



DEPARTMENT OF THE ARMY

NEW ORLEANS DISTRICT, CORPS OF ENGINEERS

P.O. BOX 60267

NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO  
ATTENTION OF

JUN 07 2010

Operations Division  
Western Evaluation Section

SUBJECT: MVN-2010-0973-WLL

Office of Coastal Protection and Restoration  
ATTN: Kristi Cantu  
P.O. Box 44027  
Baton Rouge, LA 70804

Gentlemen,

The proposed work, to excavate 4030 cubic yards of waterbottom sediment and place onsite, 950 cubic yards of aggregate material and 2520 cubic yards of cement oysterbreak armor units along the shoreline of the Gulf of Mexico west of Joseph's Harbor Canal in Cameron Parish, Louisiana for the purpose of implementing an oyster reef demonstration project is authorized under a **Category II Programmatic General Permit** provided that all conditions of the permit are met.

Prior to commencing work on your project, you must obtain approvals from state and local agencies as required by law and by the terms of this permit. These approvals include, but are not limited to, a permit or waiver from the Coastal Management Division of the Louisiana Department of Natural Resources and a water quality certification from the Louisiana Department of Environmental Quality, Office of Water Resources.


Prior to any work on the refuge, the permittee shall coordinate all activities with the Rockefeller Refuge Manager.

If the work is initiated within two (2) years of the date of this letter, the authorization remains valid for a total of five (5) years from the date of this letter. If the work is not initiated within two (2) years, this authorization becomes null and void.

The New Orleans District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete the attached Customer Service Survey and return it in the envelope provided or go to the survey found on our web site at <http://per2.nwp.usace.army.mil/survey.html>.

Should you have any further questions concerning this matter, please contact Mike Herrmann of this office at (504) 862-1954.

