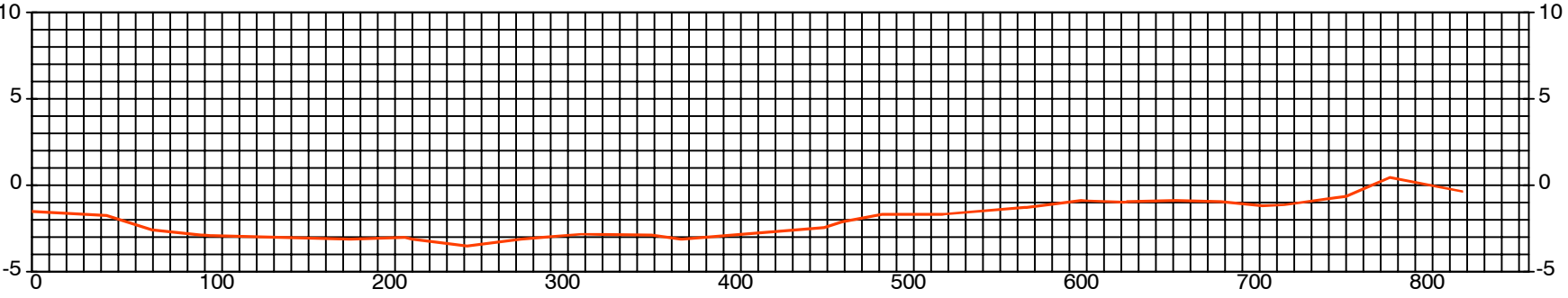
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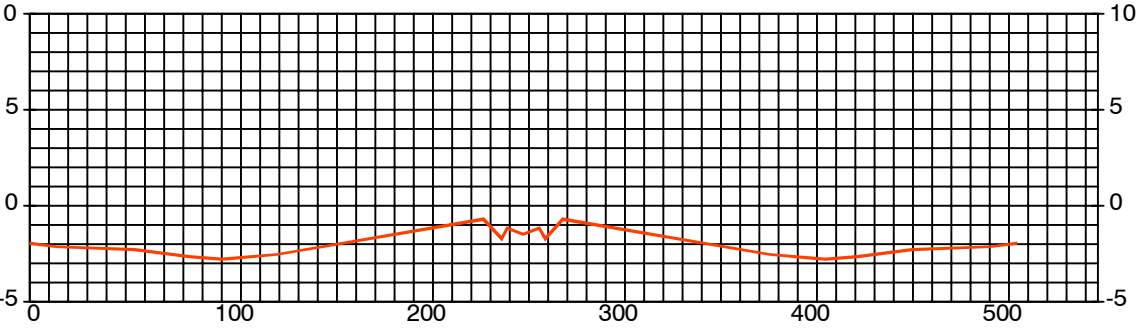
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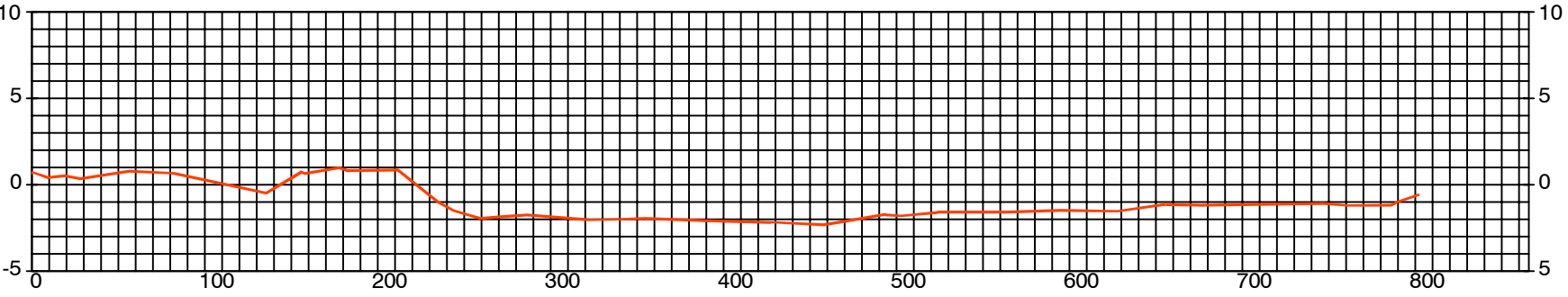
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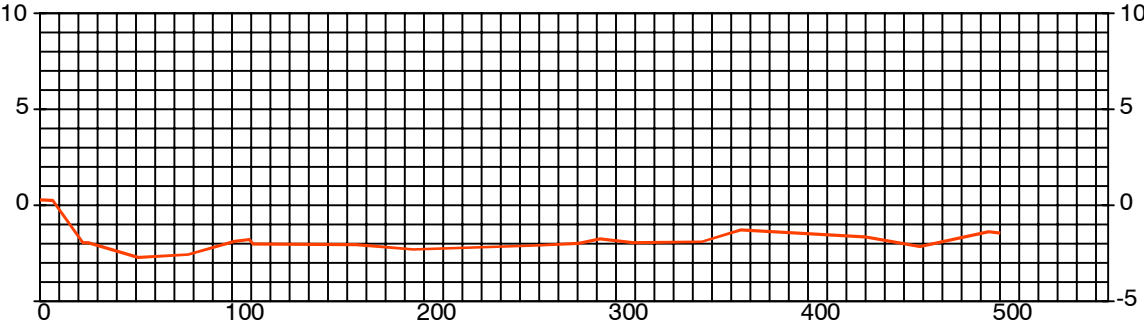
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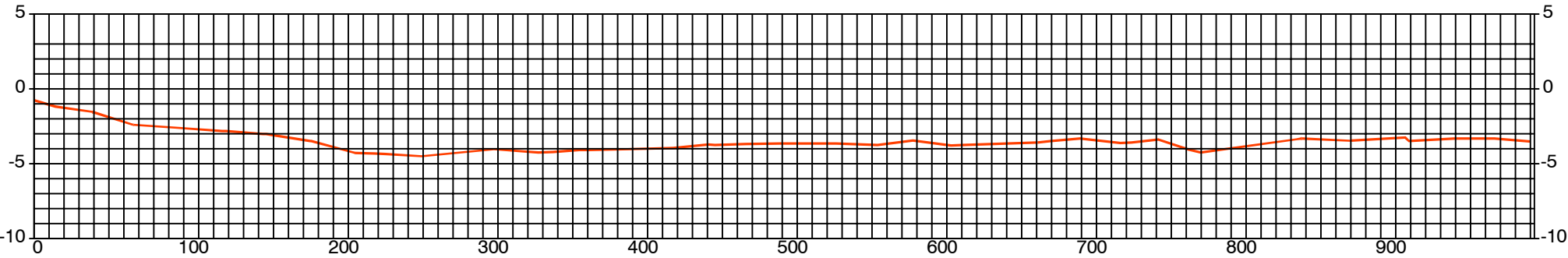
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TRANSECT 12



TRANSECT 13



LEGEND:

GROUND PROFILE

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COASTAL PROTECTION & RESTORATION AUTHORITY

ST. CATHERINE ISLAND MARSH CREATION
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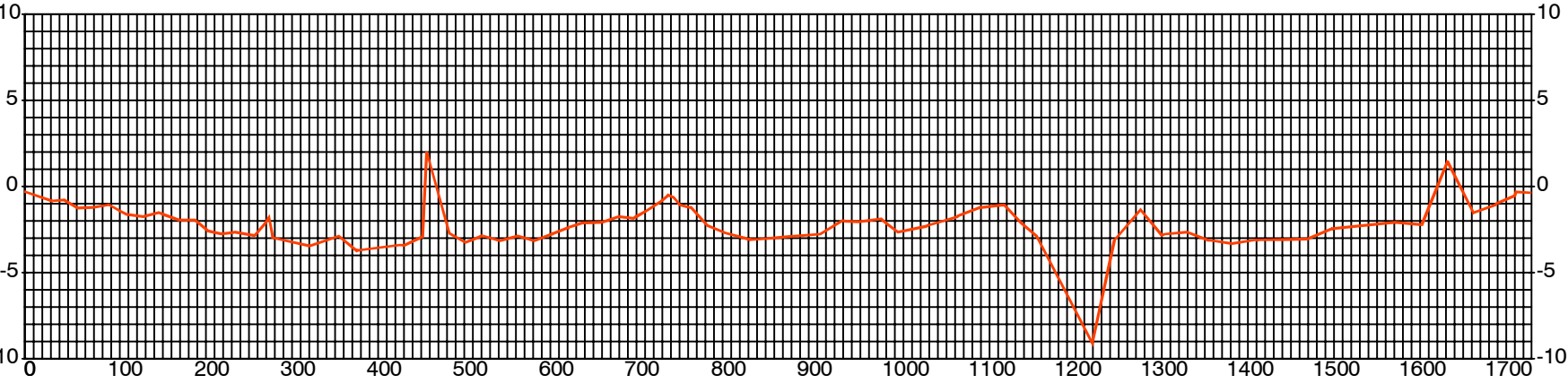
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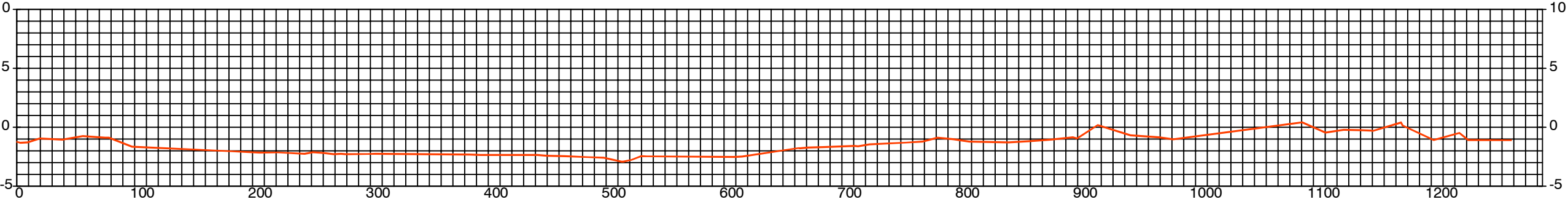
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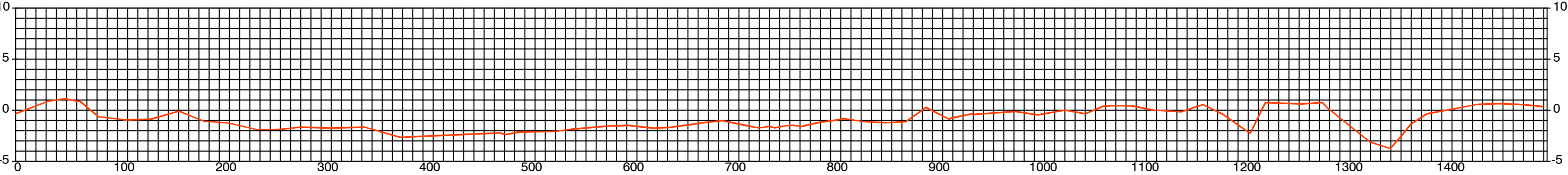


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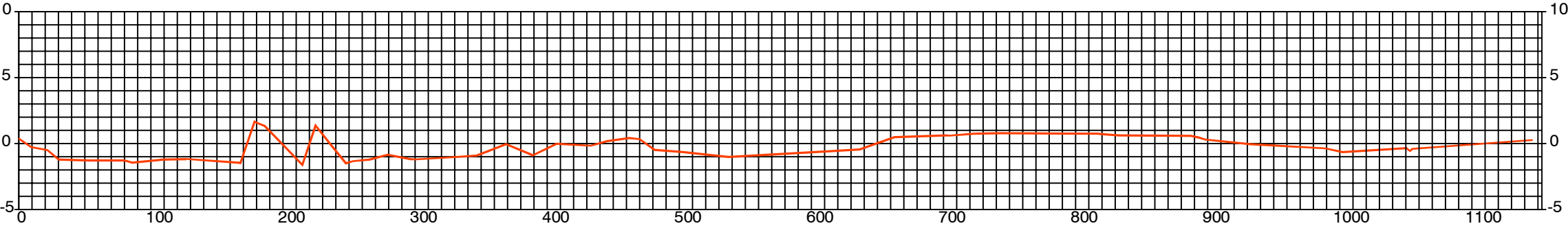
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TRANSECT 16



TRANSECT 17



LEGEND:

— GROUND PROFILE

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HORIZONTAL SCALE: 1" = 100'

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COASTAL PROTECTION & RESTORATION AUTHORITY

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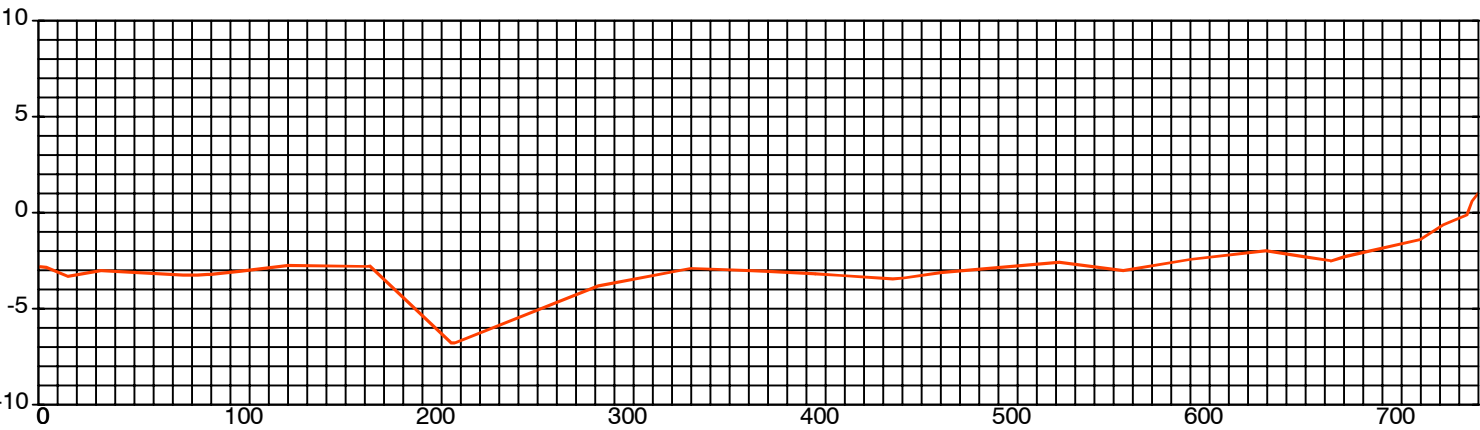
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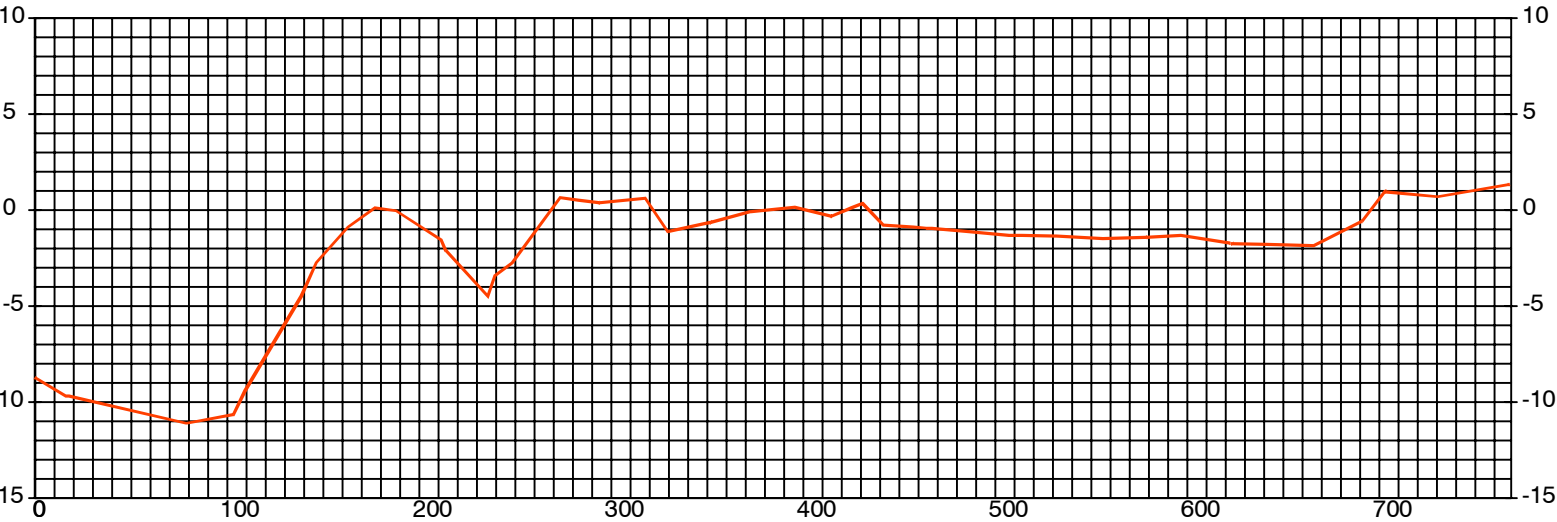
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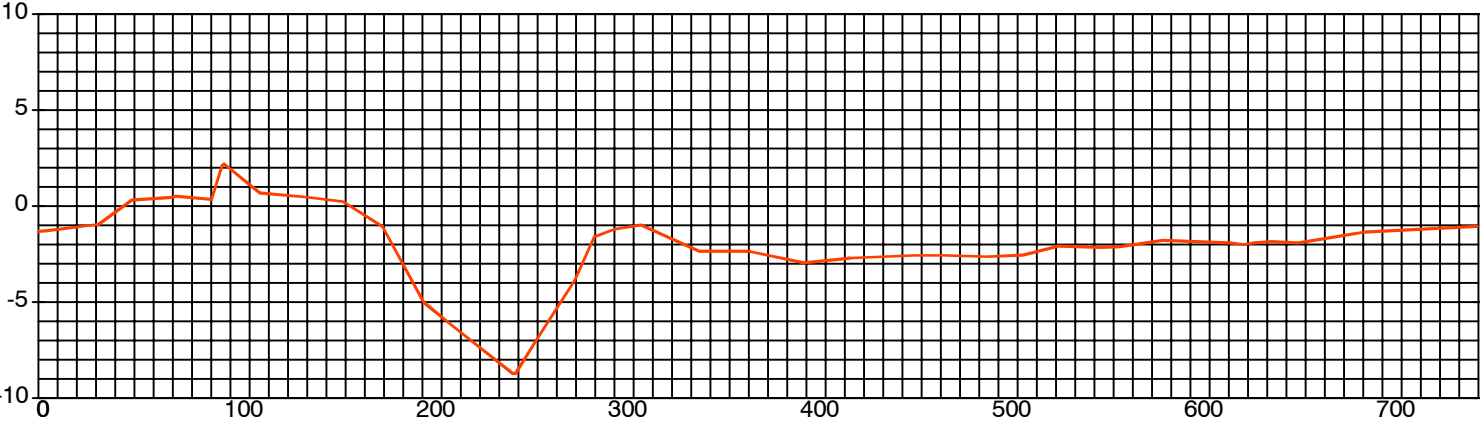
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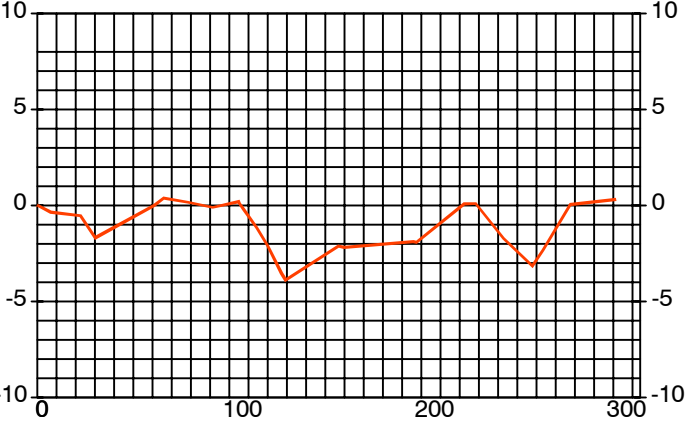
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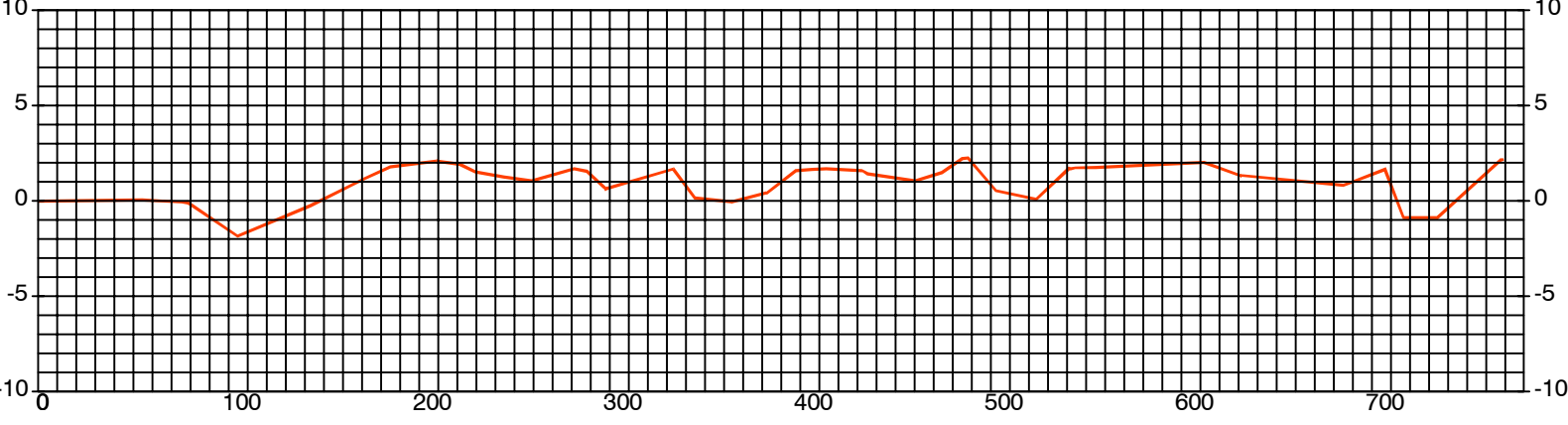
TRANSECT 19



TRANSECT 22



TRANSECT 20



LEGEND:

GROUND PROFILE

VERTICAL SCALE: 1" = 10'
HORIZONTAL SCALE: 1" = 100'

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GRID UNITS: US SURVEY FEET

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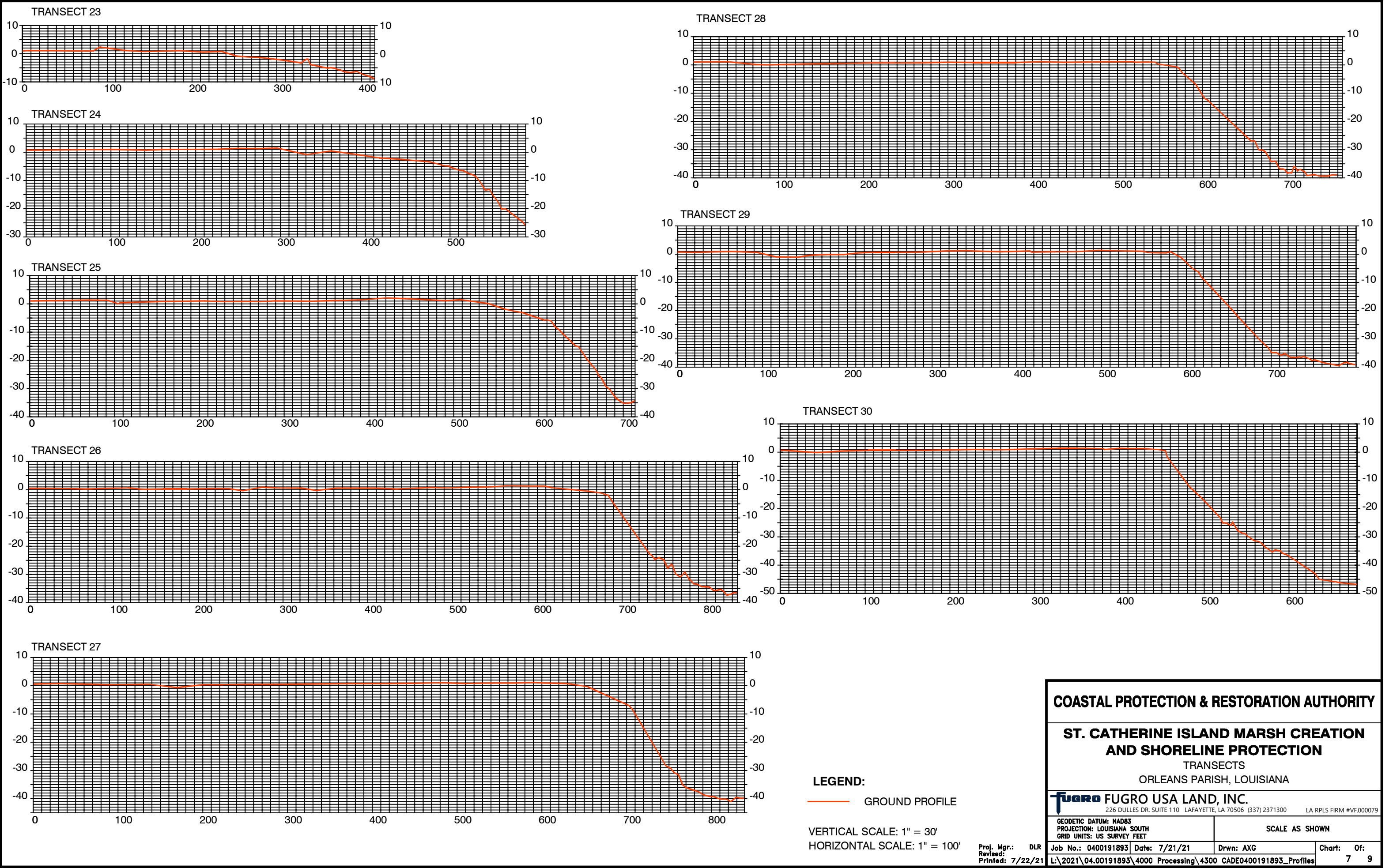
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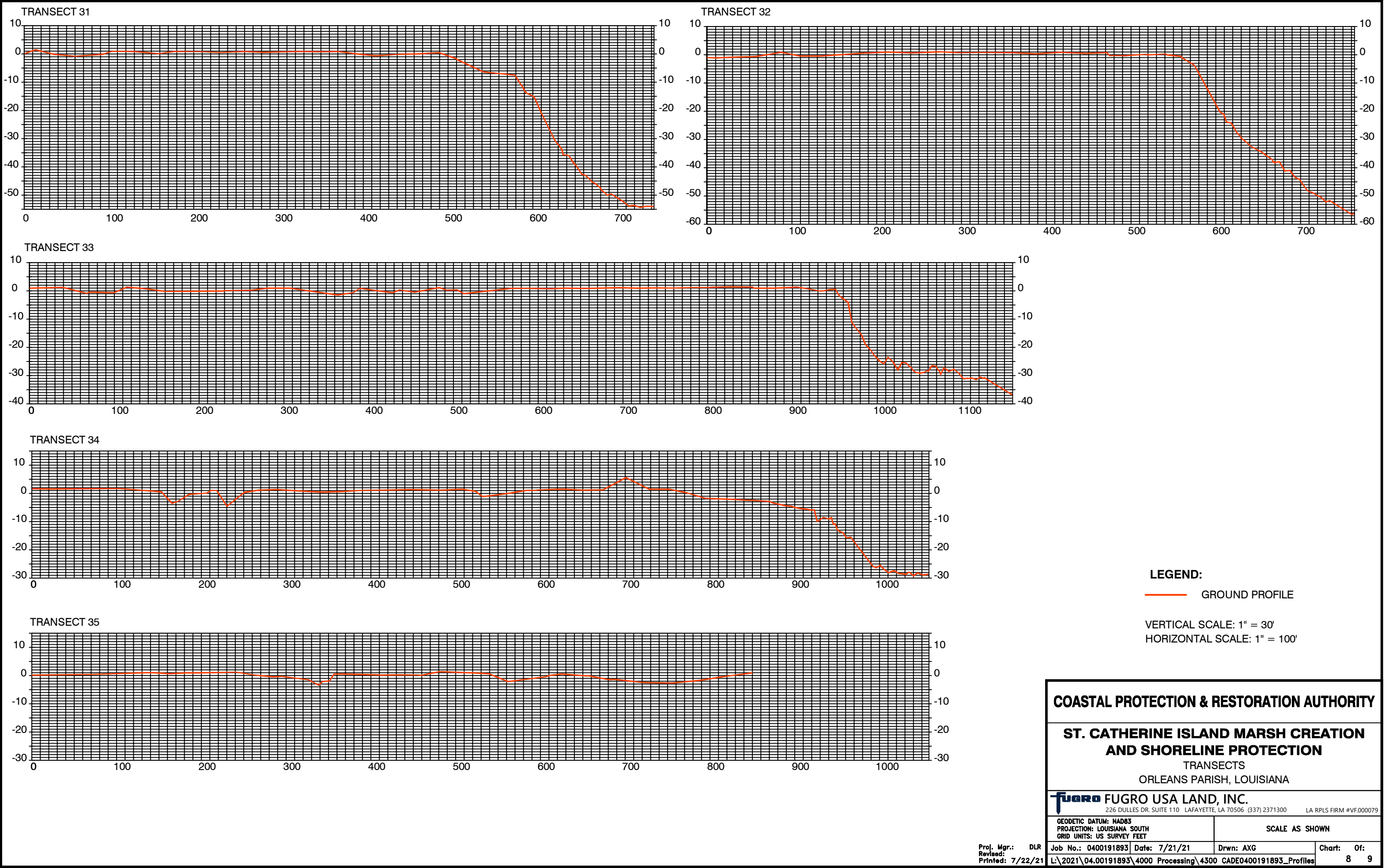
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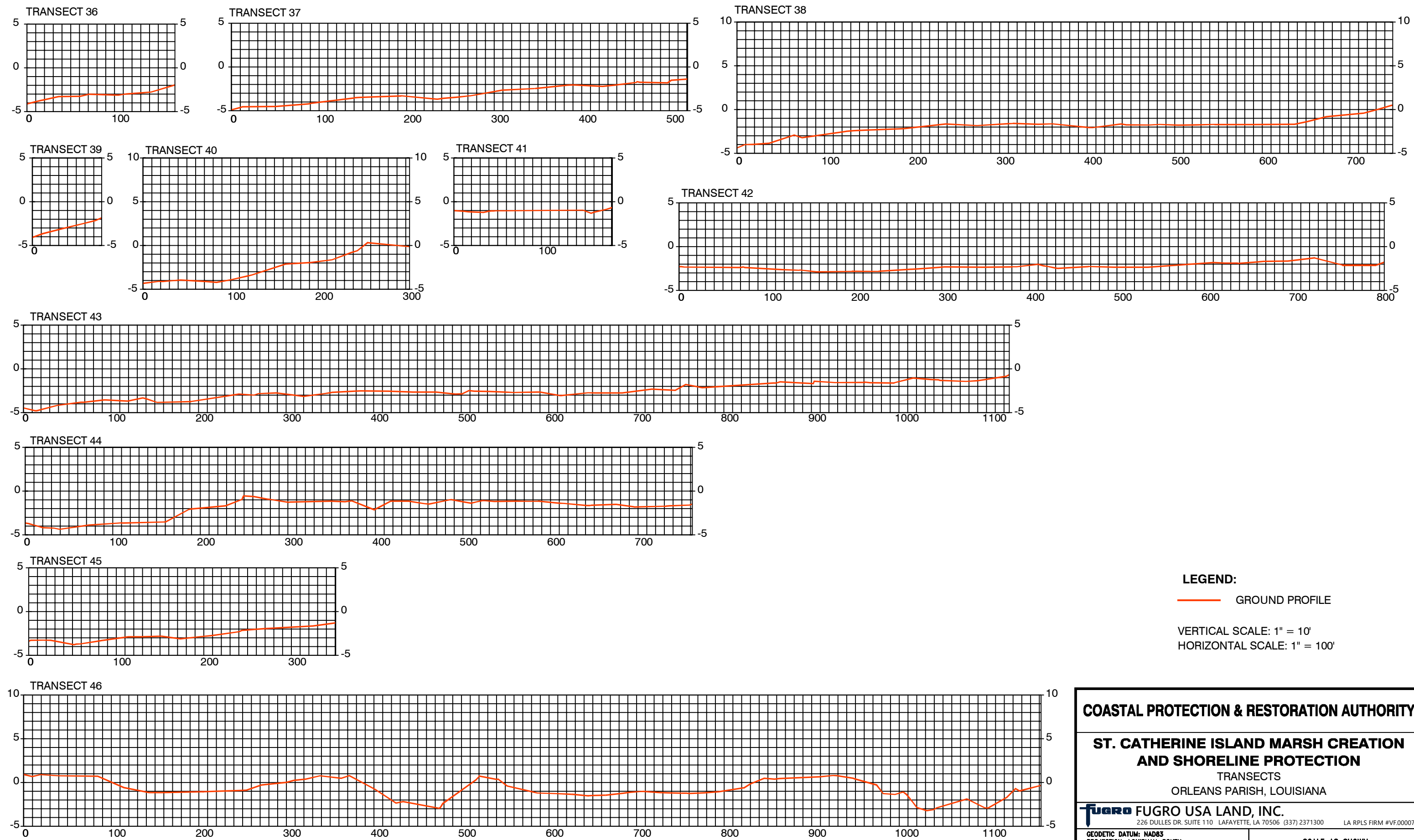
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Printed: 7/22/21







