



STATE OF MISSISSIPPI
PHIL BRYANT
GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
GARY C. RIKARD, EXECUTIVE DIRECTOR

March 18, 2019

Mrs. Valerie Alley
Mississippi Department of Environmental Quality
Post Office Box 2261
Jackson, Mississippi 39225

Dear Mrs. Alley:

Re: MDEQ Early Restoration, Deer Island Reef
Harrison County
COE No. SAM201801284-JRO
WQC No. WQC2019003

Pursuant to Section 401 of the Federal Water Pollution Control Act (33 U. S. C. 1251, 1341), the Office of Pollution Control (OPC) issues this Certification, after public notice and opportunity for public hearing, to the Mississippi Department of Environmental Quality, an applicant for a Federal License or permit to conduct the following activity:

Mississippi Department of Environmental Quality – Early Restoration Project – Deer Island Reef: Project to place approximately 45,000 cubic yards of fill in waters of the United States to create approximately 90 acres of subtidal reef north of Deer Island in Harrison County, Mississippi. The fill material will consist of graded limestone, processed concrete aggregates, and/or oyster shell. The fill material will be placed in a manner to provide substrate 0.2 feet to 3.0 feet above the existing bed elevation in an undulating pattern, while maintaining a minimum depth of 2.0 feet below Mean Low Water.

The purpose of the project is to restore lost secondary productivity resulting from the Deepwater Horizon Oil Spill and is part of the programmatic portions of an early restoration agreement entitled “Framework for Early Restoration Addressing Injuries Resulting from the Deepwater Horizon Oil Spill.” [SAM201801284-JRO, WQC2019003].

The Office of Pollution Control certifies that the above-described activity will be in compliance with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act and Section 49-17-29 of the Mississippi Code of 1972, if the applicant complies with the following conditions:

1. Fill material shall be clean and non-polluting, free of trash, debris, asphalt, etc.
2. The turbidity outside the limits of a 750-foot mixing zone shall not exceed the ambient turbidity by more than 50-Nephelometric Turbidity Units.
3. No sewage, oil, refuse, or other pollutants shall be discharged into the watercourse.

The Office of Pollution Control also certifies that there are no limitations under Section 302 nor standards under Sections 306 and 307 of the Federal Water Pollution Control Act which are applicable to the applicant's above-described activity.

This certification is valid for the project as proposed. Any deviations without proper modifications and/or approvals may result in a violation of the 401 Water Quality Certification. If we can be of further assistance, please contact us.

Sincerely,



Krystal Rudolph, P.E., BCEE
Chief, Environmental Permits Division

KR: CHB

cc: Mr. Jeremy Overstreet, U.S. Army Corps of Engineers, Mobile District
Ms. Willa Brantley, Department of Marine Resources
Mr. Paul Necaise, U.S. Fish and Wildlife Service
Ms. Molly Martin, Environmental Protection Agency
Ms. Alane Young, Covington Civil and Environmental, LLC



STATE OF MISSISSIPPI

Phil Bryant
Governor

MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

Joe Spraggins, Executive Director

PERMIT TO CONDUCT REGULATED ACTIVITIES

Certification Number: DMR-190166

Date: July 19, 2019

Issued to: Mississippi Department of Environmental Quality
Attn: Ms. Valerie Alley
P.O. Box 2261
Jackson, MS 39225

Project Description: Subtidal Reef

Project Location: Mississippi Sound
Just north of Deer Island
Biloxi, Harrison County, Mississippi

DMR Project Manager: Willa Brantley
228-523-4108
willa.brantley@dmr.ms.gov

NOTICE: Read this document carefully. Failure to follow the listed conditions can result in substantial fines and penalties.

The Department of Marine Resources (DMR) has reviewed your request to fill Coastal Wetlands for the construction of a subtidal reef within the Mississippi Sound just north of Deer Island in Biloxi, Harrison County, MS. The application was presented to the MS Commission on Marine Resources (MCMR) on July 16, 2018.

In accordance with the provisions of the Mississippi Coastal Wetlands Protection Act and our findings made in compliance with Chapter Eight, Section 2 of the Mississippi Coastal Program (MCP), a Permit to conduct Regulated Activities is issued to you this day by the MCMR and by the Executive Director. The activities herein authorized shall be conducted in a manner resulting in the least damaging impacts to wetlands and the coastal environment.