Sincerely,

  
Pete J. Serio  
Chief, Regulatory Branch

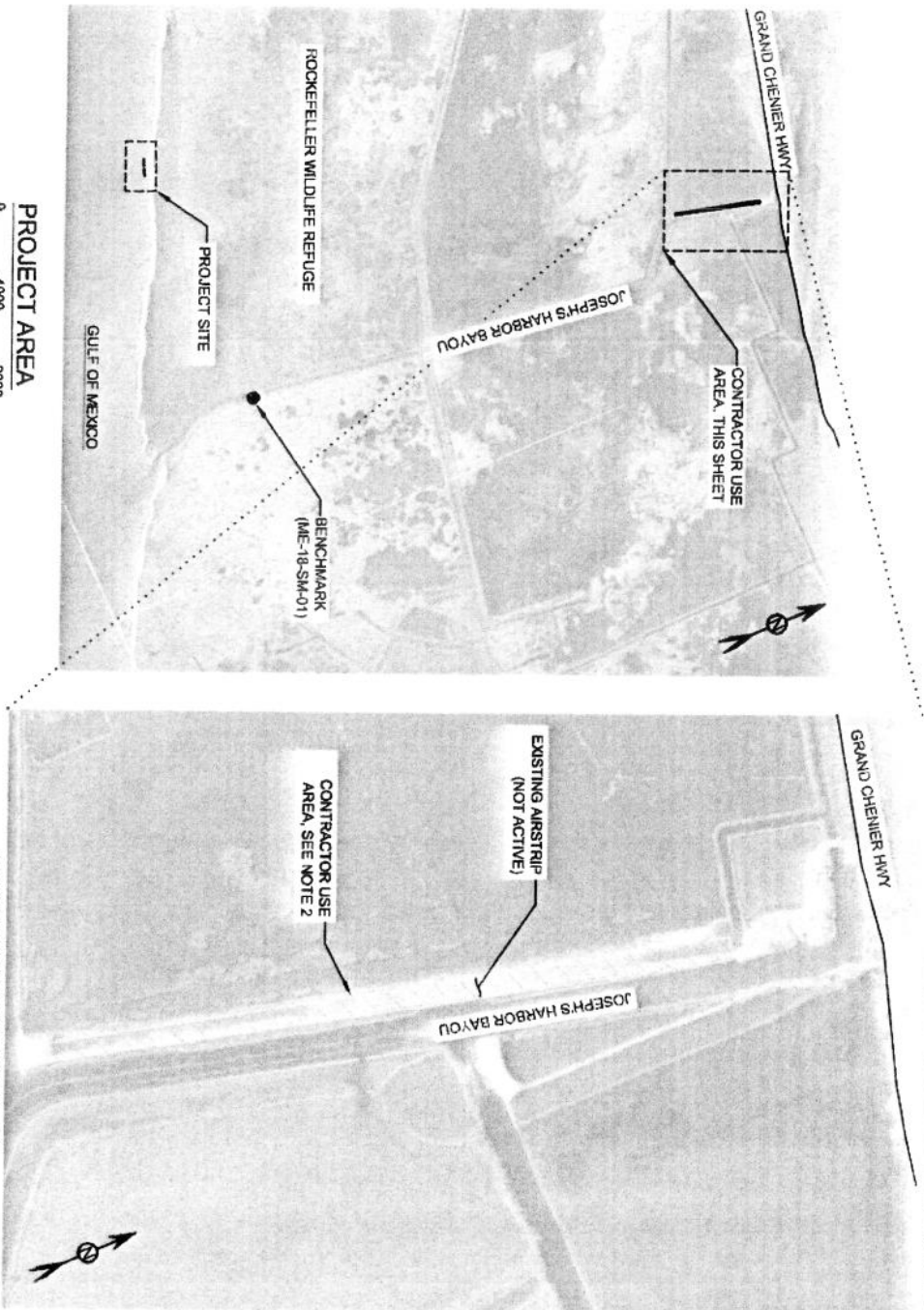
Enclosures

1. Activities authorized under this general permit shall not be used for piecemeal work and shall be applied to single and complete projects. All components of a single and complete project shall be treated together as constituting one single and complete project. All planned phases of multi-phased projects shall be treated together as constituting one single and complete project. This general permit shall not be used for any activity that is part of an overall project for which an individual permit is required.
2. No activity is authorized under this general permit which may adversely affect significant cultural resources listed or eligible for listing in the National Register of Historic Places until the requirements for Section 106 of the National Historic Preservation Act are met. Upon discovery of the presence of previously unknown historic and/or prehistoric cultural resources, all work must cease and the permittee must notify the State Historic Preservation Office and the Corps of Engineers. The authorization is suspended until it is determined whether or not the activity will have an adverse effect on cultural resources. The authorization may be reactivated or modified through specific conditions if necessary, if it is determined that the activity will have no adverse effect on cultural resources. The NOD-PGP authorization will be revoked if it is determined that cultural resources would be adversely affected, and an individual permit may be necessary.
3. The Chitimacha Tribe of Louisiana has stated that the project area is part of the aboriginal Chitimacha homelands. If during the course of work at the site, prehistoric and/or historic aboriginal cultural materials are discovered, the applicant will contact the Chitimacha Tribe of Louisiana at P.O. Box 661, Charenton, LA 70523, and the Army Corps of Engineers, New Orleans District (NOD) Regulatory Branch. NOD will initiate the required Federal, State, and Tribal coordination to determine the significance of the cultural materials and the need, if applicable, for additional cultural resource investigations.
4. There shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein. The permittee will, at his or her expense, install and maintain any safety lights, signals, and signs prescribed by the United States Coast Guard, through regulations or otherwise, on authorized facilities or on equipment used in performing work under the authorization.
5. No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including those species which normally migrate through the area, unless the activity's primary purpose is to block or impound water.
6. If the proposed activity involves the installation of aerial transmission lines, submerged cable, or submerged pipelines across navigable waters of the United States the following is applicable:  
  
The National Ocean Service (NOS) has been notified of this authorization. You must notify NOS and this office in writing, at least two weeks before you begin work and upon completion of the activity authorized by this permit. Your notification of completion must include a drawing which certifies the location and configuration of the completed activity (a certified permit drawing may be used). Notification to NOS will be sent to the following address: National Ocean Service, Office of Coast Survey, N/CS261, 1315 East West Highway, Silver Springs, Maryland 20910-3282.
7. For pipelines under an anchorage or a designated fairway in the Gulf of Mexico the following is applicable: The National Ocean Service has been notified of this authorization. You must notify NOS and this office in writing, at least two weeks before you begin work and upon completion of the activity authorized by this permit. Within 30 days of completion of the pipeline, 'as built' drawings certified by a professional engineer registered in Louisiana or by a registered surveyor shall be furnished to this office, the U.S. Coast Guard, Sector New Orleans Command Center, 201 Hammond Highway, Metairie, Louisiana 70005, and to the Director, National Ocean Service, Office of Coast Survey, N/CS261, 1315 East West Highway, Silver Springs, Maryland 20910-3282. The plans must include the location, configuration and actual burial depth of the completed pipeline project.

