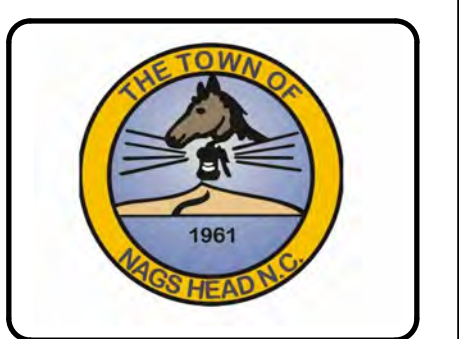


TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT

NAGS HEAD, NORTH CAROLINA



Mark	Description	Date	By	Appr
1	UPDATED BORROW AREA & ADDED SHEETS	2021-08-31	BU	
0	ISSUED FOR PERMIT	2021-07-09		

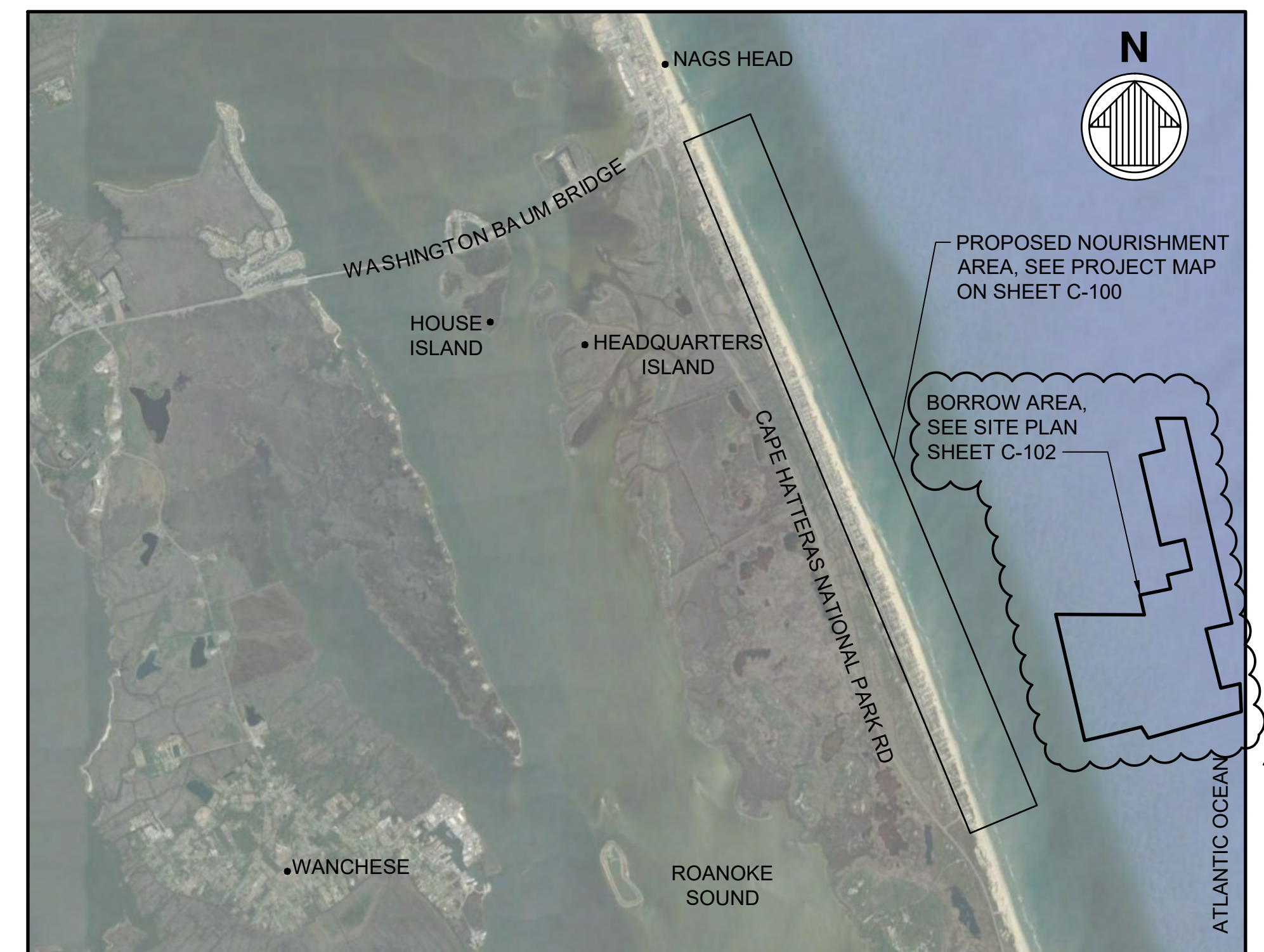
TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT

COVER SHEET



VICINITY MAP
SCALE: NTS

INDEX OF DRAWINGS	
SHEET NO.	SHEET TITLE
G-001	COVER SHEET
G-002	GENERAL NOTES
G-003	KEY PLAN
C-100	OVERALL PROJECT PLAN
C-101	PROJECT STAGING AND ACCESS PLANS
C-102	BORROW AREA PLAN
C-103	BORROW AREA CROSS SECTIONS
C-104	BORROW AREA SEDIMENT SUMMARY TABLE
C-105	CORRIDOR PIPELINE PLAN
C-110	SITE PLAN SHEET 1 OF 9
C-111	SITE PLAN SHEET 2 OF 9
C-112	SITE PLAN SHEET 3 OF 9
C-113	SITE PLAN SHEET 4 OF 9
C-114	SITE PLAN SHEET 5 OF 9
C-115	SITE PLAN SHEET 6 OF 9
C-116	SITE PLAN SHEET 7 OF 9
C-117	SITE PLAN SHEET 8 OF 9
C-118	SITE PLAN SHEET 9 OF 9
C-301	TYPICAL SECTIONS



LOCATION PLAN
SCALE: NTS

Designed by:	NCV	Drawn by:	BU	Reviewed by:	JDM	Submitted by:	MOFFATT & NICHOL
Date:	AUGUST 31, 2021	MAN Project No.:	10979-04	Drawing code:		Drawing Scale:	AS SHOWN
Per scale:	1" = (0 SHEET)						

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 moftatt & nichol
 NC FIRM NO. F-0105

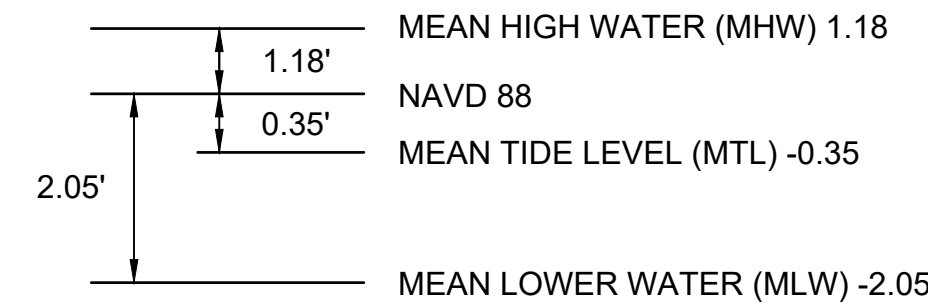
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Sheet Reference No.
G-001
 INDEX: 1 OF 19

GENERAL NOTES:

1. THE NORTHING AND EASTING COORDINATES SHOWN ON THE DRAWINGS AND REFERENCED IN THE DESIGN REFER TO NORTH CAROLINA STATE PLANE NAD83 (NORTH AMERICAN DATUM 83 (FEET)).
2. ELEVATIONS SHOWN ON THE DRAWINGS REFERENCE NAVD88 (NORTH AMERICAN VERTICAL DATUM 1988).
3. ALL THE ELEVATIONS AND BATHYMETRY/TOPOGRAPHY SHOWN ON THE DRAWINGS REFERENCE NAVD88 (NORTH AMERICAN VERTICAL DATUM 1988) AND WERE OBTAINED DURING A JUNE 2020 SURVEY CONDUCTED BY MCKIM & CREED. THE INFORMATION SHOULD ONLY BE CONSIDERED AS INDICATING THE CONDITIONS AT THAT TIME.
4. THE BORROW SITE BATHYMETRY SHOWN ON THE DRAWINGS REFERENCE NAVD88 AND WERE OBTAINED DURING A JANUARY 2021 SURVEY CONDUCTED BY MCKIM & CREED. THE INFORMATION SHOULD ONLY BE CONSIDERED AS INDICATING THE CONDITIONS AT THAT TIME.
5. THE MEAN HIGH WATER ELEVATION AND MEAN LOW WATER ELEVATION SHOWN ON THE BEACH FILL DRAWINGS AND BELOW ARE BASED ON NOAA TIDE STATION 8651370, DUCK, NC.



6. 2020 AERIAL IMAGERY PROVIDED BY NCONEMAP.

BEACH FILL

1. ALL SAND EXCAVATED FROM THE BORROW AREAS SHALL BE TRANSPORTED TO, AND DEPOSITED ON, THE BEACH BETWEEN THE LINES, GRADES, AND CROSS-SECTIONS SHOWN ON THE DRAWINGS.
2. BEACH FILL MATERIAL SHALL BE PLACED WITHIN THE LIMITS AND GRADE LINES SHOWN, AS PRACTICALLY AS POSSIBLE. TOLERANCE SHALL BE WITHIN +0.5 FOOT ABOVE FINISHED GRADE AS SHOWN.
3. THE PLACEMENT DESIGN (PLAN DIMENSIONS) MAY BE CHANGED BY THE OWNER TO ACCOUNT FOR CHANGED CONDITIONS AT THE TIME OF CONSTRUCTION. THE FINAL PLACEMENT DESIGN WILL STRIVE TO PROVIDE THE AVERAGE PLACEMENT DENSITY REFERENCED ON THE PLANS FOR EACH REACH. THIS MAY REQUIRE THE BERM WIDTH TO BE ALTERED FROM THOSE SHOWN ON THE PLANS.
4. THE BEACH FILL SHALL BE GRADED, PRIOR TO COMPLETION OF WORK, TO DISCOURAGE WATER PONDING.
5. EXISTING WALKWAYS SHALL REMAIN. ANY DAMAGE OCCURRING DURING CONSTRUCTION SHALL BE REPAIRED PRIOR TO DEMOBILIZATION. FILL SHALL BE PLACED COMPLETELY UNDERNEATH AND/OR AROUND THE WALKWAY STRUCTURES.
6. CONTOURS FOR THE BEACH FILL PLANS ARE SHOWN AT 5 FT INTERVALS AND ALSO INCLUDE THE BERM ELEVATION OF +6.0 NAVD.
7. CONTOURS FOR THE BORROW SITE ARE SHOWN AS 2 FT (MINOR) AND 10 FT (MAJOR) INTERVALS.
8. BEACH FILL SLOPES CALLED OUT ON THE PLANS ARE HORIZONTAL : VERTICAL.
9. TEMPORARY SAND RAMPS SHALL BE PROVIDED OVER THE DREDGE PIPELINE FOR PEDESTRIAN AND EMERGENCY VEHICLE ACCESS. THE MAXIMUM DISTANCE BETWEEN THESE TEMPORARY SAND RAMPS SHALL BE 500 FEET. THESE TEMPORARY SAND RAMPS SHALL BE LEVELED ONCE THE PIPELINE HAS BEEN MOVED.
10. THE BEACH SHALL BE CLOSED TO THE PUBLIC WITHIN 250 FT IN BOTH THE UP STATION AND DOWN STATION DIRECTION FROM THE ACTIVE PIPELINE DISCHARGE LOCATION.
11. THE PIPELINE SHALL BE PLACED ALONG THE CONSTRUCTED BEACH AS CLOSE TO THE DUNE AS POSSIBLE TO MINIMIZE POTENTIAL SEA TURTLE IMPACTS.
12. CONSTRUCTION LIGHTING SHALL BE MINIMIZED AND FOCUSED ONLY ON THE ACTIVE CONSTRUCTION AREA. THE LIGHTS SHALL BE DIRECTED DOWN AND SHALL BE SHIELDED FROM PERIPHERAL VIEW IN ACCORDANCE WITH FWS GUIDANCE.
13. THE BEACH PLACEMENT SHALL NOT COVER EXISTING ESTABLISHED GRASSES AND SHALL AVOID DISCHARGES DIRECTLY ONTO THE DUNE OR DUNE VEGETATION.
14. EACH MORNING, THE BEACH FILL OPERATIONS SHALL NOT ADVANCE BEYOND THE ACTIVE PLACEMENT AREA PRIOR TO A SEA TURTLE NEST SURVEY AND CONFIRMATION OF NO POTENTIAL NESTS FROM AN EXPERIENCED AND LICENSED MONITOR.
15. A TEMPORARY SHORE-PARALLEL SAND DIKE SHALL BE CONSTRUCTED AND MAINTAINED AS NECESSARY IN FRONT OF THE PIPELINE DISCHARGE TO DISCOURAGE SEDIMENT FROM RETURNING TO THE ATLANTIC OCEAN AND ASSIST WITH CONTROLLING TURBIDITY IMPACTS IN ACCORDANCE WITH STATE WATER QUALITY STANDARDS. THE TEMPORARY DIKE SHALL REMAIN WITHIN THE ACTIVE CONSTRUCTION AREA AND MAY ADVANCE ALONG THE SHORELINE CONSISTENT WITH THE PIPELINE DISCHARGE.

