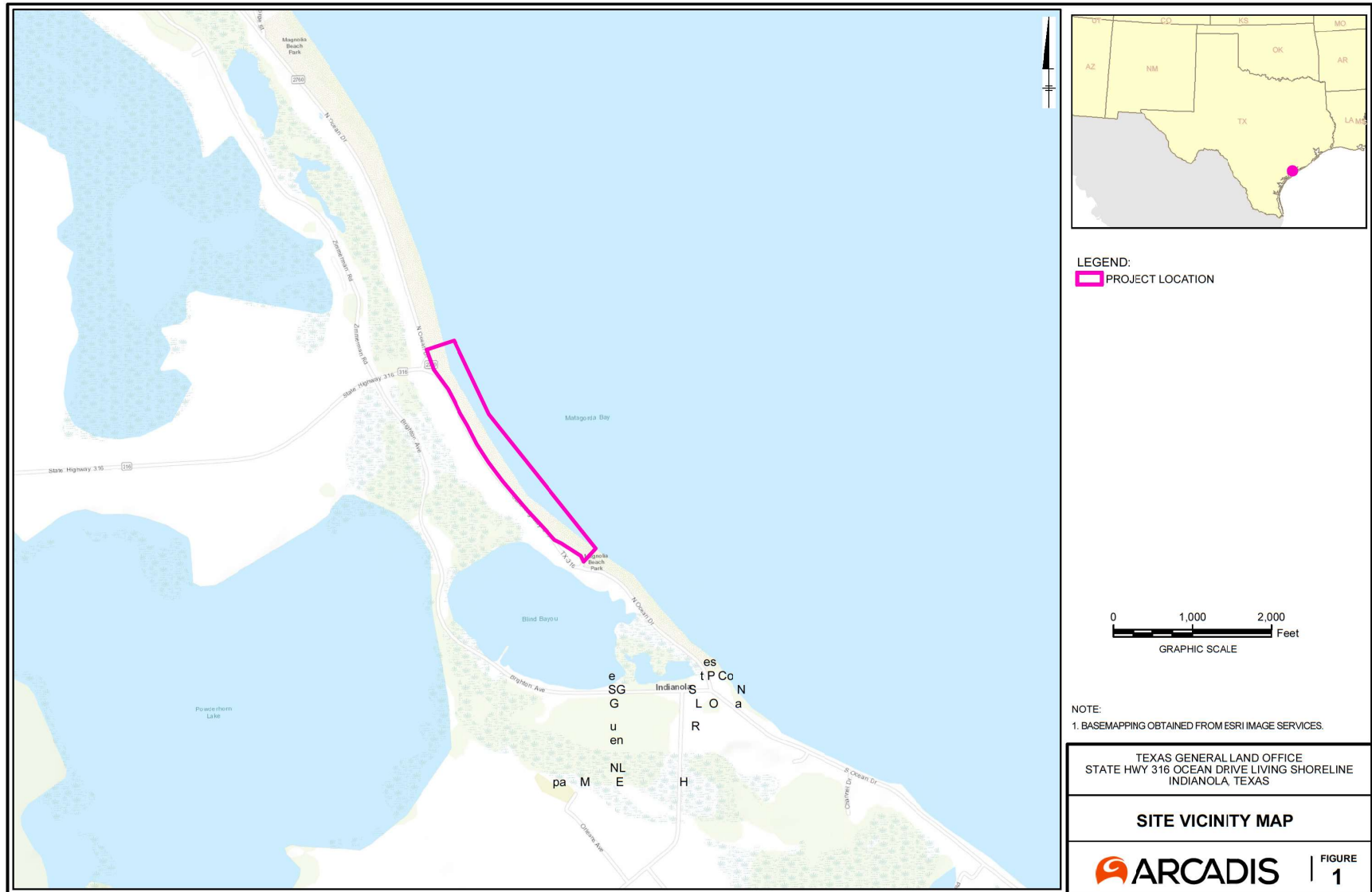


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STATE HIGHWAY 316 SHORELINE PROTECTION PROJECT

TEXAS GENERAL LAND OFFICE
TEXAS DEPARTMENT OF TRANSPORTATION
CALHOUN COUNTY, TX

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4	PROPOSED BASE LAYOUT
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6	DETAILS SHEET 1 OF 2
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VICINITY MAP