8. If the proposed project, or future maintenance work, involves the use of floating construction equipment (barge mounted cranes, barge mounted pile driving equipment, floating dredge equipment, dredge discharge pipelines, etc.) in a federally maintained waterway, you are advised to notify the Eighth Coast Guard District so that a Notice to Mariners, if required, may be prepared. Notification with a copy of your permit approval and drawings should be mailed to the US Coast Guard, Sector New Orleans Command Center, 201 Hammond Highway, Metairie, Louisiana 70005, about 1 month before you plan to start work. Telephone inquiries can be directed to (504) 846-5923.
9. All activities authorized herein shall, if they involve, during their construction or operation, any discharge of pollutants into waters of the United States, be at all times consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, pretreatment standards and management practices established pursuant to the Clean Water Act (PL 92-500: 86 Stat 816), or pursuant to applicable state and local laws.
10. Substantive changes to the Louisiana Coastal Resources Program may require immediate suspension and revocation of this permit in accordance with 33 CFR 325.7.
11. Irrespective of whether a project meets the other conditions of this permit, the Corps of Engineers retains discretionary authority to require an individual Department of the Army permit when circumstances of the proposal warrant this requirement.
12. Any individual authorization granted under this permit may be either modified, suspended, or revoked in whole or in part if the Secretary of the Army or his authorized representative determines that there has been a violation of any of the terms or conditions of this permit or that such action would otherwise be in the public interest.
13. The Corps of Engineers may suspend, modify, or revoke this general permit if it is found in the public interest to do so.
14. Activities proposed for authorization under the PGP must comply with all other necessary federal, state, and/or local permits, licenses, or approvals. Failure to do so would result in a violation of the terms and conditions of NOD-PGP.
15. The permittee shall permit the District Engineers or his authorized representative(s) or designee(s) to make periodic inspections of the project site(s) and disposal site(s) if different from the project site(s) at any time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein.
16. This general permit does not convey any property rights, either in real estate or material, or any exclusive privileges; and it does not authorize any injury to property or invasion of rights or any infringement of federal, state, or local laws or regulations nor does it obviate the requirements to obtain state or local assent required by law for the activity authorized herein.
17. In issuing authorizations under this permit, the federal government will rely upon information and data supplied by the applicant. If, subsequent to the issuance of an authorization, such information and data prove to be false, incomplete, or inaccurate, the authorization may be modified, suspended, or revoked, in whole or in part.
18. For activities resulting in sewage generation at the project site, such sewage shall be processed through a municipal sewage treatment system or, in areas where tie-in to a municipal system is not practical, the on-site sewerage system must be approved by the local parish sanitarian before construction.
19. Any modification, suspension, or revocation of this permit or any individual authorization granted under this permit will not be the basis for any claim for damages against the United States.
20. Additional conditions deemed necessary to protect the public interest may be added to the general permit by the District Engineer at any time. If additional conditions are added, the public will be advised by public notice. Individual authorizations under this PGP may include special conditions deemed necessary to ensure minimal impact and compliance with this PGP.

21. A review of cumulative losses under the general permit will be accomplished yearly in or around the month of October. A report of losses will be furnished to the Environmental Protection Agency, the US Fish and Wildlife Service, the National Marine Fisheries Service, and the Louisiana Department of Wildlife and Fisheries. Comments from reviewing agencies will be considered in determination as to whether modifications to the general permit are needed. Should the District Engineer make a determination not to incorporate a change proposed by a reviewing agency, after normal negotiations between the respective agencies, the District Engineer will explain in writing to the reviewing agency the basis and rationale for his decision.
22. The New Orleans District will periodically review NOD-PGP and its terms, conditions, and processing procedures and will decide to either modify, reissue, or revoke the permit. If the PGP is not modified or reissued within 5 years of its effective date, it automatically expires and becomes null and void. Activities which have commenced or are under contract to commence in reliance upon prior authorization of NOD-PGP will remain authorized provided the activity is completed within 12 months of the date of NOD-PGP expiration, modification, or revocation, unless the Corps of Engineers has determined that the specific activity does not qualify for authorization under NOD-PGP and exercises Corps authority to modify, suspend, or revoke the authorization in accordance with DOA regulations at 33 CFR 325.7.
23. Activities which qualify as non reporting nationwide permits and which commenced or were under contract to commence prior to June 1, 1998, are valid for a period of two years from the commencement/contract date. Those activities which have received authorization under the nationwide and regional general permit programs expire as indicated on the permit authorization. Requests received on or after June 1, 1998, will be evaluated for compliance under NOD-PGP.
24. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
25. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
26. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
27. If you sell the property associated with this permit, you must provide this office with a copy of the permit and a letter noting your agreement to transfer the permit to the new owner and the new owners agreement to accept the permit and abide by all conditions of the permit. This letter must be signed by both parties.
28. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit.
29. Many local governing bodies have instituted laws and/or ordinances in order to regulate dredge and/or fill activities in floodplains to assure maintenance of floodwater storage capacity and avoid disruption of drainage patterns that may affect surrounding properties. Your project involves dredging and/or placement of fill, therefore, you must contact the local municipal and/or parish governing body regarding potential impacts to floodplains and compliance of your proposed activities with local floodplain ordinances, regulations or permits.





