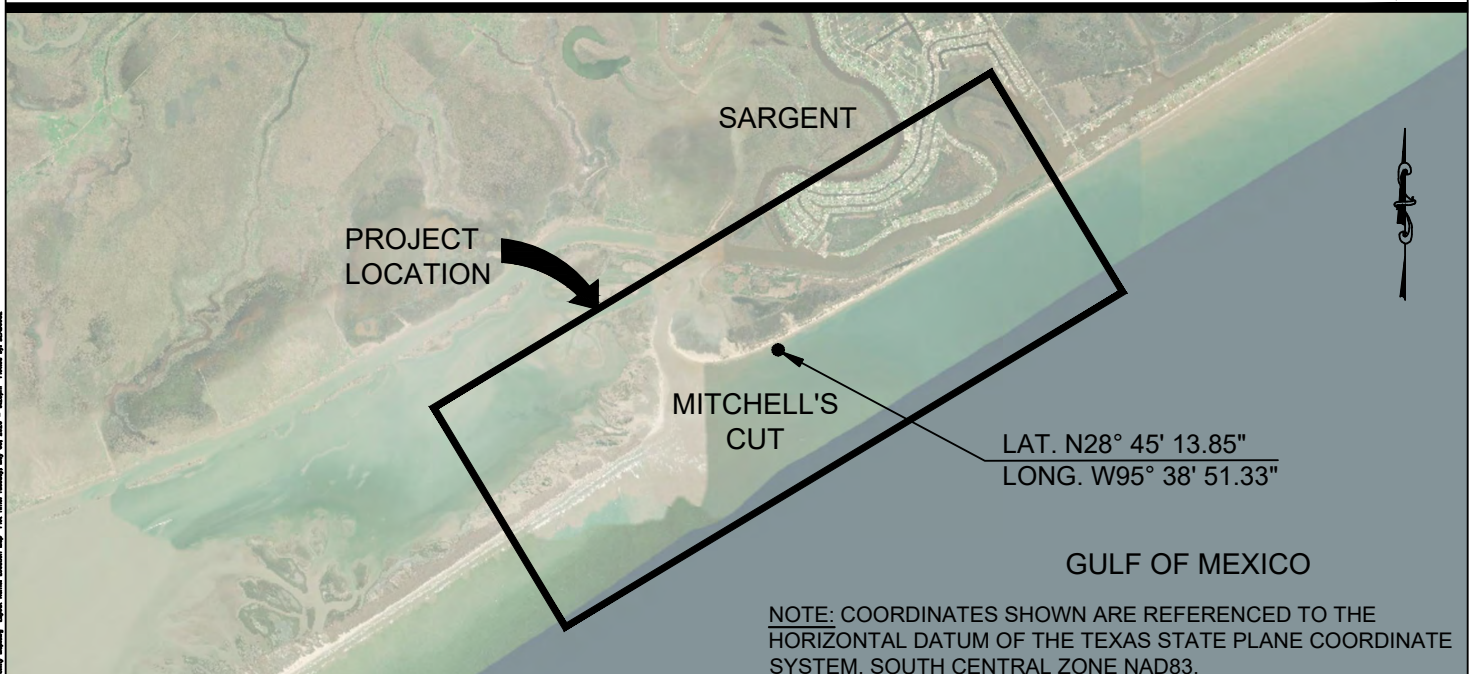




VICINITY MAP
SCALE: 1" = 25,000'



NOTE: COORDINATES SHOWN ARE REFERENCED TO THE HORIZONTAL DATUM OF THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE NAD83.

LOCATION MAP
SCALE: 1" = 6,000'

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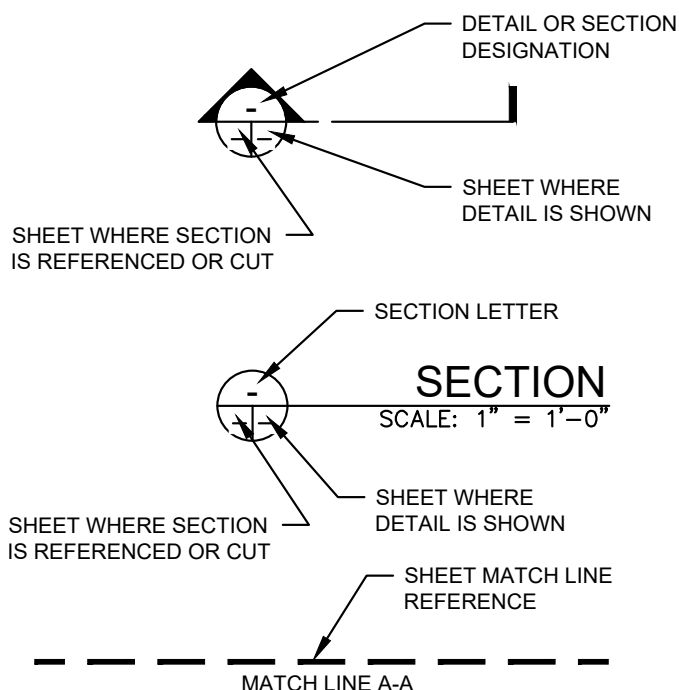
VICINITY/LOCATION MAP
**SARGENT BEACH SEGMENTED BREAKWATER
AND BEACH NOURISHMENT PROJECT**
MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS



JOB No.
100069624
CAD FILE
SHEET NUMBER
1/20

INDEX OF DRAWINGS:

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19. GROIN STRUCTURE DETAILS - 4
20. SAND SOURCE AREA MAP

DRAWING SYMBOLSSURVEY NOTES:

1. COASTAL BOUNDARY SURVEY LINE SHOWN PROVIDED BY COASTAL SURVEYING OF TEXAS, INC. PO. BOX 476, PORT BOLIVAR, TX. 77650. SURVEY PERFORMED ON MAY 15, 2018, JULY 7, 2018, AND ON FEBRUARY 23, 2019.
2. ALL DISTANCES ARE GRID DISTANCES AND ARE SHOWN IN U.S. SURVEY FEET.
3. ALL BEARINGS SHOWN HEREON ARE GRID BEARINGS AND REFER TO THE TEXAS COORDINATE SYSTEM OF 1983 - SOUTH CENTRAL ZONE, AS DEFINED BY ARTICLE 21.070 OF THE NATURAL RESOURCE CODE OF THE STATE OF TEXAS.
4. ALL COORDINATES SHOWN HEREON ARE GRID COORDINATES AND REFER TO THE TEXAS COORDINATE SYSTEM OF 1983 - SOUTH CENTRAL ZONE, AS DEFINED BY ARTICLE 21.070 OF THE NATURAL RESOURCE CODE OF THE STATE OF TEXAS.
5. ATKINS HAS ESTABLISHED SURVEY CONTROL BASED ON TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD83) AND NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). UPLAND SURVEY DATA WAS COLLECTED BY ATKINS SURVEYORS FROM THE LANDWARD TOE OF DUNE SEAWARD TO A WATER DEPTH OF -3 FEET. SURVEY WAS PERFORMED UTILIZING A LEICA C-10 LASER SCANNER AND SUPPLEMENTED WITH GPS AND CONVENTIONAL SURVEY TECHNIQUES FOR WADING DEPTHS. TERRESTRIAL SURVEY COMPLETED ON JULY 2, 2018.
6. BATHYMETRIC SURVEY DATA HAS BEEN COLLECTED BY ATKINS SURVEYORS OUT TO DEPTH OF CLOSURE (-25 FEET) USING MULTI-BEAM TECHNOLOGY. IN THE NEARSHORE WATERS TO A DEPTH OF APPROXIMATELY -3 FEET, DATA COLLECTION WAS SUPPLEMENTED WITH SINGLE BEAM TRANSECTS EVERY 500 FEET. BATHYMETRIC SURVEY COMPLETED ON AUGUST 2, 2018.
7. TERRESTRIAL AND BATHYMETRIC DATA SETS HAVE BEEN PROCESSED AND MERGED TO CREATE A COMPREHENSIVE DIGITAL TERRAIN MODEL (DTM) AND PRODUCE 1-FOOT ELEVATION CONTOURS.
8. VERTICAL ELEVATION DATA FOR ALL SURVEYS IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
9. CURRENT STRUCTURE LAYOUTS ARE BASED ON THE CURRENT BEST AVAILABLE SURVEY DATA AND MAY CHANGE BASED ON FUTURE SURVEY DATA.

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INDEX OF DRAWINGS AND NOTES**SARGENT BEACH SEGMENTED BREAKWATER
AND BEACH NOURISHMENT PROJECT**

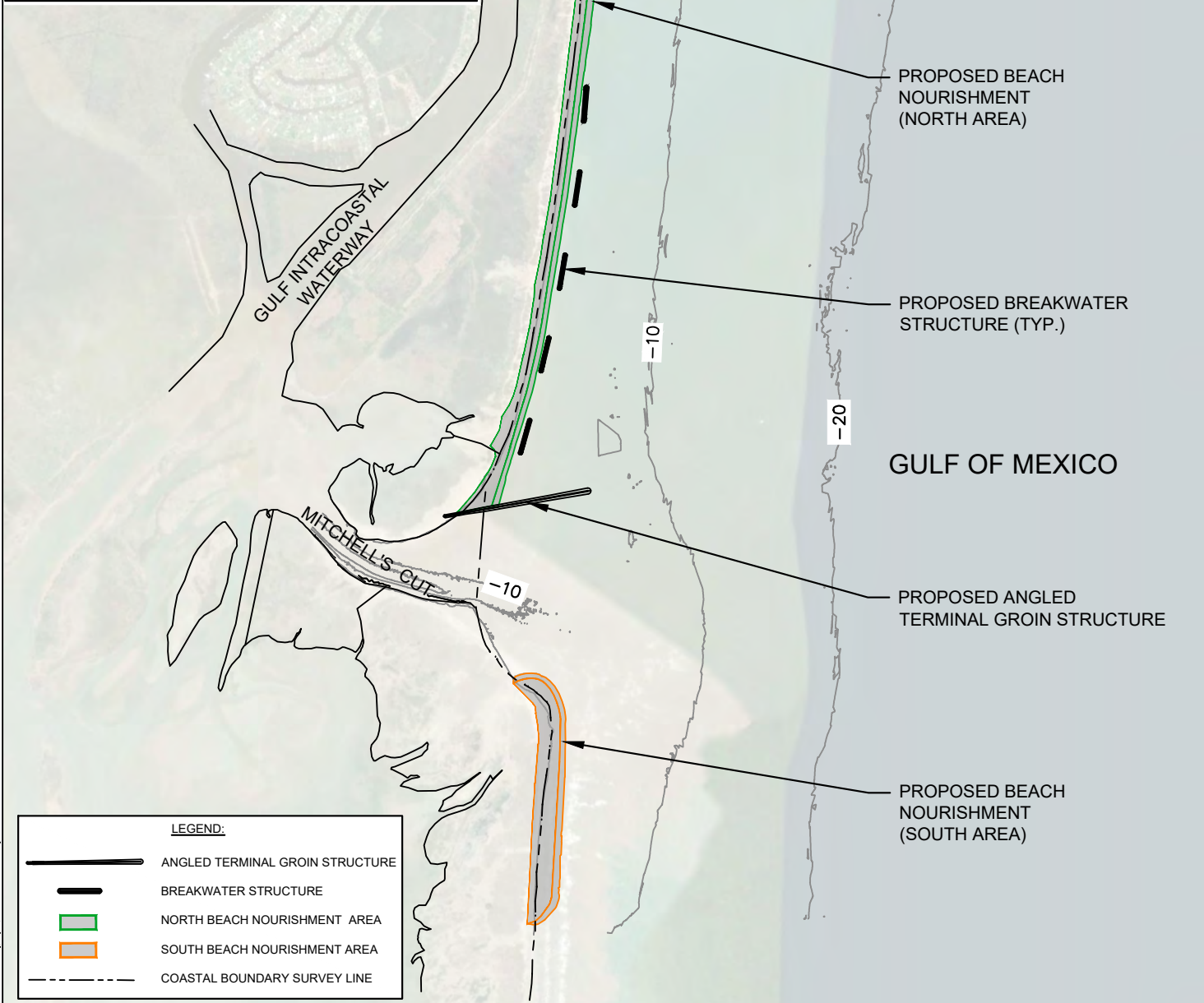
MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS