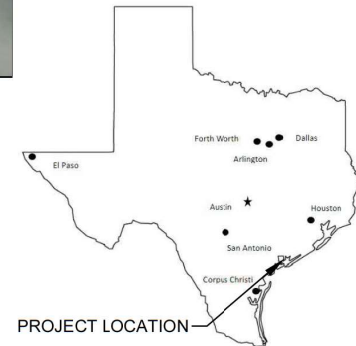
0 5,000' 10,000' Feet



NATURE OF ACTIVITY:

THE PURPOSE OF THIS PROJECT IS TO RESTORE BEACH ACCESS ALONG THE STATE HIGHWAY 316 SHORELINE AND REDUCE EROSION.

IN PARTNERSHIP WITH:



PROJECT LOCATION



STATE HIGHWAY 316 SHORELINE PROTECTION PROJECT
TEXAS GENERAL LAND OFFICE
TEXAS DEPARTMENT OF TRANSPORTATION
CALHOUN COUNTY, TEXAS

TITLE SHEET

PERMIT DRAWINGS
(NOT INTENDED FOR BIDDING OR
CONSTRUCTION PURPOSES)
MARK EDWARD MAZUCH, P.E.
TEXAS REGISTRATION NO. 81099
DATE: JANUARY 3, 2025

JANUARY 2025

SHEET:

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GENERAL NOTES:

1. APPROXIMATE LOCATION:
28° 31' 48.33" N
96° 30' 43.62" W
2. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) UNLESS OTHERWISE NOTED
3. CONTOURS SHOWN DEVELOPED FROM SURVEY COLLECTED BY CRA, INC. BETWEEN NOVEMBER AND DECEMBER 2023 USING HYDROGRAPHIC, TOPOGRAPHIC, AND LIDAR SURVEY METHODS.
4. AERIAL BASEMAP IS FROM GOOGLE EARTH DATED MARCH 2022.
5. SENSITIVE HABITAT SURVEY WAS CONDUCTED BY ARCADIS ON SEPTEMBER 5, 2024.

TIDAL ELEVATIONS (NAVD88)	
MEAN HIGHER-HIGH WATER (MHHW)	+1.10 FT
MEAN HIGH WATER (MHW)	+1.09 FT
MEAN TIDE LEVEL (MTL)	+0.74 FT
MEAN SEA LEVEL (MSL)	+0.78 FT
MEAN LOW WATER (MLW)	+0.40 FT
MEAN LOWER-LOW WATER (MLLW)	+0.38 FT
NAVD88	0.00 FT

ALL DATA VALUES ARE RELATIVE TO THE NAVD88
REFERENCE NOAA STATION NO. 8773701: FORT O'CONNOR

PROPOSED BASE WITH EXTENDED BEACH AND GROIN			
DESCRIPTION	MAX. AREA (ACRE)	MAX. VOLUME (CY)	MATERIAL
GROINS	0.92	5,600	RIPRAP AND CORE STONE
BEACH FILL	5.00	27,400	NATIVE SEDIMENT AND IMPORTED SAND FILL
SAND FILL (REVTMENT)	2.60	6,200	IMPORTED SAND FILL
REVTMENT	1.60	4,900	RIPRAP AND CORE STONE

ENVIRONMENTAL NOTES:

1. THE PROJECT IS LOCATED WITHIN AN ENVIRONMENTALLY SENSITIVE COASTAL HABITAT AND PUBLIC USE AREA. BEST MANAGEMENT PRACTICES FOR TURBIDITY CONTROLS, WATER QUALITY, AND HABITAT PROTECTIONS WILL BE IMPLEMENTED.
2. KNOWN SEA TURTLE NESTING HABITAT HAS BEEN DOCUMENTED IN THE AREA. THE PROJECT WILL IMPLEMENT THE PROPER BEST MANAGEMENT PRACTICES TO MINIMIZE ANY IMPACTS TO TURTLES. PROJECT ACTIVITIES SHOULD BE CONDUCTED OUTSIDE OF SEA TURTLE NESTING SEASONS (APRIL THROUGH AUGUST, WITH PEAK NESTING MONTHS BEING MAY AND JUNE), WHERE PRACTICABLE. SURVEYS FOR TURTLE NESTING SITES WILL ALSO BE CONDUCTED PRIOR TO INITIATING PROJECT CONSTRUCTION ACTIVITIES.
3. THE PROJECT AREA PROVIDES NESTING HABITAT FOR NUMEROUS NATIVE BIRD SPECIES. PRE-CONSTRUCTION NEST SURVEYS WILL BE CONDUCTED PRIOR TO CLEARING VEGETATION AND CONSTRUCTION ACTIVITIES THAT OCCUR DURING THE MIGRATORY BIRD NESTING SEASON (SPRING AND SUMMER MONTHS FROM MARCH 1 TO SEPTEMBER 30).
4. THE PROJECT ALSO HAS THE OPPORTUNITY TO CREATE OR IMPROVE HABITAT FOR NATIVE SPECIES. SELECTING BEACH FILL MATERIAL CONDUCIVE TO TURTLE NESTING, PLANTING NATIVE VEGETATION, BUILDING BEACH GROINS CONDUCIVE TO OYSTER HABITAT, AND REDUCING BEACH EROSION ARE ALL MEASURES THAT CAN IMPROVE HABITAT FOR COASTAL WILDLIFE.



