



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT
2000 FORT POINT RD
GALVESTON, TEXAS 77550

June 23, 2023

Evaluation Branch

SUBJECT: Permit No. SWG-2013-00646; Nationwide Permit Verification

Lindsey Savage
Texas Parks and Wildlife Department
1502 Farm to Market Road 517 East
Dickinson, Texas 77539

Dear Ms. Savage:

This is in reference to your request, dated March 8, 2023, submitted on your behalf by HDR Engineering, Inc., to discharge no more than 30,000 cubic yards of graded rock riprap into 7.7 acres of waters of the US during the construction of 8,820 linear feet of rock breakwater for protection and enhancement of estuarine habitat within Bird Island Cove. Approximately 88,000 cubic yards of sediment will be dredged from 13,500 linear feet of construction / floatation channels and placed beneficially within a 12-acre area of Bird Island Cove to restore estuarine marsh complex. The breakwaters will have a width between 25-foot and 38-foot with a crest elevation of +3.5 NAVD 88. The dredged material will be placed at elevations of +2.1 and +2.5 NAVD 88 to create marsh mounds. The floatation channel is located within water with depths varying between -3.0 and -6.0 NAVD 88. The project site is located in West Bay, at the mouth of Oystermayer Bayou, near the north terminus of Indian Beach Drive, in Galveston, Galveston County, Texas.

This request is verified by Nationwide Permit (NWP) 27 pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899. This NWP verification is valid provided the activity is compliant with the enclosed plans, in 7 sheets. In addition, the activity must be in compliance with the NWP General/Regional Conditions, Section 401 Water Quality Certification, and the Coastal Management Program, which can be found at: <https://www.swg.usace.army.mil/Missions/Regulatory/Permits/Nationwide-General-Permits/>, a hard copy can be provided to you upon request.

NWP 27. Aquatic Habitat Restoration, Enhancement, and Establishment Activities: Activities in waters of the United States associated with the restoration, enhancement, and establishment of tidal and non-tidal wetlands and riparian areas.

The NWP verification is valid until the NWP is modified, reissued, or revoked. The subject NWPs authorized in 2021 are scheduled to be modified, reissued, or revoked prior to March 15, 2026. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. Furthermore, if you

commence or are under contract to commence this activity before the date that the relevant NWP is modified or revoked, you will have 12 months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP.

The following special condition(s) has/have been added to your authorization:

The permittee must perform pre- and post-construction surveys to delineate and quantify any essential fish habitats (EFH) that may occur in the project area and monitor the impacts of the proposed projects effects to EFH. Post-construction surveys must be conducted one year from the end of construction and the monitoring report submitted to the Corps of Engineers, Galveston District, Regulatory Division, Chief of the Compliance Branch (Corps), by electronic mail at CESWGRegulatoryInbox@USACE.Army.mil within 30 days of survey completion.

This verification does not address nor include any consideration for geographic jurisdiction on aquatic resources and shall not be interpreted as such. If you have any question regarding this verification, please contact Zechariah Turk at the letterhead address or by telephone at 409-766-3974. Please notify the Chief of the Compliance Branch in the Galveston District Regulatory Division in writing at the letterhead address, upon completion of the authorized project.

FOR THE DISTRICT COMMANDER:



Kristi N. McMillan
Chief, Evaluation Branch

cc w/Encl.
Kelsea Hiebert, HDR Engineering Inc.

