

LIDO KEY BEACH DUNE RESTORATION PROJECT

SARASOTA COUNTY, FLORIDA

FOR BID



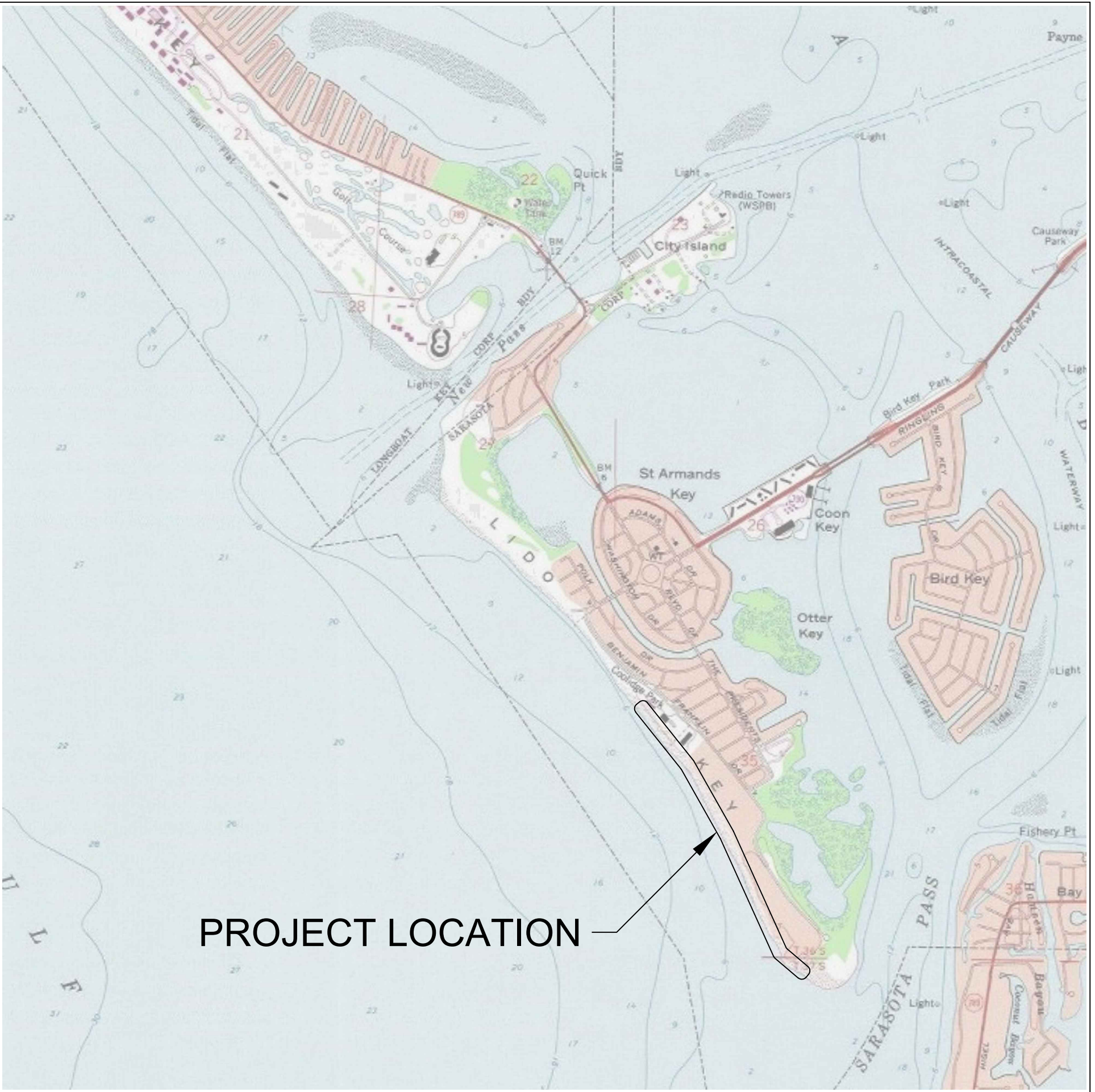
DRAWING INDEX

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LOCATION MAP

N.T.S.