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NOTES AND QUANTITIES

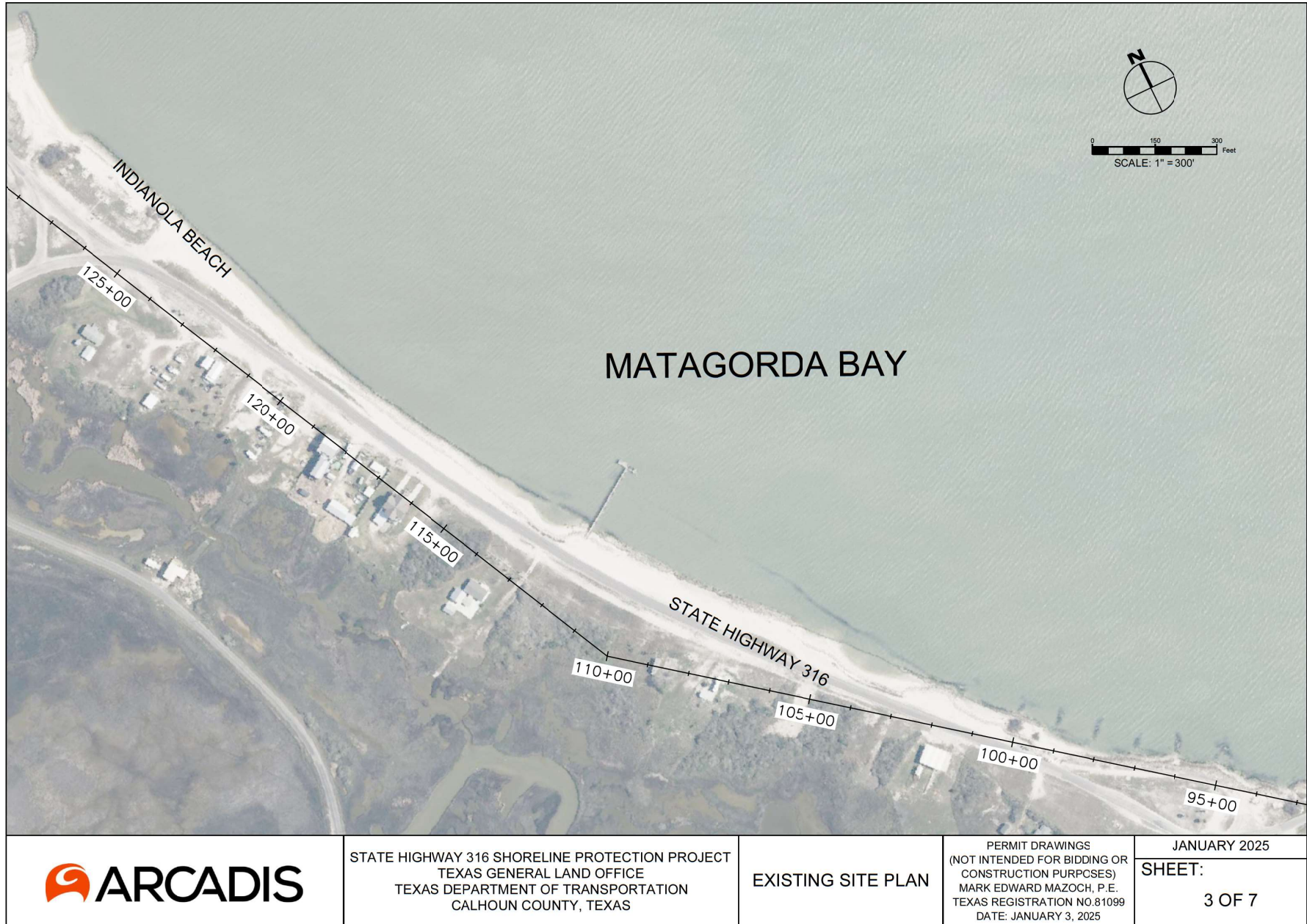
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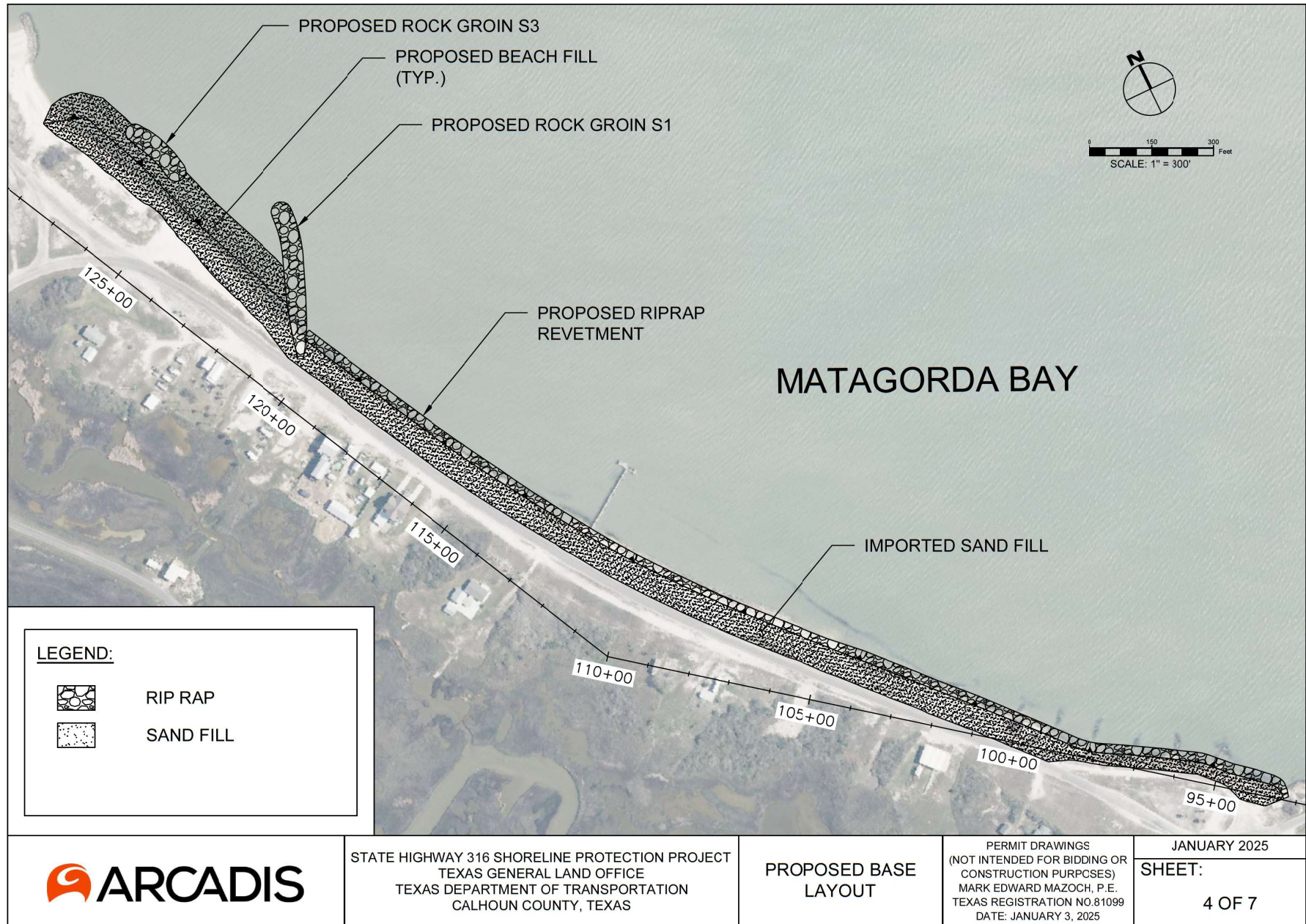
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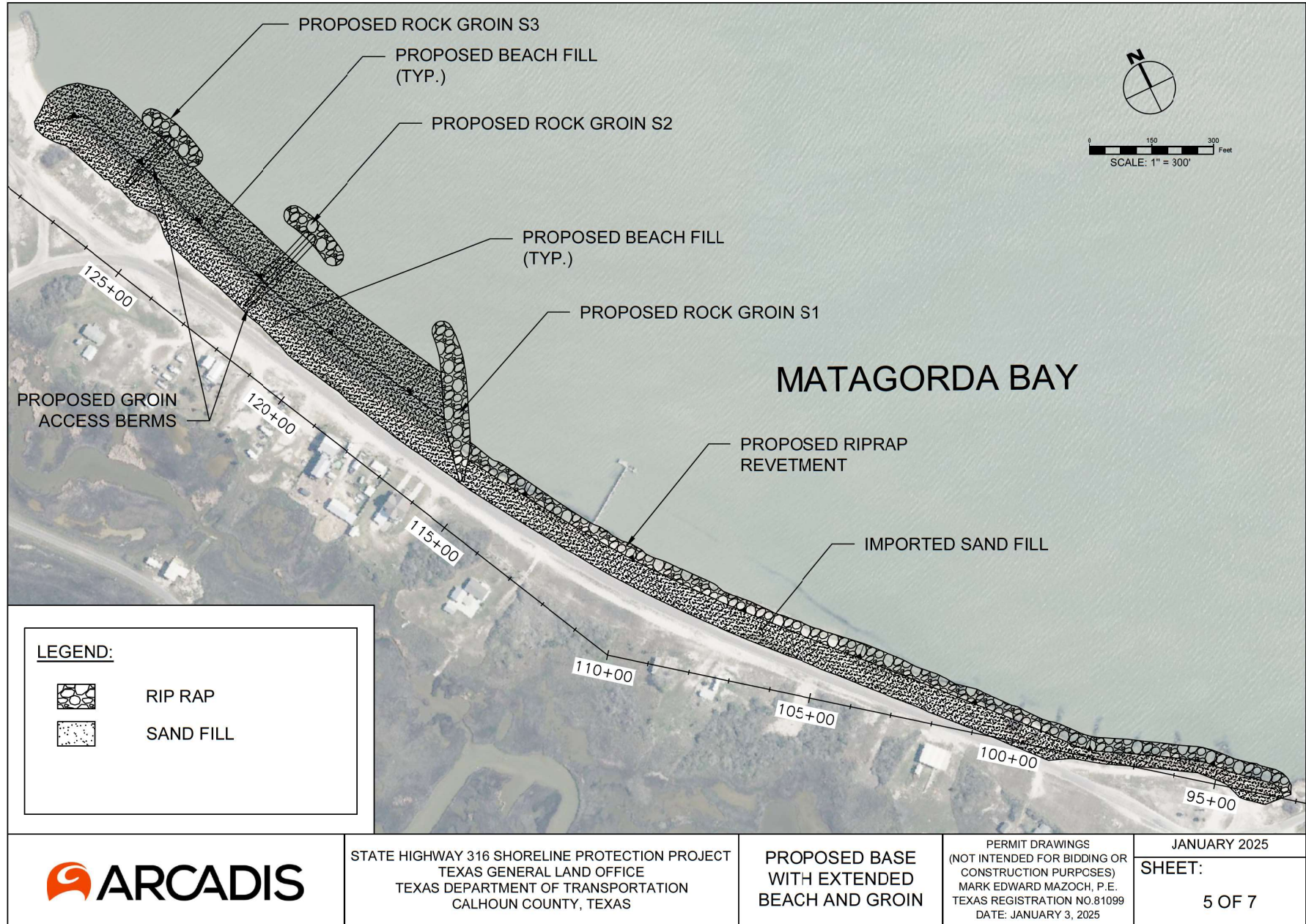
