

1/29/2025 - P:\Y-2024\2024-0468\SURVEY CORE SURVEY DRAWINGS\CBS\240468_DU_CBS-OLD RIVER COVE_AUGUST 2024.DWG

SEGMENT 1					SEGMENT 2					SEGMENT 3				
LINE	BEARING	FEET	VARS	LINE	BEARING	FEET	VARS	LINE	BEARING	FEET	VARS	LINE	BEARING	FEET
L1	S 24°24'57" W	40.65	14.74V	L49	S 89°27'35" E	49.03	17.65V	L167	S 14°02'38" W	55.34	19.92V	L142	N 68°33'50" W	65.64
L2	S 30°11'33" W	29.59	10.37V	L50	S 89°27'35" E	49.03	17.65V	L168	S 89°27'35" E	49.03	17.65V	L143	S 18°50'00" W	55.02
L3	S 24°59'06" W	38.33	14.16V	L51	S 49°03'04" E	55.37	19.93V	L69	S 22°29'40" W	8.22	2.86V	L144	S 35°33'39" E	53.86
L4	S 30°11'33" W	29.59	10.37V	L52	S 89°27'35" E	49.03	17.65V	L70	S 22°29'40" W	8.22	2.86V	L145	S 34°28'05" E	28.86
L5	S 30°11'33" W	29.59	10.37V	L53	S 89°27'35" E	49.03	17.65V	L71	S 22°29'40" W	8.22	2.86V	L146	S 30°18'51" E	18.05
L6	S 82°44'15" E	18.05	6.51V	L54	S 88°28'21" E	34.95	12.58V	L72	S 19°42'59" E	58.78	21.16V	L147	S 49°51'38" E	28.86
L7	N 70°38'40" E	15.05	5.51V	L55	S 74°29'52" E	33.13	11.30V	L73	S 40°08'45" E	27.62	9.94V	L148	S 19°24'24" E	19.02
L8	S 84°42'24" E	18.05	7.07V	L56	S 89°24'24" E	48.03	17.28V	L74	N 79°14'00" E	25.43	9.15V	L149	S 01°18'02" E	27.67
L9	N 72°02'54" E	53.20	19.27V	L57	N 89°20'00" E	49.33	14.33V	L75	N 40°35'41" E	7.83	2.79V	L150	S 32°20'01" E	28.20
L10	N 83°08'41" E	53.20	19.15V	L58	S 89°33'30" E	55.77	20.08V	L76	N 85°24'41" E	48.37	17.77V	L151	S 01°48'08" W	36.89
L11	S 82°42'14" E	18.76	6.83V	L59	S 36°47'56" E	38.96	14.38V	L77	S 86°20'13" E	24.14	8.88V	L152	N 81°00'13" E	12.83
L12	N 68°07'35" E	25.41	16.30V	L60	N 65°12'13" E	35.14	14.38V	L78	S 89°12'13" E	67.51	24.30V	L153	S 20°40'19" E	23.90
L13	N 79°09'16" E	38.33	13.90V	L61	N 89°38'45" E	48.03	17.65V	L79	S 87°24'07" E	24.38	8.78V	L154	S 73°20'13" E	50.25
L14	N 53°15'58" E	30.38	11.74V	L62	N 75°51'02" E	133.82	48.18V	L80	N 65°57'28" E	110.19	38.67V	L155	S 15°16'40" E	21.16
L15	N 35°03'51" E	18.24	6.57V	L63	N 55°01'45" E	51.53	18.48V	L81	S 59°43'52" E	15.22	5.48V	L156	S 00°18'30" E	36.32
L16	N 49°18'52" E	61.61	24.34V	L64	N 39°18'52" E	19.05	6.84V	L82	N 50°38'18" E	37.85	13.63V	L157	S 52°32'39" E	57.31
L17	N 79°09'59" E	46.57	16.77V	L65	N 82°03'42" E	32.80	11.81V	L83	N 74°52'35" E	49.79	17.92V	L158	S 56°21'43" E	50.34
L18	N 89°18'18" E	38.72	14.30V	L66	N 57°04'18" E	25.85	9.24V	L84	N 84°21'22" E	31.72	11.42V	L159	S 43°18'04" E	36.21
L19	N 61°48'11" E	35.65	13.18V	L67	N 46°06'55" E	24.84	8.89V	L85	N 61°12'58" E	24.22	8.72V	L160	S 47°12'28" E	178.81
L20	S 88°50'28" E	48.92	17.87V	L68	N 56°35'25" E	53.73	19.34V	L86	S 57°44'01" E	73.29	26.38V	L161	S 60°08'38" E	48.30
L21	N 89°17'53" E	25.25	9.19V	L69	N 89°52'22" E	35.19	13.03V	L87	S 47°12'28" E	101.12	36.53V	L162	S 38°52'30" E	52.03
L22	S 78°50'27" E	55.01	19.80V	L70	S 74°28'57" E	22.79	8.17V	L88	S 43°25'33" E	149.09	53.67V	L163	S 70°38'19" E	27.11
L23	S 89°24'02" E	22.19	7.89V	L71	S 86°22'28" E	39.71	14.30V	L89	S 69°35'43" E	68.67	25.51V	L164	S 68°35'49" E	51.27
L24	N 70°53'00" E	20.49	7.38V	L72	S 69°24'29" E	45.64	16.78V	L90	S 58°12'21" E	55.91	21.21V	L165	S 58°35'49" E	51.27
L25	N 38°30'08" E	47.32	17.11V	L73	N 89°30'08" E	27.85	9.89V	L91	N 68°11'57" E	40.69	14.65V	L166	N 85°36'22" E	21.70
L26	N 72°45'09" E	19.98	7.13V	L74	S 83°08'08" E	41.99	15.12V	L92	S 83°46'08" E	67.49	24.26V	L167	S 55°40'08" E	73.77
L27	N 38°54'13" E	34.65	12.47V	L75	N 67°55'31" E	47.85	17.28V	L93	S 63°29'03" E	36.86	13.31V	L168	S 74°33'33" E	27.46
L28	S 82°47'43" E	66.85	19.70V	L76	N 61°47'09" E	24.45	8.46V	L94	N 61°51'58" E	22.40	8.10V	L169	S 68°52'30" E	55.79
L29	N 71°08'48" E	21.85	7.87V	L77	N 19°55'58" E	34.71	12.50V	L95	S 55°31'19" E	34.39	12.37V	L170	N 80°22'29" E	24.46
L30	S 45°48'52" E	55.96	20.15V	L78	S 63°12'42" E	27.43	9.87V	L96	S 40°01'28" E	151.81	54.65V	L171	N 69°22'29" E	44.12
L31	S 77°19'20" E	24.93	8.97V	L79	S 58°43'20" E	28.29	10.17V	L97	S 69°18'18" E	24.13	8.88V	L172	N 84°28'35" E	21.76
L32	N 72°12'08" E	24.70	8.89V	L80	S 38°07'34" E	68.34	24.80V	L98	S 44°48'58" E	27.11	9.76V	L173	N 94°26'35" E	21.76
L33	S 74°24'42" E	22.83	8.20V	L81	S 84°35'24" E	26.31	8.47V	L99	N 69°28'24" E	50.11	18.44V	L174	S 74°26'09" E	24.43
L34	N 68°02'30" E	26.34	9.48V	L82	N 69°28'24" E	30.29	10.90V	L100	S 89°12'13" E	24.42	8.79V	L175	S 89°12'13" E	26.82
L35	S 80°51'01" E	23.40	8.17V	L83	N 68°02'30" E	39.71	11.90V	L101	S 67°44'37" E	22.89	8.47V	L176	N 69°28'24" E	22.89
L36	N 89°18'52" E	33.58	12.08V	L84	N 59°05'12" E	23.09	10.44V	L102	N 71°05'37" E	23.64	8.51V	L177	S 71°23'09" E	26.89
L37	S 72°55'37" E	24.77	8.85V	L85	N 60°48'58" E	23.95	10.36V	L103	N 62°25'58" E	33.44	12.38V	L178	S 12°52'59" E	61.46
L38	N 72°50'19" E	23.52	10.83V	L86	N 61°17'52" E	32.69	11.77V	L104	S 76°53'07" E	37.42	13.47V	L179	S 34°20'12" E	17.55
L39	S 56°23'47" E	26.87	9.87V	L87	S 57°17'07" E	34.54	12.43V	L105	S 32°48'32" E	24.47	8.81V			
L40	N 70°35'28" E	25.86	10.44V	L88	S 10°31'45" E	34.78	12.91V	L106	S 65°52'48" E	27.58	9.92V			
L41	N 64°13'07" E	28.83	10.31V	L89	S 55°21'29" E	25.58	9.21V	L107	N 85°52'48" E	38.75	14.31V			
L42	N 42°22'07" E	62.81	19.01V	L90	S 77°39'40" E	67.22	23.48V	L108	S 31°45'17" E	26.84	10.74V			
L43	S 47°09'29" E	26.82	9.68V	L91	N 54°31'39" E	23.90	8.69V	L109	S 38°40'48" E	38.75	14.31V			
L44	S 20°24'44" E	24.51	8.93V	L92	N 24°34'01" E	24.51	8.93V	L110	S 40°32'08" E	48.71	18.62V			
L45	S 55°01'33" E	20.52	7.39V	L93	N 03°56'45" W	77.33	9.84V	L111	S 38°40'48" E	38.75	14.31V			
L46	S 68°24'18" E	24.40	8.78V	L94	N 68°16'38" W	21.07	7.88V	L112	S 38°40'48" E	38.75	14.31V			
L47	S 81°48'51" E	22.86	12.58V	L95	S 86°11'58" W	35.30	12.71V	L113	S 38°40'48" E	38.75	14.31V			
L48	N 82°14'56" E	62.58	22.53V	L96	N 54°03'09" W	17.07	6.15V	L114	S 38°40'48" E	38.75	14.31V			