LEGEND:

— GROUND PROFILE

VERTICAL SCALE: 1" = 10'

HORIZONTAL SCALE: 1" = 100'

COASTAL PROTECTION & RESTORATION AUTHORITY

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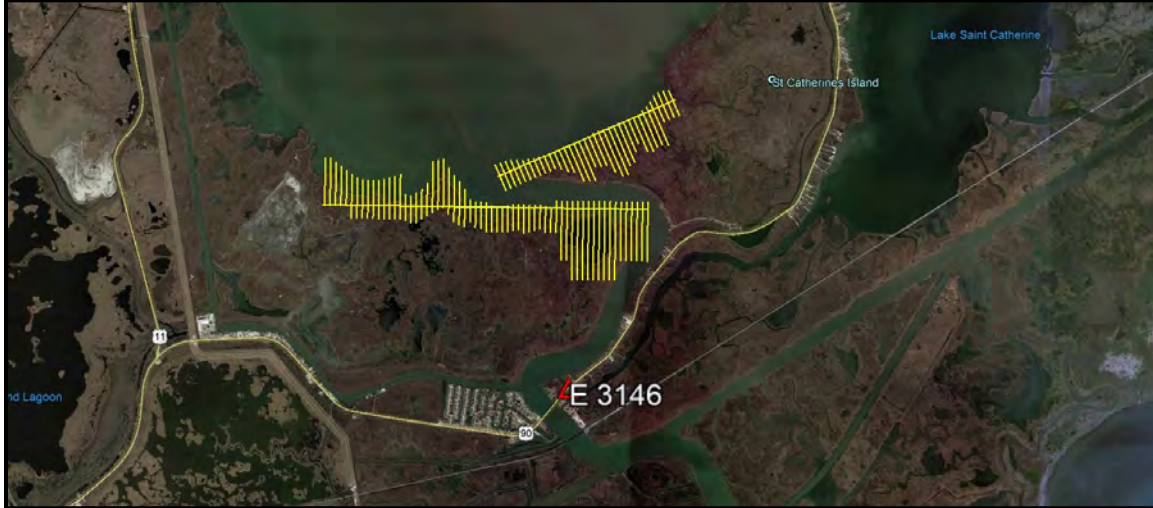
GEODEIC DATUM: NAD83 PROJECTION: LOUISIANA SOUTH GRID UNITS: US SURVEY FEET		SCALE AS SHOWN	
Job No.: 0400191893	Date: 7/21/21	Drwn: AXG	Chart: Of:
L:\2021\04.00191893\4000 Processing\4300 CADE0400191893_Profiles		9	9

Proj. Mgr.: DLR
Revised:
Printed: 7/22/21

Appendix B

Survey Control

Section 4 – Benchmark Description Form



VICINITY MAP

Station Name: "E 3146"

Monument Location: The monument is located 21.90 miles east/northeast of Metairie, La., 16.66 miles north/northwest of Shell Beach, and 14.18 miles south of Slidell, La. To reach the monument from the intersection of Highway 11 and Highway 90 (Chef Menteur Highway) in Orleans Parish, proceed east on Highway 90 (Chef Menteur Highway) for 4.1 miles to the monument on the right side of the road.

Monument Description: The monument is 38 feet southeast of the centerline of Highway 90 (Chef Menteur Highway), 25.0 feet southwest of the centerline of an old driveway, 3.4 feet west/southwest of a carsonite witness post which is set on the weedline, and set flush with the ground surface.

Date: July 5, 2018

Monument Surveyed By:
Chustz Surveying, LLC

Surveyed NAD 83 Geodetic Position*

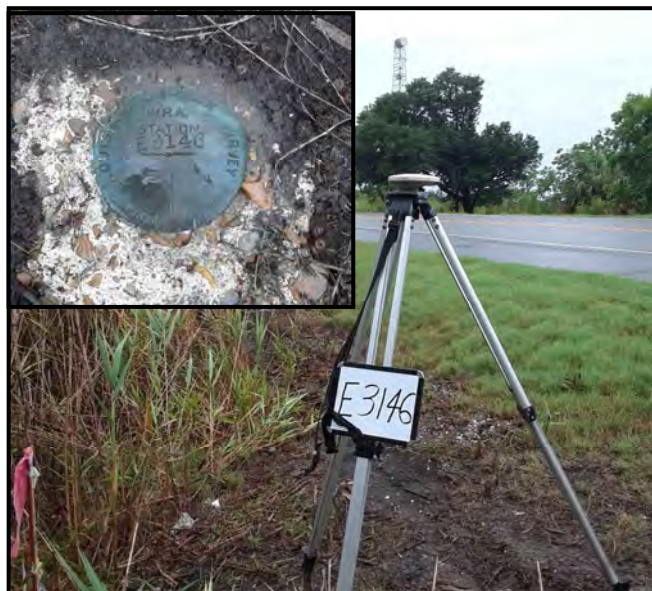
Lat. 30°04'14.05535" N
Long. 89°48'05.39135" W

Surveyed Grid Position (LSZ 1702 ft) *

N: 574,395.05
E: 3,765,350.70

Surveyed Elevation (ft) *

NAVD 88 (Geoid 12B)
Elev. = 5.15



* The information referenced above was provided by CPRA. The results of the Static GPS surveys coincided with the given information within +/-0.09 feet.



CHUSTZ
SURVEYING, LLC



USE THIS FORM IF USING FIXED HEIGHT TRIPODS TO DOCUMENT STATIC
SURVEYS ON BASE POINTS FOR ALL RTK SURVEYS

GPS LOG SHEET

Job No. **00191893** Date **6/9/2021** Operator **J. GRANGER**

Client **CPRA** Job Description

Location **St. Catherine** Proj. Mgr. **G. Spiller**

SESSION INFO

File Name 4 Characters **0330** Julian Date 3 Characters Session No. 1 Character **0**

Long Name **E3146**

Mon. Description **Brass Cap set in concrete flush with NG**

Rec. Base Type **R8-3**

Rec Serial #

Base Ant Type **R8-3**

Base Ant Ser #

Rover Ant Type

Rover Ant Ser #

Antenna Height Measurement is **TRUE VERTICAL** to the Bottom of Antenna Mount if Using Fixed Hgt Tripod

Fixed Hgt 2 Meter Tripod **6.562** Mtrs or Ft

Tripod Number

Actual Start
Time **15:24**

Actual
Stop Time **20:48**

Session Time
(Min 2:01 Hr) **5:24**

BASE STATION INFORMATION

NAD 83 or NAD 27

DATUM **NAD 83**

ZONE **LA South**

Example : LA South Zone or TX South Central Zone

Northing/Lat **574395.05**

Easting/Long. **376350.7**

Elevation **5..15**

Coordinate Origin-Where did you get your positions?

D.Rung

Note any power problems, obstructions, weather issues, etc.

ALL WHITE BOXES MUST BE FILLED IN WITH INFORMATION. A MINIMUM OBSERVATION OF 2 HOURS IS REQUIRED TO DETERMINE THE 3-D POSITION OF AN UNKNOWN POINT USING NGS-OPUS

USE BACK OF THIS SHEET TO MAKE STATION SKETCH, REFERENCE TIES & DESCRIPTION

USE THIS FORM IF USING FIXED HEIGHT TRIPODS TO DOCUMENT STATIC
SURVEYS ON BASE POINTS FOR ALL RTK SURVEYS

GPS LOG SHEET

Job No. **00191893** Date **6/11/2021** Operator **J.GRANGER**

Client **CPRA** Job Description

Location **St.Catherine** Proj. Mgr. **G.Spiller**

SESSION INFO

File Name 4 Characters **0330** Julian Date 3 Characters Session No. 1 Character **0**

Long Name **E3146**

Mon. Description **Brass Cap set in concrete flush with NG**

Rec. Base Type **R8-3**

Rec Serial #

Base Ant Type **R8-3**

Base Ant Ser #

Rover Ant Type

Rover Ant Ser #

Antenna Height Measurement is **TRUE VERTICAL** to the Bottom of Antenna Mount if Using Fixed Hgt Tripod

Fixed Hgt 2 Meter Tripod **6.562** Mtrs or Ft

Tripod Number

Actual Start
Time **7:51**

Actual
Stop Time **16:19**

Session Time
(Min 2:01 Hr) **8:28**

BASE STATION INFORMATION

NAD 83 or NAD 27

DATUM **NAD 83**

ZONE **LA South**

Example : LA South Zone or TX South Central Zone

Northing/Lat **574395.05**

Easting/Long. **376350.7**

Elevation **5..15**

Coordinate Origin-Where did you get your positions?

D.Rung

Note any power problems, obstructions, weather issues, etc.

ALL WHITE BOXES MUST BE FILLED IN WITH INFORMATION. A MINIMUM OBSERVATION OF 2 HOURS IS REQUIRED TO DETERMINE THE 3-D POSITION OF AN UNKNOWN POINT USING NGS-OPUS

USE BACK OF THIS SHEET TO MAKE STATION SKETCH, REFERENCE TIES & DESCRIPTION

USE THIS FORM IF USING FIXED HEIGHT TRIPODS TO DOCUMENT STATIC
SURVEYS ON BASE POINTS FOR ALL RTK SURVEYS

GPS LOG SHEET

Job No. **00191893** Date **6/14/2021** Operator **J. GRANGER**

Client **CPRA** Job Description

Location **St. Catherine** Proj. Mgr. **G. Spiller**

SESSION INFO

File Name 4 Characters **0330** Julian Date 3 Characters Session No. 1 Character **0**

Long Name **E3146**

Mon. Description **Brass Cap set in concrete flush with NG**

Rec. Base Type **R8-3**

Rec Serial #

Base Ant Type **R8-3**

Base Ant Ser #

Rover Ant Type

Rover Ant Ser #

Antenna Height Measurement is **TRUE VERTICAL** to the Bottom of Antenna Mount if Using Fixed Hgt Tripod

Fixed Hgt 2 Meter Tripod **6.562** Mtrs or Ft

Tripod Number

Actual Start
Time **9:46**

Actual
Stop Time **12:14**

Session Time
(Min 2:01 Hr) **2:28**

BASE STATION INFORMATION

NAD 83 or NAD 27

DATUM **NAD 83**

ZONE **LA South**

Example : LA South Zone or TX South Central Zone

Northing/Lat **574395.05**

Easting/Long. **376350.7**

Elevation **5..15**

Coordinate Origin-Where did you get your positions?

D.Rung

Note any power problems, obstructions, weather issues, etc.

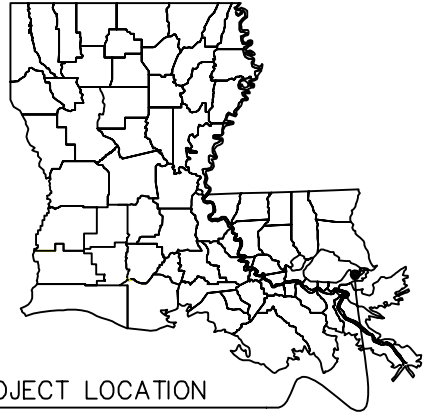
ALL WHITE BOXES MUST BE FILLED IN WITH INFORMATION. A MINIMUM OBSERVATION OF 2 HOURS IS REQUIRED TO DETERMINE THE 3-D POSITION OF AN UNKNOWN POINT USING NGS-OPUS

USE BACK OF THIS SHEET TO MAKE STATION SKETCH, REFERENCE TIES & DESCRIPTION

Appendix C

Magnetometer Table

VICINITY MAP
NOT TO SCALE

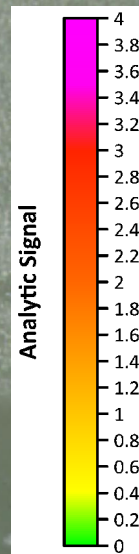


PROJECT LOCATION
ORLEANS PARISH



LAKE PONTCHARTRAIN

CHEF MENTEUR PASS



COASTAL PROTECTION & RESTORATION AUTHORITY

ST. CATHERINE ISLAND MARSH CREATION
AND SHORELINE PROTECTION

MAGNETIC INTENSITY
ORLEANS PARISH, LOUISIANA

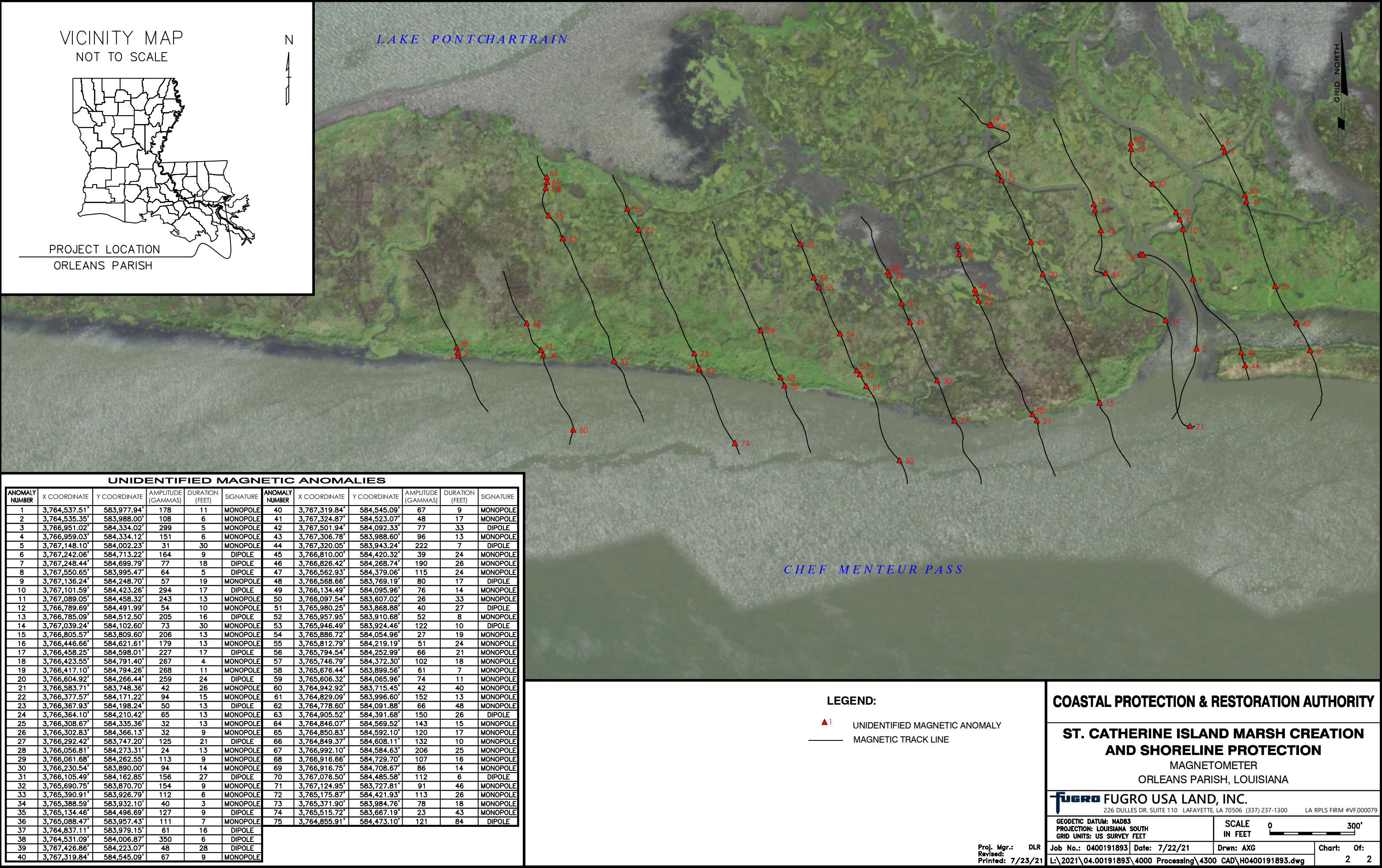
fugro FUGRO USA LAND, INC.
226 DULLES DR., SUITE 110 LAFAYETTE, LA 70506 (337) 237-1300 LA RPLS FIRM #VF.000079

GEODETIC DATUM: NAD83
PROJECTION: LOUISIANA SOUTH
GRID UNITS: US SURVEY FEET

SCALE
IN FEET 0 300'

Proj. Mgr.: DLR	Job No.: 0400191893	Date: 7/22/21	Drwn: AXG	Chart: Of:
Revised:	L:\2021\04.00191893\4000 Processing\4300 CAD\H0400191893.dwg			1 2
Printed: 7/23/21				

PRELIMINARY
THIS DOCUMENT SHALL NOT BE RECORDED
FOR ANY PURPOSE AND SHALL NOT BE USED
OR VIEWED OR RELIED UPON AS A FINAL
SURVEY DOCUMENT.



Appendix D

Field Notes

Duod depart Lafayette

0845 @ E3146

0923 start static

1010 Begin Surveying

1447 end static

Scale: 1 square = _____

10-9-2021

J. Granger

G. Spiller

C. Duval

CPR A

St. Catherine Island

04.00191893

Orleans Parish

NAD 83

LAS 1702

Geoid 1213

PC E3146

N 574395.050

E. 3765350.400

Elev. 5.150

Rite in the Rain

Scale: 1 square = _____

33003 Natural Ground HR = 16.5%
33004 - Dotted

33000 WATER Surface @ RMS0002-SG-H01
Scale: 1 square =

Rite in the Rain.

0600 depart hotel

0651 start static

0730 start survey

1019 end static

10-11-2021

J. Granger

A. Spiller

C. Duval

CPRA

St. Catherine Island

04.00191893

Orleans Parish

NAD 83

LAS 1702

Geoid 12B

X @ E3146

N. 574395.050

E. 37105350.700

Elev 5.150

Scale: 1 square =

Scale: 1 square =

Rite in the Rain

331239 NG

↑ ↑

T

33498 NG

HR=10.562

33489 NG

↑ ↑

T

33410 NG

HR=10.562

~~33408~~ - deleted

33408 NG

↑ ↑

T

33340 NG

HR=5.562

33339 NG

↑ ↑

T

33332 NG

HR=14.562

33331 NG

T

33330 NG

HR=10.562

~~33329~~ - deleted

33328 NG

↑ ↑

T

33288 NG

~~33287~~ deleted

~~33286~~ deleted

33285 NG

↑ ↑

33215 NG

HR=1.562

33214 WS @ CRSMOT02 - NG - 1101

Scale: 1 square = _____

Scale

0.001

34010

↑

34007

NG

~~34006~~

- Deleted

34005

~~34004~~

NG

↑

↑

33918

NG

~~33917~~

~~33916~~ Deleted

↑

↑

33935

NG

33934

NG

↑

↑

33905

NG

33904

NG

↑

↑

33721

NG

33720

NG

↑

↑

33711

NG

33710

NG

↑

↑

33645

NG

~~33644~~

Deleted

33643

NG

↑

33640

NG

HR=10.562

Scale: 1 square =

T

↑

HR=6.562

T

↑

HR=6.562

T

↑

HR=14.562

T

↑

HR=10.562

T

↑

HR=10.562

T

↑

HR=10.562

T

↑

HR=10.562

T

↑

HR=10.562

T

↑

Scale: 1 square =

10.562

34384	NG	
↑	↑	↑
34376	NG	
34375	NG	HR=14.562
↑	↑	↑
34199	NG	
34198	Deleted	
34197	NG	
↑	↑	
34148	NG	
34147	Deleted	
34146	Deleted	
34145	NG	
↑	↑	
34023	NG	HR=6.562
34022	NG	
34021	NG	
34020	NG	HR=6.562
34019	NG	
34018	NG	
34017	NG	
34016	Deleted	
34015	NG	HR=14.562
↑	↑	↑
34011	NG	HR=14.562

Scale: 1 square = _____

Scale: 1 square = _____

Rite in the Rain

34539 WS

34538 NG

↑

↑

34510 NG

34515 NG

↑

34385 NG

HR=10.562

HR=16.562

—

1

HR=14.562

T

Scale: 1 square =

Scale: 1 square =

0600 depart Lafayette
 0930 @ jobsite
 0940 start static
 1214 end static

J. Branger
 C. Duval

12-14-2021

CPRA
 St. Catherine Island
 04.00191593
 Orleans Parish

NAD 83
 LAS 1702
 Geoid 1213

T@E3146
 N. 574395.050
 E. 3745350.700
 Elev. 5.150

Rite in the Rain.