JOB No.
100069624
CAD FILE
SHEET NUMBER
2/20

SARGENT

PROJECT COMPONENT	APPROXIMATE CUMULATIVE LENGTH (FT)	APPROXIMATE CUMULATIVE SURFACE AREA (AC)	APPROXIMATE CUMULATIVE VOLUME (CY)
NORTH BEACH NOURISHMENT	8,000	42.38	215,000
SOUTH BEACH NOURISHMENT	3,250	28.39	185,000
BREAKWATER STRUCTURES	2,430	2.94	35,270
ANGLED TERMINAL GROIN STRUCTURE	1,950	2.56	31,675



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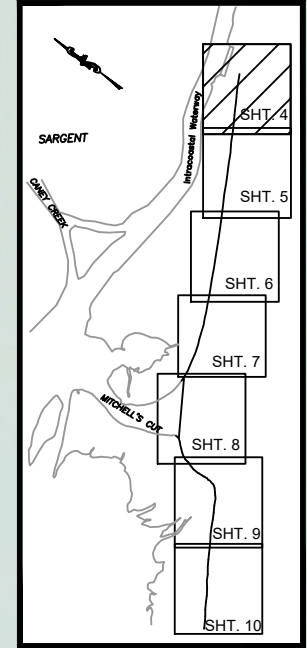
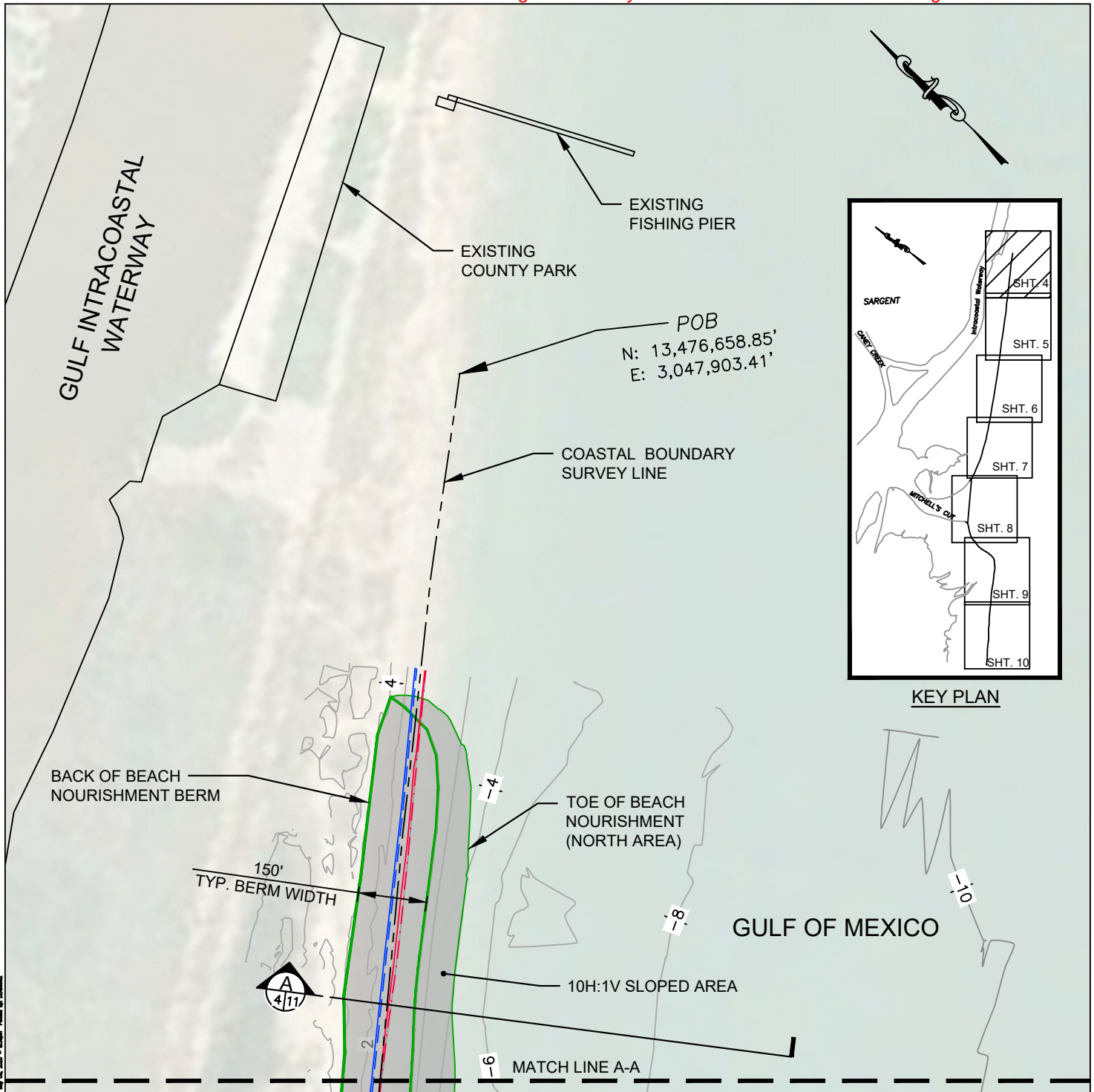
OVERALL SITE PLAN

**SARGENT BEACH SEGMENTED BREAKWATER
AND BEACH NOURISHMENT PROJECT**

MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS



JOB No.
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CAD FILE
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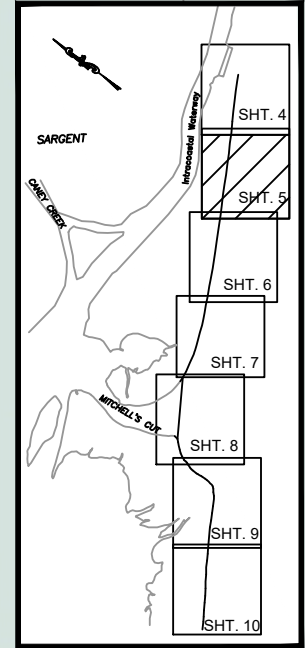
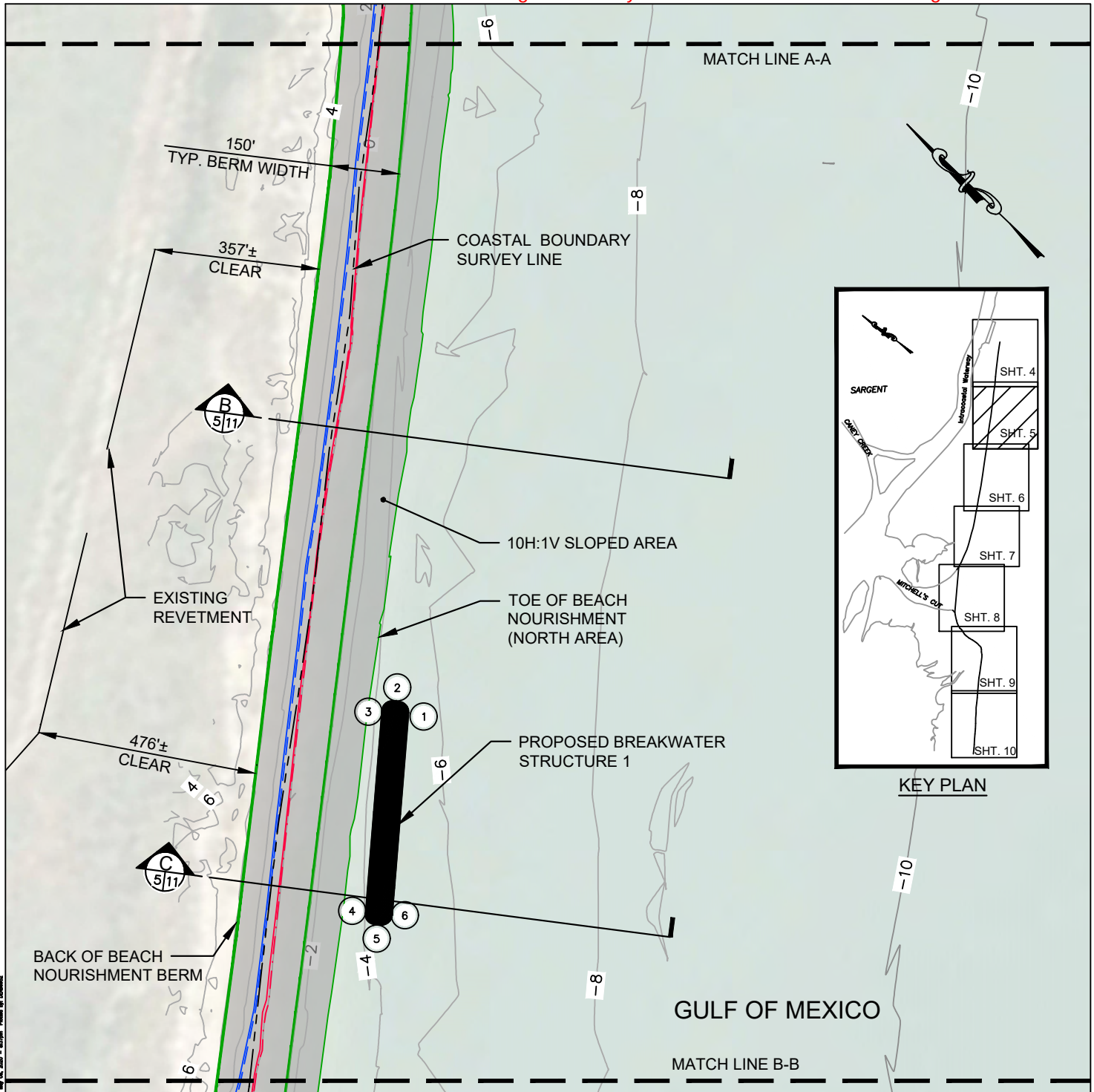
KEY PLAN

WATER LEVELS, FT. (NAVD88) SARGENT, TX. STATION ID: 8772985		LEGEND: 1 REFERENCE POINT OF BREAKWATER; SEE SHT. 14 FOR COORDINATE TABLE ANGED TERMINAL GROIN STRUCTURE BREAKWATER STRUCTURE NORTH BEACH NOURISHMENT AREA SOUTH BEACH NOURISHMENT AREA COASTAL BOUNDARY SURVEY LINE		NOTES: 1. BACK OF BEACH NOURISHMENT BERM TO INTERSECT EXISTING +4.0 FT (NAVD88) LANDSIDE. 2. SECTIONS SHOWN AT 1000' INTERVALS.	
MHHW	+1.04 FT.			0 300' 600' SCALE: 1" = 300'-0"	
MHW	+1.00 FT.				
MLW	+0.33 FT.				
MLLW	+0.31 FT.				

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SITE PLAN 1
SARGENT BEACH SEGMENTED BREAKWATER AND BEACH NOURISHMENT PROJECT
 MATAGORDA COUNTY
 SARGENT BEACH, MATAGORDA COUNTY, TEXAS

 TEXAS GENERAL LAND OFFICE	 MATAGORDA COUNTY TEXAS	JOB No. 100069624 CAD FILE SHEET NUMBER 4/20
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KEY PLAN

WATER LEVELS, FT. (NAVD88) SARGENT, TX. STATION ID: 8772985 <table style="width: 100%;"> <tr> <td>MHHW</td> <td>+1.04 FT.</td> <td>———</td> </tr> <tr> <td>MHW</td> <td>+1.00 FT.</td> <td>———</td> </tr> <tr> <td>MLW</td> <td>+0.33 FT.</td> <td>———</td> </tr> <tr> <td>MLLW</td> <td>+0.31 FT.</td> <td>———</td> </tr> </table>	MHHW	+1.04 FT.	———	MHW	+1.00 FT.	———	MLW	+0.33 FT.	———	MLLW	+0.31 FT.	———	LEGEND: <table style="width: 100%;"> <tr> <td style="text-align: center;">①</td> <td>REFERENCE POINT OF BREAKWATER; SEE SHT. 14 FOR COORDINATE TABLE</td> </tr> <tr> <td style="text-align: center;">—</td> <td>ANGLED TERMINAL GROIN STRUCTURE</td> </tr> <tr> <td style="text-align: center;">—</td> <td>BREAKWATER STRUCTURE</td> </tr> <tr> <td style="text-align: center;">■</td> <td>NORTH BEACH NOURISHMENT AREA</td> </tr> <tr> <td style="text-align: center;">■</td> <td>SOUTH BEACH NOURISHMENT AREA</td> </tr> <tr> <td style="text-align: center;">---</td> <td>COASTAL BOUNDARY SURVEY LINE</td> </tr> </table>	①	REFERENCE POINT OF BREAKWATER; SEE SHT. 14 FOR COORDINATE TABLE	—	ANGLED TERMINAL GROIN STRUCTURE	—	BREAKWATER STRUCTURE	■	NORTH BEACH NOURISHMENT AREA	■	SOUTH BEACH NOURISHMENT AREA	---	COASTAL BOUNDARY SURVEY LINE	NOTES: - BACK OF BEACH NOURISHMENT BERM TO INTERSECT EXISTING +4.0 FT (NAVD88) LANDSIDE. - SECTIONS SHOWN AT 1000' INTERVALS. SCALE: 1" = 300'-0"
MHHW	+1.04 FT.	———																								
MHW	+1.00 FT.	———																								
MLW	+0.33 FT.	———																								
MLLW	+0.31 FT.	———																								
①	REFERENCE POINT OF BREAKWATER; SEE SHT. 14 FOR COORDINATE TABLE																									
—	ANGLED TERMINAL GROIN STRUCTURE																									
—	BREAKWATER STRUCTURE																									
■	NORTH BEACH NOURISHMENT AREA																									
■	SOUTH BEACH NOURISHMENT AREA																									
---	COASTAL BOUNDARY SURVEY LINE																									