ABBREVIATIONS

CY	CUBIC YARDS	NOAA	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
FT	FEET OR FOOT	No.	NUMBER
FWS	US FISH & WILDLIFE SERVICE	TYP	TYPICAL
MHW	MEAN HIGH WATER	WP	WORK POINT
MLW	MEAN LOW WATER	BL	BASELINE
MTL	MEAN TIDE LEVEL	@	AT
NAD	NORTH AMERICAN DATUM	~	APPROXIMATELY
NAVD	NORTH AMERICAN VERTICAL DATUM	Ø	DIAMETER
NGS	NATIONAL GEODETIC SURVEY		

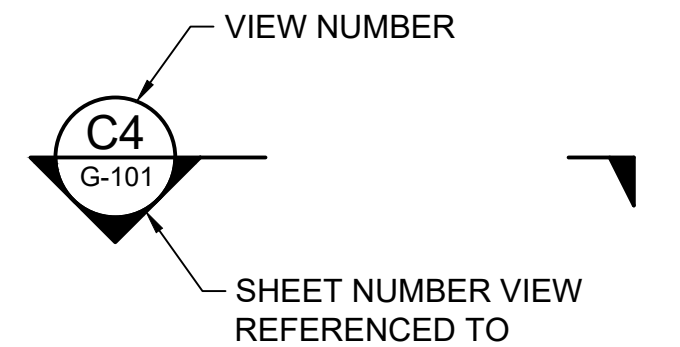
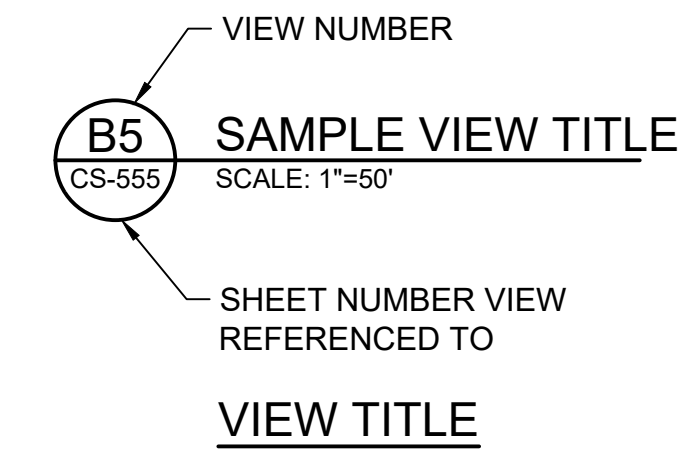
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EXISTING		PROPOSED
---	MEAN HIGH WATER LINE	---
---	MEAN LOW WATER LINE	---
---	MEAN TIDE LEVEL LINE	---
---(5)---	MAJOR CONTOUR	
---	MINOR CONTOUR	
---	FILL SLOPE LIMIT	---
---	FILL SLOPE BREAK	---
⊙	CONSTRUCTION BASELINE WORK POINT	⊙ WP-##
⊙	NGS STATION	
⊙	NAME	
⊙	SLOPE INDICATOR	⊙

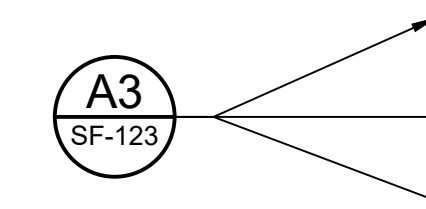
DESIGN FEATURES (DESIGN GRADE -6.0 NAVD)				
SHORELINE SEGMENT	STATIONS	AVERAGE BERM WIDTH (FT)	AVERAGE PLACEMENT DENSITY (CY/LF)	*ESTIMATED PLACEMENT VOLUME (CY)
REACH 1	497+00 TO 790+00	0	0	0
RACH 2	790+00 TO 920+00	30	17.9	232,100
REACH 3N	920+00 TO 975+00	62	42.2	232,100
REACH 3S	975+00 TO 1010+00	98	62.5	218,900
REACH 4	1010+00 TO 1025+00	71	46.2	63,900
		AVERAGE = 56		TOTAL= 752,000

*ESTIMATED PLACEMENT VOLUMES INCLUDE 10% ADDITIONAL MATERIAL TO ACCOUNT FOR POTENTIAL CHANGED CONDITIONS.

LEGEND

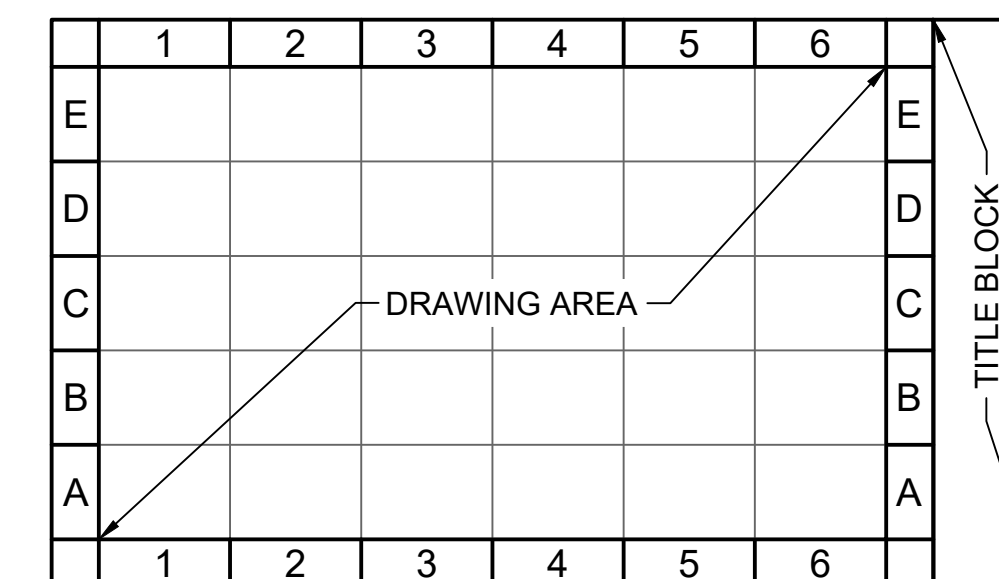


SECTION CALLOUT

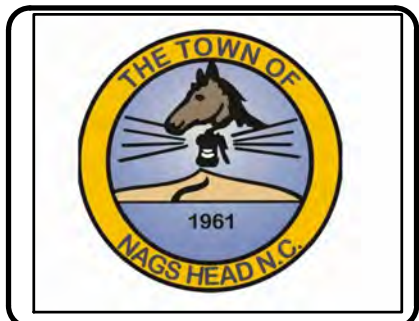
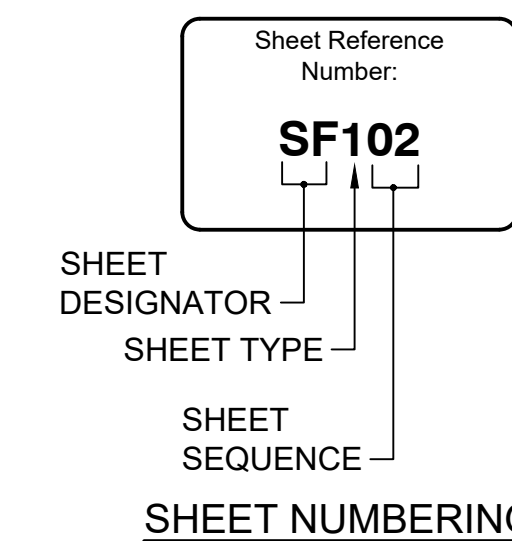


DETAIL CALLOUT WITH LEADERS

* VIEW NUMBER IS BASED ON THE (DACS) LOCATION OF THE LOWER-LEFT EXTENTS OF THE VIEW ON THE REFERENCED SHEET. WHEN REFERENCING DRAWING INFORMATION BETWEEN SHEETS, BOTH THE VIEW AND SHEET NUMBERS MUST BE QUOTED TOGETHER - EITHER IN A CALLOUT FORMAT AS SHOWN ABOVE OR IN THE FORM:
"VIEW NO./SHEET NO." (EG A1/CS-5001)



DRAWING AREA COORDINATE SYSTEM (DACS)

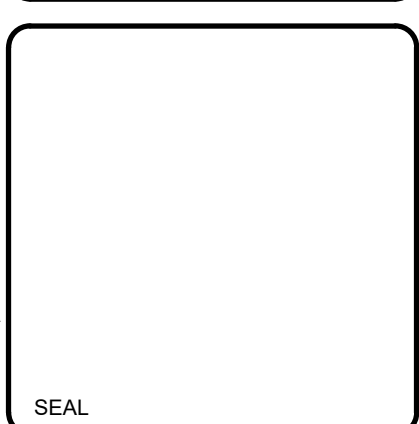


Date	By	Appr.
2021-07-09	BJ	
0		

TOWN OF NAGS HEAD POST-DORIAN BEACH RENOVATION PROJECT	GENERAL NOTES
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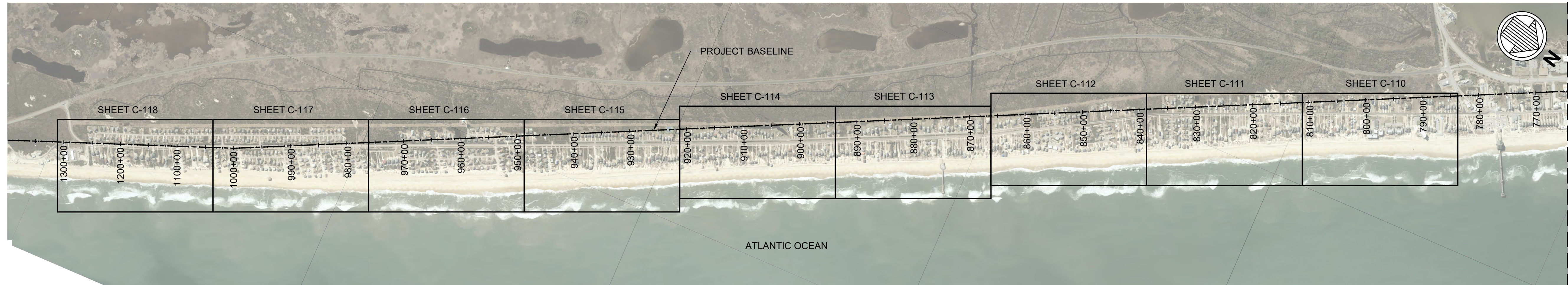
Designed by: NCV	Drawn by: VNM	Reviewed by: JDM	Submitted by: MOFFATT & NICHOL
Date: JULY 09, 2021	MAN Project No: 10979-04	Drawing code:	Drawing Scale: AS SHOWN
Rev: 1			Per Scale: 1" = (0 SHEET)

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 NC FIRM NO. F-0105

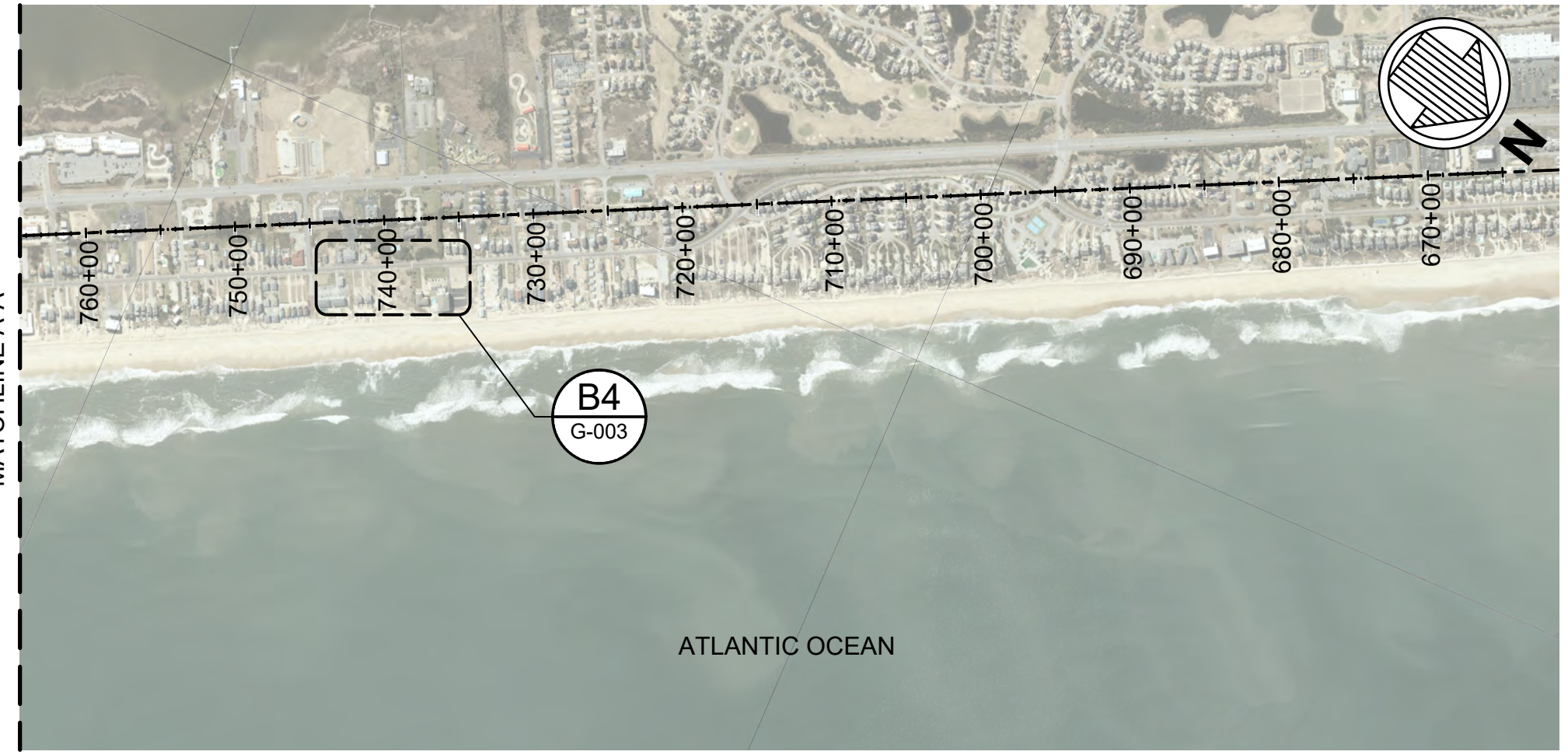


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G-002
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D1 KEY PLAN
G-003 SCALE: 1"=1000'



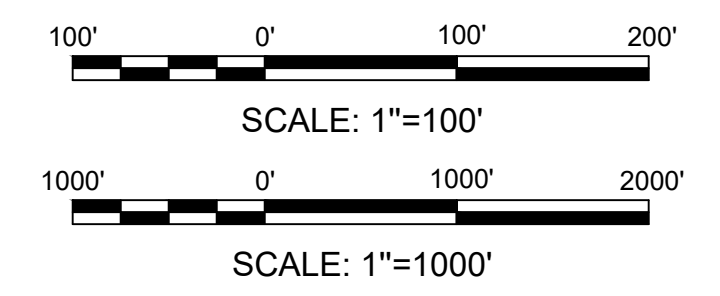
B1 PROJECT GEODETIC CONTROL AREA
G-003 SCALE: 1"=1000'

PROJECT BASELINE COORDINATES		
STATION	NORTHING	EASTING
0+00.00	871,890.78	2,971,224.44
498+36.53	827,961.11	2,995,099.54
995+35.61	736,372.22	3,035,031.20
1499+91.18	782,952.89	3,016,870.16

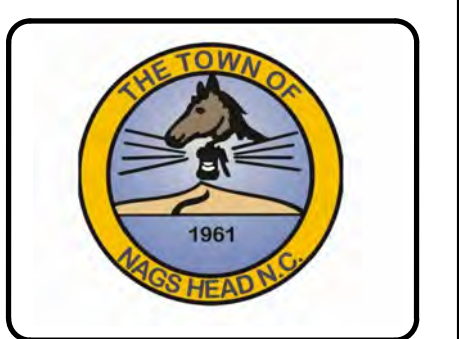


MONUMENT	NORTHING	EASTING	ELEVATION
W 168	806,503.64	3,005,850.14	7.53

B4 PROJECT GEODETIC CONTROL STATION
G-003 SCALE: 1"=100'



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TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT

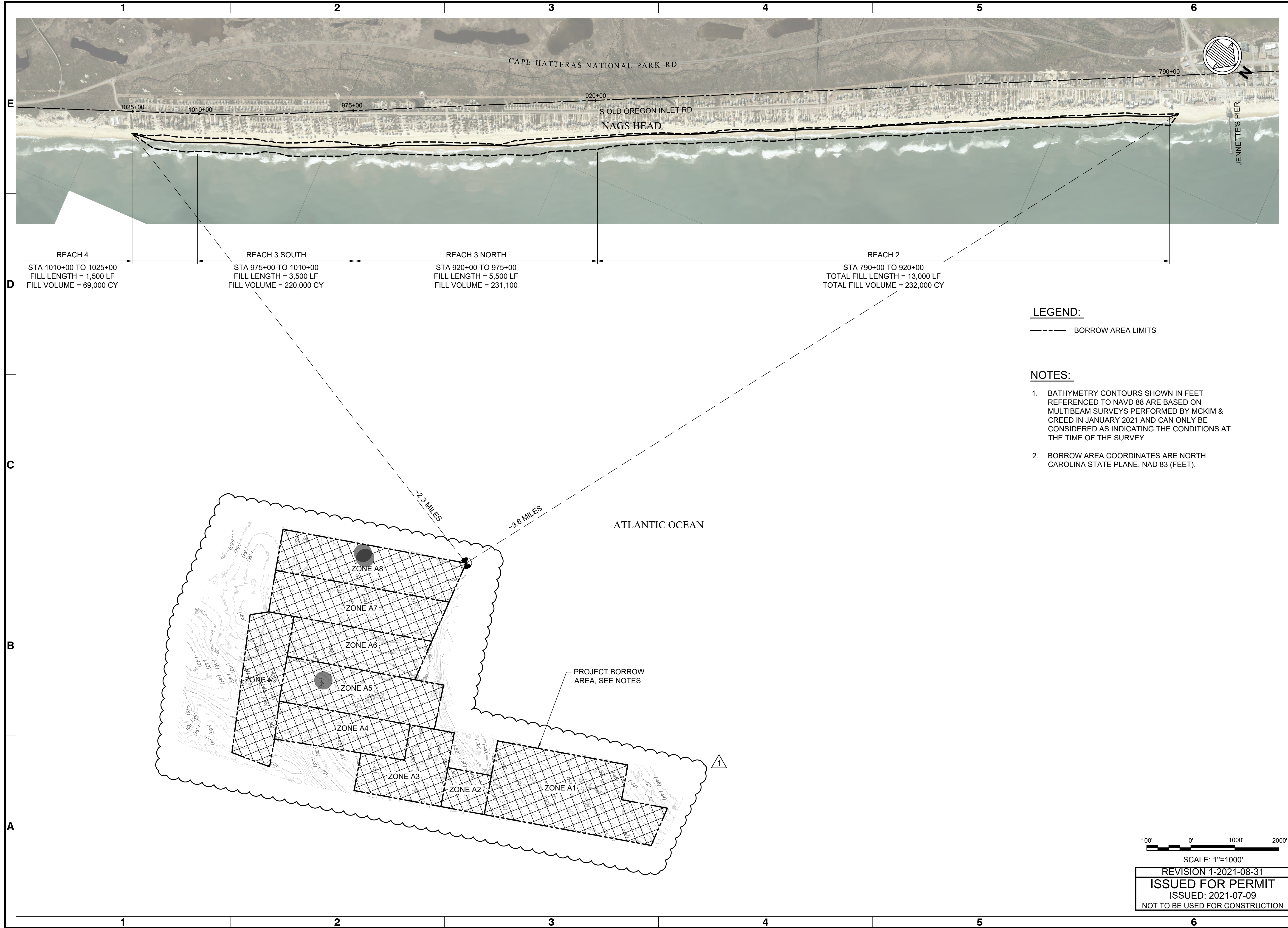
KEY PLAN

Designed by: NCV	Date: JULY 09, 2021	Rev: 1
Drawn by: VNM	MAN Project No: 10979-04	
Reviewed by: JDM	Drawn by: BJ	
Submitted by: MOFFATT & NICHOL	Drawing code:	Per Scale: 1"=10 (0 SHEET)
AS SHOWN		

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NC FIRM NO. F-0105

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Sheet Reference No.
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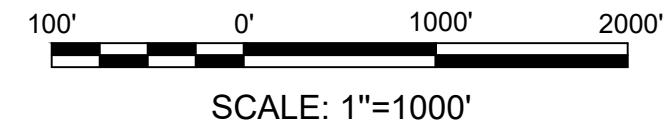


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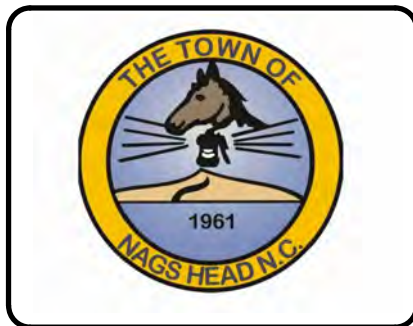
----- BORROW AREA LIMITS

NOTES:

- BATHYMETRY CONTOURS SHOWN IN FEET REFERENCED TO NAVD 88 ARE BASED ON MULTIBEAM SURVEYS PERFORMED BY MCKIM & CREED IN JANUARY 2021 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS AT THE TIME OF THE SURVEY.
- BORROW AREA COORDINATES ARE NORTH CAROLINA STATE PLANE, NAD 83 (FEET).



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TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT

OVERALL PROJECT PLAN

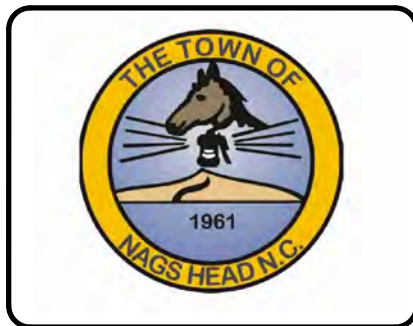
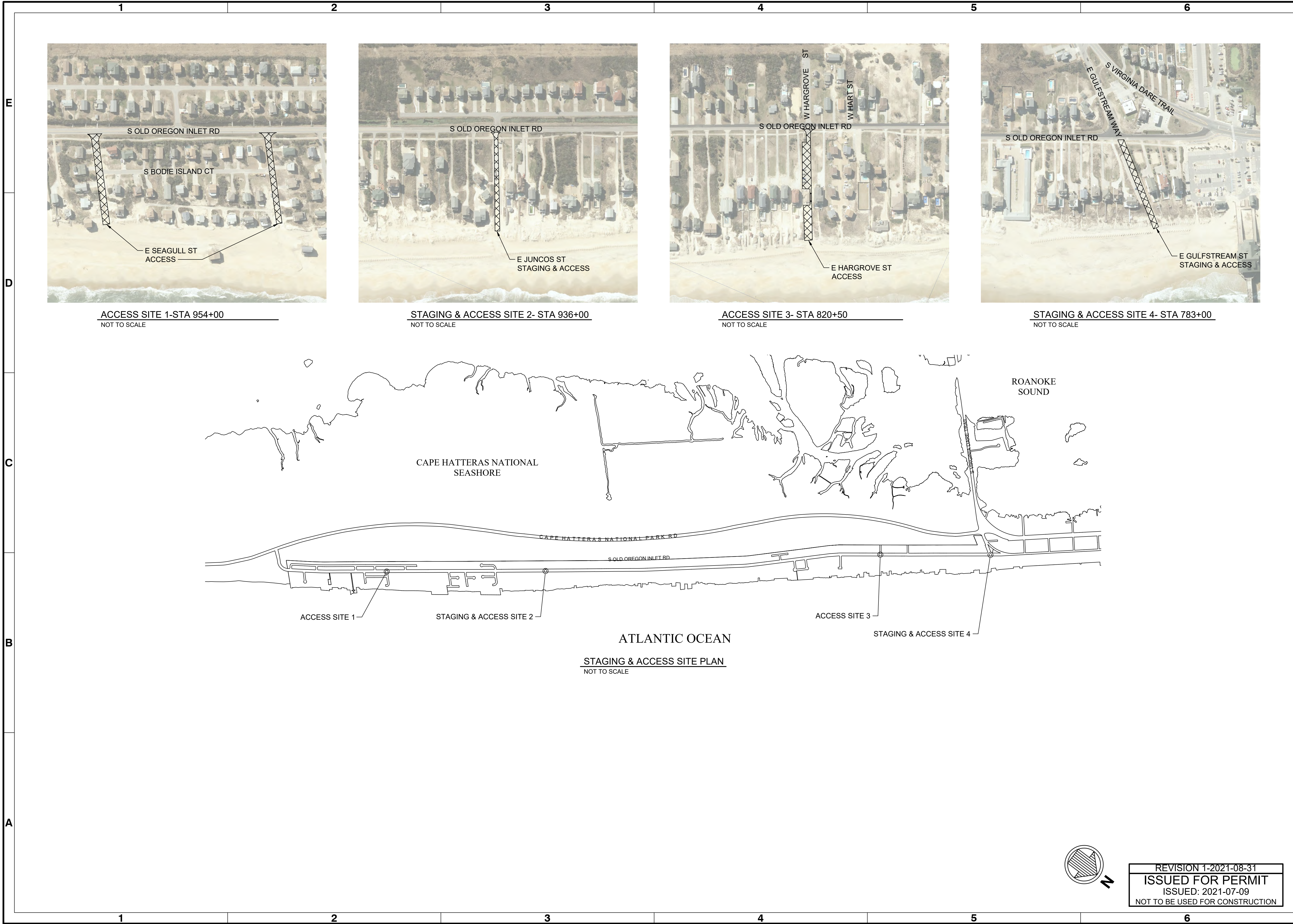
Designed by:	NCV	Drawn by:	BJ	Reviewed by:	JDM	Submitted by:	MOFFATT & NICHOL
Date:	AUGUST 31, 2021	M&N Project No.:	10979-04	Drawing code:		Drawing Scale:	AS SHOWN
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Sheet Reference No.
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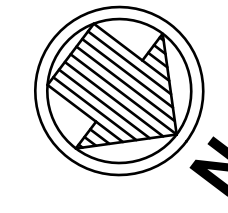
TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT

PROJECT STAGING AND ACCESS PLANS

Designed by:	NCV	Date:	JULY 09, 2021	Rev:	1
Drawn by:	VNM	MAN Project No.:	10979-04	Drawing code:	AS SHOWN
Reviewed by:	JDM	Per scale:	1" = 10' (0 SHEET)	Submitted by:	MOFFATT & NICHOL

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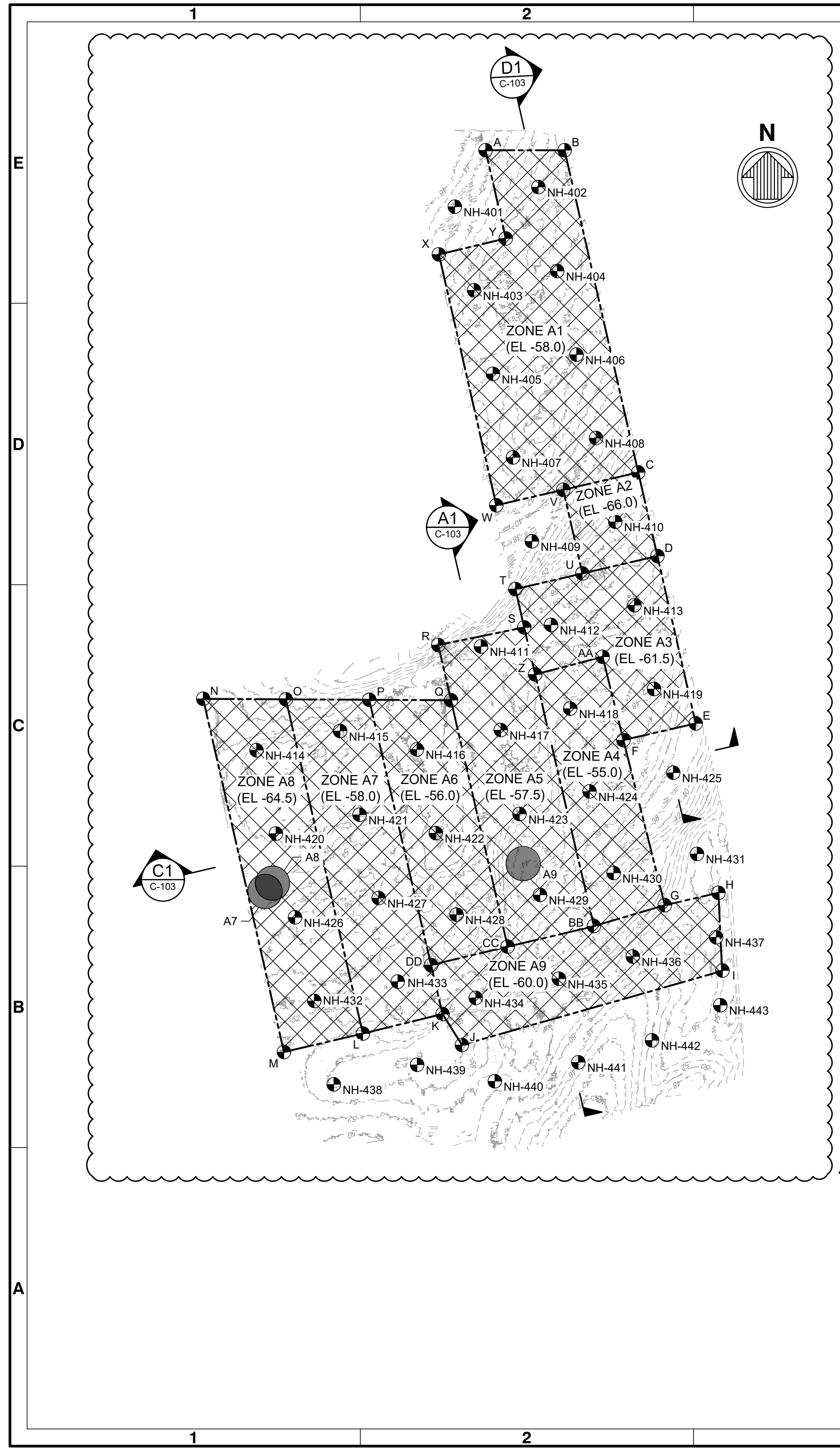
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C-101
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VIBRACORE COORDINATE TABLE

POINT	NORTHING	EASTING
NH-401	797,357.62	3,027,124.51
NH-402	797,587.15	3,028,098.39
NH-403	796,383.60	3,027,348.89
NH-404	796,607.92	3,028,318.48
NH-405	795,409.59	3,027,569.10
NH-406	795,633.50	3,028,543.55
NH-407	794,435.59	3,027,802.06
NH-408	794,661.40	3,028,771.52
NH-409	793,457.88	3,028,022.94
NH-410	793,685.45	3,028,995.37
NH-411	792,232.07	3,027,429.19
NH-412	792,483.40	3,028,246.65
NH-413	792,712.72	3,029,219.52
NH-414	791,023.11	3,024,811.49
NH-415	791,246.76	3,025,786.54
NH-416	791,031.71	3,026,683.05
NH-417	791,258.66	3,027,660.35
NH-418	791,508.46	3,028,469.63
NH-419	791,737.06	3,029,447.53
NH-420	790,051.55	3,025,038.11
NH-421	790,271.16	3,026,013.73
NH-422	790,057.14	3,026,903.05
NH-423	790,279.34	3,027,878.94
NH-424	790,542.29	3,028,695.35
NH-425	790,761.03	3,029,671.28
NH-426	789,074.74	3,025,260.89
NH-427	789,300.13	3,026,236.18
NH-428	789,107.12	3,027,144.05
NH-429	789,337.22	3,028,117.28
NH-430	789,592.09	3,028,975.85
NH-431	789,814.93	3,029,948.38
NH-432	788,101.51	3,025,485.44
NH-433	788,325.99	3,026,458.60
NH-434	788,136.47	3,027,367.90
NH-435	788,359.69	3,028,338.06
NH-436	788,618.47	3,029,199.71
NH-437	788,843.34	3,030,171.71
NH-438	787,128.21	3,025,712.54
NH-439	787,356.63	3,026,684.87
NH-440	787,164.83	3,027,591.07
NH-441	787,385.33	3,028,564.89
NH-442	787,641.91	3,029,424.01
NH-443	788,051.27	3,030,219.75

BORROW AREA WORK POINT TABLE

POINT	NORTHING	EASTING
A	798,016.00	3,027,483.30
B	798,016.00	3,028,405.00
C	794,261.00	3,029,263.60
D	793,286.60	3,029,487.20
E	791,334.80	3,029,933.30
F	791,142.00	3,029,090.80
G	789,216.90	3,029,573.30
H	789,361.00	3,030,198.50
I	788,454.90	3,030,245.30
J	787,588.10	3,027,207.30
K	787,948.20	3,026,981.30
L	787,720.70	3,026,052.40
M	787,505.90	3,025,132.10
N	791,622.00	3,024,190.00
O	791,616.60	3,025,155.20
P	791,611.10	3,026,126.70
Q	791,605.80	3,027,080.10
R	792,249.40	3,026,931.50
S	792,454.60	3,027,933.70
T	792,901.10	3,027,831.70
U	793,082.80	3,028,612.10
V	794,058.40	3,028,388.90
W	793,878.00	3,027,608.30
X	796,802.00	3,026,938.90
Y	796,987.40	3,027,718.70
Z	791,906.50	3,028,061.60
AA	792,111.40	3,028,847.80
BB	788,973.40	3,028,746.30
CC	788,733.70	3,027,741.20
DD	788,519.40	3,026,848.10

LEGEND

- PROPOSED BORROW AREA WORK POINT
- VIBRACORE LOCATION
- PROPOSED DREDGE AREA
- NO DREDGE AREA (AVOIDANCE AREA) - 400' BUFFER (MAGNETIC ANOMALY)

NOTES

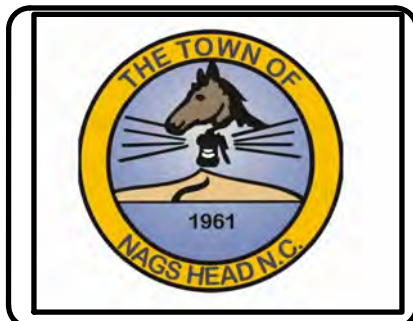
1. BATHYMETRY CONTOURS SHOWN IN FEET REFERENCED TO NAVD 88 ARE BASED ON MULTIBEAM SURVEYS PERFORMED BY MCKIM & CREED IN JANUARY 2021 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS AT THE TIME OF THE SURVEY.
2. BORROW AREA COORDINATES ARE NORTH CAROLINA STATE PLANE, NAD 83 (FEET).