34,547 WS
 34,546 NG
 ↑ ↑
 34,541 NG

T
 HR = 6.562

51,224 NG
 ↑ ↑
 50,000 NG

T
 HR = 6.000

34,548 Water Surface

HR = 6.562

Appendix E

RTK Table

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33000	585261.585	3768347.743	1.144	WATER SURFACE
33003	585480.202	3768465.364	0.594	NATURAL GROUND
33004	585470.151	3768458.222	-1.493	NATURAL GROUND
33005	585434.508	3768429.014	-1.293	NATURAL GROUND
33006	585418.978	3768413.812	0.959	NATURAL GROUND
33007	585410.298	3768396.369	0.804	NATURAL GROUND
33008	585408.961	3768382.534	0.159	NATURAL GROUND
33009	585420.259	3768341.692	-0.413	NATURAL GROUND
33010	585409.041	3768282.63	-0.716	NATURAL GROUND
33011	585393.532	3768271.159	0.753	NATURAL GROUND
33012	585374.084	3768264.618	-0.522	NATURAL GROUND
33013	585360.09	3768246.054	1.083	NATURAL GROUND
33014	585362.76	3768221.633	-0.484	NATURAL GROUND
33015	585367.33	3768197.503	0.292	NATURAL GROUND
33016	585364.378	3768179.399	0.827	NATURAL GROUND
33017	585359.054	3768158.467	1.05	NATURAL GROUND
33018	585354.269	3768140.768	1.116	NATURAL GROUND
33019	585339.504	3768128.098	0.713	NATURAL GROUND
33020	585322.973	3768112.265	0.705	NATURAL GROUND
33021	585313.204	3768093.597	0.803	NATURAL GROUND
33022	585306.354	3768078.016	0.827	NATURAL GROUND
33023	585301.206	3768057.644	0.786	NATURAL GROUND
33024	585295.15	3768038.815	0.758	NATURAL GROUND
33025	585289.153	3768020.562	0.593	NATURAL GROUND
33026	585284.033	3767996.248	0.793	NATURAL GROUND
33027	585279.39	3767982.369	-0.191	NATURAL GROUND
33028	585269.281	3767964.847	-0.395	NATURAL GROUND
33029	585247.742	3767933.872	-0.621	NATURAL GROUND
33030	585229.248	3767928.173	-0.724	NATURAL GROUND
33031	585215.6	3767911.971	-0.914	NATURAL GROUND
33032	585208.536	3767891.652	-0.759	NATURAL GROUND
33033	585203.55	3767874.317	-0.988	NATURAL GROUND
33034	585196.83	3767858.936	-0.68	NATURAL GROUND
33035	585196.484	3767841.747	-0.662	NATURAL GROUND
33036	585192.972	3767818.323	-0.491	NATURAL GROUND
33037	585192.181	3767806.457	0.326	NATURAL GROUND
33038	585188.717	3767786.325	0.559	NATURAL GROUND
33039	585182.253	3767767.783	-0.128	NATURAL GROUND
33040	585172.353	3767750.384	-0.03	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33041	585161.171	3767732.202	-0.903	NATURAL GROUND
33042	585152.661	3767714.493	-0.052	NATURAL GROUND
33043	585142.859	3767696.125	-0.913	NATURAL GROUND
33044	585132.544	3767676.215	-1.045	NATURAL GROUND
33045	585120.44	3767657.186	-1.149	NATURAL GROUND
33046	585112.335	3767639.106	-0.759	NATURAL GROUND
33047	585101.074	3767616.394	-0.958	NATURAL GROUND
33048	585086.141	3767580.793	1.846	NATURAL GROUND
33049	585081.623	3767570.149	-1.637	NATURAL GROUND
33050	585064.939	3767537.486	1.931	NATURAL GROUND
33051	585059.383	3767526.688	-1.457	NATURAL GROUND
33052	585041.553	3767487.939	-1.157	NATURAL GROUND
33053	585032.204	3767468.51	-1.395	NATURAL GROUND
33054	585018.074	3767442.514	-1.44	NATURAL GROUND
33055	585006.041	3767417.021	-1.333	NATURAL GROUND
33056	584999.68	3767395.287	-0.786	NATURAL GROUND
33057	584985.515	3767382.311	0.766	NATURAL GROUND
33058	584979.391	3767361.222	0.612	NATURAL GROUND
33059	584974.553	3767343.676	0.834	NATURAL GROUND
33060	585092.496	3766943.809	-0.327	NATURAL GROUND
33061	585101.88	3766961.651	0.272	NATURAL GROUND
33062	585106.69	3766975.985	-0.32	NATURAL GROUND
33063	585110.264	3766997.5	-0.521	NATURAL GROUND
33064	585112.931	3767021.741	-0.735	NATURAL GROUND
33065	585116.899	3767046.813	-0.611	NATURAL GROUND
33066	585123.362	3767065.137	0.687	NATURAL GROUND
33067	585135.096	3767081.741	0.913	NATURAL GROUND
33068	585142.133	3767097.115	1.137	NATURAL GROUND
33069	585150.129	3767110.371	0.844	NATURAL GROUND
33070	585158.763	3767125.701	-0.686	NATURAL GROUND
33071	585170.244	3767145.055	-0.93	NATURAL GROUND
33072	585183.262	3767167.246	-0.876	NATURAL GROUND
33073	585194.917	3767191.991	-0.069	NATURAL GROUND
33074	585203.766	3767215.091	-1.06	NATURAL GROUND
33075	585213.162	3767238.174	-1.249	NATURAL GROUND
33076	585224.468	3767263.616	-1.903	NATURAL GROUND
33077	585233.705	3767283.039	-1.885	NATURAL GROUND
33078	585244.806	3767302.591	-1.65	NATURAL GROUND
33079	585257.43	3767329.526	-1.759	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33080	585270.357	3767360.326	-1.659	NATURAL GROUND
33081	585283.787	3767391.847	-2.652	NATURAL GROUND
33082	585312.82	3767480.829	-2.167	NATURAL GROUND
33083	585325.14	3767502.466	-1.769	NATURAL GROUND
33084	585351.501	3767556.435	-1.744	NATURAL GROUND
33085	585360.671	3767587.989	-1.451	NATURAL GROUND
33086	585370.523	3767605.588	-1.388	NATURAL GROUND
33087	585380.938	3767628.735	-1.692	NATURAL GROUND
33088	585396.743	3767653.967	-1.348	NATURAL GROUND
33089	585412.933	3767671.552	-1.073	NATURAL GROUND
33090	585426.895	3767695.007	-1.759	NATURAL GROUND
33091	585430.916	3767721.105	-1.583	NATURAL GROUND
33092	585427.952	3767744.912	-1.404	NATURAL GROUND
33093	585425.833	3767766.012	-1.152	NATURAL GROUND
33094	585431.254	3767789.069	-1.331	NATURAL GROUND
33095	585447.828	3767810.673	-0.617	NATURAL GROUND
33096	585461.07	3767829.79	-1.05	NATURAL GROUND
33097	585470.932	3767850.476	-1.138	NATURAL GROUND
33098	585479.688	3767869.798	0.339	NATURAL GROUND
33099	585490.73	3767891.169	-0.88	NATURAL GROUND
33100	585500.647	3767910.145	-0.403	NATURAL GROUND
33101	585508.181	3767929.51	-0.4	NATURAL GROUND
33102	585520.303	3767948.719	-0.106	NATURAL GROUND
33103	585531.49	3767967.534	-0.44	NATURAL GROUND
33104	585545.768	3767990.216	0.02	NATURAL GROUND
33105	585558.16	3768007.446	-0.402	NATURAL GROUND
33106	585568.11	3768028.71	0.454	NATURAL GROUND
33107	585575.068	3768047.913	0.417	NATURAL GROUND
33108	585582.782	3768068.595	-0.004	NATURAL GROUND
33109	585587.756	3768091.736	-0.169	NATURAL GROUND
33110	585593.749	3768112.244	0.543	NATURAL GROUND
33111	585601.966	3768130.969	-0.444	NATURAL GROUND
33112	585615.511	3768155.073	-2.318	NATURAL GROUND
33113	585621.543	3768169.088	0.768	NATURAL GROUND
33114	585630.594	3768185.317	0.673	NATURAL GROUND
33115	585640.77	3768200.914	0.607	NATURAL GROUND
33116	585650.616	3768216.799	0.743	NATURAL GROUND
33117	585662.213	3768233.521	0.9	NATURAL GROUND
33118	585669.46	3768248.045	-0.039	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33119	585672.968	3768259.838	-3.137	NATURAL GROUND
33120	585680.449	3768278.444	-3.773	NATURAL GROUND
33121	585685.834	3768298.893	-1.366	NATURAL GROUND
33122	585688.528	3768317.845	-0.378	NATURAL GROUND
33123	585692.126	3768335.752	0.533	NATURAL GROUND
33124	585698.218	3768352.932	0.544	NATURAL GROUND
33125	585708.091	3768369.478	0.603	NATURAL GROUND
33126	585717.314	3768384.748	0.687	NATURAL GROUND
33127	585729.455	3768402.928	0.566	NATURAL GROUND
33128	585740.36	3768420.575	0.489	NATURAL GROUND
33129	585753.938	3768436.758	0.059	NATURAL GROUND
33130	585762.483	3768451.227	-0.828	NATURAL GROUND
33131	585777.339	3768472.795	-1.024	NATURAL GROUND
33132	585790.048	3768515.808	0.089	NATURAL GROUND
33133	585861.774	3768126.332	-0.091	NATURAL GROUND
33134	585845.619	3768125.745	0.496	NATURAL GROUND
33135	585826.619	3768124.489	0.938	NATURAL GROUND
33136	585817.331	3768113.258	0.606	NATURAL GROUND
33137	585814.137	3768089.611	0.566	NATURAL GROUND
33138	585822.052	3768058.445	0.398	NATURAL GROUND
33139	585821.684	3768031.447	-0.609	NATURAL GROUND
33140	585818.162	3768003.163	0.493	NATURAL GROUND
33141	585816.241	3767978.612	-0.324	NATURAL GROUND
33142	585811.415	3767951.778	-0.126	NATURAL GROUND
33143	585803.148	3767983.585	-0.711	NATURAL GROUND
33144	585802.66	3767964.356	-0.452	NATURAL GROUND
33145	585802.23	3767941.986	-0.475	NATURAL GROUND
33146	585801.46	3767921.362	0.431	NATURAL GROUND
33147	585801.833	3767907.279	0.955	NATURAL GROUND
33148	585807.484	3767888.773	0.709	NATURAL GROUND
33149	585810.878	3767865.375	-0.067	NATURAL GROUND
33150	585793.245	3767845.027	-0.625	NATURAL GROUND
33151	585770.44	3767834.636	-0.635	NATURAL GROUND
33152	585753.048	3767821.242	-1.05	NATURAL GROUND
33153	585734.963	3767803.137	-0.651	NATURAL GROUND
33154	585716.55	3767778.969	0.82	NATURAL GROUND
33155	585703.74	3767753.405	-0.997	NATURAL GROUND
33156	585734.507	3767744.099	-0.898	NATURAL GROUND
33157	585727.043	3767738.299	-0.74	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33158	585708.414	3767720.483	-1.106	NATURAL GROUND
33159	585692.029	3767704.878	-1.286	NATURAL GROUND
33160	585671.12	3767686.468	-1.131	NATURAL GROUND
33161	585656.026	3767666.695	-0.794	NATURAL GROUND
33162	585642.741	3767639.233	-1.077	NATURAL GROUND
33163	585636.121	3767608.023	-1.714	NATURAL GROUND
33164	585632.887	3767575.112	-1.646	NATURAL GROUND
33165	585625.631	3767537.154	-1.749	NATURAL GROUND
33166	585620.937	3767498.42	-2.478	NATURAL GROUND
33167	585607.847	3767425.128	-2.433	NATURAL GROUND
33168	585601.373	3767413.615	-2.437	NATURAL GROUND
33169	585588.385	3767400.548	-2.699	NATURAL GROUND
33170	585574.014	3767415.731	-2.464	NATURAL GROUND
33171	585556.873	3767407.511	-2.45	NATURAL GROUND
33172	585541.044	3767396.882	-2.478	NATURAL GROUND
33173	585524.843	3767377.995	-2.556	NATURAL GROUND
33174	585509.775	3767353.474	-2.463	NATURAL GROUND
33175	585497.957	3767320.512	-2.327	NATURAL GROUND
33176	585455.936	3767228.892	-2.242	NATURAL GROUND
33177	585457.973	3767223.675	-2.244	NATURAL GROUND
33178	585452.309	3767215.86	-2.152	NATURAL GROUND
33179	585442.027	3767205.936	-2.203	NATURAL GROUND
33180	585429.677	3767190.108	-2.319	NATURAL GROUND
33181	585415.511	3767171.146	-2.004	NATURAL GROUND
33182	585401.108	3767146.312	-1.378	NATURAL GROUND
33183	585381.99	3767113.934	-1.943	NATURAL GROUND
33184	585369.997	3767085.956	-1.978	NATURAL GROUND
33185	585363.076	3767050.722	-1.804	NATURAL GROUND
33186	585357.34	3767022.753	-0.836	NATURAL GROUND
33187	585350.075	3766998.287	-0.684	NATURAL GROUND
33188	585346.853	3766975.121	-1.07	NATURAL GROUND
33189	585346.845	3766945.698	-1.199	NATURAL GROUND
33190	585351.207	3766921.054	-1.272	NATURAL GROUND
33191	585355.097	3766894.454	-0.839	NATURAL GROUND
33192	585349.325	3766863.855	-0.868	NATURAL GROUND
33193	585343.84	3766835.567	-0.85	NATURAL GROUND
33194	585569.075	3766899.026	-1.001	NATURAL GROUND
33195	585557.977	3766904.453	-0.837	NATURAL GROUND
33196	585539.298	3766919.842	-0.837	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33197	585530.395	3766911.24	-0.925	NATURAL GROUND
33198	585518.363	3766894.289	-1.007	NATURAL GROUND
33199	585475.808	3766910.559	-1.195	NATURAL GROUND
33200	585460.627	3766904.407	-1.065	NATURAL GROUND
33201	585453.012	3766888.352	-1.225	NATURAL GROUND
33202	585446.049	3766882.649	-1.116	NATURAL GROUND
33203	585435.995	3766878.436	-1.185	NATURAL GROUND
33204	585413.65	3766880.228	-0.777	NATURAL GROUND
33205	585397.048	3766889.857	-0.874	NATURAL GROUND
33206	585386.255	3766898.202	-0.795	NATURAL GROUND
33207	585368.778	3766917.24	-0.857	NATURAL GROUND
33208	585351.184	3766939.486	-1.384	NATURAL GROUND
33209	585333.451	3766953.894	-0.845	NATURAL GROUND
33210	585315.463	3766962.993	-0.213	NATURAL GROUND
33211	585296.926	3766971.456	-0.034	NATURAL GROUND
33212	585282.548	3766976.478	-2.47	NATURAL GROUND
33213	585268.626	3766980.595	0.714	NATURAL GROUND
33214	585262.955	3768347.839	0.508	WATER SURFACE
33215	586808.173	3769579.513	1.334	NATURAL GROUND
33216	586786.373	3769584.026	1.136	NATURAL GROUND
33217	586763.113	3769590.856	0.977	NATURAL GROUND
33218	586737.184	3769598.648	1.314	NATURAL GROUND
33219	586710.17	3769613.774	0.886	NATURAL GROUND
33220	586693.789	3769627.416	0.276	NATURAL GROUND
33221	586672.076	3769638.227	0.928	NATURAL GROUND
33222	586651.442	3769649.945	0.661	NATURAL GROUND
33223	586629.698	3769664.303	0.756	NATURAL GROUND
33224	586613.639	3769673.76	0.062	NATURAL GROUND
33225	586593.886	3769679.195	-1.199	NATURAL GROUND
33226	586573.841	3769684.856	-1.064	NATURAL GROUND
33227	586551.033	3769693.916	-1.049	NATURAL GROUND
33228	586531.518	3769703.531	-1.072	NATURAL GROUND
33229	586493.335	3769721.734	-0.91	NATURAL GROUND
33230	586472.579	3769727.892	-1.7	NATURAL GROUND
33231	586452.958	3769734.292	-1.555	NATURAL GROUND
33232	586430.581	3769752.639	0.751	NATURAL GROUND
33233	586415.402	3769767.166	-0.709	NATURAL GROUND
33234	586378.925	3769771.503	0.784	NATURAL GROUND
33235	586360.731	3769766.418	-2.785	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33236	586342.927	3769782.812	-2.642	NATURAL GROUND
33237	586324.61	3769800.376	-2.249	NATURAL GROUND
33238	586286.084	3769818.013	-3.076	NATURAL GROUND
33239	586266.604	3769829.95	-1.826	NATURAL GROUND
33240	586241.352	3769833.972	0.75	NATURAL GROUND
33241	586219.068	3769840.592	0.333	NATURAL GROUND
33242	586207.768	3769844.291	-0.526	NATURAL GROUND
33243	586181.007	3769863.55	-1.225	NATURAL GROUND
33244	586160.285	3769874.657	-1.323	NATURAL GROUND
33245	586144.417	3769879.801	-1.366	NATURAL GROUND
33246	586129.083	3769885.615	-1.51	NATURAL GROUND
33247	586110.816	3769892.679	-1.442	NATURAL GROUND
33248	586091.87	3769900.47	-1.224	NATURAL GROUND
33249	586071.994	3769907.861	-1.115	NATURAL GROUND
33250	586076.009	3769910.821	-0.986	NATURAL GROUND
33251	586055.817	3769912.303	-1.124	NATURAL GROUND
33252	586035.014	3769915.314	-1.097	NATURAL GROUND
33253	586016.323	3769925.514	-1.184	NATURAL GROUND
33254	585998.279	3769933.338	-1.129	NATURAL GROUND
33255	585983.48	3769944.006	-0.994	NATURAL GROUND
33256	585965.087	3769957.558	-0.603	NATURAL GROUND
33257	585951.214	3769965.941	0.511	NATURAL GROUND
33258	585931.077	3769970.785	0.439	NATURAL GROUND
33259	585908.5	3769975.442	0.715	NATURAL GROUND
33260	585888.647	3769987.805	0.654	NATURAL GROUND
33261	585871.948	3770000.416	0.811	NATURAL GROUND
33262	585852.651	3770005.937	0.541	NATURAL GROUND
33263	585829.839	3770011.042	-0.013	NATURAL GROUND
33264	585812.291	3770018.18	-0.052	NATURAL GROUND
33265	585799.837	3770030.473	-0.791	NATURAL GROUND
33266	585784.339	3770041.126	-3.433	NATURAL GROUND
33267	585762.547	3770045.818	-2.935	NATURAL GROUND
33268	585719.423	3770058.584	-1.851	NATURAL GROUND
33269	585704.616	3770069.106	-2.978	NATURAL GROUND
33270	585687.765	3770083.845	-1.293	NATURAL GROUND
33271	585668.56	3770085.869	0.916	NATURAL GROUND
33272	585649.584	3770093.625	0.077	NATURAL GROUND
33273	585626.94	3770107.884	0.427	NATURAL GROUND
33274	585630.935	3770108.963	0.314	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33275	585753.463	3769922.249	0.256	NATURAL GROUND
33276	585763.59	3769931.882	0.466	NATURAL GROUND
33277	585770.544	3769938.171	-1.251	NATURAL GROUND
33278	585768.029	3769946.264	-1.542	NATURAL GROUND
33279	585756.426	3769967.104	-1.258	NATURAL GROUND
33280	585759.3	3769981.233	-0.066	NATURAL GROUND
33281	585784.472	3769988.914	0.882	NATURAL GROUND
33282	585792.167	3770004.846	0.602	NATURAL GROUND
33283	585794.52	3770022.088	0.52	NATURAL GROUND
33284	585795.917	3770031.67	-1.019	NATURAL GROUND
33285	585800.606	3770049.126	-4.08	NATURAL GROUND
33288	585829.058	3770113.777	-1.803	NATURAL GROUND
33289	585812.741	3770079.145	-2.154	NATURAL GROUND
33290	585841.306	3770131.105	0.339	NATURAL GROUND
33291	585849.014	3770143.375	0.364	NATURAL GROUND
33292	585856.833	3770162.783	-2.916	NATURAL GROUND
33293	585862.393	3770180.977	0.299	NATURAL GROUND
33294	585866.372	3770193.39	0.296	NATURAL GROUND
33295	585877.668	3770214.598	0.729	NATURAL GROUND
33296	585885.926	3770229.215	0.689	NATURAL GROUND
33297	585893.908	3770244.297	-0.411	NATURAL GROUND
33298	586135.409	3770175.699	1.343	NATURAL GROUND
33299	586120.941	3770159.806	1.289	NATURAL GROUND
33300	586116.167	3770143.664	0.764	NATURAL GROUND
33301	586106.136	3770118.17	1.01	NATURAL GROUND
33302	586102.295	3770106.734	-0.569	NATURAL GROUND
33303	586092.892	3770083.222	-1.84	NATURAL GROUND
33304	586077.573	3770043.758	-1.738	NATURAL GROUND
33305	586069.428	3770021.392	-1.359	NATURAL GROUND
33306	586058.669	3770003.309	-1.395	NATURAL GROUND
33307	586050.437	3769982.866	-1.493	NATURAL GROUND
33308	586040.602	3769960.277	-1.355	NATURAL GROUND
33309	586029.249	3769938.481	-1.301	NATURAL GROUND
33310	586019.931	3769918.476	-1.101	NATURAL GROUND
33311	586011.839	3769898.207	-0.921	NATURAL GROUND
33312	586002.363	3769878.001	-0.761	NATURAL GROUND
33313	585998.102	3769868.071	0.362	NATURAL GROUND
33314	585991.846	3769852.992	-0.305	NATURAL GROUND
33315	585984.673	3769834.508	0.168	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33316	585975.104	3769814.047	-0.074	NATURAL GROUND
33317	585966.374	3769796.164	-0.626	NATURAL GROUND
33318	585956.357	3769775.853	-1.1	NATURAL GROUND
33319	585950.978	3769765.421	0.641	NATURAL GROUND
33320	585941.825	3769743.473	0.394	NATURAL GROUND
33321	585934.715	3769723.818	0.668	NATURAL GROUND
33322	585927.206	3769705.445	0.562	NATURAL GROUND
33323	585918.483	3769690.07	-4.474	NATURAL GROUND
33324	585909.69	3769670.037	-2.101	NATURAL GROUND
33325	585906.282	3769659.932	0.29	NATURAL GROUND
33326	585899.316	3769643.766	0.71	NATURAL GROUND
33327	585890.63	3769629.09	-0.414	NATURAL GROUND
33328	585883.903	3769603.054	-2.513	NATURAL GROUND
33330	585880.782	3769614.395	-2.954	NATURAL GROUND
33331	585870.335	3769597.747	-8.237	NATURAL GROUND
33332	585864.286	3769569.212	-10.653	NATURAL GROUND
33333	585852.25	3769548.234	-11.211	NATURAL GROUND
33334	585835.727	3769526.769	-10.821	NATURAL GROUND
33335	585823.143	3769493.459	-9.914	NATURAL GROUND
33336	585805.034	3769462.475	-7.892	NATURAL GROUND
33337	585791.156	3769436.898	-6.313	NATURAL GROUND
33338	585769.535	3769422.069	-2.828	NATURAL GROUND
33339	585747.724	3769393.54	-1.639	NATURAL GROUND
33340	586012.933	3769292.807	-1.405	NATURAL GROUND
33341	586017.921	3769322.298	-1.508	NATURAL GROUND
33342	586026.662	3769350.194	-1.469	NATURAL GROUND
33343	586043.944	3769376.817	-1.497	NATURAL GROUND
33344	586056.247	3769399.758	-1.405	NATURAL GROUND
33345	586069.849	3769420.916	-1.253	NATURAL GROUND
33346	586084.391	3769443.609	-1.37	NATURAL GROUND
33347	586098.404	3769465.451	-3.15	NATURAL GROUND
33348	586112.622	3769501.749	-1.524	NATURAL GROUND
33349	586119.124	3769523.428	-0.417	NATURAL GROUND
33350	586125.626	3769540.548	0.489	NATURAL GROUND
33351	586128.655	3769549.166	-0.647	NATURAL GROUND
33352	586135.874	3769562.953	0.798	NATURAL GROUND
33353	586143.491	3769578.793	0.196	NATURAL GROUND
33354	586152.933	3769595.075	0.344	NATURAL GROUND
33355	586157.54	3769608.75	-0.244	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33356	586165.513	3769628.94	0.407	NATURAL GROUND
33357	586173.125	3769644.495	-0.651	NATURAL GROUND
33358	586182.521	3769659.973	-0.274	NATURAL GROUND
33359	586189.329	3769675.791	0.385	NATURAL GROUND
33360	586194.134	3769686.133	-1.147	NATURAL GROUND
33361	586201.05	3769704.383	-1.35	NATURAL GROUND
33362	586207.55	3769721.063	-0.887	NATURAL GROUND
33363	586213.855	3769734.794	0.296	NATURAL GROUND
33364	586219.512	3769750.118	0.4	NATURAL GROUND
33365	586224.875	3769766.733	0.354	NATURAL GROUND
33366	586231.19	3769788.668	0.235	NATURAL GROUND
33367	586238.94	3769803.984	0.654	NATURAL GROUND
33368	586250.779	3769817.436	0.987	NATURAL GROUND
33369	586274.515	3769857.961	-2.014	NATURAL GROUND
33370	586273.242	3769868.184	0.395	NATURAL GROUND
33371	586271.72	3769886.801	0.953	NATURAL GROUND
33372	586271.327	3769903.359	0.729	NATURAL GROUND
33373	586273.924	3769913.867	-1.938	NATURAL GROUND
33374	586281.556	3769927.849	-0.333	NATURAL GROUND
33375	586299.272	3769938.13	0.882	NATURAL GROUND
33376	586308.326	3769949.352	0.042	NATURAL GROUND
33377	586312.617	3769964.852	-1.086	NATURAL GROUND
33378	586320.352	3769983.606	0.145	NATURAL GROUND
33379	586329.905	3769999.139	-0.46	NATURAL GROUND
33380	586341.364	3770017.265	0.357	NATURAL GROUND
33381	586345.513	3770026.011	-2.198	NATURAL GROUND
33382	586353.051	3770041.433	-2.217	NATURAL GROUND
33383	586357.614	3770050.806	0.277	NATURAL GROUND
33384	586364.09	3770073.621	0.857	NATURAL GROUND
33385	586370.945	3770096.211	1.169	NATURAL GROUND
33386	586378.595	3770118.511	0.904	NATURAL GROUND
33387	586186.117	3768550.295	-1.396	NATURAL GROUND
33388	586189.847	3768522.658	-0.95	NATURAL GROUND
33389	586168.704	3768504.635	-0.933	NATURAL GROUND
33390	586183.03	3768424.53	-1.378	NATURAL GROUND
33391	586168.838	3768410.807	-1.868	NATURAL GROUND
33392	586153.604	3768396.122	-1.572	NATURAL GROUND
33393	586169.171	3768376.005	-2.013	NATURAL GROUND
33394	586149.263	3768373.824	-1.83	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33395	586133.543	3768358.863	-1.984	NATURAL GROUND
33396	586124.159	3768337.976	-1.728	NATURAL GROUND
33397	586115.296	3768313.281	-2.113	NATURAL GROUND
33398	586104.745	3768290.375	-2.024	NATURAL GROUND
33399	586098.695	3768269.713	-2.561	NATURAL GROUND
33400	586095.932	3768249.171	-2.646	NATURAL GROUND
33401	586093.589	3768222.665	-2.55	NATURAL GROUND
33402	586084.766	3768201.724	-2.542	NATURAL GROUND
33403	586073.409	3768182.443	-2.722	NATURAL GROUND
33404	586061.645	3768162.722	-2.936	NATURAL GROUND
33405	586046.506	3768139.199	-2.342	NATURAL GROUND
33406	586035.672	3768116.052	-2.319	NATURAL GROUND
33407	586022.043	3768085.938	-0.825	NATURAL GROUND
33408	586013.284	3768066.849	-1.638	NATURAL GROUND
33410	586025.833	3768055.863	-1.571	NATURAL GROUND
33411	586017.415	3768038.498	-5.879	NATURAL GROUND
33412	586005.735	3768021.882	-8.888	NATURAL GROUND
33413	585982	3767980.789	-5.002	NATURAL GROUND
33414	585975.092	3767960.671	-1.087	NATURAL GROUND
33415	585969.201	3767941.178	0.245	NATURAL GROUND
33416	585944.923	3767902.91	0.753	NATURAL GROUND
33417	585940.728	3767886.134	0.297	NATURAL GROUND
33418	585941.06	3767885.304	2.188	NATURAL GROUND
33419	585932.61	3767861.597	0.51	NATURAL GROUND
33420	585925.033	3767842.768	0.41	NATURAL GROUND
33421	585917.922	3767826.032	-0.947	NATURAL GROUND
33422	585905.234	3767800.426	-1.297	NATURAL GROUND
33423	585889.666	3767776.905	-1.55	NATURAL GROUND
33424	585877.097	3767756.065	-1.553	NATURAL GROUND
33425	586059.693	3767713.644	-3.019	NATURAL GROUND
33426	586098.563	3767729.23	-3.364	NATURAL GROUND
33427	586124.024	3767757.34	-2.879	NATURAL GROUND
33428	586125.412	3767795.299	-3.275	NATURAL GROUND
33429	586129.961	3767837.167	-2.717	NATURAL GROUND
33430	586148.719	3767875.751	-2.773	NATURAL GROUND
33431	586169.273	3767913.812	-6.854	NATURAL GROUND
33432	586190.864	3767988.94	-3.895	NATURAL GROUND
33433	586213.435	3768036.443	-2.878	NATURAL GROUND
33434	586233.838	3768069.41	-3.044	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33435	586258.274	3768093.931	-3.273	NATURAL GROUND
33436	586266.755	3768121.288	-3.456	NATURAL GROUND
33437	586273.841	3768155.034	-3.12	NATURAL GROUND
33438	586286.504	3768191.442	-2.462	NATURAL GROUND
33439	586299.55	3768217.926	-2.563	NATURAL GROUND
33440	586314.125	3768244.944	-3.022	NATURAL GROUND
33441	586328.797	3768268.577	-2.423	NATURAL GROUND
33442	586344.817	3768300.627	-1.986	NATURAL GROUND
33443	586358.856	3768329.814	-2.515	NATURAL GROUND
33444	586370.536	3768360.522	-1.501	NATURAL GROUND
33445	586376.16	3768381.348	-0.206	NATURAL GROUND
33446	586385.52	3768396.852	2.694	NATURAL GROUND
33447	586389.353	3768397.17	-0.108	NATURAL GROUND
33448	586406.718	3768423.294	-0.953	NATURAL GROUND
33449	586361.488	3768582.565	-0.488	NATURAL GROUND
33450	586349.402	3768554.334	-0.59	NATURAL GROUND
33451	586345.038	3768541.49	-0.629	NATURAL GROUND
33452	586338.113	3768528.96	-0.751	NATURAL GROUND
33453	586332.476	3768513.789	-0.23	NATURAL GROUND
33454	586332.738	3768514.007	-0.417	NATURAL GROUND
33455	586311.846	3768481.554	-0.6	NATURAL GROUND
33456	586299.512	3768464.25	-0.675	NATURAL GROUND
33457	586286.869	3768445.739	-0.832	NATURAL GROUND
33458	586283.658	3768426.62	-0.542	NATURAL GROUND
33459	586277.174	3768404.777	-1.019	NATURAL GROUND
33460	586267.943	3768381.35	-1.484	NATURAL GROUND
33461	586258.293	3768352.158	1.453	NATURAL GROUND
33462	586244.964	3768325.055	-2.21	NATURAL GROUND
33463	586232.687	3768296.879	-2.065	NATURAL GROUND
33464	586204.564	3768229.153	-2.431	NATURAL GROUND
33465	586196.554	3768202.224	-3.061	NATURAL GROUND
33466	586164.34	3768151.78	-3.089	NATURAL GROUND
33467	586149.304	3768127.95	-3.338	NATURAL GROUND
33468	586137.538	3768104.994	-3.132	NATURAL GROUND
33469	586128.017	3768079.393	-2.628	NATURAL GROUND
33470	586118.798	3768053.079	-2.751	NATURAL GROUND
33471	586112.381	3768026.455	-1.307	NATURAL GROUND
33472	586100.454	3767999.334	-3.066	NATURAL GROUND
33473	586087.849	3767977.515	-9.181	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33474	586056.616	3767919.652	-2.867	NATURAL GROUND
33475	586045.561	3767902.216	-2.005	NATURAL GROUND
33476	586040.512	3767882.277	-0.919	NATURAL GROUND
33477	586038.278	3767855.63	-1.231	NATURAL GROUND
33478	586030.789	3767830.735	-1.849	NATURAL GROUND
33479	586014.141	3767801.87	-2.242	NATURAL GROUND
33480	585996.833	3767775.291	-2.752	NATURAL GROUND
33481	585980.851	3767747.977	-1.55	NATURAL GROUND
33482	585965.209	3767709.632	-1.877	NATURAL GROUND
33483	585957.231	3767685.268	-2.741	NATURAL GROUND
33484	585941.689	3767636.609	-2.991	NATURAL GROUND
33485	585928.61	3767613.412	-3.08	NATURAL GROUND
33486	585913.629	3767595.486	-2.76	NATURAL GROUND
33487	585904.768	3767573.626	-2.288	NATURAL GROUND
33488	585898.813	3767551.709	-1.159	NATURAL GROUND
33489	585890.772	3767524.796	-0.48	NATURAL GROUND
33490	585889.861	3767524.593	-0.544	NATURAL GROUND
33491	585887.335	3767514.203	-1.12	NATURAL GROUND
33492	585887.324	3767514.239	-0.93	NATURAL GROUND
33493	585883.252	3767495.184	-1.477	NATURAL GROUND
33494	585877.977	3767479.092	-1.928	NATURAL GROUND
33495	585870.457	3767460.539	-1.812	NATURAL GROUND
33496	585861.209	3767447.697	-2.107	NATURAL GROUND
33497	585850.501	3767432.257	-2.118	NATURAL GROUND
33498	585843.299	3767419.593	-2.367	NATURAL GROUND
33499	585836.106	3767402.595	-2.749	NATURAL GROUND
33500	585829.205	3767383.977	-3.135	NATURAL GROUND
33501	585821.968	3767366.555	-2.861	NATURAL GROUND
33502	585812.765	3767347.202	-3.145	NATURAL GROUND
33503	585802.37	3767328.601	-2.85	NATURAL GROUND
33504	585794.328	3767310.337	-3.232	NATURAL GROUND
33506	585773.999	3767264.575	-2.917	NATURAL GROUND
33507	585763.765	3767244.736	-3.386	NATURAL GROUND
33508	585742.919	3767194.8	-3.706	NATURAL GROUND
33509	585736.821	3767177.137	-2.865	NATURAL GROUND
33511	585756.166	3767196.509	-3.389	NATURAL GROUND
