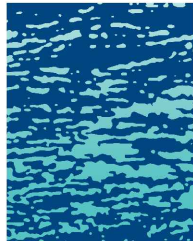


**APPENDIX B: CONSTRUCTION PLANS
#24-086**

**GULFSIDE RD. INTERIM BEACH RENOURISHMENT PROJECT
TOWN OF LONGBOAT KEY, FL
MANATEE COUNTY, FL**

<u>INDEX OF SHEETS</u>	
1.	PROJECT LOCATION & SITE INFORMATION
2.	CONTROL & ACCESS
3.	BEACH FILL PLAN
4.	BEACH FILL SECTIONS
5.	BORROW AREA PLAN
6.	BORROW AREA SECTIONS
7.	DUNE PLANTING DETAILS

PROJECT ENGINEER:



olsen associates, inc.
2618 Herschel St.
Jacksonville, FL 32204
904.387.6114
904.384.7368
COA 0003491

KRISTA J. EGAN, FL PE #85302

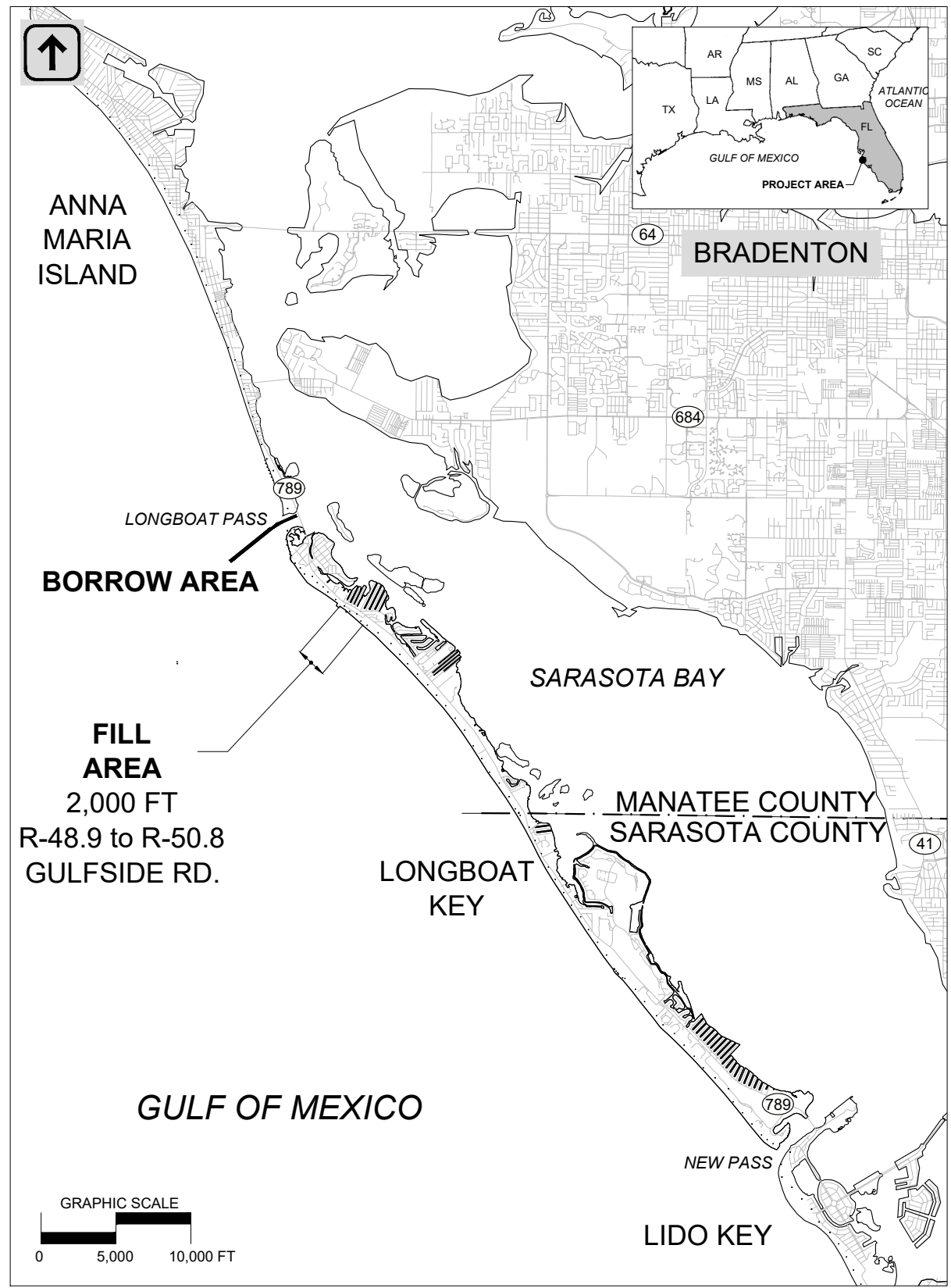
PROJECT OWNER:



Town of Longboat Key, FL
Public Works Department
600 General Harris St.
Longboat Key, FL 34228
941.316.1988
941.316.1984

DATE ISSUED: **07/01/2024**

BID SET. NOT RELEASED FOR CONSTRUCTION



TIDAL DATUMS

LABINS TIDE POINT (100146)
STATION LOCATION: 27°19.9' N, 82°35.7' W

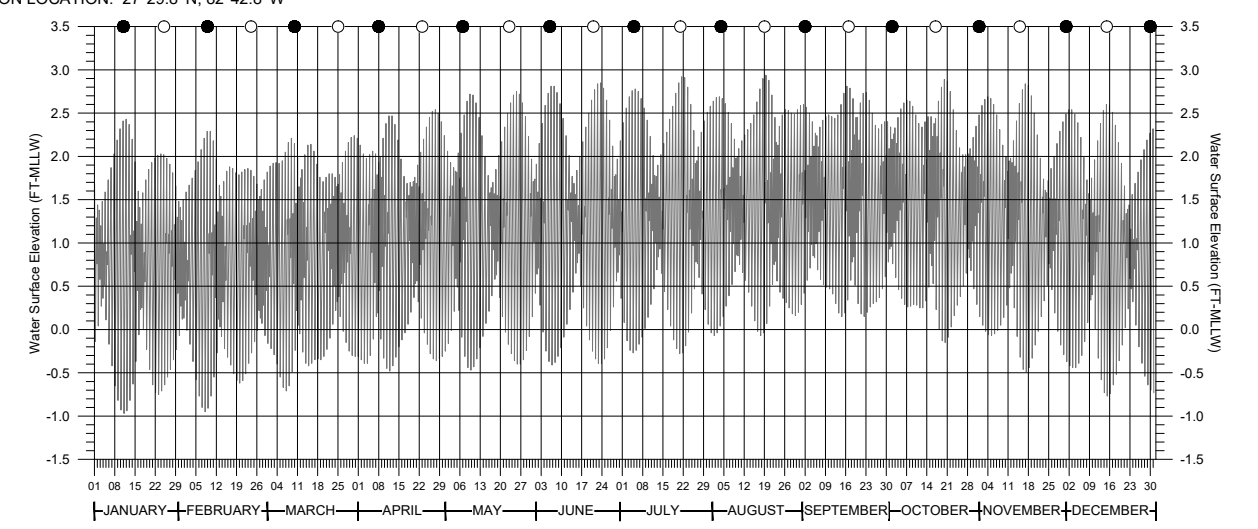
DATUM	ELEVATION (ft, NAVD88)
MEAN HIGH WATER (MHW)	0.40
NAVD88	0.00
MEAN LOW WATER (MLW)	-1.01
NGVD29	-1.04