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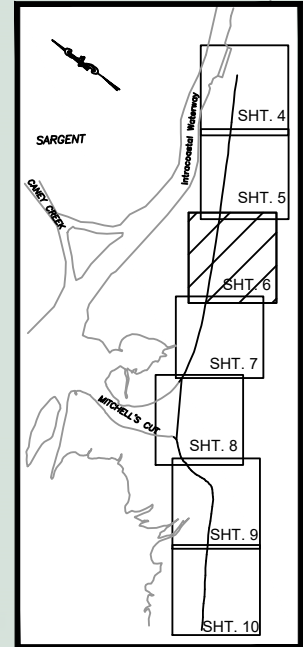
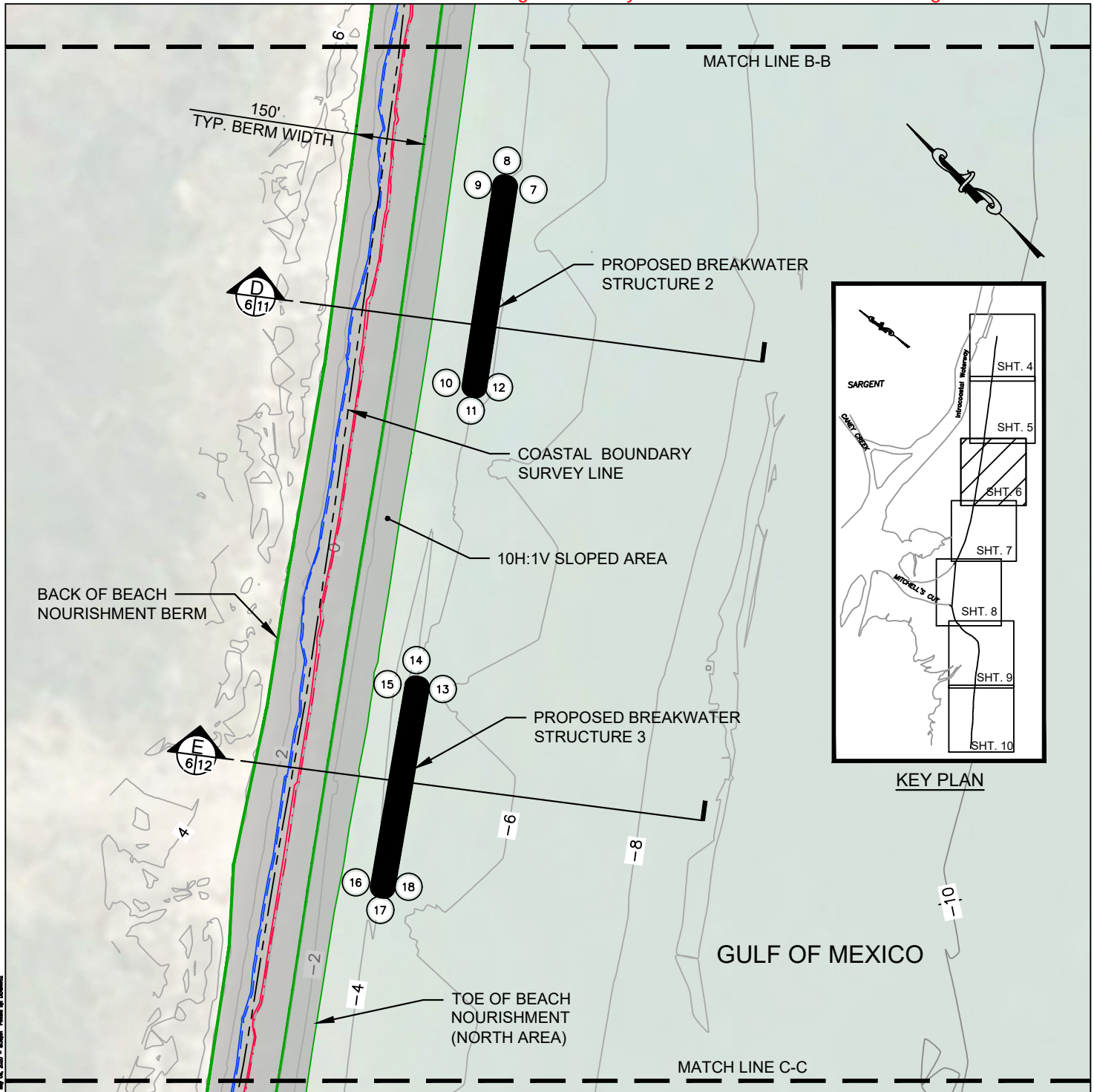
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SITE PLAN 2

**SARGENT BEACH SEGMENTED BREAKWATER
AND BEACH NOURISHMENT PROJECT**

MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS

JOB No. 100069624 CAD FILE	SHEET NUMBER 5/20
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KEY PLAN

LEGEND:

1

REFERENCE POINT OF BREAKWATER;
SEE SHT. 14 FOR COORDINATE TABLE

ANGLED TERMINAL GROIN STRUCTURE

BREAKWATER STRUCTURE

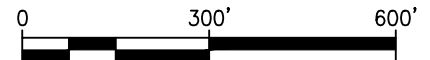
NORTH BEACH NOURISHMENT AREA

SOUTH BEACH NOURISHMENT AREA

COASTAL BOUNDARY SURVEY LINE

NOTES:

1. BACK OF BEACH NOURISHMENT BERM TO INTERSECT EXISTING +4.0 FT (NAVD88) LANDSIDE.
2. SECTIONS SHOWN AT 1000' INTERVALS.



SCALE: 1" = 300'-0"

WATER LEVELS, FT. (NAVD88)
SARGENT, TX. STATION ID: 8772985

MHHW	+1.04 FT.	---
MHW	+1.00 FT.	---
MLW	+0.33 FT.	---
MLLW	+0.31 FT.	---

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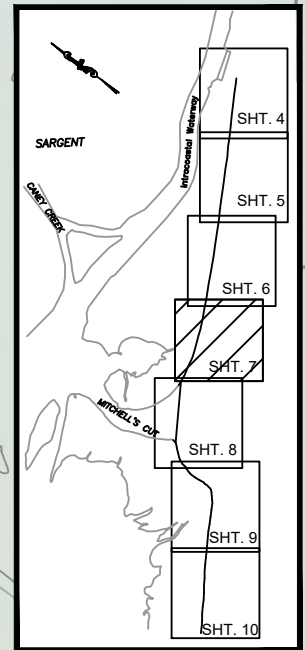
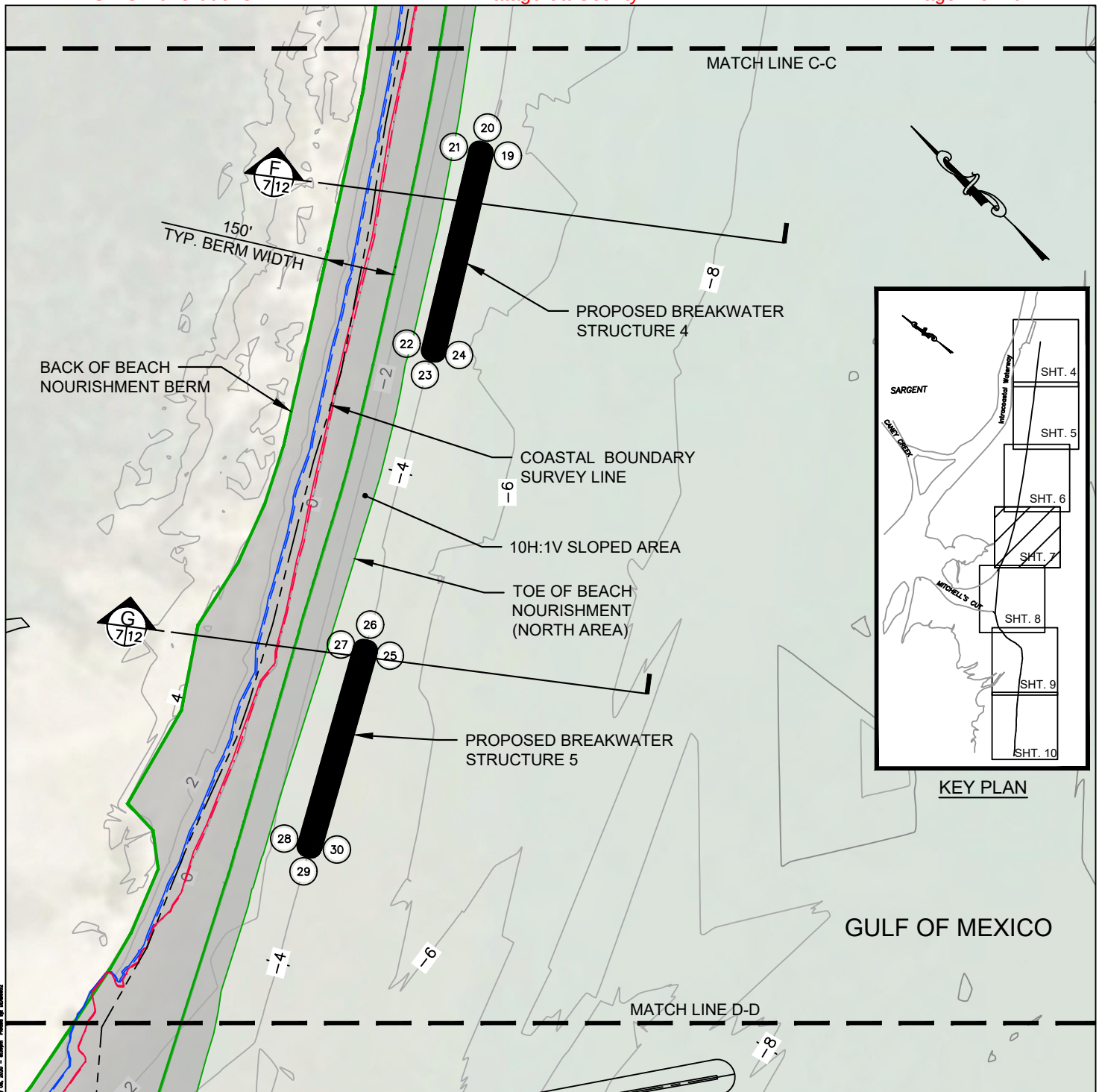
SITE PLAN 3

**SARGENT BEACH SEGMENTED BREAKWATER
AND BEACH NOURISHMENT PROJECT**

MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS



JOB No.
100069624
CAD FILE
SHEET NUMBER
6/20



KEY PLAN

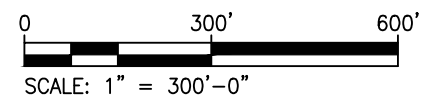
GULF OF MEXICO

WATER LEVELS, FT. (NAVD88)		
SARGENT, TX. STATION ID: 8772985		
MHHW	+1.04 FT.	—
MHW	+1.00 FT.	—
MLW	+0.33 FT.	—
MLLW	+0.31 FT.	—

LEGEND:	
①	REFERENCE POINT OF BREAKWATER; SEE SHT. 14 FOR COORDINATE TABLE
—	ANGLED TERMINAL GROIN STRUCTURE
—	BREAKWATER STRUCTURE
—	NORTH BEACH NOURISHMENT AREA
—	SOUTH BEACH NOURISHMENT AREA
—	COASTAL BOUNDARY SURVEY LINE

NOTES:

1. BACK OF BEACH NOURISHMENT BERM TO INTERSECT EXISTING +4.0 FT (NAVD88) LANDSIDE.
2. SECTIONS SHOWN AT 1000' INTERVALS.



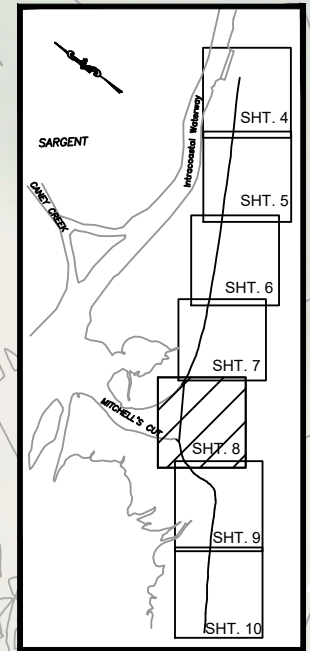
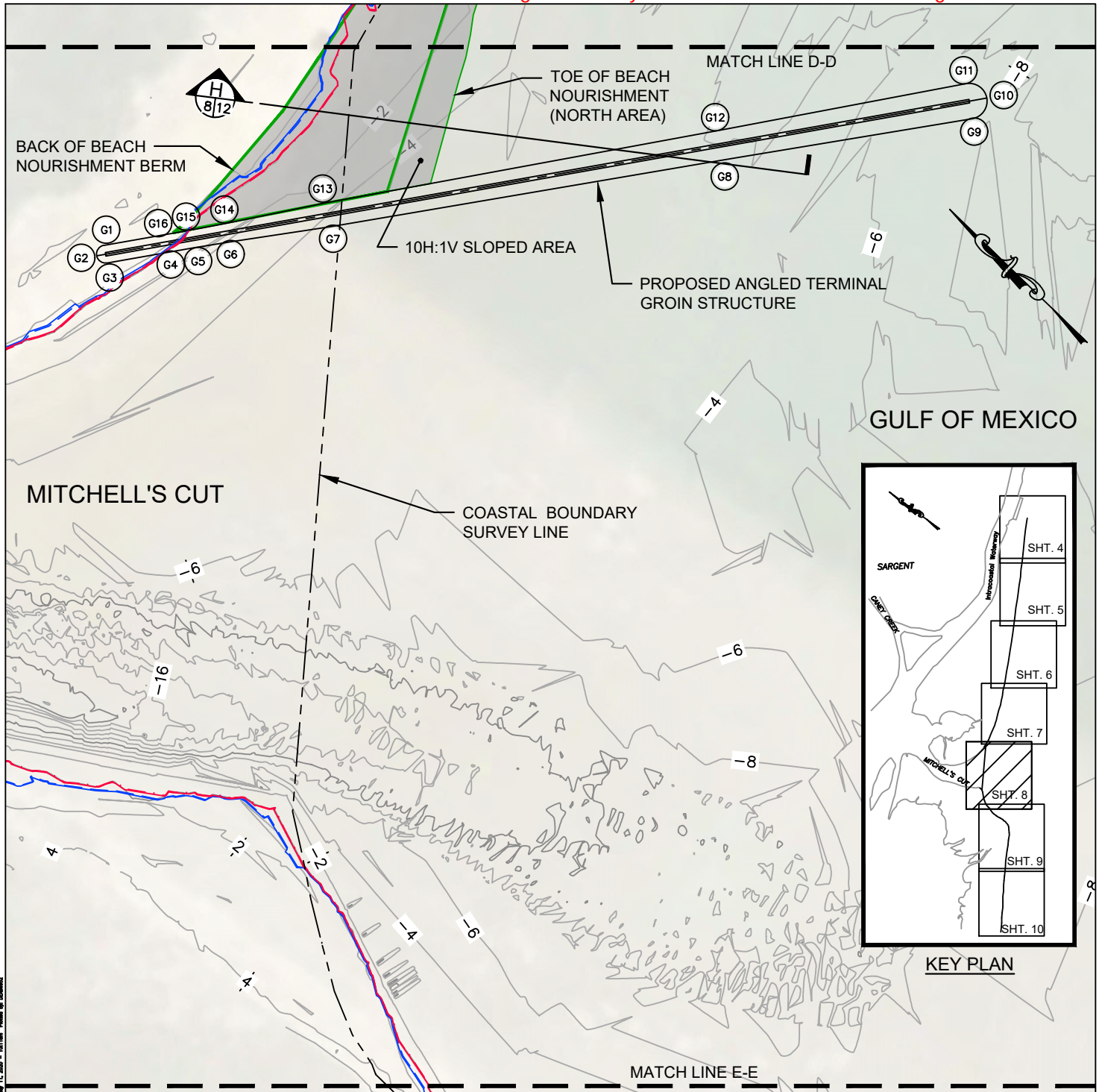
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SITE PLAN 4
**SARGENT BEACH SEGMENTED BREAKWATER
AND BEACH NOURISHMENT PROJECT**
MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS



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CAD FILE
SHEET NUMBER
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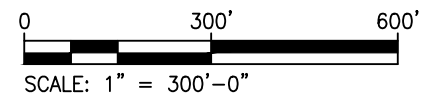
KEY PLAN

WATER LEVELS, FT. (NAVD88) SARGENT, TX. STATION ID: 8772985		
MHHW	+1.04 FT.	—
MHW	+1.00 FT.	—
MLW	+0.33 FT.	—
MLLW	+0.31 FT.	—

LEGEND:	
(G1)	REFERENCE POINT OF GROIN STRUCTURE; SEE SHT. 16 FOR COORDINATE TABLE
—	ANGLED TERMINAL GROIN STRUCTURE
—	BREAKWATER STRUCTURE
—	NORTH BEACH NOURISHMENT AREA
—	SOUTH BEACH NOURISHMENT AREA
---	COASTAL BOUNDARY SURVEY LINE

NOTES:

1. BACK OF BEACH NOURISHMENT BERM TO INTERSECT EXISTING +4.0 FT (NAVD88) LANDSIDE.
2. SECTIONS SHOWN AT 1000' INTERVALS.



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SITE PLAN 5
**SARGENT BEACH SEGMENTED BREAKWATER
AND BEACH NOURISHMENT PROJECT**
MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS



JOB No.
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CAD FILE
SHEET NUMBER
8/20



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NOTES:

-
- 0 300' 600'
- SCALE: 1" = 300'-0"

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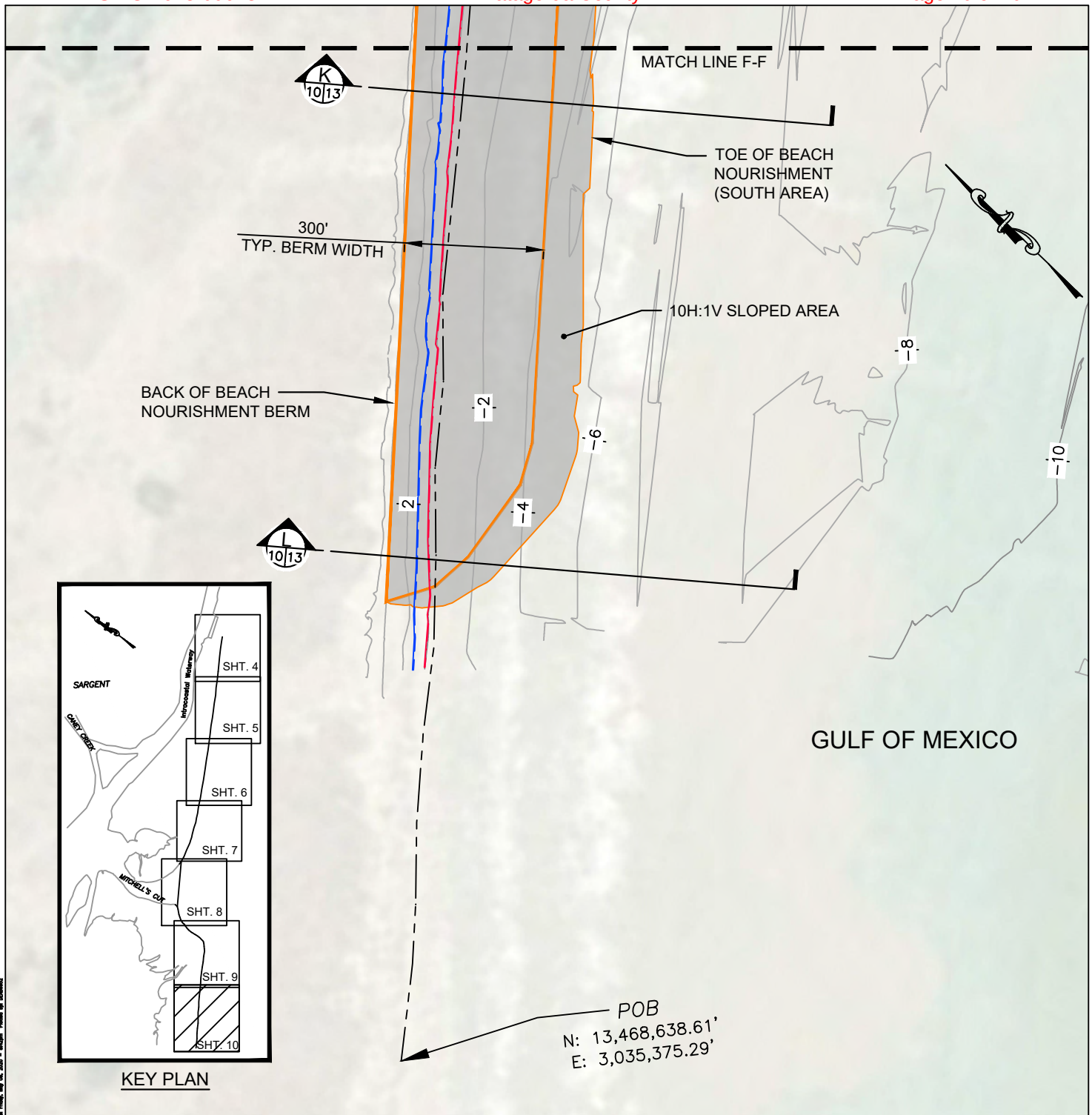
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MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS



JOB No.
100069624
CAD FILE

SHEET NUMBER
9/20

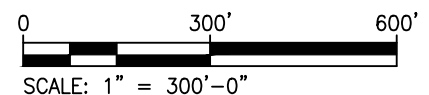


WATER LEVELS, FT. (NAVD88)		
SARGENT, TX. STATION ID: 8772985		
MHHW	+1.04 FT.	— (solid blue line)
MHW	+1.00 FT.	— (dashed blue line)
MLW	+0.33 FT.	— (solid red line)
MLLW	+0.31 FT.	— (dashed red line)

LEGEND:	
	ANGLED TERMINAL GROIN STRUCTURE
	BREAKWATER STRUCTURE
	NORTH BEACH NOURISHMENT AREA
	SOUTH BEACH NOURISHMENT AREA
	COASTAL BOUNDARY SURVEY LINE

NOTES:

1. BACK OF BEACH NOURISHMENT BERM TO INTERSECT EXISTING +4.0 FT (NAVD88) LANDSIDE.
2. SECTIONS SHOWN AT 1000' INTERVALS.



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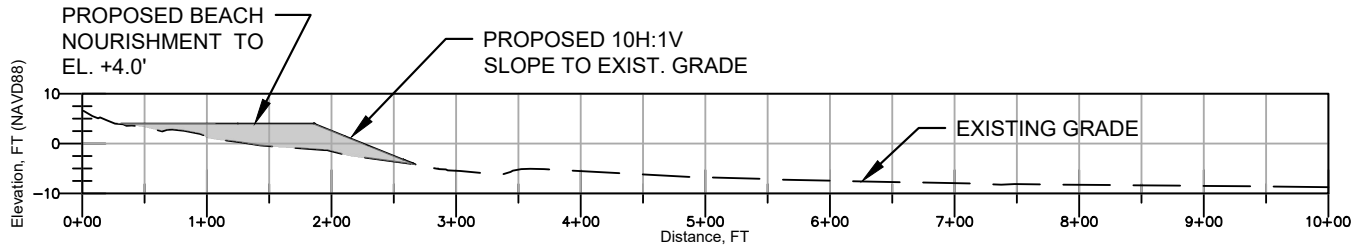
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SITE PLAN 7