Eighth Coast Guard District, New Orleans, LA

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Coast & Geodetic Survey, Silver Spring, MD

Texas Commission on Environmental Quality

Texas General Land Office



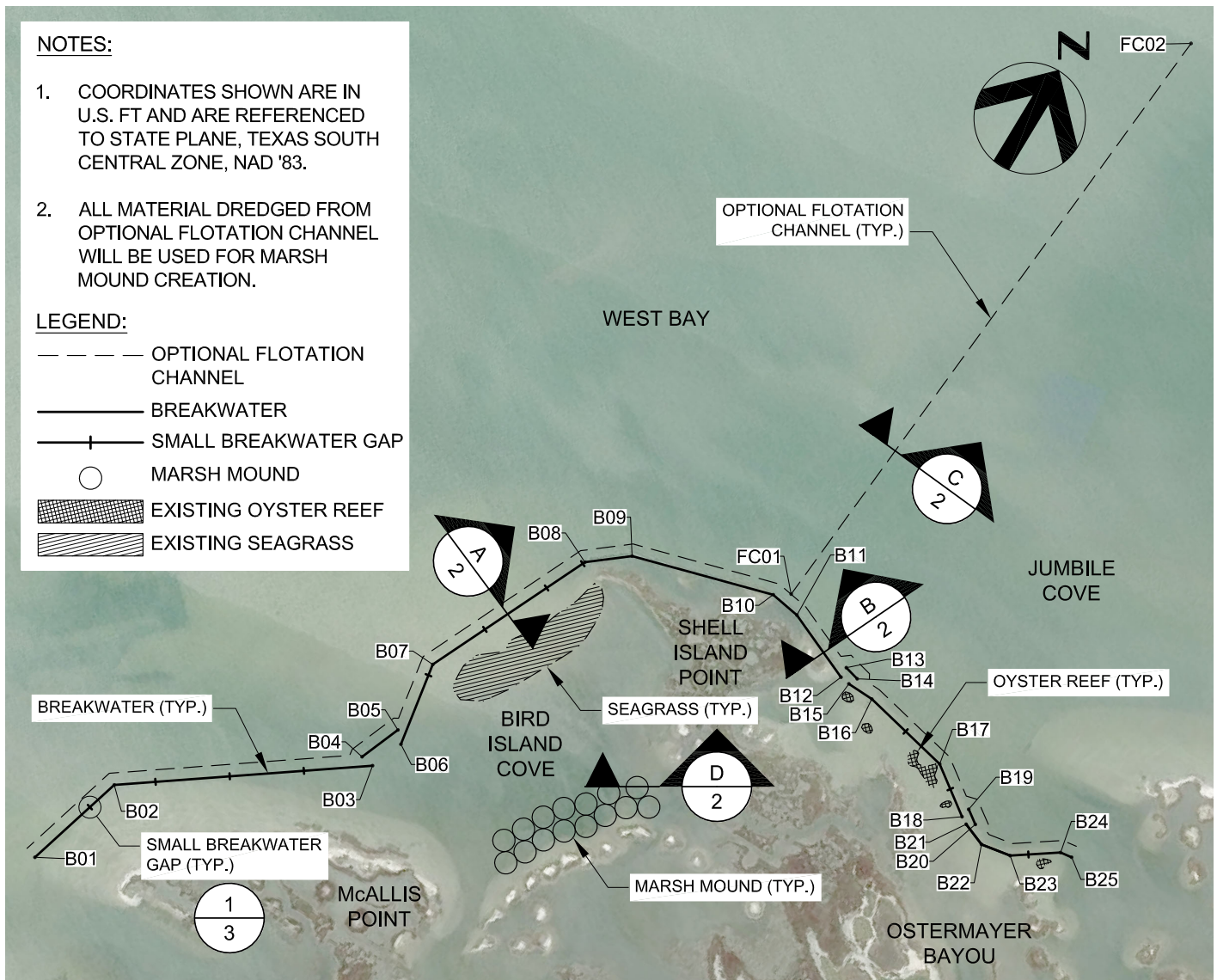


NOTES:

- COORDINATES SHOWN ARE IN U.S. FT AND ARE REFERENCED TO STATE PLANE, TEXAS SOUTH CENTRAL ZONE, NAD '83.
- ALL MATERIAL DREDGED FROM OPTIONAL FLOTATION CHANNEL WILL BE USED FOR MARSH MOUND CREATION.