TEXAS PARKS AND WILDLIFE DEPARTMENT
4200 SMITH SCHOOL ROAD
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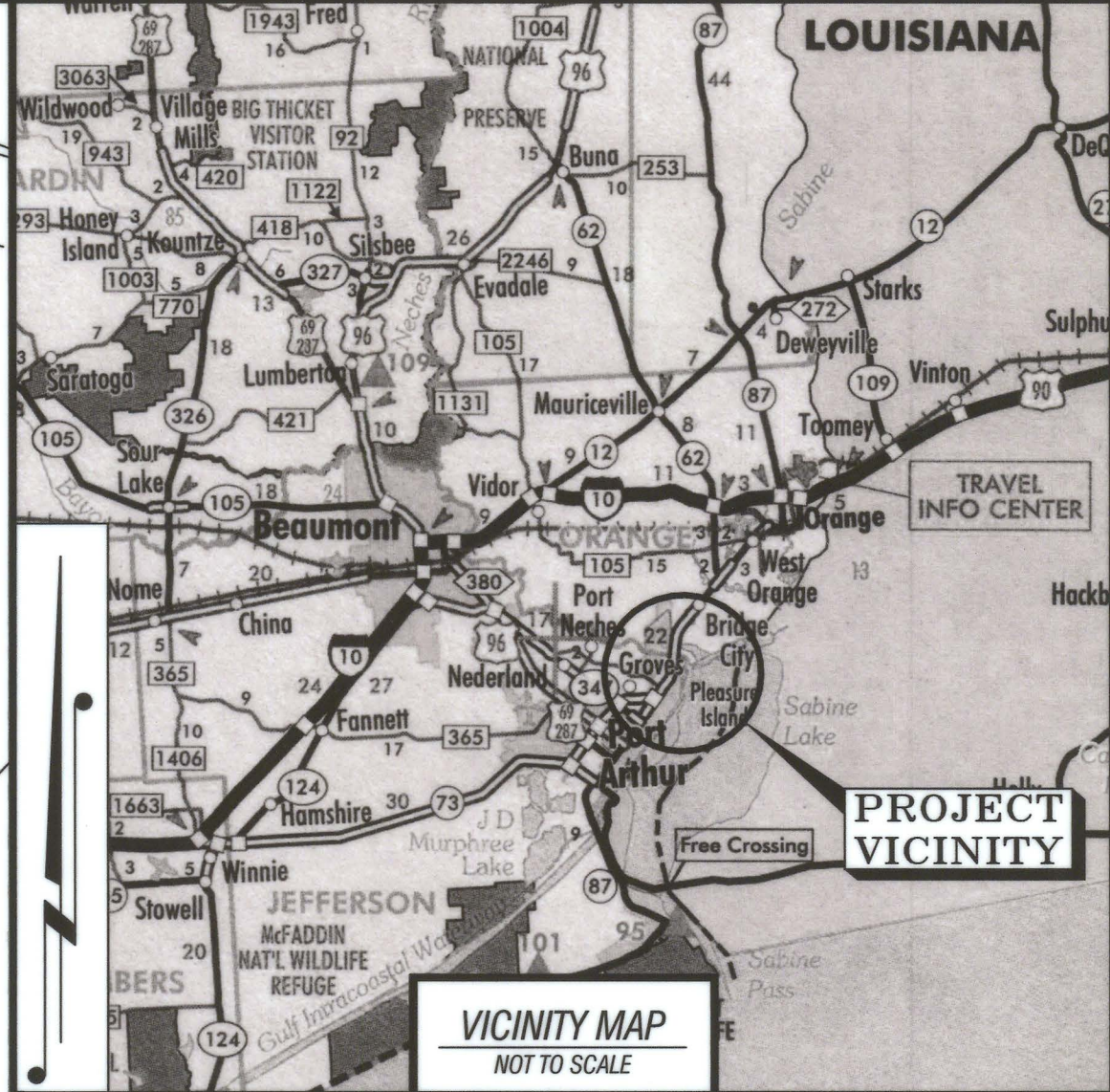
NRIC ARTICLE 33.136
SKETCH 2
MARCH 2011