VICINITY MAP

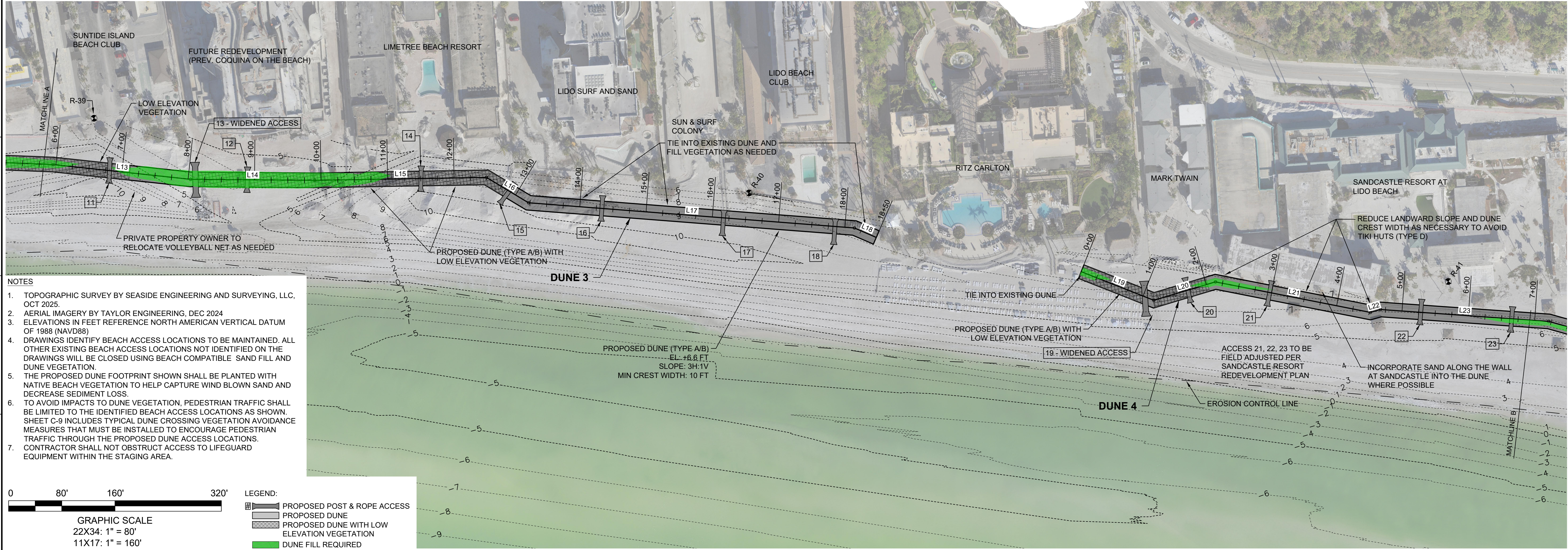
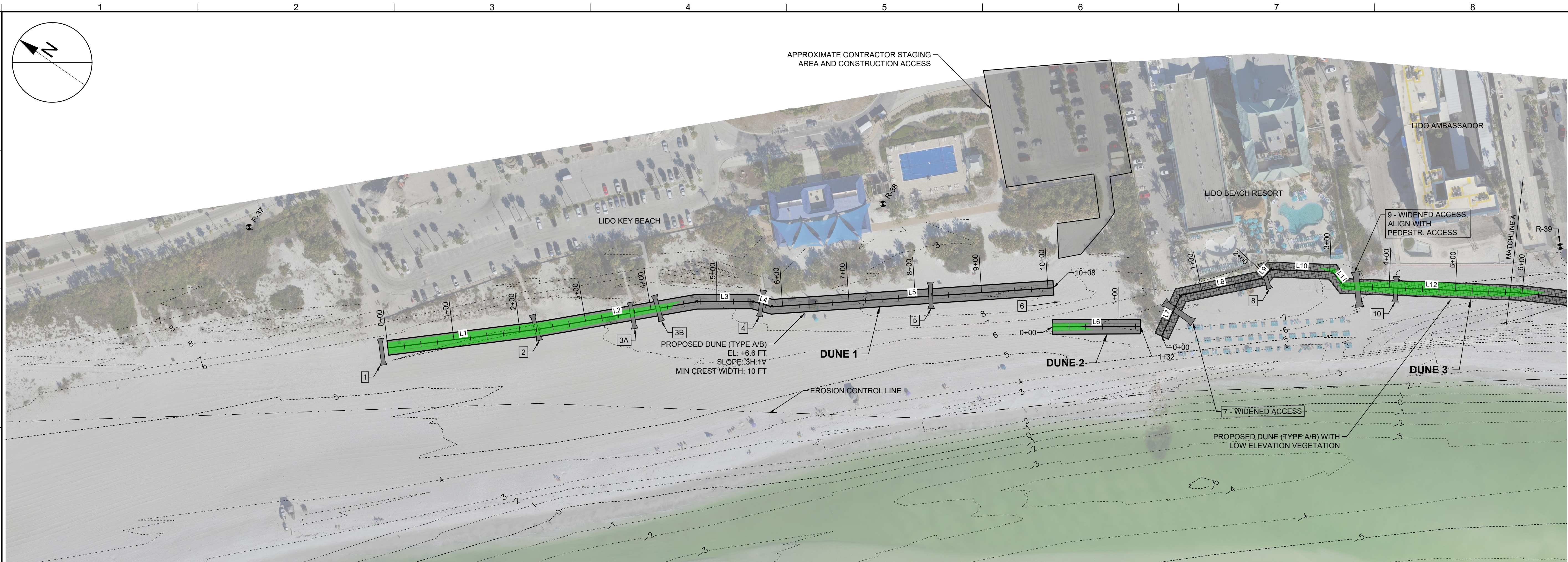
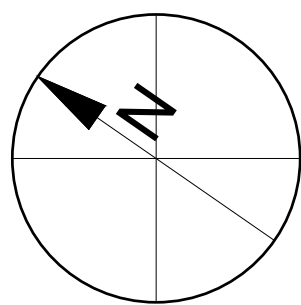
1"= 2000' (22x34)

1"= 4000' (11x17)

REFERENCE:
USA TOPO MAPS, ESRI



TAYLOR ENGINEERING, INC. 10199 SOUTHSIDE BLVD SUITE 310 JACKSONVILLE, FLORIDA 32256 (904)-731-7040 REGISTRY # 4815			SEAL	FOR BID
	PROJECT TITLE			
	LIDO KEY BEACH DUNE RESTORATION PROJECT SARASOTA COUNTY, FLORIDA		NICOLE A. FILIPOW P.E. #99896	
	PROJECT NO	C2020-044	C-1	
DATE	APR 2026	SHEET 1 OF 9		
7	8			



- NOTES
1. TOPOGRAPHIC SURVEY BY SEASIDE ENGINEERING AND SURVEYING, LLC, OCT 2025.
 2. AERIAL IMAGERY BY TAYLOR ENGINEERING, DEC 2024
 3. ELEVATIONS IN FEET REFERENCE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
 4. DRAWINGS IDENTIFY BEACH ACCESS LOCATIONS TO BE MAINTAINED. ALL OTHER EXISTING BEACH ACCESS LOCATIONS NOT IDENTIFIED ON THE DRAWINGS WILL BE CLOSED USING BEACH COMPATIBLE SAND FILL AND DUNE VEGETATION.
 5. THE PROPOSED DUNE FOOTPRINT SHOWN SHALL BE PLANTED WITH NATIVE BEACH VEGETATION TO HELP CAPTURE WIND BLOWN SAND AND DECREASE SEDIMENT LOSS.
 6. TO AVOID IMPACTS TO DUNE VEGETATION, PEDESTRIAN TRAFFIC SHALL BE LIMITED TO THE IDENTIFIED BEACH ACCESS LOCATIONS AS SHOWN. SHEET C-9 INCLUDES TYPICAL DUNE CROSSING VEGETATION AVOIDANCE MEASURES THAT MUST BE INSTALLED TO ENCOURAGE PEDESTRIAN TRAFFIC THROUGH THE PROPOSED DUNE ACCESS LOCATIONS.
 7. CONTRACTOR SHALL NOT OBSTRUCT ACCESS TO LIFEGUARD EQUIPMENT WITHIN THE STAGING AREA.

080'160'320'

GRAPHIC SCALE
22X34: 1" = 80'
11X17: 1" = 160'

LEGEND:

- PROPOSED POST & ROPE ACCESS
- PROPOSED DUNE
- PROPOSED DUNE WITH LOW ELEVATION VEGETATION
- DUNE FILL REQUIRED

TAYLOR
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SARASOTA COUNTY, FLORIDA

NO	ZONE	REVISIONS / SUBMISSIONS	DATE

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REVIEWED	KC

SHEET TITLE

DUNE PLAN

C-3

SHEET 3 OF 9

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NOTES

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DUNE 1 CENTERLINE CONTROL TABLE						
SEGMENT	LENGTH	BEARING	START STATION	END STATION	START POINT (N,E)	END POINT (N,E)
L1	229.42	S41°46'11.85"E	0+00.00	2+29.42	1083156.95,468459.64	1082985.85,468612.46
L2	240.23	S44°34'55.71"E	2+29.42	4+69.65	1082985.85,468612.46	1082814.74,468781.09
L3	84.61	S34°57'36.34"E	4+69.65	5+54.26	1082814.74,468781.09	1082745.40,468829.57
L4	29.70	S19°09'18.02"E	5+54.26	5+83.96	1082745.40,468829.57	1082717.35,468839.32
L5	424.35	S38°33'10.98"E	5+83.96	10+08.31	1082717.35,468839.32	1082385.49,469103.79