33512	585743.901	3767180.086	-3.038	NATURAL GROUND
33513	585733.159	3767163.149	-3.067	NATURAL GROUND
33514	585720.838	3767145.163	-3.444	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33515	585691.006	3767085.061	-2.707	NATURAL GROUND
33516	585711.162	3767112.837	-2.882	NATURAL GROUND
33517	585702.882	3767105.654	-2.96	NATURAL GROUND
33518	585694.189	3767087.217	-2.856	NATURAL GROUND
33519	585684.566	3767066.266	-2.654	NATURAL GROUND
33520	585677.669	3767051.891	-2.729	NATURAL GROUND
33521	585669.718	3767037.308	-2.58	NATURAL GROUND
33522	585660.604	3767021.319	-1.869	NATURAL GROUND
33523	585651.809	3767002.652	-1.87	NATURAL GROUND
33524	585644.34	3766985.203	-1.545	NATURAL GROUND
33525	585638.11	3766968.134	-1.765	NATURAL GROUND
33526	585633.262	3766950.751	-1.603	NATURAL GROUND
33527	585626.826	3766932.503	-1.055	NATURAL GROUND
33528	585620.39	3766915.845	-1.208	NATURAL GROUND
33529	585613.868	3766899.094	-1.253	NATURAL GROUND
33530	585605.99	3766883.968	-0.769	NATURAL GROUND
33531	585598.785	3766872.288	-0.827	NATURAL GROUND
33532	585589.156	3766859.245	-0.698	NATURAL GROUND
33533	585580.915	3766848.612	0.014	NATURAL GROUND
33534	585568.27	3766831.201	-0.528	NATURAL GROUND
33535	585568.391	3766809.791	0.364	NATURAL GROUND
33536	585562.663	3766792.829	0.32	NATURAL GROUND
33537	585824.927	3766981.657	-0.652	NATURAL GROUND
33538	585814.391	3767002.69	-1.667	NATURAL GROUND
33539	585811.151	3767014.003	-2.27	NATURAL GROUND
33540	585800.506	3767035.388	-2.387	NATURAL GROUND
33541	585778.608	3767043.966	-2.803	NATURAL GROUND
33542	585747.099	3767043.358	-2.347	NATURAL GROUND
33543	585717.087	3767042.018	-2.444	NATURAL GROUND
33544	585681.318	3767049.123	-2.738	NATURAL GROUND
33545	585656.328	3767076.325	-2.975	NATURAL GROUND
33546	585631.683	3767096.261	-2.835	NATURAL GROUND
33547	585602.64	3767112.318	-2.873	NATURAL GROUND
33548	585569.385	3767125.323	-2.604	NATURAL GROUND
33549	585535.861	3767136.685	-2.32	NATURAL GROUND
33550	585500.438	3767147.493	-2.363	NATURAL GROUND
33551	585466.776	3767160.524	-2.337	NATURAL GROUND
33552	585436.85	3767176.358	-1.966	NATURAL GROUND
33553	585414.574	3767190.031	-2.507	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33554	585384.97	3767206.148	-2.27	NATURAL GROUND
33555	585356.748	3767220.297	-2.371	NATURAL GROUND
33556	585325.282	3767231.796	-2.359	NATURAL GROUND
33557	585259.528	3767245.237	-1.901	NATURAL GROUND
33558	585220.943	3767262.635	-1.988	NATURAL GROUND
33559	585196.883	3767285.286	-1.689	NATURAL GROUND
33560	585176.561	3767298.225	-1.643	NATURAL GROUND
33561	585148.877	3767312.385	-1.3	NATURAL GROUND
33562	585119.888	3767325.496	-2.117	NATURAL GROUND
33563	585085.557	3767338.765	-2.125	NATURAL GROUND
33564	585050.473	3767354.756	-0.753	NATURAL GROUND
33565	585019.189	3767366.655	0.667	NATURAL GROUND
33566	584992.121	3767383.801	0.131	NATURAL GROUND
33567	584977.557	3767655.271	-0.31	NATURAL GROUND
33568	584983.84	3767663.185	-0.084	NATURAL GROUND
33569	584983.894	3767663.067	-0.039	NATURAL GROUND
33570	585001.852	3767654.637	-1.182	NATURAL GROUND
33571	585031.773	3767635.414	-1.429	NATURAL GROUND
33572	585056.756	3767621.468	-1.312	NATURAL GROUND
33573	585083.356	3767608.992	-1.063	NATURAL GROUND
33574	585109.416	3767601.219	-1.645	NATURAL GROUND
33575	585140.65	3767589.138	-1.547	NATURAL GROUND
33576	585232.378	3767548.451	-1.591	NATURAL GROUND
33577	585182.232	3767579.21	-1.926	NATURAL GROUND
33578	585202.971	3767567.844	-1.681	NATURAL GROUND
33579	585230.081	3767550.184	-1.467	NATURAL GROUND
33580	585300.529	3767504.195	-2.227	NATURAL GROUND
33581	585334.901	3767490.413	-2.579	NATURAL GROUND
33582	585363.527	3767481.011	-2.383	NATURAL GROUND
33583	585393.474	3767475.118	-2.744	NATURAL GROUND
33584	585425.962	3767465.804	-2.739	NATURAL GROUND
33585	585454.902	3767452.904	-3.079	NATURAL GROUND
33586	585478.301	3767439.197	-2.63	NATURAL GROUND
33587	585501.173	3767422.712	-2.697	NATURAL GROUND
33588	585527.686	3767407.126	-2.72	NATURAL GROUND
33589	585555.411	3767397.446	-2.968	NATURAL GROUND
33590	585587.298	3767388.78	-2.641	NATURAL GROUND
33591	585616.029	3767381.271	-2.64	NATURAL GROUND
33592	585647.882	3767371.172	-2.558	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33593	585674.893	3767356.594	-2.526	NATURAL GROUND
33594	585696.411	3767342.373	-2.686	NATURAL GROUND
33595	585719.961	3767327.188	-3.125	NATURAL GROUND
33596	585741.342	3767311.874	-2.714	NATURAL GROUND
33597	585764.743	3767301.039	-2.819	NATURAL GROUND
33598	585791.95	3767291.54	-2.694	NATURAL GROUND
33599	585843.322	3767275.289	-3.73	NATURAL GROUND
33600	585891.516	3767252.925	-3.296	NATURAL GROUND
33601	585865.171	3767274.332	-3.615	NATURAL GROUND
33602	585880.89	3767261.244	-3.832	NATURAL GROUND
33603	585904.429	3767245.13	-3.656	NATURAL GROUND
33604	585924.56	3767233.388	-3.497	NATURAL GROUND
33605	585947.596	3767223.176	-3.796	NATURAL GROUND
33606	585976.167	3767210.881	-4.188	NATURAL GROUND
33607	586002.627	3767202.552	-4.804	NATURAL GROUND
33608	586115.683	3767428.015	-3.733	NATURAL GROUND
33609	586092.532	3767428.31	-4.308	NATURAL GROUND
33610	586064.677	3767429.222	-4.564	NATURAL GROUND
33611	586028.347	3767448.313	-3.913	NATURAL GROUND
33612	586004.496	3767466.574	-3.658	NATURAL GROUND
33613	585975.7	3767483.457	-3.674	NATURAL GROUND
33614	585911.824	3767515.289	-1.744	NATURAL GROUND
33615	585973.373	3767489.726	-3.537	NATURAL GROUND
33616	585949.172	3767500.538	-2.094	NATURAL GROUND
33617	585916.448	3767510.329	-2.017	NATURAL GROUND
33618	585892.359	3767523.128	-0.926	NATURAL GROUND
33619	585891.345	3767524.231	-0.596	NATURAL GROUND
33620	585881.514	3767531.705	-0.62	NATURAL GROUND
33621	585862.021	3767544.779	-0.907	NATURAL GROUND
33622	585840.694	3767556.987	-1.2	NATURAL GROUND
33623	585780.115	3767573.934	-1.143	NATURAL GROUND
33624	585757.155	3767578.722	-2.232	NATURAL GROUND
33625	585738.944	3767586.673	-1.196	NATURAL GROUND
33626	585720.003	3767599.91	-1.157	NATURAL GROUND
33627	585699.184	3767614.363	-1.501	NATURAL GROUND
33628	585676.024	3767624.915	-0.96	NATURAL GROUND
33629	585654.167	3767632.883	-1.398	NATURAL GROUND
33630	585628.165	3767642.62	-1.208	NATURAL GROUND
33631	585605.534	3767653.55	-1.179	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33632	585583.241	3767667.28	-1.157	NATURAL GROUND
33633	585559.846	3767679.807	-1.383	NATURAL GROUND
33634	585534.479	3767690.34	-1.65	NATURAL GROUND
33635	585507.958	3767702.619	-1.549	NATURAL GROUND
33636	585483.783	3767709.202	-1.817	NATURAL GROUND
33637	585453.456	3767719.698	-1.784	NATURAL GROUND
33638	585425.66	3767729.872	-1.715	NATURAL GROUND
33639	585402.345	3767743.017	-0.67	NATURAL GROUND
33640	585861.6	3767816.984	-1.175	NATURAL GROUND
33641	585876.898	3767805.423	-1.186	NATURAL GROUND
33642	585898.909	3767790.676	-1.334	NATURAL GROUND
33643	585925.972	3767780.973	-1.753	NATURAL GROUND
33645	585975.124	3767764.046	-1.948	NATURAL GROUND
33646	586003.76	3767754.894	-2.329	NATURAL GROUND
33647	586035.747	3767741.606	-2.821	NATURAL GROUND
33648	586063.929	3767729.122	-3.174	NATURAL GROUND
33649	586091.118	3767716.879	-2.77	NATURAL GROUND
33650	586116.159	3767704.717	-2.872	NATURAL GROUND
33651	586143.387	3767689.742	-3.281	NATURAL GROUND
33652	586169.468	3767674.825	-3.744	NATURAL GROUND
33653	586197.204	3767664.002	-3.274	NATURAL GROUND
33654	586225.096	3767653.522	-3.58	NATURAL GROUND
33655	586282.677	3767628.922	-4.025	NATURAL GROUND
33656	586322.341	3767909.115	-3.124	NATURAL GROUND
33657	586325.621	3767884.793	-3.511	NATURAL GROUND
33658	586324.078	3767856.784	-3.058	NATURAL GROUND
33659	586314.834	3767829.324	-2.995	NATURAL GROUND
33660	586297.619	3767801.851	-3.277	NATURAL GROUND
33661	586277.034	3767772.111	-3.477	NATURAL GROUND
33662	586260.964	3767742.877	-3.323	NATURAL GROUND
33663	586232.21	3767682.474	-4.261	NATURAL GROUND
33664	586219.881	3767656.512	-3.282	NATURAL GROUND
33665	586209.704	3767632.37	-3.607	NATURAL GROUND
33666	586199.031	3767607.305	-3.315	NATURAL GROUND
33667	586189.234	3767580.585	-3.581	NATURAL GROUND
33668	586165.255	3767528.759	-3.777	NATURAL GROUND
33669	586153.388	3767504.044	-3.463	NATURAL GROUND
33670	586143.771	3767482.331	-3.767	NATURAL GROUND
33671	586133.124	3767457.569	-3.668	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33672	586121.252	3767431.578	-3.65	NATURAL GROUND
33673	586102.745	3767376.406	-3.658	NATURAL GROUND
33674	586093.382	3767349.345	-3.882	NATURAL GROUND
33675	586066.783	3767302.521	-4.087	NATURAL GROUND
33676	586053.144	3767279.216	-4.277	NATURAL GROUND
33677	586040.826	3767257.02	-4.09	NATURAL GROUND
33678	586029.271	3767233.365	-3.902	NATURAL GROUND
33679	586021.316	3767206.178	-4.512	NATURAL GROUND
33680	586011.196	3767184.846	-4.378	NATURAL GROUND
33681	586003.364	3767162.13	-4.243	NATURAL GROUND
33682	585991.52	3767136.885	-3.477	NATURAL GROUND
33683	585979.005	3767111.171	-3.034	NATURAL GROUND
33684	585968.773	3767084.482	-2.816	NATURAL GROUND
33685	585954.979	3767056.746	-2.607	NATURAL GROUND
33686	585944.004	3767029.915	-2.41	NATURAL GROUND
33687	585933.193	3767005.06	-1.549	NATURAL GROUND
33688	585924.307	3766982.364	-1.21	NATURAL GROUND
33689	585916.586	3766956.9	-0.387	NATURAL GROUND
33690	585903.941	3766929.339	-0.747	NATURAL GROUND
33691	586049.647	3766992.408	-2.224	NATURAL GROUND
33692	586046.997	3766968.842	-2.421	NATURAL GROUND
33693	586038.587	3766939.112	-1.716	NATURAL GROUND
33694	586032.666	3766911.287	-1.41	NATURAL GROUND
33695	586021.488	3766876.382	-2.246	NATURAL GROUND
33696	586008.904	3766849.803	-1.7	NATURAL GROUND
33697	585977.051	3766786.747	-1.263	NATURAL GROUND
33698	585966.779	3766762.512	-1.948	NATURAL GROUND
33699	585957.415	3766741.646	-1.412	NATURAL GROUND
33700	585948.642	3766714.463	-1.993	NATURAL GROUND
33701	585929.787	3766673.306	-2.216	NATURAL GROUND
33702	585909.144	3766632.713	-1.806	NATURAL GROUND
33703	585894.862	3766593.638	-2.539	NATURAL GROUND
33704	585887.078	3766571.682	-1.611	NATURAL GROUND
33705	585879.696	3766548.503	-1.904	NATURAL GROUND
33706	585871.728	3766525.257	-2.594	NATURAL GROUND
33707	585861.708	3766501.237	-2.738	NATURAL GROUND
33708	585850.97	3766477.794	-1.979	NATURAL GROUND
33709	585844.395	3766462.706	0.231	NATURAL GROUND
33710	585838.418	3766436.917	0.422	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33711	585675.649	3766338.155	0.323	NATURAL GROUND
33712	585678.055	3766318.29	-1.941	NATURAL GROUND
33713	585673.473	3766280.385	0.36	NATURAL GROUND
33714	585669.679	3766269.936	-1.272	NATURAL GROUND
33715	585666.512	3766252.153	-1.018	NATURAL GROUND
33716	585661.937	3766239.422	-1.867	NATURAL GROUND
33717	585655.859	3766227.706	0.38	NATURAL GROUND
33718	585649.994	3766215.125	-1.793	NATURAL GROUND
33719	585626.359	3766181	-2.82	NATURAL GROUND
33720	585614.005	3766162.385	-2.486	NATURAL GROUND
33721	585604.685	3766139.371	-2.764	NATURAL GROUND
33722	585592.919	3766108.704	-2.401	NATURAL GROUND
33723	585583.087	3766081.326	-2.159	NATURAL GROUND
33724	585574.469	3766057.946	-1.589	NATURAL GROUND
33725	585565.292	3766033.447	-2.528	NATURAL GROUND
33726	585475.801	3765781.496	-1.709	NATURAL GROUND
33727	585492.655	3765848.59	-2.322	NATURAL GROUND
33728	585482.227	3765829.186	-3.628	NATURAL GROUND
33730	585454.504	3765772.322	-2.496	NATURAL GROUND
33731	585440.877	3765743.573	-2.202	NATURAL GROUND
33732	585431.253	3765710.441	-3.86	NATURAL GROUND
33733	585422.533	3765650.851	-4.802	NATURAL GROUND
33734	585412.34	3765618.707	-5.662	NATURAL GROUND
33735	585384.782	3765585.05	-4.914	NATURAL GROUND
33736	585372.209	3765559.425	-4.241	NATURAL GROUND
33737	585352.737	3765522.308	-5.206	NATURAL GROUND
33738	585336.075	3765480.96	-4.775	NATURAL GROUND
33739	585323.689	3765442.205	-4.189	NATURAL GROUND
33740	585312.292	3765406.623	-4.861	NATURAL GROUND
33741	585299.949	3765371.656	-4.333	NATURAL GROUND
33742	585285.505	3765336.067	-4.314	NATURAL GROUND
33743	585266.199	3765305.145	-3.391	NATURAL GROUND
33744	585251.646	3765275.243	-3.274	NATURAL GROUND
33745	585238.222	3765239.721	-3.636	NATURAL GROUND
33746	585226.976	3765207.852	-3.709	NATURAL GROUND
33747	585215.864	3765178.23	-3.986	NATURAL GROUND
33748	585198.973	3765137.037	-4.373	NATURAL GROUND
33749	585182.371	3765105.241	-4.372	NATURAL GROUND
33750	585167.521	3765071.976	-2.912	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33751	585155.49	3765031.091	-4.942	NATURAL GROUND
33752	585143.634	3765000.711	-5.112	NATURAL GROUND
33753	585132.446	3764971.343	-5.445	NATURAL GROUND
33754	585116.772	3764938.756	-5.736	NATURAL GROUND
33755	585102.719	3764910.111	-5.063	NATURAL GROUND
33756	585089.52	3764881.681	-4.919	NATURAL GROUND
33757	585077.562	3764854.242	-4.733	NATURAL GROUND
33758	585068.476	3764826.631	-4.541	NATURAL GROUND
33759	585059.541	3764795.788	-4.841	NATURAL GROUND
33760	585050.15	3764766.634	-5.229	NATURAL GROUND
33761	585039.116	3764736.569	-5.185	NATURAL GROUND
33762	585023.447	3764707.928	-4.924	NATURAL GROUND
33763	585008.473	3764680.004	-4.781	NATURAL GROUND
33764	584998.356	3764651.126	-4.304	NATURAL GROUND
33765	584988.695	3764625.789	-3.984	NATURAL GROUND
33766	584981.033	3764600.24	-3.617	NATURAL GROUND
33767	584965.085	3764570.096	-3.773	NATURAL GROUND
33768	584953.412	3764545.33	-3.963	NATURAL GROUND
33769	584940.416	3764511.363	-3.3	NATURAL GROUND
33770	584929.734	3764479.438	-3.274	NATURAL GROUND
33771	584917.719	3764446.133	-2.179	NATURAL GROUND
33772	584891.715	3764378.399	-2.804	NATURAL GROUND
33773	584867.424	3764331.08	-1.754	NATURAL GROUND
33774	584859.165	3764310.01	-0.983	NATURAL GROUND
33775	585006.308	3764645.298	-4.213	NATURAL GROUND
33776	584973.321	3764649.779	-3.623	NATURAL GROUND
33777	584938.23	3764649.842	-2.658	NATURAL GROUND
33778	584901.055	3764663.27	-2.488	NATURAL GROUND
33779	584870.687	3764682.115	-2.734	NATURAL GROUND
33780	584836.67	3764699.561	-1.67	NATURAL GROUND
33781	584815.516	3764715.432	-0.671	NATURAL GROUND
33782	584815.628	3764716.612	0.707	NATURAL GROUND
33783	585162.37	3764831.731	-5.039	NATURAL GROUND
33784	585140.173	3764851.016	-4.757	NATURAL GROUND
33785	585108.144	3764864.02	-4.558	NATURAL GROUND
33786	585071.81	3764875.56	-4.467	NATURAL GROUND
33787	585033.713	3764891.059	-4.408	NATURAL GROUND
33788	584996.097	3764908.353	-4.08	NATURAL GROUND
33789	584956.048	3764931.285	-3.505	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33790	584912.264	3764954.916	-3.316	NATURAL GROUND
33791	584872.891	3764970.862	-3.693	NATURAL GROUND
33792	584836.806	3764984.044	-3.319	NATURAL GROUND
33793	584799.303	3764998.561	-2.632	NATURAL GROUND
33794	584766.789	3765015.481	-2.45	NATURAL GROUND
33795	584733.097	3765029.786	-2.068	NATURAL GROUND
33796	584701.004	3765045.804	-2.218	NATURAL GROUND
33797	584667.524	3765065.112	-1.866	NATURAL GROUND
33798	584636.603	3765082.55	-2.113	NATURAL GROUND
33799	584608.338	3765087.334	-1.323	NATURAL GROUND
33800	585272.567	3765097.794	-4.787	NATURAL GROUND
33801	585247.784	3765098.612	-4.681	NATURAL GROUND
33802	585209.891	3765091.472	-4.458	NATURAL GROUND
33803	585172.955	3765107.875	-3.973	NATURAL GROUND
33804	585145.459	3765132.219	-4.047	NATURAL GROUND
33805	585109.037	3765153.007	-2.93	NATURAL GROUND
33806	585066.273	3765162.799	-2.399	NATURAL GROUND
33807	585019.41	3765171.562	-2.296	NATURAL GROUND
33808	584964.72	3765192.338	-1.634	NATURAL GROUND
33809	584926.613	3765214.718	-1.862	NATURAL GROUND
33810	584895.189	3765235.827	-1.58	NATURAL GROUND
33811	584867.093	3765256.1	-1.604	NATURAL GROUND
33812	584831.941	3765276.695	-2.051	NATURAL GROUND
33813	584798.268	3765292.611	-1.558	NATURAL GROUND
33814	584760.456	3765302.564	-1.678	NATURAL GROUND
33815	584722.759	3765313.636	-1.814	NATURAL GROUND
33816	584682.118	3765327.473	-1.71	NATURAL GROUND
33817	584642.392	3765344.598	-1.718	NATURAL GROUND
33818	584599.858	3765364.853	-1.698	NATURAL GROUND
33819	584569.368	3765382.41	-0.829	NATURAL GROUND
33820	584530.15	3765398.502	-0.417	NATURAL GROUND
33821	584499.093	3765410.3	0.483	NATURAL GROUND
33822	584855.249	3765652.765	0.176	NATURAL GROUND
33823	584846.969	3765628.521	0.75	NATURAL GROUND
33824	584839.574	3765614.173	-0.288	NATURAL GROUND
33825	584835.201	3765566.645	-1.346	NATURAL GROUND
33826	584819.325	3765538.456	-1.083	NATURAL GROUND
33827	584805.446	3765520.901	-0.792	NATURAL GROUND
33828	584795.152	3765499.067	-1.046	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33829	584791.782	3765474.106	-1.173	NATURAL GROUND
33830	584785.087	3765453.579	-1.141	NATURAL GROUND
33831	584773.582	3765432.409	-1.511	NATURAL GROUND
33832	584761.053	3765401.857	-1.474	NATURAL GROUND
33833	584750.065	3765369.59	-1.576	NATURAL GROUND
33834	584736.338	3765332.249	-1.59	NATURAL GROUND
33835	584724.455	3765302.997	-1.726	NATURAL GROUND
33836	584709.657	3765270.233	-2.33	NATURAL GROUND
33837	584696.228	3765241.63	-2.182	NATURAL GROUND
33838	584683.325	3765209.172	-2.08	NATURAL GROUND
33839	584670.199	3765175.638	-1.952	NATURAL GROUND
33840	584659.35	3765145.659	-2.042	NATURAL GROUND
33841	584648.259	3765114.716	-1.796	NATURAL GROUND
33842	584633.472	3765089.028	-1.877	NATURAL GROUND
33843	584621.051	3765064.572	-0.925	NATURAL GROUND
33844	584603.968	3765038.114	1.499	NATURAL GROUND
33845	584595.988	3765009.373	1.207	NATURAL GROUND
33846	584586.814	3764989.379	0.895	NATURAL GROUND
33847	584578.15	3764969.48	-0.393	NATURAL GROUND
33848	584566.425	3764922.913	0.668	NATURAL GROUND
33849	584561.885	3764902.28	0.831	NATURAL GROUND
33850	584557.463	3764874.294	0.351	NATURAL GROUND
33851	584550.508	3764857.864	0.147	NATURAL GROUND
33852	584765.91	3764689.974	-0.753	NATURAL GROUND
33853	584773.328	3764709.321	-0.77	NATURAL GROUND
33854	584780.661	3764737.8	-1.713	NATURAL GROUND
33855	584784.775	3764760.003	-1.631	NATURAL GROUND
33856	584783.957	3764784.653	-1.811	NATURAL GROUND
33857	584794.977	3764809.568	-2.67	NATURAL GROUND
33858	584804.831	3764836.191	-2.958	NATURAL GROUND
33859	584836.13	3764911.623	-3.148	NATURAL GROUND
33860	584850.249	3764940.226	-3.081	NATURAL GROUND
33861	584867.833	3764976.205	-3.625	NATURAL GROUND
33862	584879.719	3765012.584	-3.078	NATURAL GROUND
33863	584899.936	3765089.595	-2.995	NATURAL GROUND
33864	584870.36	3765029.776	-2.979	NATURAL GROUND
33865	584887.239	3765040.598	-2.833	NATURAL GROUND
33866	584901.14	3765066.468	-2.822	NATURAL GROUND
33867	584907.292	3765093.426	-3.144	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33868	584926.726	3765168.741	-2.487	NATURAL GROUND
33869	584968.403	3765233.712	-1.687	NATURAL GROUND
33870	584986.986	3765277.985	-1.287	NATURAL GROUND
33871	584995.906	3765306.563	-0.906	NATURAL GROUND
33872	585004.536	3765330.544	-0.975	NATURAL GROUND
33873	585012.756	3765356.426	-0.894	NATURAL GROUND
33874	585022.447	3765381.398	-0.962	NATURAL GROUND
33875	585033.588	3765403.488	-1.196	NATURAL GROUND
33876	585045.958	3765423.638	-1.11	NATURAL GROUND
33877	585054.446	3765447.647	-0.662	NATURAL GROUND
33878	585063.828	3765471.498	0.423	NATURAL GROUND
33879	585082.244	3765516.551	-0.495	NATURAL GROUND
33880	585092.156	3765544.387	1.1	NATURAL GROUND
33881	585440.624	3765533.958	-5.111	NATURAL GROUND
33882	585418.327	3765548.848	-4.732	NATURAL GROUND
33883	585359.007	3765587.267	-3.882	NATURAL GROUND
33884	585375.561	3765577.718	-4.367	NATURAL GROUND
33885	585354.167	3765580.134	-4.051	NATURAL GROUND
33886	585320.266	3765584.876	-3.959	NATURAL GROUND
33887	585293.463	3765600.78	-4.178	NATURAL GROUND
33888	585266.501	3765621.468	-3.507	NATURAL GROUND
33889	585232.33	3765639.232	-2.278	NATURAL GROUND
33890	585203.681	3765650.12	-2.042	NATURAL GROUND
33891	585173.303	3765657.185	-1.559	NATURAL GROUND
33892	585149.792	3765667.608	-0.602	NATURAL GROUND
33893	585139.474	3765672.57	0.332	NATURAL GROUND
33894	585116.284	3765677.897	1.694	NATURAL GROUND
33895	585089.169	3765687.256	1.344	NATURAL GROUND
33896	585071.688	3765695.963	-0.198	NATURAL GROUND
33897	585185.009	3765405.137	-1.653	NATURAL GROUND
33898	585219.007	3765420.782	-1.999	NATURAL GROUND
33899	585199.565	3765371.303	-1.499	NATURAL GROUND
33900	585212.094	3765358.088	-2.159	NATURAL GROUND
33901	585224.323	3765341.831	-2.504	NATURAL GROUND
33902	585252.862	3765327.977	-3.319	NATURAL GROUND
33903	585283.308	3765326.113	-4.288	NATURAL GROUND
33904	585313.697	3765324.645	-4.801	NATURAL GROUND
33905	584366.88	3766913.693	-6.696	NATURAL GROUND
33906	584359.674	3766939.129	-5.309	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33907	584350.264	3766968.234	-10.395	NATURAL GROUND
33908	584334.605	3766997.655	-8.801	NATURAL GROUND
33909	584319.423	3767025.679	-7.763	NATURAL GROUND
33910	584296.515	3767052.139	-7.143	NATURAL GROUND
33911	584275.152	3767074.157	-7.207	NATURAL GROUND
33912	584244.55	3767094.862	-7.661	NATURAL GROUND
33913	584183.33	3767120.558	-9.404	NATURAL GROUND
33914	584151.037	3767129.807	-6.855	NATURAL GROUND
33915	584119.637	3767132.494	-5.077	NATURAL GROUND
33916	584051.732	3767151.557	-5.223	NATURAL GROUND
33917	584024.722	3767151.527	-5.613	NATURAL GROUND
33918	583998.777	3767145.056	-5.91	NATURAL GROUND
33919	583971.221	3767133.392	-5.755	NATURAL GROUND
33920	583940.996	3767123.82	-5.397	NATURAL GROUND
33921	583909.68	3767119.266	-5.36	NATURAL GROUND
33922	583898.32	3767348.081	0.831	NATURAL GROUND
33923	583924.537	3767322.876	1.18	NATURAL GROUND
33924	583947.741	3767315.504	1.419	NATURAL GROUND
33925	583968.773	3767306.426	1.737	NATURAL GROUND
33926	583992.87	3767293.709	1.248	NATURAL GROUND
33927	584002.771	3767284.611	-0.03	NATURAL GROUND
33928	584027.709	3767268.116	-1.582	NATURAL GROUND
33929	584058.919	3767260.436	-2.305	NATURAL GROUND
33930	584092.483	3767248.251	-2.028	NATURAL GROUND
33931	584125.227	3767230.291	-0.963	NATURAL GROUND
33932	584147.924	3767214.707	0.269	NATURAL GROUND
33933	584178.412	3767208.449	1.708	NATURAL GROUND
33934	584193.742	3767203.324	1.312	NATURAL GROUND
33935	584247.568	3767187.613	-0.007	NATURAL GROUND
33936	584256.999	3767148.864	1.061	NATURAL GROUND
33937	584280.667	3767143.011	1.406	NATURAL GROUND
33938	584305.243	3767139.44	1.418	NATURAL GROUND
33939	584333.317	3767137.476	1.041	NATURAL GROUND
33940	584357.232	3767129.285	1.308	NATURAL GROUND
33941	584376.753	3767115.569	0.819	NATURAL GROUND
33942	584415.282	3767094.917	0.936	NATURAL GROUND
33943	584421.313	3767089.682	0.644	NATURAL GROUND
33944	584427.638	3767084.78	-3.319	NATURAL GROUND
33945	584443.797	3767077.138	-4.655	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33946	584459.184	3767070.154	-2.277	NATURAL GROUND
33947	584466.029	3767065.169	-0.118	NATURAL GROUND
33948	584485.35	3767059.271	-0.415	NATURAL GROUND
33949	584506.803	3767050.787	0.269	NATURAL GROUND
33950	584527.359	3767042.722	1.322	NATURAL GROUND
33951	584551.293	3767031.295	1.11	NATURAL GROUND
33952	584574.592	3767019.361	0.966	NATURAL GROUND
33953	584593.89	3767010.723	0.643	NATURAL GROUND
33954	584619.149	3767005.135	1.102	NATURAL GROUND
33955	584641.811	3766999.832	0.861	NATURAL GROUND
33956	584665.553	3766988.169	1.217	NATURAL GROUND
33957	584683.366	3766972.679	0.457	NATURAL GROUND
33958	584706.155	3766953.917	0.449	NATURAL GROUND
33959	584729.378	3766936.599	1.306	NATURAL GROUND
33960	584763.447	3766937.098	0.11	NATURAL GROUND
33961	584750.613	3766702.362	-0.614	NATURAL GROUND
33962	584742.447	3766679.46	-0.664	NATURAL GROUND
33963	584745.572	3766656.727	1.794	NATURAL GROUND
33964	584704.281	3766705.186	1.596	NATURAL GROUND
33965	584672.475	3766692.622	1.438	NATURAL GROUND
33966	584645.602	3766691.654	0.84	NATURAL GROUND
33968	584600.534	3766716.034	1.694	NATURAL GROUND
33969	584590.02	3766716.024	0.391	NATURAL GROUND
33970	584567.025	3766720.524	0.994	NATURAL GROUND
33971	584572.544	3766718.327	-2.852	NATURAL GROUND
33972	584555.471	3766744.376	-3.745	NATURAL GROUND
33973	584553.654	3766753.904	-4.327	NATURAL GROUND
33974	584549.115	3766765.384	0.009	NATURAL GROUND
33975	584526.739	3766771.512	0.91	NATURAL GROUND
33976	584505.707	3766779.515	0.986	NATURAL GROUND
33977	584495.033	3766784.891	-4.671	NATURAL GROUND
33978	584480.916	3766792.043	-1.534	NATURAL GROUND
33979	584475.8	3766793.052	0.326	NATURAL GROUND
33980	584459.694	3766798.304	1.111	NATURAL GROUND
33981	584441.302	3766805.921	1.351	NATURAL GROUND
33982	584417.043	3766813.852	1.127	NATURAL GROUND
33983	584393.371	3766820.776	0.99	NATURAL GROUND
33984	584370.654	3766834.208	0.944	NATURAL GROUND
33985	584324.317	3766860.591	1.181	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
33986	584297.176	3766877.76	1.095	NATURAL GROUND
33987	584273.366	3766884.551	0.912	NATURAL GROUND
33988	584249.438	3766886.509	1.468	NATURAL GROUND
33989	584231.833	3766891.901	-1.096	NATURAL GROUND
33990	584227.348	3766896.196	-2.191	NATURAL GROUND
33991	584223.864	3766903.55	0.735	NATURAL GROUND
33992	584216.014	3766918.742	1.439	NATURAL GROUND
33993	584198.629	3766924.427	1.022	NATURAL GROUND
33994	584171.875	3766928.553	1.043	NATURAL GROUND
33995	584151.015	3766933.121	1.11	NATURAL GROUND
33996	584151.116	3766933.227	1.269	NATURAL GROUND
33997	584130.041	3766943.974	1.455	NATURAL GROUND
33998	584110.176	3766954.321	1.146	NATURAL GROUND
33999	584088.759	3766963.896	1.216	NATURAL GROUND
34000	584065.578	3766977.481	5.603	NATURAL GROUND
34001	584063.227	3766982.33	1.309	NATURAL GROUND
34002	584040.348	3766989.07	1.423	NATURAL GROUND
34003	584016.725	3766995.2	1.393	NATURAL GROUND
34004	584002.44	3767002.518	0.383	NATURAL GROUND
34005	583987.127	3767011.794	-1.715	NATURAL GROUND
34007	583937.017	3767024.158	-2.194	NATURAL GROUND
34008	583909.836	3767025.25	-2.58	NATURAL GROUND
34009	583886.057	3767029.253	-3.858	NATURAL GROUND
34010	583865.664	3767048.948	-5.296	NATURAL GROUND
34011	583910.52	3767015.258	-2.224	NATURAL GROUND
34012	583882.432	3767016.313	-3.507	NATURAL GROUND
34013	583870.756	3767029.161	-3.342	NATURAL GROUND
34014	583869.662	3767072.414	-5.67	NATURAL GROUND
34015	583845.738	3767077.244	-4.052	NATURAL GROUND
34017	583931.084	3767031.705	-2.431	NATURAL GROUND
34018	583908.532	3767054.134	-3.094	NATURAL GROUND
34023	583891.333	3766782.376	1.608	NATURAL GROUND
34024	583911.12	3766771.305	1.306	NATURAL GROUND
34025	583933.764	3766758.234	1.448	NATURAL GROUND
34026	583955.691	3766747.573	1.164	NATURAL GROUND
34027	583974.495	3766738.987	1.165	NATURAL GROUND