ANNA MARIA ISLAND, FL (NOAA STA. 8726243)
STATION LOCATION: 27°29.8' N, 82°42.8' W

DATUM	ELEVATION (ft, NAVD88)
MEAN HIGHER HIGH WATER (MHHW)	0.64
MEAN HIGH WATER (MHW)	0.34
NAVD88	0.00
MEAN TIDE LEVEL (MTL)	-0.45
NGVD29	-0.99
MEAN LOW WATER (MLW)	-1.24
MEAN LOWER LOW WATER (MLLW)	-1.62

PREDICTED ASTRONOMICAL TIDES

ANNA MARIA ISLAND, FL (NOAA STA. 8726243)
STATION LOCATION: 27°29.8' N, 82°42.8' W



Reference: NOAA, Station ID: 8726243
Anna Maria Island, FL
Latitude: 27° 29.8' N, Longitude: 82° 42.8' W
Epoch: 1983-2001
Elevations relative to FEET-MLLW
NOT FOR PURPOSES OF NAVIGATION

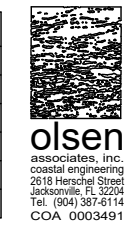
Datum Elevations (Feet)
MHHW = 2.25
MHW = 1.96
NAVD88 = 1.62
MSL = 1.19
MTL = 1.17
MLW = 0.38
MLLW = 0.00

LEGEND
● NEW MOON
☉ FULL MOON

2024

NOTES:
1. DATUMS - HORIZ: NAD83 SPC (FL WEST, FT), VERT: NAVD88 (UNITS IN FT)

REVISIONS			
LTR	DESCRIPTION	BY	DATE



TOWN OF LONGBOAT KEY, FL
GULFSIDE RD. INTERIM
BEACH RENOURISHMENT PROJECT
PROJECT LOCATION & SITE INFORMATION

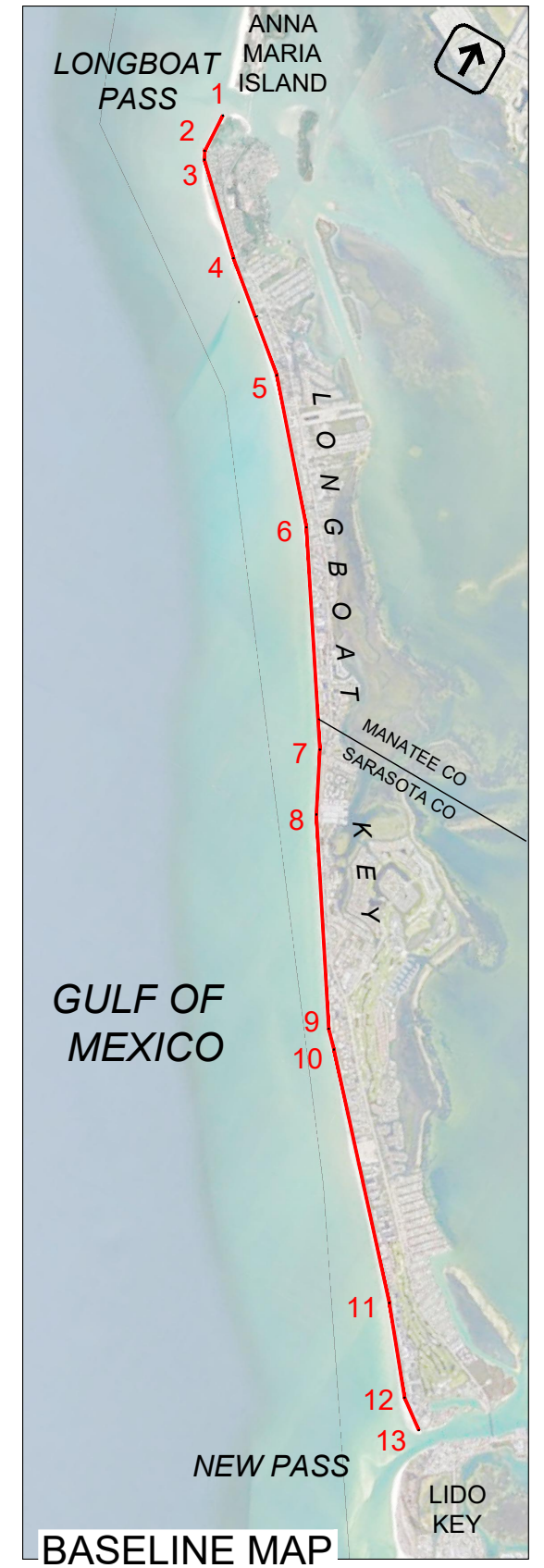
DRAWN BY: ML DATE: 07/01/2024
CHECKED BY: KJE DATE: 07/01/2024

SHEET
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of 7

FDEP SURVEY R-MONUMENTS			
Point	Easting (FT, NAD83)	Northing (FT, NAD83)	Azimuth (deg relative to North)
R-44	432,262.33	1,129,262.43	265
R-45	432,814.34	1,128,057.59	235
R-46A	433,443.12	1,127,329.03	220
R-47	434,296.02	1,126,761.97	220
R-48	434,990.37	1,126,130.11	220
R-48.5	435,519.00	1,125,635.00	220
R-49	436,099.67	1,125,200.34	220
R-49.5	436,448.00	1,124,845.00	220

ADDITIONAL CONTROL POINTS			
Point	Easting (FT, NAD83)	Northing (FT, NAD83)	Elevation (ft, NAVD88)
R-50	436,929.24	1,124,665.36	220
R-50.5	437,201.01	1,124,191.83	220
R-51	437,617.97	1,123,910.91	220
R-52	438,353.07	1,123,412.82	220
R-53	439,211.16	1,122,696.49	230
R-54A	439,804.26	1,121,973.33	230
R-55	440,316.76	1,121,352.31	230
R-56	440,975.50	1,120,659.49	230

BASELINE CONTROL			
Point	Station	Easting (FT, NAD83)	Northing (FT, NAD83)
1	00+00.0	432,488.20	1,130,070.05
2	15+65.7	432,566.20	1,128,506.25
3	19+16.5	432,726.64	1,128,194.37
4	59+60.3	435,658.39	1,125,409.17
5	108+74.1	439,441.13	1,122,272.84
6	169+72.2	443,441.75	1,117,670.44
7	257+44.1	448,276.04	1,110,350.96
8	283+00.8	449,434.33	1,108,071.67
9	367+52.7	454,076.12	1,101,008.44
10	375+90.1	454,657.41	1,100,405.68
11	478+03.2	461,533.10	1,092,853.77
12	515+80.1	463,920.06	1,089,926.78
13	529+78.1	465,044.50	1,089,096.03



- NOTES:
1. DATE OF PHOTOGRAPHY: OCT 26, 2023.
 2. DATUMS - HORIZ: NAD83 SPC (FL WEST, FT), VERT: NAVD88 (UNITS IN FT).
 3. CONTRACTOR SHALL AVOID IMPACTS TO EXISTING VEGETATION.