LEGEND:

- OPTIONAL FLOTATION CHANNEL
- BREAKWATER
- + SMALL BREAKWATER GAP
- MARSH MOUND
- ▨ EXISTING OYSTER REEF
- ▨ EXISTING SEAGRASS



APPROXIMATE BREAKWATER COORDINATES		
POINT	NORTHING	EASTING
B01	13,632,800	3,238,161
B02	13,633,492	3,238,366
B03	13,634,500	3,239,786
B04	13,634,515	3,239,695
B05	13,634,794	3,239,807
B06	13,634,722	3,239,875
B07	13,635,292	3,239,781
B08	13,636,409	3,240,301
B09	13,636,608	3,240,552
B10	13,636,876	3,241,499

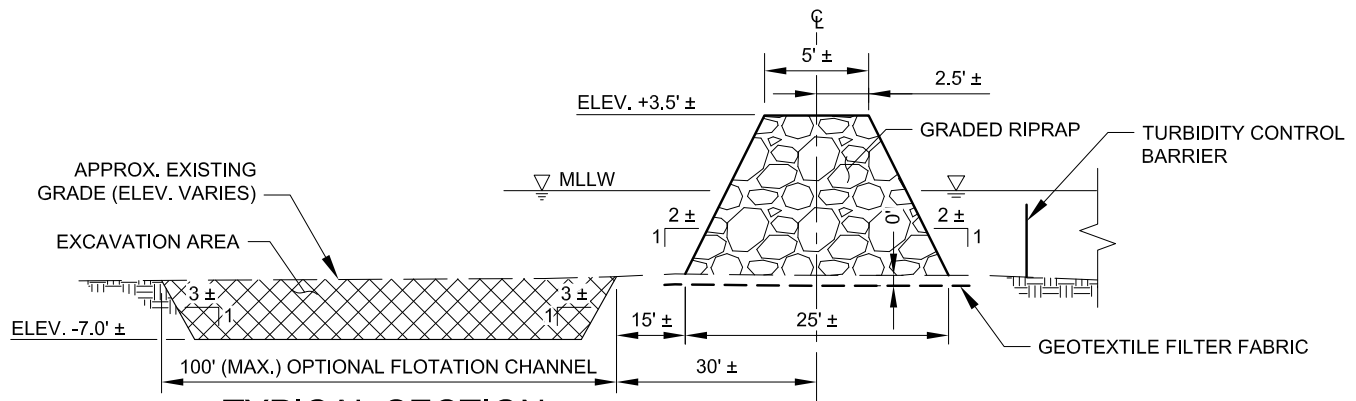
APPROXIMATE BREAKWATER COORDINATES		
POINT	NORTHING	EASTING
B11	13,636,841	3,241,705
B12	13,636,637	3,242,175
B13	13,636,711	3,242,173
B14	13,636,684	3,242,274
B15	13,636,626	3,242,243
B16	13,636,618	3,242,428
B17	13,636,481	3,243,045
B18	13,636,255	3,243,356
B19	13,636,321	3,243,369
B20	13,636,257	3,243,460

APPROXIMATE BREAKWATER COORDINATES		
POINT	NORTHING	EASTING
B21	13,636,226	3,243,406
B22	13,636,163	3,243,565
B23	13,636,198	3,243,769
B24	13,636,391	3,244,048
B25	13,636,403	3,244,128

