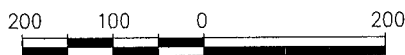


## VICINITY MAP

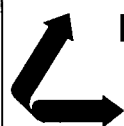
GRAPHIC SCALE



DISTANCE IN FEET

LAT. 29° 55' 00"N  
LONG. 90° 04' 16"W

8591-P1



**LANIER & ASSOCIATES**  
CONSULTING ENGINEERS  
INCORPORATED

NEW ORLEANS, LA

HOUSTON, TX

GRETNA

IMTT

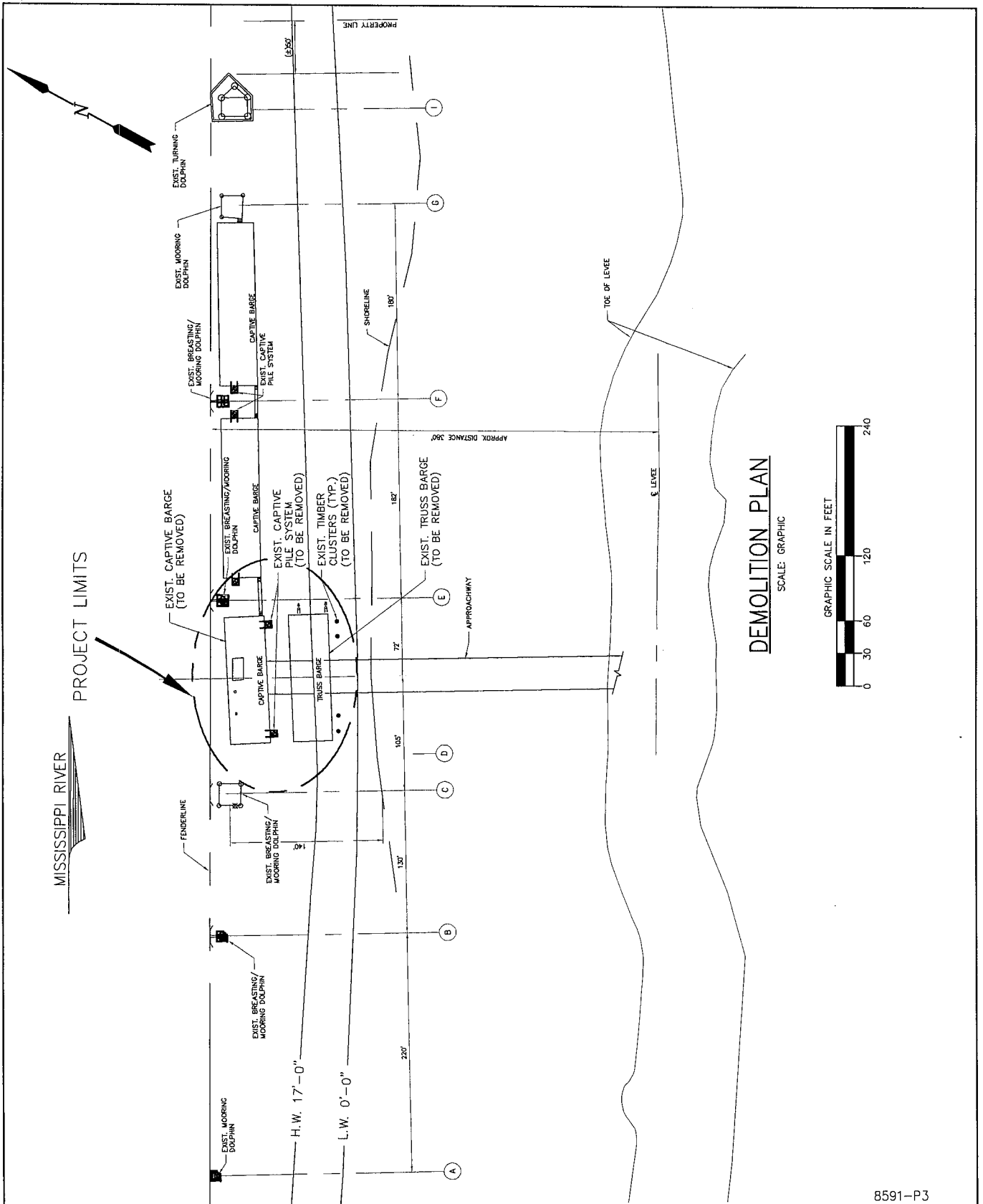
LOUISIANA

**PERMIT DRAWING**  
**GRETNA DOCK FACILITY - DOCK UPGRADE**  
**VICINITY MAP**

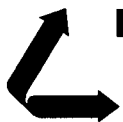
DATE OCT '11  
DESIGN TMO  
DRAWN BSB  
CHECK JEJ  
CONTRACT 8591  
SHEET No.

