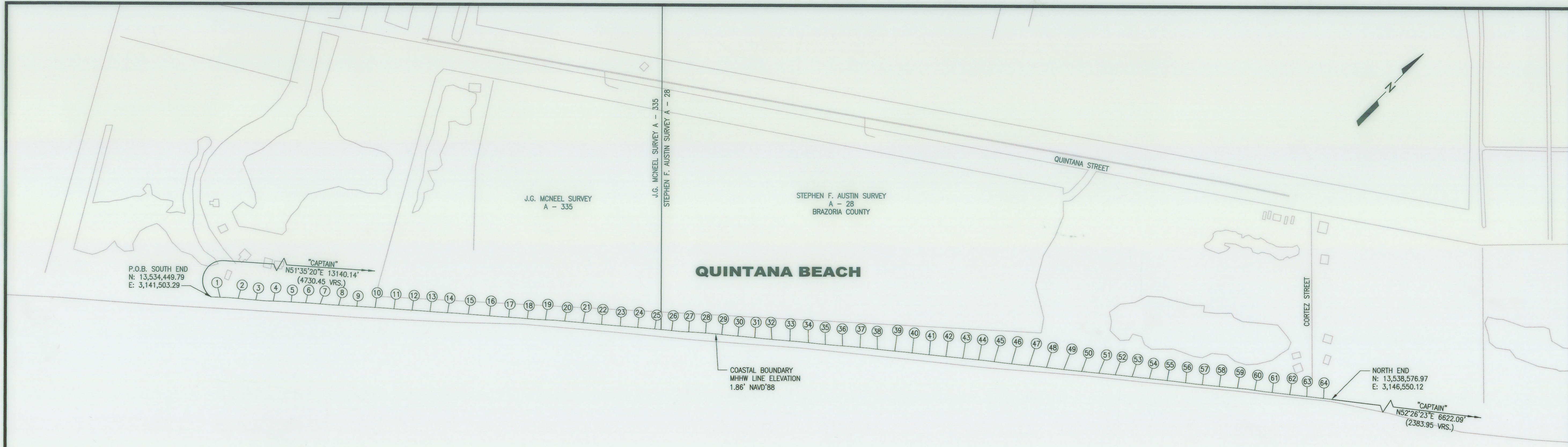
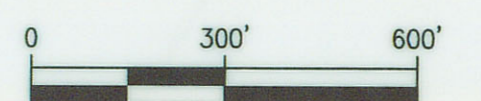


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**QUINTANA BEACH**

GULF OF MEXICO



**NOTES**

- ALL SURVEYING WAS PERFORMED BY HDR | SHINER MOSELEY AND ASSOCIATES, INC. FROM GPS OBSERVATIONS. THIS DRAWING REPRESENTS THE CONDITION THAT EXISTED AT THE TIME OF THE SURVEY CONDUCTED APRIL 6, 2007.  
FIELD PERSONNEL: GEORGE RUBALCABA, BRUCE JACKSON, HOMER MARTINEZ
- ALL ELEVATIONS SHOWN ARE IN FEET AND ARE REFERENCED TO NAVD '88.
- COORDINATES SHOWN ARE GRID IN U.S. FEET AND REFERENCED TO STATE PLANE GRID COORDINATE SYSTEM, SOUTH CENTRAL ZONE, AS DEFINED BY ARTICLE 21.071 OF THE NATURAL RESOURCES CODE OF THE STATE OF TEXAS, 1993 DATUM (1993 ADJUSTMENT).
- MONUMENTS USED FOR HORIZONTAL CONTROL WERE:  
"CAPTAIN" N 13,542,613.78  
E 3,151,799.53  
MONUMENTS USED FOR VERTICAL CONTROL WERE:  
"CAPTAIN" ELEV. 9.70' NAVD'88  
"Z 1255" ELEV. 7.02' NAVD'88
- MEAN HIGHER HIGH WATER DETERMINED FROM TIDAL INFORMATION AT TCOON FREEPORT GAUGE NO. 056
- BASIS OF BEARINGS IS "TEXAS COORDINATE SYSTEM" PER SECTION 21.071 OF THE NATURAL RESOURCES CODE.
- DISTANCES AND BEARINGS ARE GRID. SCALE FACTOR IS 0.99988744 CONVERGENCE IS +1'48"46.0".
- UPLAND OWNERS:  