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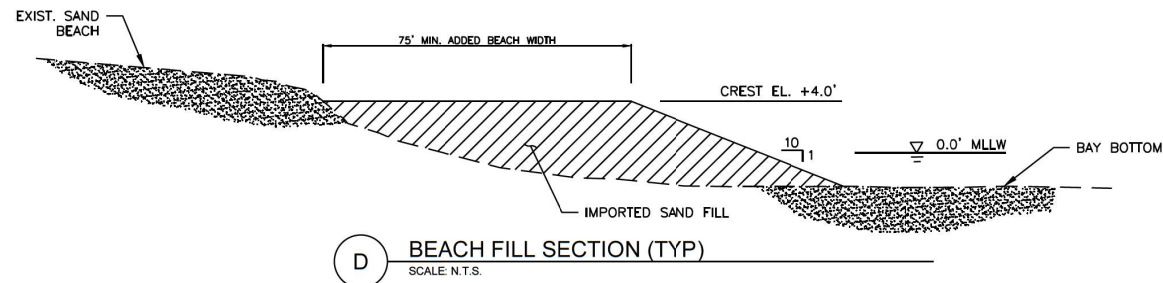
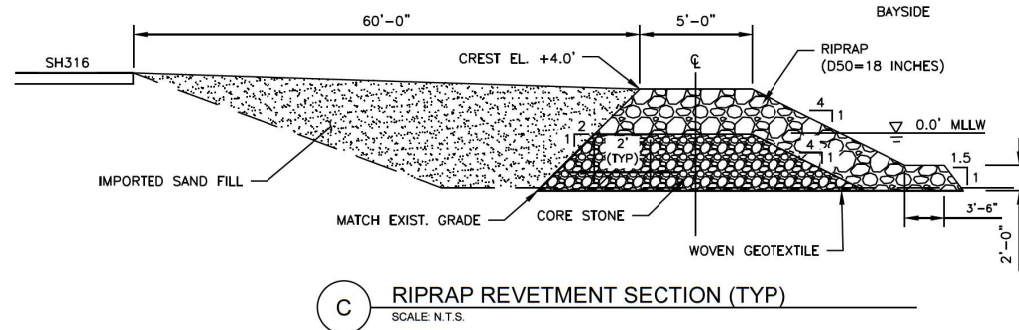
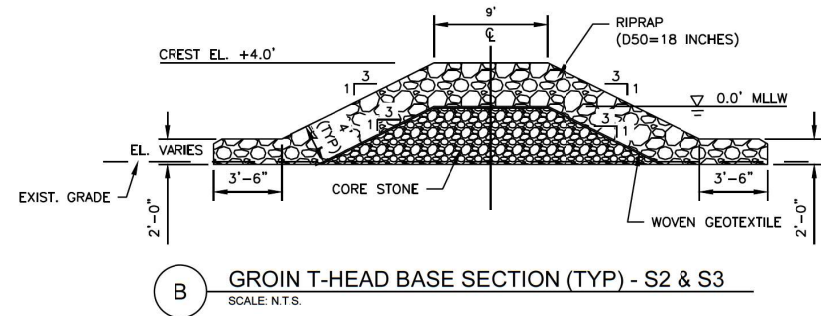
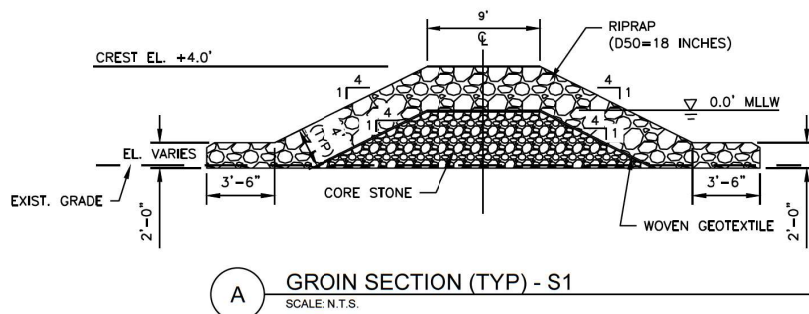
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DETAILS
SHEET 1 OF 2