34028	583995.646	3766730.39	0.969	NATURAL GROUND
34029	584014.963	3766723.756	0.979	NATURAL GROUND
34030	584034.595	3766714.384	0.917	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34031	584054.462	3766707.172	1.124	NATURAL GROUND
34032	584075.682	3766696.814	0.914	NATURAL GROUND
34033	584093.217	3766686.78	0.779	NATURAL GROUND
34034	584111.908	3766677.578	0.911	NATURAL GROUND
34035	584126.069	3766671.366	0.748	NATURAL GROUND
34036	584147.964	3766660.144	0.85	NATURAL GROUND
34037	584169.247	3766648.145	0.836	NATURAL GROUND
34038	584187.371	3766636.434	0.915	NATURAL GROUND
34039	584210.094	3766628.51	0.613	NATURAL GROUND
34040	584219.924	3766627.687	-1.04	NATURAL GROUND
34041	584227.725	3766625.961	0.291	NATURAL GROUND
34042	584246.406	3766618.733	1.178	NATURAL GROUND
34043	584254.398	3766616.972	0.194	NATURAL GROUND
34044	584264.856	3766614.818	-1.34	NATURAL GROUND
34045	584274.882	3766607.993	-0.466	NATURAL GROUND
34046	584290.821	3766601.922	0.269	NATURAL GROUND
34047	584299.302	3766599.296	-0.698	NATURAL GROUND
34048	584316.698	3766593.704	-0.044	NATURAL GROUND
34049	584335.453	3766586.161	0.803	NATURAL GROUND
34050	584342.364	3766584.519	-0.623	NATURAL GROUND
34051	584359.586	3766578.76	-1.485	NATURAL GROUND
34052	584379.166	3766571.233	-0.002	NATURAL GROUND
34053	584391.845	3766562.326	0.045	NATURAL GROUND
34054	584409.794	3766550.533	0.901	NATURAL GROUND
34055	584431.294	3766537.237	0.919	NATURAL GROUND
34056	584448.14	3766525.81	0.232	NATURAL GROUND
34057	584476.598	3766508.347	0.035	NATURAL GROUND
34058	584493.848	3766498.234	0.823	NATURAL GROUND
34059	584515.525	3766492.457	-0.135	NATURAL GROUND
34060	584542.369	3766485.908	-0.234	NATURAL GROUND
34061	584563.975	3766480.14	0.627	NATURAL GROUND
34062	584587.653	3766470.857	1.328	NATURAL GROUND
34063	584600.849	3766463.968	-0.728	NATURAL GROUND
34064	584610.887	3766461.401	-3.146	NATURAL GROUND
34065	584631.581	3766445.907	-0.401	NATURAL GROUND
34066	584654.075	3766437.827	1.18	NATURAL GROUND
34067	584676.851	3766426.906	0.994	NATURAL GROUND
34068	584698.123	3766416.477	0.882	NATURAL GROUND
34069	584710.15	3766410.994	-0.501	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34070	584342.3	3766307.965	0.572	NATURAL GROUND
34071	584328.273	3766309.807	0.567	NATURAL GROUND
34072	584320.318	3766311.892	-0.054	NATURAL GROUND
34073	584299.96	3766316.176	-0.712	NATURAL GROUND
34074	584279.666	3766320.784	-0.895	NATURAL GROUND
34075	584258.975	3766327.748	-1.109	NATURAL GROUND
34076	584234.338	3766338.911	-0.823	NATURAL GROUND
34077	584217.981	3766347.729	-0.707	NATURAL GROUND
34078	584192.956	3766365.55	0.863	NATURAL GROUND
34079	584173.933	3766377.241	-0.485	NATURAL GROUND
34080	584154.392	3766391.574	-0.511	NATURAL GROUND
34081	584134.927	3766406.087	0.041	NATURAL GROUND
34082	584110.479	3766414.652	0.547	NATURAL GROUND
34083	584081.662	3766425.729	0.928	NATURAL GROUND
34084	584053.167	3766432.867	0.644	NATURAL GROUND
34085	584023.726	3766443.955	1.041	NATURAL GROUND
34086	584005.303	3766455.785	0.714	NATURAL GROUND
34087	583979.759	3766471.591	0.836	NATURAL GROUND
34088	583950.098	3766483.571	0.772	NATURAL GROUND
34089	583922.047	3766493.402	0.365	NATURAL GROUND
34090	583895.672	3766505.407	0.866	NATURAL GROUND
34091	583870.772	3766516.755	0.507	NATURAL GROUND
34092	583845.386	3766528.12	0.802	NATURAL GROUND
34093	583829.108	3766535.141	0.739	NATURAL GROUND
34094	583802.984	3766545.512	0.931	NATURAL GROUND
34095	583782.08	3766554.725	1.199	NATURAL GROUND
34096	583765.782	3766561.65	0.51	NATURAL GROUND
34097	583754.818	3766568.001	-1.165	NATURAL GROUND
34098	583737.594	3766321.791	-1.243	NATURAL GROUND
34099	583754.162	3766317.458	0.732	NATURAL GROUND
34100	583764.451	3766315.477	0.546	NATURAL GROUND
34101	583744.665	3766317.223	-0.756	NATURAL GROUND
34102	583758.11	3766315.393	1.382	NATURAL GROUND
34103	583762.288	3766314.677	0.708	NATURAL GROUND
34104	583784.844	3766300.024	0.817	NATURAL GROUND
34105	583803.07	3766276.221	0.531	NATURAL GROUND
34106	583816.909	3766261.742	0.414	NATURAL GROUND
34107	583836.583	3766248.116	0.284	NATURAL GROUND
34108	583859.85	3766238.658	-0.214	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34109	583882.992	3766231.833	-0.626	NATURAL GROUND
34110	583899.76	3766226.759	-0.127	NATURAL GROUND
34111	583923.058	3766215.208	0.875	NATURAL GROUND
34112	583942.014	3766205.05	0.782	NATURAL GROUND
34113	583963.074	3766196.162	0.88	NATURAL GROUND
34114	583983.691	3766187.988	0.803	NATURAL GROUND
34115	584004.921	3766178.897	0.598	NATURAL GROUND
34116	584025.196	3766171.426	0.853	NATURAL GROUND
34117	584050.706	3766159.6	0.509	NATURAL GROUND
34118	584072.263	3766150.04	0.808	NATURAL GROUND
34119	584099.964	3766135.463	0.837	NATURAL GROUND
34120	584116.197	3766127.943	0.121	NATURAL GROUND
34121	584145.053	3766118.085	0.892	NATURAL GROUND
34122	584168.919	3766110.702	0.914	NATURAL GROUND
34123	584179.664	3766106.142	-0.137	NATURAL GROUND
34124	584207.234	3766090.091	-0.795	NATURAL GROUND
34125	584229.84	3766079.99	-0.127	NATURAL GROUND
34126	584250.684	3766073.064	1.458	NATURAL GROUND
34127	584268.448	3766070.636	-0.366	NATURAL GROUND
34128	584242.779	3765784.386	0.778	NATURAL GROUND
34129	584227.76	3765793.846	0.061	NATURAL GROUND
34130	584208.91	3765812.34	-0.088	NATURAL GROUND
34131	584179.34	3765829.451	0.465	NATURAL GROUND
34132	584154.113	3765839.442	0.7	NATURAL GROUND
34133	584123.027	3765850.355	0.665	NATURAL GROUND
34134	584091.941	3765864.597	0.697	NATURAL GROUND
34135	584068.604	3765877.48	0.77	NATURAL GROUND
34136	584039.649	3765892.115	1.005	NATURAL GROUND
34137	584016.111	3765899.501	0.836	NATURAL GROUND
34138	583996.709	3765908.659	1.027	NATURAL GROUND
34139	583975.832	3765915.591	1.156	NATURAL GROUND
34140	583948.466	3765927.177	1.362	NATURAL GROUND
34141	583928.66	3765938.599	1.401	NATURAL GROUND
34142	583901.061	3765953.99	1.407	NATURAL GROUND
34143	583881.914	3765962.415	1.327	NATURAL GROUND
34144	583859.42	3765967.217	1.315	NATURAL GROUND
34145	583842.685	3765968.363	0.956	NATURAL GROUND
34148	583850.562	3765642.24	0.214	NATURAL GROUND
34149	583870.36	3765673.395	-1.375	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34150	583881.615	3765682.714	0.642	NATURAL GROUND
34151	583903.2	3765685.164	1.249	NATURAL GROUND
34152	583926.778	3765673.362	1.14	NATURAL GROUND
34153	583946.194	3765656.551	1.17	NATURAL GROUND
34154	583966.953	3765648.947	1.374	NATURAL GROUND
34155	583991.808	3765640.045	1.006	NATURAL GROUND
34156	584015.302	3765632.284	1.057	NATURAL GROUND
34157	584042.405	3765622.482	1.07	NATURAL GROUND
34158	584072.326	3765605.488	0.817	NATURAL GROUND
34159	584105.149	3765586.655	1.17	NATURAL GROUND
34160	584130.149	3765575.886	1.095	NATURAL GROUND
34161	584155.944	3765565.154	0.743	NATURAL GROUND
34162	584185.452	3765551.203	0.597	NATURAL GROUND
34163	584207.591	3765542.093	0.609	NATURAL GROUND
34164	584225.1	3765534.674	0.395	NATURAL GROUND
34165	584240.958	3765527.815	-0.218	NATURAL GROUND
34166	584258.62	3765519.675	-0.234	NATURAL GROUND
34167	584278.947	3765509.224	-0.46	NATURAL GROUND
34168	584289.77	3765504.524	-1.076	NATURAL GROUND
34169	584313.662	3765493.196	-1.018	NATURAL GROUND
34170	584334.493	3765484.018	0.586	NATURAL GROUND
34171	584361.593	3765472.219	0.907	NATURAL GROUND
34172	584405.101	3765453.414	0.638	NATURAL GROUND
34173	584433.448	3765439.978	0.758	NATURAL GROUND
34174	584468.803	3765159.62	1.003	NATURAL GROUND
34175	584451.266	3765152.314	1.035	NATURAL GROUND
34176	584420.943	3765165.969	0.964	NATURAL GROUND
34177	584397.447	3765188.196	1.179	NATURAL GROUND
34178	584370.434	3765195.845	-0.056	NATURAL GROUND
34179	584342.955	3765200.907	0.386	NATURAL GROUND
34180	584322.941	3765212.406	0.327	NATURAL GROUND
34181	584296.765	3765226.255	0.388	NATURAL GROUND
34182	584274.265	3765234.903	0.543	NATURAL GROUND
34183	584249.632	3765245.354	0.669	NATURAL GROUND
34184	584225.832	3765254.758	0.677	NATURAL GROUND
34185	584197.894	3765268.715	0.718	NATURAL GROUND
34186	584168.374	3765283.058	0.898	NATURAL GROUND
34187	584143.385	3765295.68	0.801	NATURAL GROUND
34188	584118.536	3765307.163	0.772	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34189	584096.35	3765315.614	0.791	NATURAL GROUND
34190	584070.587	3765326.472	1.071	NATURAL GROUND
34191	584043.864	3765338.543	0.902	NATURAL GROUND
34192	584019.526	3765351.376	0.993	NATURAL GROUND
34193	583994.348	3765363.499	1.149	NATURAL GROUND
34194	583969.833	3765374.912	1.162	NATURAL GROUND
34195	583947.121	3765383.049	0.951	NATURAL GROUND
34196	583927.726	3765389.904	1.138	NATURAL GROUND
34197	583910.677	3765393.01	-1.545	NATURAL GROUND
34199	583935.875	3765134.396	-1.189	NATURAL GROUND
34200	583951.933	3765134.219	0.454	NATURAL GROUND
34201	583955.552	3765106.859	-0.298	NATURAL GROUND
34202	583964.325	3765090.973	0.16	NATURAL GROUND
34203	583982.678	3765098.299	1.005	NATURAL GROUND
34204	584014.759	3765083.356	1.235	NATURAL GROUND
34205	584035.655	3765075.343	1.033	NATURAL GROUND
34206	584060.254	3765063.831	0.989	NATURAL GROUND
34207	584086.104	3765047.926	0.795	NATURAL GROUND
34208	584112.01	3765035.432	1.05	NATURAL GROUND
34209	584143.779	3765025.406	0.865	NATURAL GROUND
34210	584174.833	3765011.878	0.723	NATURAL GROUND
34211	584209.263	3764993.686	0.742	NATURAL GROUND
34212	584239.777	3764979.44	0.652	NATURAL GROUND
34213	584295.539	3764957.667	0.438	NATURAL GROUND
34214	584323.947	3764946.755	0.457	NATURAL GROUND
34215	584349.169	3764930.731	0.397	NATURAL GROUND
34216	584372.161	3764924.253	0.351	NATURAL GROUND
34217	584399.492	3764910.773	-0.688	NATURAL GROUND
34218	584426.982	3764895.128	0.507	NATURAL GROUND
34219	584449.682	3764883.603	0.399	NATURAL GROUND
34220	584474.036	3764878.629	0.395	NATURAL GROUND
34221	584497.368	3764870.903	0.382	NATURAL GROUND
34222	584523.637	3764854.104	0.738	NATURAL GROUND
34223	584545.939	3764843.779	0.667	NATURAL GROUND
34224	584572.951	3764835.189	0.335	NATURAL GROUND
34225	584638.589	3764525.349	0.449	NATURAL GROUND
34226	584619.776	3764535.015	0.806	NATURAL GROUND
34227	584599.987	3764547.398	0.795	NATURAL GROUND
34228	584578.601	3764558.607	0.484	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34229	584554.957	3764571.673	0.429	NATURAL GROUND
34230	584534.045	3764576.916	0.371	NATURAL GROUND
34231	584506.281	3764584.337	0.272	NATURAL GROUND
34232	584483.942	3764590.752	0.659	NATURAL GROUND
34233	584461.405	3764605.383	0.597	NATURAL GROUND
34234	584443.429	3764615.67	0.1	NATURAL GROUND
34235	584424.652	3764625.698	0.244	NATURAL GROUND
34236	584398.374	3764635.732	0.256	NATURAL GROUND
34237	584372.621	3764648.1	0.357	NATURAL GROUND
34238	584352.654	3764655.26	0.336	NATURAL GROUND
34239	584337.321	3764661.123	-0.354	NATURAL GROUND
34240	584317.648	3764672.022	0.876	NATURAL GROUND
34241	584298.431	3764679.235	0.592	NATURAL GROUND
34242	584274.504	3764689.659	0.532	NATURAL GROUND
34243	584258.135	3764696.138	-0.281	NATURAL GROUND
34244	584235.215	3764704.615	0.554	NATURAL GROUND
34245	584213.46	3764710.953	0.549	NATURAL GROUND
34246	584193.162	3764718.529	0.533	NATURAL GROUND
34247	584170.276	3764731.999	0.236	NATURAL GROUND
34248	584154.898	3764742.972	0.48	NATURAL GROUND
34249	584135.669	3764753.846	0.757	NATURAL GROUND
34250	584117.673	3764762.523	0.588	NATURAL GROUND
34251	584096.818	3764769.588	0.826	NATURAL GROUND
34252	584072.15	3764778.104	0.921	NATURAL GROUND
34253	584051.476	3764785.929	1.401	NATURAL GROUND
34254	584031.297	3764791.551	1.372	NATURAL GROUND
34255	584007.443	3764811.367	1.164	NATURAL GROUND
34256	583994.2	3764822.38	1.187	NATURAL GROUND
34257	583973.924	3764829.998	1.084	NATURAL GROUND
34258	583964.485	3764832.172	0.176	NATURAL GROUND
34259	583954.846	3764834.921	-1.203	NATURAL GROUND
34260	583944.258	3764835.989	-1.951	NATURAL GROUND
34261	583935.101	3764567.69	-3.126	NATURAL GROUND
34262	583965.131	3764541.105	-1.385	NATURAL GROUND
34263	583976.088	3764540.298	-0.548	NATURAL GROUND
34264	583988.505	3764540.575	1.531	NATURAL GROUND
34265	584003.593	3764537.729	1.509	NATURAL GROUND
34266	584020.859	3764534.041	1.352	NATURAL GROUND
34267	584045.752	3764528.325	1.244	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34268	584082.447	3764501.235	2.144	NATURAL GROUND
34269	584091.777	3764494.948	1.37	NATURAL GROUND
34270	584103.572	3764490.793	1.55	NATURAL GROUND
34271	584126.731	3764481.871	1.287	NATURAL GROUND
34272	584142.04	3764478.064	1.236	NATURAL GROUND
34273	584163.652	3764470.719	1.023	NATURAL GROUND
34274	584186.884	3764468.319	1.099	NATURAL GROUND
34275	584205.472	3764453.982	1.105	NATURAL GROUND
34276	584220.213	3764446.734	0.837	NATURAL GROUND
34277	584238.981	3764434.099	0.876	NATURAL GROUND
34278	584257.766	3764423.747	0.847	NATURAL GROUND
34279	584277.901	3764412.945	1.125	NATURAL GROUND
34280	584297.699	3764401.977	0.988	NATURAL GROUND
34281	584319.677	3764389.925	0.922	NATURAL GROUND
34282	584340.935	3764378.353	0.935	NATURAL GROUND
34283	584352.612	3764375.87	-0.196	NATURAL GROUND
34284	584357.923	3764375.078	-1.151	NATURAL GROUND
34285	584368.045	3764374.558	0.53	NATURAL GROUND
34286	584383.475	3764371.824	1.26	NATURAL GROUND
34287	584405.803	3764364.702	1.384	NATURAL GROUND
34288	584424.315	3764354.76	1.304	NATURAL GROUND
34289	584442.091	3764340.475	1.205	NATURAL GROUND
34290	584461.255	3764328.476	1.108	NATURAL GROUND
34291	584478.175	3764319.308	1.039	NATURAL GROUND
34292	584481.981	3764316.464	0.965	NATURAL GROUND
34293	584428.898	3764069.521	0.859	NATURAL GROUND
34294	584414.259	3764077.955	0.805	NATURAL GROUND
34295	584392.053	3764090.453	0.803	NATURAL GROUND
34296	584374.205	3764100.973	0.713	NATURAL GROUND
34297	584357.154	3764111.463	0.745	NATURAL GROUND
34298	584344.338	3764123.362	-0.561	NATURAL GROUND
34299	584331.838	3764137.574	0.9	NATURAL GROUND
34300	584311.854	3764155.279	0.965	NATURAL GROUND
34301	584308.751	3764149.082	1.278	NATURAL GROUND
34302	584294.492	3764139.828	0.895	NATURAL GROUND
34303	584271.672	3764148.169	0.906	NATURAL GROUND
34304	584255.624	3764156.134	0.822	NATURAL GROUND
34305	584236.108	3764161.312	0.775	NATURAL GROUND
34306	584218.211	3764166.974	0.938	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34307	584194.506	3764176.923	0.985	NATURAL GROUND
34308	584173.014	3764183.344	0.97	NATURAL GROUND
34309	584157.677	3764193.899	1.029	NATURAL GROUND
34310	584137.626	3764206.553	1.398	NATURAL GROUND
34311	584113.891	3764215.952	1.228	NATURAL GROUND
34312	584093.876	3764220.625	1.471	NATURAL GROUND
34313	584068.182	3764226.805	1.013	NATURAL GROUND
34314	584060.312	3764231.283	-0.867	NATURAL GROUND
34315	584046.954	3764236.602	-1.698	NATURAL GROUND
34316	584034.932	3764244.208	0.434	NATURAL GROUND
34317	584021.105	3764248.56	-0.275	NATURAL GROUND
34318	584007.362	3764262.972	-0.913	NATURAL GROUND
34319	583990.424	3764275.959	-1.257	NATURAL GROUND
34320	583955.706	3764010.399	-1.84	NATURAL GROUND
34321	583973.99	3764020.773	-2.843	NATURAL GROUND
34322	583952.69	3764008.418	-3.997	NATURAL GROUND
34323	583964.069	3764008.128	-3.267	NATURAL GROUND
34324	583977.482	3764002.672	-2.53	NATURAL GROUND
34325	583991.455	3764000.491	-1.886	NATURAL GROUND
34326	584005.635	3763998.993	-1.259	NATURAL GROUND
34327	584021.238	3763996.976	-0.766	NATURAL GROUND
34328	584036.298	3763990.94	-0.538	NATURAL GROUND
34329	584049.886	3763983.909	-0.154	NATURAL GROUND
34330	584054.058	3763983.185	1.342	NATURAL GROUND
34331	584069.38	3763975.391	1.787	NATURAL GROUND
34332	584086.297	3763963.03	1.245	NATURAL GROUND
34333	584100.378	3763949.702	1.247	NATURAL GROUND
34334	584120.185	3763943.403	0.928	NATURAL GROUND
34335	584140.611	3763932.117	0.922	NATURAL GROUND
34336	584160.016	3763922.277	1.277	NATURAL GROUND
34337	584179.584	3763911.138	2.35	NATURAL GROUND
34338	584186.72	3763907.822	0.92	NATURAL GROUND
34339	584205.267	3763899.857	0.881	NATURAL GROUND
34340	584227.922	3763889.479	1.056	NATURAL GROUND
34341	584247.928	3763881.201	1.048	NATURAL GROUND
34342	584273.847	3763871.224	0.895	NATURAL GROUND
34343	584299.732	3763861.992	0.967	NATURAL GROUND
34344	584386.166	3762083.183	0.962	NATURAL GROUND
34345	584392.294	3762081.321	0.842	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34346	584394.344	3762080.371	-0.313	NATURAL GROUND
34347	584397.05	3762144.743	0.577	NATURAL GROUND
34348	584395.777	3762152.299	0.145	NATURAL GROUND
34349	584415.526	3762154.564	-1.534	NATURAL GROUND
34350	584428.242	3762158.731	-1.588	NATURAL GROUND
34351	584422.472	3762171.596	-2.07	NATURAL GROUND
34352	584400.292	3762205.254	-0.852	NATURAL GROUND
34353	584419.224	3762227.328	0.637	NATURAL GROUND
34354	584426.99	3762239.463	-1.213	NATURAL GROUND
34355	584440.66	3762254.894	-1.211	NATURAL GROUND
34356	584454.397	3762267.972	-0.664	NATURAL GROUND
34357	584465.391	3762277.634	-0.84	NATURAL GROUND
34358	584428.244	3762200.58	-2.557	NATURAL GROUND
34359	584406.054	3762172.18	0.646	NATURAL GROUND
34360	584411.071	3762170.437	-1.529	NATURAL GROUND
34361	584413.048	3762179.718	1.735	NATURAL GROUND
34362	584229.65	3762104.354	-3.036	NATURAL GROUND
34363	584220.04	3762132.834	0.965	NATURAL GROUND
34364	584225.648	3762157.883	0.036	NATURAL GROUND
34365	584259.947	3762179.876	-1.712	NATURAL GROUND
34366	584281.09	3762192.512	-0.384	NATURAL GROUND
34367	584279.191	3762210.381	-1.568	NATURAL GROUND
34368	584283.593	3762236.049	-2.058	NATURAL GROUND
34369	584293.633	3762251.842	-0.093	NATURAL GROUND
34370	584302.247	3762264.713	0.736	NATURAL GROUND
34371	584317.688	3762284.183	0.524	NATURAL GROUND
34372	584333.588	3762318.342	0.51	NATURAL GROUND
34373	584456.725	3759311.251	-3.432	NATURAL GROUND
34374	584435.839	3759305.441	-2.963	NATURAL GROUND
34375	584407.286	3759297.909	-2.723	NATURAL GROUND
34376	584447.151	3759679.087	-7.594	NATURAL GROUND
34377	584410.594	3759582.36	-5.963	NATURAL GROUND
34378	584362.623	3759536.626	-5.28	NATURAL GROUND
34379	584423.902	3759468.299	-5.385	NATURAL GROUND
34380	582836.755	3760824.876	-4.795	NATURAL GROUND
34381	582828.073	3760783.913	-4.555	NATURAL GROUND
34382	582836.331	3760730.895	-0.568	NATURAL GROUND
34383	582868.335	3760697.807	-4.727	NATURAL GROUND
34384	582860.953	3760683.733	-4.403	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34385	582847.685	3760687.459	-4.571	NATURAL GROUND
34386	582847.012	3760657.837	-4.815	NATURAL GROUND
34387	582857.793	3760621.097	-5.562	NATURAL GROUND
34388	582861.761	3760578.712	-5.134	NATURAL GROUND
34389	582868.617	3760531.479	-3.623	NATURAL GROUND
34390	582867.006	3760570.829	-4.517	NATURAL GROUND
34391	582867.013	3760480.457	2.475	NATURAL GROUND
34392	582867.894	3760472.183	-3.378	NATURAL GROUND
34393	582863.402	3760424.759	-3.159	NATURAL GROUND
34394	582861.617	3760386.162	-3.515	NATURAL GROUND
34395	582868.533	3760308.097	-2.512	NATURAL GROUND
34396	582869.291	3760278.399	-1.95	NATURAL GROUND
34397	582865.103	3760246.537	-1.493	NATURAL GROUND
34398	582862.166	3760215.699	-0.953	NATURAL GROUND
34399	582861.837	3760187.064	-1.045	NATURAL GROUND
34400	582870.237	3760154.345	-1.092	NATURAL GROUND
34401	582872.87	3760125.684	-0.988	NATURAL GROUND
34402	582873.849	3760088.595	-1.015	NATURAL GROUND
34403	582866.779	3760054.628	-1.292	NATURAL GROUND
34404	582836.854	3758146.242	-1.044	NATURAL GROUND
34405	582830.499	3758124.924	-3.171	NATURAL GROUND
34406	582825.157	3758091.377	-3.83	NATURAL GROUND
34407	582819.146	3758051.736	-2	NATURAL GROUND
34408	582823.406	3758004.13	-3.541	NATURAL GROUND
34409	582828.324	3757964.528	-2.341	NATURAL GROUND
34410	582827.321	3757921.107	-3.609	NATURAL GROUND
34411	582824.297	3757880.375	-3.049	NATURAL GROUND
34412	582819.121	3757779.706	-3.834	NATURAL GROUND
34413	582821.207	3757699.375	-3.669	NATURAL GROUND
34414	582828.35	3757655.725	-3.012	NATURAL GROUND
34415	582830.607	3757610.397	-3.362	NATURAL GROUND
34416	582830.958	3757579.172	-1.741	NATURAL GROUND
34417	582831.512	3757544.67	-3.509	NATURAL GROUND
34418	582821.378	3757508.384	-1.857	NATURAL GROUND
34419	582813.53	3757472.839	-1.249	NATURAL GROUND
34420	582824.146	3757441.238	-0.339	NATURAL GROUND
34421	582837.092	3757411.54	-1.377	NATURAL GROUND
34422	582827.747	3757385.932	-1.316	NATURAL GROUND
34423	582821.319	3757363.384	-1.135	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34424	582817.791	3757344.635	-1.41	NATURAL GROUND
34425	582814.772	3757309.592	-0.018	NATURAL GROUND
34426	582815.005	3757280.23	-0.833	NATURAL GROUND
34427	582814.479	3757248.063	-0.932	NATURAL GROUND
34428	582815.156	3757220.326	-0.435	NATURAL GROUND
34429	582818.863	3757196.174	0.245	NATURAL GROUND
34430	582820.354	3757174.888	0.892	NATURAL GROUND
34431	582822.117	3757148.497	0.125	NATURAL GROUND
34432	582824.056	3757122.611	0.096	NATURAL GROUND
34433	582824.047	3757098.703	-0.003	NATURAL GROUND
34434	582819.295	3757075.125	0.29	NATURAL GROUND
34435	582817.612	3757057.884	1.099	NATURAL GROUND
34436	582825.196	3757042.131	1.082	NATURAL GROUND
34437	582817.067	3757018.708	1.076	NATURAL GROUND
34438	582816.885	3757004.963	0.652	NATURAL GROUND
34439	582816.958	3756985.774	-0.868	NATURAL GROUND
34440	582822.092	3756949.739	-1.115	NATURAL GROUND
34441	582824.789	3756915.257	-1.417	NATURAL GROUND
34442	582826.87	3756829.075	-0.003	NATURAL GROUND
34443	582828.322	3756817.864	-0.261	NATURAL GROUND
34444	582823.555	3756796.205	0.499	NATURAL GROUND
34445	582823.97	3756775.8	1.363	NATURAL GROUND
34446	582823.016	3756752.026	-0.327	NATURAL GROUND
34447	582819.3	3756728.332	0.694	NATURAL GROUND
34448	582821.422	3756702.852	0.922	NATURAL GROUND
34449	582823.029	3756683.457	1.263	NATURAL GROUND
34450	582824.215	3756656.713	1.08	NATURAL GROUND
34451	582823.658	3756641.871	0.594	NATURAL GROUND
34452	582822.04	3756636.095	-0.735	NATURAL GROUND
34453	582820.94	3756625.656	-1.804	NATURAL GROUND
34454	582817.52	3756613.828	-0.805	NATURAL GROUND
34455	582818.965	3756602.452	1.082	NATURAL GROUND
34456	582822.903	3756576.571	1.568	NATURAL GROUND
34457	582826.425	3756553.805	5.665	NATURAL GROUND
34458	582829.304	3756528.253	1.384	NATURAL GROUND
34459	582968.85	3756521.1	0.857	NATURAL GROUND
34460	582967.881	3756545.538	0.946	NATURAL GROUND
34461	582973.011	3756571.983	0.943	NATURAL GROUND
34462	582975.25	3756585.617	4.271	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34463	582981.857	3756601.294	0.728	NATURAL GROUND
34464	582977.141	3756632.315	1.044	NATURAL GROUND
34465	582973.81	3756652.639	0.685	NATURAL GROUND
34466	582973.215	3756663.438	-1.404	NATURAL GROUND
34467	582970.553	3756684.33	-1.458	NATURAL GROUND
34468	582967.94	3756699.84	0.658	NATURAL GROUND
34469	582961.527	3756716.212	-0.764	NATURAL GROUND
34470	582973.135	3756745.951	-0.106	NATURAL GROUND
34471	582961.383	3756776.35	-1.722	NATURAL GROUND
34472	582966.272	3756804.979	-2.487	NATURAL GROUND
34473	582972.603	3756837.699	-2.701	NATURAL GROUND
34474	582979.261	3756870.98	-2.318	NATURAL GROUND
34475	582981.728	3756900.42	-1.592	NATURAL GROUND
34476	582980.807	3756921.432	-1.962	NATURAL GROUND
34477	582971.662	3756949.006	-2.433	NATURAL GROUND
34478	582966.576	3756974.819	-2.239	NATURAL GROUND
34479	582967.572	3757003.817	-2.124	NATURAL GROUND
34480	582969.793	3757031.926	-2.23	NATURAL GROUND
34481	582973.143	3757062.254	-3.083	NATURAL GROUND
34482	582978.098	3757098.124	-2.86	NATURAL GROUND
34483	582978.017	3757126.443	-2.822	NATURAL GROUND
34484	582975.805	3757158.139	-3.103	NATURAL GROUND
34485	582968.85	3757194.581	-2.682	NATURAL GROUND
34486	582960.131	3757233.56	-2.762	NATURAL GROUND
34487	582963.921	3757274.286	-1.829	NATURAL GROUND
34488	582975.844	3757300.321	-2.961	NATURAL GROUND
34489	583118.326	3757317.24	-2.988	NATURAL GROUND
34490	583119.603	3757293.038	-2.962	NATURAL GROUND
34491	583131.334	3757260.382	-3.138	NATURAL GROUND
34492	583135.372	3757217.738	-3.512	NATURAL GROUND
34493	583130.424	3757174.05	-2.927	NATURAL GROUND
34494	583123.267	3756458.757	0.983	NATURAL GROUND
34495	583117.886	3756483.749	-1.711	NATURAL GROUND
34496	583115.184	3756511.313	-0.824	NATURAL GROUND
34497	583114.059	3756543.615	-1.437	NATURAL GROUND
34498	583117.663	3756575.613	-0.851	NATURAL GROUND
34499	583121.816	3756600.518	-0.169	NATURAL GROUND
34500	583119.056	3756620.12	-1.223	NATURAL GROUND
34501	583124.962	3756651.33	-1.206	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34502	583125.559	3756681.365	0.194	NATURAL GROUND
34503	583121.994	3756700.669	-1.594	NATURAL GROUND
34504	583117.505	3756733.624	-1.4	NATURAL GROUND
34505	583118.119	3756770.866	-2.095	NATURAL GROUND
34506	583120.49	3756843.36	-2.229	NATURAL GROUND
34507	583123.597	3756883.492	-2.598	NATURAL GROUND
34508	583125.998	3756924.301	-3.382	NATURAL GROUND
34509	583127.956	3756967.415	-2.349	NATURAL GROUND
34510	583123.952	3757003.295	-2.695	NATURAL GROUND
34511	583120.404	3757037.105	-2.73	NATURAL GROUND
34512	583120.332	3757077.154	-2.792	NATURAL GROUND
34513	583120.983	3757114.471	-2.802	NATURAL GROUND
34514	583123.999	3757148.642	-3.159	NATURAL GROUND
34515	583127.205	3757184.315	-3.28	NATURAL GROUND
34516	584422.716	3758841.737	-4.15	NATURAL GROUND
34517	584425.345	3758864.043	-3.998	NATURAL GROUND
34518	584433.666	3758891.987	-4.241	NATURAL GROUND
34519	584437.613	3758928.552	-4.227	NATURAL GROUND
34520	584429.69	3758960.212	-4.284	NATURAL GROUND
34521	584452.976	3759005.215	-4.373	NATURAL GROUND
34522	584462.84	3759029.172	-4.458	NATURAL GROUND
34523	584444.383	3759058.772	-4.634	NATURAL GROUND
34524	584423.485	3759093.033	-4.343	NATURAL GROUND
34525	584427.365	3759146.095	-3.466	NATURAL GROUND
34526	584459.856	3759173.227	-3.01	NATURAL GROUND
34527	584456.249	3759191.893	-2.866	NATURAL GROUND
34528	584432.936	3759228.049	1.808	NATURAL GROUND
34529	584466.778	3759288.744	-3.356	NATURAL GROUND
34530	584464.542	3759316.188	-3.657	NATURAL GROUND
34531	584451.04	3759343.31	-3.385	NATURAL GROUND
34532	584436.747	3759394.492	-4.302	NATURAL GROUND
34533	584452.723	3759454.69	-5.364	NATURAL GROUND
34534	584453.387	3759482.51	-5.621	NATURAL GROUND
34535	584448.655	3759518.167	-5.808	NATURAL GROUND
34536	584453.743	3759552.671	-5.972	NATURAL GROUND
34537	584457.093	3759603.868	-6.304	NATURAL GROUND
34538	584460.113	3759633.926	-6.603	NATURAL GROUND
34539	585260.807	3768347.595	0.722	WATER SURFACE
34540	585254.313	3768352.923	0.082	WATER SURFACE