PHAN NGUYEN	BILL R. MADDOX
STATE OF TEXAS	Q.K.B. INC.
BOB L. JOHNSON	CLEVELAND DEAR JR.
ROBERT D. MATHEWS	MARK R. WEHLING
GARY R. HARRIS	JUDGE ALLEN L. STILLLEY
GEORGE M. WALLER	JANICE PLATONAS
ROGER TRAW	CARL A. CLARK
MUSSEL WHITE JR.	KEVIN WALKER
SHARON S. MAJOR	

**TEXAS GENERAL LAND OFFICE**  
 Art. 33.136, Natural Resources Code  
 Co. Brazoria, Sketch No. 10  
 File Date 7-7-2007 by D.J.H.  
 See Shts. 2, 3, 4, small format

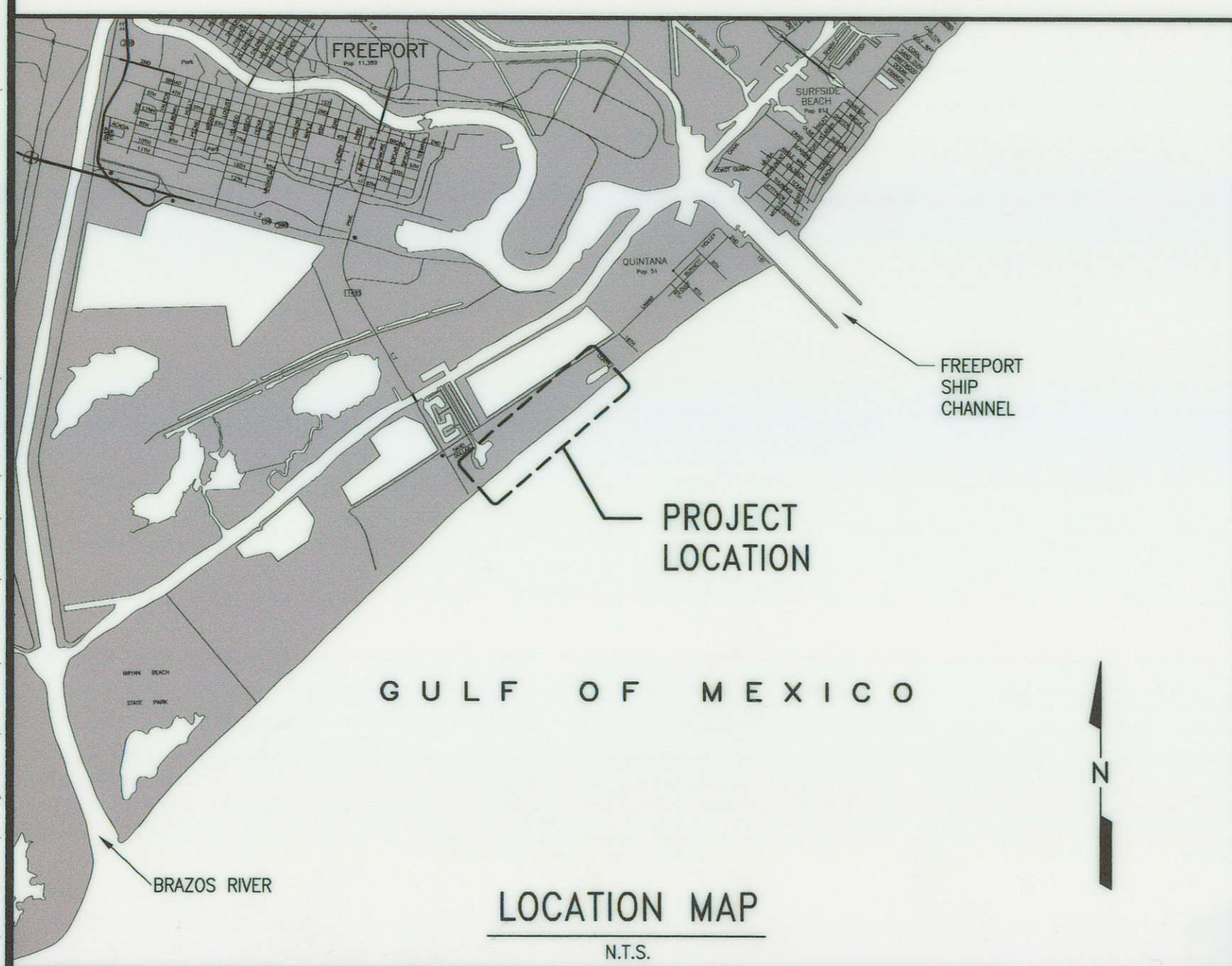
WE, HDR | SHINER MOSELEY AND ASSOCIATES, INC., HEREBY STATE THAT THIS DRAWING REPRESENTS THE CONDITIONS THAT EXISTED AT THE TIME OF THE COASTAL BOUNDARY SURVEY CONDUCTED ON APRIL 6, 2007.  
 NOTICE: THIS SURVEY WAS PERFORMED IN ACCORDANCE WITH SECTION 33.136, NATURAL RESOURCES CODE, FOR THE PURPOSE OF EVIDENCING THE LOCATION OF THE SHORELINE IN THE AREA DEPICTED IN THIS SURVEY AS THAT SHORELINE EXISTED BEFORE COMMENCEMENT OF EROSION RESPONSE ACTIVITY, AS REQUIRED BY CHAPTER 33, NATURAL RESOURCES CODE. THE LINE DEPICTED ON THIS SURVEY FIXES THE SHORELINE FOR THE PURPOSE OF LOCATING A SHORELINE BOUNDARY, SUBJECT TO EROSION LANDWARD AS PROVIDED BY SECTION 33.136, NATURAL RESOURCES CODE.