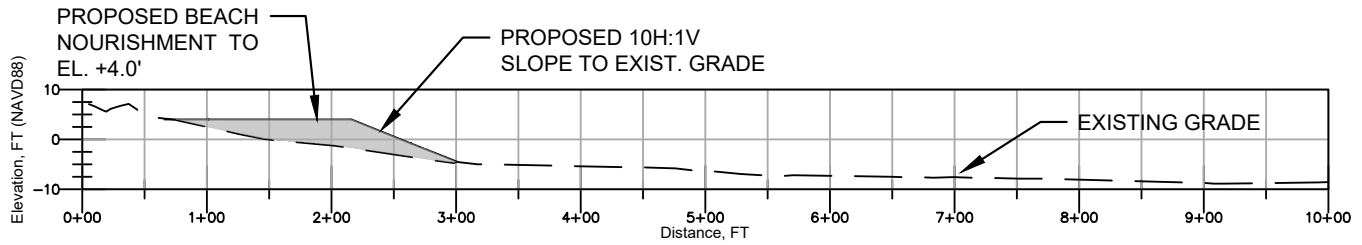
**SARGENT BEACH SEGMENTED BREAKWATER
AND BEACH NOURISHMENT PROJECT**
MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS



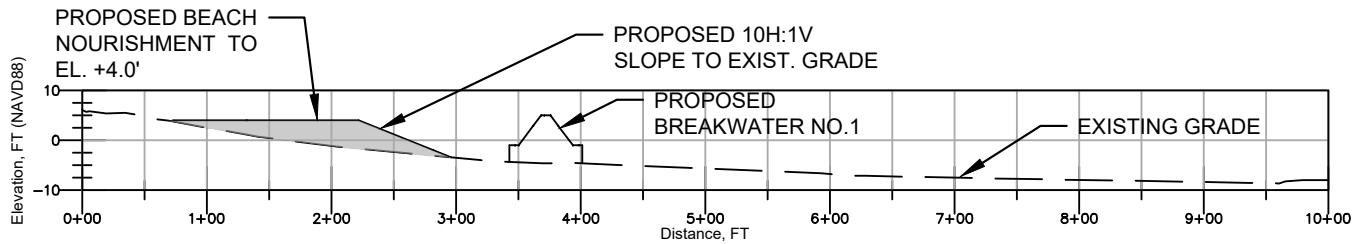
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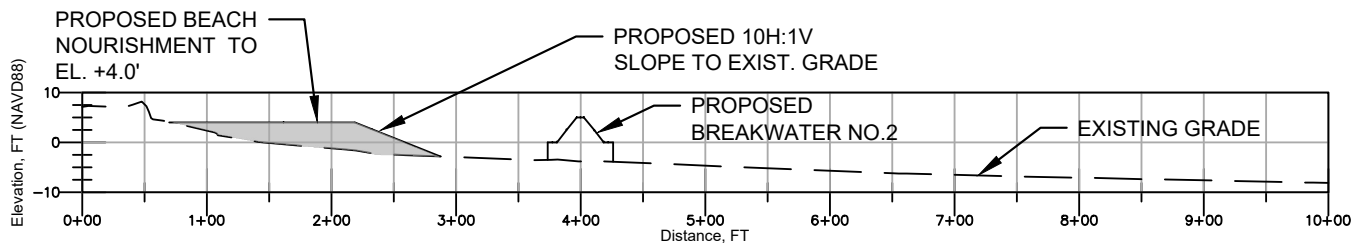
A SECTION
4 | 11



B SECTION
5 | 11



C SECTION
5 | 11



D SECTION
6 | 11

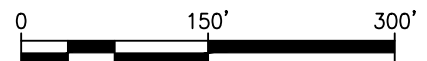
NOTES:

1. SCALES SHOWN EXAGGERATED FOR CLARITY:
4 VERTICAL: 1 HORIZONTAL
2. VERTICAL DATUM IS NAVD88

WATER LEVELS, FT. (NAVD88)
SARGENT, TX. STATION ID: 8772985

MHHW	+1.04 FT.
MHW	+1.00 FT.
MLW	+0.33 FT.
MLLW	+0.31 FT.

HORIZONTAL SCALE:



SCALE: 1" = 150'-0"

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NORTH BEACH SECTIONS - 1

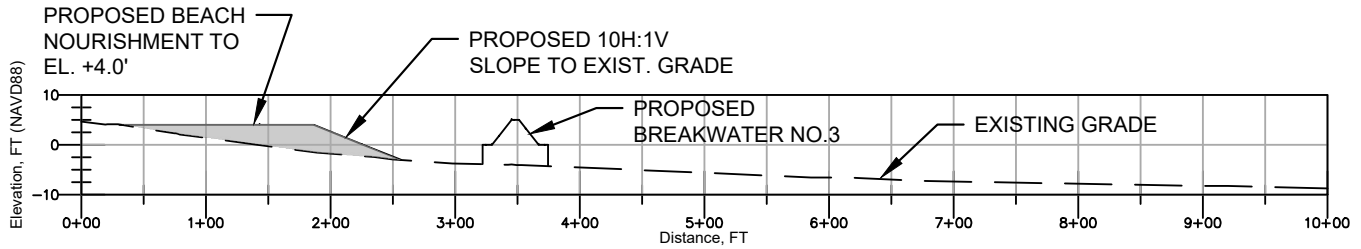
**SARGENT BEACH SEGMENTED BREAKWATER
AND BEACH NOURISHMENT PROJECT**

MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS

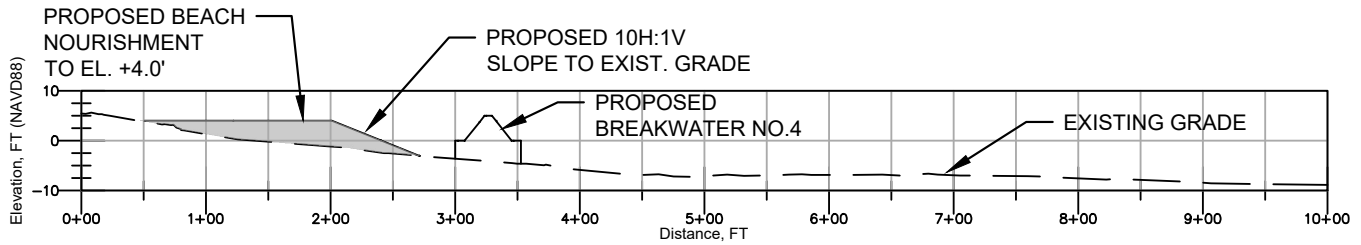


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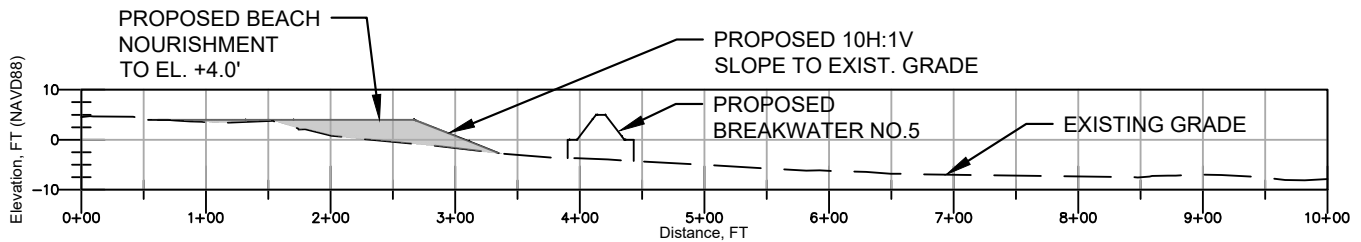
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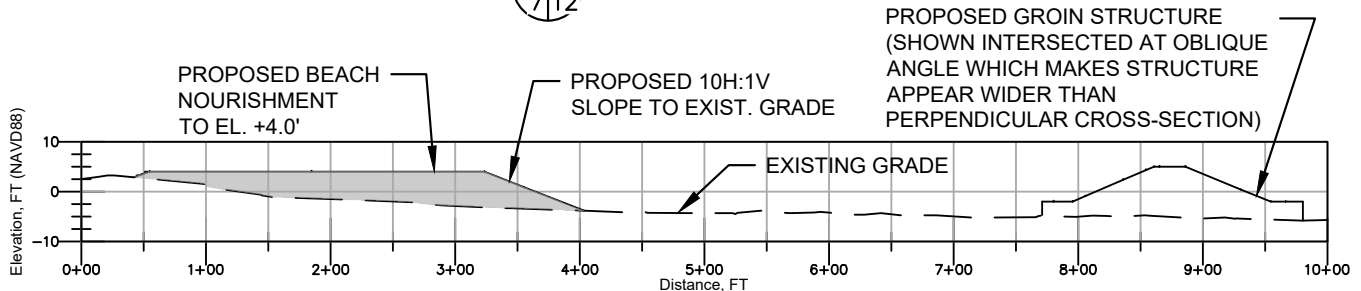
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6/12
SECTION



F
7/12
SECTION



G
7/12
SECTION



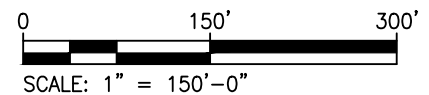
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8/12
SECTION

NOTES:

1. SCALES SHOWN EXAGGERATED FOR CLARITY:
4 VERTICAL: 1 HORIZONTAL
2. VERTICAL DATUM IS NAVD88

WATER LEVELS, FT. (NAVD88)	
SARGENT, TX. STATION ID: 8772985	
MHHW	+1.04 FT.
MHW	+1.00 FT.
MLW	+0.33 FT.
MLLW	+0.31 FT.

HORIZONTAL SCALE:



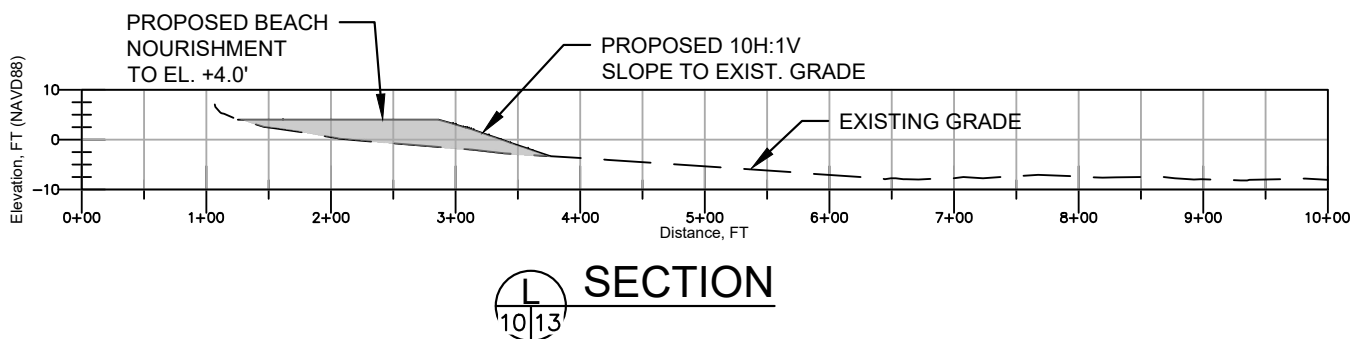
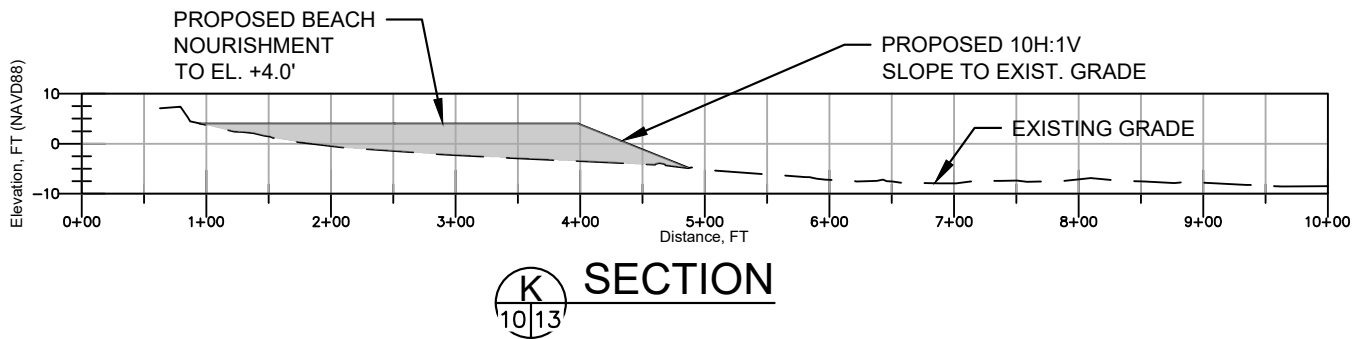
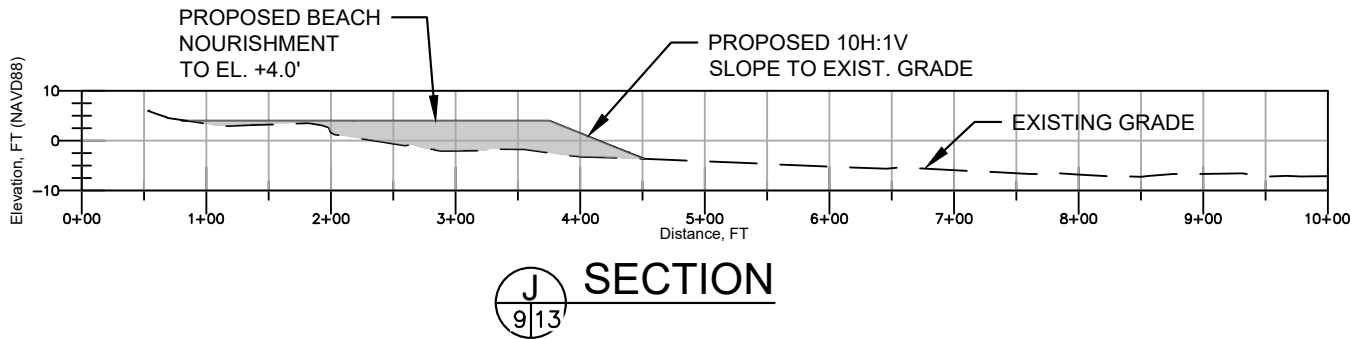
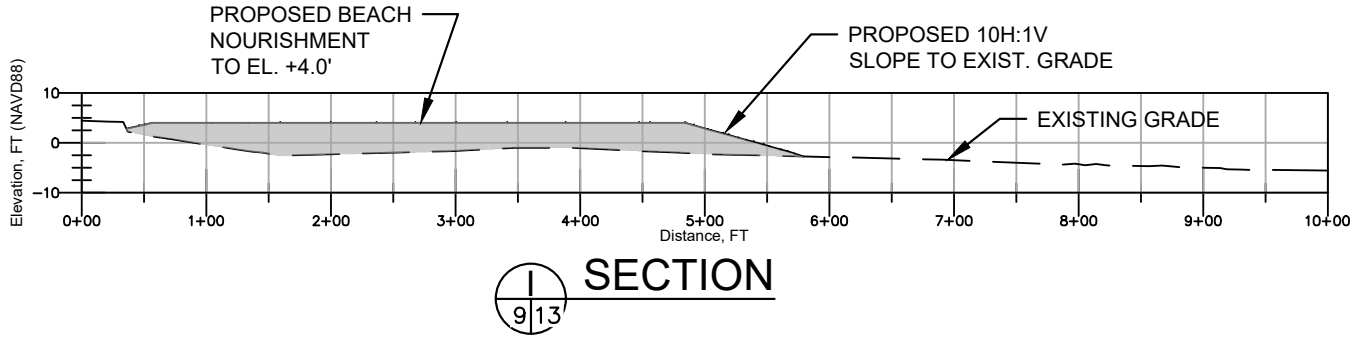
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NORTH BEACH SECTIONS - 2
**SARGENT BEACH SEGMENTED BREAKWATER
AND BEACH NOURISHMENT PROJECT**
MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS



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CAD FILE
SHEET NUMBER
12/20

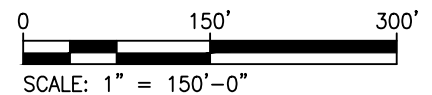


NOTES:

1. SCALES SHOWN EXAGGERATED FOR CLARITY:
4 VERTICAL: 1 HORIZONTAL
2. VERTICAL DATUM IS NAVD88

WATER LEVELS, FT. (NAVD88)	
SARGENT, TX. STATION ID: 8772985	
MHW	+1.04 FT.
MW	+1.00 FT.
MLW	+0.33 FT.
MLLW	+0.31 FT.

HORIZONTAL SCALE:



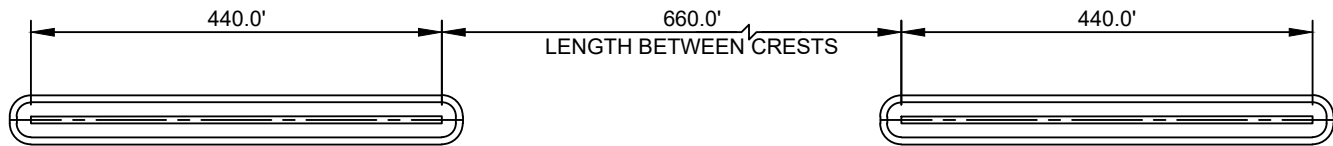
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SOUTH BEACH SECTIONS
**SARGENT BEACH SEGMENTED BREAKWATER
AND BEACH NOURISHMENT PROJECT**
MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS

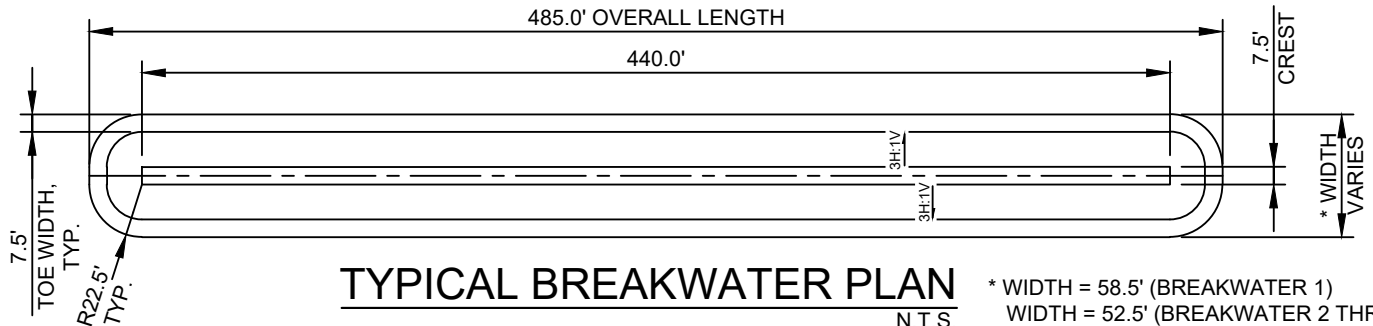


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SHEET NUMBER
13/20



BREAKWATER SPACING PLAN

NTS



TYPICAL BREAKWATER PLAN

N.T.S.

* WIDTH = 58.5' (BREAKWATER 1)
 WIDTH = 52.5' (BREAKWATER 2 THRU 5)

BREAKWATER LOCATION COORDINATE POINTS

BREAKWATER NO.	POINT NO.	NORTHING	EASTING	LATITUDE	LONGITUDE
1	1	13474997.72	3045434.23	N28° 45' 28.48"	W95° 38' 17.77"
	2	13475034.41	3045438.22	N28° 45' 28.84"	W95° 38' 17.71"
	3	13475047.67	3045403.79	N28° 45' 28.98"	W95° 38' 18.09"
	4	13474818.65	3045028.09	N28° 45' 26.82"	W95° 38' 22.38"
	5	13474781.97	3045024.10	N28° 45' 26.46"	W95° 38' 22.49"
	6	13474768.70	3045058.53	N28° 45' 26.32"	W95° 38' 22.06"
2	7	13474423.49	3044490.74	N28° 45' 23.07"	W95° 38' 28.55"
	8	13474453.80	3044500.42	N28° 45' 23.36"	W95° 38' 28.43"
	9	13474470.14	3044466.67	N28° 45' 23.53"	W95° 38' 28.80"
	10	13474268.37	3044075.66	N28° 45' 21.65"	W95° 38' 33.26"
	11	13474234.72	3044067.70	N28° 45' 21.32"	W95° 38' 33.36"
	12	13474221.71	3044099.73	N28° 45' 21.18"	W95° 38' 33.00"
3	13	13473940.47	3043502.00	N28° 45' 18.57"	W95° 38' 39.81"
	14	13473970.60	3043512.24	N28° 45' 18.86"	W95° 38' 39.68"
	15	13473987.56	3043478.79	N28° 45' 19.04"	W95° 38' 40.05"
	16	13473793.07	3043084.11	N28° 45' 17.23"	W95° 38' 44.55"
	17	13473756.21	3043077.19	N28° 45' 16.86"	W95° 38' 44.64"
	18	13473745.98	3043107.32	N28° 45' 16.75"	W95° 38' 44.30"
4	19	13473476.44	3042502.81	N28° 45' 14.26"	W95° 38' 51.18"
	20	13473509.32	3042513.50	N28° 45' 14.58"	W95° 38' 51.05"
	21	13473524.92	3042482.64	N28° 45' 14.74"	W95° 38' 51.39"
	22	13473355.89	3042076.40	N28° 45' 13.19"	W95° 38' 56.01"
	23	13473319.55	3042067.15	N28° 45' 12.83"	W95° 38' 56.12"
	24	13473307.42	3042096.57	N28° 45' 12.70"	W95° 38' 55.80"
5	25	13473047.61	3041488.09	N28° 45' 10.30"	W95° 39' 02.71"
	26	13473080.01	3041500.17	N28° 45' 10.62"	W95° 39' 02.57"
	27	13473096.90	3041470.00	N28° 45' 10.79"	W95° 39' 02.90"
	28	13472945.34	3041056.93	N28° 45' 09.41"	W95° 39' 07.59"
	29	13472909.43	3041046.14	N28° 45' 09.06"	W95° 39' 07.72"
	30	13472896.06	3041075.01	N28° 45' 08.92"	W95° 39' 07.40"

PERMIT PLAN SET/ NOT FOR CONSTRUCTION

NOTES:

- FOR LOCATIONS OF THESE POINTS, SEE SHEETS 5 THROUGH 7.
- COORDINATES SHOWN ARE GRID COORDINATES AND REFER TO THE TEXAS COORDINATE SYSTEM OF 1983 - SOUTH CENTRAL ZONE.
- STONE MATERIAL SPECIFIED IN THESE PLANS IS GRANITE WITH A MINIMUM UNIT WEIGHT OF 165 POUNDS PER CUBIC FOOT.

