

# INDEX TO SHEETS

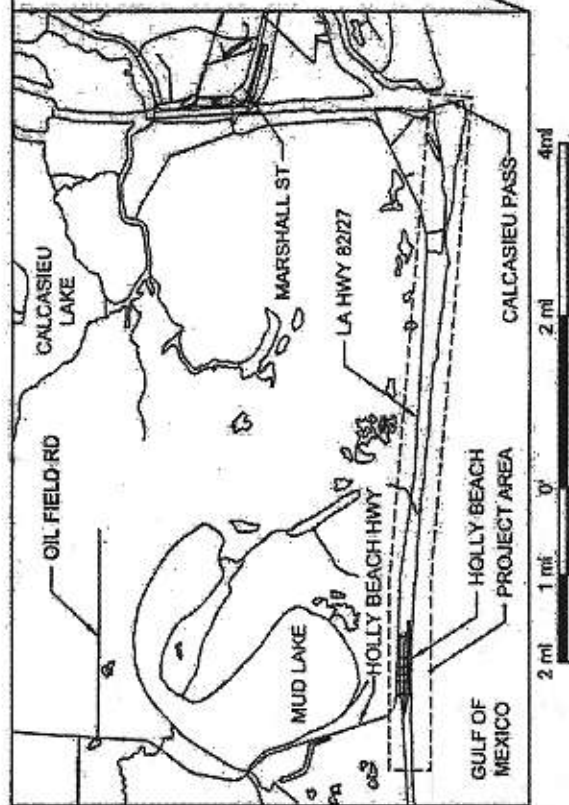
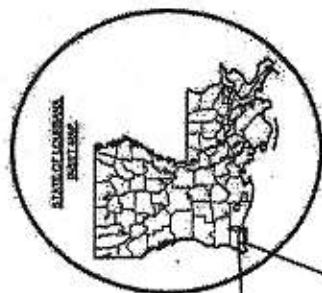
SHEET NO. DESCRIPTION

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## STATE OF LOUISIANA OFFICE OF COASTAL PROTECTION AND RESTORATION ENGINEERING BRANCH

### CAMERON PARISH SHORELINE RESTORATION (CS-33 SF)

CAMERON PARISH, LA



PREPARED BY:

**COAST & HARBOR ENGINEERING**  
3410 FAR WEST BLVD, SUITE 210  
AUSTIN, TEXAS 78731  
PH 512-342-6516  
FAX 512-342-6708

APPLICATION BY:

STATE OF LOUISIANA  
OFFICE OF COASTAL PROTECTION AND RESTORATION  
P.O. BOX 40027  
BATON ROUGE, LA 70804-0027

OFFICE OF COASTAL PROTECTION AND RESTORATION  
RESTORATION ENGINEERING DIVISION  
480 LAUREL STREET, 12TH FLOOR  
BATON ROUGE, LOUISIANA 70801

CAMERON PARISH  
SHORELINE RESTORATION

TITLE SHEET

DRAWN BY: T. MORRISON

DESIGNED BY: J. CARTER

APPROVED BY: H. BERNARDEZ

STATE PROJECT NUMBER: CS-33 SF

DATE: 6/7/11

FEDERAL PROJECT NUMBER:

SHEET 1 OF 15



LOCATION	AREA (ACRES)
BORROW SITE HF	288
BORROW SITE JF	335
REHABILITATING SITE	16.7
BEACH	
NOURISHMENT SITE	840

#### TIDAL VERTICAL DATUMS (NAVD88)

UNLESS NOTED OTHERWISE

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

#### NOTES:

- ALL COORDINATES ARE GIVEN IN NAD83  
LOUISIANA STATE PLANE, SOUTH ZONE, U.S.  
FOOT OR NAD83 GEOGRAPHIC COORDINATES.
- ALL ELEVATIONS ARE IN FEET AND REFERENCED  
TO NAVD88 UNLESS NOTED OTHERWISE.

#### PREPARED BY:

#### COAST & HARBOR ENGINEERING

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#### APPLICATION BY:

STATE OF LOUISIANA  
OFFICE OF COASTAL PROTECTION AND RESTORATION  
BAYON ROUGE, LA 70604-4027

DRAWN BY: T. MORRISON

DESIGNED BY: J. CARTER

APPROVED BY: H. BERNHARDT

#### OFFICE OF COASTAL PROTECTION AND RESTORATION RESTORATION ENGINEERING DIVISION

450 LAUREL STREET, 12TH FLOOR  
BATON ROUGE, LOUISIANA 70801

#### CAMERON PARISH SHORELINE RESTORATION

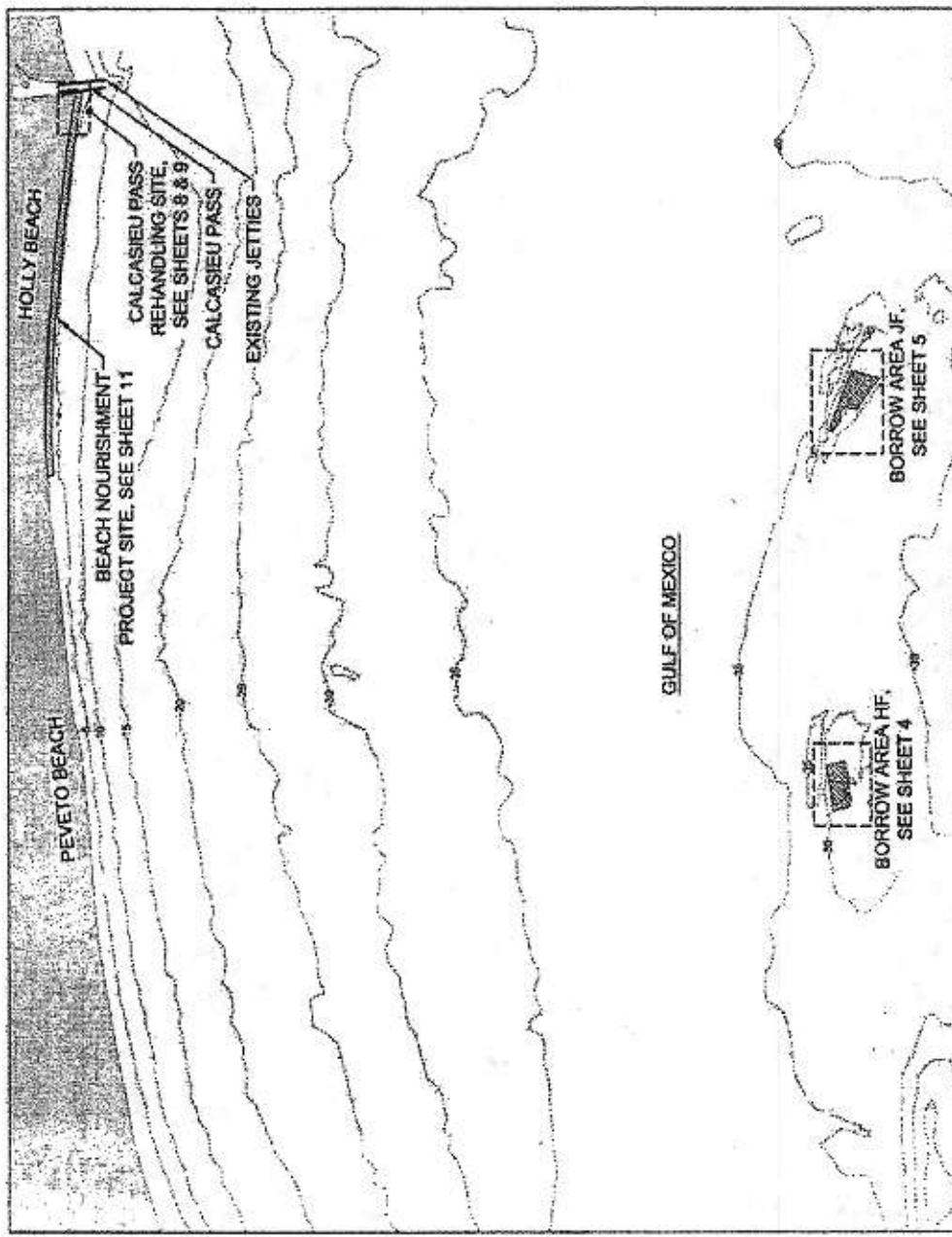
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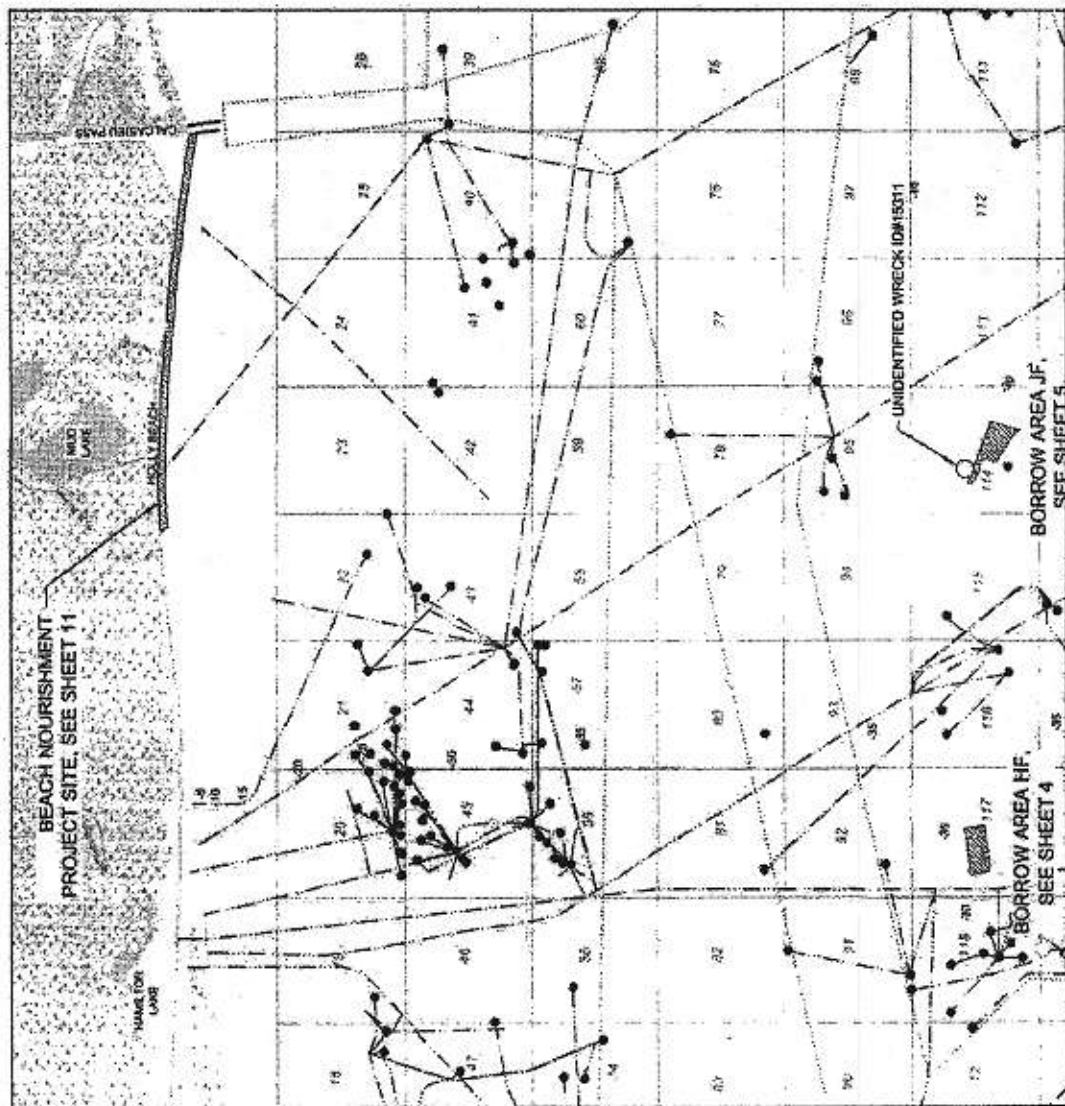
FEDERAL PROJECT NUMBER:

#### OVERALL PROJECT LOCATION

DATE: 6/7/11

SHEET 2 OF 15





LEGEND	
	BORROW AREA
	OIL PLATFORM (EST. 500FT RADIUS)
	BOEMRE BLOCKS
	PIPELINES
	NAVIGATION FAIRWAYS

PREPARED BY:  
**COAST & HARBOR ENGINEERING**  
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APPLICATION BY:  
STATE OF LOUISIANA  
OFFICE OF COASTAL PROTECTION AND RESTORATION  
P.O. BOX 44027  
BATON ROUGE, LA 70804-4027

OFFICE OF COASTAL PROTECTION AND RESTORATION  
RESTORATION ENGINEERING DIVISION  
150 LAUREL STREET, 12TH FLOOR  
BATON ROUGE, LOUISIANA 70801

CAMERON PARISH  
SHORELINE RESTORATION

OVERALL PROJECT LOCATION  
WITH OCS HAZARDS

DRAWN BY: T. MORRISON

DESIGNED BY: J. CARTER

APPROVED BY: H. BERNARDEZ

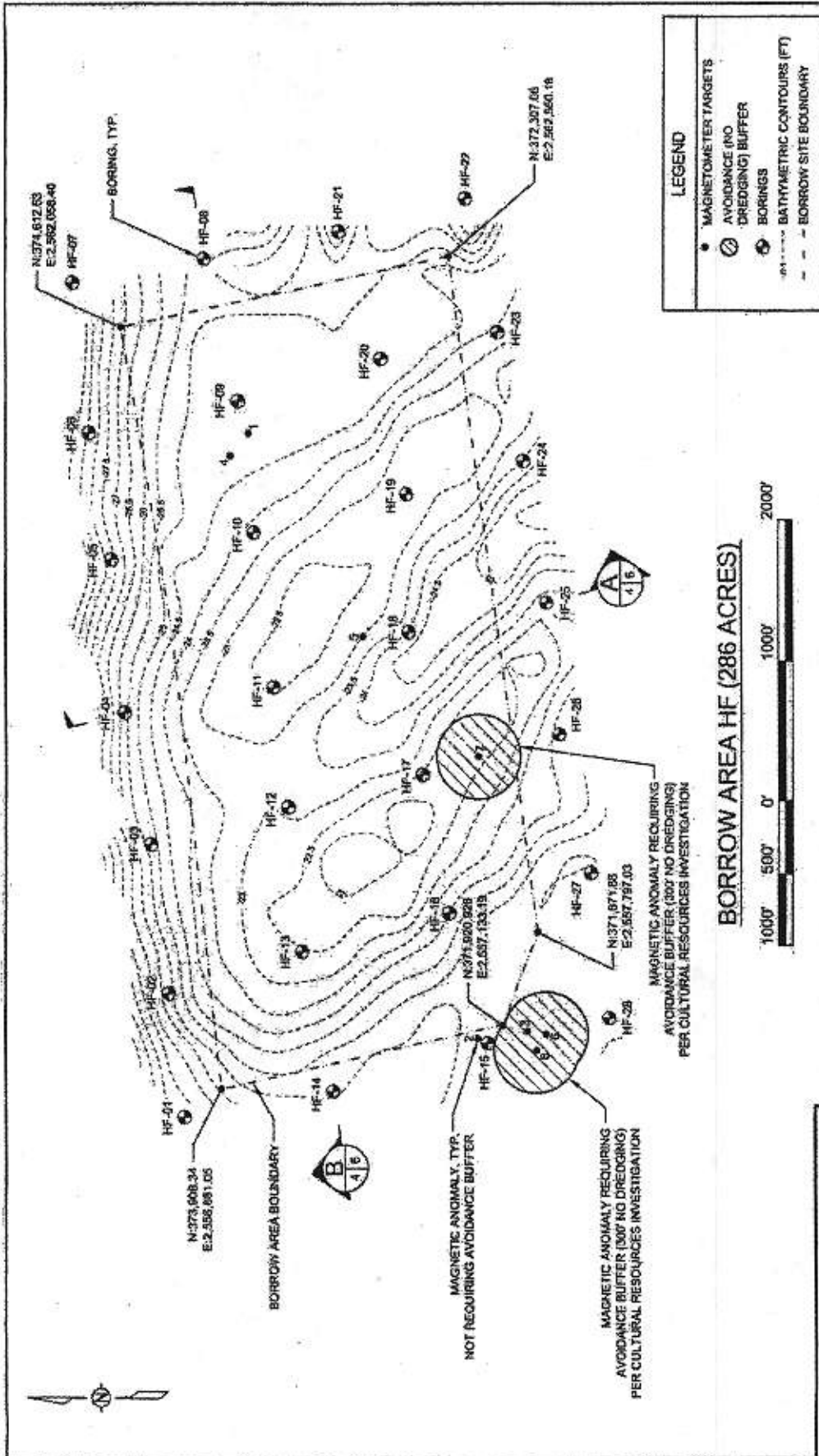
STATE PROJECT NUMBER: CS-33 SF

DATE: 6/7/11

FEDERAL PROJECT NUMBER:

SHEET 3 OF 15





**LEGEND**

- MAGNETOMETER TARGETS
- AVOIDANCE (NO DREDGING) BUFFER
- BORINGS
- - - - - BATHYMETRIC CONTOURS (FT)
- - - - - BORROW SITE BOUNDARY

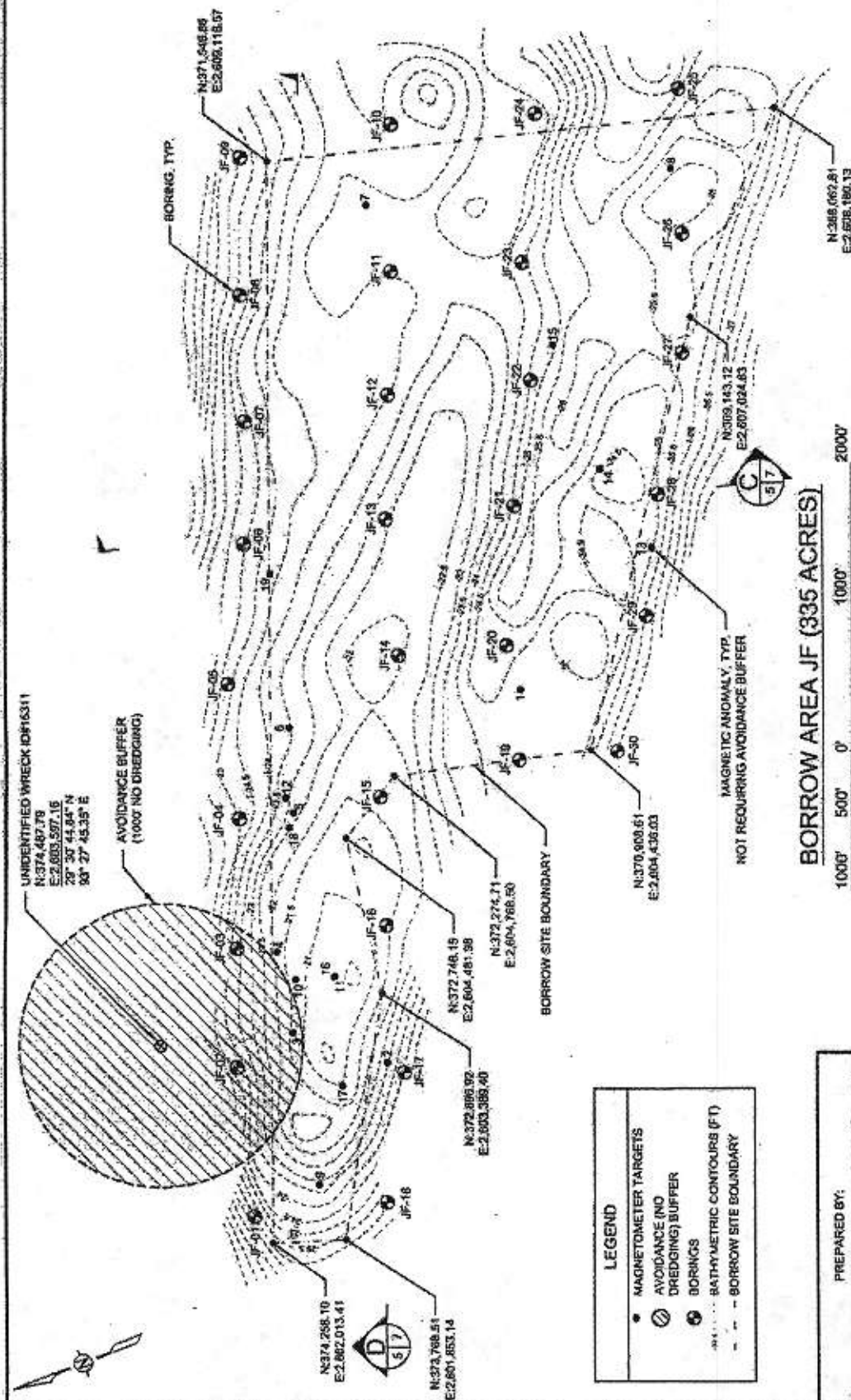
**BORROW AREA HF (286 ACRES)**



**NOTES:**

1. COORDINATES ARE GIVEN IN NAD 83, LOUISIANA STATE PLANE, SOUTHERN ZONE, U.S. FOOT.
2. BORROW AREA HF HAS AVAILABLE APPROXIMATELY 4,400,000 CUBIC YARDS OF MATERIAL. NOTE THAT THIS TOTAL VOLUME MAY NOT BE DREDGED.
3. CONTRACTOR IS NOT TO DREDGE OUTSIDE BORROW AREA LIMITS OR WITHIN THE AVOIDANCE BUFFER.
4. SEE SHEET 6 FOR SECTIONS A AND B.

<p>PREPARED BY:</p> <p><b>COAST &amp; HARBOR ENGINEERING</b>          3410 FAR WEST BLVD., SUITE 210          AUSTIN, TEXAS 78731          PH 512-342-9516          FAX 512-342-9708</p>	<p>APPLICATION BY:</p> <p>STATE OF LOUISIANA          OFFICE OF COASTAL PROTECTION AND RESTORATION          P.O. BOX 44027          BATON ROUGE, LA 70804-4027</p>
<p>DRAWN BY: T. MORRISON</p>	<p>DESIGNED BY: J. CARTER</p> <p>APPROVED BY: H. BERNHARDT</p>
<p>OFFICE OF COASTAL PROTECTION AND RESTORATION  <b>RESTORATION ENGINEERING DIVISION</b>          450 LAUREL STREET, 12TH FLOOR          BATON ROUGE, LOUISIANA 70801</p>	<p>CAMERON PARISH          SHORELINE RESTORATION</p>
<p>SITE PLAN - BORROW AREA HF</p>	<p>STATE PROJECT NUMBER: CS-33 SF</p> <p>FEDERAL PROJECT NUMBER:</p>
<p>DATE: 6/7/11</p>	<p>SHEET 4 OF 15</p>



# **BORROW AREA JF (335 ACRES)**

## **NOTES:**

- COORDINATES ARE GIVEN IN NAD 83, LOUISIANA STATE PLANE, SOUTHERN ZONE, U.S. FOOT.
- BORROW AREA JF HAS AVAILABLE APPROXIMATELY 4,200,000 CUBIC YARDS OF MATERIAL. NOTE THAT THIS TOTAL VOLUME MAY NOT BE DREDGED.
- CONTRACTOR IS NOT TO DREDGE OUTSIDE BORROW AREA LIMITS OR WITHIN AVOIDANCE BUFFER.
- SEE SHEET 7 FOR SECTIONS C AND D.