DUNE 2 CENTERLINE CONTROL TABLE						
SEGMENT	LENGTH	BEARING	START STATION	END STATION	START POINT (N,E)	END POINT (N,E)
L6	132.27	S34°56'31.85"E	0+00.00	1+32.27	1082353.21,469054.61	1082244.78,469130.37

DUNE 3 CENTERLINE CONTROL TABLE						
SEGMENT	LENGTH	BEARING	START STATION	END STATION	START POINT (N,E)	END POINT (N,E)
L7	67.64	N80°11'39.46"E	0+00.00	0+67.64	1082210.21,469136.75	1082221.73,469203.40
L8	126.28	S46°31'22.59"E	0+67.64	1+93.92	1082221.73,469203.40	1082134.85,469295.03
L9	17.48	S81°44'26.02"E	1+93.92	2+11.39	1082134.85,469295.03	1082132.33,469312.33
L10	93.12	S32°36'53.85"E	2+11.39	3+04.51	1082132.33,469312.33	1082053.90,469362.52
L11	26.80	S17°33'24.78"W	3+04.51	3+31.31	1082053.90,469362.52	1082028.35,469354.43
L12	264.52	S32°26'53.53"E	3+31.31	5+95.83	1082028.35,469354.43	1081805.13,469496.36
L13	207.90	S28°33'10.66"E	5+95.83	8+03.73	1081805.13,469496.36	1081622.51,469595.73
L14	186.82	S34°15'11.46"E	8+03.73	9+90.55	1081622.51,469595.73	1081468.09,469700.88
L15	258.17	S35°39'37.88"E	9+90.55	12+48.72	1081468.09,469700.88	1081258.33,469851.39
L16	73.88	S3°37'30.13"E	12+48.72	13+22.61	1081258.33,469851.39	1081184.60,469856.06
L17	491.76	S30°16'34.09"E	13+22.61	18+14.37	1081184.60,469856.06	1080759.91,470103.99
L18	35.77	S11°16'10.15"E	18+14.37	18+50.14	1080759.91,470103.99	1080724.83,470110.98

DUNE 4 CENTERLINE CONTROL TABLE						
SEGMENT	LENGTH	BEARING	START STATION	END STATION	START POINT (N,E)	END POINT (N,E)
L19	117.46	S13°10'48.31"E	0+00.00	1+17.46	1080442.16,470244.11	1080327.80,470270.89
L20	96.74	S51°22'39.44"E	1+17.46	2+14.20	1080327.80,470270.89	1080267.42,470346.47
L21	237.37	S23°32'39.48"E	2+14.20	4+51.57	1080267.42,470346.47	1080049.80,470441.29
L22	15.83	S50°33'24.41"E	4+51.57	4+67.40	1080049.80,470441.29	1080039.75,470453.51
L23	253.74	S30°39'03.06"E	4+67.40	7+21.14	1080039.75,470453.51	1079821.46,470582.87
L24	97.74	S19°02'39.93"E	7+21.14	8+18.88	1079821.46,470582.87	1079729.07,470614.76
L25	19.66	S11°31'42.10"W	8+18.88	8+38.54	1079729.07,470614.76	1079709.80,470610.84
L26	196.67	S19°02'39.93"E	8+38.54	10+35.21	1079709.80,470610.84	1079523.90,470675.01
L27	21.81	S15°26'10.54"W	10+35.21	10+57.02	1079523.90,470675.01	1079502.88,470669.20
L28	170.77	S14°40'01.64"E	10+57.02	12+27.78	1079502.88,470669.20	1079337.67,470712.44
L29	130.29	S38°35'50.82"E	12+27.78	13+58.07	1079337.67,470712.44	1079235.85,470793.72
L30	51.02	S16°45'04.71"E	13+58.07	14+09.09	1079235.85,470793.72	1079186.99,470808.43
L31	359.19	S26°57'54.00"E	14+09.09	17+68.28	1079186.99,470808.43	1078866.85,470971.30
L32	85.94	S51°51'22.10"W	17+68.28	18+54.22	1078866.85,470971.30	1078813.77,470903.71
L33	63.45	S27°38'57.03"E	18+54.22	19+17.67	1078813.77,470903.71	1078757.57,470933.15
L34	15.77	S3°32'08.12"W	19+17.67	19+33.44	1078757.57,470933.15	1078741.83,470932.18
L35	75.88	S39°14'45.75"E	19+33.44	20+09.33	1078741.83,470932.18	1078683.06,470980.19
L36	17.65	S77°20'08.47"E	20+09.33	20+26.98	1078683.06,470980.19	1078679.19,470997.41
L37	50.29	S51°15'24.78"E	20+26.98	20+77.27	1078679.19,470997.41	1078647.72,471036.64
L38	251.71	S36°18'54.62"E	20+77.27	23+28.98	1078647.72,471036.64	1078444.90,471185.71
L39	76.52	S20°45'32.65"W	23+28.98	24+05.50	1078444.90,471185.71	1078373.35,471158.59
L40	24.19	S26°18'29.35"E	24+05.50	24+29.69	1078373.35,471158.59	1078351.66,471169.31
L41	42.57	S68°06'29.24"E	24+29.69	24+72.26	1078351.66,471169.31	1078335.78,471208.81
L42	56.61	S36°26'04.80"E	24+72.26	25+28.87	1078335.78,471208.81	1078290.24,471242.43
L43	233.03	S74°49'22.94"E	25+28.87	27+61.90	1078290.24,471242.43	1078229.23,471467.33
L44	62.20	S47°25'15.30"E	27+61.90	28+24.10	1078229.23,471467.33	1078187.15,471513.13
L45	51.33	S65°10'47.16"E	28+24.10	28+75.43	1078187.15,471513.13	1078165.60,471559.71