REVISIONS			
LTR	DESCRIPTION	BY	DATE

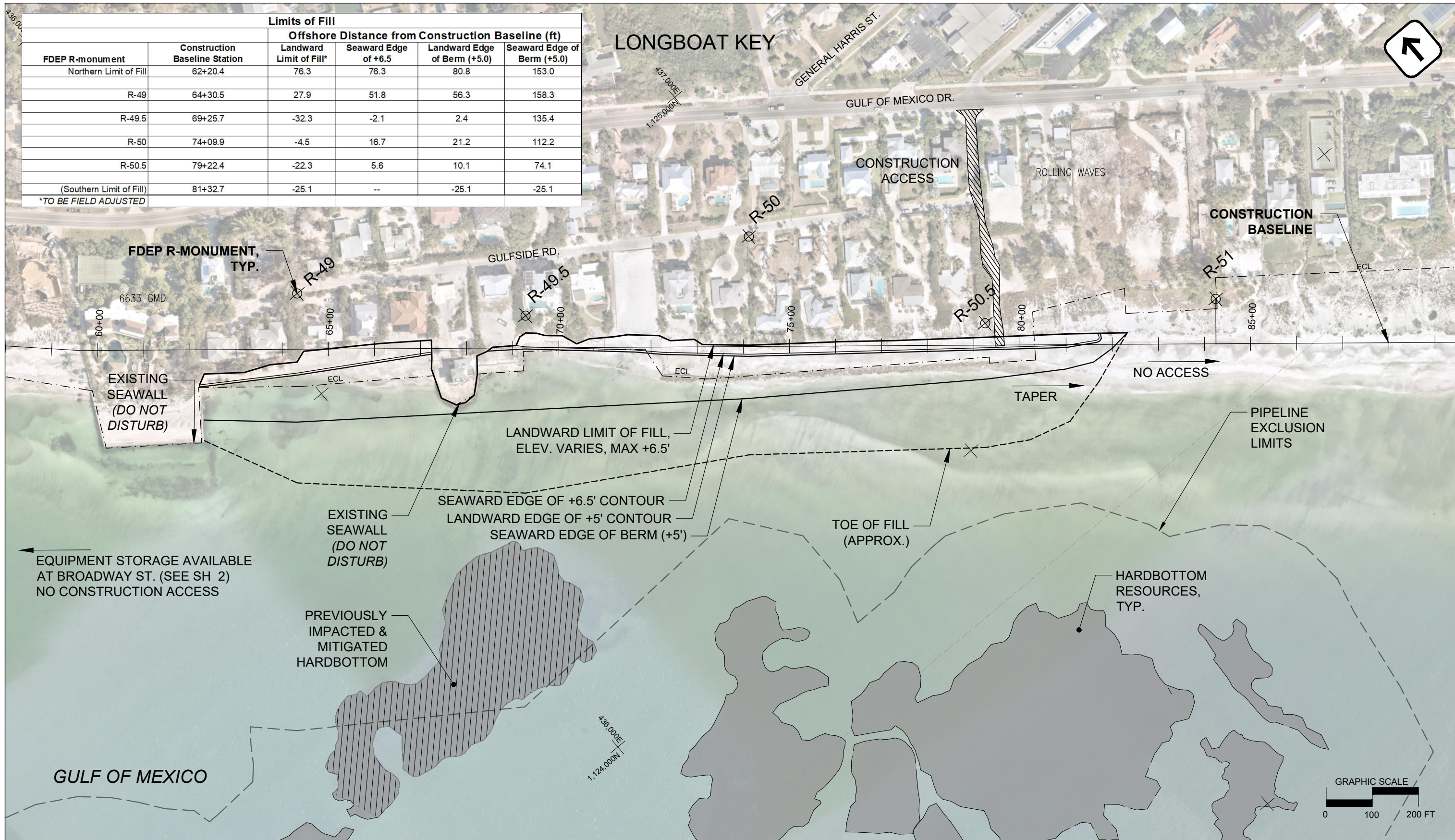


TOWN OF LONGBOAT KEY, FL
 GULFSIDE RD. INTERIM
 BEACH RENOURISHMENT PROJECT
CONTROL & ACCESS
 DRAWN BY: ML DATE: 07/01/2024
 CHECKED BY: KJE DATE: 07/01/2024

LONGBOAT KEY

Limits of Fill					
FDEP R-monument	Construction Baseline Station	Offshore Distance from Construction Baseline (ft)			
		Landward Limit of Fill*	Seaward Edge of +6.5	Landward Edge of Berm (+5.0)	Seaward Edge of Berm (+5.0)
Northern Limit of Fill	62+20.4	76.3	76.3	80.8	153.0
R-49	64+30.5	27.9	51.8	56.3	158.3
R-49.5	69+25.7	-32.3	-2.1	2.4	135.4
R-50	74+09.9	-4.5	16.7	21.2	112.2
R-50.5	79+22.4	-22.3	5.6	10.1	74.1
(Southern Limit of Fill)	81+32.7	-25.1	--	-25.1	-25.1

*TO BE FIELD ADJUSTED



- NOTES:
1. DATE OF PHOTOGRAPHY: OCT 26, 2023.
 2. SURVEY DATE: OCT 2023
 3. DATUMS - HORIZ: NAD83 SPC (FL WEST, FT), VERT: NAVD88 (UNITS IN FT)
 4. FILL VOLUME, LANDWARD LIMIT, AND BEACH WIDTH VARY ALONG PROJECT LENGTH.
 5. BEACH FILL VOLUME TO BE RECOMPUTED BY THE ENGINEER PRIOR TO CONSTRUCTION START AND DURING CONSTRUCTION TO ADJUST TO CHANGING CONDITIONS.
 6. LANDWARD LIMIT OF FILL SHALL AVOID SIGNIFICANT ESTABLISHED VEGETATION.
 7. EXISTING STRUCTURES SHALL BE PROTECTED.
 8. HARDBOTTOM AREAS AND EXTENT ESTIMATED FROM SIDESCAN SONAR SURVEY (JULY 2020).