OLD RIVER COVE
(SABINE LAKE)
STATE SUBMERGED TRACT
(NO TRACT NUMBER - CONTROL NUMBER 02-103523)

HUMBLE ISLAND

W.A. ATKINS
SURVEY, A-381

TEXAS PARKS
AND WILDLIFE DEPARTMENT
4200 SMITH SCHOOL ROAD
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VOL. 886, PAGE 401
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REFERENCE MAPS:

- NRIC ARTICLE 33.136, SKETCH 2: "COASTAL BOUNDARY SURVEY OF A PORTION OF OLD RIVER COVE" AS RECORDED IN VOLUME 367, PAGE 200, MAP RECORDS OF ORANGE COUNTY TEXAS, DATED MARCH 21, 2011.

NOTES:

- SURVEY CONDUCTED RELATIVE TO THE TEXAS COORDINATE SYSTEM, CENTRAL ZONE, US SURVEY FEET, NORTH AMERICAN DATUM OF 1983 (2011). ALL BEARINGS, DISTANCES, AND COORDINATES SHOWN HEREON ARE GRID. COMBINED SCALE FACTOR: 1.000043651. CONVERGENCE ANGLE IS +3' 19" 20.5".
- COORDINATES AND ELEVATIONS ARE BASED ON NOS MONUMENTS:
NOS MONUMENT "LUB 0520 D" (CONVERTED FROM SHARED OPUS SOLUTION DATASHEET)
N: 10,015,401.53
E: 4,537,671.68
EL: 2.91' NAVD88
NOS MONUMENT "877 0520 C" (CONVERTED FROM SHARED OPUS SOLUTION DATASHEET)
N: 10,015,680.71
E: 4,537,636.31
EL: 4.24' NAVD88
NOS MONUMENT "877 0520 E" (CONVERTED FROM SHARED OPUS SOLUTION DATASHEET)
N: 10,015,132.34
E: 4,537,613.46
EL: 2.33' NAVD88
- ALL OTHER MONUMENTS ARE REFERENCED AS MEASURED AND SHOWN HEREON.
- ALL POSITIONS AND ELEVATIONS RECORDED USING SURVEY GRADE, RTK GPS. EQUIPMENT: TRIMBLE R10 AND R12 RECEIVERS.
- AS REFERENCED TO THIS SURVEY, THE STATE OWNERSHIP BOUNDARY IS BASED ON THE MEAN HIGH WATER (MHW) CONTOUR. MHW ELEVATION OF 0.51' NAVD88 WAS DETERMINED IN ACCORDANCE WITH A LOCAL TIDE STUDY CROSS-CHECKED AGAINST NOAA TIDE GAUGES: "PORT ARTHUR, TX - STATION ID: 8770475" AND "RAINBOW BRIDGE, TX - STATION ID: 8770520".
- TO CONVERT FEET TO VARS MULTIPLY BY 0.36
- SURVEY ABSTRACTS NOT FIELD VERIFIED AND SHOULD BE CONSIDERED APPROXIMATE.
- REFERENCE ACCOMPANYING REPORT CONTAINING FIELD NOTES DATED AUGUST 2024 FOR ADDITIONAL INFORMATION.
- EROSION RESPONSE WORK: GLO ID#SL20250044.
- NO ARTIFICIAL BUILDUP OR FILL WAS OBSERVED IN THIS AREA.
- SPARSE RIPRAP AS SHOWN.