**George Rubalcaba**  
 GEORGE RUBALCABA  
 LICENSED STATE LAND SURVEYOR

ID#	BEARING	DISTANCE
1	N47°38'42"E	102.39'
2	N50°53'04"E	106.46'
3	N50°35'19"E	98.26'
4	N47°48'11"E	104.71'
5	N48°50'19"E	104.43'
6	N48°51'41"E	61.99'
7	N50°09'53"E	107.06'
8	N48°45'23"E	109.46'
9	N49°09'10"E	101.36'
10	N48°59'32"E	112.16'
11	N50°29'56"E	104.80'
12	N49°01'26"E	106.78'
13	N50°17'27"E	101.84'
14	N48°50'31"E	101.70'
15	N50°06'38"E	137.78'
16	N49°58'30"E	110.99'
17	N48°57'42"E	112.99'
18	N50°31'11"E	101.54'
19	N48°18'30"E	109.44'
20	N50°31'00"E	111.72'
21	N50°30'37"E	101.33'
22	N50°42'01"E	113.70'
23	N50°10'40"E	104.12'
24	N50°17'53"E	99.57'
25	N50°36'15"E	99.84'
26	N51°35'11"E	98.57'
27	N48°33'05"E	100.46'
28	N49°45'18"E	95.73'
29	N51°54'24"E	91.55'
30	N50°14'56"E	97.77'
31	N51°44'47"E	97.67'
32	N50°27'21"E	100.21'

ID#	BEARING	DISTANCE
33	N49°59'42"E	111.77'
34	N51°49'59"E	101.60'
35	N50°53'32"E	96.77'
36	N49°48'44"E	102.46'
37	N50°55'32"E	101.76'
38	N52°21'40"E	99.81'
39	N51°05'49"E	101.47'
40	N51°53'05"E	101.44'
41	N51°22'24"E	99.47'
42	N51°16'12"E	94.34'
43	N51°39'29"E	103.49'
44	N51°04'51"E	79.36'
45	N53°07'01"E	101.78'
46	N51°40'11"E	103.06'
47	N50°48'47"E	102.20'
48	N52°21'22"E	98.67'
49	N52°04'34"E	102.11'
50	N51°29'40"E	108.11'
51	N51°01'54"E	92.16'
52	N51°19'12"E	97.34'
53	N52°05'59"E	99.48'
54	N51°32'48"E	101.66'
55	N51°54'52"E	106.78'
56	N52°48'29"E	107.58'
57	N51°28'53"E	87.98'
58	N51°22'47"E	108.26'
59	N50°50'45"E	103.02'
60	N53°29'05"E	96.82'
61	N52°16'20"E	107.72'
62	N51°56'06"E	97.34'
63	N52°11'17"E	102.21'
64	N52°03'46"E	94.74'



REV	DATE	DESCRIPTION	APP
0	4/18/07	SUBMITTED TO GLO	
1	5/8/07	REVISIONS PER GLO COMMENTS	
2	7/2/07	REVISIONS PER GLO COMMENTS	

BLJ	DATE	NO.	AS SHOWN	NO.	NO.
BLJ	4/18/07	NO.	AS SHOWN	NO.	NO.
NO.	NO.	NO.	48573-00-T1A	NO.	NO.
NO.	NO.	NO.	48573	NO.	NO.