# PERMIT PLANS

**TIDAL VERTICAL DATUMS (NAVD88)**

MEAN HIGHER HIGH WATER (MHHW)	1.24'
MEAN SEA LEVEL (MSL)	0.48'
NAVD88	0.00'
MEAN LOWER LOW WATER (MLLW)	-0.74'

**HORIZONTAL/VERTICAL BENCHMARK (BM)**

NAME	NORTHING	EASTING	ELEVATION (NAVD88)
ME-18-SM-01	420,724.78	2,824,955.19	6.05

**OFFICE OF COASTAL PROTECTION AND RESTORATION**  
 APPLICANT:  
 450 LAUREL STREET, 12TH FLOOR  
 BATON ROUGE, LOUISIANA 70801

**COAST & HARBOR ENGINEERING**  
 343 3RD STREET, SUITE 308  
 BATON ROUGE, LA 70801  
 PH 512-342-9705  
 FAX 512-342-9708

**BIO-ENGINEERED OYSTER REEF DEMONSTRATION PROJECT**

**PROJECT AREA AND CONTRACTOR USE AREA**

DRAWN BY: T. MORRISON

DESIGNED BY: S. HICKS

APPROVED BY: WHITNEY THOMPSON

FEDERAL PROJECT NUMBER: LA-08

STATE PROJECT NUMBER: LA-08

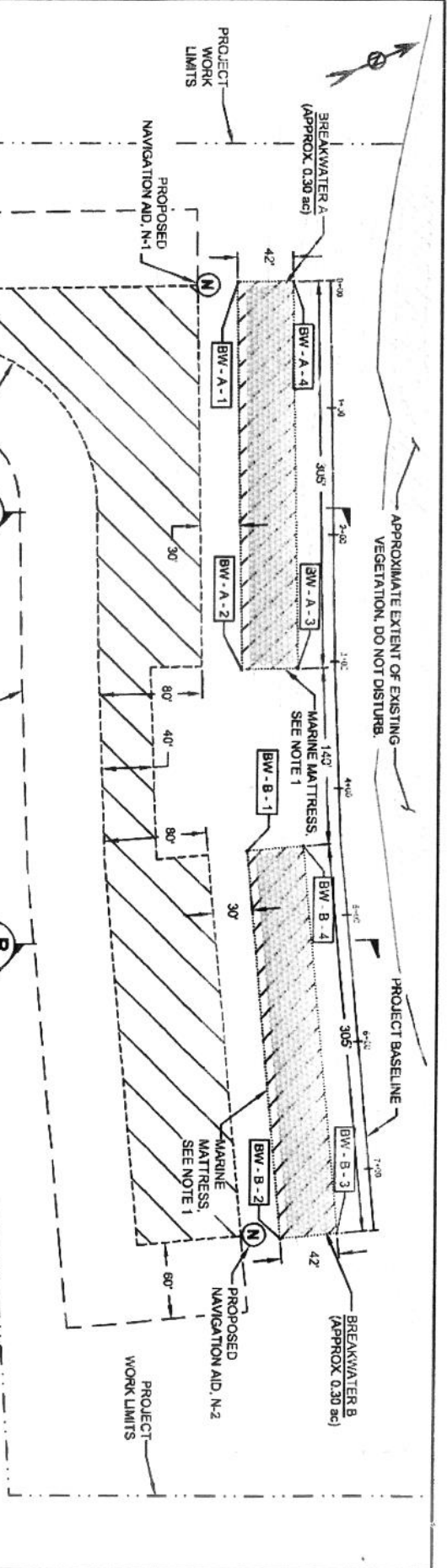
DATE: 4/20/2010

SHEET 2 OF 8

- NOTES:**
1. AERIAL PHOTOGRAPH DOQQ FROM THE LOUISIANA STATEWIDE GIS, DATED 2006.
  2. CONTRACTOR USE AREA LOCATED OFF JOSEPH'S HARBOR BAYOU IN ROCKEFELLER REFUGE. UPLAND CONTRACTOR USE AREA ACCESS IS AVAILABLE VIA GRAND CHENIER HWY. WATER ACCESS IS AVAILABLE VIA JOSEPH'S HARBOR BAYOU.
  3. THERE IS NO UPLAND ACCESS TO THE PROJECT SITE. CONTRACTOR SHALL ACCESS PROJECT SITE FROM A NAVIGABLE WATER BODY.