1 OF 6





8591-P3



**LANIER & ASSOCIATES**  
CONSULTING ENGINEERS  
INCORPORATED

NEW ORLEANS, LA

BEAUMONT, TX

GRETNA

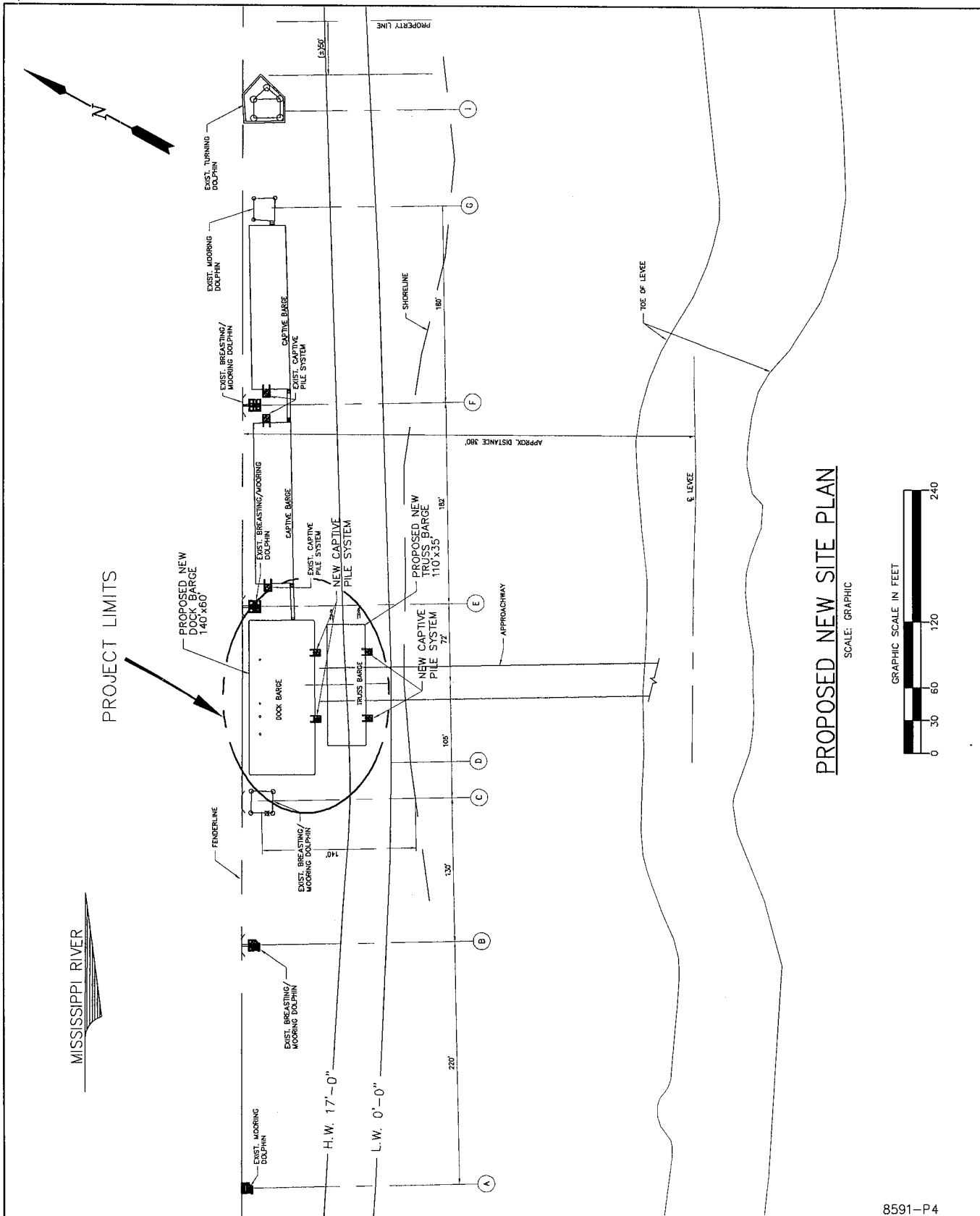
IMTT

LOUISIANA

**PERMIT DRAWING**  
**GRETNA DOCK FACILITY - DOCK UPGRADE**  
**DEMOLITION PLAN**

DATE OCT. '11  
DESIGN TMO  
DRAWN BSB  
CHECK JEJ  
CONTRACT 8591  
SHEET No.