The following activities and impacts are authorized by this certification as indicated on the attached approved diagrams:

1. Permanent fill of approximately 90 acres of Coastal Wetlands consisting of unvegetated waterbottoms for the construction of a subtidal reef using graded stone (limestone or granite), processed concrete aggregate, native and fossilized oyster shell, or other similar clean materials; Additional such materials may be added to the reef as needed during the life of this Permit to maintain the authorized design parameters; The DMR Bureau of Wetlands Permitting must receive written notice of any maintenance activities at least 30 days prior to commencement
2. A variance to Chapter VIII, Section 2, Part III.O.1. of the MCP

The applicant must abide by specific conditions as listed below.

Any deviations beyond the above-authorized dimensions, the project footprint as shown on the attached approved diagram, or the specific conditions as set forth below will be considered a violation and may result in the revocation of the permit. Violations of these conditions may be subject to fines, project modifications, and/or site restoration. Both the permittee and the contractor may be held liable for such violations or for conducting unauthorized work. A modification to the project dimensions or footprint or to these conditions may be requested by submitting a written request along with a revised project diagram to DMR. Proposed modifications to project dimensions, footprint, or conditions must be approved in writing prior to commencement of work.

The specific conditions of this certification are as follows:

1. The project area must be surveyed for the presence of submerged aquatic vegetation (SAV) during the growing season prior to implementation of the project; The results of this survey must be submitted to the DMR Bureau of Wetlands Permitting at least 30 days prior to commencement of construction; If SAV is found within the project area, an additional review by and written approval from DMR staff will be required prior to commencement of construction
2. A final as-built diagram must be provided to DMR's Bureau of Coastal Preserves within 90 days of construction completion
3. The reef authorized above must:
 - a. Be constructed such that a minimum clearance of 2 feet is maintained at Mean Lower Low Water
 - b. Use only clean, approved materials free of waste, metal and organic trash, unsightly debris, petroleum products, asphalt, etc.
 - c. Be marked by safety lights, signs, and/or signals as prescribed by the U.S. Coast Guard and the DMR Office of Marine Patrol through regulations or otherwise
 - d. Be constructed in a manner that allows water flow and wildlife movement

- e. Not result in fill of or adverse impacts to submerged aquatic vegetation or shellfish beds
 - f. Not pose a hazard to navigation
4. All authorized activities must:
- a. Use Best Management Practices (BMPs) at all times during construction, including, but not limited to, the use of staked hay bales; staked filter cloth; sodding, seeding, and mulching; staged construction; and the installation of turbidity screens around the immediate project site
 - b. Be conducted in a manner that minimizes the discharge of turbid waters into Waters of the State
 - c. Not result in construction debris, sewage, oil, refuse, other pollutants, or unauthorized fill material entering Coastal Wetlands or Waters of the State
 - d. Not impact wetlands, submerged aquatic vegetation, or shellfish beds unless specifically authorized above

**Work authorized by this certification must be completed on or before:
July 19, 2024.**

Enclosed is a Notice of Compliance (NOC) which must be conspicuously displayed at the site during construction of the authorized work.

This certification is contingent on clearance by the Mississippi Department of Archives and History (MDAH) and the Permittee shall maintain the project in accordance with any conditions required by MDAH for the project to comply with the Mississippi Coastal Program goal of preserving historical and archaeological resources, provided that MDAH specifies the policies, guidelines, or statutes on which these conditions are based.

Issuance of this certification by DMR does not release the applicant from other legal requirements including but not limited to other applicable federal, state, or local laws, ordinances, zoning codes, or other regulations, including a possible Tidelands Lease from the MS Secretary of State's Office, required City or County construction setbacks, or building permits from the City or County where the project is located. A list of contacts has been provided for your assistance in determining whether any further certifications are required.

This certification conveys no title to land and water, does not constitute authority for reclamation of coastal wetlands and does not authorize invasion of private property or rights in property.

The Department of Marine Resources has also coordinated a review of your project through the Coastal Program review procedures and determined that the project referenced above is consistent with the Mississippi Coastal Program, provided that you comply with the noted conditions and reviewing Coastal Program Agencies do not disagree with said plans. By copy of this certification, we are notifying the U.S. Army Corps of Engineers of this determination.

Please notify this Department upon completion of the permitted project so that compliance checks may be conducted by DMR staff.

THIS CERTIFICATION IS EFFECTIVE IMMEDIATELY.