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BREAKWATER DETAILS - 1

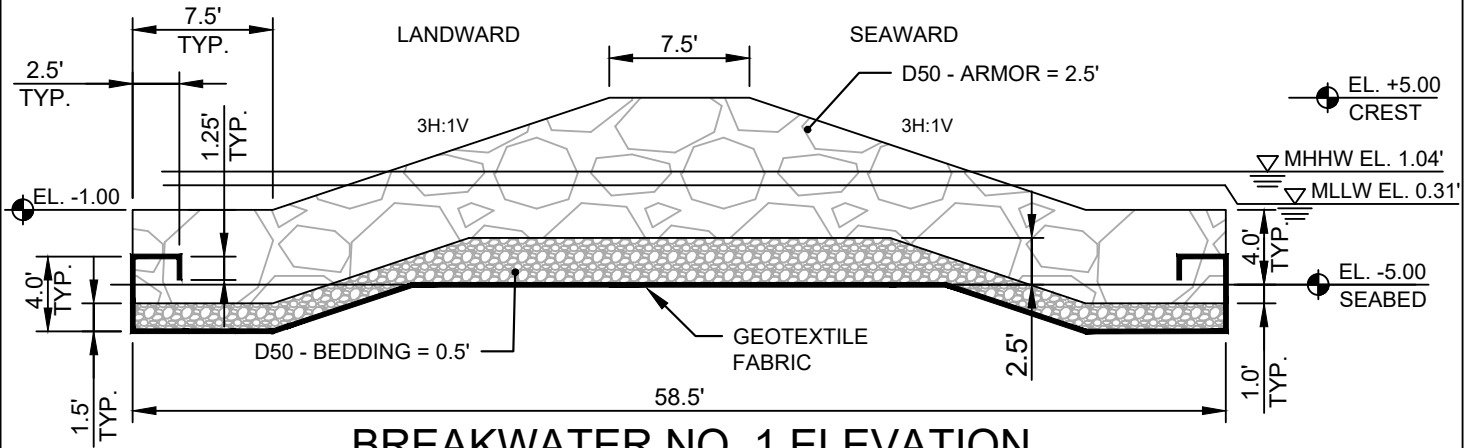
SARGENT BEACH SEGMENTED BREAKWATER AND BEACH NOURISHMENT PROJECT

MATAGORDA COUNTY
 SARGENT BEACH, MATAGORDA COUNTY, TEXAS

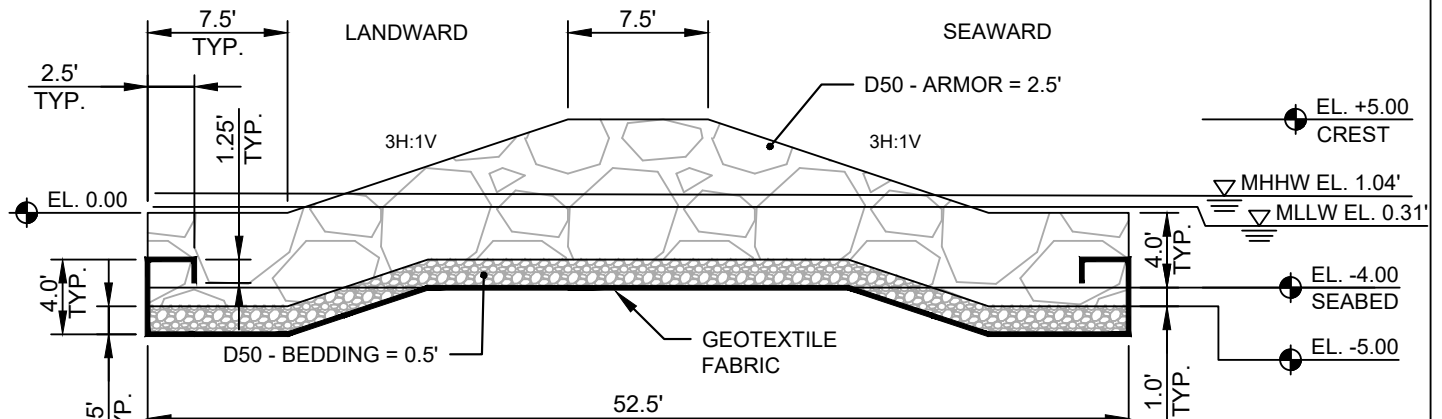


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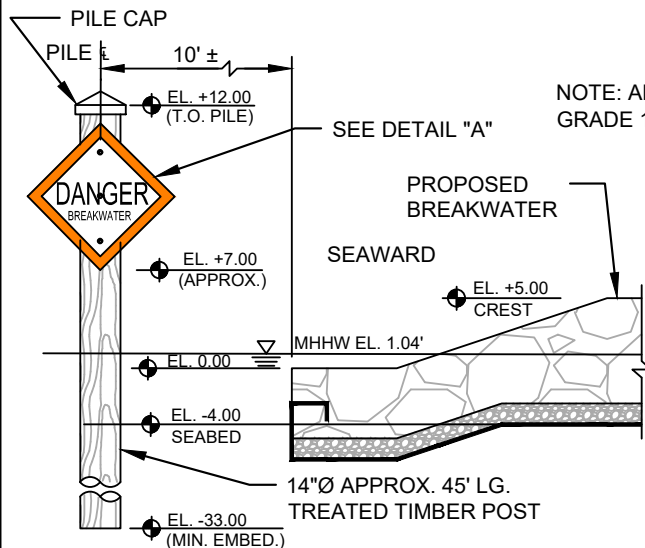
SHEET NUMBER
 14/20



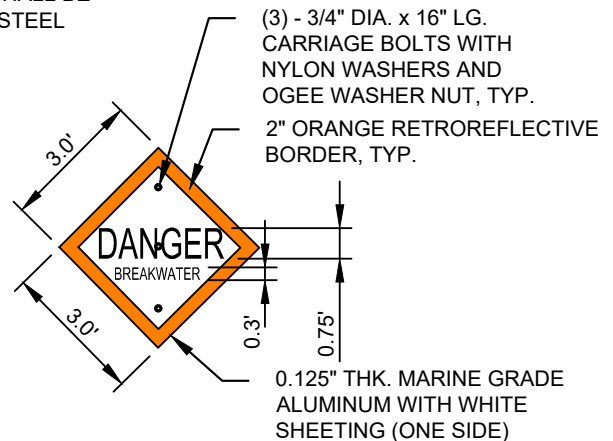
SCALE: 1" = 10'



SCALE: 1" = 10'

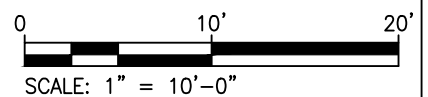


NOTE: ALL HARDWARE SHALL BE GRADE 18-8 STAINLESS STEEL



NOTE:
1. ALL ELEVATIONS ARE IN FEET AND REFERENCE NAVD88

PERMIT PLAN SET/NOT FOR CONSTRUCTION

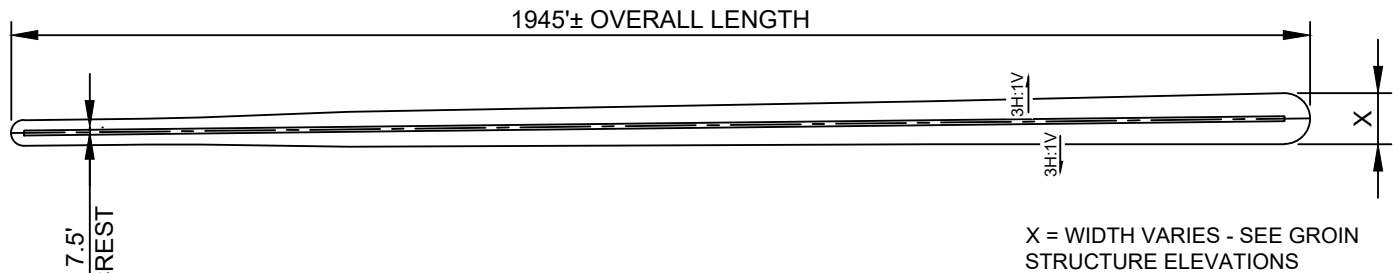


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BREAKWATER DETAILS - 2
**SARGENT BEACH SEGMENTED BREAKWATER
AND BEACH NOURISHMENT PROJECT**
MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS



JOB No.
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CAD FILE
SHEET NUMBER
15/20



ANGLED TERMINAL GROIN STRUCTURE PLAN

N.T.S.

GROIN STRUCTURE COORDINATE TABLE

POINT NO.	NORTHING	EASTING	LATITUDE	LONGITUDE
G1	13473244.05	3039835.53	N28° 45' 12.71"	W95° 39' 21.20"
G2	13473243.56	30399808.31	N28° 45' 12.72"	W95° 39' 21.50"
G3	13473216.34	3039808.80	N28° 45' 12.50"	W95° 39' 21.50"
G4	13473116.70	3039912.12	N28° 45' 11.43"	W95° 39' 20.39"
G5	13473100.84	3039928.58	N28° 45' 11.27"	W95° 39' 20.20"
G6	13473030.66	3039999.87	N28° 45' 10.56"	W95° 39' 19.44"
G7	13472873.96	3040154.13	N28° 45' 08.96"	W95° 39' 17.75"
G8	13472273.52	3040767.91	N28° 45' 02.84"	W95° 39' 11.05"
G9	13471892.55	3041154.20	N28° 44' 58.96"	W95° 39' 06.83"
G10	13471892.93	3041208.91	N28° 44' 58.95"	W95° 39' 06.22"
G11	13471947.01	3041207.92	N28° 44' 59.48"	W95° 39' 06.21"
G12	13472320.31	3040812.03	N28° 45' 03.29"	W95° 39' 10.54"
G13	13472911.52	3040190.35	N28° 45' 09.33"	W95° 39' 17.34"
G14	13473060.50	3040027.31	N28° 45' 10.84"	W95° 39' 19.18"
G15	13473128.55	3039955.30	N28° 45' 11.54"	W95° 39' 19.90"
G16	13473144.42	3039938.85"	N28° 45' 11.90"	W95° 39' 20.08"

NOTES:

- FOR LOCATIONS OF THESE POINTS, SEE SHEET 8.
- COORDINATES SHOWN ARE GRID COORDINATES AND REFER TO THE TEXAS COORDINATE SYSTEM OF 1983 - SOUTH CENTRAL ZONE.
- STONE MATERIAL SPECIFIED IN THESE PLANS IS GRANITE WITH A MINIMUM UNIT WEIGHT OF 165 POUNDS PER CUBIC FOOT.

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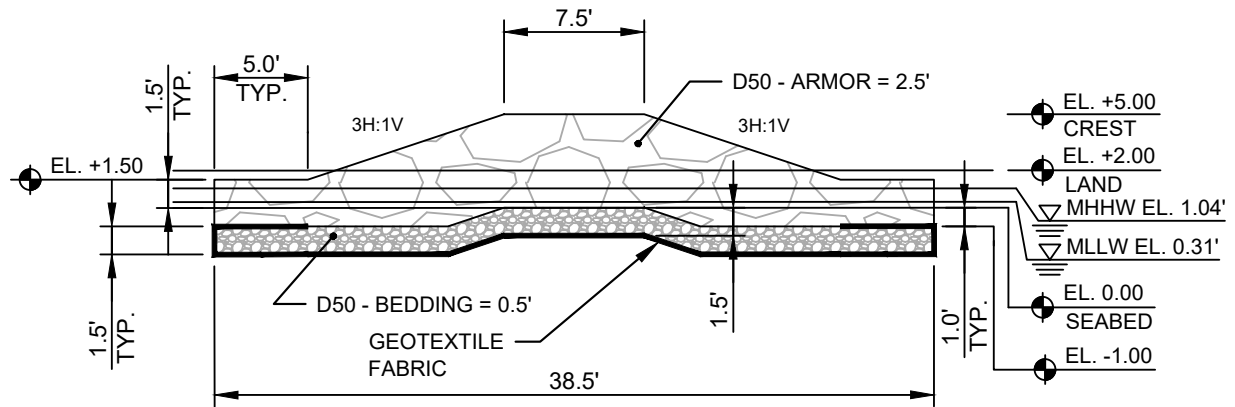
GROIN STRUCTURE DETAILS - 1

SARGENT BEACH SEGMENTED BREAKWATER AND BEACH NOURISHMENT PROJECT

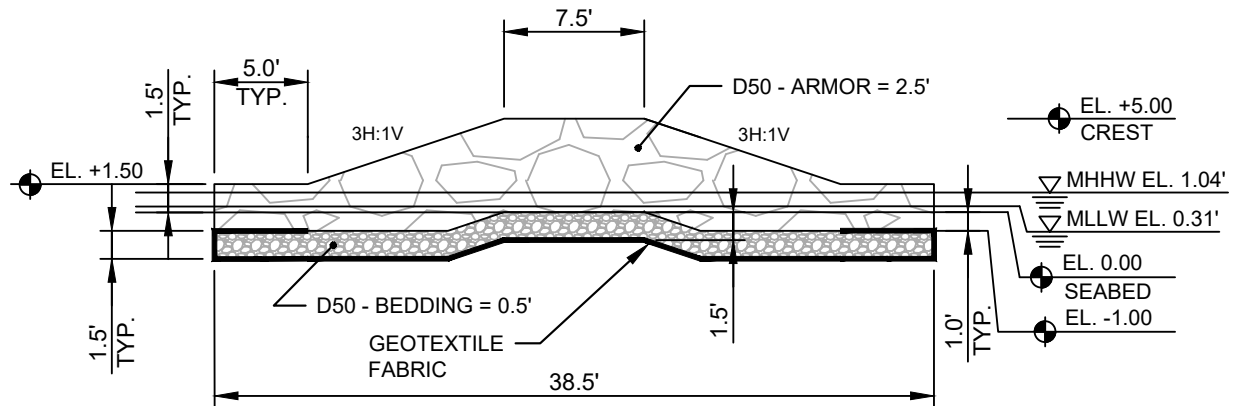
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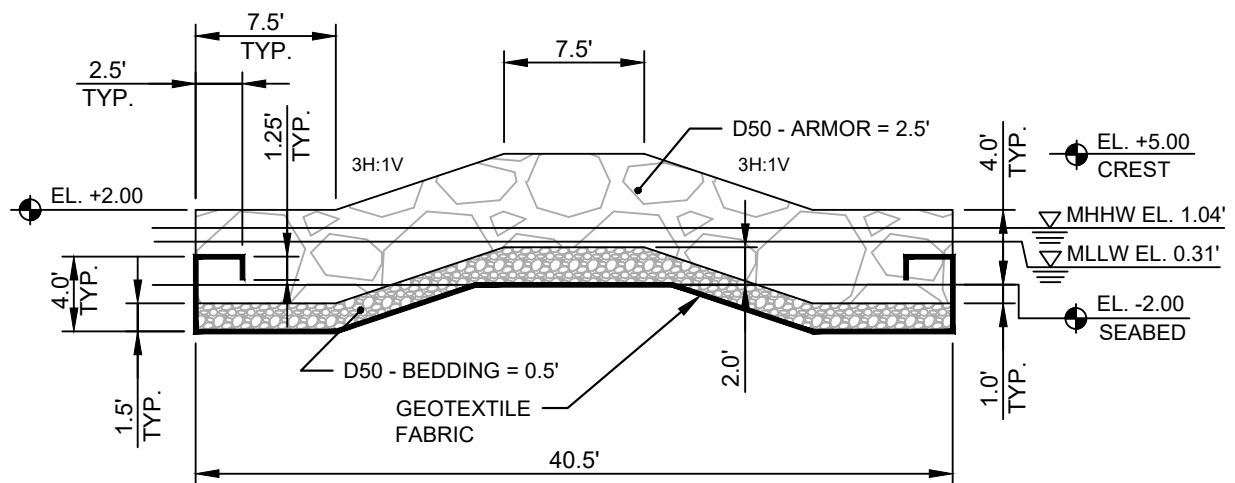
 SHEET NUMBER
 16/20