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SARASOTA COUNTY, FLORIDA

DATE	REVISIONS / SUBMISSIONS	ZONE
		NO

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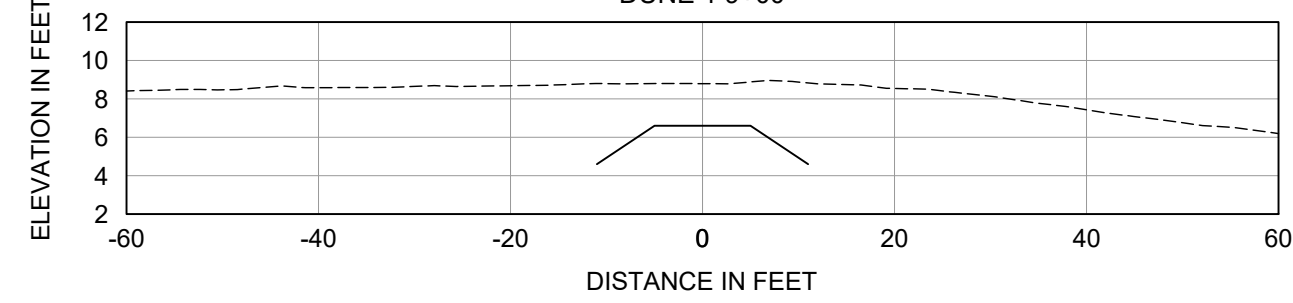
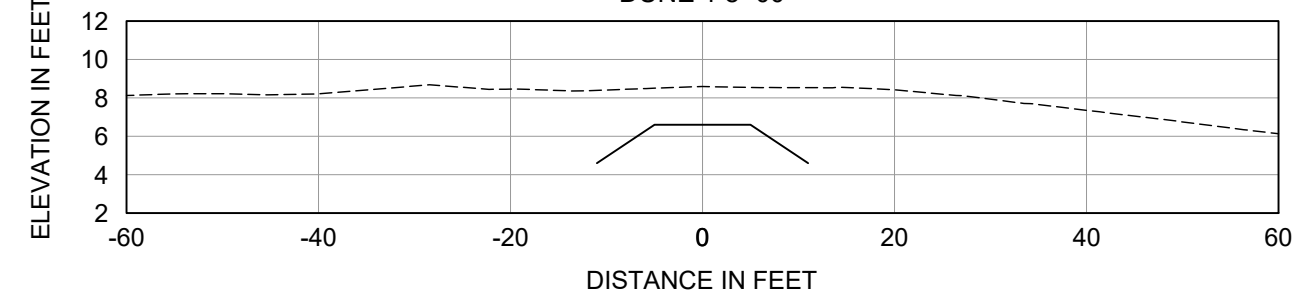
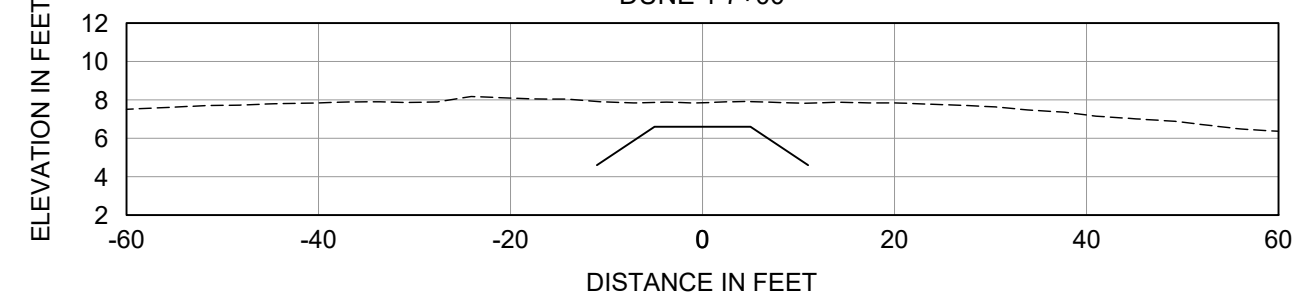
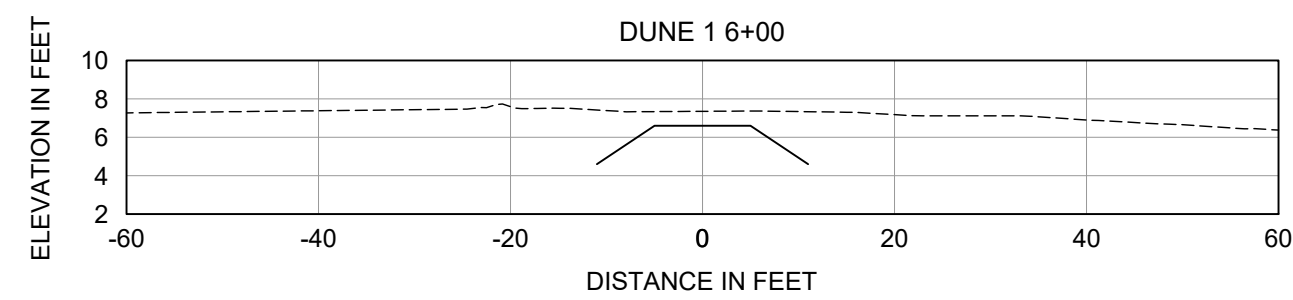
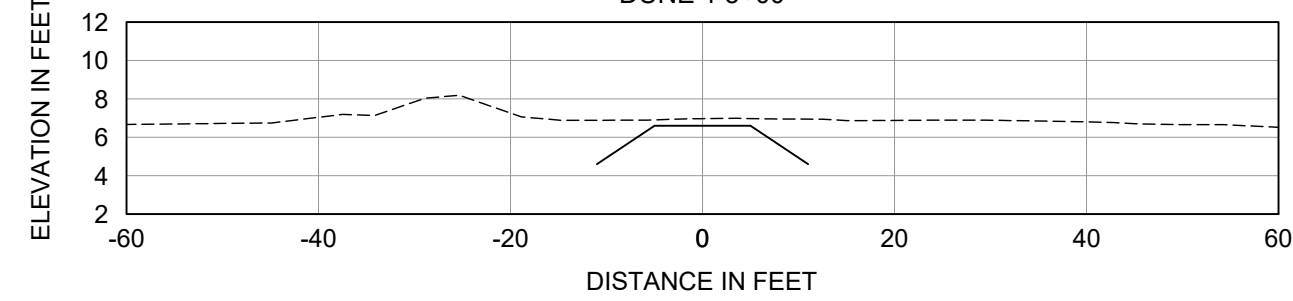
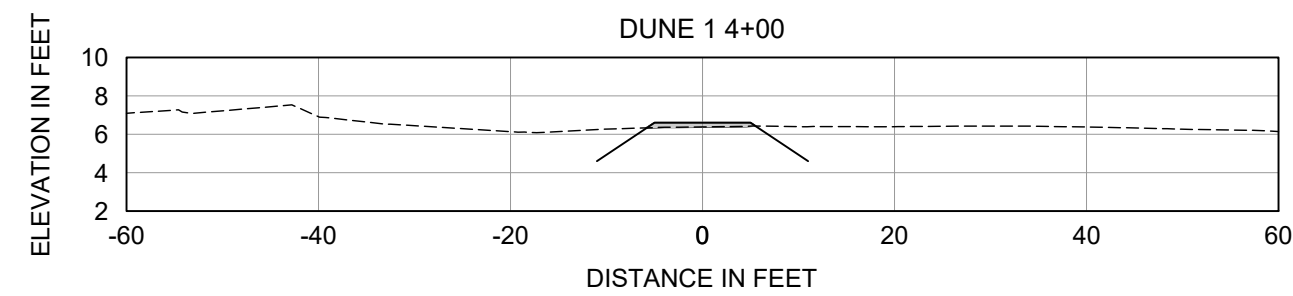