Joe Spraggins
Executive Director
MS Department of Marine Resources

JS/wjb

Attachment: NOC/Approved Diagram

cc: Mr. Jeremy Overstreet, USACE
Ms. Florance Bass, OPC
Mr. Raymond Carter, SOS
Ms. Alane Young, Covington Civil and Environmental



Department of Marine Resources

**NOTICE OF COMPLIANCE
DMR- 190166 PERMIT
THIS NOTICE ACKNOWLEDGES THAT:**

DATE: July 19, 2019

**Mississippi Department of Environmental Quality
Attn: Ms. Valerie Alley
P.O. Box 2261
Jackson, MS 39225**

HAS, THROUGH APPLICATION TO THIS DEPARTMENT, DULY COMPLIED WITH THE MISSISSIPPI COASTAL WETLANDS PROTECTION ACT. THE FOLLOWING ACTIVITIES AND IMPACTS ARE AUTHORIZED AS INDICATED ON THE ATTACHED APPROVED DIAGRAM:

1. The project area must be surveyed for the presence of submerged aquatic vegetation (SAV) during the growing season prior to implementation of the project; The results of this survey must be submitted to the DMR Bureau of Wetlands Permitting at least 30 days prior to commencement of construction; If SAV is found within the project area, an additional review by and written approval from DMR staff will be required prior to commencement of construction
2. A final as-built diagram must be provided to DMR's Bureau of Coastal Preserves within 90 days of construction completion
3. The reef authorized above must:
 - a. Be constructed such that a minimum clearance of 2 feet is maintained at Mean Lower Low Water
 - b. Use only clean, approved materials free of waste, metal and organic trash, unsightly debris, petroleum products, asphalt, etc.
 - c. Be marked by safety lights, signs, and/or signals as prescribed by the U.S. Coast Guard and the DMR Office of Marine Patrol through regulations or otherwise
 - d. Be constructed in a manner that allows water flow and wildlife movement
 - e. Not result in fill of or adverse impacts to submerged aquatic vegetation or shellfish beds
 - f. Not pose a hazard to navigation
4. All authorized activities must:
 - a. Use Best Management Practices (BMPs) at all times during construction, including, but not limited to, the use of staked hay bales; staked filter cloth; sodding, seeding, and mulching; staged construction; and the installation of turbidity screens around the immediate project site
 - b. Be conducted in a manner that minimizes the discharge of turbid waters into Waters of the State
 - c. Not result in construction debris, sewage, oil, refuse, other pollutants, or unauthorized fill material entering Coastal Wetlands or Waters of the State
 - d. Not impact wetlands, submerged aquatic vegetation, or shellfish beds unless specifically authorized above

On the Mississippi Sound just north of Deer Island in Biloxi, Harrison County, Mississippi.

Furthermore, this project as proposed has been found to be consistent with all guidelines for conduct of regulated activities in coastal wetlands as set forth in the Mississippi Coastal Program.