PREPARED BY:

**COAST & HARBOR ENGINEERING**

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APPLICATION BY:

STATE OF LOUISIANA  
OFFICE OF COASTAL PROTECTION AND RESTORATION  
BAYOU ROUGE, LA 70804-4027

DRAWN BY: T. MORRISON

DESIGNED BY: J. CARTER

APPROVED BY: H. BERNARDEZ

**CAMERON PARISH  
SHORELINE RESTORATION**

**SITE PLAN - BORROW AREA JF**

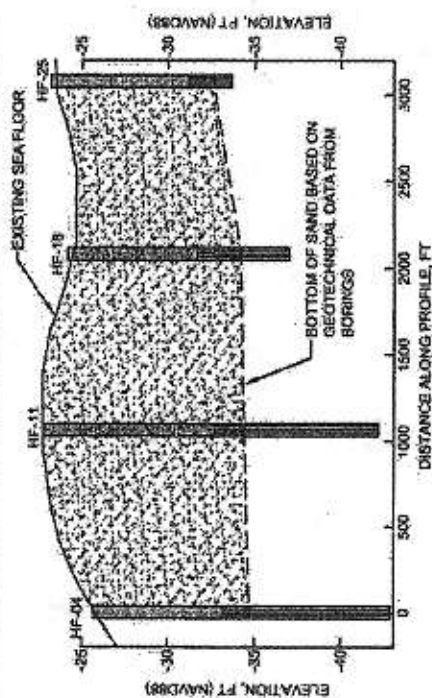
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DATE: 07/11

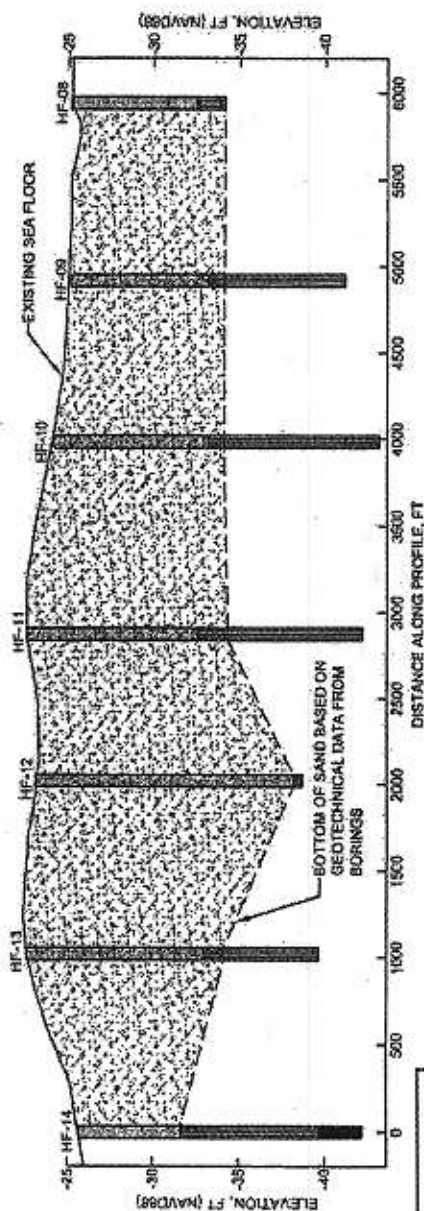
FEDERAL PROJECT NUMBER:

SHEET 5 OF 15

LEGEND	
	SAND
	BORING SAND
	SILT-CLAY
	SILT
	DENSE SILT



**A** SECTION  
BORROW AREA HF



**B** SECTION  
BORROW AREA HF



PREPARED BY:

**COAST & HARBOR ENGINEERING**  
1400 FAR WEST BLVD., SUITE 210  
AUSTIN, TEXAS 78731  
PH 512-342-8816  
FAX 512-342-8788

APPLICATION BY:

STATE OF LOUISIANA  
OFFICE OF COASTAL PROTECTION AND RESTORATION  
P.O. BOX 44027  
BATON ROUGE, LA 70804-4027

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

CAMERON PARISH  
SHORELINE RESTORATION

SECTIONS - BORROW AREA HF

DRAWN BY: T. MORRISON

DESIGNED BY: J. CARTER

APPROVED BY: N. BERRALDEZ

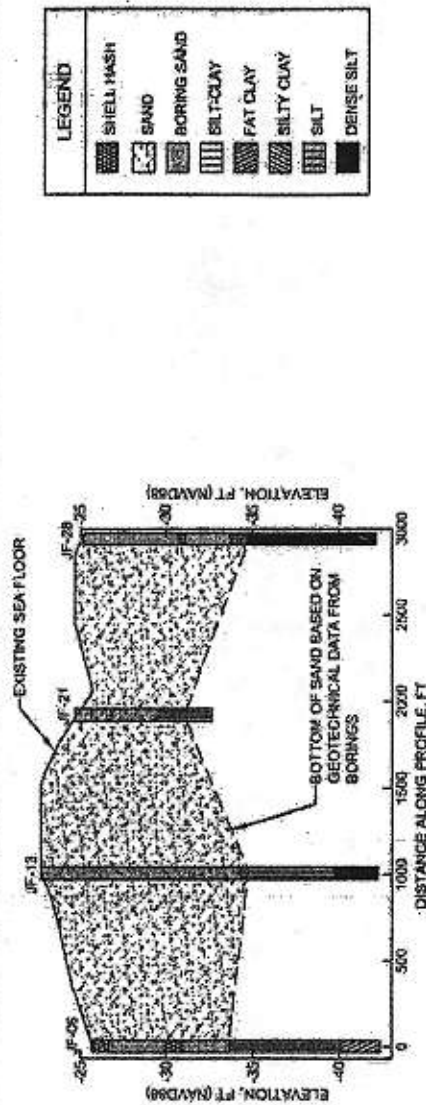
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FEDERAL PROJECT NUMBER:

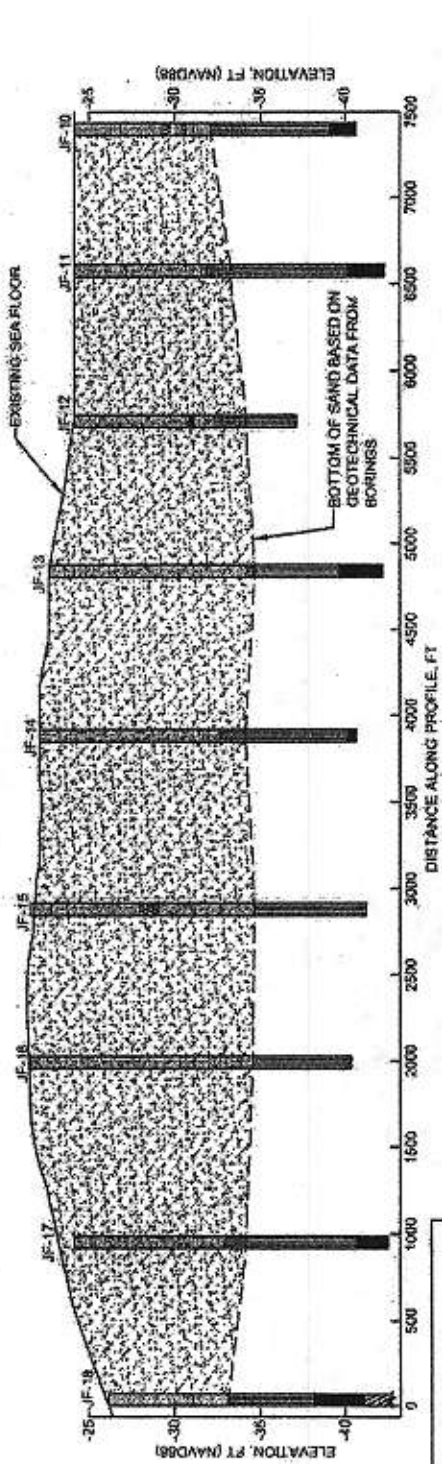
DATE: 8/7/11

SHEET 9 OF 15





**SECTION C**  
BORROW AREA JF



**SECTION D**  
BORROW AREA JF



PREPARED BY:  
**COAST & HARBOR ENGINEERING**  
1410 FAR WEST BLVD., SUITE 210  
AUSTIN, TEXAS 78731  
PH 512-342-8516  
FAX 512-342-8708

APPLICATION BY:  
STATE OF LOUISIANA  
OFFICE OF COASTAL PROTECTION AND RESTORATION  
450 LAUREL STREET, 17TH FLOOR  
BATON ROUGE, LA 70801-0227

OFFICE OF COASTAL PROTECTION AND RESTORATION  
**RESTORATION ENGINEERING DIVISION**  
450 LAUREL STREET, 17TH FLOOR  
BATON ROUGE, LOUISIANA 70801

