NOTES:

1) All coordinates and bearings shown hereon are grid values referenced to the Texas Coordinate System of 1983, South Central Zone and NGS Monument "877 2683 C". Combined scale factor for this project is 0.99989608. Mapping angle for this project is 01°44'22".

2) The elevation of Mean Higher High Water for this site is 0.81' as tied to Monument "Tidal Benchmark 877 2683 C" having an elevation of 3.29 NAVD 88. Mean High Water was determined by direct elevations from the NOAA Matagorda City, TX Tide Gauge.

3) This is an erosion control project with possible breakwater construction and slope protection.

4) CEPRA Project No. 1712

VICINITY MAP

Project Site

Swan Lake

GULF OF MEXICO

VICINITY MAP (N.T.S.)

SCALE:
1" = 36 VARAS
1" = 100 FEET

100   0   100   200   300 Feet
36   0   36   72   108 Varas

FIELD NOTE DESCRIPTION

Being the line of Mean Higher High Water of Essex Bayou and the Intracoastal Waterway adjacent to the Branch T. Archer Survey, Abstract Number 9, Brazoria County, Texas. The meander line of said Mean Higher High Water being more particularly described as follows (coordinates and bearings are grid values referenced to the Texas Coordinate System of 1983, South Central Zone and NGS Monuments "877 2683 C" and "Bay City CORS ARP". Distances shown are grid distances unless noted):

COMMENCING at NGS Monument "877 2683 C", which has grid coordinates of N=13,517,144.85 feet (4,866,172.146 varas) and E=3,104,666.52 feet (1,117,679.947 varas), from which Monument "Bay City CORS ARP" bears North 75°43'58" West, 173,874.67 feet (62,594.881 varas);

THENCE, North 52°31'54" East, a distance of 70,766.23 feet (252,475.841 varas) to a point on the line of Mean Higher High Water of the southwesterly line of said Essex Bayou and a southeasterly line of said Archer Survey for the POINT OF BEGINNING and westerly point of said meander line, having grid coordinates of N= 13,560,193.63 feet (4,881,669.707 varas) and E= 3,160,832.89 feet (1,137,899.840 varas);

THENCE, in a northerly direction, along the meander line of Mean Higher High Water of the southwesterly line of said Essex Bayou and the Intracoastal Waterway and a southeasterly line of said Archer Survey, the following twenty-four (24) courses:

(L1) North 49°06'51" East, a distance of 53.82 feet (19.375 varas) to an angle point;
(L2) North 52°34'33" East, a distance of 51.09 feet (18.391 varas) to an angle point;
(L3) North 46°55'03" East, a distance of 60.11 feet (21.641 varas) to an angle point;
(L4) North 45°10'36" East, a distance of 33.39 feet (12.020 varas) to an angle point;
(L5) North 38°43'00" East, a distance of 59.26 feet (21.334 varas) to an angle point;
(L6) North 30°18'44" East, a distance of 46.97 feet (16.909 varas) to an angle point;
(L7) North 26°37'18" East, a distance of 34.96 feet (12.586 varas) to an angle point;
(L8) North 27°53'16" East, a distance of 56.26 feet (20.252 varas) to an angle point;
(L9) North 29°55'30" East, a distance of 36.37 feet (13.093 varas) to an angle point;
(L10) North 27°31'19" East, a distance of 29.51 feet (10.623 varas) to an angle point;
(L11) North 26°06'12" East, a distance of 12.38 feet (4.456 varas) to an angle point;
(L12) North 19°20'50" East, a distance of 21.36 feet (7.690 varas) to an angle point;
(L13) North 13°19'03" East, a distance of 43.34 feet (15.603 varas) to an angle point;
(L14) North 00°36'55" West, a distance of 18.10 feet (6.517 varas) to an angle point;
(L15) North 03°27'53" East, a distance of 62.30 feet (22.429 varas) to an angle point;
(L16) North 28°10'12" East, a distance of 31.09 feet (11.194 varas) to an angle point;
(L17) North 20°57'02" East, a distance of 20.83 feet (7.498 varas) to an angle point;
(L18) North 00°56'15" East, a distance of 24.96 feet (8.984 varas) to an angle point;
(L19) North 04°57'59" East, a distance of 14.27 feet (5.138 varas) to an angle point;
(L20) North 15°41'12" East, a distance of 55.62 feet (20.023 varas) to an angle point;
(L21) North 22°48'28" East, a distance of 50.49 feet (18.177 varas) to an angle point;
(L22) North 27°47'06" East, a distance of 14.21 feet (5.114 varas) to an angle point;
(L23) North 22°42'59" East, a distance of 41.05 feet (14.777 varas) to an angle point;
(L24) North 18°06'19" East, a distance of 47.25 feet (17.010 varas) to a point on the line of Mean Higher High Water of said Essex Bayou, having grid coordinates of N=13,560,985.14 feet (4,881,954.650 varas) and E=3,161,237.88 feet (1,138,045.637 varas);