**STANDARD ABBREVIATIONS:**

- EL. = ELEVATION
- DIA. = DIAMETER
- T.O. = TOP OF
- B.O. = BOTTOM OF
- MHHW = MEAN HIGHER HIGH WATER
- MLLW = MEAN LOWER LOW WATER
- EA. = EACH
- TYP. = TYPICAL
- O.C. = ON CENTER
- O.C. = OUTSIDE DIAMETER
- APPROX = APPROXIMATE
- BM = BENCH MARK
- PL. = PLATE
- FT = FEET
- MIN = MINIMUM
- UNJ. = UNLESS NOTED OTHERWISE
- N.T.S. = NOT TO SCALE
- W.P. = WORKING POINT
- ' = MINUTES OR FEET
- " = SECONDS OR INCHES



**ACCESS CHANNEL NOTES:**

- ACCESS CHANNELS MAY BE DREDGED TO A MAXIMUM DEPTH OF -7.0' NAVD8R.
- EXCAVATED MATERIAL FROM ACCESS CHANNEL MAY BE PLACED IN THE TEMPORARY SPOIL AREAS AS SHOWN.
- TOTAL ACCESS CHANNEL DREDGE AREA IS APPROX. 1.86 AC.
- TOTAL ACCESS CHANNEL DREDGE VOLUME IS APPROX. 4030 CY.
- TOTAL TEMPORARY SPOIL PLACEMENT AREA IS APPROX. 2.12 AC.
- TOTAL LINEAR FEET OF ACCESS CHANNEL IS 1195 FT.

**TABLE 1 - BASELINE POINTS**

STATION	NORTHING	EASTING	DESCRIPTION
0+00	420729.50	2813005.40	START BW-A
3+05	420607.33	2813285.00	END BW-A
4+43	420554.65	2813412.66	START BW-B
7+46	420452.97	2813700.40	END BW-B

**TABLE 2**  
**BREAKWATER CORNERS**

POINT	NORTHING	EASTING
BW-A-1	420385.22	2812976.76
BW-A-2	420541.86	2813256.39
BW-A-3	420581.17	2813273.57
BW-A-4	420703.35	2812993.94
BW-B-1	420486.76	2813388.72
BW-B-2	420385.22	2813676.49
BW-B-3	420426.04	2813690.91
BW-B-4	420527.60	2813403.13

**LEGEND**

- MARINE MATTRESS
- CONCRETE ARMOR UNIT BREAKWATER
- ACCESS CHANNEL
- EXISTING VEGETATION
- PROJECT WORK LIMITS
- NAVIGATION AID

**SITE PLAN**



**NOTES:**

- MARINE MATTRESSES TO EXTEND 6' BEYOND SEAWARD EDGE OF CONCRETE ARMOR UNIT BREAKWATER. MARINE MATTRESSES TO EXTEND 2.0' BEYOND LANDWARD AND 2.5' BEYOND SIDE EDGES OF CONCRETE ARMOR UNIT BREAKWATER. LOCATIONS OF PROPOSED NAVIGATION AIDS ARE APPROXIMATE. SEE NAVIGATION AID STRUCTURE LOCATIONS TABLE, SHEET & CONTRACTOR IS TO FIELD LOCATE NAVIGATION AID LOCATIONS. FINAL LOCATION TO BE FIELD VERIFIED BY ENGINEER. CONTRACTOR SHALL NOT DISTURB ANY UPLAND VEGETATION IN PROJECT WORK LIMITS.
- ELEVATIONS SHOWN ARE REFERENCED TO NAVD88 FEET.