CAMERON PARISH  
SHORELINE RESTORATION

SECTIONS - BORROW AREA JF

DRAWN BY: T. MORRISON

DESIGNED BY: J. CARTER

APPROVED BY: H. BERHADEZ

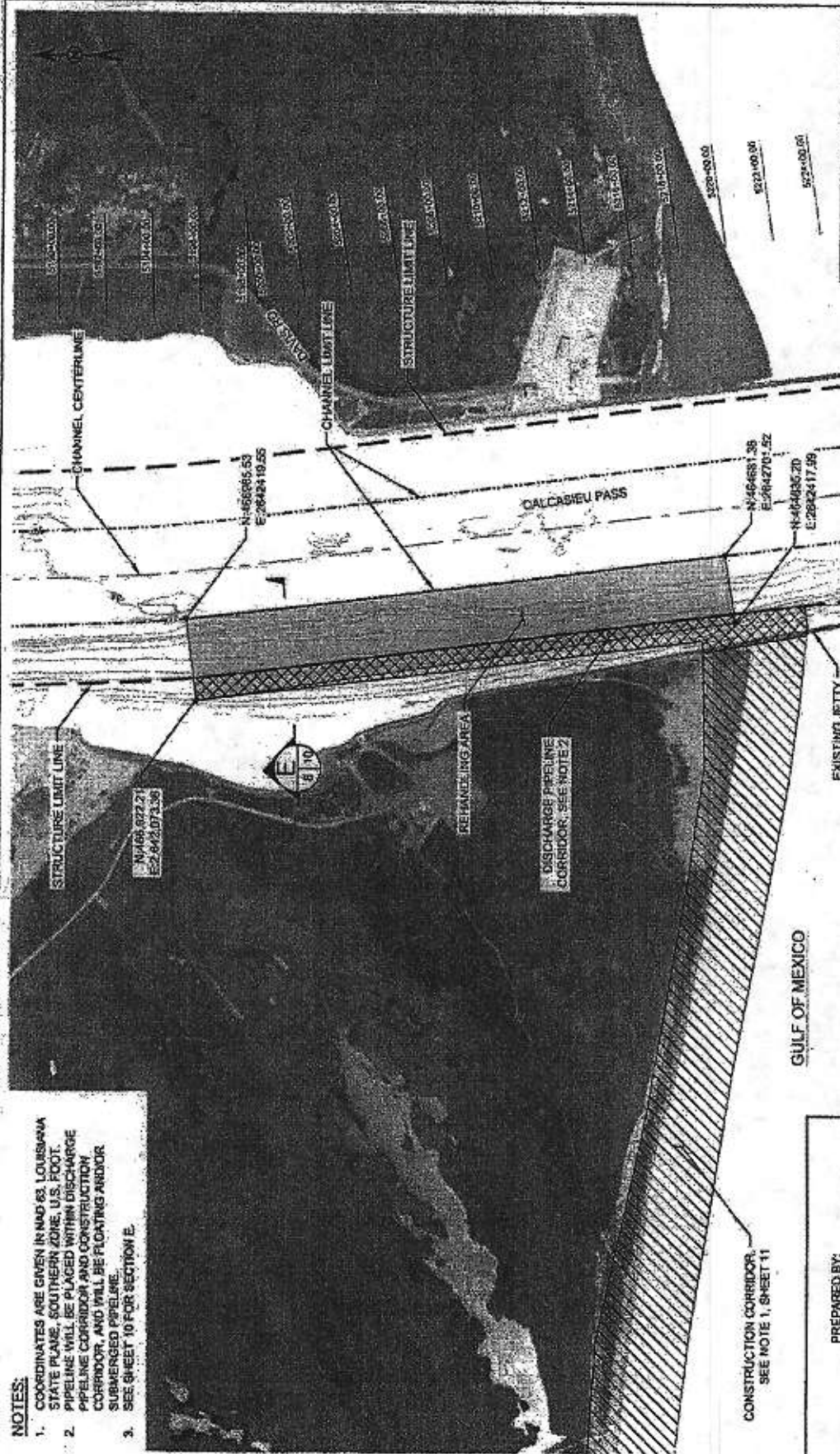
STATE PROJECT NUMBER: CS-33 SF

DATE: 8/7/11

SHEET 7 OF 15

# NOTES:

1. COORDINATES ARE GIVEN IN NAD 83, LOUISIANA STATE PLANE, SOUTHERN ZONE, U.S. FOOT.
2. PIPELINE WILL BE PLACED WITHIN DISCHARGE PIPELINE CORRIDOR AND CONSTRUCTION CORRIDOR, AND WILL BE FLOATING AND/OR SUBMERGED PIPELINE.
3. SEE SHEET 10 FOR SECTION E.



LEGEND	
	DISCHARGE PIPELINE CORRIDOR
	CONSTRUCTION CORRIDOR
	REHALING AREA

## CALCASIEU PASS REHALING SITE

MAXIMUM  
REHALING AREA

AREA (ACRES)
18.7

GULF OF MEXICO

PREPARED BY:

**COAST & HARBOR ENGINEERING**  
3410 FAR WEST BLVD., SUITE 210  
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PH 512-342-8516  
FAX 512-342-8705

APPLICATION BY:

STATE OF LOUISIANA  
OFFICE OF COASTAL PROTECTION AND RESTORATION  
P.O. BOX 44027  
BATON ROUGE, LA 70804-4027

## OFFICE OF COASTAL PROTECTION AND RESTORATION RESTORATION ENGINEERING DIVISION

459 LAUREL STREET, 12TH FLOOR  
BATON ROUGE, LOUISIANA 70801

## CAMERON PARISH SHORELINE RESTORATION

## SITE PLAN - CALCASIEU PASS REHALING

DRAWN BY: T. MORRISON

DESIGNED BY: J. CARTER

APPROVED BY: H. BEAULIEUX

STATE PROJECT NUMBER: CS-33 SF

FEDERAL PROJECT NUMBER:

DATE: 8/7/11

SHEET 8 OF 15



**PUMP-OUT STATION NOTES:**

1. COORDINATES ARE GIVEN IN U.S. LOUISIANA STATE PLANS, SOUTHERN ZONE, U.S. FOOT.
2. PIPELINE WILL BE PLACED WITHIN DISCHARGE PIPELINE CORRIDOR AND CONSTRUCTION CORRIDOR, AND WILL BE FLOATING AND/OR SUBMERGED PIPELINE.
3. DIMENSIONS OF HOPPER DREDGE ARE APPROXIMATE AND BASED ON INDUSTRY TYPICAL SIZES.
4. ONLY ONE MOORING STRUCTURE, COMPOSED OF UP TO 8 ELEMENTS (PILE OR PILE GROUPS) MAY BE CONSTRUCTED IN THE MOORING STRUCTURE AREA.
5. TEMPORARY MOORING STRUCTURE AND BARGE LOCATIONS ARE TO BE LOCATED LANDWARD OF THE STRUCTURE LIMIT LINE.
6. EXACT MOORING STRUCTURE LOCATION AND DESIGN TO BE DETERMINED AT TIME OF CONSTRUCTION.
7. TEMPORARY MOORING STRUCTURES TO BE REMOVED IMMEDIATELY AFTER CONSTRUCTION.
8. SEE SHEET 14 FOR SECTION F.