THENCE, North 75°07'07" East, crossing said Essex Bayou, a distance of 57.00 feet (20.520 varas) to a point on the line of Mean Higher High Water and northeasterly line of said Essex Bayou, having grid coordinates of N=13,560,999.78 feet (4,881,959.921 varas) and E=3,161,292.97 feet (1,138,065.469 varas);

THENCE, in an easterly direction, along the meander line of Mean Higher High Water of the northeasterly line of said Essex Bayou and the Intracoastal Waterway and a southwesterly line of said Archer Survey, the following thirty-eight (38) courses:

(L25) South 29°30'56" East, a distance of 45.73 feet (16.462 varas) to an angle point;
(L26) South 46°24'59" East, a distance of 51.08 feet (18.390 varas) to an angle point;
(L27) South 46°24'53" East, a distance of 64.93 feet (23.373 varas) to an angle point;
(L28) South 48°02'25" East, a distance of 49.98 feet (17.993 varas) to an angle point;
(L29) South 45°33'47" East, a distance of 23.95 feet (8.623 varas) to an angle point;
(L30) South 40°40'17" East, a distance of 11.23 feet (4.044 varas) to an angle point;
(L31) South 52°28'47" East, a distance of 5.63 feet (2.028 varas) to an angle point;
(L32) South 43°26'55" East, a distance of 18.58 feet (6.688 varas) to an angle point;
(L33) South 41°18'08" East, a distance of 15.59 feet (5.611 varas) to an angle point;
(L34) South 85°28'09" East, a distance of 15.59 feet (5.613 varas) to an angle point;
(L35) South 75°04'22" East, a distance of 10.23 feet (3.684 varas) to an angle point;
(L36) South 71°16'33" East, a distance of 35.21 feet (12.676 varas) to an angle point;
(L37) South 85°08'32" East, a distance of 3.61 feet (1.299 varas) to an angle point;
(L38) North 80°38'08" East, a distance of 17.82 feet (6.415 varas) to an angle point;
(L39) North 63°25'11" East, a distance of 16.62 feet (5.984 varas) to an angle point;
(L40) North 70°45'38" East, a distance of 25.70 feet (9.251 varas) to an angle point;
(L41) North 61°51'10" East, a distance of 3.83 feet (1.378 varas) to an angle point;
(L42) North 73°11'35" East, a distance of 17.10 feet (6.155 varas) to an angle point;
(L43) North 71°50'03" East, a distance of 17.17 feet (6.181 varas) to an angle point;
(L44) North 76°35'16" East, a distance of 8.73 feet (3.141 varas) to an angle point;
(L45) North 87°48'50" East, a distance of 10.40 feet (3.743 varas) to an angle point;
(L46) North 74°09'08" East, a distance of 21.89 feet (7.880 varas) to an angle point;
(L47) North 52°43'44" East, a distance of 7.92 feet (2.852 varas) to an angle point;
(L48) North 56°23'17" East, a distance of 25.18 feet (9.066 varas) to an angle point;
(L49) North 62°05'36" East, a distance of 14.82 feet (5.336 varas) to an angle point;
(L50) North 59°36'47" East, a distance of 9.90 feet (3.564 varas) to an angle point;
(L51) North 52°33'51" East, a distance of 9.02 feet (3.246 varas) to an angle point;
(L52) North 63°23'07" East, a distance of 17.54 feet (6.314 varas) to an angle point;
(L53) North 68°24'40" East, a distance of 5.84 feet (2.102 varas) to an angle point;
(L54) North 60°38'27" East, a distance of 7.00 feet (2.520 varas) to an angle point;
(L55) North 75°05'18" East, a distance of 16.12 feet (5.803 varas) to an angle point;
(L56) South 34°08'03" East, a distance of 5.29 feet (1.906 varas) to an angle point;
(L57) South 57°49'30" East, a distance of 12.47 feet (4.489 varas) to an angle point;
(L58) South 61°12'08" East, a distance of 18.54 feet (6.675 varas) to an angle point;
(L59) South 57°10'55" East, a distance of 13.02 feet (4.687 varas) to an angle point;
(L60) South 87°59'20" East, a distance of 15.13 feet (5.445 varas) to an angle point;
(L61) South 67°54'30" East, a distance of 20.72 feet (7.460 varas) to an angle point;
(L62) South 88°48'16" East, a distance of 29.88 feet (10.756 varas) to a point on the line of Mean Higher High Water of the northeasterly line of said Essex Bayou and a southwesterly line of said Archer Survey for the POINT OF TERMINUS and the easterly point of said meander line, having grid coordinates of N= 13,560,858.20 feet (4,881,908.952 varas) and E= 3,161,887.49 feet (1,138,279.496 varas), from which NGS Monument "HGCSD 61" bears South 52°37'21" West, 72,007.61 feet (25,922.739 varas).