REVISIONS			
LTR	DESCRIPTION	BY	DATE

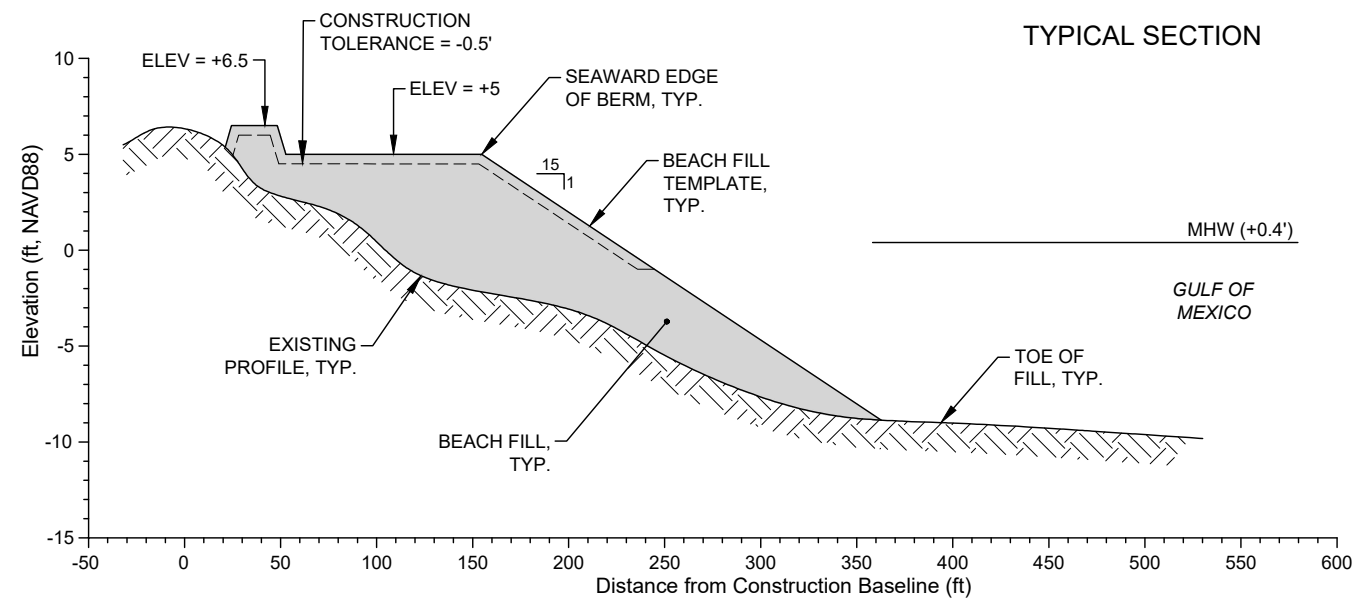


TOWN OF LONGBOAT KEY, FL
 GULFSIDE RD. INTERIM
 BEACH RENOURISHMENT PROJECT

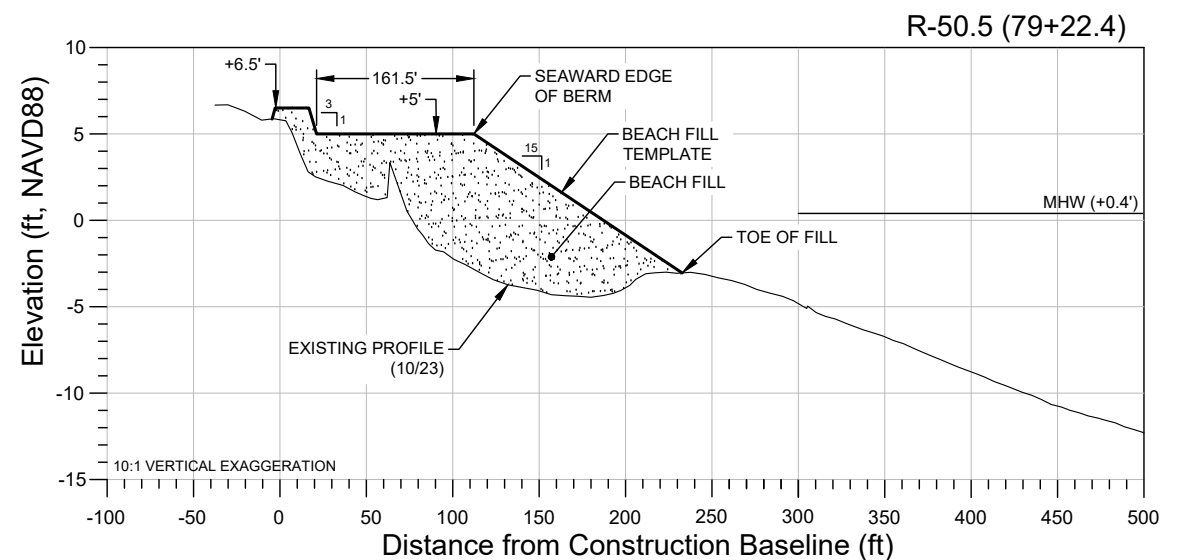
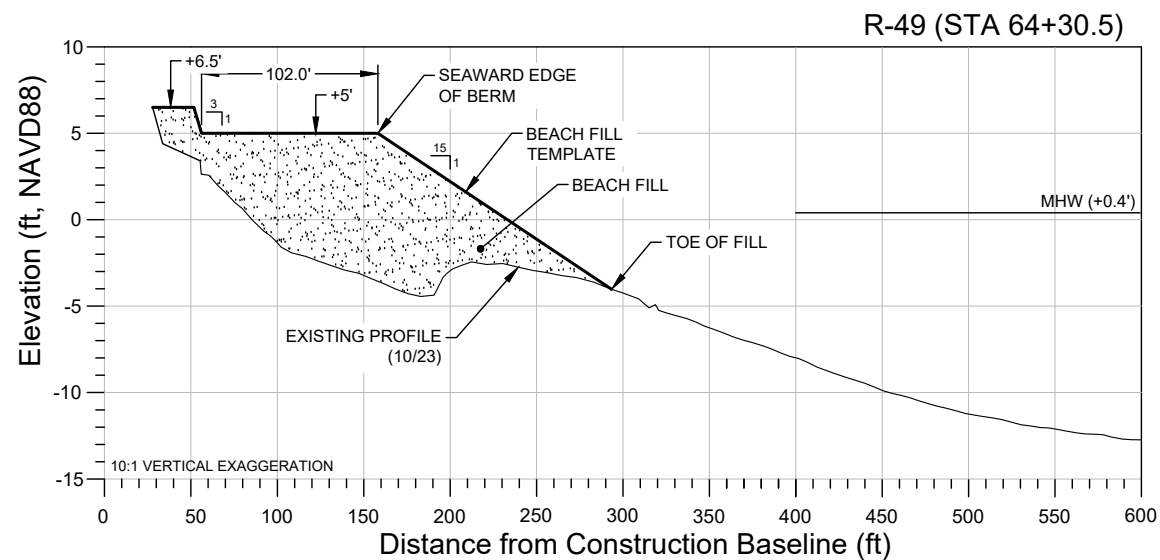
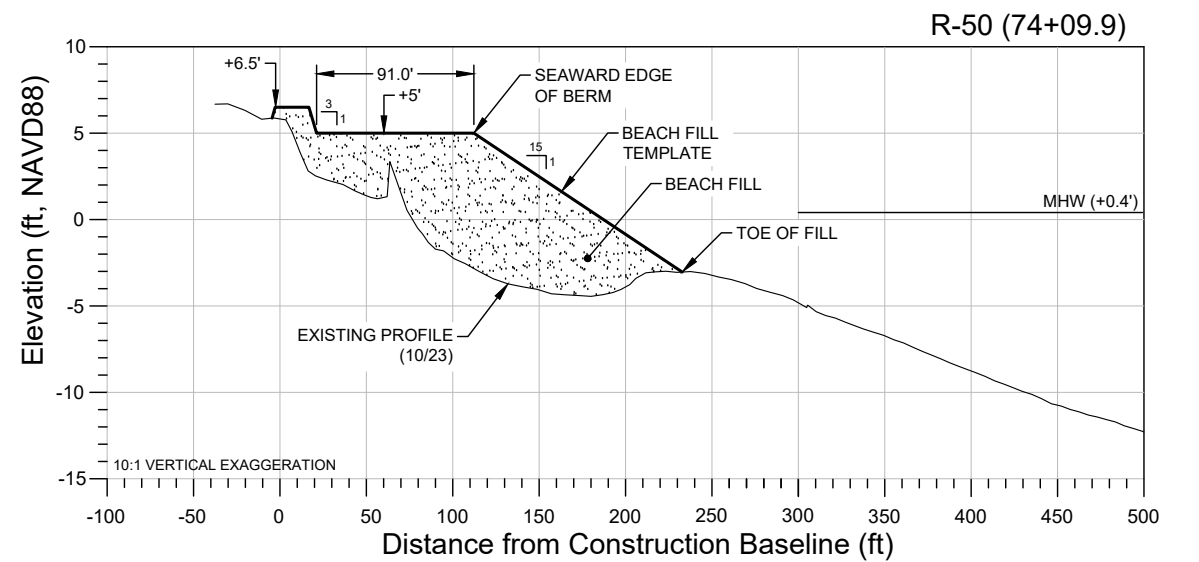
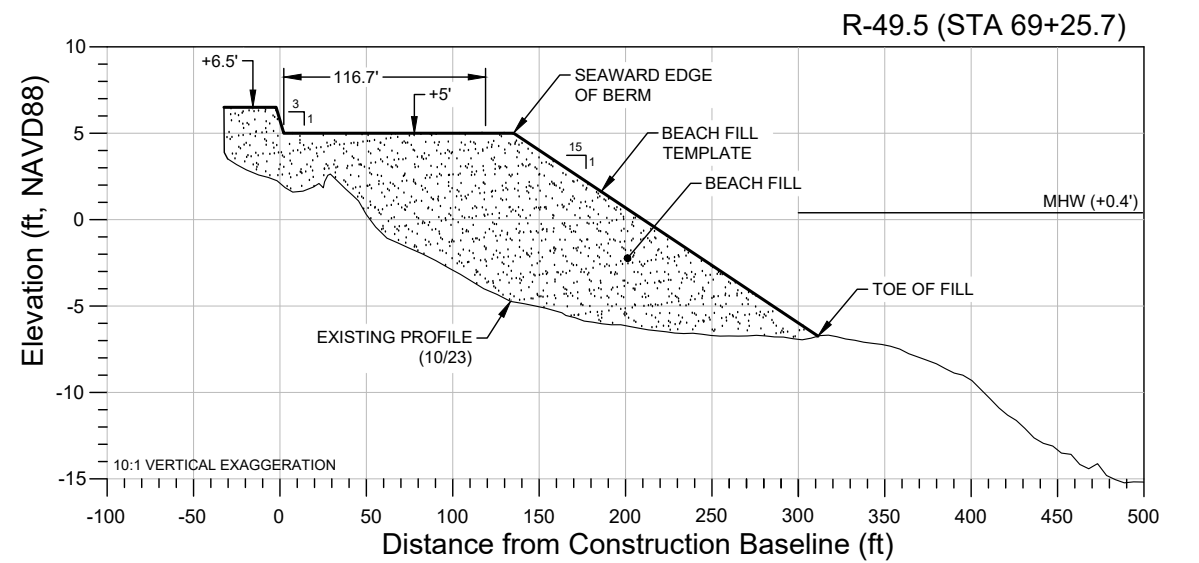
BEACH FILL PLAN