APPLICATION BY:  
STATE OF LOUISIANA  
OFFICE OF COASTAL PROTECTION AND RESTORATION  
P.O. BOX 44027  
BATON ROUGE, LA 70804-4027

APPLICATION BY:  
STATE OF LOUISIANA  
FEDERAL PROTECTION AN  
P.O. BOX 44277  
HOUSTON, TX 77064

**OFFICE OF COASTAL PROTECTION AND RESTORATION  
RESTORATION ENGINEERING DIVISION**  
400 LAURIEBERTHE FLOOR  
BATON ROUGE, LOUISIANA 70801

DRAWN BY: T. MORRISON

DESIGNED BY: J. CARTER

APPROVED BY: H. BERMUDEZ

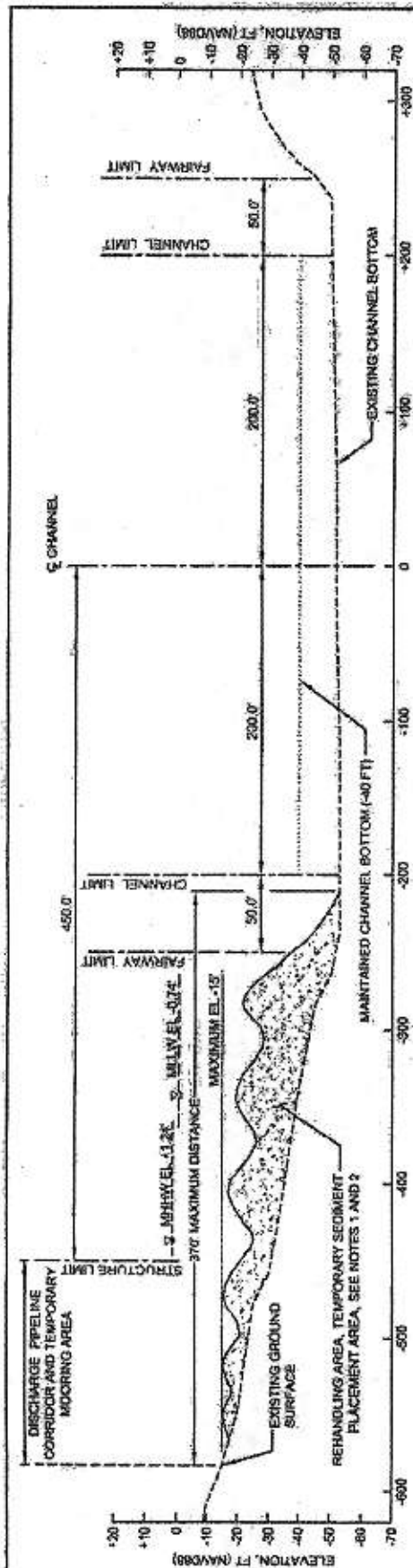
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DATE: 6/14/11

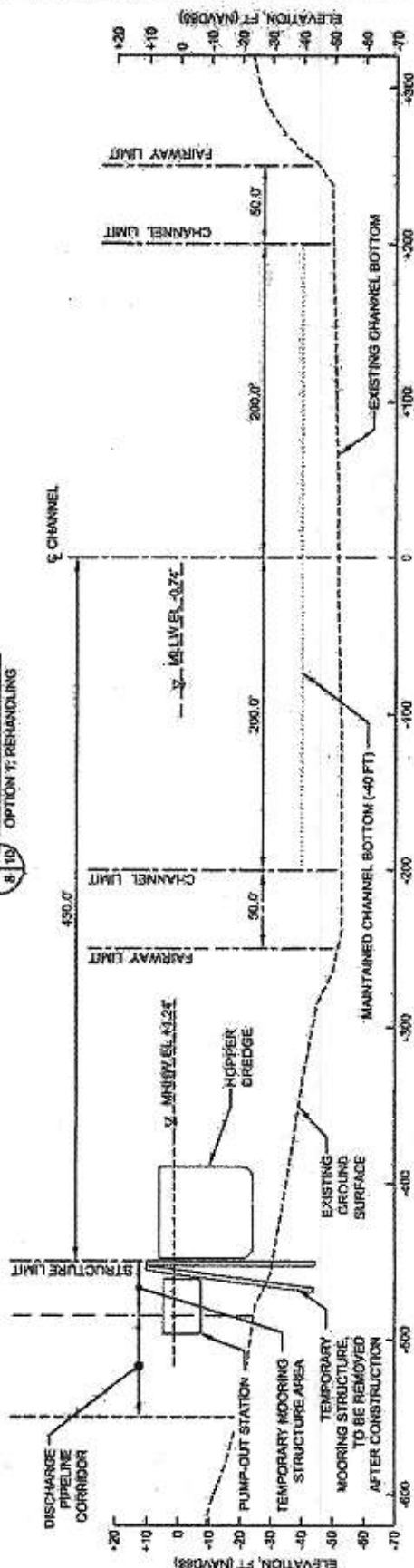
SHEET 9 OF 15

**CAMERON PARISH  
SHORELINE RESTORATION**

**SITE PLAN - CALCASIEU PASS  
PUMP-OUT**



**SECTION E**  
OPTION 1: REHANDLING



**SECTION F**  
OPTION 2: PUMP-OUT

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3410 FAY WEST BLVD., SUITE 210  
AUSTIN, TEXAS 78751  
PH 512-342-8518  
FAX 512-342-8708

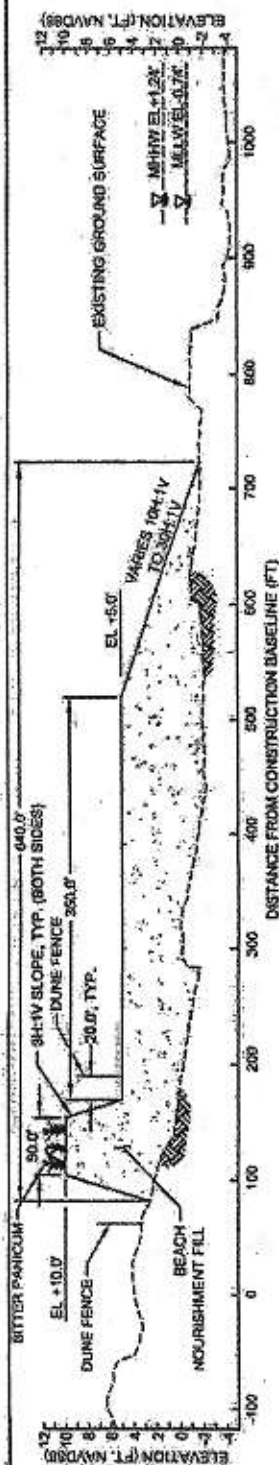
- NOTES:**
1. SLOPE TO ENSURE SEDIMENT DOES NOT SLOUGH INTO CHANNEL OR PAST CHANNEL LIMIT LINE.
  2. ELEVATION AND SLOPES OF REHANDLING MATERIAL WILL DEPEND ON CONTRACTOR EQUIPMENT AND CONSTRUCTION METHODS.

HORIZ. 100' 50' 0' 100'  
VERT. 50' 25' 0' 50'

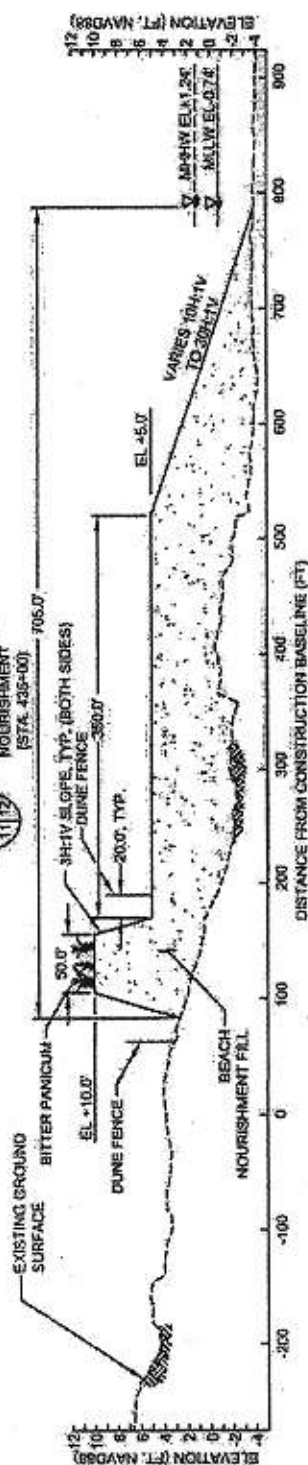
<b>DESIGNED BY: T. MORRISON</b> APPLICATION BY: STATE OF LOUISIANA OFFICE OF COASTAL PROTECTION AND RESTORATION 450 LAUREL STREET, 12TH FLOOR BATON ROUGE, LA 70804-4277	<b>DESIGNED BY: J. CARTER</b> APPROVED BY: H. BERMUDEZ	<b>OFFICE OF COASTAL PROTECTION AND RESTORATION RESTORATION ENGINEERING DIVISION</b> 450 LAUREL STREET, 12TH FLOOR BATON ROUGE, LOUISIANA 70804	<b>CAMERON PARISH SHORELINE RESTORATION</b>	<b>SECTIONS - CALCASIEU PASS REHANDLING &amp; PUMP-OUT</b>
			STATE PROJECT NUMBER: CS-33 SF DATE: 6/7/11	SHEET 16 OF 15