I, JAMES M. NAISMITH, HEREBY STATE THAT THIS DRAWING REPRESENTS A SURVEY THAT IS CORRECT; IN ACCORDANCE WITH SECTION 21.042 TEXAS NATURAL RESOURCES CODE, WAS MADE ACCORDING TO LAW; WAS MADE IN THE FIELD UNDER MY DIRECT CONTROL AND SUPERVISION; WAS MADE UTILIZING METHODOLOGY APPROVED BY THE GLO; AND IS RECORDED IN

ORANGE COUNTY # 552848

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 MOVEMENT LANDWARD AS PROVIDED BY SECTION 33.136, NATURAL RESOURCES CODE.

THIS COASTAL BOUNDARY SURVEY OF MEAN HIGH WATER EXTENDS ALONG A PORTION OF THE NORTHERLY BANK OF OLD RIVER COVE.

SURVEYED: AUGUST 15, 2024

SURVEY PERSONNEL:
MARLON AMAYA, MATTHEW KOSCELNIAK, RALPH FOSTER

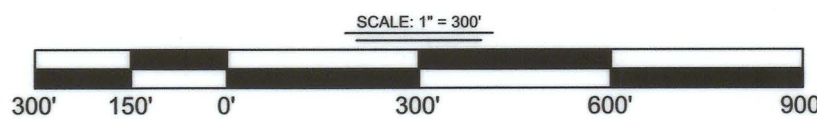
JMA
JAMES M. NAISMITH
LICENSED STATE LAND SURVEYOR
REGISTERED PROFESSIONAL LAND SURVEYOR No. 4826
3/13/2025
STATE OF TEXAS
JAMES M. NAISMITH
4826
PROFESSIONAL LAND SURVEYOR
LICENSED STATE LAND SURVEYOR

LEGEND:
FND. FOUND
P.O.B. POINT OF BEGINNING
P.O.T. POINT OF TERMINATION
P.O.W. RIGHT-OF-WAY
MHW MEAN HIGH WATER
O.P.R.O.C.T. OFFICIAL PUBLIC RECORDS OF ORANGE COUNTY, TEXAS

CONTROL POINT
FOUND IRON ROD
MHW LINE, AUGUST 2024, ELEV. = 0.51' NAVD88 (GEOD 18)
APPARENT PROPERTY LINE
APPROXIMATE SURVEY LINE

REV. NO.	REV. DATE	REV. DESCRIPTION	REV. BY
01	11/07/24	REVISED PER GLO COMMENTS	MM

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DRAWN BY:	MM	APPROVED BY:	JTR
DATE:	09/16/2024	JOB NO:	2024.0466
DRAWING NAME:	240468_DU_CBS-OLD RIVER COVE_AUGUST 2024.DWG		
PROJECTION:	TEXAS CENTRAL		
GEO. DATUM:	NAD83 (2011) VERT. DATUM: NAVD88		
GRID UNITS:	US SURVEY FEET		
SHEET NO:	1	OF	1

COASTAL BOUNDARY SURVEY
DUCKS UNLIMITED, INC.
COASTAL BOUNDARY SURVEY
ALONG A PORTION OF THE NORTHERLY BANK OF OLD RIVER COVE
SITUATED IN THE W.A. ATKINS SURVEY, ABSTRACT 381, JOHN H. FORSYTH SURVEY, ABSTRACT 79,
S.M. DEPWEE SURVEY, ABSTRACT 503 AND M. DARLIN SURVEY, ABSTRACT 66
ORANGE COUNTY, TEXAS



TEXAS GENERAL LAND OFFICE
COMMISSIONER DAWN BUCKINGHAM, M.D.

**Surveying Services
Coastal Boundary Survey**

TEXAS GENERAL LAND OFFICE
Art. 33.136, Natural Resources Code
Co. Orange, SK No. 6
File Date 5/6/25 by L. Parsons

Project: Northerly Bank of Old River Cove - DU - Naismith

Project No: Project Number GLO # SL20250044

Project Manager: Amy Nunez, Dianna Ramirez, Jason Zeplin, Coastal Field Operations.

Surveyor: James M. Naismith, Licensed State Land Surveyor

Description: Coastal boundary survey along a portion of the northerly bank of State Submerged Tract Old River Cove situated in the W.A. Atkins Survey, Abstract 381, John H. Forsyth Survey, Abstract 79, S.M. Depwe Survey, Abstract 503 and M. Darlin Survey, Abstract 66 and along Mean High Water (MHW) contour in Orange County, Texas, in connections with GLO # SL20250044. Centroid coordinates 29.989981° N, -93.860415° W, WGS84. A copy of the survey is recorded in the Orange County Public Records as Document number 552848, Orange County Texas.

A Coastal Boundary Survey for the above-referenced project has been reviewed and accepted by Surveying Services; upon completion of public notice requirements, the survey will be filed in the Texas General Land Office, Archives and Records, in accordance with provisions of the Tex. Nat. Res. Code §33.136.

by:

Signed:

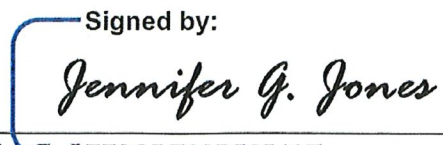

David Klotz, Staff Surveyor

4/28/2025
Surveying Services Date

Pursuant to Tex. Nat. Res. Code §33.136, the herein described Coastal Boundary Survey is approved by Dawn Buckingham, M.D., Commissioner of the Texas General Land Office.

by:

Signed:

Signed by:

Jennifer G. Jones
JENNIFER G. JONES CDF09B56540E...
Chief Clerk and Deputy Land Commissioner