TYPICAL GROIN STRUCTURE ELEVATION (EL. +2.0')
SCALE: 1" = 10'



TYPICAL GROIN STRUCTURE ELEVATION (EL. 0.0')
SCALE: 1" = 10'

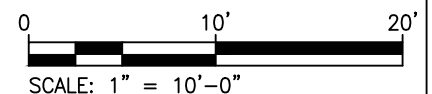


TYPICAL GROIN STRUCTURE ELEVATION (EL. -2.0')
SCALE: 1" = 10'

NOTE:

1. ALL ELEVATIONS ARE IN FEET AND REFERENCE NAVD88

PERMIT PLAN SET/ NOT FOR CONSTRUCTION



SCALE: 1" = 10'-0"

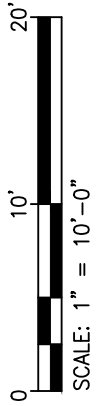
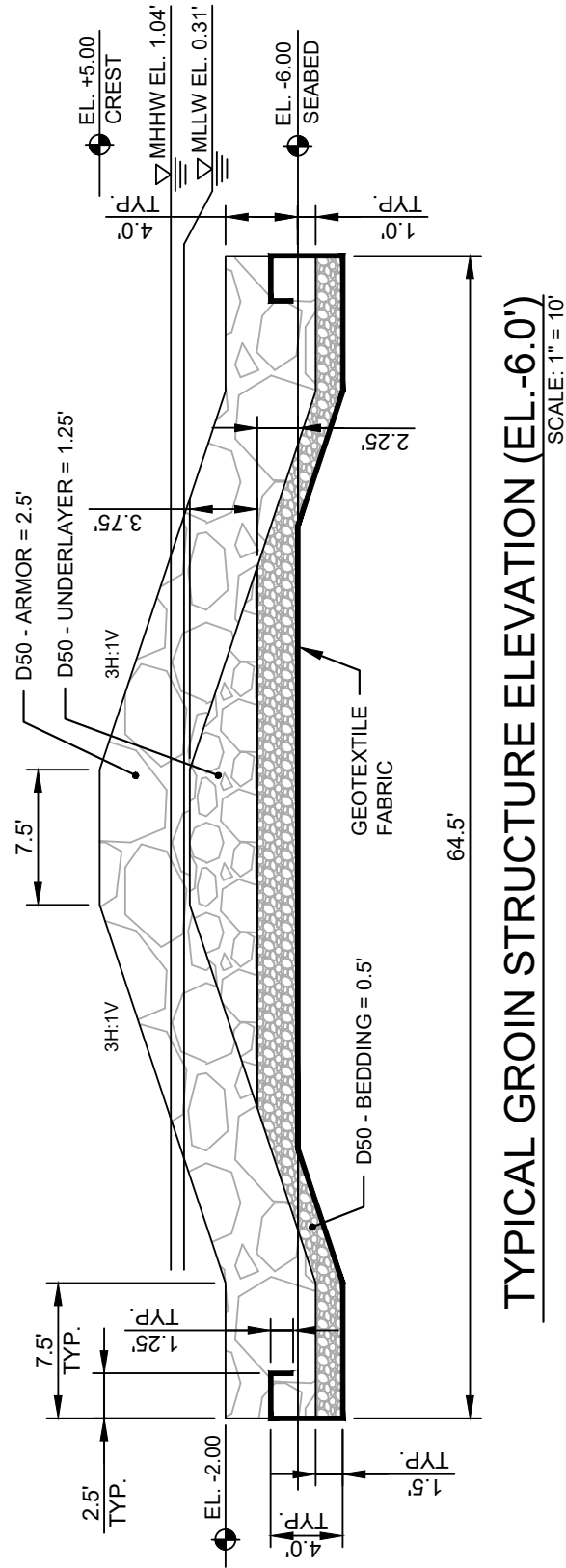
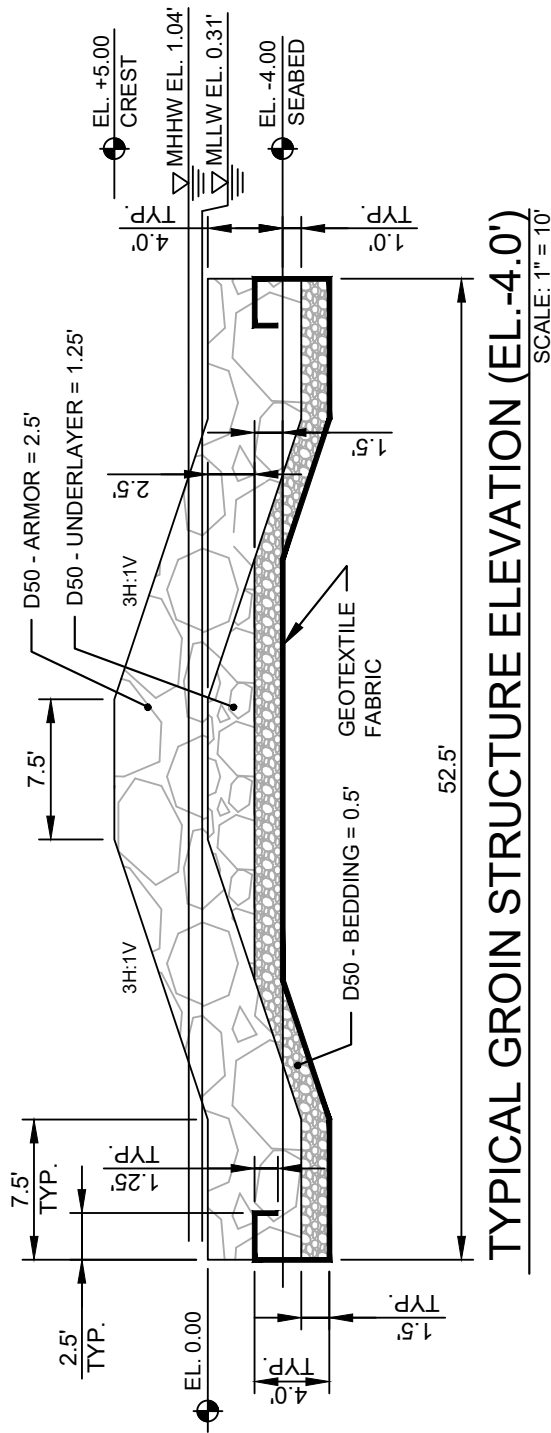
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GROIN STRUCTURE DETAILS - 2

**SARGENT BEACH SEGMENTED BREAKWATER
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MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS



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SHEET NUMBER
17/20



NOTE:
1. ALL ELEVATIONS ARE IN FEET AND REFERENCE NAVD88

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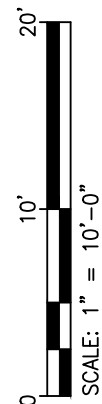
GROIN STRUCTURE DETAILS - 3

SARGENT BEACH SEGMENTED BREAKWATER AND BEACH NOURISHMENT PROJECT

MATAGORDA COUNTY
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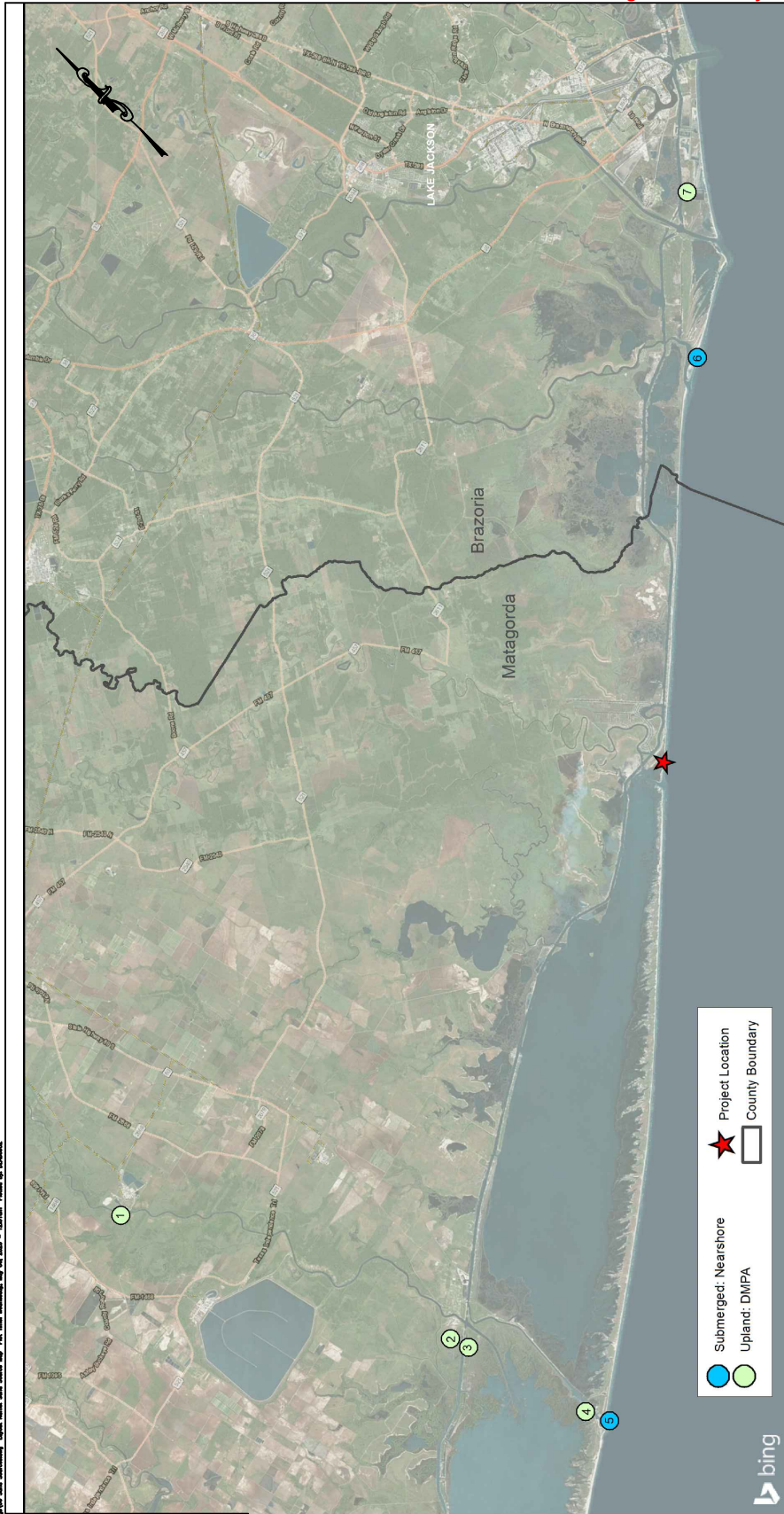
JOB No.
100069624
CAD FILE
SHEET NUMBER
18/20



NOTE:
1. ALL ELEVATIONS ARE IN FEET AND REFERENCE NAVD88

JOB No.
100069624
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SHEET NUMBER
19/20



SAND SOURCE MAP

NTS

SAND SOURCE LOCATIONS	
NO.	LOCATION NAME
①	WEIDMAN PROPERTY (DMPA #8)
②	DMPA BAXTER ISLAND
③	DMPA 108
④	DMPA AT MOUTH COLORADO RIVER
⑤	COLORADO RIVER INLET (AT MATAGORDA)
⑥	SAN BERNARD CHANNEL BAR/DELTA
⑦	DMPA #86

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SAND SOURCE MAP
**SARGENT BEACH SEGMENTED BREAKWATER
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MATAGORDA COUNTY
SARGENT BEACH, MATAGORDA COUNTY, TEXAS



JOB No.
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CAD FILE
SHEET NUMBER
20/20