AVOIDANCE AREAS POINT TABLE

POINT	NORTHING	EASTING
A7	789,376.9	3,024,911.8
A8	789,472.8	3,024,998.0
A9	789,701.4	3,027,921.1

BORROW AREA

ZONE	ACRES	PERMITTED DREDGE ELEVATION
A1	136.8	-58.0
A2	20.6	-66.0
A3	59.3	-61.5
A4	57.6	-55.0
A5	84.7	-57.5
A6	64.9	-56.0
A7	84.4	-58.0
A8	88.9	-64.5
A9	71.8	-60.0
TOTAL	669.0	



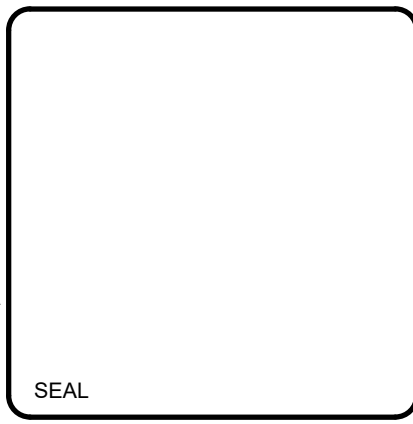
Rev.	Date	Description
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0	2021-07-06	UPDATED BORROW AREA & ADDED SHEETS

TOWN OF NAGS HEAD POST-DORIAN BEACH RENOVATION PROJECT

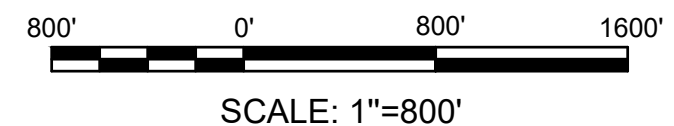
BORROW AREA PLAN

Designed by:	Drawn by:	Reviewed by:	Submitted by:
NCV	VNM	JDM	MOFFATT & NICHOL

4700 FALLS OF NEUSE RD., SUITE 300
 FARMINGTON, NC 27834-4626
moffatt & nichol
 NC FIRM NO. F-0105



Sheet Reference No.
C-102
 INDE: 6 OF 19



SCALE: 1"=800'
 REVISION 1-2021-08-31
 ISSUED FOR PERMIT
 ISSUED: 2021-07-09
 NOT TO BE USED FOR CONSTRUCTION



Mark	Description	Date	By	Appr
1	UPDATED BORROW AREA & ADDED SHEETS	2021-08-31	BJ	
0	ISSUED FOR PERMIT	2021-07-09	BJ	

TOWN OF NAGS HEAD POST-DORIAN BEACH RENOVATION PROJECT

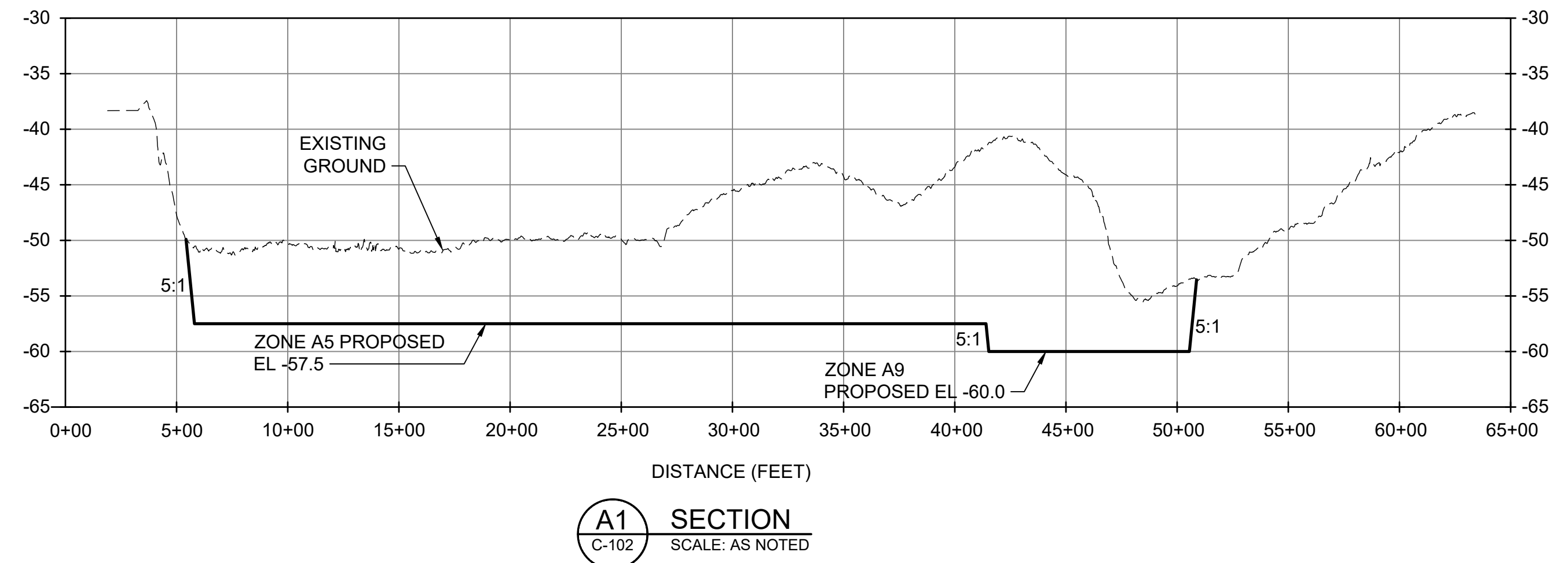
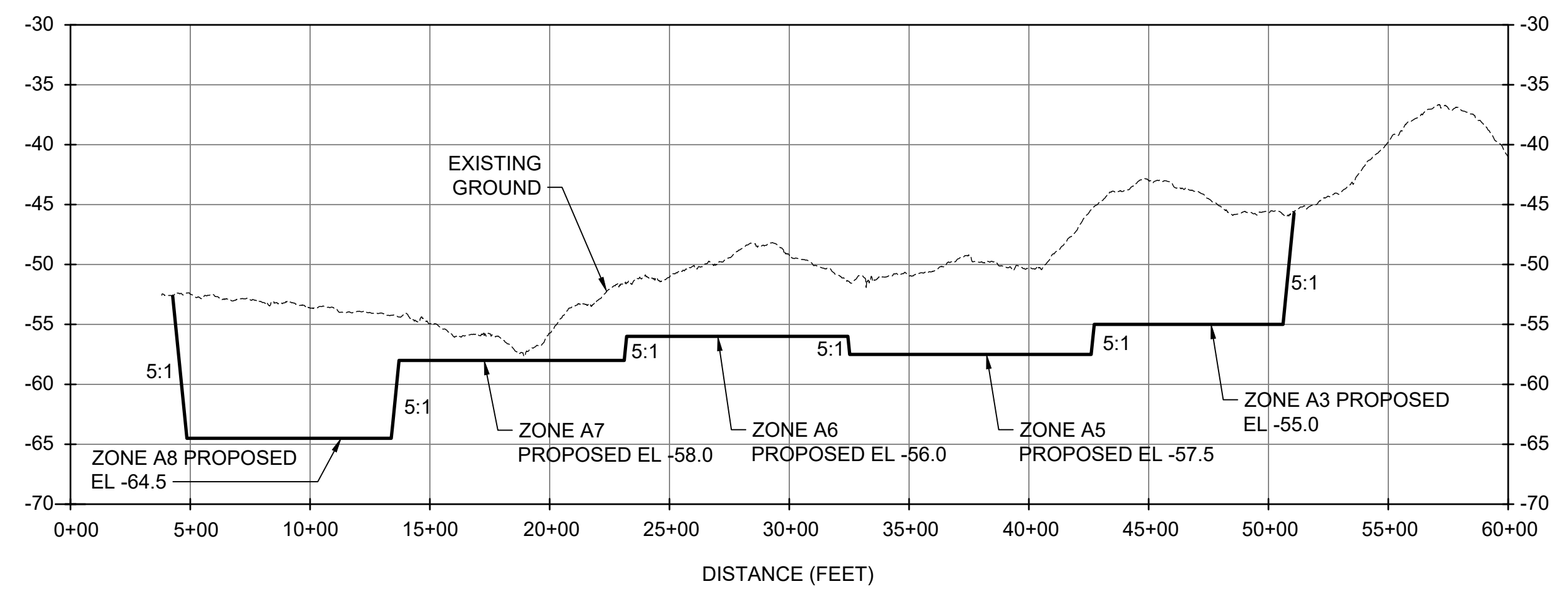
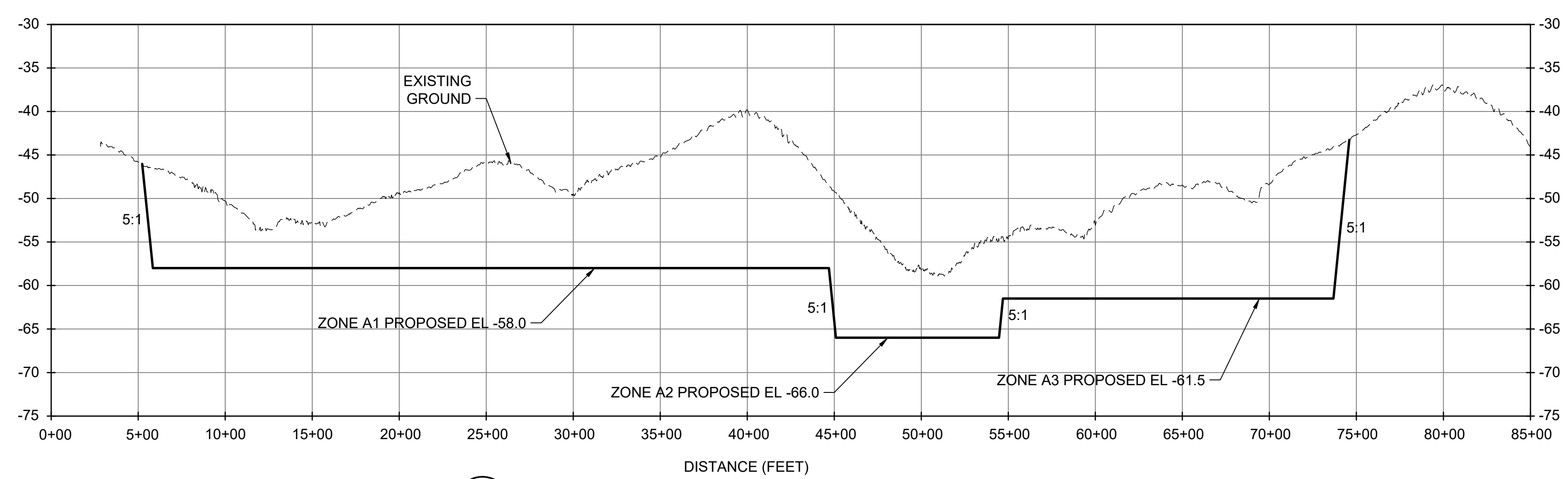
BORROW AREA CROSS SECTIONS

Designed by:	NCV	Date:	AUGUST 31, 2021	Rev:	1
Drawn by:	VNM	MAN Project No.:	10979-04	Drawing Scale:	AS SHOWN
Reviewed by:	JDM	Drawing code:		Per Scale:	1" = (0 SHEET)
Submitted by:	MOFATT & NICHOL				