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
34541	583813.723	3766011.607	-0.316	NATURAL GROUND
34542	583839.012	3766005.84	0.867	NATURAL GROUND
34543	583838.39	3766796.766	1.022	NATURAL GROUND
34544	583827.53	3766804.106	0.916	NATURAL GROUND
34545	583819.603	3766809.42	0.448	NATURAL GROUND
34546	583817.416	3766810.389	-0.94	NATURAL GROUND
34547	585262.034	3768347.727	0.236	WATER SURFACE
50000	583498.928	3767209.887	-42.611	NATURAL GROUND
50001	583502.398	3767211.185	-42.011	NATURAL GROUND
50002	583507.694	3767213.11	-39.458	NATURAL GROUND
50003	583513.082	3767214.921	-39.436	NATURAL GROUND
50004	583518.53	3767216.5	-36.015	NATURAL GROUND
50005	583523.967	3767217.956	-37.226	NATURAL GROUND
50006	583529.42	3767219.167	-37.22	NATURAL GROUND
50007	583534.89	3767219.901	-36.967	NATURAL GROUND
50008	583540.361	3767220.163	-37.055	NATURAL GROUND
50009	583545.874	3767219.999	-36.817	NATURAL GROUND
50010	583551.333	3767219.513	-36.921	NATURAL GROUND
50011	583556.625	3767218.52	-35.637	NATURAL GROUND
50012	583561.735	3767216.799	-35.988	NATURAL GROUND
50013	583566.608	3767214.594	-36.155	NATURAL GROUND
50014	583571.237	3767212.02	-36.602	NATURAL GROUND
50015	583575.53	3767208.901	-36.268	NATURAL GROUND
50016	583579.525	3767205.388	-37.241	NATURAL GROUND
50017	583583.392	3767201.8	-35.596	NATURAL GROUND
50018	583587.37	3767198.181	-36.129	NATURAL GROUND
50019	583591.458	3767194.484	-35.428	NATURAL GROUND
50020	583595.74	3767190.795	-35.678	NATURAL GROUND
50021	583600.247	3767187.211	-35.565	NATURAL GROUND
50022	583604.961	3767183.813	-35.344	NATURAL GROUND
50023	583609.831	3767180.584	-35.28	NATURAL GROUND
50024	583614.862	3767177.642	-35.27	NATURAL GROUND
50025	583619.855	3767174.732	-34.19	NATURAL GROUND
50026	583624.796	3767171.832	-33.867	NATURAL GROUND
50027	583629.791	3767169.001	-33.104	NATURAL GROUND
50028	583634.89	3767166.284	-31.223	NATURAL GROUND
50029	583640.033	3767163.547	-31.265	NATURAL GROUND
50030	583645.173	3767160.631	-32.417	NATURAL GROUND
50031	583650.31	3767157.639	-30.346	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50032	583655.558	3767154.783	-30.873	NATURAL GROUND
50033	583660.861	3767151.924	-30.834	NATURAL GROUND
50034	583666.287	3767149.335	-30.3	NATURAL GROUND
50035	583671.854	3767147.018	-29.805	NATURAL GROUND
50036	583677.333	3767144.555	-31.436	NATURAL GROUND
50037	583682.812	3767142.086	-30.586	NATURAL GROUND
50038	583688.419	3767139.824	-30.724	NATURAL GROUND
50039	583694.099	3767137.702	-29.708	NATURAL GROUND
50040	583699.768	3767135.622	-29.511	NATURAL GROUND
50041	583705.48	3767133.751	-29.945	NATURAL GROUND
50042	583711.253	3767132.012	-30.248	NATURAL GROUND
50043	583717.053	3767130.289	-30.206	NATURAL GROUND
50044	583722.796	3767128.596	-30.006	NATURAL GROUND
50045	583728.477	3767126.834	-27.028	NATURAL GROUND
50046	583734.156	3767124.957	-28.757	NATURAL GROUND
50047	583739.79	3767123.012	-28.928	NATURAL GROUND
50048	583745.254	3767120.835	-28.092	NATURAL GROUND
50049	583750.553	3767118.34	-29.466	NATURAL GROUND
50050	583755.813	3767115.625	-27.859	NATURAL GROUND
50051	583761.023	3767112.877	-29.027	NATURAL GROUND
50052	583766.05	3767109.836	-28.583	NATURAL GROUND
50053	583770.977	3767106.559	-28.416	NATURAL GROUND
50054	583775.941	3767103.355	-27.38	NATURAL GROUND
50055	583780.884	3767100.028	-28.136	NATURAL GROUND
50056	583785.748	3767096.511	-27.017	NATURAL GROUND
50057	583790.675	3767093.049	-25.282	NATURAL GROUND
50058	583795.744	3767089.704	-26.219	NATURAL GROUND
50059	583800.775	3767086.285	-25.586	NATURAL GROUND
50060	583805.83	3767082.935	-27.959	NATURAL GROUND
50061	583810.936	3767079.707	-25.932	NATURAL GROUND
50062	583816.177	3767076.582	-26.375	NATURAL GROUND
50063	583821.499	3767073.67	-25.68	NATURAL GROUND
50064	583826.933	3767070.972	-20.859	NATURAL GROUND
50065	583832.499	3767068.706	-20.871	NATURAL GROUND
50066	583838.168	3767067.034	-14.528	NATURAL GROUND
50067	583843.752	3767065.929	-14.549	NATURAL GROUND
50068	583849.082	3767064.939	-12.762	NATURAL GROUND
50069	583854.317	3767064.057	-11.259	NATURAL GROUND
50070	583859.524	3767063.346	-5.866	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50071	583864.656	3767062.446	-5.902	NATURAL GROUND
50072	583869.76	3767061.321	-5.617	NATURAL GROUND
50073	583874.984	3767060.261	-5.502	NATURAL GROUND
50074	583880.327	3767059.407	-5.256	NATURAL GROUND
50075	583885.724	3767058.559	-4.698	NATURAL GROUND
50076	583891.105	3767057.676	-4.678	NATURAL GROUND
50077	583896.516	3767056.878	-4.39	NATURAL GROUND
50078	583901.997	3767056.069	-4.017	NATURAL GROUND
50079	583907.522	3767055.228	-3.578	NATURAL GROUND
50080	583480.006	3766893.878	-43.635	NATURAL GROUND
50081	583482.748	3766898.697	-43.827	NATURAL GROUND
50082	583485.462	3766903.273	-44.545	NATURAL GROUND
50083	583488.804	3766907.301	-44.53	NATURAL GROUND
50084	583492.375	3766911.251	-45.151	NATURAL GROUND
50085	583496.876	3766914.17	-45.56	NATURAL GROUND
50086	583501.837	3766916.487	-45.908	NATURAL GROUND
50087	583507.179	3766918.362	-46.617	NATURAL GROUND
50088	583512.813	3766919.482	-47.323	NATURAL GROUND
50089	583518.515	3766919.118	-47.437	NATURAL GROUND
50090	583524.296	3766917.998	-47.67	NATURAL GROUND
50091	583530.05	3766917.168	-48.501	NATURAL GROUND
50092	583536.05	3766916.194	-48.945	NATURAL GROUND
50093	583541.123	3766915.663	-49.103	NATURAL GROUND
50094	583546.407	3766915.082	-49.232	NATURAL GROUND
50095	583551.774	3766914.321	-48.631	NATURAL GROUND
50096	583557.313	3766913.118	-48.726	NATURAL GROUND
50097	583562.89	3766911.681	-48.883	NATURAL GROUND
50098	583568.585	3766910.253	-48.35	NATURAL GROUND
50099	583574.419	3766909.112	-47.109	NATURAL GROUND
50100	583580.275	3766908.443	-45.819	NATURAL GROUND
50101	583586.146	3766908.073	-44.982	NATURAL GROUND
50102	583591.941	3766907.938	-44	NATURAL GROUND
50103	583597.696	3766907.741	-41.038	NATURAL GROUND
50104	583603.368	3766907.217	-41.718	NATURAL GROUND
50105	583609.001	3766906.459	-40.302	NATURAL GROUND
50106	583614.675	3766905.371	-39.783	NATURAL GROUND
50107	583620.425	3766904.182	-38.502	NATURAL GROUND
50108	583626.202	3766903.088	-37.197	NATURAL GROUND
50109	583631.932	3766901.591	-35.862	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50110	583637.55	3766899.64	-34.223	NATURAL GROUND
50111	583642.884	3766896.827	-34.608	NATURAL GROUND
50112	583647.84	3766893.496	-33.318	NATURAL GROUND
50113	583652.57	3766889.871	-32.257	NATURAL GROUND
50114	583657.282	3766886.362	-31.133	NATURAL GROUND
50115	583662.136	3766882.933	-30.694	NATURAL GROUND
50116	583667.21	3766879.636	-31.62	NATURAL GROUND
50117	583672.398	3766876.486	-30.928	NATURAL GROUND
50118	583677.538	3766873.436	-31.112	NATURAL GROUND
50119	583682.622	3766870.535	-31.185	NATURAL GROUND
50120	583687.743	3766867.689	-29.12	NATURAL GROUND
50121	583692.912	3766864.999	-27.782	NATURAL GROUND
50122	583698.167	3766862.693	-28.515	NATURAL GROUND
50123	583703.536	3766860.744	-27.274	NATURAL GROUND
50124	583708.829	3766859.134	-28.261	NATURAL GROUND
50125	583714.013	3766857.344	-25.895	NATURAL GROUND
50126	583719.287	3766855.674	-29.214	NATURAL GROUND
50127	583724.519	3766854.187	-28.68	NATURAL GROUND
50128	583729.692	3766852.875	-29.122	NATURAL GROUND
50129	583734.97	3766851.441	-28.825	NATURAL GROUND
50130	583740.327	3766850.071	-27.559	NATURAL GROUND
50131	583745.634	3766848.824	-27.362	NATURAL GROUND
50132	583750.791	3766847.571	-27.321	NATURAL GROUND
50133	583755.801	3766846.373	-28.014	NATURAL GROUND
50134	583760.759	3766845.565	-27.572	NATURAL GROUND
50135	583766.591	3766844.731	-26.327	NATURAL GROUND
50136	583772.252	3766843.782	-25.192	NATURAL GROUND
50137	583777.733	3766843.13	-22.962	NATURAL GROUND
50138	583783.039	3766842.415	-22.639	NATURAL GROUND
50139	583788.181	3766842.105	-20.985	NATURAL GROUND
50140	583793.204	3766841.865	-20.174	NATURAL GROUND
50141	583798.916	3766842.409	-17.784	NATURAL GROUND
50142	583803.893	3766843.911	-16.029	NATURAL GROUND
50143	583808.234	3766846.915	-12.233	NATURAL GROUND
50144	583810.699	3766851.343	-10.892	NATURAL GROUND
50145	583518.579	3766680.424	-50.37	NATURAL GROUND
50146	583520.968	3766675.722	-50.78	NATURAL GROUND
50147	583524.483	3766671.616	-50.822	NATURAL GROUND
50148	583528.878	3766668.499	-51.157	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50149	583533.613	3766665.165	-51.665	NATURAL GROUND
50150	583538.416	3766662.654	-52.347	NATURAL GROUND
50151	583543.805	3766660.939	-52.806	NATURAL GROUND
50152	583548.616	3766659.506	-53.204	NATURAL GROUND
50153	583553.594	3766657.904	-53.232	NATURAL GROUND
50154	583558.706	3766655.985	-53.957	NATURAL GROUND
50155	583564.038	3766654.218	-54.407	NATURAL GROUND
50156	583569.507	3766652.543	-55.081	NATURAL GROUND
50157	583575.122	3766650.91	-55.891	NATURAL GROUND
50158	583580.882	3766649.169	-56.701	NATURAL GROUND
50159	583586.696	3766647.254	-56.085	NATURAL GROUND
50160	583591.381	3766645.446	-55.635	NATURAL GROUND
50161	583596.092	3766643.421	-55.467	NATURAL GROUND
50162	583600.738	3766641.137	-55.091	NATURAL GROUND
50163	583605.276	3766638.738	-51.692	NATURAL GROUND
50164	583609.801	3766636.224	-52.103	NATURAL GROUND
50165	583614.325	3766633.685	-50.445	NATURAL GROUND
50166	583618.798	3766631.119	-49.806	NATURAL GROUND
50167	583623.302	3766628.506	-48.836	NATURAL GROUND
50168	583627.906	3766626.064	-46.841	NATURAL GROUND
50169	583632.457	3766623.727	-44.727	NATURAL GROUND
50170	583638.008	3766621.043	-43.796	NATURAL GROUND
50171	583643.507	3766618.575	-41.278	NATURAL GROUND
50172	583648.868	3766616.403	-41.546	NATURAL GROUND
50173	583654.199	3766614.47	-38.41	NATURAL GROUND
50174	583659.351	3766612.937	-38.863	NATURAL GROUND
50175	583664.427	3766611.655	-37.625	NATURAL GROUND
50176	583669.33	3766610.517	-36.649	NATURAL GROUND
50177	583675.021	3766609.233	-35.771	NATURAL GROUND
50178	583680.681	3766607.747	-34.419	NATURAL GROUND
50179	583686.124	3766605.907	-32.412	NATURAL GROUND
50180	583691.568	3766604.147	-32.281	NATURAL GROUND
50181	583696.918	3766602.432	-29.669	NATURAL GROUND
50182	583702.371	3766601.136	-29.288	NATURAL GROUND
50183	583707.595	3766599.734	-26.739	NATURAL GROUND
50184	583712.705	3766598.658	-23.058	NATURAL GROUND
50185	583717.589	3766597.42	-20.535	NATURAL GROUND
50186	583723.128	3766595.677	-17.959	NATURAL GROUND
50187	583728.533	3766594.272	-17.068	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50189	583738.742	3766592.188	-14.871	NATURAL GROUND
50190	583461.284	3766358.859	-46.798	NATURAL GROUND
50191	583465.607	3766361.733	-46.867	NATURAL GROUND
50192	583471.031	3766363.087	-47.293	NATURAL GROUND
50193	583476.791	3766363.204	-48.195	NATURAL GROUND
50194	583482.564	3766363.469	-48.421	NATURAL GROUND
50195	583487.889	3766364.319	-48.022	NATURAL GROUND
50196	583493.513	3766366.02	-48.995	NATURAL GROUND
50197	583498.763	3766368.529	-49.138	NATURAL GROUND
50198	583504.153	3766370.738	-48.699	NATURAL GROUND
50199	583509.201	3766371.938	-49.914	NATURAL GROUND
50200	583514.471	3766373.512	-50.182	NATURAL GROUND
50202	583524.993	3766377.942	-50.759	NATURAL GROUND
50203	583530.955	3766379.305	-50.325	NATURAL GROUND
50204	583537.183	3766379.632	-51.514	NATURAL GROUND
50205	583543.25	3766378.87	-51.75	NATURAL GROUND
50206	583548.967	3766377.852	-51.836	NATURAL GROUND
50207	583554.809	3766377.035	-52.361	NATURAL GROUND
50208	583560.739	3766375.889	-53.385	NATURAL GROUND
50209	583565.485	3766374.04	-53.516	NATURAL GROUND
50210	583570.363	3766372.296	-53.732	NATURAL GROUND
50211	583575.282	3766370.44	-53.666	NATURAL GROUND
50212	583580.138	3766368.507	-53.983	NATURAL GROUND
50213	583585.133	3766366.869	-54.082	NATURAL GROUND
50214	583590.152	3766365.413	-54.269	NATURAL GROUND
50215	583595.156	3766364.246	-54.928	NATURAL GROUND
50216	583600.181	3766363.312	-54.528	NATURAL GROUND
50217	583605.147	3766362.332	-55.08	NATURAL GROUND
50218	583610.1	3766361.348	-53.807	NATURAL GROUND
50219	583615.01	3766360.368	-52.799	NATURAL GROUND
50220	583619.876	3766359.021	-51.852	NATURAL GROUND
50221	583624.732	3766357.5	-52.586	NATURAL GROUND
50222	583629.608	3766355.959	-51.423	NATURAL GROUND
50223	583634.463	3766354.616	-50.13	NATURAL GROUND
50224	583640.51	3766353.495	-50.207	NATURAL GROUND
50225	583646.608	3766352.36	-49.104	NATURAL GROUND
50227	583658.774	3766350.75	-43.372	NATURAL GROUND
50228	583664.898	3766350.06	-40.393	NATURAL GROUND
50229	583670.977	3766349.124	-38.3	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50230	583677.151	3766348.435	-36.755	NATURAL GROUND
50231	583682.155	3766347.601	-35.622	NATURAL GROUND
50232	583687.16	3766346.837	-33.871	NATURAL GROUND
50233	583692.11	3766345.914	-34.122	NATURAL GROUND
50234	583698.142	3766344.819	-31.279	NATURAL GROUND
50235	583703.877	3766343.977	-23.189	NATURAL GROUND
50236	583709.426	3766343.677	-21.031	NATURAL GROUND
50237	583714.816	3766344.135	-12.032	NATURAL GROUND
50238	583720.365	3766345.885	-10.546	NATURAL GROUND
50239	583724.965	3766349.124	-2.067	NATURAL GROUND
50240	583615.642	3766100.36	-47.751	NATURAL GROUND
50241	583618.5	3766096.061	-47.426	NATURAL GROUND
50242	583619.146	3766090.793	-46.599	NATURAL GROUND
50243	583620.013	3766085.786	-46.998	NATURAL GROUND
50244	583622.529	3766081.392	-47.084	NATURAL GROUND
50245	583627.387	3766078.896	-46.71	NATURAL GROUND
50246	583631.895	3766076.041	-46.161	NATURAL GROUND
50247	583636.095	3766072.595	-46.28	NATURAL GROUND
50248	583640.041	3766069.241	-46.399	NATURAL GROUND
50249	583644.95	3766066.476	-46.222	NATURAL GROUND
50250	583650.295	3766064.781	-45.858	NATURAL GROUND
50251	583655.423	3766063.425	-45.834	NATURAL GROUND
50252	583660.828	3766061.569	-45.396	NATURAL GROUND
50253	583665.75	3766060.051	-45.253	NATURAL GROUND
50254	583670.831	3766058.698	-42.92	NATURAL GROUND
50255	583676.067	3766057.657	-41.388	NATURAL GROUND
50256	583681.468	3766056.017	-41.549	NATURAL GROUND
50257	583686.806	3766053.697	-40.715	NATURAL GROUND
50258	583692.154	3766050.971	-40.257	NATURAL GROUND
50259	583696.375	3766048.144	-38.843	NATURAL GROUND
50260	583700.37	3766045.038	-37.367	NATURAL GROUND
50261	583704.656	3766040.87	-36.974	NATURAL GROUND
50262	583708.617	3766036.558	-35.096	NATURAL GROUND
50263	583712.389	3766032.313	-35.278	NATURAL GROUND
50264	583716.427	3766028.305	-37.264	NATURAL GROUND
50265	583720.721	3766024.443	-34.714	NATURAL GROUND
50266	583725.414	3766021.065	-33.382	NATURAL GROUND
50268	583735.292	3766016.588	-33.493	NATURAL GROUND
50269	583740.546	3766014.604	-32.38	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50270	583745.596	3766012.262	-30.681	NATURAL GROUND
50271	583750.803	3766009.928	-29.803	NATURAL GROUND
50272	583756.151	3766008.771	-28.524	NATURAL GROUND
50273	583761.289	3766009.005	-25.228	NATURAL GROUND
50274	583766.751	3766009.729	-25.103	NATURAL GROUND
50275	583772.406	3766009.813	-24.95	NATURAL GROUND
50276	583777.592	3766010.036	-22.343	NATURAL GROUND
50277	583782.613	3766011.287	-21.651	NATURAL GROUND
50278	583787.533	3766013.322	-19.152	NATURAL GROUND
50279	583792.432	3766015.848	-17.971	NATURAL GROUND
50280	583796.7	3766019.719	-17.05	NATURAL GROUND
50281	583799.367	3766023.986	-12.336	NATURAL GROUND
50282	583800.929	3766029.547	-10.249	NATURAL GROUND
50283	583800.526	3766034.928	-5.313	NATURAL GROUND
50284	583629.104	3765807.945	-41.523	NATURAL GROUND
50285	583632.453	3765803.653	-41.327	NATURAL GROUND
50286	583635.372	3765799.051	-41.418	NATURAL GROUND
50287	583638.113	3765794.332	-41.464	NATURAL GROUND
50288	583641.702	3765790.174	-41.226	NATURAL GROUND
50289	583646.389	3765787.136	-41.166	NATURAL GROUND
50290	583651.575	3765786.544	-41.169	NATURAL GROUND
50291	583656.797	3765785.917	-41.082	NATURAL GROUND
50292	583661.707	3765784.905	-40.66	NATURAL GROUND
50293	583667.03	3765784.394	-40.754	NATURAL GROUND
50294	583672.124	3765784.378	-40.246	NATURAL GROUND
50295	583677.687	3765784.011	-40.853	NATURAL GROUND
50296	583682.625	3765782.89	-40.908	NATURAL GROUND
50297	583687.613	3765781.343	-38.727	NATURAL GROUND
50298	583693.419	3765779.958	-40.135	NATURAL GROUND
50299	583698.406	3765779.086	-39.822	NATURAL GROUND
50300	583703.661	3765778.298	-39.823	NATURAL GROUND
50301	583709.001	3765776.776	-39.313	NATURAL GROUND
50302	583714.358	3765774.464	-38.842	NATURAL GROUND
50303	583719.594	3765771.349	-38.911	NATURAL GROUND
50305	583729.399	3765764.775	-37.894	NATURAL GROUND
50306	583734.48	3765761.911	-36.738	NATURAL GROUND
50307	583739.683	3765759.301	-37.264	NATURAL GROUND
50309	583750.422	3765754.617	-35.172	NATURAL GROUND
50310	583755.775	3765752.133	-35.6	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50311	583761.139	3765749.279	-36.009	NATURAL GROUND
50312	583766.521	3765746.576	-36.034	NATURAL GROUND
50313	583772.094	3765744.372	-34.755	NATURAL GROUND
50314	583777.78	3765742.968	-35.17	NATURAL GROUND
50315	583783.454	3765741.733	-34.117	NATURAL GROUND
50316	583789.071	3765740.52	-34.022	NATURAL GROUND
50317	583794.734	3765739.297	-31.553	NATURAL GROUND
50319	583806.19	3765738.164	-28.632	NATURAL GROUND
50320	583811.948	3765737.886	-26.795	NATURAL GROUND
50321	583817.547	3765737.723	-25.089	NATURAL GROUND
50322	583822.888	3765737.637	-24.767	NATURAL GROUND
50323	583828.082	3765737.229	-21.227	NATURAL GROUND
50324	583833.061	3765736.456	-18.124	NATURAL GROUND
50325	583838.61	3765734.732	-15.447	NATURAL GROUND
50326	583843.526	3765732.361	-16.516	NATURAL GROUND
50327	583847.51	3765729.254	-12.201	NATURAL GROUND
50328	583850.902	3765724.75	-10.767	NATURAL GROUND
50329	583853.778	3765720.3	-12.284	NATURAL GROUND
50330	583856.831	3765716.107	-10.678	NATURAL GROUND
50331	583860.387	3765711.829	-8.198	NATURAL GROUND
50332	583709.35	3765464.116	-37.117	NATURAL GROUND
50333	583706.209	3765460.15	-37.413	NATURAL GROUND
50334	583705.104	3765465.112	-35.825	NATURAL GROUND
50335	583704.372	3765470.593	-35.788	NATURAL GROUND
50336	583705.561	3765475.683	-37.137	NATURAL GROUND
50337	583709.27	3765479.863	-37.566	NATURAL GROUND
50338	583714.218	3765480.852	-37.478	NATURAL GROUND
50339	583719.218	3765478.875	-37.73	NATURAL GROUND
50340	583723.162	3765475.277	-37.691	NATURAL GROUND
50341	583727.022	3765471.903	-37.688	NATURAL GROUND
50342	583732.266	3765469.949	-38.127	NATURAL GROUND
50343	583737.93	3765468.831	-38.273	NATURAL GROUND
50344	583743.193	3765468.074	-38.339	NATURAL GROUND
50345	583748.654	3765466.902	-38.751	NATURAL GROUND
50346	583753.542	3765465.301	-38.87	NATURAL GROUND
50347	583758.621	3765463.185	-39.266	NATURAL GROUND
50348	583764.01	3765461.792	-39.306	NATURAL GROUND
50349	583769.694	3765460.567	-39.293	NATURAL GROUND
50350	583775.615	3765459.576	-38.802	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50351	583781.728	3765458.828	-39.392	NATURAL GROUND
50352	583787.74	3765457.965	-39.189	NATURAL GROUND
50353	583793.82	3765456.626	-38.721	NATURAL GROUND
50354	583799.625	3765455.242	-38.657	NATURAL GROUND
50355	583805.187	3765454.072	-38.518	NATURAL GROUND
50356	583810.803	3765453.064	-38.242	NATURAL GROUND
50357	583816.374	3765451.856	-36.109	NATURAL GROUND
50358	583821.714	3765450.156	-35.978	NATURAL GROUND
50359	583826.969	3765448.873	-32.863	NATURAL GROUND
50360	583832.108	3765447.657	-33.061	NATURAL GROUND
50361	583837.223	3765446.805	-30.64	NATURAL GROUND
50362	583842.172	3765445.608	-28.081	NATURAL GROUND
50363	583847.064	3765444.164	-27.007	NATURAL GROUND
50364	583851.872	3765442.529	-26.98	NATURAL GROUND
50365	583857.523	3765440.77	-23.069	NATURAL GROUND
50366	583863.161	3765439.21	-23.022	NATURAL GROUND
50367	583868.492	3765437.377	-19.489	NATURAL GROUND
50368	583873.545	3765435.424	-18.034	NATURAL GROUND
50369	583878.351	3765433.234	-16.06	NATURAL GROUND
50370	583882.896	3765430.904	-13.133	NATURAL GROUND
50371	583887.697	3765427.767	-13.894	NATURAL GROUND
50372	583891.828	3765424.272	-12.105	NATURAL GROUND
50373	583895.146	3765420.421	-11.714	NATURAL GROUND
50374	583897.636	3765415.604	-10.736	NATURAL GROUND
50375	583898.433	3765410.27	-10.594	NATURAL GROUND
50376	583743.173	3765212.096	-38.999	NATURAL GROUND
50377	583742.318	3765207.025	-39.061	NATURAL GROUND
50378	583743.395	3765201.988	-39.043	NATURAL GROUND
50379	583746.064	3765197.719	-39.22	NATURAL GROUND
50380	583750.058	3765194.682	-39.315	NATURAL GROUND
50381	583755.166	3765193.636	-38.991	NATURAL GROUND
50382	583760.514	3765191.845	-39.45	NATURAL GROUND
50383	583765.278	3765190.015	-39.573	NATURAL GROUND
50384	583770.346	3765188.173	-39.618	NATURAL GROUND
50385	583775.668	3765185.955	-39.631	NATURAL GROUND
50386	583780.389	3765183.736	-39.597	NATURAL GROUND
50387	583785.206	3765181.581	-39.771	NATURAL GROUND
50388	583790.213	3765179.515	-39.842	NATURAL GROUND
50389	583795.363	3765177.144	-39.547	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50390	583800.623	3765174.411	-41.103	NATURAL GROUND
50391	583804.958	3765171.73	-40.285	NATURAL GROUND
50392	583809.306	3765168.928	-40.319	NATURAL GROUND
50393	583813.698	3765166.248	-39.819	NATURAL GROUND
50394	583818.292	3765164.004	-39.899	NATURAL GROUND
50395	583822.89	3765162.022	-38.671	NATURAL GROUND
50396	583828.438	3765160.346	-38.822	NATURAL GROUND
50397	583833.806	3765158.538	-38.376	NATURAL GROUND
50398	583839.065	3765156.481	-37.283	NATURAL GROUND
50399	583844.441	3765155.131	-36.631	NATURAL GROUND
50400	583849.89	3765154.322	-36.11	NATURAL GROUND
50401	583855.39	3765153.684	-34.902	NATURAL GROUND
50402	583860.949	3765152.78	-30.98	NATURAL GROUND
50403	583866.479	3765151.751	-29.984	NATURAL GROUND
50404	583872.145	3765151.21	-28.026	NATURAL GROUND
50405	583877.883	3765151.2	-26.872	NATURAL GROUND
50406	583883.765	3765151.441	-24.098	NATURAL GROUND
50407	583889.648	3765151.425	-20.855	NATURAL GROUND
50408	583895.418	3765150.898	-16.934	NATURAL GROUND
50409	583900.999	3765149.962	-14.384	NATURAL GROUND
50410	583906.293	3765148.302	-12.862	NATURAL GROUND
50411	583911.081	3765146.005	-10.413	NATURAL GROUND
50412	583915.719	3765142.592	-10.54	NATURAL GROUND
50413	583919.672	3765139.139	-9.138	NATURAL GROUND
50414	583923.277	3765134.794	-2.529	NATURAL GROUND
50415	583774.554	3764918.324	-37.273	NATURAL GROUND
50416	583773.875	3764913.115	-36.91	NATURAL GROUND
50417	583774.137	3764907.741	-37.023	NATURAL GROUND
50418	583775.989	3764902.897	-37.059	NATURAL GROUND
50419	583780.279	3764900.146	-36.271	NATURAL GROUND
50420	583785.04	3764897.756	-37.097	NATURAL GROUND
50421	583789.672	3764895.353	-36.906	NATURAL GROUND
50422	583794.645	3764894.345	-36.908	NATURAL GROUND
50423	583799.921	3764894.914	-36.635	NATURAL GROUND
50424	583805.234	3764894.798	-36.539	NATURAL GROUND
50425	583810.383	3764893.886	-37.206	NATURAL GROUND
50426	583815.669	3764893.371	-37.469	NATURAL GROUND
50427	583821.173	3764893.45	-35.445	NATURAL GROUND
50428	583826.224	3764893.18	-36.304	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50429	583831.541	3764892.059	-34.397	NATURAL GROUND
50430	583836.913	3764890.367	-35.09	NATURAL GROUND
50431	583842.348	3764888.843	-31.139	NATURAL GROUND
50432	583847.844	3764887.305	-34.165	NATURAL GROUND
50433	583853.384	3764885.259	-33.231	NATURAL GROUND
50434	583857.973	3764883.197	-32.937	NATURAL GROUND
50435	583862.63	3764880.96	-30.947	NATURAL GROUND
50436	583867.375	3764878.688	-28.368	NATURAL GROUND
50437	583872.209	3764876.696	-30.201	NATURAL GROUND
50438	583877.236	3764874.902	-29.189	NATURAL GROUND
50439	583882.332	3764873.287	-25.055	NATURAL GROUND
50440	583887.48	3764871.66	-26.683	NATURAL GROUND
50441	583892.736	3764870.244	-23.281	NATURAL GROUND
50442	583897.966	3764868.849	-22.652	NATURAL GROUND
50443	583903.162	3764867.391	-23.152	NATURAL GROUND
50444	583908.399	3764865.977	-21.208	NATURAL GROUND
50445	583913.744	3764864.856	-17.379	NATURAL GROUND
50446	583918.96	3764863.736	-14.598	NATURAL GROUND
50447	583923.91	3764862.669	-13.413	NATURAL GROUND
50448	583929.662	3764861.296	-10.671	NATURAL GROUND
50449	583935.245	3764859.607	-8.571	NATURAL GROUND
50450	583940.589	3764857.511	-1.991	NATURAL GROUND
50451	583945.434	3764854.978	-1.911	NATURAL GROUND
50452	583949.771	3764851.809	-1.358	NATURAL GROUND
50453	583763.337	3764628.314	-35.684	NATURAL GROUND
50454	583767.198	3764624.623	-34.86	NATURAL GROUND
50455	583771.389	3764621.351	-35.561	NATURAL GROUND
50456	583776.223	3764619.236	-35.545	NATURAL GROUND
50457	583781.454	3764619.168	-35.848	NATURAL GROUND
50458	583785.932	3764621.484	-35.973	NATURAL GROUND
50459	583791.118	3764623.058	-34.533	NATURAL GROUND
50460	583796.267	3764623.763	-36.86	NATURAL GROUND
50461	583801.734	3764623.262	-34.718	NATURAL GROUND
50462	583806.658	3764621.417	-35.464	NATURAL GROUND
50463	583811.767	3764619.36	-34.62	NATURAL GROUND
50464	583817.243	3764617.952	-35.349	NATURAL GROUND
50465	583822.482	3764616.849	-35.236	NATURAL GROUND
50466	583828.023	3764616.164	-35.245	NATURAL GROUND
50467	583833.116	3764615.038	-34.429	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50468	583838.353	3764613.277	-32.255	NATURAL GROUND
50469	583843.825	3764611.615	-31.196	NATURAL GROUND
50470	583849.506	3764609.942	-28.326	NATURAL GROUND
50471	583854.259	3764608.028	-26.022	NATURAL GROUND
50472	583858.962	3764605.63	-23.498	NATURAL GROUND
50473	583863.412	3764602.762	-21.497	NATURAL GROUND
50474	583867.62	3764599.655	-19.361	NATURAL GROUND
50475	583871.675	3764596.57	-17.013	NATURAL GROUND
50476	583875.781	3764593.616	-14.805	NATURAL GROUND
50477	583880.206	3764590.886	-13.975	NATURAL GROUND
50478	583884.826	3764588.476	-12.089	NATURAL GROUND
50479	583890.205	3764586.012	-9.485	NATURAL GROUND
50480	583895.563	3764584.519	-9.283	NATURAL GROUND
50481	583901.266	3764583.823	-7.903	NATURAL GROUND
50482	583906.391	3764583.123	-5.792	NATURAL GROUND
50483	583911.352	3764582.091	-5.189	NATURAL GROUND
50484	583916.398	3764580.686	-5.114	NATURAL GROUND
50485	583921.529	3764578.833	-4.033	NATURAL GROUND
50486	583926.67	3764577.55	-3.434	NATURAL GROUND
50487	583931.777	3764576.587	-3.155	NATURAL GROUND
50488	583936.714	3764575.128	-2.922	NATURAL GROUND
50489	583802.398	3764403.069	-30.527	NATURAL GROUND
50490	583801.714	3764397.957	-32.771	NATURAL GROUND
50491	583800.501	3764392.595	-32.78	NATURAL GROUND
50492	583799.665	3764387.115	-29.502	NATURAL GROUND
50493	583799.056	3764382.106	-31.589	NATURAL GROUND
50494	583798.665	3764377.022	-32.553	NATURAL GROUND
50495	583799.622	3764372.099	-32.971	NATURAL GROUND
50496	583801.879	3764367.522	-30.961	NATURAL GROUND
50497	583805.053	3764363.448	-33.231	NATURAL GROUND
50498	583809.111	3764360.372	-33.444	NATURAL GROUND
50499	583813.695	3764357.724	-29.6	NATURAL GROUND
50500	583817.403	3764354.199	-29.485	NATURAL GROUND
50501	583821.075	3764350.533	-27.88	NATURAL GROUND
50502	583825.442	3764347.278	-26.364	NATURAL GROUND
50503	583830.318	3764346.011	-25.348	NATURAL GROUND
50504	583835.614	3764344.333	-23.37	NATURAL GROUND
50505	583840.256	3764342.098	-20.001	NATURAL GROUND
50506	583844.937	3764339.248	-21.564	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50507	583849.594	3764336.914	-21.587	NATURAL GROUND
50508	583854.402	3764334.301	-18.692	NATURAL GROUND
50509	583858.653	3764331.631	-16.79	NATURAL GROUND
50510	583863.659	3764328.908	-14.024	NATURAL GROUND
50511	583868.864	3764326.741	-14.374	NATURAL GROUND
50512	583874.137	3764325.264	-11.44	NATURAL GROUND
50513	583879.388	3764323.9	-9.426	NATURAL GROUND
50514	583884.644	3764321.906	-8.312	NATURAL GROUND
50515	583889.376	3764320.073	-7.501	NATURAL GROUND
50516	583894.197	3764318.038	-6.699	NATURAL GROUND
50517	583898.96	3764315.311	-5.932	NATURAL GROUND
50518	583903.373	3764311.917	-5.929	NATURAL GROUND
50519	583907.315	3764308.074	-5.399	NATURAL GROUND
50520	583910.913	3764304.223	-4.582	NATURAL GROUND
50521	583914.468	3764300.603	-4.211	NATURAL GROUND
50522	583918.48	3764297.251	-3.92	NATURAL GROUND
50523	583923.331	3764294.453	-3.639	NATURAL GROUND
50524	583928.239	3764292.325	-3.328	NATURAL GROUND
50525	583933.562	3764290.583	-3.177	NATURAL GROUND
50526	583938.54	3764288.412	-3.084	NATURAL GROUND
50527	583943.746	3764286.368	-2.986	NATURAL GROUND
50528	583948.539	3764284.784	-2.754	NATURAL GROUND
50529	583953.529	3764283.807	-2.708	NATURAL GROUND
50530	583958.67	3764283.494	-2.578	NATURAL GROUND
50531	583963.924	3764283.222	-2.479	NATURAL GROUND
50532	583969.163	3764282.705	-2.17	NATURAL GROUND
50533	583974.311	3764281.77	-1.942	NATURAL GROUND
50534	583979.811	3764280.488	-1.759	NATURAL GROUND
50535	583985.339	3764278.465	-1.528	NATURAL GROUND
50536	583989.257	3764275.23	-1.781	NATURAL GROUND
50537	583837.484	3764089.283	-21.132	NATURAL GROUND
50538	583838.614	3764083.849	-19.621	NATURAL GROUND
50539	583839.815	3764078.473	-22.152	NATURAL GROUND
50540	583841.694	3764073.111	-21.47	NATURAL GROUND
50541	583844.423	3764068.094	-18.341	NATURAL GROUND
50542	583847.754	3764063.578	-18.894	NATURAL GROUND
50543	583851.495	3764059.689	-18.707	NATURAL GROUND
50544	583855.445	3764056.467	-15.56	NATURAL GROUND
50545	583860.73	3764053.726	-15.947	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50546	583865.361	3764050.88	-12.622	NATURAL GROUND
50547	583869.452	3764047.896	-11.079	NATURAL GROUND
50548	583873.751	3764044.438	-11.838	NATURAL GROUND
50549	583878.915	3764041.504	-9.372	NATURAL GROUND
50550	583884.047	3764040.136	-8.979	NATURAL GROUND
50551	583889.561	3764039.943	-8.016	NATURAL GROUND
50552	583894.619	3764039.388	-7.483	NATURAL GROUND
50553	583900.033	3764038.44	-6.448	NATURAL GROUND
50554	583905.678	3764037.499	-6.908	NATURAL GROUND
50555	583912.372	3764037.065	-6.54	NATURAL GROUND
50556	583917.532	3764036.098	-6.59	NATURAL GROUND
50557	583922.553	3764034.456	-5.609	NATURAL GROUND
50558	583928.016	3764032.557	-5.927	NATURAL GROUND
50559	583933.352	3764030.907	-5.436	NATURAL GROUND
50560	583938.583	3764029.147	-4.572	NATURAL GROUND
50561	583943.783	3764027.247	-4.268	NATURAL GROUND
50562	583948.958	3764025.238	-3.823	NATURAL GROUND
50563	583953.948	3764023.029	-3.414	NATURAL GROUND
50564	583958.777	3764020.346	-3.371	NATURAL GROUND
50565	583963.484	3764017.714	-3.024	NATURAL GROUND
50566	583968.218	3764015.471	-2.624	NATURAL GROUND
50567	583972.911	3764013.577	-2.55	NATURAL GROUND
50568	583953.199	3763945.175	-4.214	NATURAL GROUND
50569	583949.856	3763948.945	-4.103	NATURAL GROUND
50570	583946.801	3763953.078	-4.375	NATURAL GROUND
50571	583944.108	3763957.689	-4.712	NATURAL GROUND
50572	583941.59	3763962.509	-4.341	NATURAL GROUND
50573	583938.875	3763967.794	-4.772	NATURAL GROUND
50574	583936.397	3763972.429	-5.15	NATURAL GROUND
50575	583933.556	3763977.199	-5.067	NATURAL GROUND
50576	583930.716	3763982.193	-5.607	NATURAL GROUND
50577	583928.168	3763987.427	-5.919	NATURAL GROUND
50578	583926.058	3763992.841	-5.999	NATURAL GROUND
50579	583924.462	3763998.354	-5.509	NATURAL GROUND
50580	583923.688	3764003.974	-6.11	NATURAL GROUND
50581	583923.971	3764009.378	-5.659	NATURAL GROUND
50582	583924.861	3764014.346	-6.106	NATURAL GROUND
50583	583925.783	3764020.151	-5.278	NATURAL GROUND