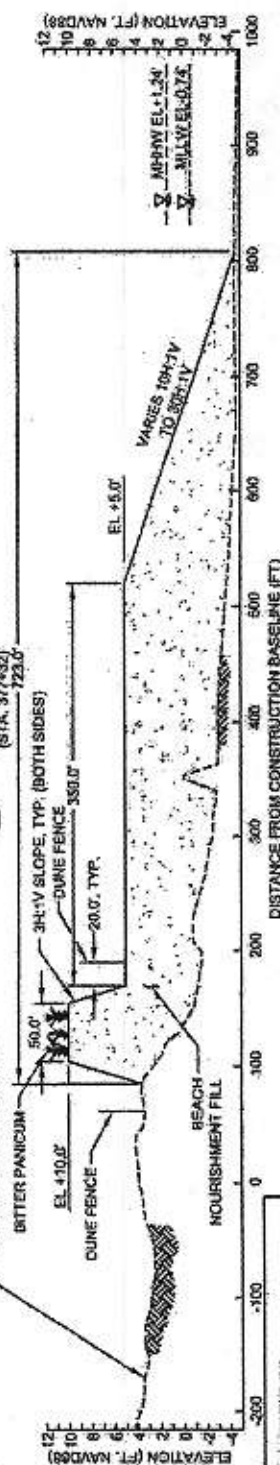




**SECTION G**  
NOURISHMENT  
(STA. 435+00)



**SECTION H**  
NOURISHMENT  
(STA. 377+33)



**SECTION I**  
NOURISHMENT  
(STA. 339+23)

PREPARED BY:

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3410 FAR WEST BLVD., SUITE 210  
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PH 512-342-9516  
FAX 512-342-8708

APPLICATION BY:

STATE OF LOUISIANA  
OFFICE OF COASTAL PROTECTION AND RESTORATION  
P.O. BOX 44027  
BATON ROUGE, LA 70804-0027

DRAWN BY: T. MORRISON

DESIGNED BY: J. CARTER

APPROVED BY: H. BERNHARDT

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

**CAMERON PARISH  
SHORELINE RESTORATION**

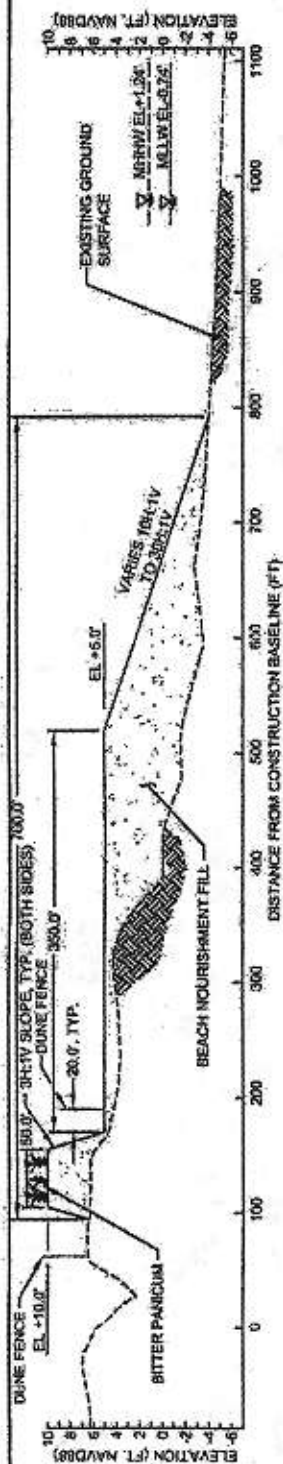
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DATE: 8/7/11

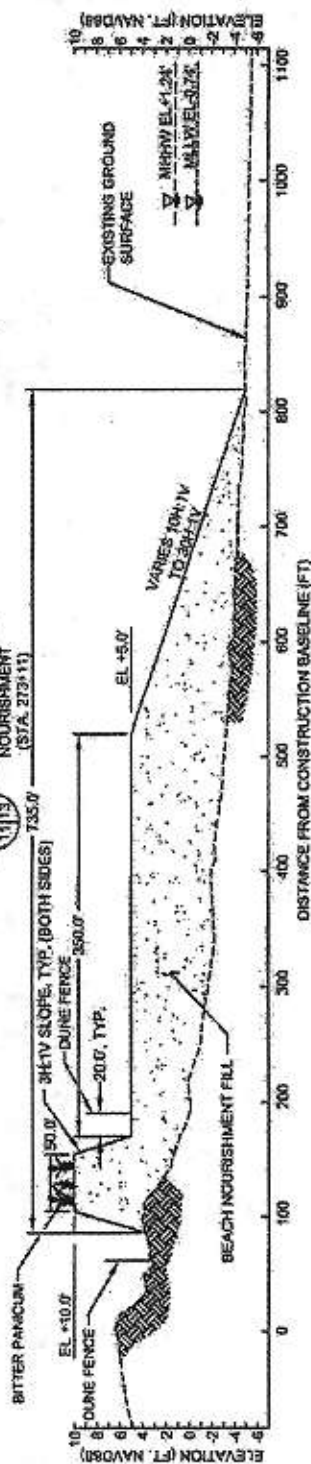
FEDERAL PROJECT NUMBER:

SHEET 12 OF 15

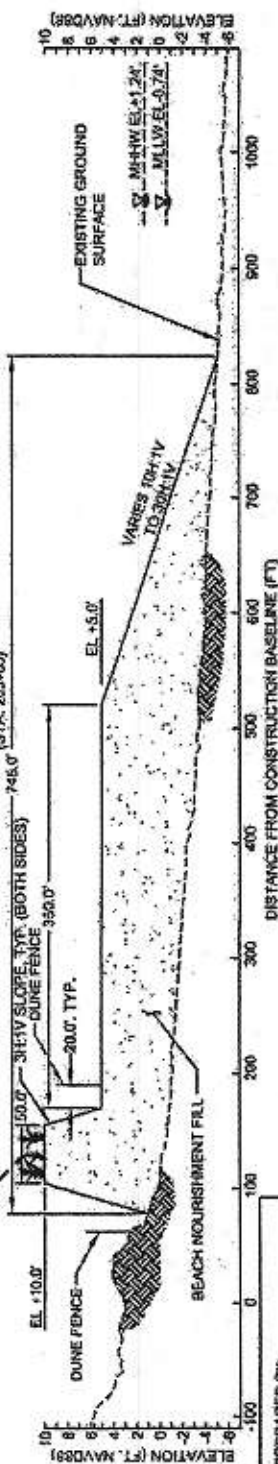
**SECTIONS - NOURISHMENT**



**SECTION J**  
NOURISHMENT  
(STA. 273+11)



**SECTION K**  
NOURISHMENT  
(STA. 225+00)



**SECTION L**  
NOURISHMENT  
(STA. 158+00)

PREPARED BY:

**COAST & HARBOR ENGINEERING**  
3410 FAR WEST BLVD., SUITE 210  
AUSTIN, TEXAS 78731  
PH 512-342-9516  
FAX 512-342-6708

APPLICATION BY:

STATE OF LOUISIANA  
OFFICE OF COASTAL PROTECTION AND RESTORATION  
P.O. BOX 4027  
BATON ROUGE, LA 70804-4027

DRAWN BY: T. MORRISON

DESIGNED BY: J. CARTER

APPROVED BY: H. BERNARDEZ

STATE PROJECT NUMBER: CS-33.3F

DATE: 6/7/11

SHEET 13 OF 15

CAMERON PARISH  
SHORELINE RESTORATION

OFFICE OF COASTAL PROTECTION AND RESTORATION  
RESTORATION ENGINEERING DIVISION  
490 LAUREL STREET, 12TH FLOOR  
BATON ROUGE, LOUISIANA 70801

SECTIONS - NOURISHMENT

HORIZ. 150' 75' 0' 150'  
VERT. 15' 7.5' 0' 15'