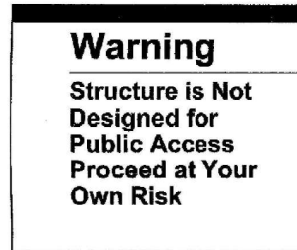
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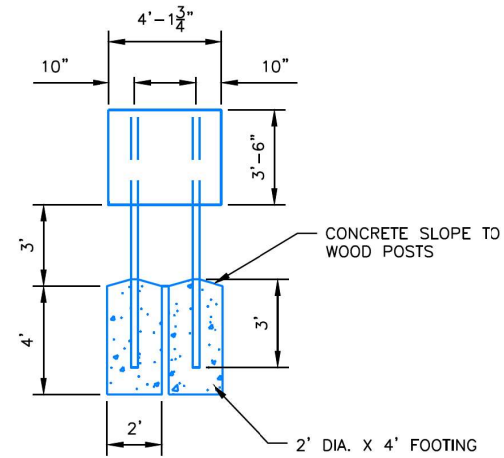
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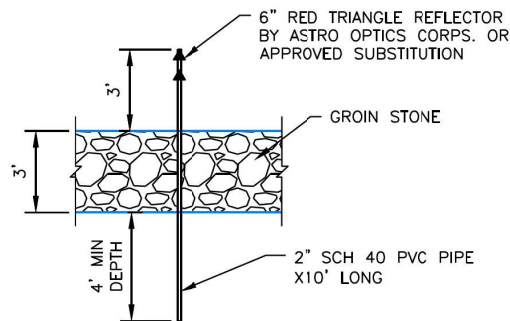