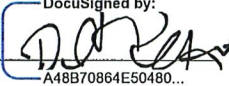
5/5/2025

Date

1700 North Congress Avenue, Austin, Texas 78701-1495
P.O. Box 12873, Austin, Texas 78711-2873
512-463-5001 glo.texas.gov

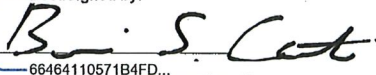
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Tex. Nat. Res. Code §33.136

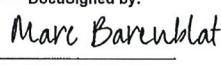
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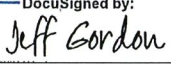
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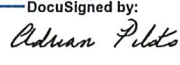
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Legal 
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Director 
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Dep. Gen. Counsel 
DocuSigned by:
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Gen. Counsel 
DocuSigned by:
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Deputy Chief Clerk 
DocuSigned by:
C663841567B2413...

Chief Clerk and Deputy Land Commissioner 
Signed by:
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TEXAS GENERAL LAND OFFICE
Art. 33.136, Natural Resources Code
Co. Orange, SK No. 13
File Date 5/6/25 by L. Parsons

AUGUST 2024

COASTAL BOUNDARY SURVEY ALONG A PORTION OF THE NORTHERLY BANK OF STATE SUBMERGED
TRACT OLD RIVER COVE
SITUATED IN THE W.A. ATKINS SURVEY, ABSTRACT 381, JOHN H. FORSYTH SURVEY, ABSTRACT 79,
S.M. DEPWE SURVEY, ABSTRACT 503 AND M. DARLIN SURVEY, ABSTRACT 66
ORANGE COUNTY, TEXAS

This report accompanies a map of survey dated August 15, 2024.



Figure 1: The typical shoreline of Old River Cove.

Coastal boundary survey along a portion of the northerly bank of State Submerged Tract Old River Cove situated in the W.A. Atkins Survey, Abstract 381, John H. Forsyth Survey, Abstract 79, S.M. Depwe Survey, Abstract 503 and M. Darlin Survey, Abstract 66 in Orange County, Texas. All survey work was performed using survey grade RTK GPS base and rover: Trimble R10 and R12 receivers. The survey was conducted on August 15, 2024.

SURVEY CONTROL: One NGS monument and two found monuments were used as primary control: "LUB 0520 D" (N: 10,015,401.53, E: 4,33,871.68, EL: 2.91' NAVD88), published position Found 5/8" iron rod (N: 10,020,022.56, E: 4,348,332.17, EL: 3.93' NAVD88), "877 0520 C" (N: 10,015,690.71, E: 4,337,936.31, EL: 4.24' NAVD88), and "877 0520 E" (N: 10,015,132.34, E: 4,337,813.46, EL: 2.33' NAVD88).

Datum is NAD 83 (2011), Central Zone of the Texas Coordinate System (US Survey Feet).
Orthometric heights referenced to NAVD88 datum (Geoid 18).



Figure 2: NGS Monument "LUB 0520 D" (N: 10,015,401.53, E: 4,337,871.68, EL: 2.91' NAVD88)



Figure 3: NGS Monument "877 0520 C" (N: 10,015,690.71, E: 4,337,936.31, EL: 4.24' NAVD88)



Figure 4: NGS Monument "877 0520 E" (N: 10,015,132.34, E: 4,337,813.46, EL: 2.33' NAVD88)

STATE OWNERSHIP BOUNDARY: As referenced to this survey, the state ownership boundary is based on the Mean High Water (MHW) contour. MHW elevation of 0.51' NAVD88 was determined in accordance with a local tide study cross-checked against NOAA Tide Gauges: "Port Arthur, TX – Station ID: 8770475" and "Rainbow Bridge, TX – Station ID: 8770520".