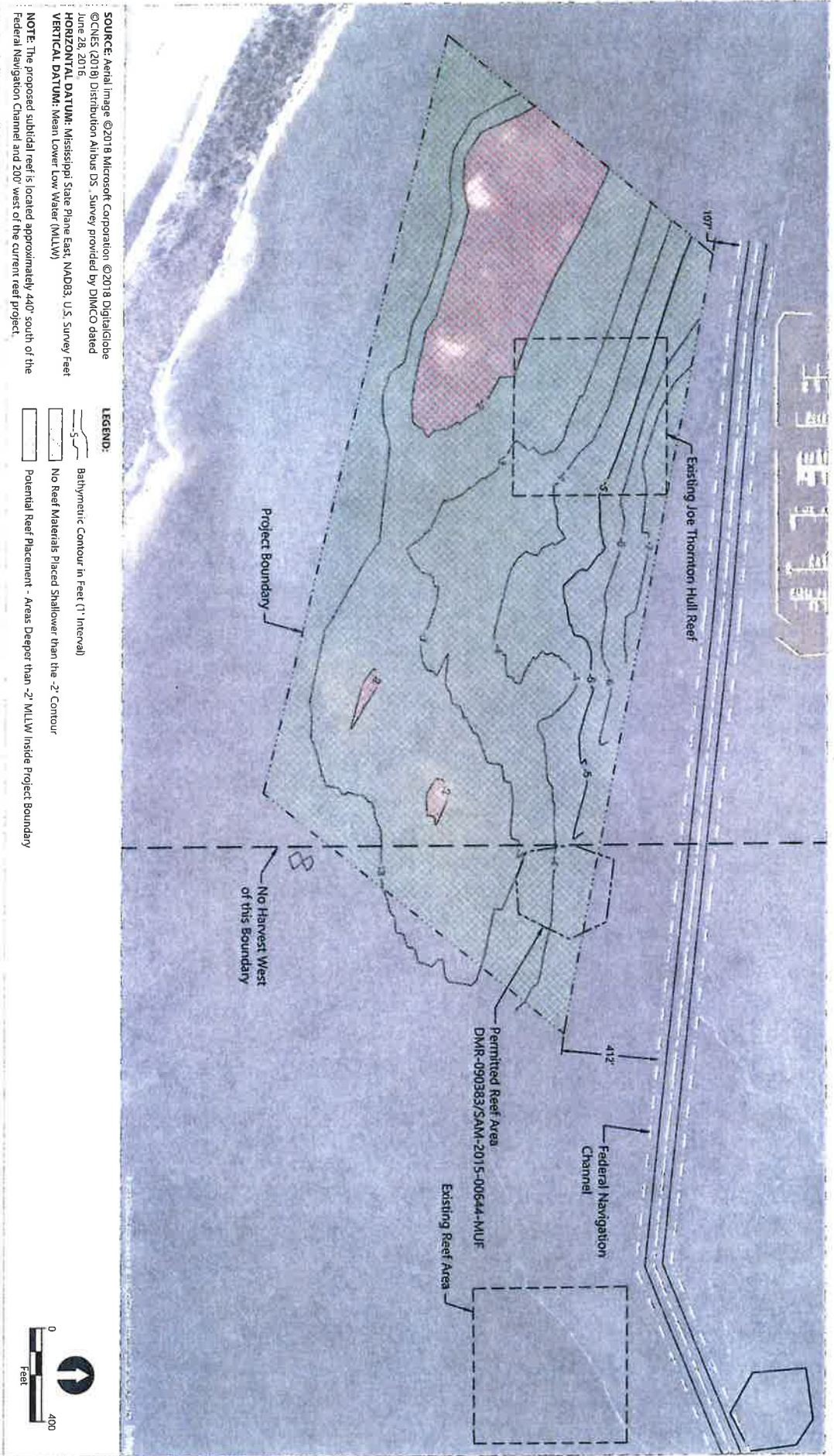
No construction debris or unauthorized fill material shall be allowed to enter coastal wetlands or waters.

ALL CONDITIONS AS SPECIFIED IN THE WRITTEN CERTIFICATION DATED JULY 19, 2019, TO WHICH THIS NOTICE OF COMPLIANCE AND APPROVED DIAGRAM ARE ATTACHED MUST BE FOLLOWED AT ALL TIMES DURING CONSTRUCTION AND CONTINUING FOR THE LIFE OF THE PROJECT. ANY DEVIATIONS FROM THESE CONDITIONS, THE ABOVE-LISTED DIMENSIONS, OR THE PROJECT FOOTPRINT AS SHOWN ON THE ATTACHED APPROVED DIAGRAM SHALL BE CONSIDERED A VIOLATION AND MAY RESULT IN THE REVOCATION OF THE PERMIT.

VIOLATIONS MAY BE SUBJECT TO FINES, PROJECT MODIFICATIONS, AND/OR SITE RESTORATION. BOTH THE PERMITTEE AND THE CONTRACTOR MAY BE HELD LIABLE FOR SUCH VIOLATIONS OR FOR CONDUCTING UNAUTHORIZED WORK.

Executive Director

POST THIS NOTICE CONSPICUOUSLY AT SITE OF WORK



SOURCE: Aerial Image ©2018 Microsoft Corporation, ©2018 DigitalGlobe ©CNES (2018) Distribution Airbus DS, Survey provided by DIMCO dated June 28, 2016

HORIZONTAL DATUM: Mississippi State Plane East, NAD83, U.S. Survey Feet

VERTICAL DATUM: Mean Lower Low Water (MLLW)