50584	583926.394	3764026.066	-5.174	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50585	583926.515	3764031.306	-5.923	NATURAL GROUND
50586	583925.942	3764036.842	-5.955	NATURAL GROUND
50587	583925.317	3764042.485	-5.784	NATURAL GROUND
50588	583924.85	3764048.169	-5.653	NATURAL GROUND
50589	583924.295	3764053.823	-5.47	NATURAL GROUND
50590	583923.238	3764059.525	-5.519	NATURAL GROUND
50591	583922.303	3764065.385	-5.474	NATURAL GROUND
50592	583920.988	3764071.432	-5.581	NATURAL GROUND
50593	583919.638	3764076.296	-5.741	NATURAL GROUND
50594	583918.008	3764081.129	-5.895	NATURAL GROUND
50595	583916.09	3764085.899	-5.876	NATURAL GROUND
50596	583914.075	3764090.611	-5.886	NATURAL GROUND
50597	583912.199	3764095.277	-6.113	NATURAL GROUND
50598	583910.138	3764101.087	-5.568	NATURAL GROUND
50599	583908.199	3764106.938	-6.139	NATURAL GROUND
50600	583906.3	3764112.858	-6.206	NATURAL GROUND
50601	583904.492	3764118.813	-6.527	NATURAL GROUND
50602	583902.75	3764124.77	-6.54	NATURAL GROUND
50603	583901.273	3764129.561	-6.478	NATURAL GROUND
50604	583899.813	3764134.384	-6.63	NATURAL GROUND
50605	583898.368	3764139.225	-6.77	NATURAL GROUND
50606	583896.99	3764144.082	-6.941	NATURAL GROUND
50607	583895.716	3764148.921	-6.2	NATURAL GROUND
50608	583894.318	3764154.992	-7.132	NATURAL GROUND
50609	583893.341	3764161.058	-7.062	NATURAL GROUND
50610	583892.85	3764167.064	-7.063	NATURAL GROUND
50611	583892.35	3764173.042	-7.053	NATURAL GROUND
50612	583891.71	3764178.917	-7.357	NATURAL GROUND
50613	583890.887	3764184.794	-7.403	NATURAL GROUND
50614	583890.214	3764190.766	-7.197	NATURAL GROUND
50615	583889.696	3764196.828	-6.726	NATURAL GROUND
50616	583888.996	3764202.91	-7.074	NATURAL GROUND
50617	583888.331	3764209.048	-7.08	NATURAL GROUND
50618	583887.73	3764215.233	-7.44	NATURAL GROUND
50619	583887.075	3764220.247	-6.979	NATURAL GROUND
50620	583886.329	3764225.271	-6.965	NATURAL GROUND
50621	583885.457	3764230.309	-7.77	NATURAL GROUND
50622	583884.485	3764235.333	-7.617	NATURAL GROUND
50623	583883.37	3764240.317	-7.565	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50624	583882.279	3764245.293	-7.583	NATURAL GROUND
50625	583881.238	3764250.261	-8.222	NATURAL GROUND
50627	583879.181	3764260.172	-8.865	NATURAL GROUND
50628	583878.026	3764265.134	-9.359	NATURAL GROUND
50629	583876.997	3764270.131	-8.717	NATURAL GROUND
50630	583876.178	3764275.1	-9.57	NATURAL GROUND
50631	583875.613	3764280.082	-8.775	NATURAL GROUND
50632	583875.384	3764286.306	-9.174	NATURAL GROUND
50633	583875.776	3764292.371	-8.862	NATURAL GROUND
50634	583876.781	3764298.134	-9.75	NATURAL GROUND
50635	583878.03	3764303.788	-8.54	NATURAL GROUND
50636	583879.365	3764309.324	-8.884	NATURAL GROUND
50637	583880.627	3764314.934	-8.383	NATURAL GROUND
50638	583881.855	3764320.618	-8.328	NATURAL GROUND
50639	583883.461	3764326.274	-8.049	NATURAL GROUND
50640	583885.329	3764331.987	-7.124	NATURAL GROUND
50641	583886.711	3764337.896	-7.744	NATURAL GROUND
50642	583887.292	3764343.936	-7.706	NATURAL GROUND
50643	583887.379	3764349.925	-7.511	NATURAL GROUND
50644	583887.406	3764355.823	-6.537	NATURAL GROUND
50645	583887.085	3764361.646	-6.56	NATURAL GROUND
50646	583886.559	3764367.56	-7.612	NATURAL GROUND
50647	583886.075	3764373.583	-7.638	NATURAL GROUND
50648	583885.383	3764379.701	-7.563	NATURAL GROUND
50649	583884.572	3764384.661	-7.362	NATURAL GROUND
50650	583883.632	3764389.648	-7.896	NATURAL GROUND
50651	583882.502	3764394.65	-8.016	NATURAL GROUND
50652	583881.301	3764399.638	-7.447	NATURAL GROUND
50653	583880.101	3764404.581	-7.691	NATURAL GROUND
50654	583878.927	3764409.531	-7.67	NATURAL GROUND
50655	583877.866	3764414.506	-9.533	NATURAL GROUND
50656	583876.966	3764419.491	-10.074	NATURAL GROUND
50657	583876.198	3764424.483	-10.236	NATURAL GROUND
50658	583875.599	3764429.471	-10.464	NATURAL GROUND
50659	583875.037	3764435.673	-9.955	NATURAL GROUND
50660	583874.736	3764441.891	-10.557	NATURAL GROUND
50661	583874.626	3764448.097	-10.615	NATURAL GROUND
50662	583874.652	3764454.318	-10.539	NATURAL GROUND
50663	583874.723	3764459.338	-10.501	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50664	583874.829	3764464.392	-9.03	NATURAL GROUND
50665	583874.873	3764469.482	-10.301	NATURAL GROUND
50666	583874.871	3764474.6	-10.249	NATURAL GROUND
50667	583874.718	3764479.763	-9.544	NATURAL GROUND
50668	583874.408	3764484.964	-10.49	NATURAL GROUND
50669	583873.933	3764490.169	-10.624	NATURAL GROUND
50670	583873.273	3764495.357	-10.914	NATURAL GROUND
50671	583872.159	3764500.507	-11.074	NATURAL GROUND
50672	583870.742	3764505.553	-10.137	NATURAL GROUND
50673	583869.196	3764510.492	-10.19	NATURAL GROUND
50674	583867.637	3764515.348	-13.669	NATURAL GROUND
50675	583866.061	3764520.186	-12.462	NATURAL GROUND
50676	583864.418	3764524.984	-12.484	NATURAL GROUND
50677	583862.721	3764529.77	-14.731	NATURAL GROUND
50678	583860.965	3764534.578	-14.219	NATURAL GROUND
50679	583859.273	3764539.434	-15.605	NATURAL GROUND
50680	583857.643	3764544.361	-17.209	NATURAL GROUND
50681	583856.16	3764549.326	-17.635	NATURAL GROUND
50682	583854.883	3764554.333	-18.979	NATURAL GROUND
50683	583853.832	3764559.311	-18.549	NATURAL GROUND
50684	583853.05	3764564.267	-19.302	NATURAL GROUND
50685	583852.59	3764570.442	-19.873	NATURAL GROUND
50686	583852.702	3764576.533	-21.135	NATURAL GROUND
50687	583853.109	3764582.53	-21.054	NATURAL GROUND
50688	583853.507	3764588.488	-22.421	NATURAL GROUND
50689	583853.709	3764594.577	-22.562	NATURAL GROUND
50690	583853.609	3764600.806	-23.615	NATURAL GROUND
50691	583853.401	3764605.81	-26.333	NATURAL GROUND
50692	583853.111	3764610.834	-26.064	NATURAL GROUND
50693	583852.698	3764615.876	-28.712	NATURAL GROUND
50694	583852.155	3764620.908	-30.117	NATURAL GROUND
50695	583851.499	3764625.99	-30.683	NATURAL GROUND
50696	583850.764	3764631.133	-31.163	NATURAL GROUND
50697	583849.968	3764636.311	-31.059	NATURAL GROUND
50698	583849.178	3764641.538	-31.077	NATURAL GROUND
50699	583848.39	3764646.777	-30.092	NATURAL GROUND
50700	583847.61	3764652.05	-31.689	NATURAL GROUND
50701	583846.896	3764657.365	-32.202	NATURAL GROUND
50702	583846.242	3764662.728	-32.157	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50703	583845.656	3764668.11	-31.937	NATURAL GROUND
50704	583845.23	3764673.464	-31.816	NATURAL GROUND
50705	583844.915	3764678.786	-32.324	NATURAL GROUND
50706	583844.676	3764684.089	-32.935	NATURAL GROUND
50707	583844.688	3764689.395	-33.801	NATURAL GROUND
50708	583844.709	3764694.719	-32.746	NATURAL GROUND
50709	583844.669	3764700.096	-33.91	NATURAL GROUND
50710	583844.61	3764705.477	-34.844	NATURAL GROUND
50711	583844.475	3764710.89	-32.462	NATURAL GROUND
50712	583844.403	3764716.333	-33.738	NATURAL GROUND
50713	583844.415	3764721.771	-33.009	NATURAL GROUND
50714	583844.458	3764727.19	-32.571	NATURAL GROUND
50715	583844.585	3764732.619	-32.586	NATURAL GROUND
50716	583844.769	3764738.08	-32.431	NATURAL GROUND
50717	583845.035	3764743.493	-31.203	NATURAL GROUND
50718	583845.318	3764748.892	-32.374	NATURAL GROUND
50719	583845.577	3764754.315	-31.65	NATURAL GROUND
50720	583845.741	3764759.768	-31.229	NATURAL GROUND
50721	583845.822	3764765.231	-32.736	NATURAL GROUND
50722	583845.726	3764770.705	-33.032	NATURAL GROUND
50723	583845.316	3764776.197	-33.713	NATURAL GROUND
50724	583844.598	3764781.663	-33.193	NATURAL GROUND
50725	583843.75	3764787.023	-33.897	NATURAL GROUND
50726	583842.79	3764792.307	-34.026	NATURAL GROUND
50727	583841.718	3764797.527	-34.035	NATURAL GROUND
50728	583840.667	3764802.714	-33.998	NATURAL GROUND
50729	583839.808	3764807.883	-34.093	NATURAL GROUND
50730	583839.303	3764813.001	-32.926	NATURAL GROUND
50731	583839.238	3764818.052	-33.919	NATURAL GROUND
50732	583839.517	3764824.217	-31.601	NATURAL GROUND
50733	583839.723	3764830.301	-32.551	NATURAL GROUND
50734	583839.775	3764836.373	-34.121	NATURAL GROUND
50735	583839.589	3764842.577	-34.158	NATURAL GROUND
50736	583839.317	3764847.611	-34.273	NATURAL GROUND
50737	583839.138	3764852.665	-33.361	NATURAL GROUND
50738	583839.063	3764857.769	-31.95	NATURAL GROUND
50739	583839.059	3764862.931	-34.344	NATURAL GROUND
50740	583839.172	3764868.125	-34.445	NATURAL GROUND
50741	583839.402	3764873.369	-34.025	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50742	583839.707	3764878.635	-34.54	NATURAL GROUND
50743	583839.75	3764883.966	-34.367	NATURAL GROUND
50744	583839.517	3764889.345	-33.861	NATURAL GROUND
50745	583839.138	3764894.739	-34.716	NATURAL GROUND
50746	583838.649	3764900.101	-35.141	NATURAL GROUND
50747	583837.999	3764905.396	-34.417	NATURAL GROUND
50748	583837.164	3764910.635	-34.699	NATURAL GROUND
50749	583836.154	3764915.838	-35.425	NATURAL GROUND
50750	583835.003	3764921.018	-35.693	NATURAL GROUND
50751	583833.786	3764926.195	-35.41	NATURAL GROUND
50752	583832.532	3764931.372	-35.836	NATURAL GROUND
50753	583831.326	3764936.548	-35.699	NATURAL GROUND
50754	583830.288	3764941.706	-35.002	NATURAL GROUND
50755	583829.541	3764946.863	-34.612	NATURAL GROUND
50756	583828.967	3764951.99	-35.106	NATURAL GROUND
50757	583828.574	3764957.101	-36.119	NATURAL GROUND
50758	583828.424	3764962.155	-36.462	NATURAL GROUND
50759	583828.526	3764968.377	-36.809	NATURAL GROUND
50760	583828.882	3764974.579	-37.006	NATURAL GROUND
50761	583829.47	3764980.782	-36.669	NATURAL GROUND
50762	583830.092	3764985.75	-37.32	NATURAL GROUND
50763	583830.785	3764990.743	-37.45	NATURAL GROUND
50764	583831.511	3764995.809	-37.534	NATURAL GROUND
50765	583832.214	3765000.944	-37.75	NATURAL GROUND
50766	583832.828	3765006.141	-37.77	NATURAL GROUND
50767	583833.343	3765011.463	-37.762	NATURAL GROUND
50768	583833.742	3765016.85	-38.054	NATURAL GROUND
50769	583833.96	3765022.271	-38.072	NATURAL GROUND
50770	583833.917	3765027.697	-38.136	NATURAL GROUND
50771	583833.629	3765033.087	-38.141	NATURAL GROUND
50772	583833.199	3765038.417	-38.189	NATURAL GROUND
50773	583832.634	3765043.713	-37.998	NATURAL GROUND
50774	583832.038	3765049.001	-38.057	NATURAL GROUND
50775	583831.428	3765054.277	-38.225	NATURAL GROUND
50776	583830.87	3765059.54	-38.143	NATURAL GROUND
50777	583830.437	3765064.815	-37.193	NATURAL GROUND
50778	583830.041	3765070.102	-37.201	NATURAL GROUND
50779	583829.639	3765075.404	-37.681	NATURAL GROUND
50780	583829.229	3765080.7	-37.924	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50781	583828.886	3765085.984	-37.305	NATURAL GROUND
50782	583828.556	3765091.325	-38.189	NATURAL GROUND
50783	583828.199	3765096.684	-38.371	NATURAL GROUND
50784	583827.77	3765102.015	-38.24	NATURAL GROUND
50785	583827.167	3765107.367	-37.487	NATURAL GROUND
50786	583826.4	3765112.717	-38.039	NATURAL GROUND
50787	583825.53	3765118.026	-38.134	NATURAL GROUND
50788	583824.584	3765123.293	-38.54	NATURAL GROUND
50789	583823.597	3765128.532	-38.548	NATURAL GROUND
50790	583822.575	3765133.744	-39.318	NATURAL GROUND
50791	583821.583	3765138.929	-39.182	NATURAL GROUND
50792	583820.621	3765144.131	-39.19	NATURAL GROUND
50793	583819.777	3765149.352	-39.17	NATURAL GROUND
50794	583819.064	3765154.588	-39.625	NATURAL GROUND
50795	583818.586	3765159.814	-39.013	NATURAL GROUND
50796	583818.413	3765165.05	-39.181	NATURAL GROUND
50797	583818.418	3765170.298	-39.782	NATURAL GROUND
50798	583818.757	3765175.464	-39.663	NATURAL GROUND
50799	583819.019	3765180.593	-39.013	NATURAL GROUND
50800	583818.912	3765185.719	-39.674	NATURAL GROUND
50801	583818.997	3765190.813	-39.256	NATURAL GROUND
50802	583819.15	3765195.921	-39.408	NATURAL GROUND
50803	583818.923	3765201.109	-39.175	NATURAL GROUND
50804	583818.411	3765206.273	-38.846	NATURAL GROUND
50805	583817.809	3765211.438	-39.972	NATURAL GROUND
50806	583817.145	3765216.614	-39.48	NATURAL GROUND
50807	583816.384	3765221.735	-40.646	NATURAL GROUND
50808	583815.545	3765226.824	-40.749	NATURAL GROUND
50809	583814.694	3765231.936	-40.982	NATURAL GROUND
50810	583813.81	3765237.071	-40.948	NATURAL GROUND
50811	583812.986	3765242.212	-40.676	NATURAL GROUND
50812	583812.003	3765247.33	-40.777	NATURAL GROUND
50813	583810.964	3765252.484	-40.88	NATURAL GROUND
50814	583810.01	3765257.679	-40.738	NATURAL GROUND
50815	583809.153	3765262.869	-41.222	NATURAL GROUND
50816	583808.405	3765268.009	-41.379	NATURAL GROUND
50817	583807.654	3765273.141	-41.45	NATURAL GROUND
50818	583806.855	3765278.286	-41.398	NATURAL GROUND
50819	583806.019	3765283.471	-41.349	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50820	583805.194	3765288.665	-41.241	NATURAL GROUND
50821	583804.356	3765293.829	-40.286	NATURAL GROUND
50822	583803.464	3765298.98	-41.638	NATURAL GROUND
50823	583802.474	3765304.096	-41.501	NATURAL GROUND
50824	583801.383	3765309.18	-40.143	NATURAL GROUND
50826	583798.879	3765319.292	-41.549	NATURAL GROUND
50827	583797.527	3765324.352	-41.556	NATURAL GROUND
50828	583796.077	3765329.412	-41.57	NATURAL GROUND
50829	583794.489	3765334.44	-41.687	NATURAL GROUND
50830	583792.815	3765339.441	-41.471	NATURAL GROUND
50831	583791.118	3765344.455	-41.399	NATURAL GROUND
50832	583789.385	3765349.448	-40.795	NATURAL GROUND
50833	583787.757	3765354.446	-40.909	NATURAL GROUND
50834	583786.305	3765359.481	-40.554	NATURAL GROUND
50835	583785.109	3765364.539	-40.305	NATURAL GROUND
50836	583784.282	3765369.566	-39.677	NATURAL GROUND
50837	583783.781	3765374.554	-39.81	NATURAL GROUND
50838	583783.708	3765380.707	-39.219	NATURAL GROUND
50839	583784.246	3765386.704	-38.798	NATURAL GROUND
50840	583785.444	3765392.455	-37.319	NATURAL GROUND
50841	583787.363	3765397.847	-37.186	NATURAL GROUND
50842	583789.382	3765403.123	-38.218	NATURAL GROUND
50843	583791.259	3765408.468	-38.478	NATURAL GROUND
50844	583792.685	3765414.088	-37.876	NATURAL GROUND
50845	583793.55	3765419.916	-37.555	NATURAL GROUND
50846	583794.057	3765425.747	-37.816	NATURAL GROUND
50847	583794.399	3765431.596	-38.578	NATURAL GROUND
50848	583794.552	3765437.551	-38.597	NATURAL GROUND
50849	583794.435	3765443.696	-38.088	NATURAL GROUND
50850	583794.154	3765448.734	-34.846	NATURAL GROUND
50851	583793.658	3765453.858	-39.064	NATURAL GROUND
50852	583792.668	3765458.966	-38.666	NATURAL GROUND
50853	583790.974	3765463.945	-38.704	NATURAL GROUND
50854	583788.757	3765468.661	-39.166	NATURAL GROUND
50855	583786.24	3765473.096	-39.671	NATURAL GROUND
50856	583783.02	3765478.283	-39.777	NATURAL GROUND
50857	583779.484	3765483.344	-39.913	NATURAL GROUND
50858	583776.343	3765487.411	-39.962	NATURAL GROUND
50859	583773.329	3765491.572	-40.037	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50861	583767.682	3765502.267	-40.023	NATURAL GROUND
50862	583765.948	3765507.708	-39.556	NATURAL GROUND
50863	583764.36	3765513.087	-39.844	NATURAL GROUND
50864	583762.588	3765518.504	-39.765	NATURAL GROUND
50865	583760.508	3765524.095	-39.613	NATURAL GROUND
50867	583757.329	3765535.829	-39.126	NATURAL GROUND
50868	583756.496	3765541.954	-39.572	NATURAL GROUND
50869	583755.902	3765546.953	-39.756	NATURAL GROUND
50870	583755.687	3765552.048	-38.859	NATURAL GROUND
50871	583755.697	3765557.144	-39.288	NATURAL GROUND
50872	583755.73	3765562.241	-39.514	NATURAL GROUND
50873	583755.764	3765567.401	-39.717	NATURAL GROUND
50874	583755.669	3765572.63	-39.668	NATURAL GROUND
50875	583755.313	3765577.913	-39.598	NATURAL GROUND
50876	583754.559	3765583.21	-39.251	NATURAL GROUND
50877	583753.574	3765588.445	-39.563	NATURAL GROUND
50878	583752.578	3765593.56	-39.534	NATURAL GROUND
50879	583751.543	3765598.552	-39.197	NATURAL GROUND
50880	583750.62	3765603.511	-39.484	NATURAL GROUND
50881	583749.647	3765608.535	-38.727	NATURAL GROUND
50882	583748.429	3765613.62	-38.635	NATURAL GROUND
50883	583746.988	3765618.739	-38.791	NATURAL GROUND
50884	583745.518	3765623.842	-38.703	NATURAL GROUND
50885	583744.102	3765628.93	-39.396	NATURAL GROUND
50886	583742.696	3765634.009	-39.311	NATURAL GROUND
50887	583741.333	3765639.069	-39.211	NATURAL GROUND
50888	583740.124	3765644.195	-38.909	NATURAL GROUND
50889	583739.151	3765649.358	-39.074	NATURAL GROUND
50890	583738.505	3765654.509	-39.077	NATURAL GROUND
50891	583738.272	3765659.599	-38.929	NATURAL GROUND
50892	583738.452	3765664.629	-38.762	NATURAL GROUND
50893	583738.976	3765669.604	-38.535	NATURAL GROUND
50894	583739.751	3765675.738	-38.119	NATURAL GROUND
50895	583740.4	3765681.867	-37.184	NATURAL GROUND
50897	583740.761	3765694.255	-38.237	NATURAL GROUND
50899	583740.981	3765706.746	-37.707	NATURAL GROUND
50900	583740.847	3765712.959	-37.989	NATURAL GROUND
50901	583740.554	3765717.961	-36.496	NATURAL GROUND
50902	583740.094	3765723.016	-37.804	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50903	583739.468	3765728.065	-37.971	NATURAL GROUND
50904	583738.59	3765733.103	-37.967	NATURAL GROUND
50905	583737.404	3765738.143	-37.876	NATURAL GROUND
50906	583735.942	3765743.161	-37.882	NATURAL GROUND
50907	583734.346	3765748.181	-37.858	NATURAL GROUND
50908	583732.799	3765753.132	-37.495	NATURAL GROUND
50909	583731.423	3765758.03	-37.806	NATURAL GROUND
50910	583730.215	3765764.138	-37.714	NATURAL GROUND
50911	583729.689	3765770.217	-37.489	NATURAL GROUND
50912	583729.735	3765776.166	-37.834	NATURAL GROUND
50913	583730.201	3765781.96	-37.443	NATURAL GROUND
50914	583730.981	3765787.721	-35.652	NATURAL GROUND
50915	583732.265	3765793.469	-36.04	NATURAL GROUND
50916	583733.867	3765799.163	-36.122	NATURAL GROUND
50917	583735.207	3765805.023	-34.871	NATURAL GROUND
50918	583736.024	3765811.085	-35.044	NATURAL GROUND
50919	583736.062	3765817.24	-35.682	NATURAL GROUND
50920	583735.34	3765823.24	-35.782	NATURAL GROUND
50921	583734.389	3765828.926	-34.918	NATURAL GROUND
50922	583733.384	3765834.543	-35.619	NATURAL GROUND
50923	583732.501	3765840.267	-35.722	NATURAL GROUND
50924	583731.413	3765846.17	-35.666	NATURAL GROUND
50925	583730.089	3765852.239	-34.958	NATURAL GROUND
50926	583728.946	3765857.13	-35.283	NATURAL GROUND
50927	583727.788	3765862.092	-35.459	NATURAL GROUND
50928	583726.539	3765867.098	-35.743	NATURAL GROUND
50929	583725.172	3765872.087	-35.75	NATURAL GROUND
50930	583723.675	3765877.11	-36.153	NATURAL GROUND
50931	583721.936	3765882.116	-36.273	NATURAL GROUND
50932	583719.858	3765887.052	-36.553	NATURAL GROUND
50933	583717.508	3765891.906	-38.012	NATURAL GROUND
50934	583715.235	3765896.734	-39.156	NATURAL GROUND
50935	583713.298	3765901.482	-40.08	NATURAL GROUND
50936	583711.709	3765906.234	-40.812	NATURAL GROUND
50937	583710.376	3765912.217	-40.002	NATURAL GROUND
50938	583709.655	3765918.174	-41.941	NATURAL GROUND
50939	583709.322	3765924.035	-42.336	NATURAL GROUND
50940	583709.216	3765929.846	-42.086	NATURAL GROUND
50941	583709.156	3765935.815	-42.559	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50942	583709.599	3765941.883	-42.429	NATURAL GROUND
50944	583712.458	3765953.859	-40.934	NATURAL GROUND
50945	583714.826	3765959.521	-39.043	NATURAL GROUND
50946	583717.662	3765964.963	-39.095	NATURAL GROUND
50947	583720.507	3765970.438	-38.175	NATURAL GROUND
50948	583722.723	3765974.962	-37.599	NATURAL GROUND
50949	583724.907	3765979.6	-36.709	NATURAL GROUND
50950	583726.917	3765984.345	-35.04	NATURAL GROUND
50951	583728.517	3765989.208	-35.954	NATURAL GROUND
50952	583729.754	3765994.15	-34.575	NATURAL GROUND
50953	583731.146	3766000.224	-33.859	NATURAL GROUND
50954	583732.016	3766006.307	-35.01	NATURAL GROUND
50955	583732.183	3766012.399	-34.011	NATURAL GROUND
50956	583731.399	3766018.441	-32.878	NATURAL GROUND
50957	583729.698	3766024.253	-32.683	NATURAL GROUND
50958	583727.353	3766029.724	-33.161	NATURAL GROUND
50961	583718.719	3766045.355	-31.227	NATURAL GROUND
50962	583716.318	3766050.836	-30.834	NATURAL GROUND
50964	583713.533	3766062.121	-33.456	NATURAL GROUND
50965	583712.725	3766067.815	-33.507	NATURAL GROUND
50967	583710.614	3766079.703	-32.909	NATURAL GROUND
50968	583709.444	3766084.668	-33.431	NATURAL GROUND
50969	583708.081	3766089.658	-34.286	NATURAL GROUND
50970	583706.584	3766094.702	-32.566	NATURAL GROUND
50971	583705.172	3766099.826	-34.285	NATURAL GROUND
50972	583704.011	3766105.002	-33.589	NATURAL GROUND
50973	583703.211	3766110.166	-35.019	NATURAL GROUND
50974	583702.493	3766115.373	-32.574	NATURAL GROUND
50975	583701.862	3766120.626	-32.543	NATURAL GROUND
50976	583701.407	3766125.856	-35.961	NATURAL GROUND
50977	583701.189	3766131.059	-32.654	NATURAL GROUND
50978	583701.227	3766136.249	-30.81	NATURAL GROUND
50979	583701.354	3766141.498	-33.119	NATURAL GROUND
50980	583701.486	3766146.736	-35.615	NATURAL GROUND
50981	583701.593	3766151.993	-36.099	NATURAL GROUND
50982	583701.62	3766157.31	-36.799	NATURAL GROUND
50983	583701.416	3766162.65	-36.171	NATURAL GROUND
50984	583700.986	3766168.029	-35.763	NATURAL GROUND
50985	583700.308	3766173.375	-35.464	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
50986	583699.438	3766178.661	-34.795	NATURAL GROUND
50988	583697.602	3766189.158	-35.687	NATURAL GROUND
50989	583696.608	3766194.346	-35.518	NATURAL GROUND
50990	583695.394	3766199.525	-37.658	NATURAL GROUND
50991	583694.007	3766204.686	-36.866	NATURAL GROUND
50992	583692.36	3766209.82	-36.315	NATURAL GROUND
50993	583690.401	3766214.774	-36.503	NATURAL GROUND
50994	583688.193	3766219.455	-37.673	NATURAL GROUND
50995	583686.121	3766224.075	-37.484	NATURAL GROUND
50996	583683.618	3766229.772	-35.915	NATURAL GROUND
50997	583681.45	3766235.473	-35.539	NATURAL GROUND
50998	583679.828	3766241.178	-36.522	NATURAL GROUND
50999	583678.89	3766246.887	-37.783	NATURAL GROUND
51000	583678.22	3766252.53	-38.415	NATURAL GROUND
51001	583677.754	3766258.156	-38.473	NATURAL GROUND
51002	583677.72	3766263.815	-38.425	NATURAL GROUND
51003	583678.227	3766269.526	-37.37	NATURAL GROUND
51004	583678.667	3766275.347	-37.088	NATURAL GROUND
51005	583678.865	3766281.203	-37.476	NATURAL GROUND
51006	583678.974	3766287.148	-36.068	NATURAL GROUND
51007	583678.934	3766293.184	-33.697	NATURAL GROUND
51008	583678.613	3766299.243	-34.778	NATURAL GROUND
51009	583678.02	3766305.256	-36.673	NATURAL GROUND
51010	583677.094	3766311.23	-36.649	NATURAL GROUND
51011	583676.112	3766317.1	-36.986	NATURAL GROUND
51012	583675.158	3766322.959	-36.292	NATURAL GROUND
51013	583674.466	3766328.814	-36.002	NATURAL GROUND
51014	583674.205	3766334.685	-36.001	NATURAL GROUND
51015	583674.468	3766340.496	-35.382	NATURAL GROUND
51016	583675.258	3766346.17	-35.913	NATURAL GROUND
51017	583676.455	3766351.762	-35.02	NATURAL GROUND
51018	583677.607	3766357.362	-36.17	NATURAL GROUND
51019	583678.543	3766363.065	-37.051	NATURAL GROUND
51020	583679.491	3766368.854	-35.459	NATURAL GROUND
51021	583680.447	3766374.732	-36.627	NATURAL GROUND
51022	583681.346	3766380.632	-34.395	NATURAL GROUND
51023	583682.065	3766386.526	-37.069	NATURAL GROUND
51024	583682.613	3766392.505	-37.234	NATURAL GROUND
51025	583683.065	3766398.582	-38.717	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
51026	583683.505	3766404.664	-36.948	NATURAL GROUND
51027	583683.993	3766410.733	-36.681	NATURAL GROUND
51028	583684.672	3766416.747	-37.477	NATURAL GROUND
51029	583685.543	3766422.725	-37.887	NATURAL GROUND
51030	583686.585	3766428.74	-37.355	NATURAL GROUND
51031	583687.798	3766434.74	-37.25	NATURAL GROUND
51032	583689.155	3766440.725	-38.921	NATURAL GROUND
51033	583690.487	3766446.748	-37.539	NATURAL GROUND
51034	583691.736	3766452.805	-37.87	NATURAL GROUND
51035	583692.695	3766458.918	-36.874	NATURAL GROUND
51036	583693.067	3766465.102	-35.975	NATURAL GROUND
51037	583693.182	3766471.212	-36.527	NATURAL GROUND
51038	583693.265	3766477.204	-35.408	NATURAL GROUND
51039	583693.43	3766483.189	-34.188	NATURAL GROUND
51040	583693.667	3766489.147	-37.292	NATURAL GROUND
51041	583693.985	3766495.085	-37.649	NATURAL GROUND
51042	583694.466	3766501.049	-36.858	NATURAL GROUND
51043	583695.18	3766506.992	-35.515	NATURAL GROUND
51044	583696.198	3766512.922	-35.624	NATURAL GROUND
51045	583697.551	3766518.733	-35.42	NATURAL GROUND
51046	583699.128	3766524.485	-33.245	NATURAL GROUND
51047	583700.944	3766530.169	-31.873	NATURAL GROUND
51048	583702.543	3766535.939	-29.305	NATURAL GROUND
51049	583703.72	3766541.87	-31.747	NATURAL GROUND
51050	583704.569	3766547.851	-26.239	NATURAL GROUND
51051	583705.089	3766553.872	-25.843	NATURAL GROUND
51052	583705.136	3766559.869	-24.966	NATURAL GROUND
51053	583704.295	3766565.784	-25.799	NATURAL GROUND
51054	583702.724	3766571.507	-29.641	NATURAL GROUND
51055	583700.801	3766576.944	-28.39	NATURAL GROUND
51056	583699.066	3766582.197	-29.744	NATURAL GROUND
51057	583697.772	3766587.374	-29.811	NATURAL GROUND
51058	583697.199	3766592.591	-30.035	NATURAL GROUND
51059	583697.15	3766597.706	-29.797	NATURAL GROUND
51061	583698.022	3766607.871	-29.185	NATURAL GROUND
51062	583698.771	3766613.088	-26.169	NATURAL GROUND
51063	583699.628	3766618.468	-26.313	NATURAL GROUND
51064	583700.437	3766624.009	-26.898	NATURAL GROUND
51065	583701.041	3766629.725	-26.511	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
51066	583701.489	3766635.477	-25.117	NATURAL GROUND
51067	583702.098	3766641.158	-22.074	NATURAL GROUND
51068	583703.018	3766646.779	-23.756	NATURAL GROUND
51069	583704.45	3766652.272	-21.211	NATURAL GROUND
51070	583706.554	3766657.533	-21.52	NATURAL GROUND
51071	583709.108	3766662.483	-23.201	NATURAL GROUND
51072	583711.519	3766667.402	-22.238	NATURAL GROUND
51073	583713.481	3766672.524	-20.516	NATURAL GROUND
51074	583715.128	3766677.857	-22.436	NATURAL GROUND
51075	583716.377	3766683.292	-22.315	NATURAL GROUND
51076	583716.995	3766688.768	-21.632	NATURAL GROUND
51077	583716.834	3766694.216	-20.187	NATURAL GROUND
51078	583716.115	3766699.528	-24.288	NATURAL GROUND
51079	583715.088	3766704.771	-22.568	NATURAL GROUND
51080	583713.687	3766710.044	-23.609	NATURAL GROUND
51081	583712.343	3766715.339	-20.675	NATURAL GROUND
51082	583711.362	3766720.621	-24.444	NATURAL GROUND
51083	583710.734	3766725.964	-22.088	NATURAL GROUND
51084	583710.185	3766731.388	-22.883	NATURAL GROUND
51085	583709.59	3766736.882	-22.801	NATURAL GROUND
51086	583708.678	3766742.441	-24.672	NATURAL GROUND
51087	583707.215	3766748.039	-24.605	NATURAL GROUND
51088	583705.033	3766753.475	-24.105	NATURAL GROUND
51089	583702.534	3766758.618	-23.706	NATURAL GROUND
51090	583700.116	3766763.55	-23.731	NATURAL GROUND
51091	583698.164	3766768.516	-23.691	NATURAL GROUND
51092	583696.594	3766773.504	-29.632	NATURAL GROUND
51093	583695.243	3766778.629	-29.648	NATURAL GROUND
51094	583694.105	3766783.881	-30.893	NATURAL GROUND
51095	583693.366	3766789.174	-30.823	NATURAL GROUND
51096	583692.97	3766794.603	-31.156	NATURAL GROUND
51097	583692.798	3766800.195	-27.987	NATURAL GROUND
51098	583692.837	3766805.893	-30.456	NATURAL GROUND
51099	583692.993	3766811.626	-26.689	NATURAL GROUND
51100	583693.327	3766817.369	-29.754	NATURAL GROUND
51101	583693.872	3766823.125	-28.469	NATURAL GROUND
51102	583694.701	3766828.897	-29.517	NATURAL GROUND
51103	583695.829	3766834.645	-27.377	NATURAL GROUND
51104	583697.355	3766840.31	-27.38	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
51105	583699.356	3766845.782	-27.592	NATURAL GROUND
51106	583701.851	3766851.03	-28.978	NATURAL GROUND
51107	583704.855	3766856.018	-29.825	NATURAL GROUND
51108	583708.059	3766860.846	-29.43	NATURAL GROUND
51109	583710.899	3766865.93	-28.428	NATURAL GROUND
51110	583712.919	3766871.382	-27.273	NATURAL GROUND
51111	583713.736	3766876.995	-29.186	NATURAL GROUND
51112	583713.994	3766882.247	-27.369	NATURAL GROUND
51113	583713.999	3766888.197	-27.749	NATURAL GROUND
51114	583713.486	3766893.239	-26.531	NATURAL GROUND
51115	583712.25	3766898.4	-29.465	NATURAL GROUND
51116	583710.588	3766903.558	-27.688	NATURAL GROUND
51117	583708.606	3766908.679	-29.104	NATURAL GROUND
51118	583706.206	3766913.815	-27.445	NATURAL GROUND
51119	583703.48	3766919.094	-28.228	NATURAL GROUND
51120	583700.672	3766924.498	-29.101	NATURAL GROUND
51121	583698.03	3766929.911	-28.495	NATURAL GROUND
51122	583695.787	3766935.344	-27.512	NATURAL GROUND
51123	583694.169	3766940.882	-29.143	NATURAL GROUND
51124	583693.371	3766946.351	-30.331	NATURAL GROUND
51125	583693.675	3766951.479	-30.497	NATURAL GROUND
51126	583695.531	3766956.829	-29.357	NATURAL GROUND
51127	583698.685	3766961.116	-29.617	NATURAL GROUND
51128	583702.522	3766964.735	-30.176	NATURAL GROUND
51129	583707.189	3766967.991	-28.815	NATURAL GROUND
51130	583711.615	3766970.473	-30.338	NATURAL GROUND
51131	583716.307	3766973.086	-29.042	NATURAL GROUND
51132	583720.884	3766976.291	-29.124	NATURAL GROUND
51133	583724.914	3766980.173	-29.586	NATURAL GROUND
51134	583727.768	3766984.657	-27.808	NATURAL GROUND
51135	583729.842	3766990.038	-29.461	NATURAL GROUND
51136	583731.387	3766995.03	-26.988	NATURAL GROUND
51137	583732.769	3767000.279	-28.125	NATURAL GROUND
51138	583734.177	3767005.855	-28.711	NATURAL GROUND
51139	583735.741	3767010.614	-29.408	NATURAL GROUND
51140	583737.641	3767015.446	-27.421	NATURAL GROUND
51141	583739.737	3767020.449	-27.799	NATURAL GROUND
51142	583742.096	3767025.549	-27.775	NATURAL GROUND
51143	583744.71	3767030.686	-28.373	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
51144	583747.476	3767036	-28.87	NATURAL GROUND
51145	583750.298	3767041.483	-28.612	NATURAL GROUND
51146	583752.543	3767045.971	-28.602	NATURAL GROUND
51147	583754.698	3767050.557	-26.518	NATURAL GROUND
51148	583756.699	3767055.279	-27.883	NATURAL GROUND
51149	583758.429	3767060.076	-28.184	NATURAL GROUND
51150	583759.88	3767064.936	-28.1	NATURAL GROUND
51152	583762.167	3767076	-28.731	NATURAL GROUND
51153	583762.893	3767082.093	-28.374	NATURAL GROUND
51154	583763.472	3767088.153	-28.873	NATURAL GROUND
51155	583763.999	3767094.217	-28.756	NATURAL GROUND
51156	583764.813	3767100.258	-28.176	NATURAL GROUND
51158	583768.021	3767111.768	-26.724	NATURAL GROUND
51159	583770.372	3767117.197	-27.001	NATURAL GROUND
51160	583773.008	3767122.388	-28.462	NATURAL GROUND
51161	583775.785	3767127.564	-27.994	NATURAL GROUND
51162	583778.554	3767132.855	-27.638	NATURAL GROUND
51163	583680.565	3766903.897	-29.391	NATURAL GROUND
51164	583682.031	3766898.278	-30.364	NATURAL GROUND
51165	583683.985	3766892.877	-30.842	NATURAL GROUND
51166	583686.452	3766887.717	-30.86	NATURAL GROUND
51167	583689.706	3766883.193	-30.199	NATURAL GROUND
51168	583693.328	3766879.291	-27.487	NATURAL GROUND
51170	583700.691	3766871.048	-29.301	NATURAL GROUND
51171	583704.188	3766866.557	-26.827	NATURAL GROUND
51172	583707.326	3766862.647	-27.018	NATURAL GROUND
51173	583711.683	3766858.494	-27.406	NATURAL GROUND
51174	583716.255	3766855.459	-26.488	NATURAL GROUND
51175	583720.79	3766852.632	-28.15	NATURAL GROUND
51176	583724.946	3766849.773	-28.912	NATURAL GROUND
51177	583729.215	3766846.99	-29.18	NATURAL GROUND
51178	583733.972	3766844.922	-28.847	NATURAL GROUND
51179	583738.928	3766843.837	-26.896	NATURAL GROUND
51180	583744.25	3766842.463	-25.456	NATURAL GROUND
51181	583749.057	3766840.988	-25.41	NATURAL GROUND
51182	583753.895	3766839.228	-27.988	NATURAL GROUND
51183	583759.319	3766836.685	-25.081	NATURAL GROUND
51184	583763.788	3766833.978	-23.547	NATURAL GROUND
51185	583768.123	3766831.451	-25.843	NATURAL GROUND