4700 FALLS OF NEUSE RD., SUITE 300
 FARMINGTON, NC 27834
 919-781-4626
mofatt & nichol
 NC FIRM NO. F-0105

SEAL

Sheet Reference No.
C-103
 INDEX: 7 OF 19

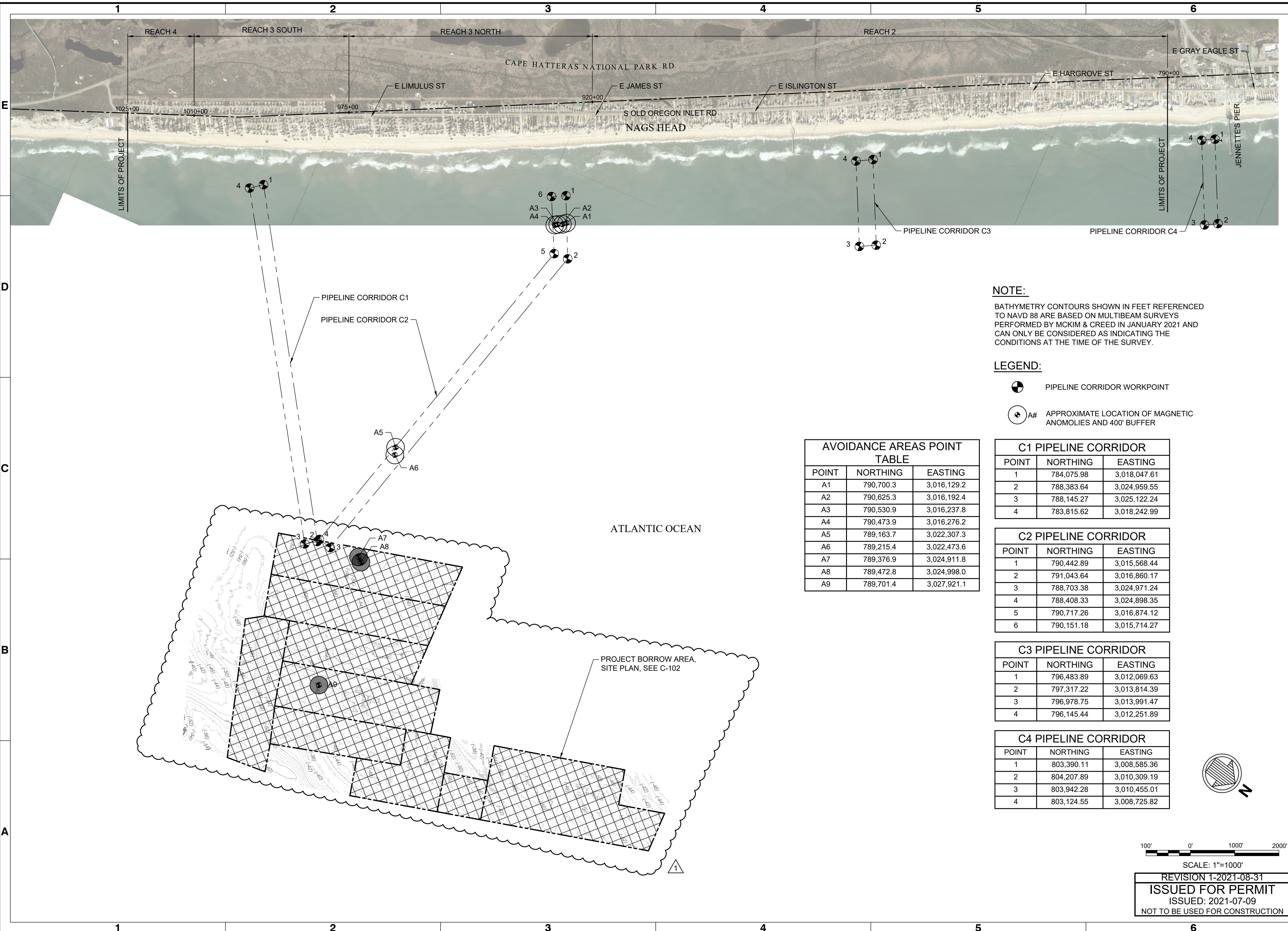


REVISION 1-2021-08-31
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SUMMARY OF SEDIMENT CHARACTERISTICS

Vibracore	Sample Number	Sample Depth (ft)	Survey Elev (ft, NAVD88)	Proposed Dredge Elevation (ft, NAVD88)	Gravel (%)	Granular (%)	Sand (%)	<#230 (%)	Carbonate (%)	Mean (mm)	Mean (phi)	Munsell Color	
Zone A1	NH-402	1	0.0 - 3.0	-50.1 - -53.1	-58.0	0.00	0.07	98.9	1.1	1.0	0.30	1.74	2.5YR-6/3
		2	3.0 - 7.0	-53.1 - -57.1		0.38	0.69	98.1	0.9	0.0	0.34	1.56	2.5YR-6/3
		3	7.0 - 10.0	-57.1 - -60.1		0.39	0.89	97.4	1.3	2.0	0.30	1.74	2.5YR-6/2
Zone A1	NH-403	1	0.0 - 3.0	-49.4 - -52.4	-58.0	0.11	0.07	98.8	1.0	0.0	0.31	1.69	2.5YR-6/3
		2	3.0 - 5.5	-52.4 - -54.9		0.11	1.09	97.7	1.1	1.0	0.31	1.69	2.5YR-6/2
		3	5.5 - 8.0	-54.9 - -57.4		0.25	0.83	98.1	0.8	2.0	0.31	1.69	2.5YR-6/2
		4	8.0 - 11.0	-57.4 - -60.4		0.03	0.06	98.6	1.3	0.0	0.24	2.06	5YR-6/2
Zone A1	NH-404	1	0.0 - 2.2	-49.8 - -52.0	-58.0	0.96	4.43	93.9	0.7	1.0	0.49	1.03	2.5YR-5/4
		2	2.2 - 7.0	-52.0 - -56.8		0.25	0.66	98.4	0.7	3.0	0.34	1.56	5YR-6/2
		3	7.0 - 11.5	-56.8 - -61.3		0.18	0.20	98.5	1.1	1.0	0.27	1.89	2.5YR-6/2
Zone A1	NH-405	1	0.0 - 3.0	-46.4 - -49.4	-58.0	0.28	1.43	97.1	1.2	2.0	0.42	1.25	2.5YR-6/3
		2	3.0 - 6.3	-49.4 - -52.7		0.10	0.49	98.9	0.6	1.0	0.35	1.51	2.5YR-6/3
		3	6.3 - 7.3	-52.7 - -53.7		0.10	0.49	98.9	0.6	1.0	0.35	1.51	2.5YR-6/3
		4	7.3 - 8.1	-53.7 - -54.5		2.29	3.77	92.9	1.0	9.0	0.46	1.12	2.5YR-6/2
		5	8.1 - 11.8	-54.5 - -58.2		0.18	0.37	98.2	1.3	1.0	0.33	1.60	2.5YR-6/2
Zone A1	NH-406	1	0.0 - 2.0	-50.0 - -52.0	-58.0	0.03	0.75	98.3	0.9	1.0	0.34	1.56	2.5YR-6/3
		2	2.0 - 5.0	-52.0 - -55.0		0.03	1.10	98.4	0.4	1.0	0.41	1.29	2.5YR-6/3
		3	5.0 - 8.0	-55.0 - -58.0		2.26	2.25	94.5	1.0	5.0	0.34	1.56	2.5YR-6/3
Zone A1	NH-407	1	0.0 - 4.4	-47.5 - -51.9	-58.0	1.98	1.80	95.6	0.6	3.0	0.43	1.22	2.5YR-6/3
		2	4.4 - 7.0	-51.9 - -54.5		0.39	0.65	98.4	0.6	3.0	0.33	1.60	2.5YR-6/3
		3	7.0 - 10.0	-54.5 - -57.5		0.11	0.49	98.8	0.6	2.0	0.30	1.74	2.5YR-6/2
		4	10.0 - 12.6	-57.5 - -60.1		0.38	0.24	98.5	0.9	1.0	0.31	1.69	2.5YR-6/2
Zone A1	NH-408	1	0.0 - 5.0	-40.9 - -45.9	-58.0	0.00	0.28	98.0	1.7	0.0	0.40	1.32	2.5YR-6/4
		2	5.0 - 10.0	-45.9 - -50.9		0.66	2.77	95.5	1.1	1.0	0.45	1.15	2.5YR-5/4
		3	10.0 - 14.0	-50.9 - -54.9		0.02	0.39	98.6	1.0	2.0	0.37	1.43	2.5YR-5/3
		4	14.0 - 17.1	-54.9 - -58.0		0.26	0.34	98.3	1.1	1.0	0.31	1.69	2.5YR-5/3
Zone A2	NH-410	1	0.0 - 3.0	-58.2 - -61.2	-66.0	0.05	0.34	99.0	0.6	2.0	0.29	1.79	2.5YR-6/2
		2	3.0 - 6.2	-61.2 - -64.4		0.24	0.31	98.4	1.1	1.0	0.25	2.00	5YR-6/2
		3	6.2 - 8.0	-64.4 - -66.2		0.15	0.39	93.3	6.2	2.0	0.17	2.56	5YR-5/1
Zone A3	NH-412	1	0.0 - 1.9	-51.4 - -53.3	-61.5	0.19	2.97	93.3	3.6	2.0	0.49	1.03	2.5YR-6/3
		2	1.9 - 5.0	-53.3 - -56.4		0.66	0.58	97.8	0.9	0.0	0.34	1.56	2.5YR-6/3
		3	5.0 - 8.8	-56.4 - -60.2		0.94	1.35	97.1	0.6	2.0	0.30	1.74	2.5YR-6/2
		4	8.8 - 11.0	-60.2 - -62.4		1.08	2.00	92.7	4.2	6.0	0.18	2.47	5YR-5/1
Zone A3	NH-413	1	0.0 - 4.0	-54.1 - -58.1	-61.5	0.36	1.86	96.9	0.9	1.0	0.31	1.69	2.5YR-6/3
		2	4.0 - 5.2	-58.1 - -59.3		0.00	0.01	98.6	1.4	0.0	0.27	1.89	2.5YR-6/2
		3	5.2 - 7.0	-59.3 - -61.1		2.26	3.03	94.3	0.4	16.0	0.43	1.22	2.5YR-6/3
		4	7.0 - 6.1	-61.1 - -61.7		0.72	1.22	97.6	0.5	6.0	0.30	1.74	2.5YR-6/2
Zone A4	NH-418	1	0.0 - 4.0	-50.1 - -54.1	-55.0	0.26	1.04	97.9	0.8	3.0	0.34	1.56	2.5YR-6/3
		2	4.0 - 8.0	-54.1 - -58.1		0.30	0.46	98.6	0.7	0.0	0.32	1.64	2.5YR-6/2
		3	8.0 - 11.0	-58.1 - -61.1		0.24	0.22	98.8	0.7	0.0	0.31	1.69	2.5YR-6/2
		4	11.0 - 13.0	-61.1 - -63.1		0.13	0.27	98.7	0.9	1.0	0.29	1.79	2.5YR-6/2
Zone A4	NH-424	1	0.0 - 2.6	-44.9 - -47.5	-55.0	0.07	0.76	99.0	0.2	0.0	0.42	1.25	2.5YR-6/3
		2	2.6 - 6.0	-47.5 - -50.9		0.07	0.21	99.1	0.6	4.0	0.31	1.69	2.5YR-6/2
		3	6.0 - 10.0	-50.9 - -54.9		0.12	0.45	98.8	0.7	1.0	0.30	1.74	2.5YR-6/2
Zone A4	NH-430	1	0.0 - 4.0	-44.1 - -48.1	-55.0	0.00	0.24	98.4	1.4	1.0	0.34	1.56	2.5YR-6/2
		2	4.0 - 8.0	-48.1 - -52.1		0.20	0.93	96.4	2.5	1.0	0.33	1.60	2.5YR-6/3
		3	8.0 - 12.1	-52.1 - -56.2		0.46	1.07	96.4	2.1	2.0	0.35	1.51	2.5YR-6/3
Zone A5	NH-411	1	0.0 - 4.0	-43.1 - -47.1	-55.0	0.12	0.47	98.8	0.6	0.0	0.33	1.60	2.5YR-7/3
		2	4.0 - 8.0	-47.1 - -51.1		0.10	0.73	98.5	0.7	1.0	0.34	1.56	2.5YR-6/3
		3	8.0 - 11.8	-51.1 - -54.9		0.15	0.10	99.2	0.6	0.0	0.30	1.74	2.5YR-6/2
Zone A5	NH-417	1	0.0 - 2.5	-50.4 - -52.9	-57.5	0.04	0.72	98.6	0.7	2.0	0.32	1.64	2.5YR-6/3
		2	2.5 - 6.0	-52.9 - -56.4		0.08	0.35	98.5	1.1	1.0	0.30	1.74	5YR-6/2
		3	6.0 - 8.6	-56.4 - -59.0		0.26	0.37	97.9	1.5	2.0	0.22	2.18	5YR-6/2
		4	8.6 - 11.5	-59.0 - -62.6		4.04	0.87	94.3	0.8	6.0	0.32	1.64	2.5YR-7/3
Zone A5	NH-423	1	0.0 - 1.5	-51.1 - -52.6	-57.5	0.05	0.28	96.6	3.1	1.0	0.29	1.79	2.5YR-6/2
		2	1.5 - 4.4	-52.6 - -55.5		5.74	7.26	86.1	0.9	7.0	0.49	1.03	2.5YR-6/3
		3	4.4 - 4.8	-55.5 - -55.9		0.15	0.80	97.1	1.9	1.0	0.19	2.40	5YR-5/2
		4	4.8 - 7.8	-55.9 - -58.9		0.14	0.51	98.7	0.6	2.0	0.32	1.64	2.5YR-6/2
Zone A5	NH-429	1	0.0 - 2.8	-50.3 - -53.1	-57.5	0.38	0.34	98.3	1.0	2.0	0.28	1.84	2.5YR-6/2
		2	2.8 - 5.0	-53.1 - -55.3		0.00	0.09	98.5	1.4	0.0	0.22	2.18	5YR-6/1
		3	5.0 - 7.6	-55.3 - -57.9		0.09	0.61	98.5	0.8	0.0	0.37	1.43	2.5YR-7/4
Zone A5	NH-429	1	0.0 - 4.0	-46.5 - -50.5	-57.5	1.39	1.35	96.4	0.9	4.0	0.34	1.56	2.5YR-7/3
		2	4.0 - 8.0	-50.5 - -54.5		0.00	0.55	98.7	0.8	0.0	0.33	1.60	2.5YR-7/3
		3	8.0 - 11.1	-54.5 - -58.1		0.00	0.55	98.7	0.8	0.0	0.33	1.60	2.5YR-7/3