Map labels

"BAY CITY CORS ARP" (DL3490)
N=13,559,995.62 (GRID FEET)
E=2,936,154.76 (GRID FEET)
N=4,881,598.423 (GRID VARAS)
E=1,057,015.714 (GRID VARAS)

N 75°43'58" W 173,874.67'
(62,594.881 VS)

P.O.C.
NGS MON. "877 2683 C" (DP0700)
N=13,517,144.85 (GRID FEET)
E=3,104,666.52 (GRID FEET)
N=4,866,172.146 (GRID VARAS)
E=1,117,679.947 (GRID VARAS)

N 52°31'54" E 70,766.23'
(25,475.841 VS)

P.O.B.
N=13,560,193.63 (GRID FEET)
E=3,160,832.89 (GRID FEET)
N=4,881,669.707 (GRID VARAS)
E=1,137,899.840 (GRID VARAS)

BRANCH T. ARCHER SURVEY ABSTRACT NUMBER 9 TITLED

U.S.A.
P.O. BOX 1306
ALBUQUERQUE, N.M. 87103
C.A.D. FILE NO. 148082

N=13,560,985.14 (GRID FEET)
E=3,161,237.88 (GRID FEET)
N=4,881,954.650 (GRID VARAS)
E=1,138,045.637 (GRID VARAS)

N 75°07'07" E 57.00'
(20.520 VS)

N=13,560,999.78 (GRID FEET)
E=3,161,292.97 (GRID FEET)
N=4,881,959.921 (GRID VARAS)
E=1,138,065.469 (GRID VARAS)

BRANCH T. ARCHER SURVEY ABSTRACT NUMBER 9 TITLED

ESSEX BAYOU STATE OF TEXAS

U.S.A.
P.O. BOX 1306
ALBUQUERQUE, N.M. 87103
C.A.D. FILE NO. 180568

MEANDER LINE OF MEAN HIGHER HIGH WATER ON JULY 10, 2023 ELEV. 0.81' (SEE NOTE 2)

INTRACOASTAL WATERWAY

TO MON. "HGCSD 61"
S 52°37'21" W 72,007.61'
(25,922.739 VS)

P.O.T.
N=13,560,858.20 (GRID FEET)
E=3,161,887.49 (GRID FEET)
N=4,881,908.952 (GRID VARAS)
E=1,138,279.496 (GRID VARAS)

Line labels: L1 L3 L5 L7 L9 L11 L13 L15 L17 L19 L21 L23 L25 L27 L29 L31 L33 L35 L37 L39 L41 L43 L45 L47 L49 L51 L53 L55 L57 L59 L61

Surveyor's certificate

I, Kyle C. Sunday, Licensed State Land Surveyor in and for the State of Texas, do hereby certify that on July 10, 2023, I have located the natural contour line of Mean Higher High Water in accordance with methodology approved by the General Land Office, on the ground, according to law, in accordance with Natural Resources Code Section 21.042, under my direct control and supervision and with the personnel stated, and that said contour line is true and correct as shown hereon. To the best of my knowledge no artificial fill, any development or placement of retaining walls, other than as shown hereon, that would cause alteration to said contour line has occurred within the area surveyed.