**St. Catherine Island Marsh Creation and Shoreline Protection (PO-0179)
2021 RTK Survey**



RTK Survey Points Table

Horizontal Datum: NAD83 (2011) LA-S 1702 Ft

Vertical Datum: NAVD88 (GEOID 12B) Ft

Point	Northing Ground	Easting Ground	Elevation	Description
51186	583772.98	3766828.856	-24.923	NATURAL GROUND
51187	583777.92	3766826.392	-23.097	NATURAL GROUND
51188	583782.528	3766823.884	-20.847	NATURAL GROUND
51189	583787.286	3766821.169	-19.03	NATURAL GROUND
51190	583792.184	3766818.449	-15.063	NATURAL GROUND
51191	583797.671	3766816.272	-12.943	NATURAL GROUND
51192	583802.854	3766815.033	-10.952	NATURAL GROUND
51193	583807.86	3766814.83	-2.643	NATURAL GROUND
51194	583674.093	3766091.225	-43.315	NATURAL GROUND
51195	583676.497	3766086.28	-42.953	NATURAL GROUND
51196	583679.672	3766080.503	-41.357	NATURAL GROUND
51197	583682.46	3766075.817	-40.649	NATURAL GROUND
51198	583685.478	3766071.37	-40.527	NATURAL GROUND
51199	583688.701	3766067.181	-39.909	NATURAL GROUND
51200	583692.025	3766063.092	-39.311	NATURAL GROUND
51201	583695.391	3766059.146	-38.327	NATURAL GROUND
51202	583698.875	3766055.461	-36.484	NATURAL GROUND
51203	583703.085	3766051.326	-36.887	NATURAL GROUND
51204	583707.376	3766047.554	-35.883	NATURAL GROUND
51205	583711.696	3766044.397	-38.217	NATURAL GROUND
51206	583716.599	3766041.38	-33.544	NATURAL GROUND
51207	583721.32	3766038.64	-33.168	NATURAL GROUND
51208	583725.988	3766036.156	-31.997	NATURAL GROUND
51209	583730.621	3766034.034	-29.073	NATURAL GROUND
51210	583735.804	3766031.988	-30.165	NATURAL GROUND
51211	583740.743	3766030.443	-29.487	NATURAL GROUND
51212	583745.689	3766029.104	-27.966	NATURAL GROUND
51213	583750.691	3766027.786	-26.766	NATURAL GROUND
51214	583755.867	3766026.279	-26.544	NATURAL GROUND
51215	583761.161	3766024.927	-23.688	NATURAL GROUND
51216	583766.623	3766024.148	-27.3	NATURAL GROUND
51217	583772.148	3766023.271	-25.3	NATURAL GROUND
51218	583777.772	3766022.646	-25.63	NATURAL GROUND
51219	583783.446	3766021.8	-21.08	NATURAL GROUND
51220	583788.997	3766020.569	-19.914	NATURAL GROUND
51221	583793.855	3766018.887	-17.31	NATURAL GROUND
51222	583799.059	3766017.05	-15.3	NATURAL GROUND
51223	583804.208	3766015.075	-11.994	NATURAL GROUND
51224	583808.624	3766012.688	-7.133	NATURAL GROUND