3 OF 6



8591-P4



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BEAUMONT, TX

GRETNA

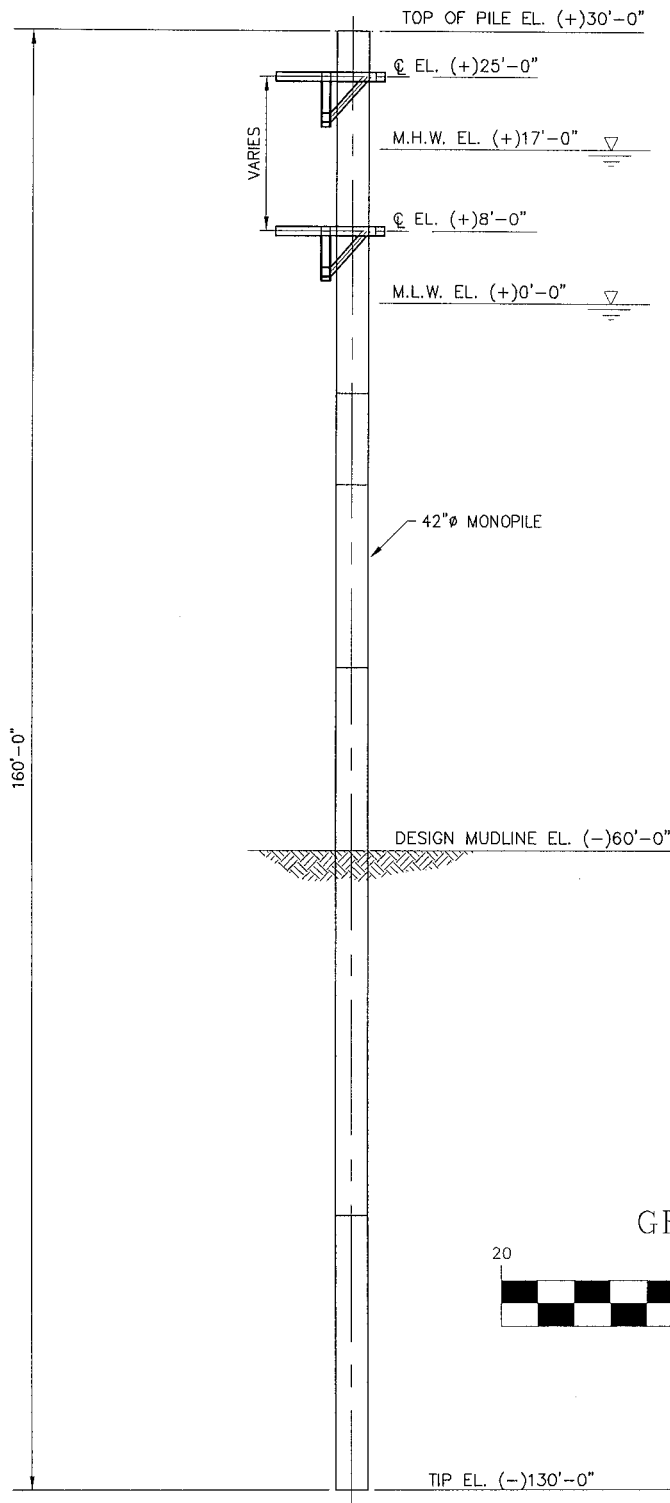
IMTT

LOUISIANA

**PERMIT DRAWING**  
**GRETNA DOCK FACILITY - DOCK UPGRADE**  
**PROPOSED NEW SITE PLAN**

DATE OCT. '11  
DESIGN IMO  
DRAWN BSB  
CHECK JFJ  
CONTRACT 8591  
SHEET No.

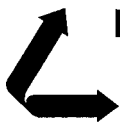
4 OF 6



NEW 42"Ø CAPTURE PILE (TYP.)

SCALE: GRAPHIC

8591-P5



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BEAUMONT, TX

GRETNA

IMTT

LOUISIANA

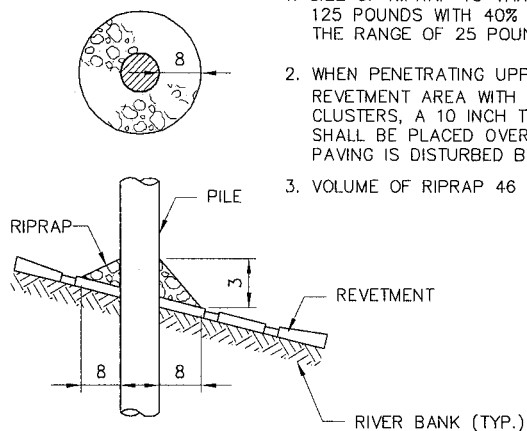
**PERMIT DRAWING**  
**GRETNA DOCK FACILITY - DOCK UPGRADE**  
**NEW 42"Ø CAPTURE PILE**

DATE OCT. '11  
DESIGN IMQ  
DRAWN BSB  
CHECK JEJ  
CONTRACT 8591  
SHEET No.

5 OF 6

NOTES:

1. SIZE OF RIPRAP TO VARY BETWEEN 6 POUNDS AND 125 POUNDS WITH 40% TO 60% OF THE STONE WITHIN THE RANGE OF 25 POUNDS TO 75 POUNDS.