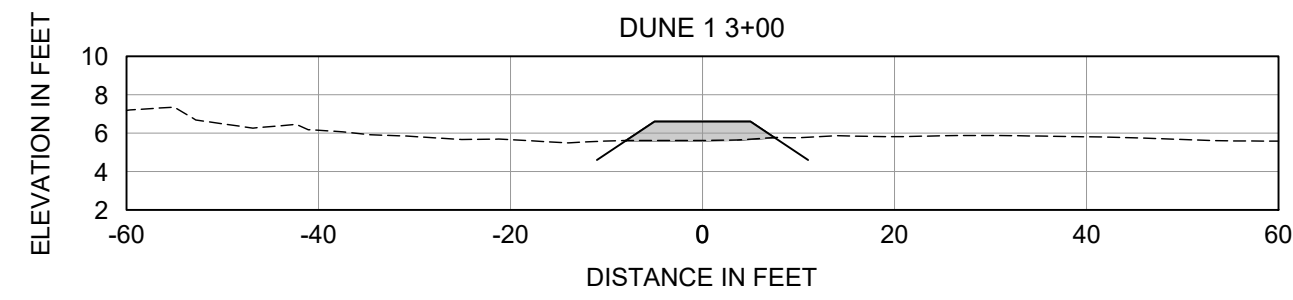
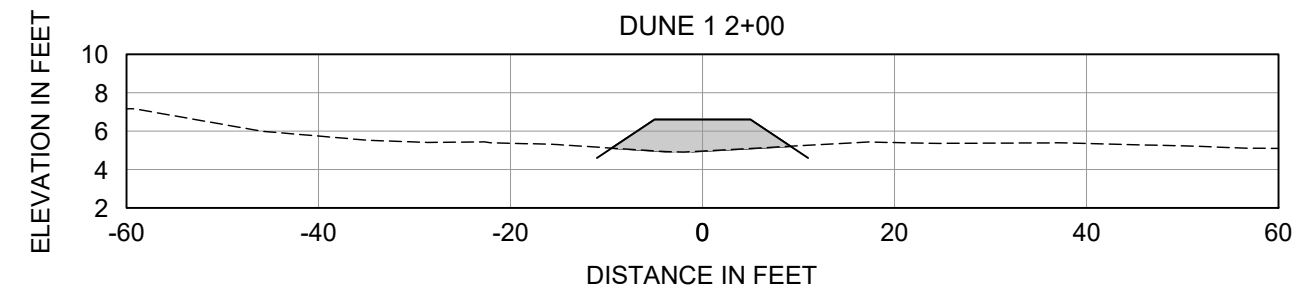
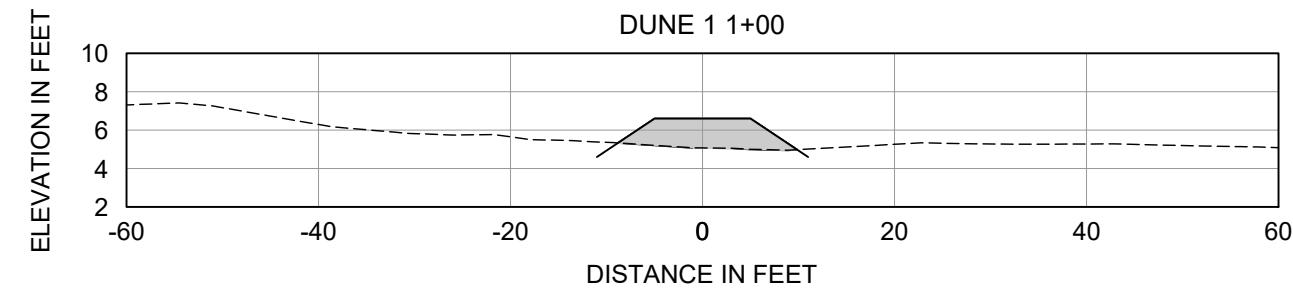
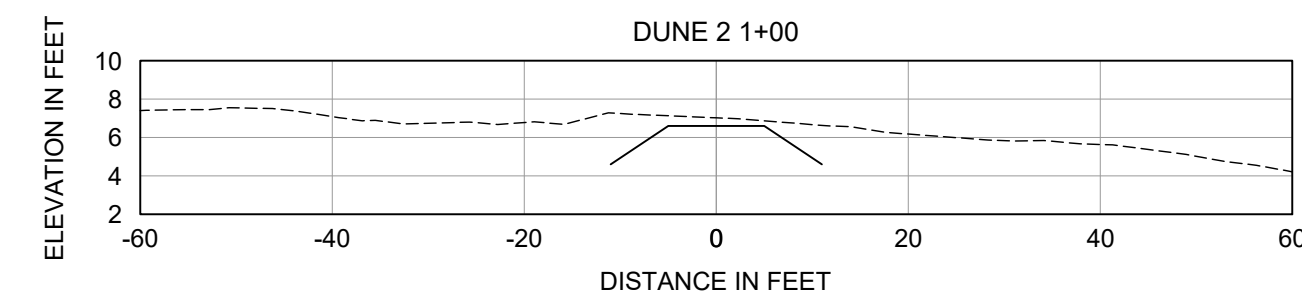
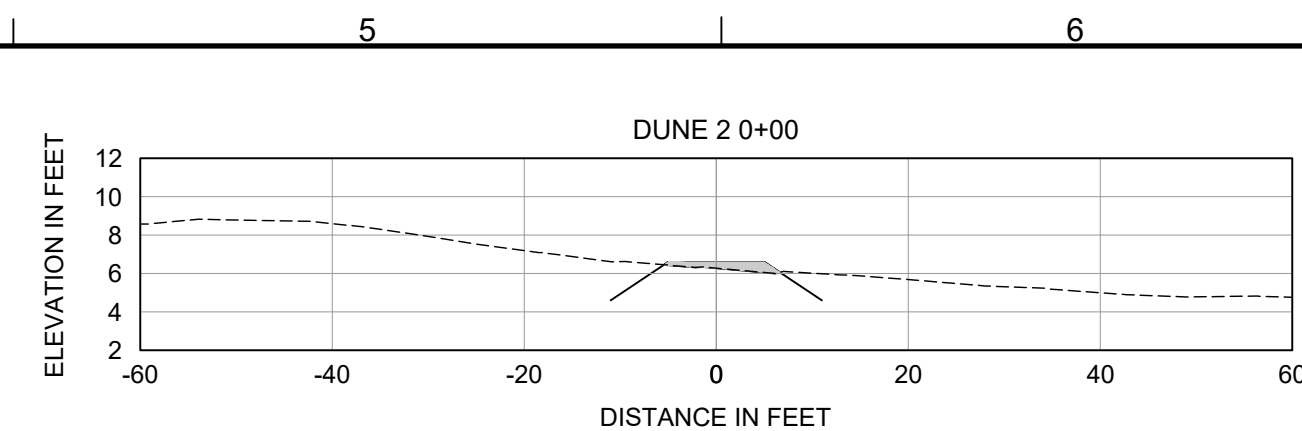
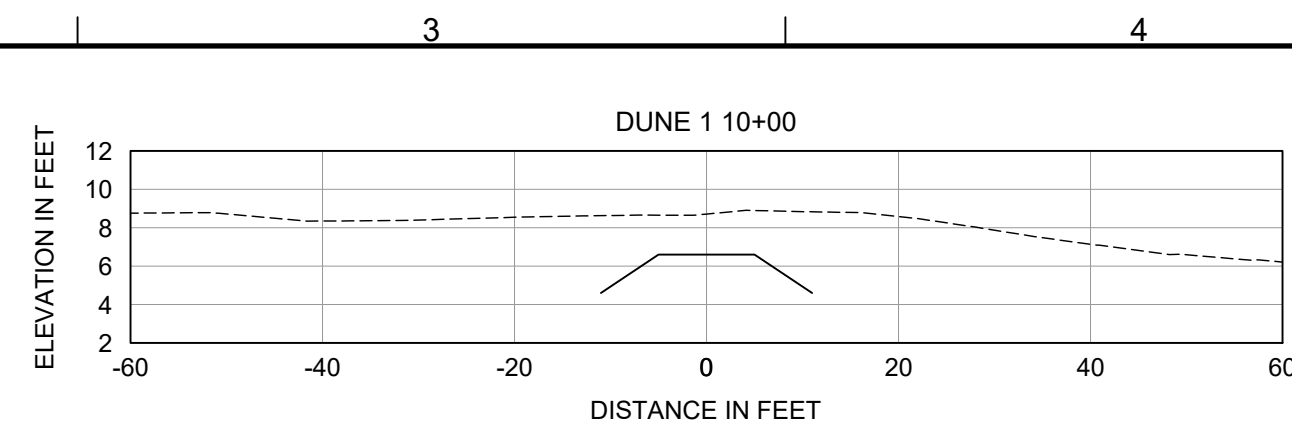
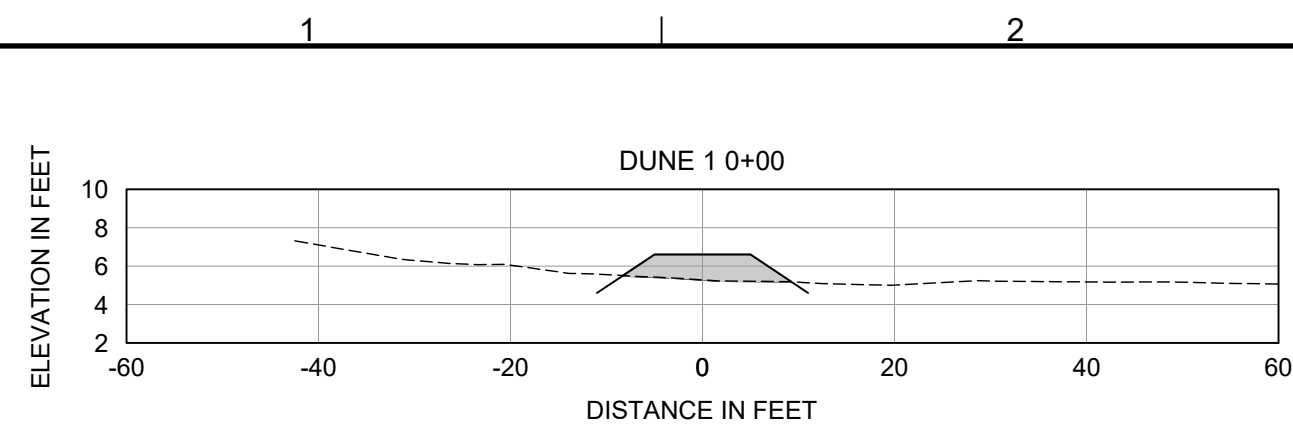
PROJECT NO	C2020-044
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CHECKED	NF
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SHEET TITLE