PREPARED BY:  
**COAST & HARBOR ENGINEERING**  
 3410 FAR WEST BLVD., SUITE 210  
 AUSTIN, TEXAS 78731  
 PH 512-342-8916  
 FAX 512-342-8708

APPLICATION BY:  
 STATE OF LOUISIANA  
 OFFICE OF COASTAL PROTECTION AND RESTORATION  
 P.O. BOX 44027  
 BATON ROUGE, LA 70804-4027

DRAWN BY: T. MORRISON

DESIGNED BY: J. CARTER

APPROVED BY: H. BERMUDEZ

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

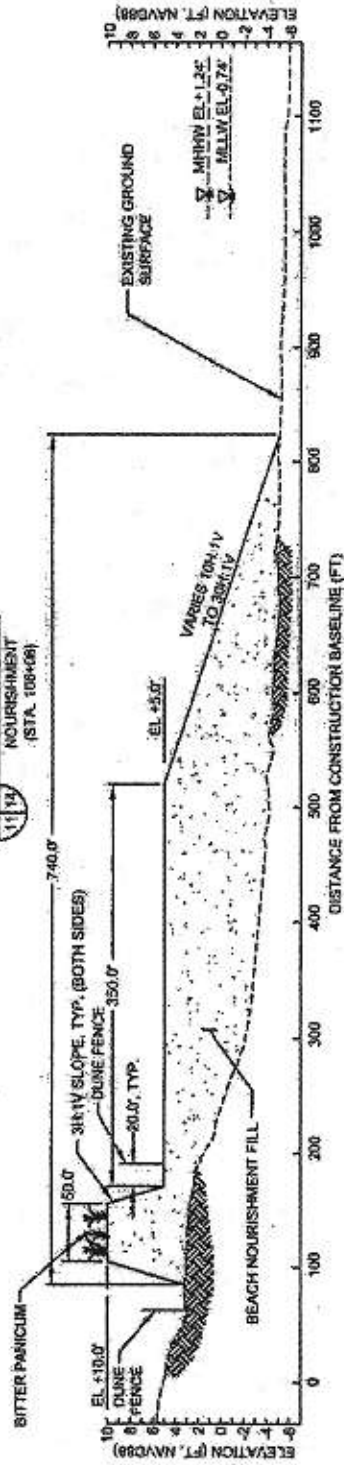
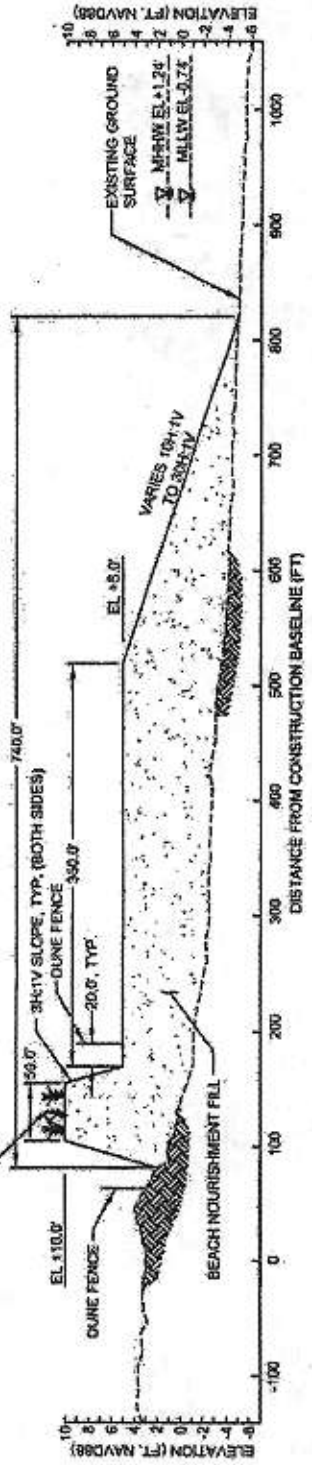
CAMERON PARISH  
 SHORELINE RESTORATION

SECTIONS - NOURISHMENT

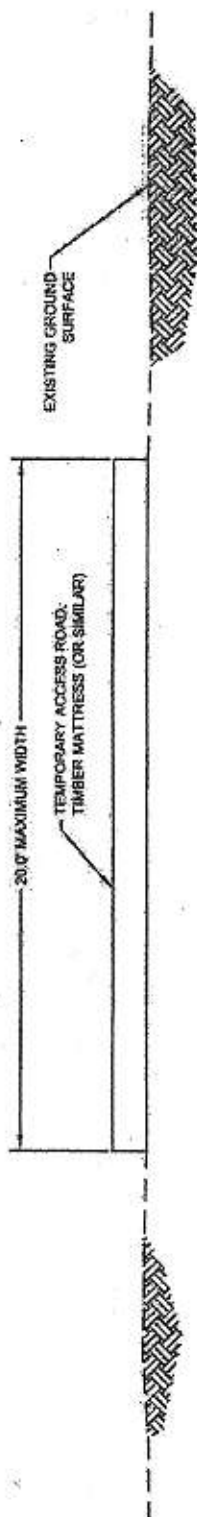
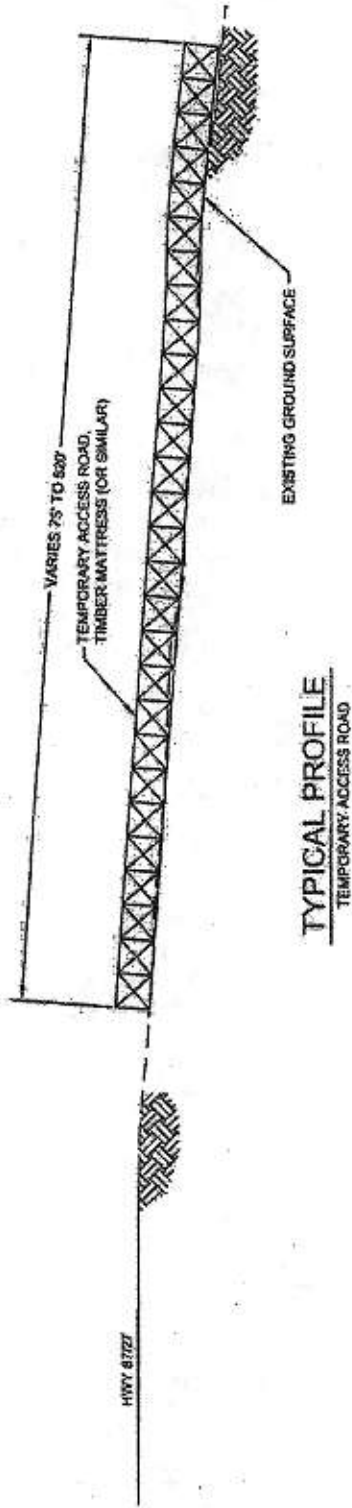
STATE PROJECT NUMBER: CS-33 SF

DATE: 8/9/11

SHEET 14 OF 15







**TYPICAL SECTION**  
TEMPORARY ACCESS ROAD



<p>PREPARED BY:</p> <p><b>COAST &amp; HARBOR ENGINEERING</b>          1410 FAR WEST BLVD., SUITE 210          AUSTIN, TEXAS 78731          PH 512-342-8516          FAX 512-342-8708</p>	<p>APPLICATION BY:</p> <p>STATE OF LOUISIANA          OFFICE OF COASTAL PROTECTION AND RESTORATION          BATON ROUGE, LA 70804-4027</p>
--	--

<p>DESIGNED BY: J. CARTER</p>	<p>APPROVED BY: H. BERNALDEZ</p>	<p>OFFICE OF COASTAL PROTECTION AND RESTORATION  <b>RESTORATION ENGINEERING DIVISION</b>          450 LAUREL STREET, 12TH FLOOR          BATON ROUGE, LOUISIANA 70801</p>	<p>CAMERON PARISH          SHORELINE RESTORATION</p>	<p>SECTION - TEMPORARY          ACCESS ROAD</p>
<p>DRAWN BY: T. MORRISON</p>	<p>DATE: 6/7/11</p>	<p>STATE PROJECT NUMBER: CS-33 SF</p>	<p>FEDERAL PROJECT NUMBER:</p>	<p>SHEET 15 OF 15</p>