Vibracore	Sample Number	Sample Depth (ft)	Survey Elev (ft, NAVD88)	Proposed Dredge Elevation (ft, NAVD88)	Gravel (%)	Granular (%)	Sand (%)	<#230 (%)	Carbonate (%)	Mean (mm)	Mean (phi)	Munsell Color	
Zone A6	NH-416	2	4.3 - 5.0	-54.7 - -55.4	-56.0	1.01	6.51	90.3	2.2	4.0	0.60	0.74	2.5YR-5/3
		3	5.0 - 6.7	-55.4 - -57.1		2.33	4.09	92.6	1.0	4.0	0.50	1.00	2.5YR-6/3
		1	0.0 - 3.0	-48.5 - -51.5		0.07	1.94	97.1	0.9	0.0	0.41	1.29	2.5YR-5/3
Zone A6	NH-422	2	3.0 - 7.5	-51.5 - -56.0	-56.0	0.05	1.64	96.9	1.4	1.0	0.35	1.51	2.5YR-6/2
		1	0.0 - 1.6	-54.6 - -56.2		0.21	0.61	97.4	1.8	0.0	0.23	2.12	5YR-7/1
Zone A7	NH-415	1	0.0 - 1.7	-53.3 - -55.0	-58.0	0.70	1.97	97.0	0.3	2.0	0.32	1.64	2.5YR-7/3
		2	1.7 - 3.3	-55.0 - -56.6		0.73	1.12	97.6	0.6	1.0	0.30	1.74	5YR-7/1
		3	3.3 - 5.3	-56.6 - -58.6		0.63	2.35	95.9	1.1	2.0	0.39	1.36	5Y-6/2
Zone A7	NH-421	1	0.0 - 3.0	-53.8 - -56.8	-58.0	0.00	0.02	98.4	1.6	0.0	0.28	1.84	2.5YR-6/2
		2	3.0 - 5.8	-56.8 - -59.6		0.00	0.01	98.0	2.0	0.0	0.30	1.74	2.5YR-5/3
		1	0.0 - 1.2	-53.1 - -54.3		2.23	1.71	92.6	3.4	2.0	0.34	1.56	2.5YR-6/3
Zone A7	NH-427	2	1.2 - 2.7	-54.3 - -55.8	-58.0	0.44	0.78	97.7	1.0	1.0	0.31	1.69	2.5YR-6/3
		3	2.7 - 5.4	-55.8 - -58.5		2.02	6.46	90.1	1.4	2.0	0.45	1.15	2.5YR-6/3
		1	0.0 - 3.0	-51.7 - -54.7		0.32	0.78	98.1	0.8	0.0	0.35	1.51	2.5YR-6/4
Zone A7	NH-433	2	3.0 - 7.0	-54.7 - -58.7	-58.0	0.16	0.79	97.9	1.1	0.0	0.34	1.56	2.5YR-6/4
		1	0.0 - 1.6	-57.4 - -59.0		1.47	1.86	94.6	2.1	5.0	0.34	1.56	2.5YR-6/3
Zone A8	NH-414	2	1.6 - 3.5	-59.0 - -60.9	-64.5	4.37	0.60	94.1	1.0	4.0	0.29	1.79	2.5YR-6/2
		3	3.5 - 6.8	-60.9 - -64.2		0.00	0.15	98.8	1.1	1.0	0.34	1.56	2.5YR-6/2
		4	6.8 - 8.2	-64.2 - -65.6		4.65	5.20	88.4	1.8	5.0	0.40	1.32	5YR-6/2
		1	0.0 - 3.0	-55.1 - -58.1		0.15	0.45	98.6	0.8	1.0	0.32	1.64	2.5YR-6/2
Zone A8	NH-420	2	3.0 - 6.0	-58.1 - -61.1	-64.5	0.04	0.24	98.6	1.1	2.0	0.33	1.60	2.5YR-6/2
		3	6.0 - 9.0	-61.1 - -64.1		0.29	0.47	98.4	0.8	1.0	0.33	1.60	2.5YR-6/2
		4	9.0 - 11.0	-64.1 - -66.1		0.30	1.10	97.3	1.3	4.0	0.33	1.60	2.5YR-6/2
		1	0.0 - 4.0	-56.9 - -60.9		0.90	0.88	97.5	0.7	2.0	0.34	1.56	2.5YR-6/2
Zone A8	NH-426	2	4.0 - 7.3	-60.9 - -64.2	-64.5	0.19	0.97	98.3	0.6	1.0	0.34	1.56	2.5YR-6/3
		3	7.3 - 10.1	-64.2 - -67.0		0.45	1.28	94.3	3.9	4.0	0.33	1.60	5YR-5/2
		1	0.0 - 3.0	-51.5 - -54.5		2.86	4.21	91.7	1.3	2.0	0.43	1.22	2.5YR-6/4
Zone A8	NH-432	2	3.0 - 4.9	-54.5 - -56.4	-64.5	0.55	0.44	97.7	1.3	0.0	0.32	1.64	2.5YR-6/2
		3	4.9 - 8.1	-56.4 - -59.6		1.10	2.00	95.5	1.4	2.0	0.35	1.51	2.5YR-6/3
		4	8.1 - 11.0	-59.6 - -62.5		0.54	0.92	97.8	0.7	1.0	0.33	1.60	2.5YR-6/2
		5	11.0 - 13.2	-62.5 - -65.0		1.51	1.76	95.8	0.9	3.0	0.39	1.36	2.5YR-6/2
Zone 9	NH-434	1	0.0 - 4.3	-47.1 - -51.4	-60.0	0.01	0.52						



NOTE:
 BATHYMETRY CONTOURS SHOWN IN FEET REFERENCED TO NAVD 88 ARE BASED ON MULTIBEAM SURVEYS PERFORMED BY MCKIM & CREED IN JANUARY 2021 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS AT THE TIME OF THE SURVEY.

LEGEND:

- PIPELINE CORRIDOR WORKPOINT
- A# APPROXIMATE LOCATION OF MAGNETIC ANOMOLIES AND 400' BUFFER

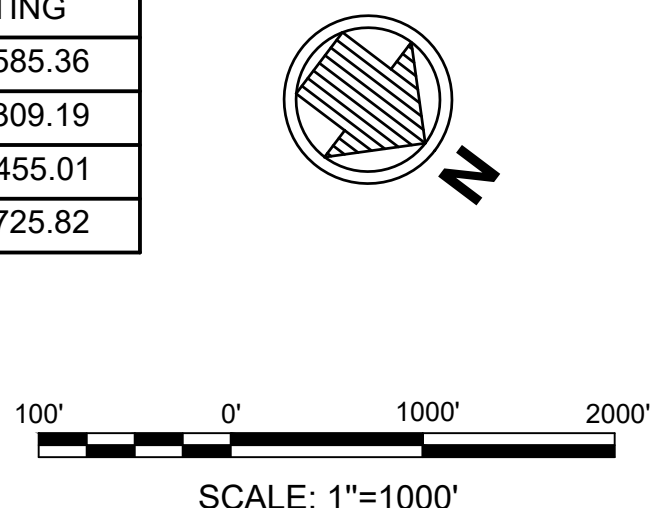
AVOIDANCE AREAS POINT TABLE		
POINT	NORTHING	EASTING
A1	790,700.3	3,016,129.2
A2	790,625.3	3,016,192.4
A3	790,530.9	3,016,237.8
A4	790,473.9	3,016,276.2
A5	789,163.7	3,022,307.3
A6	789,215.4	3,022,473.6
A7	789,376.9	3,024,911.8
A8	789,472.8	3,024,998.0
A9	789,701.4	3,027,921.1

C1 PIPELINE CORRIDOR		
POINT	NORTHING	EASTING
1	784,075.98	3,018,047.61
2	788,383.64	3,024,959.55
3	788,145.27	3,025,122.24
4	783,815.62	3,018,242.99

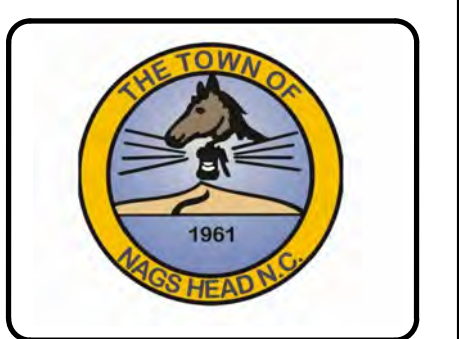
C2 PIPELINE CORRIDOR		
POINT	NORTHING	EASTING
1	790,442.89	3,015,568.44
2	791,043.64	3,016,860.17
3	788,703.38	3,024,971.24
4	788,408.33	3,024,898.35
5	790,717.26	3,016,874.12
6	790,151.18	3,015,714.27

C3 PIPELINE CORRIDOR		
POINT	NORTHING	EASTING
1	796,483.89	3,012,069.63
2	797,317.22	3,013,814.39
3	796,978.75	3,013,991.47
4	796,145.44	3,012,251.89

C4 PIPELINE CORRIDOR		
POINT	NORTHING	EASTING
1	803,390.11	3,008,585.36
2	804,207.89	3,010,309.19
3	803,942.28	3,010,455.01
4	803,124.55	3,008,725.82



REVISION 1-2021-08-31
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1	2021-08-31	UPDATED BORROW AREA & ADDED SHEETS
0	2021-07-09	ISSUED FOR PERMIT

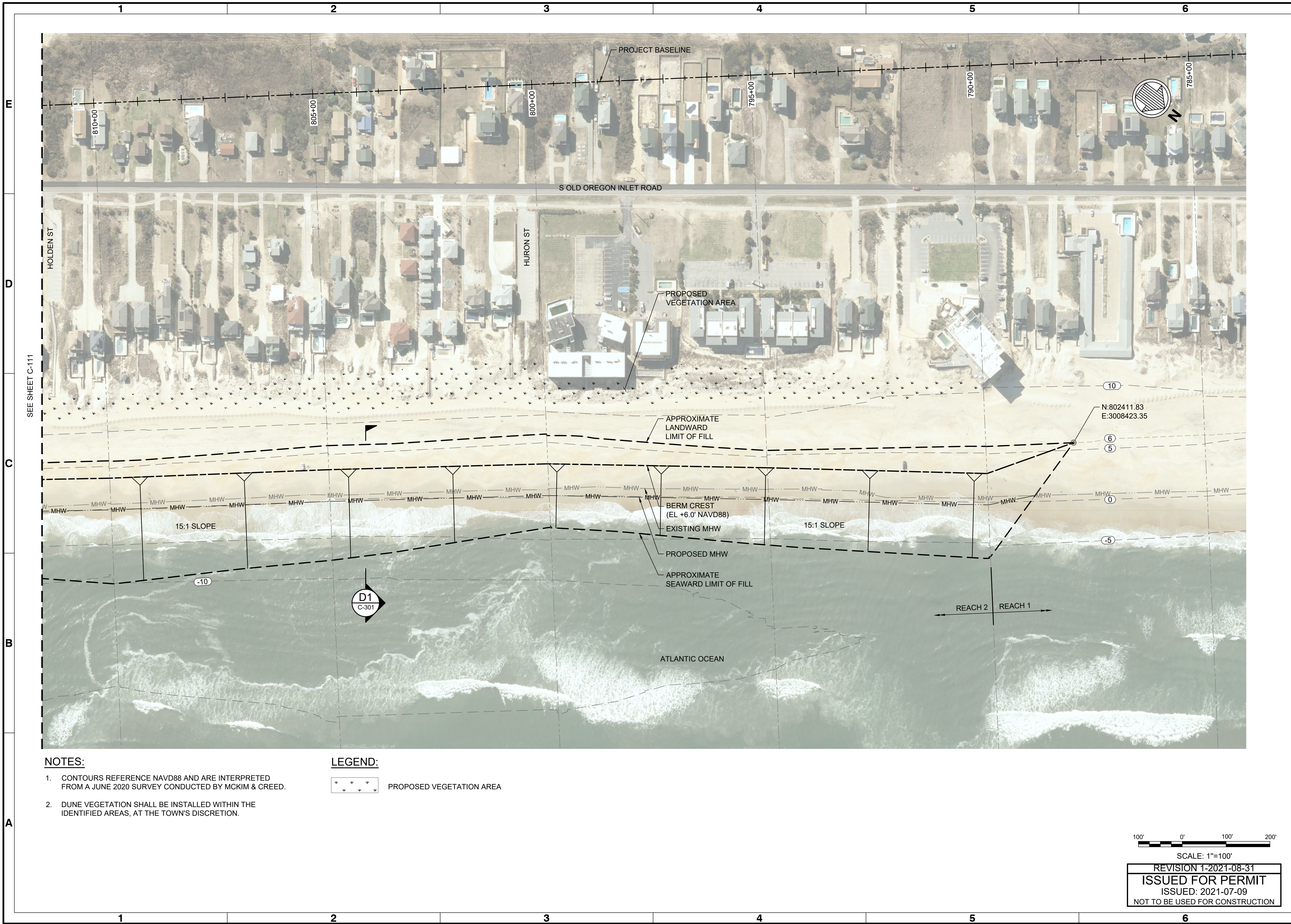
TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT
 CORRIDOR PIPELINE PLAN

Designed by: NCV	Drawn by: VNM	Checked by: BJ	Reviewed by: JDM	Submitted by: MOFFATT & NICHOL
Date: AUGUST 31, 2021	MAN Project No: 10979-04	Drawing code:	AS SHOWN	Per Scale: 1" = (0 SHEET)

4700 FALLS OF NEUSE RD., SUITE 300
 RALEIGH, NC 27609
 919-781-4626
 moftatt & nichol
 NC FIRM NO. F-0105

SEAL

Sheet Reference No.
C-105
 INDEX: 9 OF 19



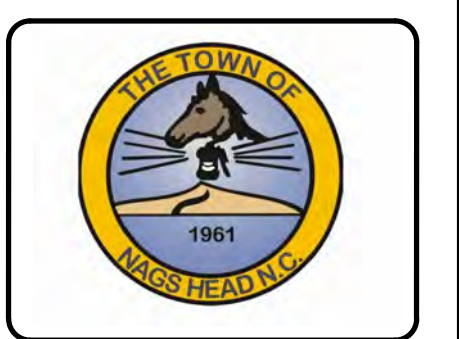
- NOTES:**
1. CONTOURS REFERENCE NAVD88 AND ARE INTERPRETED FROM A JUNE 2020 SURVEY CONDUCTED BY MCKIM & CREED.
 2. DUNE VEGETATION SHALL BE INSTALLED WITHIN THE IDENTIFIED AREAS, AT THE TOWN'S DISCRETION.



100' 0' 100' 200'

SCALE: 1"=100'

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0	ISSUED FOR PERMIT	2021-07-09	BJ	

TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT

SITE PLAN SHEET 1 OF 9

Designed by:	NCV	Drawn by:	VNM	Reviewed by:	JDM	Submitted by:	MOFFATT & NICHOL
Date:	JULY 09, 2021	MAN Project No.:	10979-04	Drawing code:		Drawing Scale:	AS SHOWN
Per Scale:	1" = 100' (0 SHEET)						

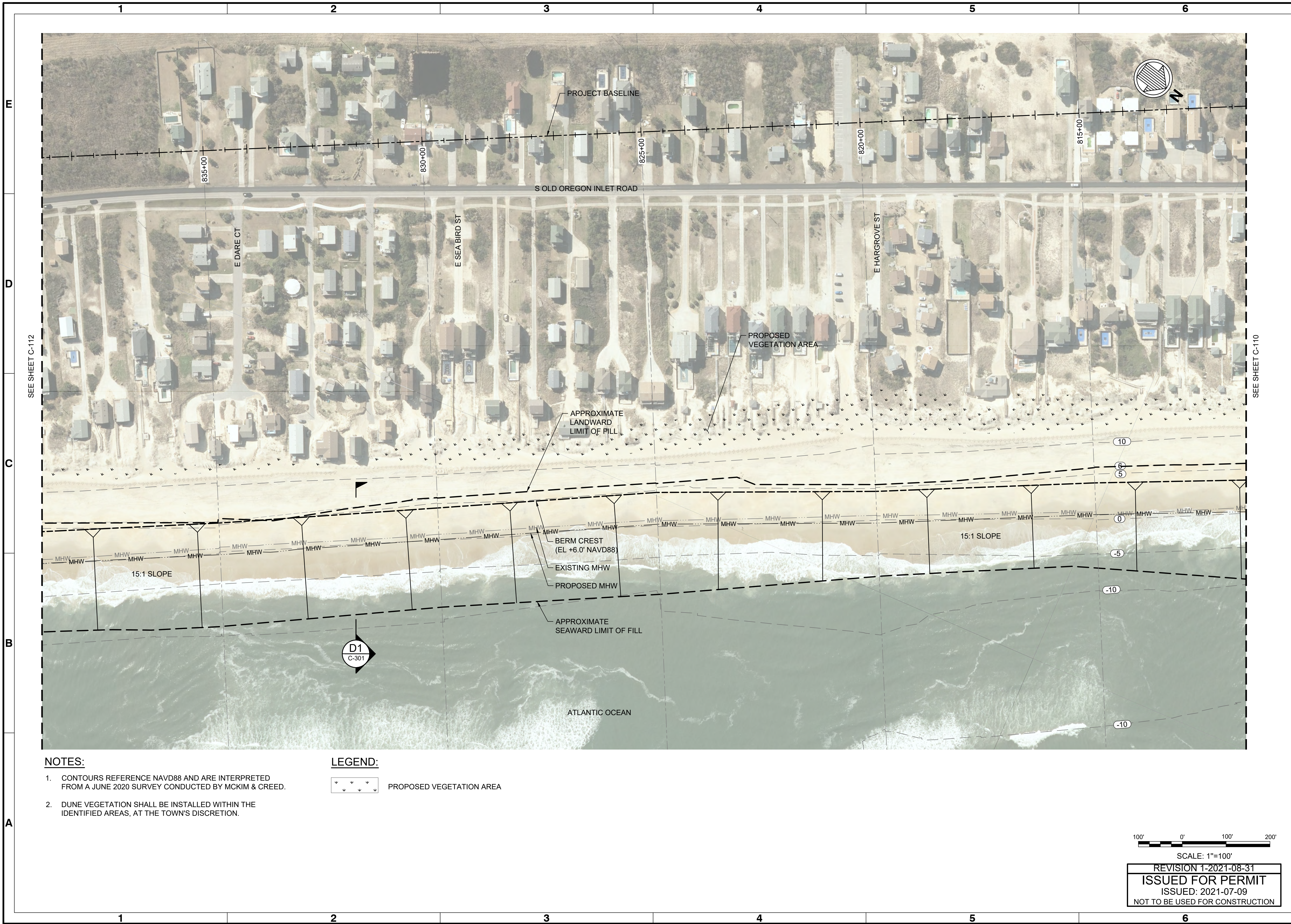
4700 FALLS OF NEUSE RD., SUITE 300
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 919-781-4626
 NC FIRM NO. F-0105

moffatt & nichol

SEAL

Sheet Reference No.
C-110
 INDEX: 10 OF 19

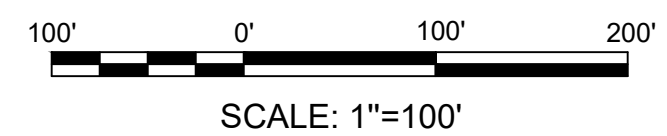
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- NOTES:**
- CONTOURS REFERENCE NAVD88 AND ARE INTERPRETED FROM A JUNE 2020 SURVEY CONDUCTED BY MCKIM & CREED.
 - DUNE VEGETATION SHALL BE INSTALLED WITHIN THE IDENTIFIED AREAS, AT THE TOWN'S DISCRETION.