DUNE PLAN AND
CONTROL TABLES

C-4

SHEET 4 OF 9



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LEGEND

----- OCT 2025 SURVEY

———— DUNE TEMPLATE

 DUNE FILL



TAYLOR
ENGINEERING, INC.

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FOR BID

NICOLE A. FILIPOW P.E.#99896

CT TITLE

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PROJECT

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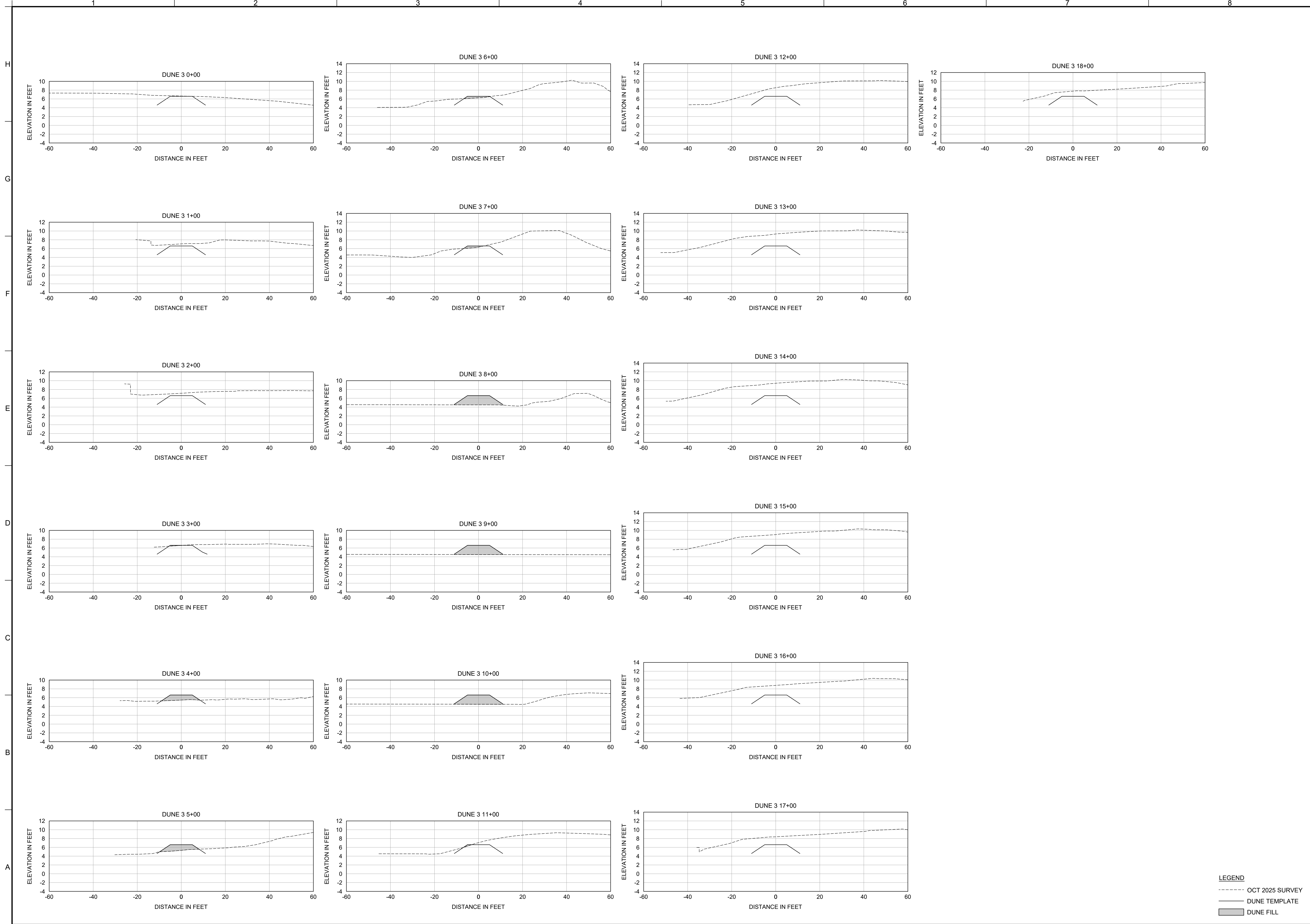
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DUNE CROSS-SECTIONS