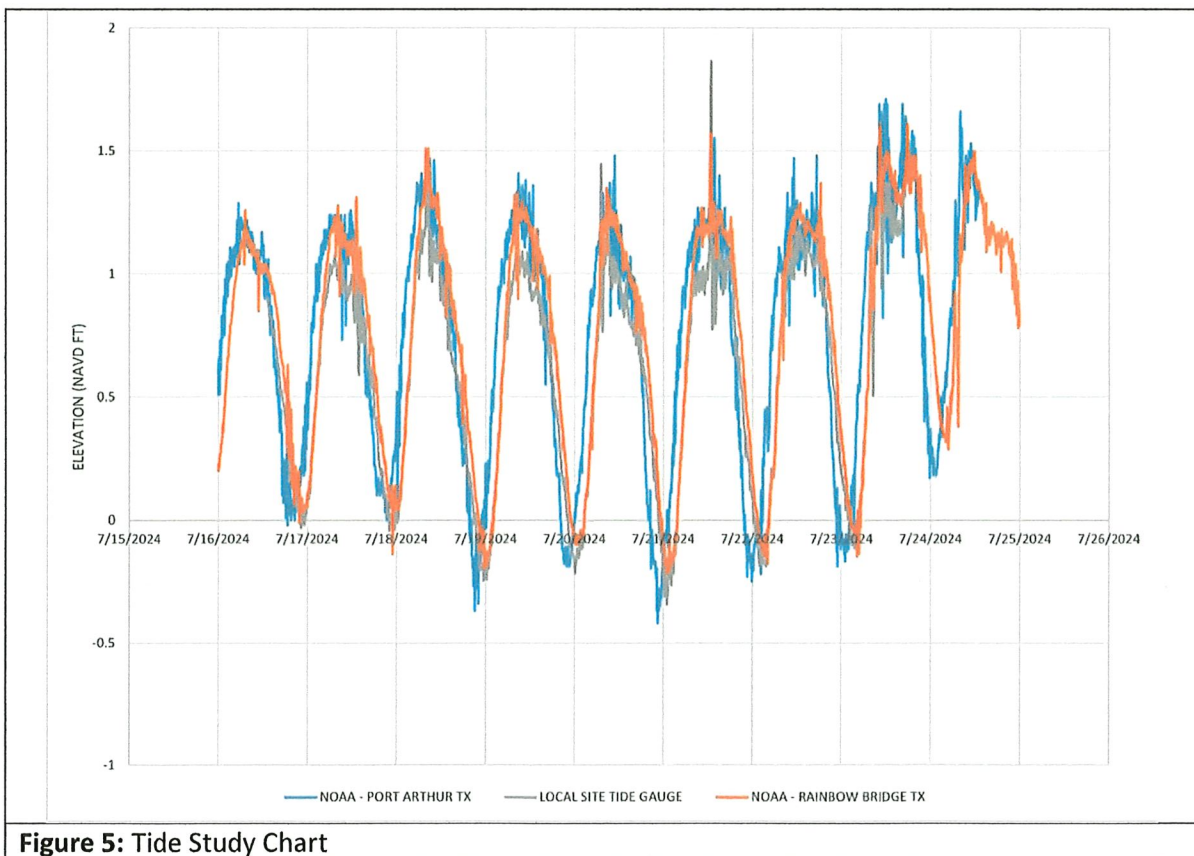


Figure 5: Tide Study Chart



FIELD NOTES for the coastal boundary survey along a portion of the northerly bank of State Submerged Tract Old River Cove situated in the W.A. Atkins Survey, Abstract 381, John H. Forsyth Survey, Abstract 79, S.M. Depwe Survey, Abstract 503 and M. Darlin Survey, Abstract 66 in Orange County, Texas. Distances, bearings, and Coordinates are grid, North American Datum of 1983 (2011), Central Zone of the Texas Coordinate System;

SEGMENT 1:

Beginning at the MHW line, (N: 10,019,932.42, E: 4,342,884.50) along the northerly bank of State Submerged Tract Old River Cove, same being the northerly line of said Atkins Survey and the southerly line of said Forsyth Survey, from which NGS monument "LUB 0520 D" (N: 10,015,401.53, E: 4,337,871.68, EL: 2.91') bears S 47°53'27" W, a distance of 6,757.02 feet (2,432.53V);

Thence along said MHW line, the following courses and distances:

S 24°24'57" W, a distance of 40.95 feet (14.74V);
S 36°11'34" W, a distance of 81.59 feet (29.37V);
S 24°57'06" W, a distance of 39.33 feet (14.16V);
S 07°09'24" E, a distance of 35.84 feet (12.90V);
S 43°52'58" E, a distance of 28.25 feet (10.17V);
S 62°44'15" E, a distance of 18.08 feet (6.51V);
N 70°38'45" E, a distance of 35.30 feet (12.71V);
S 84°46'24" E, a distance of 19.65 feet (7.07V);
N 72°04'54" E, a distance of 53.53 feet (19.27V);
N 83°08'41" E, a distance of 53.20 feet (19.15V);
S 82°23'14" E, a distance of 16.76 feet (6.03V);
N 68°07'33" E, a distance of 45.41 feet (16.35V);
N 75°09'16" E, a distance of 38.33 feet (13.80V);
N 53°15'38" E, a distance of 60.38 feet (21.74V);
N 35°03'51" E, a distance of 18.24 feet (6.57V);
N 49°16'02" E, a distance of 67.61 feet (24.34V);
N 79°07'59" E, a distance of 46.57 feet (16.77V);
N 86°05'16" E, a distance of 39.72 feet (14.30V);
N 67°48'31" E, a distance of 36.62 feet (13.18V);
S 88°50'26" E, a distance of 49.92 feet (17.97V);
N 80°17'53" E, a distance of 25.52 feet (9.19V);
S 76°50'37" E, a distance of 55.01 feet (19.80V);
S 66°29'43" E, a distance of 22.19 feet (7.99V);
N 70°53'00" E, a distance of 20.49 feet (7.38V);
N 58°30'00" E, a distance of 47.52 feet (17.11V);
N 72°52'49" E, a distance of 19.98 feet (7.19V);
N 35°54'13" E, a distance of 34.65 feet (12.47V);
S 82°47'43" E, a distance of 54.86 feet (19.75V);