APPROXIMATE FLOTATION CHANNEL COORDINATES		
POINT	NORTHING	EASTING
FC01	13,636,942	3,241,600
FC02	13,641,501	3,241,988

BREAKWATER AND FLOTATION CHANNEL LAYOUT

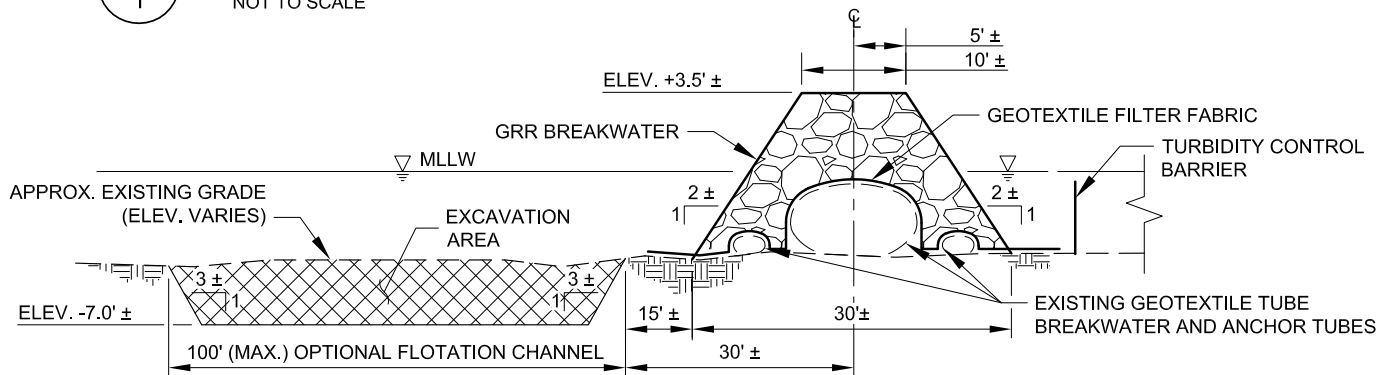
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TYPICAL SECTION - OPTIONAL FLOTATION CHANNEL FOR GRR BREAKWATER

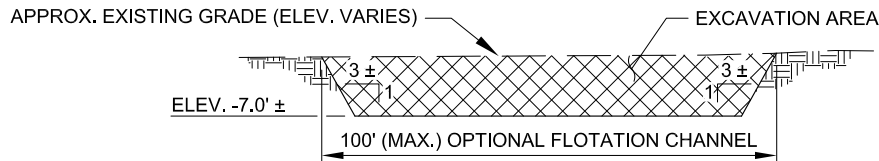
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TYPICAL SECTION - OPTIONAL FLOTATION CHANNEL FOR GRR BREAKWATER OVER GEOTUBE

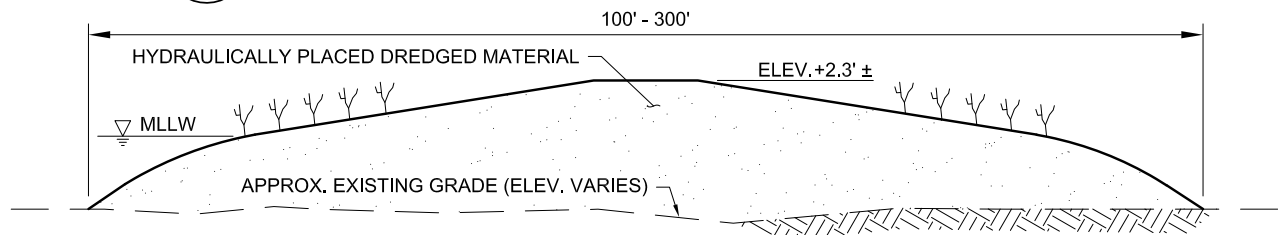
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TYPICAL SECTION - OPTIONAL FLOTATION CHANNEL FOR GRR BREAKWATER