**HDR | SHINER MOSELEY AND ASSOCIATES, INC.**  
 555 N. Carancahua, Suite 1650  
 Corpus Christi, Texas 78478

PORT FREEPORT  
**QUINTANA BEACH NOURISHMENT**  
 BRAZORIA COUNTY  
**COASTAL BOUNDARY SURVEY**

SHEET  
**T1**  
 OF 1 REV 2





**SHINER MOSELEY  
AND ASSOCIATES, INC.**

July 5, 2007

200.48573

Mr. Bill O'Hara  
Texas General Land Office  
1700 N. Congress Avenue  
Austin, Texas 78701-1495

**RE: SURVEY AT QUINTANA BEACH AND FREEPORT CHANNEL,  
BRAZORIA COUNTY, TEXAS (STATE COASTAL BOUNDARY  
SURVEY)**

Dear Mr. O'Hara:

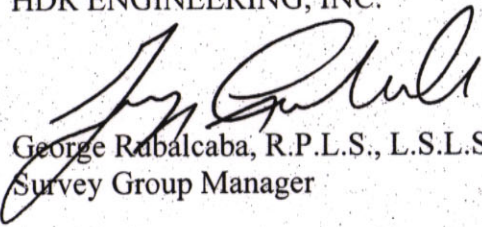
Enclosed are the State Coastal Boundary Survey drawings and metes and bounds descriptions of the above referenced sites depicting the revisions as per your comments of May 29, 2007.

Your letter with the comments was apparently lost in the mail and only found its way to my desk last Friday.

Thanks again for your time and assistance on this project. If you should have any questions, please call me at (361) 857-2211.

Sincerely,

HDR ENGINEERING, INC.

  
George Rubalcaba, R.P.L.S., L.S.L.S.  
Survey Group Manager

GR/vmn

**TEXAS GENERAL LAND OFFICE**  
Art. 33.136, Natural Resources Code  
Co. Brazoria, Sketch No. 10, sht. 2  
small format  
File Date 9-7-2007 by D.J.H.

Enclosures: State Coastal Boundary Survey Drawings  
State Coastal Boundary Metes and Bounds



COASTAL BOUNDARY SURVEY  
METES AND BOUNDS DESCRIPTION  
AT QUINTANA BEACH

Being the coastal boundary survey along the Gulf of Mexico shoreline of Quintana Beach determined from an on the ground survey conducted by GPS observations April 6, 2007, said coastal boundary determined by the Mean Higher High Water line from TCOON Freeport Gauge No. 056 at elevation +1.86' NAVD '88 and located within the J.G. McNeel Survey, Abstract 335, and the Stephen F. Austin Survey, Abstract 28, in Brazoria County, Texas, and this coastal boundary being more particularly described by metes and bounds as follows:

Beginning at the southwest end of this coastal boundary, said beginning point having a grid coordinate of N 13,534,449.79, E 3,141,503.29, State Plane Grid, Texas South Central Zone, NAD'83 in U.S. feet and bearing from NGS monument "CAPTAIN" having grid coordinates of N 13,542,613.78', E 3,151,799.53', NAD '83 (1993 adjustment) State of Texas Coordinate System, South Central Zone as defined by Article 21.071 of the Natural Resources Code of the State of Texas, Scale Factor 0.99988744, convergence +1°48'46.0";

Thence along said coastal boundary as follows:

N 47-38-42 E, 102.39 feet (36.86 varas);  
 N 50-53-04 E, 106.46 feet (38.33 varas);  
 N 50-35-19 E, 98.26 feet (35.37 varas);  
 N 47-48-11 E, 104.71 feet (37.70 varas);  
 N 48-50-19 E, 104.43 feet (37.59 varas);  
 N 48-51-41 E, 61.99 feet (22.32 varas);  
 N 50-09-53 E, 107.06 feet (38.54 varas);  
 N 48-45-23 E, 109.46 feet (39.41 varas);  
 N 49-09-10 E, 101.36 feet (36.49 varas);  
 N 48-59-32 E, 112.16 feet (40.38 varas);  
 N 50-29-56 E, 104.80 feet (37.73 varas);  
 N 49-01-26 E, 106.78 feet (38.44 varas);  
 N 50-17-27 E, 101.84 feet (36.66 varas);  
 N 48-50-31 E, 101.70 feet (36.61 varas);  
 N 50-06-38 E, 137.78 feet (49.60 varas);  
 N 49-58-30 E, 110.99 feet (39.96 varas);  
 N 48-57-42 E, 112.99 feet (40.68 varas);  
 N 50-31-11 E, 101.54 feet (36.55 varas);  
 N 48-18-30 E, 109.44 feet (39.40 varas);  
 N 50-31-00 E, 111.72 feet (40.22 varas);  
 N 50-30-37 E, 101.33 feet (36.48 varas);  
 N 50-42-01 E, 113.70 feet (40.93 varas);  
 N 50-10-40 E, 104.12 feet (37.48 varas);  
 N 50-17-53 E, 99.57 feet (35.85 varas);  
 N 50-36-15 E, 99.84 feet (35.94 varas);  
 N 51-35-11 E, 98.57 feet (35.49 varas);  
 N 48-33-05 E, 100.46 feet (36.17 varas);  
 N 49-45-18 E, 95.73 feet (34.46 varas);  
 N 51-54-24 E, 91.55 feet (32.96 varas);  
 N 50-14-56 E, 97.77 feet (35.20 varas);  
 N 51-44-47 E, 97.67 feet (35.16 varas);  
 N 50-27-21 E, 100.21 feet (36.08 varas);  
 N 49-59-42 E, 111.77 feet (40.24 varas);  
 N 51-49-59 E, 101.60 feet (36.58 varas);  
 N 50-53-32 E, 96.77 feet (34.84 varas);  
 N 49-48-44 E, 102.46 feet (36.89 varas);  
 N 50-55-32 E, 101.76 feet (36.63 varas);  
 N 52-21-40 E, 99.81 feet (35.93 varas);  
 N 51-05-49 E, 101.47 feet (36.53 varas);  
 N 51-53-05 E, 101.44 feet (36.52 varas);

**TEXAS GENERAL LAND OFFICE**  
 Art. 33.136, Natural Resources Code  
 Co. Brazoria, Sketch No. 20, sht. 3  
Small-format  
 File Date 9-7-2007 by D.J.H.

N 51-22-24 E, 99.47 feet (35.81 varas);  
 N 51-16-12 E, 94.34 feet (33.96 varas);  
 N 51-39-29 E, 103.49 feet (37.26 varas);  
 N 51-04-51 E, 79.36 feet (28.57 varas);  
 N 53-07-01 E, 101.78 feet (36.64 varas);  
 N 51-40-11 E, 103.06 feet (37.10 varas);  
 N 50-48-47 E, 102.20 feet (36.79 varas);  
 N 52-21-22 E, 98.67 feet (35.52 varas);  
 N 52-04-34 E, 102.11 feet (36.76 varas);  
 N 51-29-40 E, 108.11 feet (38.92 varas);  
 N 51-01-54 E, 92.16 feet (33.18 varas);  
 N 51-19-12 E, 97.34 feet (35.04 varas);  
 N 52-05-59 E, 99.48 feet (35.81 varas);  
 N 51-32-48 E, 101.66 feet (36.60 varas);  
 N 51-54-52 E, 106.78 feet (38.44 varas);  
 N 52-48-29 E, 107.58 feet (38.73 varas);  
 N 51-28-53 E, 87.98 feet (31.67 varas);  
 N 51-22-47 E, 108.26 feet (38.97 varas);  
 N 50-50-45 E, 103.02 feet (37.09 varas);  
 N 53-29-05 E, 96.82 feet (34.86 varas);  
 N 52-16-20 E, 107.72 feet (38.78 varas);  
 N 51-56-06 E, 97.34 feet (35.04 varas);  
 N 52-11-17 E, 102.21 feet (36.80 varas);

N 52-03-46 E, 94.74 feet (34.11 varas) to the northeast end of this surveyed coastal boundary, said point of termination having a coordinate of N 13,538,576.97, E 3,146,550.12;



Note: Bearings based on "Texas Coordinate System" per Section 21.071 of the Natural Resources Code.

TEXAS GENERAL LAND OFFICE  
 Art. 33.136, Natural Resources Code  
 Co. Brazoria, Sketch No. 20, sht. 4  
Small format  
 File Date 9-7-2007 by D. J. H.