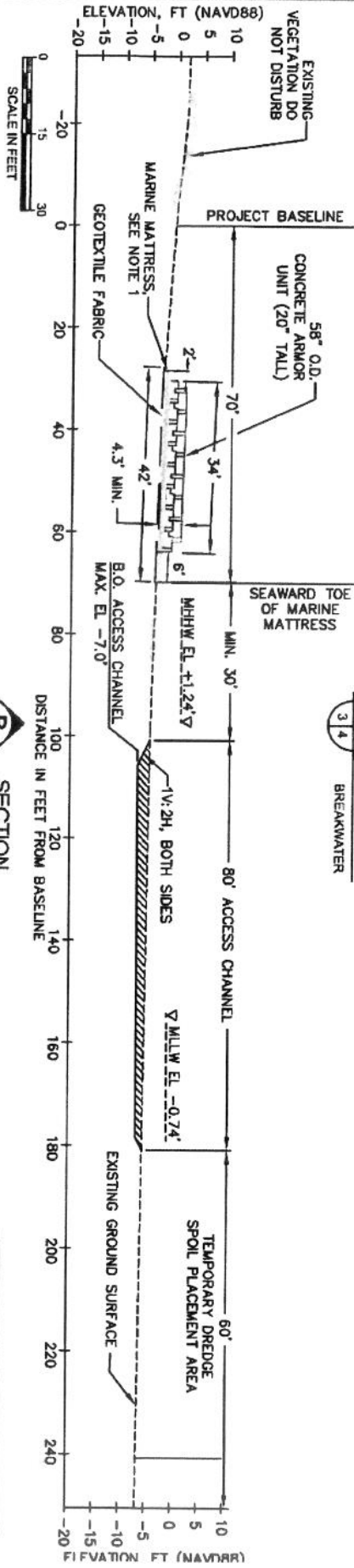
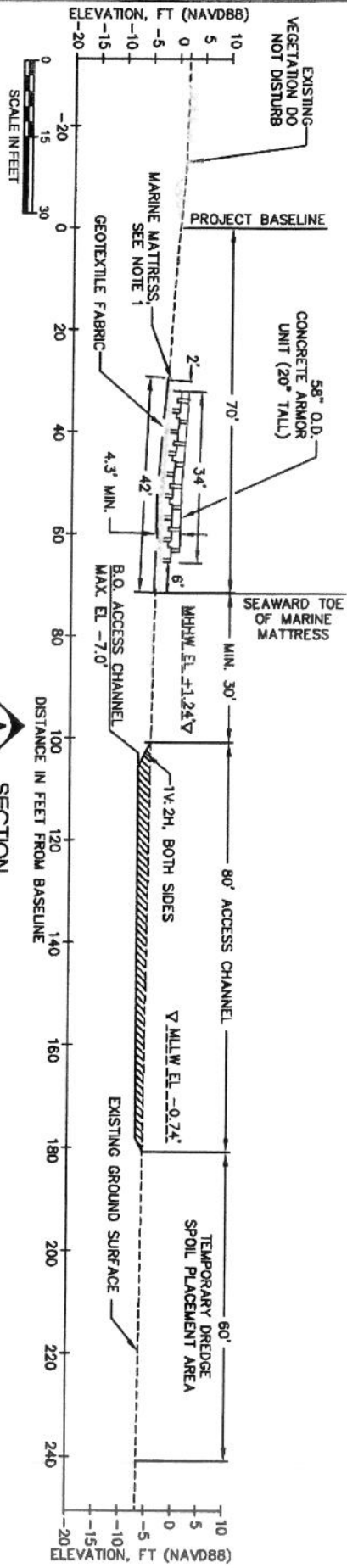
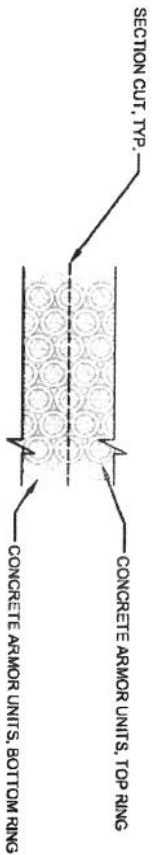
**PERMIT PLANS**

**OFFICE OF COASTAL PROTECTION AND RESTORATION**  
450 LAUREL STREET, 12TH FLOOR  
BATON ROUGE, LOUISIANA 70801

**APPLICANT:**  
**COAST & HARBOR ENGINEERING**  
343 3RD STREET, SUITE 308  
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DRAWN BY: T. MORRISON      DESIGNED BY: S. HICKS      APPROVED BY: WHITNEY THOMPSON      STATE PROJECT NUMBER: LA-08      FEDERAL PROJECT NUMBER: LA-08      DATE: 4/20/2010      SHEET 3 OF 6

**PARTIAL PLAN VIEW - BREAKWATER**  
(MARINE MATRESS NOT SHOWN)



- NOTES:**
- ELEVATION OF TOP OF BREAKWATER AND BOTTOM TOE OF BREAKWATER VARIES.
  - MARINE MATRESSES TO EXTEND 8.0' BEYOND SEAWARD EDGE OF CONCRETE ARMOR UNIT BREAKWATER, MARINE MATRESSES TO EXTEND 20' BEYOND LANDWARD AND 2.5' PAST SIDE EDGES OF CONCRETE ARMOR UNIT BREAKWATER.