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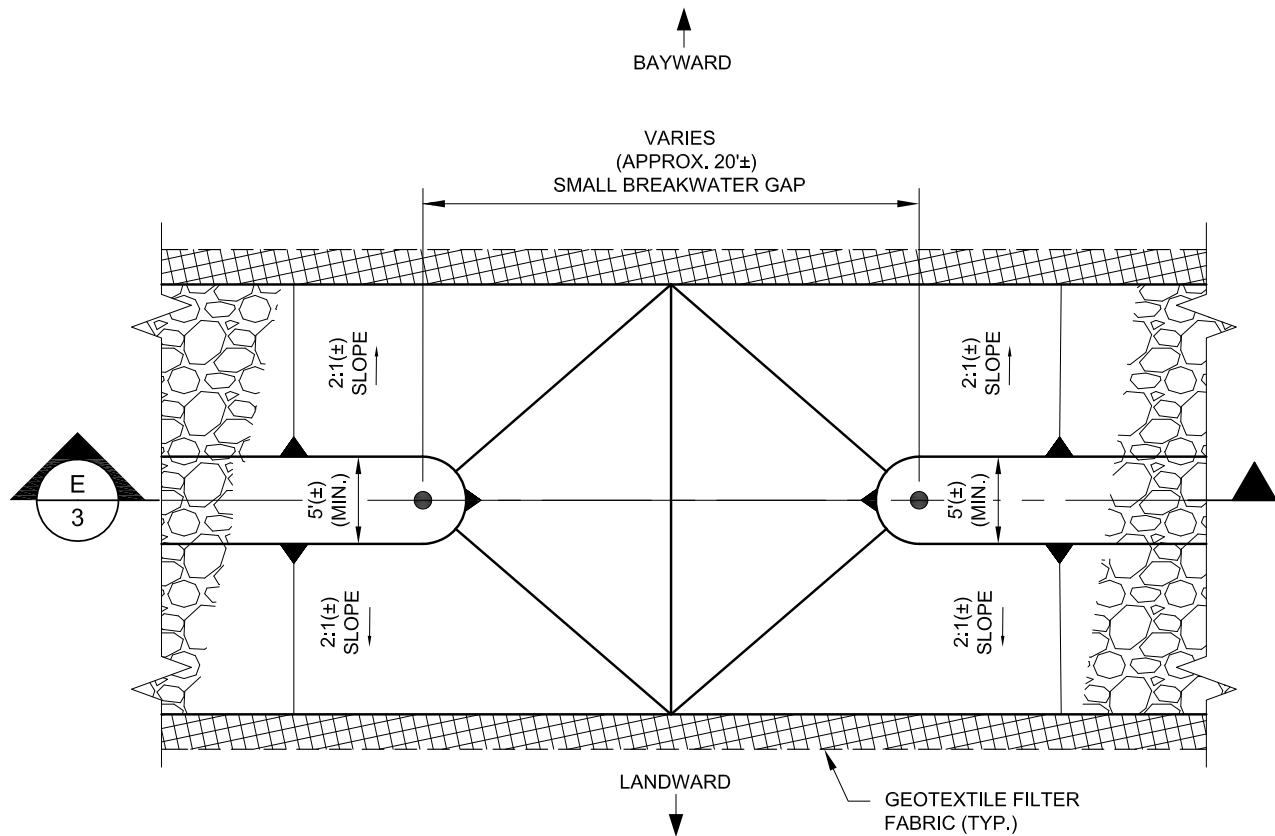
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TYPICAL SECTION - MARSH MOUND

NOT TO SCALE

NOTES:

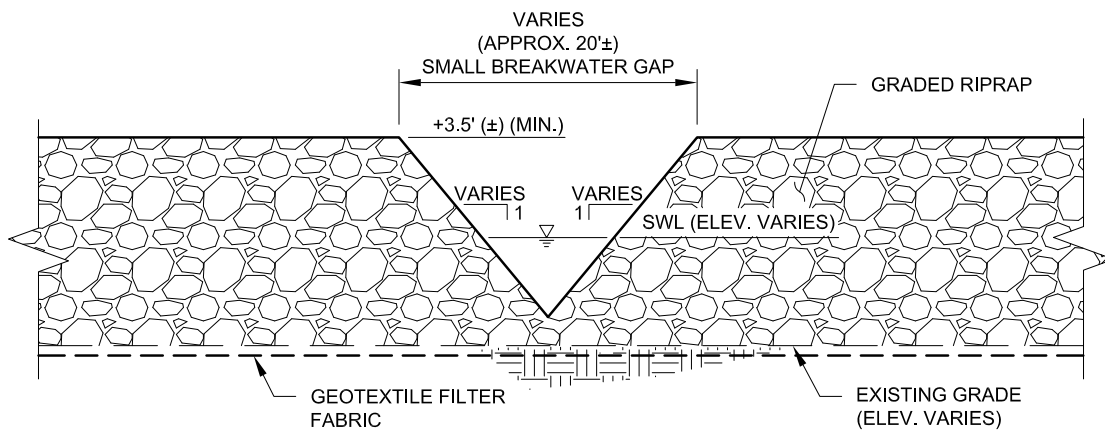
- COORDINATES SHOWN ARE IN U.S. FEET AND ARE REFERENCED TO STATE PLANE, TEXAS SOUTH CENTRAL ZONE, NAD '83.
- ALL MATERIAL DREDGED FROM FLOTATION CHANNELS WILL BE USED FOR MARSH MOUND CREATION.
- CONSTRUCTION OF FLOTATION CHANNEL ADJACENT TO BREAKWATER WILL ONLY OCCUR AT LOCATION SHOWN IN PLAN VIEW.



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1

TYPICAL DETAIL - SMALL BREAKWATER GAP

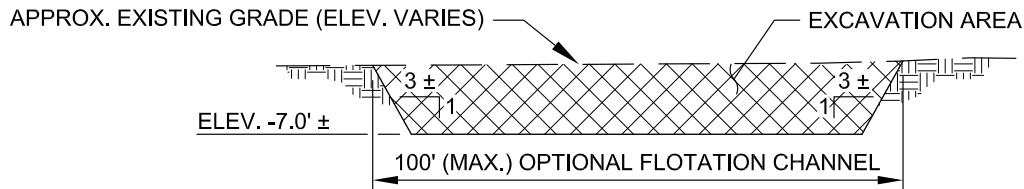
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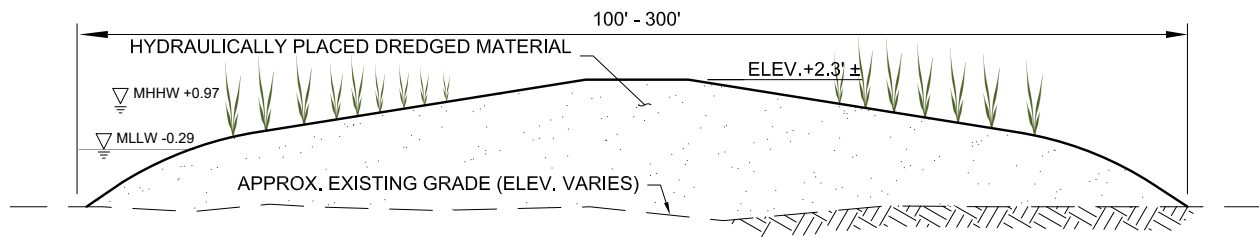
TYPICAL SECTION - SMALL BREAKWATER GAP

NOT TO SCALE



**TYPICAL SECTION - OPTIONAL
FLOTATION CHANNEL FOR GRR BREAKWATER**

C
1 NOT TO SCALE



TYPICAL SECTION - MARSH MOUND

D
1 NOT TO SCALE

THE TARGET ELEVATION OF THE MARSH MOUNDS IS +2.3 WITH A CONSTRUCTION TOLERANCE OF PLUS OR MINUS 0.2 ft.