2. WHEN PENETRATING UPPER BANK PAVING IN A REVETMENT AREA WITH PILES, CAISSONS AND/OR PILE CLUSTERS, A 10 INCH THICKNESS OF RIPRAP STONE SHALL BE PLACED OVER ALL AREAS WHERE BANK PAVING IS DISTURBED BY DRIVING OPERATIONS.
3. VOLUME OF RIPRAP 46 CUBIC YARDS.



DEPTH OF WATER IN FEET AT POINT OF PENETRATION AT TIME OF STONE PLACEMENT	DIMENSIONS IN FEET FOR PROTECTION AREA REQUIRED							
	PILE		CAISSON		SPUD PILE W/ ANCHOR CHAIN & BUOY		PILE CLUSTER	
	X	Y	X	Y	X	Y	X	Y
1 TO 10	3	1 1/2	5	2			3	1
11 TO 40	5	2	8	3	7	3	6	2
41 TO 60	8	3	12	4	12	4	10	3

## REVETMENT REPAIR DETAIL

SCALE: N.T.S.

8591-P6



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INCORPORATED

NEW ORLEANS, LA

BEAUMONT, TX

GRETNA **IMTT** LOUISIANA

**PERMIT DRAWING**  
**GRETNA DOCK FACILITY - DOCK UPGRADE**  
**REVETMENT REPAIR DETAIL**

DATE OCT. '11  
DESIGN TMO  
DRAWN BSB  
CHECK JFJ  
CONTRACT 8591  
SHEET No.  
6 OF 6