C-5

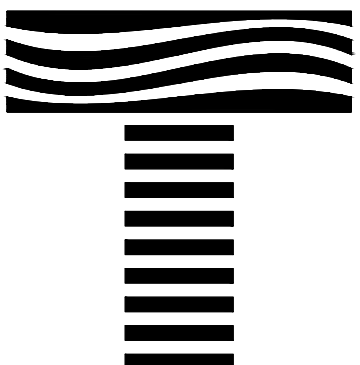
SHEET 5 OF 9

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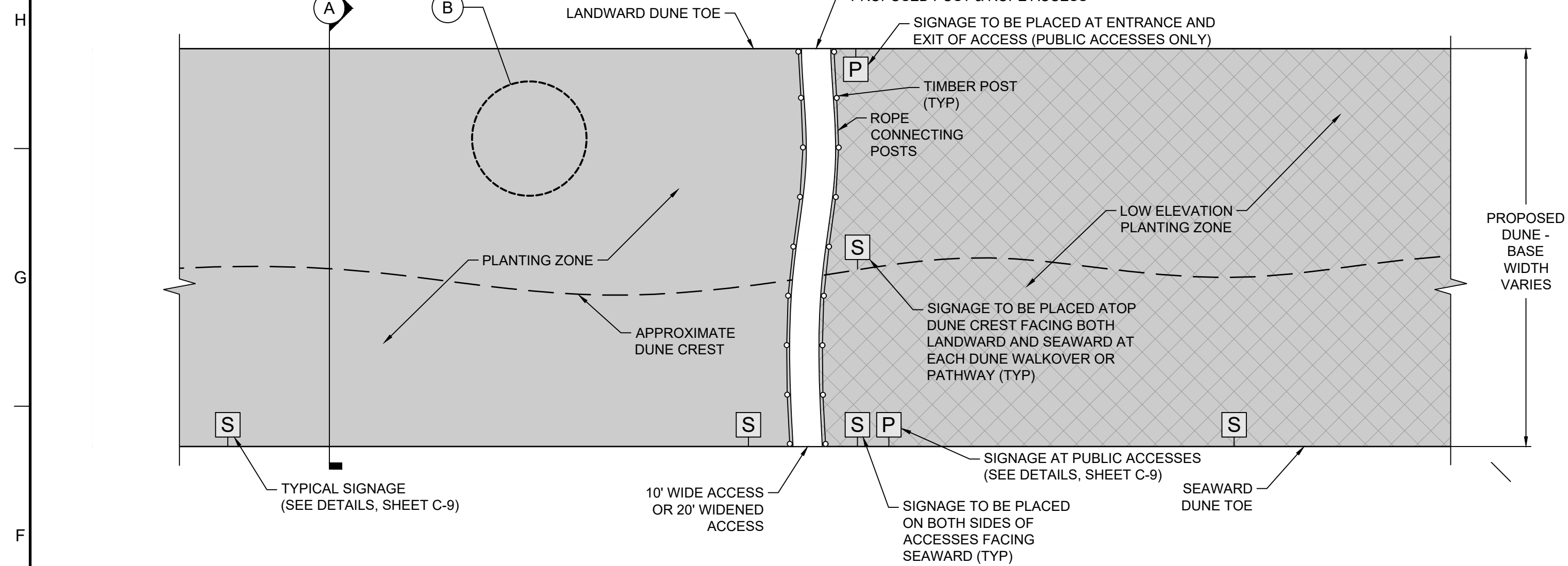
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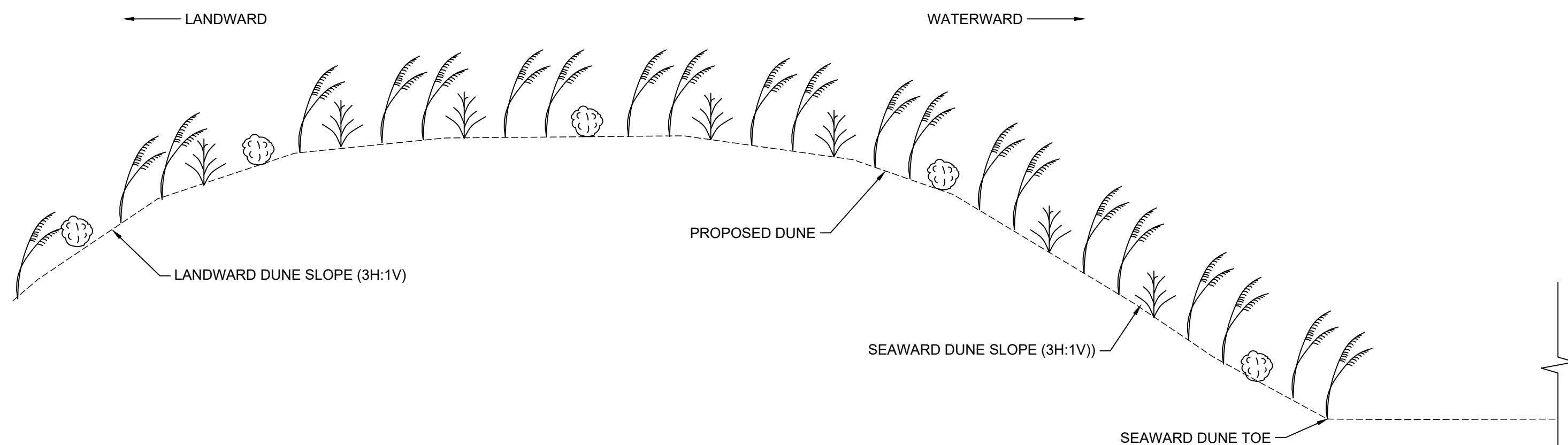
DUNE
CROSS-SECTIONS