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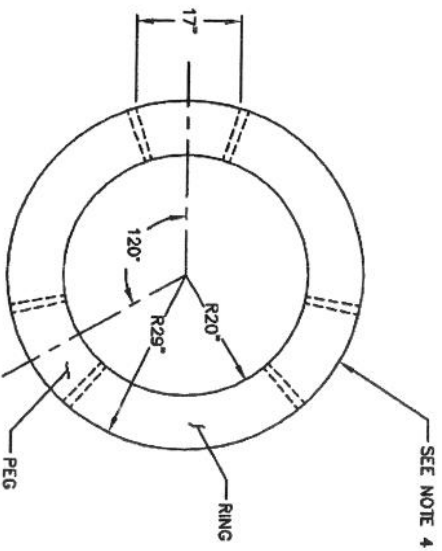
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**BIO-ENGINEERED OYSTER REEF DEMONSTRATION PROJECT**

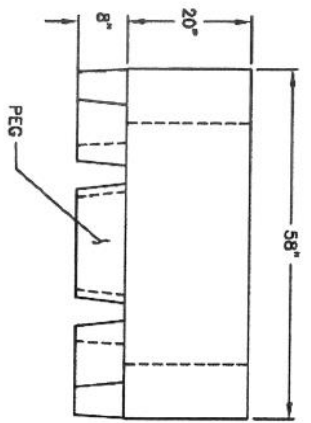
TYPICAL SECTIONS

**PERMIT PLANS**

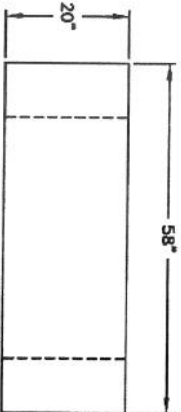
DRAWN BY: T. MORRISON	DESIGNED BY: S. HICKS	APPROVED BY: WHITNEY THOMPSON
STATE PROJECT NUMBER: LA-08	FEDERAL PROJECT NUMBER: LA-08	DATE: 4/20/2010
		SHEET 4 OF 6



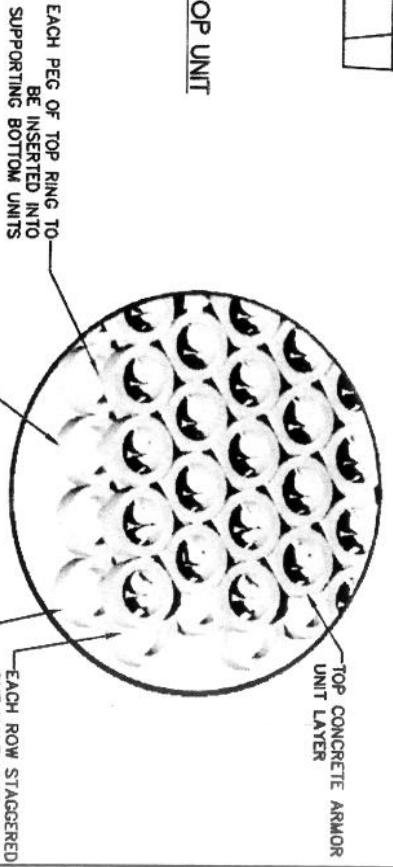
**DETAIL 1**  
**CONCRETE ARMOR UNIT**  
 TOP RING SHOWN (BOTTOM RING SIMILAR)  
 SCALE IN INCHES



**DETAIL 2**  
**CONCRETE ARMOR UNIT - TOP UNIT**  
 SIDE  
 SCALE IN INCHES



**DETAIL 3**  
**CONCRETE ARMOR UNIT - BOTTOM UNIT**  
 SIDE  
 SCALE IN INCHES



**DETAIL 4**  
**REEF CONFIGURATION**  
 (PERSPECTIVE VIEW)

- NOTES:**
1. UNITS SHALL BE PLACED IN A STAGGERED PATTERN, WHERE ONE ROW OF UNIT CENTERS ARE PERPENDICULAR TO SPACES BETWEEN UNITS OF THE NEXT ROW (SEE DETAIL 4, REEF CONFIGURATION).
  2. THE CENTER OF TOP LAYER CONCRETE ARMOR UNITS SHALL BE PLACED ON TOP OF THREE (3) BOTTOM LAYER UNITS, WHERE TOP LAYER PEGS ARE INSERTED INTO BOTTOM LAYER HOLES.
  3. TOP UNITS IN STRUCTURE TO HAVE PEGS ON BOTTOM OF UNIT. BOTTOM UNITS IN STRUCTURE TO BE FABRICATED WITHOUT PEGS.
  4. DIMENSIONS OF CONCRETE ARMOR UNITS ARE APPROXIMATE AND MAY BE MODIFIED AT TIME OF CONSTRUCTION.