DRAWN BY: ML DATE: 07/01/2024
 CHECKED BY: KJE DATE: 07/01/2024

SHEET
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Fill Schedule				
FDEP R-monument	Construction Baseline Station	Alongshore Distance (ft)	Fill Density (cy/ft)	Fill Volume (cy)
Northern Limit of Fill	62+20.4		44.5	
		210		9,300
R-49	64+30.5	495	44.5	28,200
R-49.5	69+25.7	484	69.2	26,100
R-50	74+09.9	513	38.7	16,000
R-50.5	79+22.4	210	23.8	2,500
(Southern Limit of Fill)	81+32.7		0.0	
Total				80,000



- NOTES:
- DATUMS - HORIZ: NAD83 SPC (FL WEST, FT), VERT: NAVD88 (UNITS IN FT)
 - SURVEY DATE: OCT 2023
 - EXAGGERATED SCALE 1V:10H UNLESS OTHERWISE NOTED ABOVE.
 - CONTRACTOR SHALL NOT USE DIMENSIONS FROM DRAWINGS TO LAY OUT THE WORK.
 - FILL VOLUME, LANDWARD LIMIT, AND BERM WIDTH VARY ALONG PROJECT LENGTH.
 - BEACH FILL TO BE RECOMPUTED BY ENGINEER PRIOR TO CONSTRUCTION START AND DURING CONSTRUCTION TO ADJUST TO CHANGING CONDITIONS.
 - LANDWARD LIMIT OF FILL SHALL AVOID SIGNIFICANT ESTABLISHED VEGETATION.
 - TOLERANCE IN FINAL GRADE IS 0.5 FT ABOVE THE CONSTRUCTION TEMPLATE, ABOVE MLW.

REVISIONS			
LTR	DESCRIPTION	BY	DATE



TOWN OF LONGBOAT KEY, FL
 GULFSIDE RD. INTERIM
 BEACH RENOURISHMENT PROJECT

BEACH FILL SECTIONS

DRAWN BY: ML DATE: 07/01/2024
 CHECKED BY: KJE DATE: 07/01/2024

PERMITTED BORROW AREA COORDINATES

I.D.	EASTING (FT)	NORTHING (FT)
1	432,868.5	1,131,288.2
2	432,928.9	1,131,150.8
3	431,967.6	1,130,728.4
4	431,390.9	1,130,378.7
5	428,543.3	1,128,095.3
6	428,418.2	1,128,251.3
7	431,148.7	1,130,440.9
8	431,180.0	1,130,401.9
9	431,577.8	1,130,720.9

NOTE:
VOLUME IN CHANNEL BORROW AREA AS OF MAY 2023 IS 177K CY (EST., ABOVE -14.6 FT NAVD88)

LIMITS OF AUTHORIZED DREDGE AREA TO BE DETERMINED FOLLOWING THE PRE-CONSTRUCTION SURVEY OF THE BORROW AREA. DREDGING TO BEGIN ON THE LANDWARD END, IN CUT 2.

NOTE:
NO SHORE PIPE PLACEMENT ALLOWED BETWEEN THE BORROW AREA AND THE NORTHERN LIMIT OF FILL

ANNA MARIA ISLAND

APPROXIMATE COORDINATES OF UNKNOWN HARD OBJECT ENCOUNTERED IN 2016.

LONGBOAT PASS

SARASOTA BAY (OFW)

GULF OF MEXICO

LONGBOAT PASS BORROW AREA PERMITTED LIMITS

LONGBOAT KEY

- NOTES:**
- DATUMS - HORIZ: NAD83 SPC (FL WEST, FT), VERT: NAVD88 (UNITS IN FT)
 - SURVEY DATE: MAY 2023.
 - DATE OF PHOTOGRAPHY: OCT 26, 2023.
 - EXCAVATION MAY OCCUR UP TO BORROW AREA LIMITS SHOWN.
 - UPON ENCOUNTER OF CULTURAL RESOURCES OR OBSTACLES, WORK SHALL CEASE. CONTACT ENGINEER.
 - VIBRACORES COLLECTED PRIOR TO RECENT DREDGING. SEE PROJECT DATA APPENDIX FOR LOGS AND DATA.
 - SEABED ELEVATIONS AND SEDIMENT CHARACTERISTICS SUBJECT TO CHANGE.