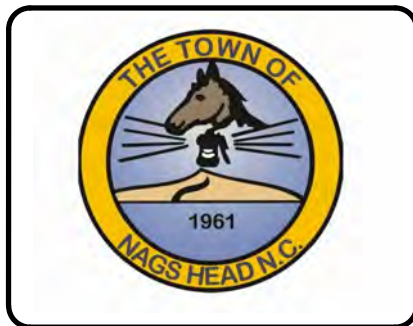
LEGEND:

PROPOSED VEGETATION AREA



SCALE: 1"=100'

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TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT

SITE PLAN SHEET 2 OF 9

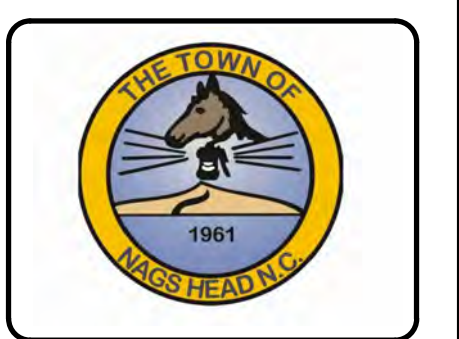
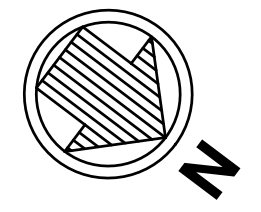
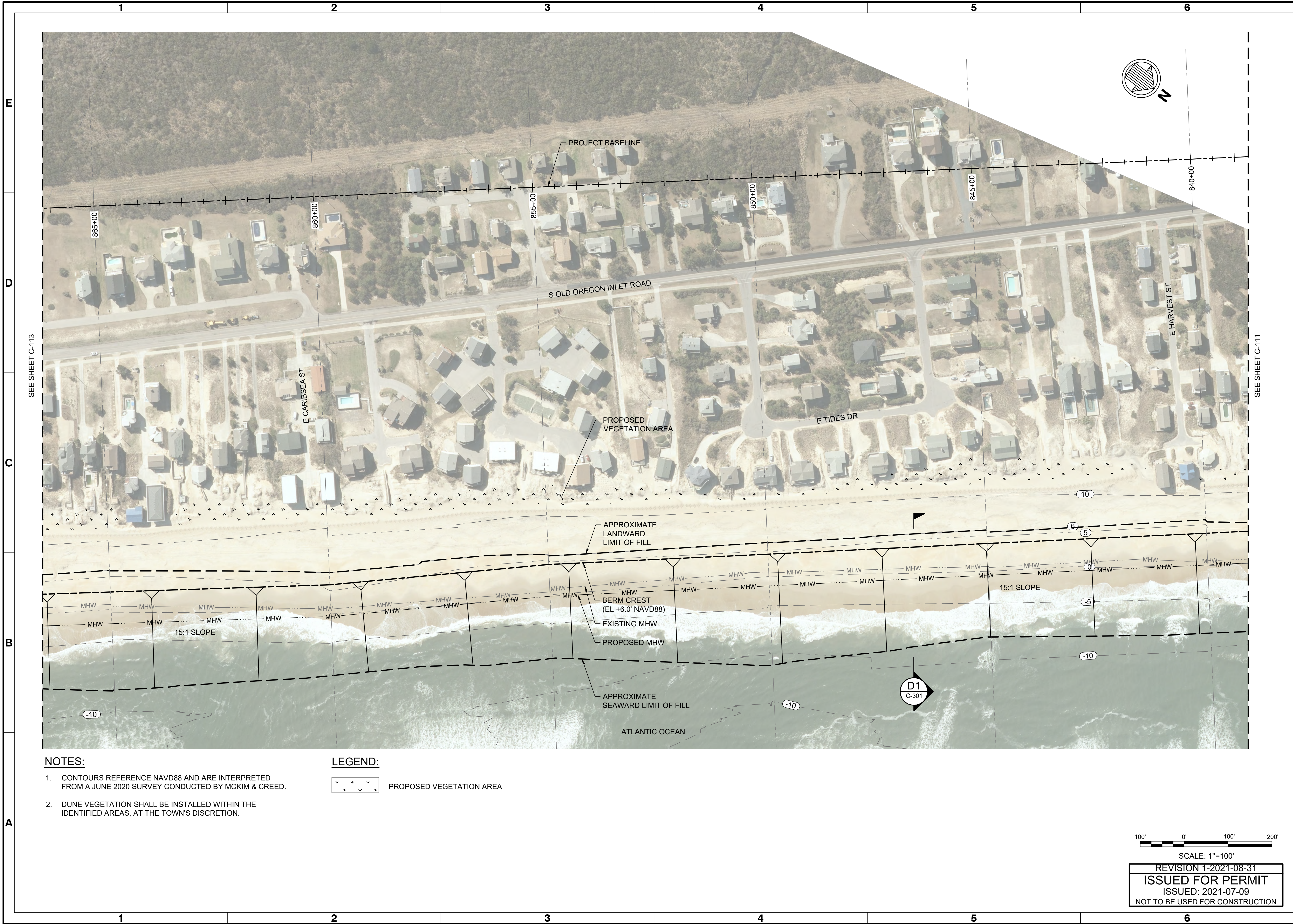
Designed by:	NCV	Date:	JULY 09, 2021	Rev:	1
Drawn by:	VNM	M&N Project No.:	10979-04	Drawn by:	AS SHOWN
Reviewed by:	JDM	Drawn code:		Per Scale:	1" = (0 SHEET)
Submitted by:	MOFFATT & NICHOL				

4700 FALLS OF NEUSE RD., SUITE 300
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 moftatt & nichol
 NC FIRM NO. F-0105

SEAL

Sheet Reference No.
C-111
 INDEX: 11 OF 19

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Mark	Description	Date	By	Appr.
0	ISSUED FOR PERMIT	2021-07-09	BJ	

TOWN OF NAGS HEAD POST-DORIAN BEACH RENOVATION PROJECT

SITE PLAN SHEET 3 OF 9

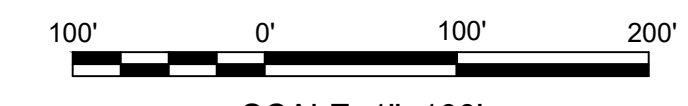
Designed by:	NCV	Drawn by:	VNM	Reviewed by:	JDM	Submitted by:	MOFFATT & NICHOL
Date:	JULY 09, 2021	MAN Project No.:	10979-04	Drawing code:		Drawing Scale:	AS SHOWN
Per scale:	1" = 10' (0 SHEET)						

4700 FALLS OF NEUSE RD., SUITE 300
 RALEIGH, NC 27609
 919-781-4626
 moftatt & nichol
 NC FIRM NO. F-0105

- NOTES:**
1. CONTOURS REFERENCE NAVD88 AND ARE INTERPRETED FROM A JUNE 2020 SURVEY CONDUCTED BY MCKIM & CREED.
 2. DUNE VEGETATION SHALL BE INSTALLED WITHIN THE IDENTIFIED AREAS, AT THE TOWN'S DISCRETION.

LEGEND:

PROPOSED VEGETATION AREA



SCALE: 1"=100'

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Sheet Reference No.
C-112
 INDEX: 12 OF 19



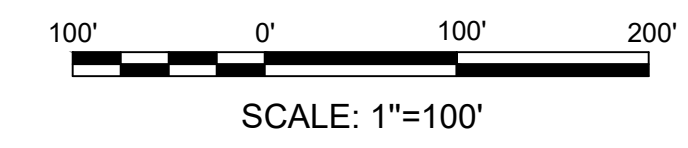
SEE SHEET C-114

SEE SHEET C-112

- NOTES:**
1. CONTOURS REFERENCE NAVD88 AND ARE INTERPRETED FROM A JUNE 2020 SURVEY CONDUCTED BY MCKIM & CREED.
 2. DUNE VEGETATION SHALL BE INSTALLED WITHIN THE IDENTIFIED AREAS, AT THE TOWN'S DISCRETION.

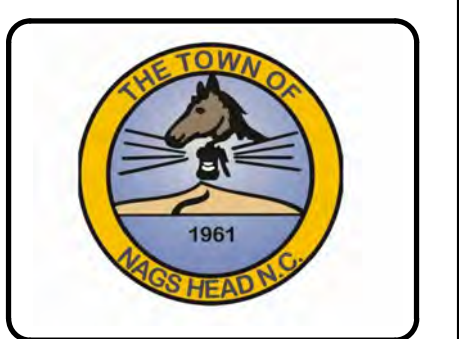
LEGEND:

PROPOSED VEGETATION AREA



SCALE: 1"=100'

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 ISSUED: 2021-07-09
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TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT

SITE PLAN SHEET 4 OF 9

Designed by:	NCV	Date:	JULY 09, 2021	Rev:	1
Drawn by:	VNM	MAN Project No.:	10979-04	Drawing code:	
Reviewed by:	JDM	Drawn by:	BJ	Drawing Scale:	AS SHOWN
Submitted by:	MOFFATT & NICHOL	Per Scale:	1" = (0 SHEET)		

4700 FALLS OF NEUSE RD., SUITE 300
 RALEIGH, NC 27609
 919-781-4626
 moftatt & nichol
 NC FIRM NO. F-0105

SEAL

Sheet Reference No.
C-113
 INDEX: 13 OF 19

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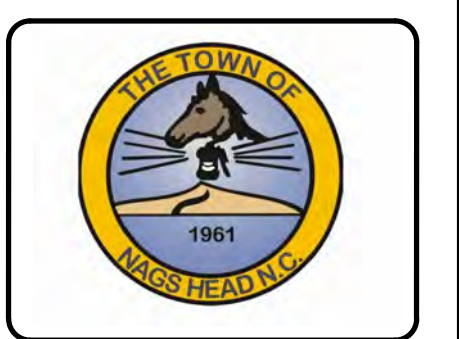
- NOTES:**
1. CONTOURS REFERENCE NAVD88 AND ARE INTERPRETED FROM A JUNE 2020 SURVEY CONDUCTED BY MCKIM & CREED.
 2. DUNE VEGETATION SHALL BE INSTALLED WITHIN THE IDENTIFIED AREAS, AT THE TOWN'S DISCRETION.



100' 0' 100' 200'

SCALE: 1"=100'

REVISION 1-2021-08-31
ISSUED FOR PERMIT
 ISSUED: 2021-07-09
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0	ISSUED FOR PERMIT	2021-07-09	BJ	

TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT

SITE PLAN SHEET 5 OF 9

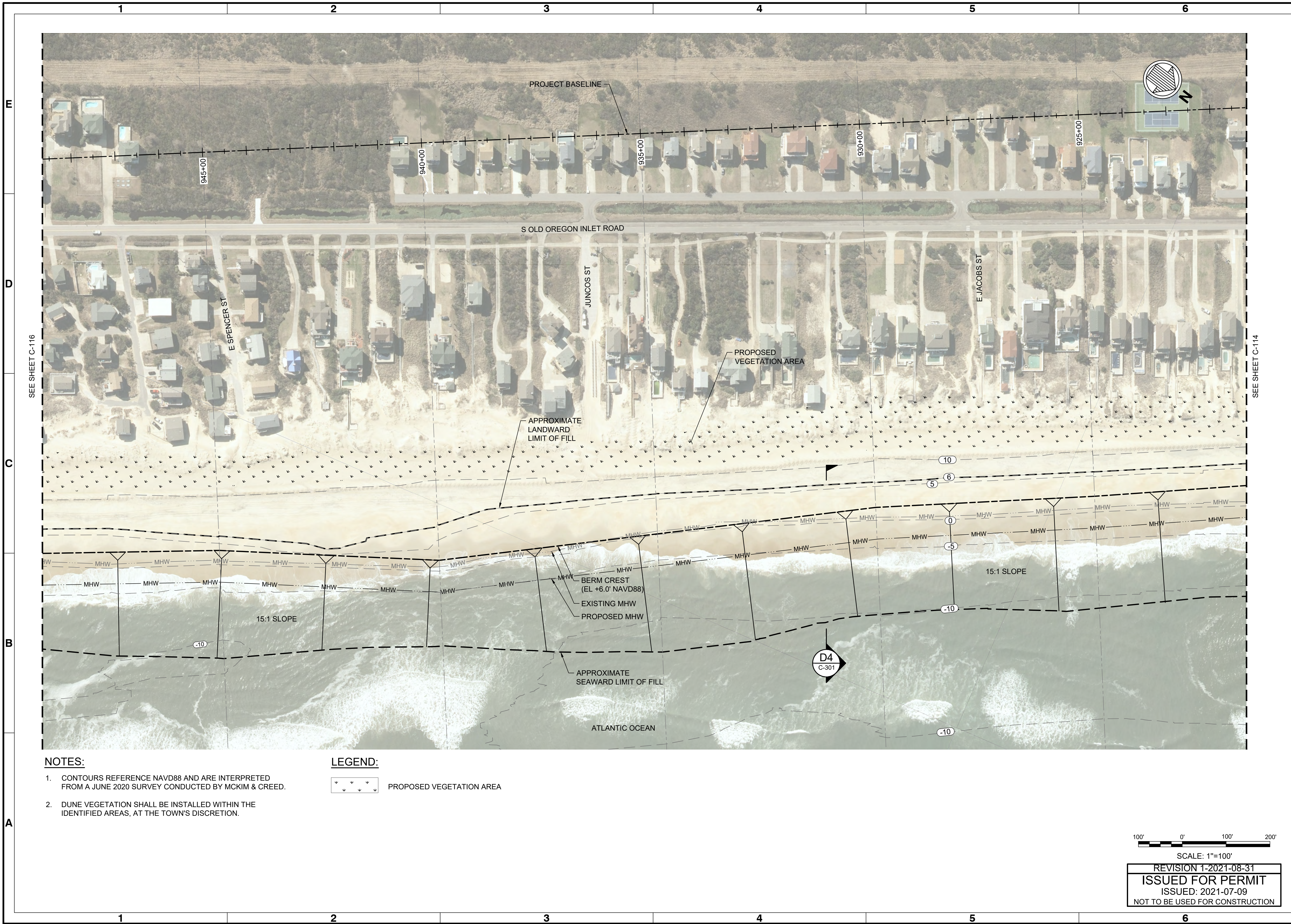
4700 FALLS OF NEUSE RD., SUITE 300 RAVENHILL, NC 27834 919-781-4626 mofatt & nichol NC FIRM NO. F-0105	Date: JULY 09, 2021 M&N Project No. 10979-04 Drawing code: Drawing Scale: AS SHOWN Plot Scale: 1" = (0 SHEET)
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Designed by: NCV Drawn by: VNM Checked by: BJ Reviewed by: JDM Submitted by: MOFFATT & NICHOL	Rev. 1 Date: JULY 09, 2021 M&N Project No. 10979-04 Drawing code: Drawing Scale: AS SHOWN Plot Scale: 1" = (0 SHEET)
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SEAL

Sheet Reference No.
C-114
 INDEX: 14 OF 19

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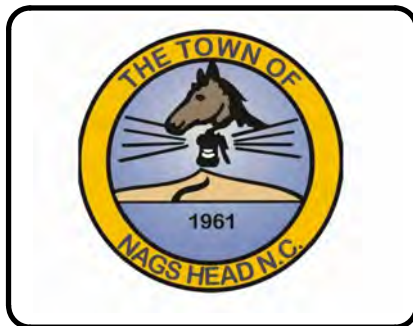


- NOTES:**
1. CONTOURS REFERENCE NAVD88 AND ARE INTERPRETED FROM A JUNE 2020 SURVEY CONDUCTED BY MCKIM & CREED.
 2. DUNE VEGETATION SHALL BE INSTALLED WITHIN THE IDENTIFIED AREAS, AT THE TOWN'S DISCRETION.