N 71°08'43" E, a distance of 21.85 feet (7.87V);
S 45°46'42" E, a distance of 55.96 feet (20.15V);
S 77°19'30" E, a distance of 24.93 feet (8.97V);
N 75°12'06" E, a distance of 24.70 feet (8.89V);
S 77°54'42" E, a distance of 22.83 feet (8.22V);
N 88°02'30" E, a distance of 26.34 feet (9.48V);
S 80°51'10" E, a distance of 25.48 feet (9.17V);
N 86°08'26" E, a distance of 33.58 feet (12.09V);
N 57°26'53" E, a distance of 24.77 feet (8.92V);
N 72°50'15" E, a distance of 29.52 feet (10.63V);
S 56°23'47" E, a distance of 26.87 feet (9.67V);
S 76°52'28" E, a distance of 53.99 feet (19.44V);
N 64°13'37" E, a distance of 28.63 feet (10.31V);
N 49°29'57" E, a distance of 52.81 feet (19.01V);
S 47°09'26" E, a distance of 26.82 feet (9.66V);
S 20°24'44" E, a distance of 24.51 feet (8.82V);
S 55°01'32" E, a distance of 20.52 feet (7.39V);
S 68°24'16" E, a distance of 24.40 feet (8.78V);
S 81°49'31" E, a distance of 62.66 feet (22.56V);
N 82°14'56" E, a distance of 62.58 feet (22.53V);
S 69°37'33" E, a distance of 49.03 feet (17.65V);
S 62°13'57" E, a distance of 108.57 feet (39.09V);
S 49°03'04" E, a distance of 55.37 feet (19.93V);
N 88°07'44" E, a distance of 48.09 feet (17.31V);
S 46°48'00" E, a distance of 38.78 feet (13.96V);
S 88°28'31" E, a distance of 34.95 feet (12.58V);
S 74°30'27" E, a distance of 33.13 feet (11.93V);
S 60°54'34" E, a distance of 48.03 feet (17.29V);
N 78°30'03" E, a distance of 40.33 feet (14.52V);
S 89°33'30" E, a distance of 55.77 feet (20.08V);
S 36°47'58" E, a distance of 39.98 feet (14.39V);
N 60°44'24" E, a distance of 39.14 feet (14.09V);
S 80°38'43" E, a distance of 49.03 feet (17.65V);
N 75°51'23" E, a distance of 133.82 feet (48.18V);
N 55°01'43" E, a distance of 51.33 feet (18.48V);
N 39°16'33" E, a distance of 79.08 feet (28.47V);
N 82°03'42" E, a distance of 32.80 feet (11.81V);
N 57°04'18" E, a distance of 25.66 feet (9.24V);
N 46°06'23" E, a distance of 26.84 feet (9.66V);
N 56°35'49" E, a distance of 53.73 feet (19.34V);
N 80°52'22" E, a distance of 36.19 feet (13.03V);
S 74°26'07" E, a distance of 22.70 feet (8.17V);
S 86°23'26" E, a distance of 39.71 feet (14.30V);
S 65°24'26" E, a distance of 46.64 feet (16.79V);
N 89°30'09" E, a distance of 27.65 feet (9.95V);
S 53°06'58" E, a distance of 41.99 feet (15.12V);



N 67°55'31" E, a distance of 47.95 feet (17.26V);
N 81°47'09" E, a distance of 23.45 feet (8.44V);
N 19°55'58" E, a distance of 34.71 feet (12.50V);
N 63°14'20" E, a distance of 27.43 feet (9.87V);
S 58°43'20" E, a distance of 28.26 feet (10.17V);
S 38°07'34" E, a distance of 68.34 feet (24.60V);
S 84°35'29" E, a distance of 26.31 feet (9.47V);
N 69°28'33" E, a distance of 30.29 feet (10.90V);
N 88°02'27" E, a distance of 30.71 feet (11.06V);
N 59°05'12" E, a distance of 29.00 feet (10.44V);
N 06°46'57" E, a distance of 29.95 feet (10.78V);
N 61°17'52" E, a distance of 32.69 feet (11.77V);
S 57°17'07" E, a distance of 34.54 feet (12.43V);
S 10°37'34" E, a distance of 34.76 feet (12.51V);
S 55°21'29" E, a distance of 25.58 feet (9.21V);
S 77°59'45" E, a distance of 87.22 feet (31.40V);
N 64°31'39" E, a distance of 23.90 feet (8.60V);
N 24°30'41" E, a distance of 24.31 feet (8.75V);
N 03°56'45" W, a distance of 27.33 feet (9.84V);
N 66°05'18" W, a distance of 21.07 feet (7.59V);
S 86°11'58" W, a distance of 35.30 feet (12.71V);

Thence N 54°03'09" W, a distance of 17.07 feet (6.15V) to the **POINT OF TERMINATION**
(N: 10,019,915.46, E: 4,345,753.13), from which a 5/8" iron rod found in a concrete filled pipe
(N: 10,020,022.56, E: 4,348,332.17, EL: 3.93' NAVD88) bears N 87°37'19" E, a distance of 2,581.26
feet (929.25V).

SEGMENT 2:

Beginning at the MHW line, (N: 10,019,823.46, E: 4,348,232.91) along the northerly bank of State
Submerged Tract Old River Cove and the southerly line of said Forsyth Survey, from which NGS
monument "LUB 0520 D" (N: 10,015,401.53, E: 4,337,871.68, EL: 2.91') bears S 66°53'18" W, a
distance of 11,265.37 feet (4,055.53V);

Thence along said MHW line, the following courses and distances:

S 14°02'38" W, a distance of 55.34 feet (19.92V);
S 00°31'10" E, a distance of 41.03 feet (14.77V);
S 22°29'40" W, a distance of 8.22 feet (2.96V);
S 29°20'05" E, a distance of 21.99 feet (7.92V);
S 04°28'12" E, a distance of 42.60 feet (15.34V);
S 19°42'59" E, a distance of 58.78 feet (21.16V);
S 44°06'45" E, a distance of 27.62 feet (9.94V);
N 79°14'00" E, a distance of 25.43 feet (9.15V);
N 44°30'41" E, a distance of 7.63 feet (2.75V);
N 85°24'41" E, a distance of 49.37 feet (17.77V);