REVISIONS			
LTR	DESCRIPTION	BY	DATE

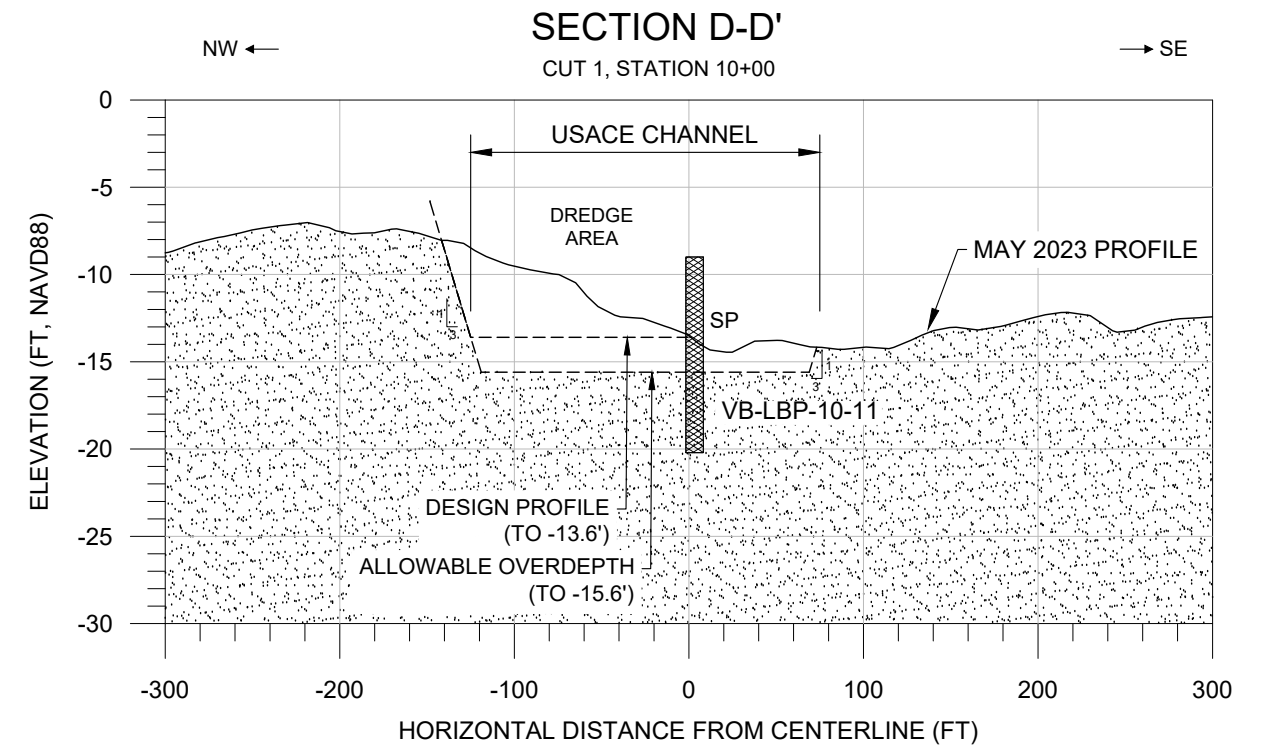
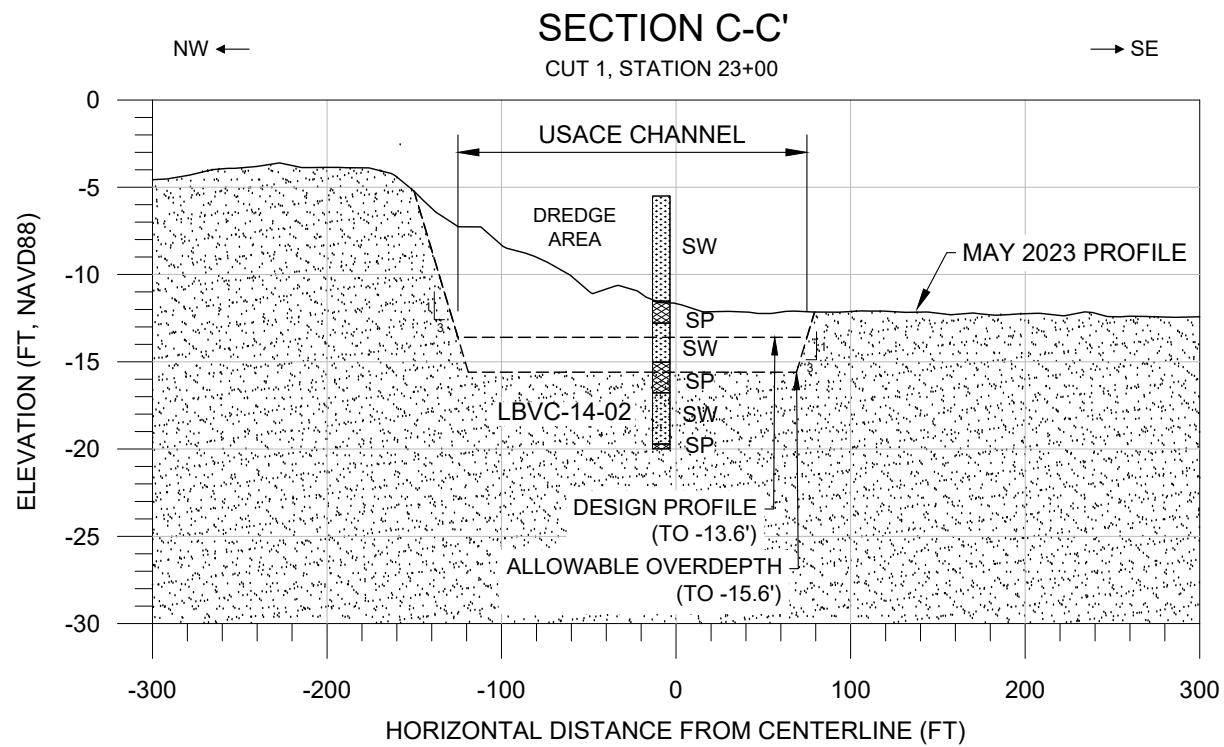
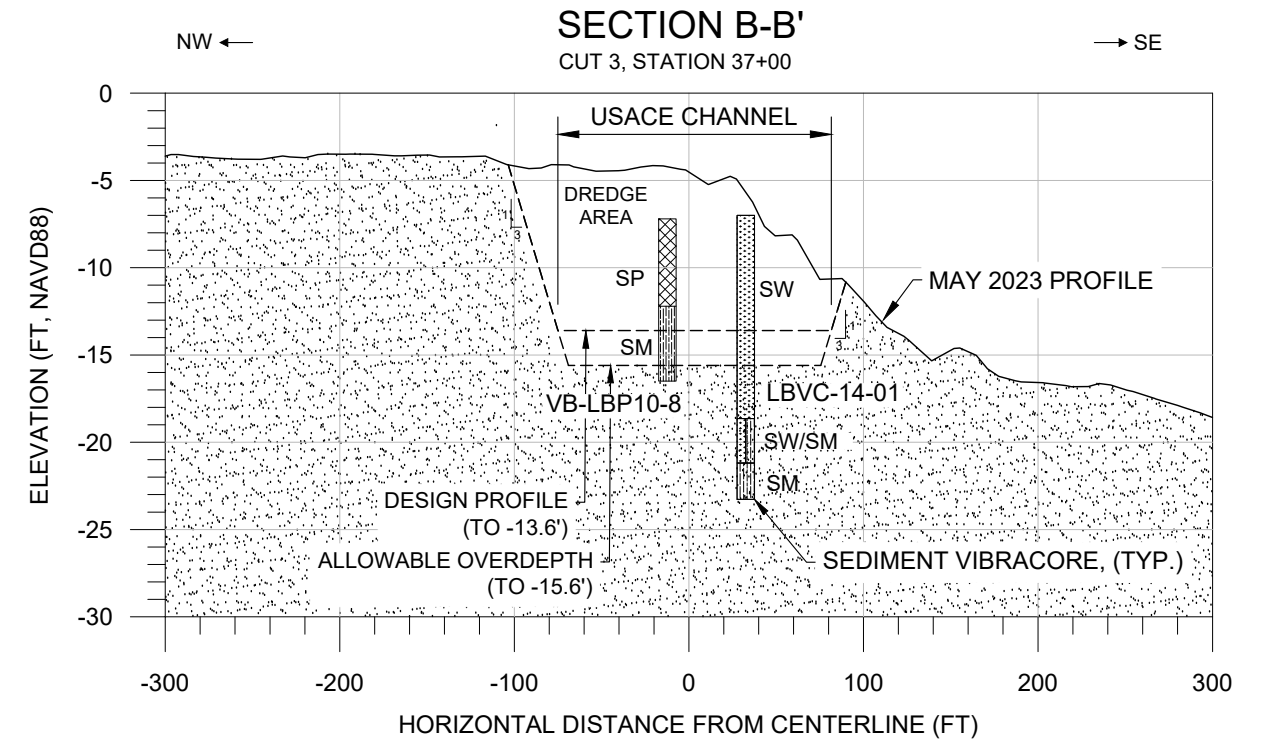
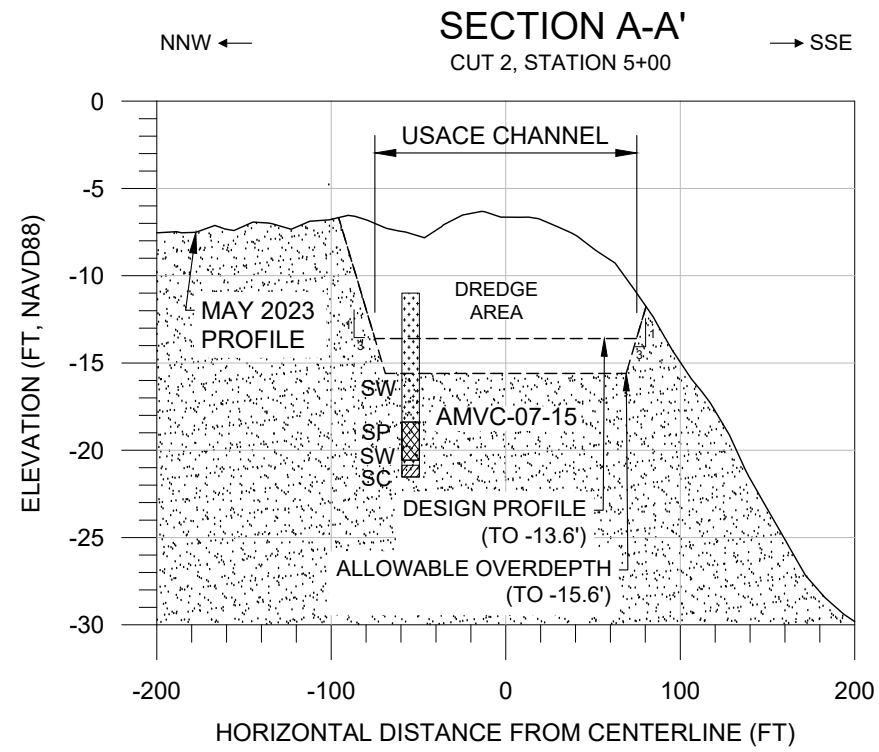