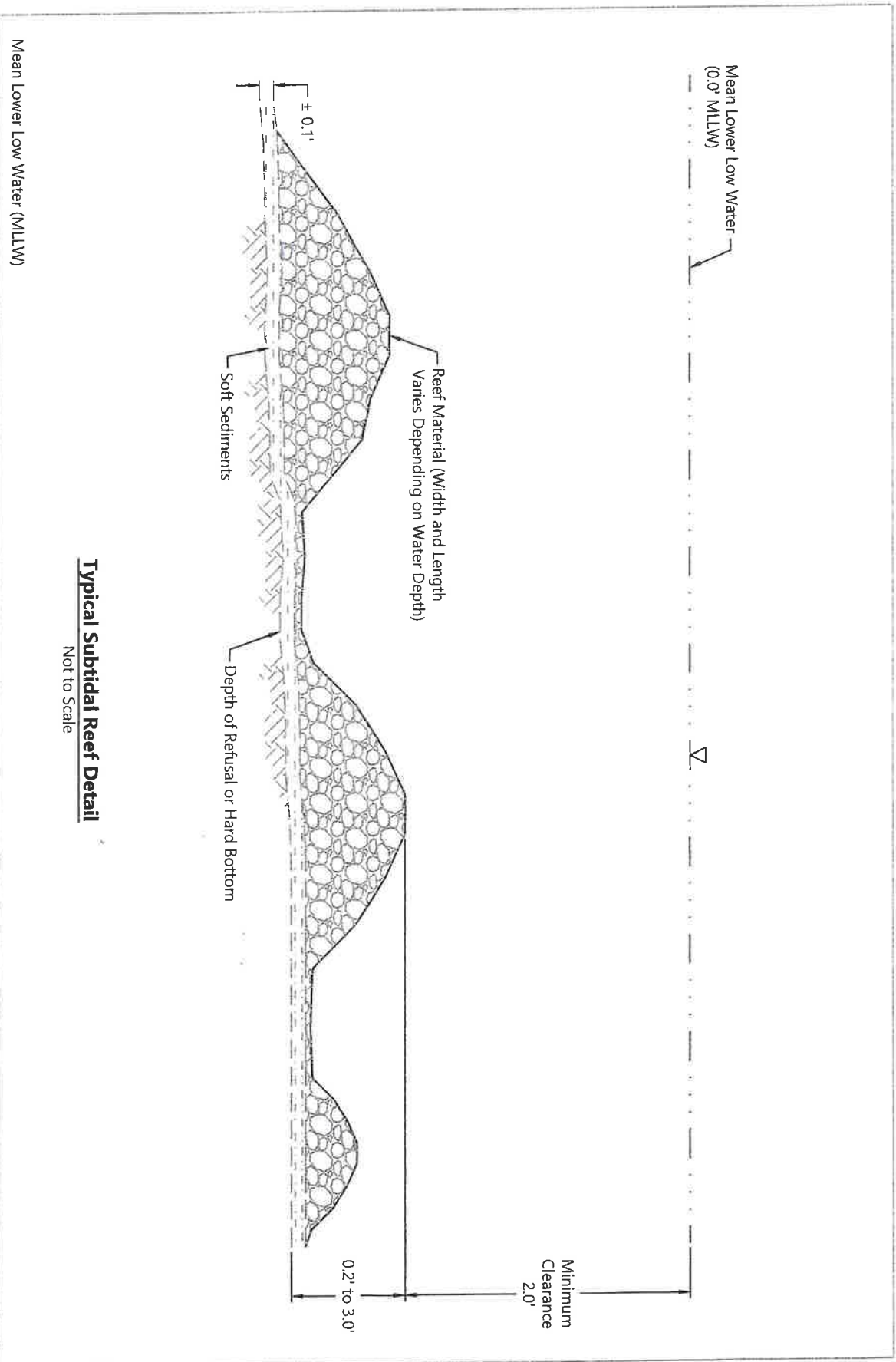
NOTE: The proposed subtidal reef is located approximately 400' south of the Federal Navigation Channel and 200' west of the current reef project.

LEGEND:

- Bathymetric Contour in Feet (1' Interval)
- No Reef Materials Placed Shallower than the -2' Contour
- Potential Reef Placement - Areas Deeper than -2' MLLW inside Project Boundary

Figure 3.2
Deer Island Subtidal Reef
 Basis of Design Report
 Restoring Living Shorelines and Reefs in Mississippi Estuaries Project
 Department of Environmental Quality





Publish Date: 2018/11/09 4:43 PM | User: dtholmer
 Filepath: K:\Project\1232-Mississippi Department of Environmental Quality\Mississippi Estuaries Living Shoreline\1232-RP-024 (Deer Island - RODR) dwg Fig 4 (BODR)



Figure 4
 Deer Island Subtidal Reef Typical Ridged Section
 Basis of Design Report
 Restoring Living Shorelines and Reefs in Mississippi Estuaries Project
 Department of Environmental Quality