S 68°20'13" E, a distance of 24.14 feet (8.69V);
S 86°12'13" E, a distance of 67.51 feet (24.30V);
S 67°24'07" E, a distance of 24.38 feet (8.78V);
N 88°57'36" E, a distance of 110.19 feet (39.67V);
S 59°43'52" E, a distance of 15.22 feet (5.48V);
N 56°06'18" E, a distance of 37.85 feet (13.63V);
N 74°52'35" E, a distance of 49.79 feet (17.92V);
S 84°21'22" E, a distance of 31.72 feet (11.42V);
N 82°15'55" E, a distance of 24.22 feet (8.72V);
S 57°44'01" E, a distance of 73.28 feet (26.38V);
S 47°37'26" E, a distance of 101.74 feet (36.63V);
S 43°25'33" E, a distance of 149.09 feet (53.67V);
S 78°08'34" E, a distance of 26.43 feet (9.51V);
S 58°12'21" E, a distance of 58.91 feet (21.21V);
N 68°11'57" E, a distance of 40.69 feet (14.65V);
S 83°56'39" E, a distance of 67.40 feet (24.26V);
S 63°29'03" E, a distance of 36.96 feet (13.31V);
N 83°51'59" E, a distance of 22.56 feet (8.12V);
S 55°31'15" E, a distance of 34.36 feet (12.37V);
S 46°01'29" E, a distance of 151.81 feet (54.65V);
S 69°16'16" E, a distance of 24.13 feet (8.69V);
S 44°45'50" E, a distance of 27.11 feet (9.76V);
N 89°50'24" E, a distance of 50.11 feet (18.04V);
S 80°01'30" E, a distance of 24.42 feet (8.79V);
S 67°44'57" E, a distance of 23.53 feet (8.47V);
N 71°05'37" E, a distance of 23.64 feet (8.51V);
N 86°27'58" E, a distance of 20.44 feet (7.36V);
S 76°53'07" E, a distance of 37.42 feet (13.47V);
S 32°48'32" E, a distance of 24.47 feet (8.81V);
S 72°53'27" E, a distance of 43.58 feet (15.69V);
N 85°52'49" E, a distance of 27.56 feet (9.92V);
S 24°45'17" E, a distance of 29.84 feet (10.74V);
S 38°40'48" E, a distance of 39.75 feet (14.31V);
S 46°32'05" E, a distance of 46.71 feet (16.82V);

Thence S 71°17'47" E, a distance of 38.92 feet (14.01V) to the **POINT OF TERMINATION**
(N: 10,019,046.41, E: 4,349,740.79), from which a 5/8" iron rod found in a concrete filled pipe
(N: 10,020,022.56, E: 4,348,332.17, EL: 3.93' NAVD88) bears N 55°16'44" W, a distance of 1,713.79
feet (616.96V).

SEGMENT 3:

Beginning at the MHW line, (N: 10,018,978.61, E: 4,349,716.85) along the northerly bank of State
Submerged Tract Old River Cove and the southerly lines of said Depwe and Darlin Surveys, from
which NGS monument "LUB 0520 D" (N: 10,015,401.53, E: 4,337,871.68, EL: 2.91') bears
S 73°11'47" W, a distance of 12,373.50 feet (4,454.46V);



Thence along said MHW line, the following courses and distances:

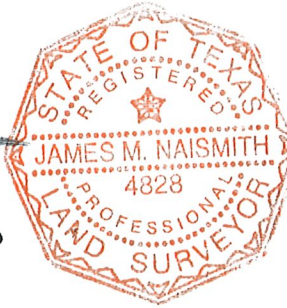
N 68°33'50" W, a distance of 65.64 feet (23.63V);
S 18°54'00" W, a distance of 25.02 feet (9.01V);
S 35°33'39" E, a distance of 53.96 feet (19.43V);
S 64°28'05" E, a distance of 29.05 feet (10.46V);
S 35°18'51" E, a distance of 18.65 feet (6.71V);
S 49°51'36" E, a distance of 28.96 feet (10.43V);
S 19°28'47" E, a distance of 19.09 feet (6.87V);
S 01°19'02" E, a distance of 27.67 feet (9.96V);
S 25°29'01" E, a distance of 26.25 feet (9.45V);
S 01°48'08" W, a distance of 36.98 feet (13.31V);
N 87°00'15" E, a distance of 12.63 feet (4.55V);
S 26°04'19" E, a distance of 23.90 feet (8.60V);
S 73°20'13" E, a distance of 50.25 feet (18.09V);
S 15°16'40" E, a distance of 21.16 feet (7.62V);
S 00°19'30" E, a distance of 36.32 feet (13.08V);
S 63°52'39" E, a distance of 51.31 feet (18.47V);
S 56°21'43" E, a distance of 59.34 feet (21.36V);
S 43°16'04" E, a distance of 95.21 feet (34.28V);
S 47°41'28" E, a distance of 178.81 feet (64.37V);
S 60°06'38" E, a distance of 48.30 feet (17.39V);
S 38°59'30" E, a distance of 52.03 feet (18.73V);
S 70°39'19" E, a distance of 27.11 feet (9.76V);
S 58°52'40" E, a distance of 51.27 feet (18.46V);
S 79°00'14" E, a distance of 23.49 feet (8.46V);
N 85°38'22" E, a distance of 21.70 feet (7.81V);
S 55°44'09" E, a distance of 78.77 feet (28.36V);
S 74°33'33" E, a distance of 27.46 feet (9.89V);
S 88°52'50" E, a distance of 55.79 feet (20.08V);
N 80°29'29" E, a distance of 24.46 feet (8.81V);
N 69°29'29" E, a distance of 44.13 feet (15.89V);
N 84°28'06" E, a distance of 21.27 feet (7.66V);
N 54°38'35" E, a distance of 21.76 feet (7.83V);
S 74°24'09" E, a distance of 24.43 feet (8.79V);
S 89°12'13" E, a distance of 26.62 feet (9.58V);
N 66°30'42" E, a distance of 52.89 feet (19.04V);
S 71°23'09" E, a distance of 26.88 feet (9.68V);
S 12°30'55" E, a distance of 61.48 feet (22.13V);

Thence S 34°20'12" E, a distance of 17.55 feet (6.32V) to the **POINT OF TERMINATION**
(N: 10,018,254.82, E: 4,350,713.15), from which a 5/8" iron rod found in a concrete filled pipe
(N: 10,020,022.56, E: 4,348,332.17, EL: 3.93' NAVD88) bears N 53°24'30" W, a distance of 2,965.46
feet (1,067.57V).

Prepared 09/16/2024. Revised 11/07/2024.



James M. Naismith, RPLS, LSLS
Licensed State Land Surveyor
Registered Professional Land Surveyor No. 4828



3/13/2025