TOWN OF LONGBOAT KEY, FL GULFSIDE RD. INTERIM BEACH RENOURISHMENT PROJECT	
BORROW AREA PLAN	
DRAWN BY: ML	DATE: 07/01/2024
CHECKED BY: KJE	DATE: 07/01/2024

SHEET
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of 7

SOIL CLASSIFICATION LEGEND

- SC = CLAYEY SAND
- SM = SILTY SAND
- SP = POORLY GRADED SAND
- SW = WELL-GRADED SAND



NOTES:

1. DATUMS - HORIZ: NAD83 SPC (FL WEST, FT), VERT: NAVD88 (UNITS IN FT)
2. SURVEY DATE: MAY 2023.
3. VERTICAL POSITIONING OF VIBRACORES RELATIVE TO SEABED PROFILE IS APPROXIMATE.
4. EXCAVATION MAY OCCUR UP TO BORROW AREA LIMITS SHOWN.
5. UPON ENCOUNTER OF CULTURAL RESOURCES, WORK SHALL CEASE. CONTACT ENGINEER.
6. VIBRACORES COLLECTED PRIOR TO RECENT DREDGING. SEE PROJECT DATA APPENDIX FOR LOGS AND DATA.
7. SEABED ELEVATIONS AND SEDIMENT CHARACTERISTICS SUBJECT TO CHANGE.
8. EXAGGERATED SCALE: 1V:10H