PANEL COLOR	LEMON YELLOW
LEGEND COLOR	BLACK
LEGEND SIZE	3"
VIEWING DISTANCE	84'
MOUNTED HEIGHT ABOVE GROUND LEVEL	36"
PANEL SIZE	49.75" X 42"
POST SIZE	2 - 4"X4" POSTS
SIGN TYPE	WWA-20
SIGN SPEC CODE	WTW-03
QUANTITY	9

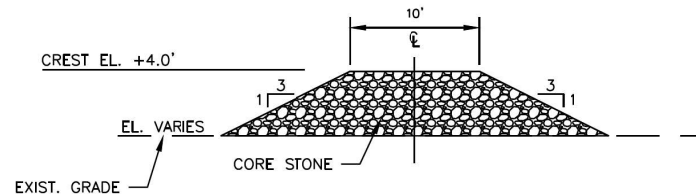
NOTE:
TIMBER SHALL BE NO. 1 STRUCTURAL GRADE SOUTHERN YELLOW PINE AND SHALL BE PRESSURE TREATED WITH CHROMATED-COPPER ARSENIC (CCA) IN ACCORDANCE WITH AWPA STANDARD C1, EXCEPT AS MODIFIED AND SUPPLEMENTED BY AWPA C2. RETENTION SHALL BE 2.5 LBS/CU FT. ALL TREATED TIMBER SHALL BE STORED AND HANDLED ACCORDING TO AWPA STANDARD M-4. USE OF PRESSURE HOLE TREATER IS REQUIRED FOR ANY FIELD TREATED IN ACCORDANCE WITH AWPA STANDARD M-4.



1 GROIN SIGN DETAIL (TYP)
SCALE: N.T.S.



2 GROIN MARKER DETAIL (TYP)
SCALE: N.T.S.



3 GROIN ACCESS BERM DETAIL (TYP)
SCALE: N.T.S.



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DETAILS
SHEET 2 OF 2

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