C-6

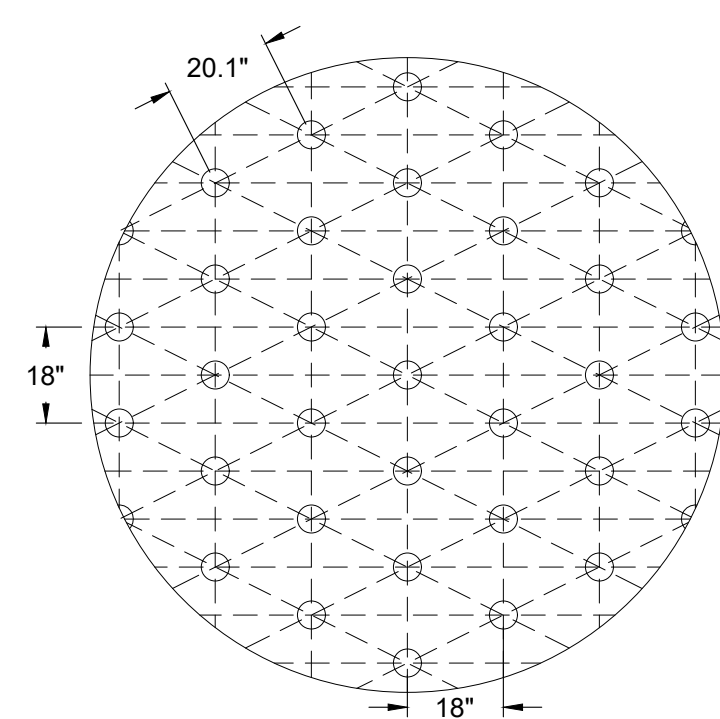
SHEET 6 OF 9



TYPICAL DUNE PLANTING PLAN



A TYPICAL DUNE PLANTING CROSS-SECTION
NOT TO SCALE



B DUNE PLANTING DETAIL: 18" SPACING
NOT TO SCALE

GENERAL NOTES

1. THE CONTRACTOR SHALL NOT ENCROACH INTO EXISTING VEGETATION LANDWARD OF THE PLANTING AREA.
2. PLANTING SHALL BE DONE BY HAND DURING DAYLIGHT HOURS ONLY.
3. NO HEAVY EQUIPMENT SHALL BE USED ON OR SEAWARD OF THE DUNE FOR PLANTING PURPOSES.
4. PLANTS SHALL BE PLANTED 18" ON CENTER IN ROWS SPACED 18" APART.
5. THE PLANTING DEPTH SHALL BE AT LEAST 6" MEASURED FROM THE TOP OF THE ROOT BALL.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT QUANTITIES NEEDED.
7. LOCATIONS OF BEACH ACCESSES SHOULD BE FIELD ADJUSTED WITH THE CITY OF SARASOTA AND THE ENGINEER TO ALIGN WITH EXISTING ACCESS POINTS
8. NO POSTS SHALL BE INSTALLED CLOSER THAN 5-FT TO A SEAWALL, REVETMENT, OR OTHER HARDENED STRUCTURE.
9. SEE SPECIFICATIONS FOR ADDITIONAL PLANTING AND MAINTENANCE REQUIREMENTS
10. ANY IMPACTS TO EXISTING DUNES BEYOND THOSE INDICATED ON THESE DRAWINGS SHALL BE RESTORED AND REPLANTED TO MATCH THE PRE-CONSTRUCTION CONDITIONS.
11. NIGHTTIME STORAGE OF EQUIPMENT OR MATERIALS SHALL BE OFF THE BEACH.

STANDARD PLANTING AREA

COMMON NAME	SCIENTIFIC NAME	SIZE	% OF TOTAL	SPACING	ESTIMATED QUANTITY
SEA OATS	<i>UNIOLA PANICULATA</i>	2" LINER	70%	18" O.C.	42,670
BITTER PANICUM	<i>PANICUM AMARUM</i>	2" LINER	15%	18" O.C.	9,140
WEST COAST DUNE SUNFLOWER	<i>HELIANTHUS DEBILIS</i> SPP. <i>VESTITUS</i>	2" LINER	15% - NO SINGLE SPECIES SHALL ACCOUNT FOR GREATER THAN 5%	EVENLY DISTRIBUTED AMONG SEA OATS	9,140
PLANKET FLOWER	<i>GAILLARDIA PULCHRA</i>	2" LINER			
RAILROAD VINE	<i>IPOMOEA PES-CAPRAE</i>	2" LINER			
BEACH MORNING GLORY	<i>IPOMOEA IMPERATI</i>	2" LINER			
SEA PURSLANE	<i>SESUVIUM PORTULACAESTRUM</i>	2" LINER			

LOW ELEVATION PLANTING AREA

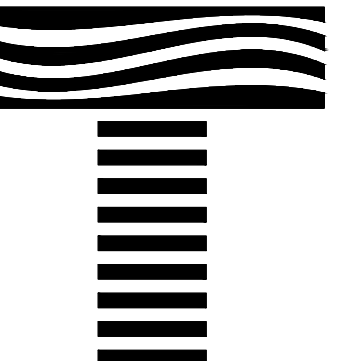
COMMON NAME	SCIENTIFIC NAME	SIZE	% OF TOTAL	SPACING	ESTIMATED QUANTITY
WEST COAST DUNE SUNFLOWER	<i>HELIANTHUS DEBILIS</i> SSP. <i>VESTITUS</i>	2" LINER	20%	18" O.C., EVENLY DISTRIBUTED	4,085
BLANKET FLOWER	<i>GAILLARDIA PULCHELLA</i>	2" LINER	20%		4,085
RAILROAD VINE	<i>IPOMOEA PES-CAPRAE</i>	2" LINER	20%		4,085
BEACH MORNING GLORY	<i>IPOMOEA IMPERATI</i>	2" LINER	20%		4,085
SEA PURSLANE	<i>SESUVIUM PORTULACAstrum</i>	2" LINER	20%		4,085

TYPICAL DUNE PLANTING TABLE



VEGETATION AVOIDANCE: TYPICAL POST AND ROPE INSTALLATION

TAYLOR
ENGINEERING, INC.



10199 SOUTHSIDE BLVD
SUITE 310
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SHEET TITLE

DUNE PLANTING DETAILS

C-8

SHEET 8 OF 9