MHHW +0.97
MHW +0.87
MSL +0.45
NAVD88 0.00
MLW -0.09
MLLW -0.29

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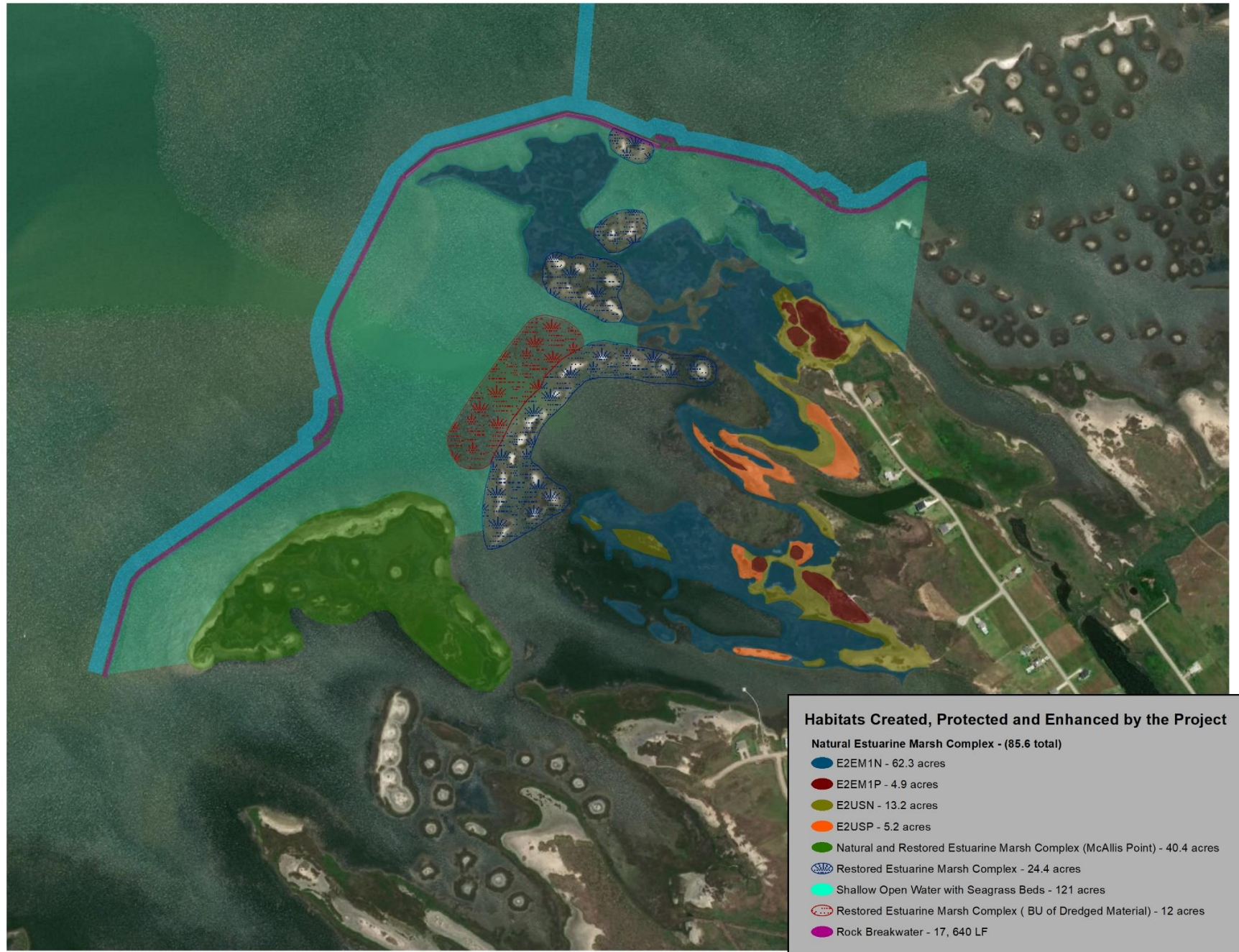


Figure 1. Habitats Created, Protected and Enhanced by the Project.