Field Personnel:
William E. Merten, LSLS, Jeffrey Bernal, J. Montiel, Robert Winans

21-MAY-2025

Kyle C. Sunday
Licensed State Land Surveyor   220016

LICENSED STATE LAND SURVEYOR

THIS SURVEY HAS BEEN FILED FOR RECORD AND DULY RECORDED THIS 21st DAY OF MAY, 2025, IN 2025023687 OF BRAZORIA COUNTY, TEXAS.

CobbFendley

TSPELS Firm Registration No. 274
TBPELS Firm Registration No. 10046700
4424 W Sam Houston Parkway N, Suite 600, Houston, Texas 77041
713.462.3242 | fax 713.462.3262 | www.cobbfendley.com

Title block

A COASTAL BOUNDARY SURVEY OF ESSEX BAYOU ADJACENT TO THE BRANCH T. ARCHER SURVEY, ABSTRACT NUMBER 9, BRAZORIA COUNTY, TEXAS

GLO PROJECT NO. CEPRA 1712

FOR GENERAL LAND OFFICE USE ONLY

TEXAS GENERAL LAND OFFICE
Art. 33.136, Natural Resources Code
Co. BRAZORIA   SK No. 31
File Date 7/8/25   by L. Parsons

| CFA JOB NO. 2302-065-01 | SCALE: 1" = 100' (36 VARAS) |
| DATE: MAY 21, 2025 | FB NO. 3390 | SHEET 1 OF 1 |

BRAZORIA 31

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

Surveying Services
Coastal Boundary Survey

Project: Essex Bayou - Branch T. Archer Survey, A-9 - Sunday

Project No: Project Number: CEPRA # 1712

Project Manager: Carver Wray, Coastal Resources.
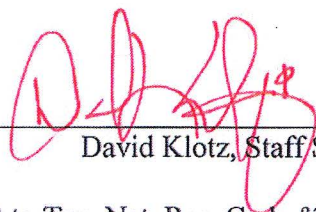
Surveyor: Kyle Sunday, Licensed State Land Surveyor

Description: Coastal Boundary Survey dated July 10, 2023, delineating the line of Mean Higher High Water of Essex Bayou and the Intracoastal Waterway adjacent to the Branch T. Archer Survey, Abstract 9, Brazoria County, Texas, Texas, in connection with CEPRA No. 1712. Centroid coordinates 28°59'01"N, 95°16'07"W, WGS84. A copy of the survey Recorded in Official Public Records, Brazoria County Instrument No. 2025023687, Brazoria 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: _____   6/24/2025
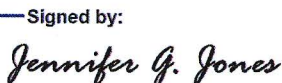   David Klotz, Staff Surveyor   Surveying Services Date

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: _____   6/30/2025
        Signed by: Jennifer G. Jones
        Jennifer G. Jones E70CDF09B56540E...   Date
        Chief Clerk and Deputy Land Commissioner

Filed as: Brazoria County, NRC Article 33.136 Sketch No. 31
Tex. Nat. Res. Code §33.136

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

Page 1 of 2

97476 (2)

ROUTING FOR INTERNAL DOCUSIGN PACKET

Staff Surveyor _____
DocuSigned by:
A48B70864E50480...

Surveying _____
DocuSigned by: Mark J. Neugebauer
E246E7FD22AA4D6...

Legal _____
DocuSigned by: David Land
287BFE8E18D748F...

Director _____
DocuSigned by: B. S. Cat
66464110571B4FD...

Dep. Gen. Counsel _____
DocuSigned by: Marc Barenblat
833F61245C79401...

Gen. Counsel _____
DocuSigned by: Jeff Gordon
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Deputy Chief Clerk _____
DocuSigned by: Adrian Pilato
C663841567B2413...

Chief Clerk and Deputy Land Commissioner _____
Signed by: Jennifer G. Jones
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