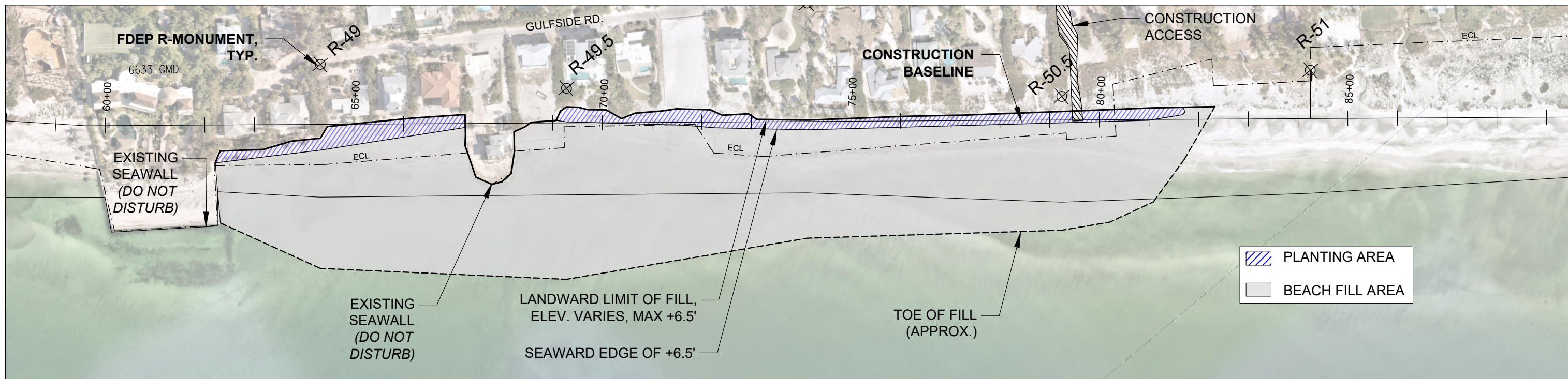
REVISIONS			
LTR	DESCRIPTION	BY	DATE



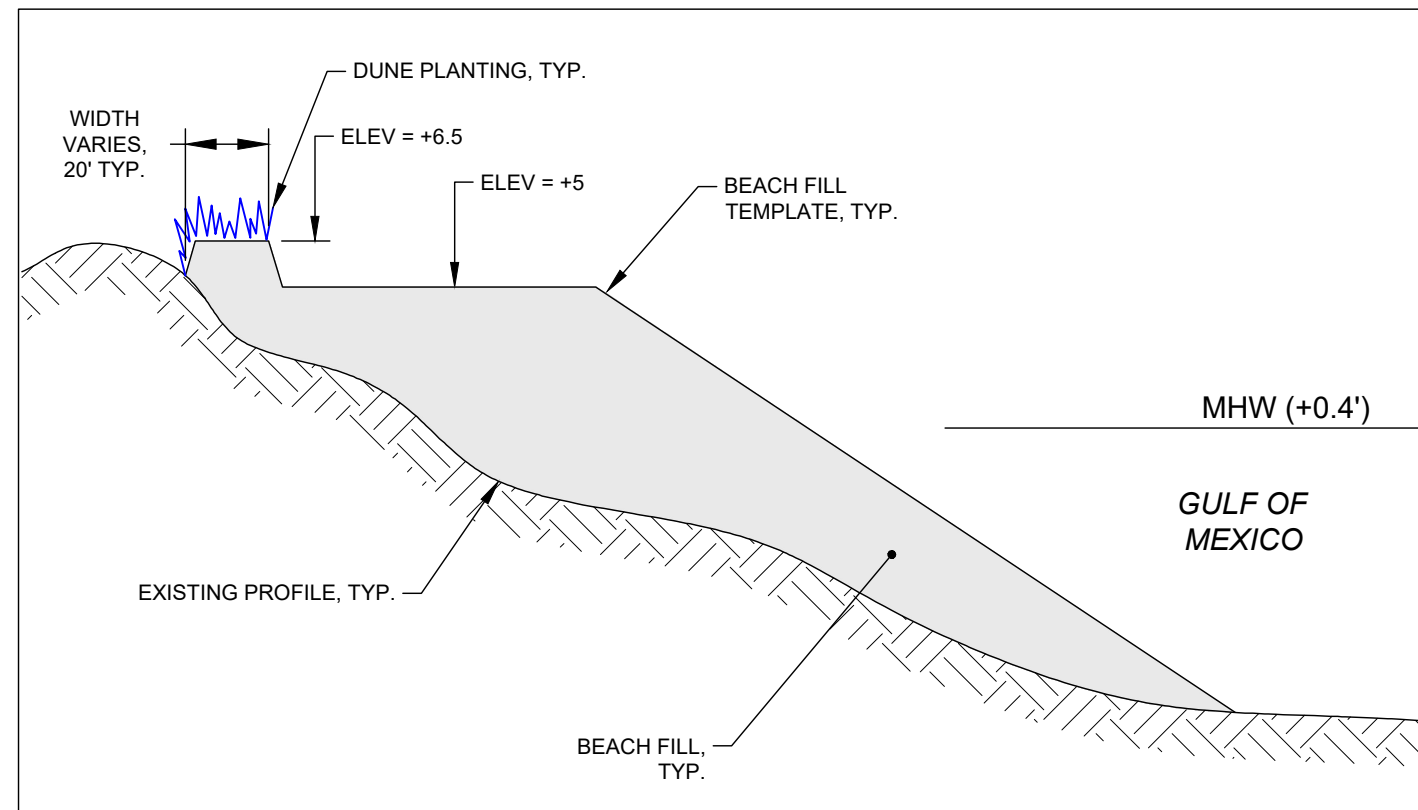
TOWN OF LONGBOAT KEY, FL
GULFSIDE RD. INTERIM
BEACH RENOURISHMENT PROJECT

BORROW AREA SECTIONS

DRAWN BY: ML DATE: 05/29/2024
CHECKED BY: KJE DATE: 05/29/2024

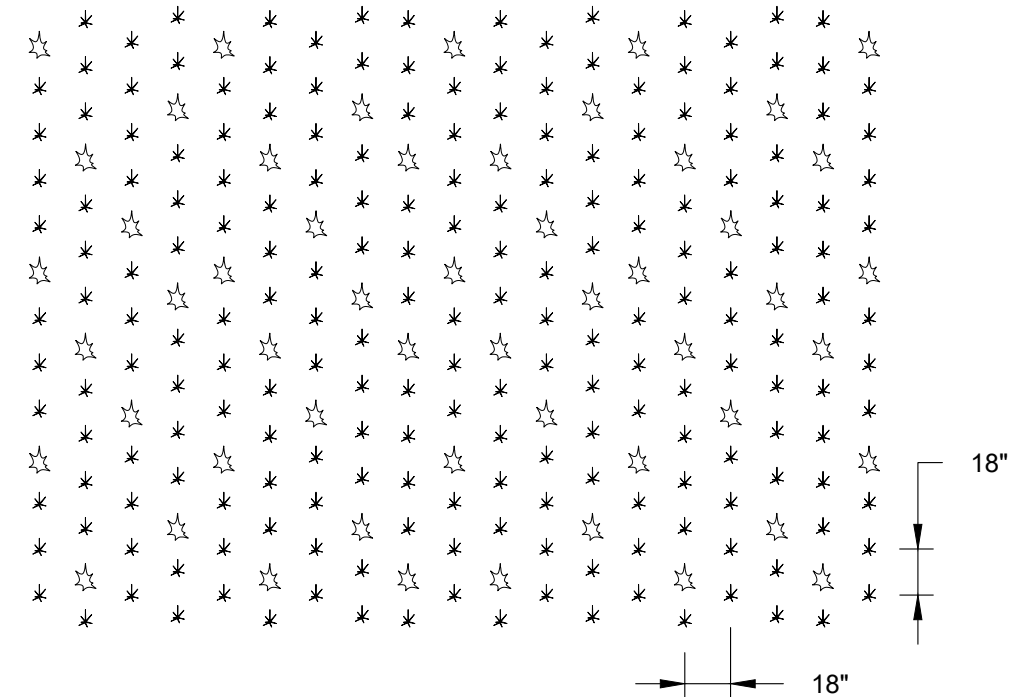


TYPICAL DUNE PLANTING SECTION



TYPICAL DUNE PLANTING PATTERN

- * DUNE GRASSES 90%
 - SEA OATS (*Uniola paniculata*)
 - COASTAL PANIC GRASS (*Panicum amarum*)
- ☆ DIVERSITY SPECIES 10%
 - MINIMUM OF 3 DIFFERENT SPECIES
 - BEACH ELDER (*Iva imbricata*)
 - RAILROAD VINE (*Ipomaea pescaprae*)
 - DUNE SUNFLOWER (*Helianthus debilis*)
 - Beach morning glory (*Ipomaea imperati*),
 - SEA PURSLANE (*Sesuvium portulacastrum*)



- NOTES:
1. DATUMS - HORIZ: NAD83 SPC (FL WEST, FT), VERT: NAVD88 (UNITS IN FT)
 2. SURVEY DATE: OCT 2023.
 3. EXAGGERATED SCALE: 1V:10H
 4. FINAL DESIGN PLAN MAY BE ADJUSTED BASED UPON BEACH CONDITIONS AT TIME OF CONSTRUCTION.
 5. REFER TO SECTION 3500 FOR PLANT SPECIFICATIONS.

REVISIONS			
LTR	DESCRIPTION	BY	DATE



TOWN OF LONGBOAT KEY, FL GULFSIDE RD. INTERIM BEACH RENOURISHMENT PROJECT	
DUNE PLANTING DETAILS	
DRAWN BY: ML	DATE: 07/01/2024
CHECKED BY: KJE	DATE: 07/01/2024