**PERMIT PLANS**

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**BIO-ENGINEERED OYSTER REEF DEMONSTRATION PROJECT**

**CONCRETE ARMOR UNIT DETAILS**

DRAWN BY: T. MORRISON

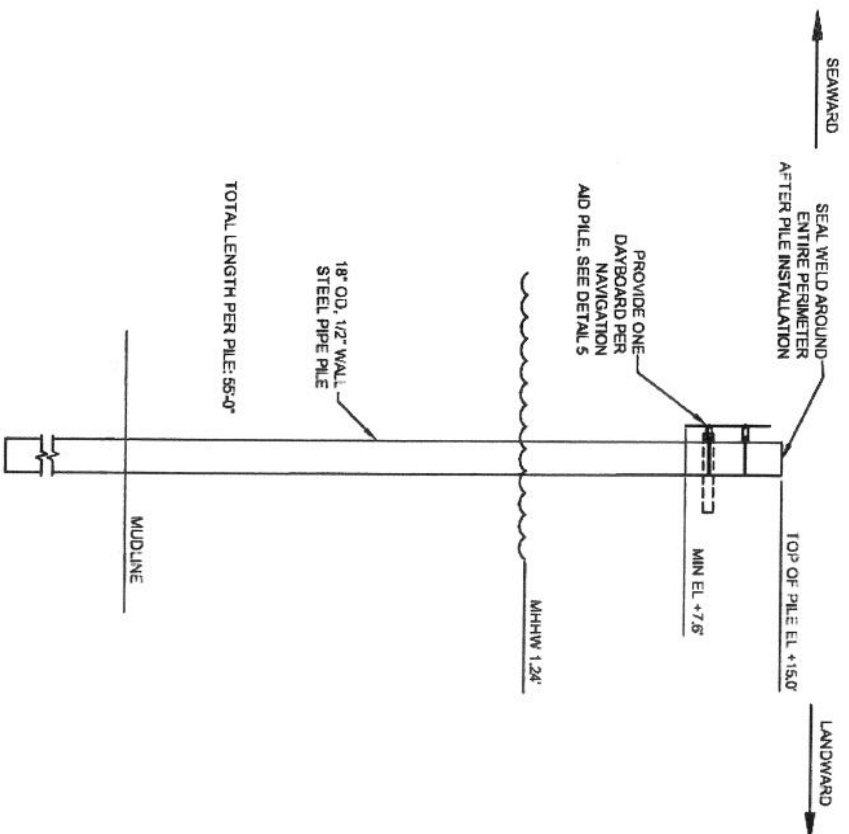
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APPROVED BY: WHITNEY THOMPSON

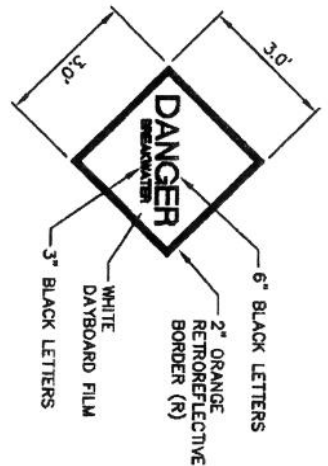
STATE PROJECT NUMBER: LA-08  
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DATE: 4/20/2010  
 SHEET 5 OF 6





TOTAL LENGTH PER PILE: 65'-0"



**6** DAYBOARD MOUNTING BRACKET



NOTE: DAYBOARD TO BE FASTENED TO PILE USING (2) 1/2" GALVANIZED U-BOLTS, WASHERS, AND NUTS.

# PERMIT PLANS

- NOTES:**
1. ALL DIMENSIONS AND DETAILS ARE APPROXIMATE AND MAY BE MODIFIED AT TIME OF CONSTRUCTION.
  2. DAYBOARD TO BE INSTALLED FACING SOUTH
  3. ALL ELEVATIONS REFERENCE NAVD88 FT.
  4. NAVIGATION AID TO MEET USCG REQUIREMENTS.



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**BIO-ENGINEERED OYSTER REEF DEMONSTRATION PROJECT**

**NAVIGATION AID**

POINT	NORTHING *	EASTING *	DIRECTION
N-1	420624	2812969	S
N-2	420388	2813665	S

\* APPROXIMATE LOCATION, FINAL LOCATION TO BE FIELD LOCATED BY THE ENGINEER.

DRAWN BY: I. MORRISON	DESIGNED BY: S. HICKS	APPROVED BY: W. THOMPSON	STATE PROJECT NUMBER: LA-98	DATE: 4/20/2010
			FEDERAL PROJECT NUMBER: LA-08	SHEET 6 OF 6