LEGEND:

PROPOSED VEGETATION AREA

100' 0' 100' 200'
 SCALE: 1"=100'
REVISION 1-2021-08-31
ISSUED FOR PERMIT
 ISSUED: 2021-07-09
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Mark	Description	Date	By	Appr.
0	ISSUED FOR PERMIT	2021-07-09	BJ	

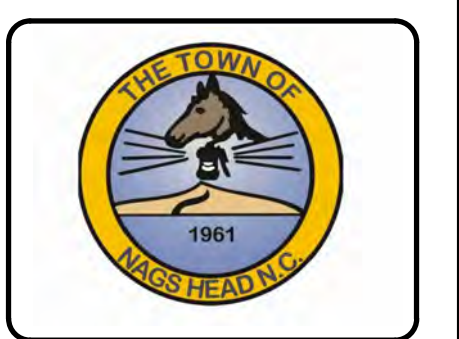
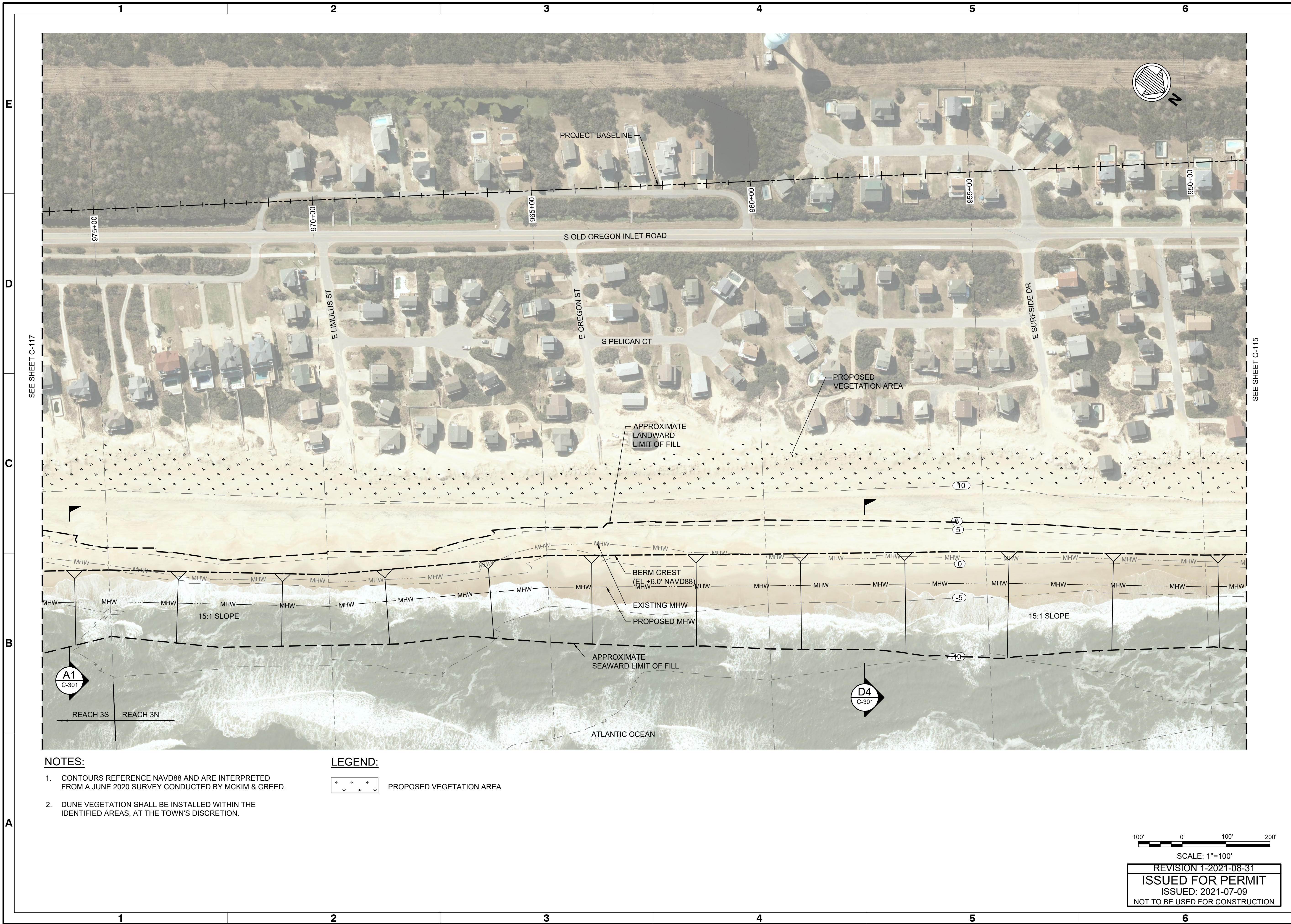
TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT
SITE PLAN SHEET 6 OF 9

Date: JULY 09, 2021 M&N Project No. 10979-04 Drawing code:	Rev: 1 Per scale: 1" = (0 SHEET)
Designed by: NCV Drawn by: VNM Checked by: BJ Reviewed by: JDM Submitted by: MOFFATT & NICHOL	Drawing Scale: AS SHOWN Per scale: 1" = (0 SHEET)

4700 FALLS OF NEUSE RD., SUITE 300
 RALEIGH, NC 27609
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 NC FIRM NO. F-0105
moffatt & nichol

SEAL

Sheet Reference No.
C-115
 INDEX: 15 OF 19



Mark	Description	Date	By	Appr.
0	ISSUED FOR PERMIT	2021-07-09	BJ	

TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT

SITE PLAN SHEET 7 OF 9

Designed by:	NCV	Drawn by:	VNM	Reviewed by:	JDM	Submitted by:	MOFFATT & NICHOL
Date:	JULY 09, 2021	MAN Project No.:	10979-04	Drawing code:		Drawing Scale:	AS SHOWN
Per Scale:	1" = 10' (0 SHEET)						

4700 FALLS OF NEUSE RD., SUITE 300
 RALEIGH, NC 27609
 919-781-4626
 moftatt & nichol
 NC FIRM NO. F-0105

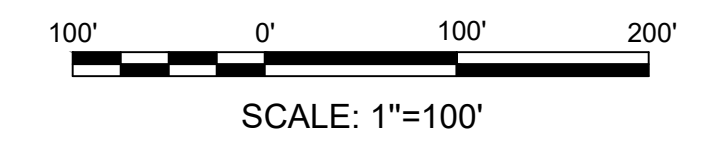
SEAL

Sheet Reference No.
C-116
 INDEX: 16 OF 19

- NOTES:**
1. CONTOURS REFERENCE NAVD88 AND ARE INTERPRETED FROM A JUNE 2020 SURVEY CONDUCTED BY MCKIM & CREED.
 2. DUNE VEGETATION SHALL BE INSTALLED WITHIN THE IDENTIFIED AREAS, AT THE TOWN'S DISCRETION.

LEGEND:

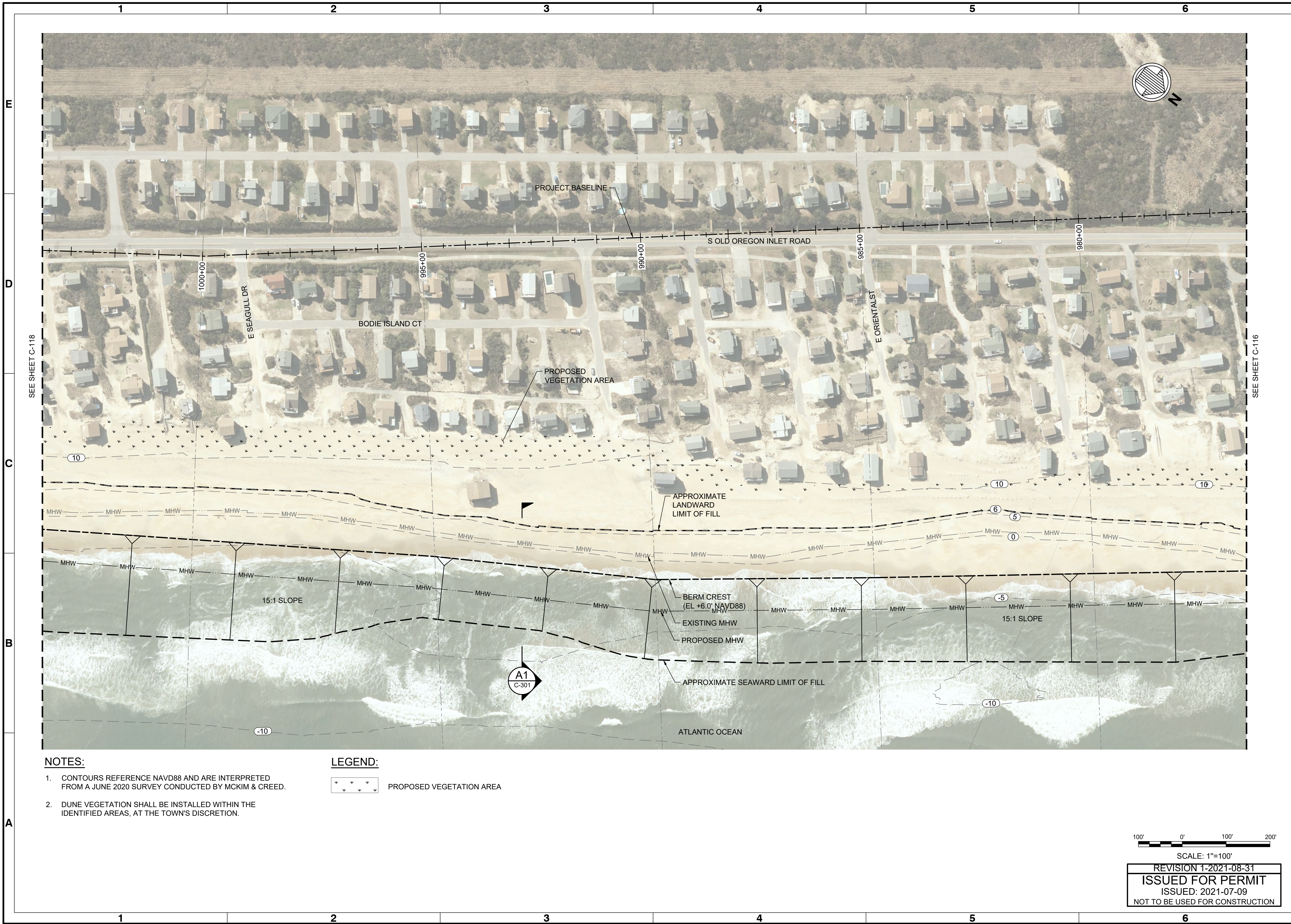
PROPOSED VEGETATION AREA



SCALE: 1"=100'

REVISION 1-2021-08-31
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 ISSUED: 2021-07-09
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File: Q:\RAI\10979-04\20 CAD\1_Active\1_10979-04 Nags Head Sheets - Permit\1097904-C-116 - Plotted: 8/31/2021 6:42 PM by CAMPBELL, IRA; Saved: 8/31/2021 6:10 PM by ICAMPBELL



- NOTES:**
1. CONTOURS REFERENCE NAVD88 AND ARE INTERPRETED FROM A JUNE 2020 SURVEY CONDUCTED BY MCKIM & CREED.
 2. DUNE VEGETATION SHALL BE INSTALLED WITHIN THE IDENTIFIED AREAS, AT THE TOWN'S DISCRETION.

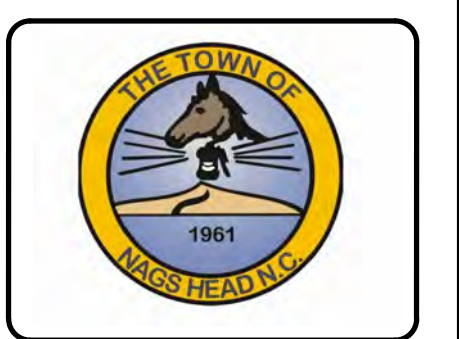
LEGEND:

PROPOSED VEGETATION AREA

100' 0' 100' 200'

SCALE: 1"=100'

REVISION 1-2021-08-31
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0	ISSUED FOR PERMIT	2021-07-09	BJ	

TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT

SITE PLAN SHEET 8 OF 9

Designed by:	NCV	Drawn by:	BJ	Reviewed by:	JDM	Submitted by:	MOFFATT & NICHOL
Date:	JULY 09, 2021	MAN Project No.:	10979-04	Drawing code:		Drawing Scale:	AS SHOWN
Per scale:	1" = 100'	Per sheet:	1" = 100'	Per sheet:	1" = 100'	Per sheet:	1" = 100'

4700 FALLS OF NEUSE RD., SUITE 300
 RALEIGH, NC 27609
 919-781-4626
 MOFFATT & NICHOL
 NC FIRM NO. F-0105

SEAL

Sheet Reference No.
C-117
 INDEX: 17 OF 19

File: Q:\RA\10979-04\20 CAD\10979-04 Nags Head Sheets - Permit\1097904-C-117 - Plotted: 8/31/2021 6:43 PM by CAMPBELL, IRA



Rev.	Date	Description	By	Appr.
0	2021-07-09	ISSUED FOR PERMIT	BJ	

TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT

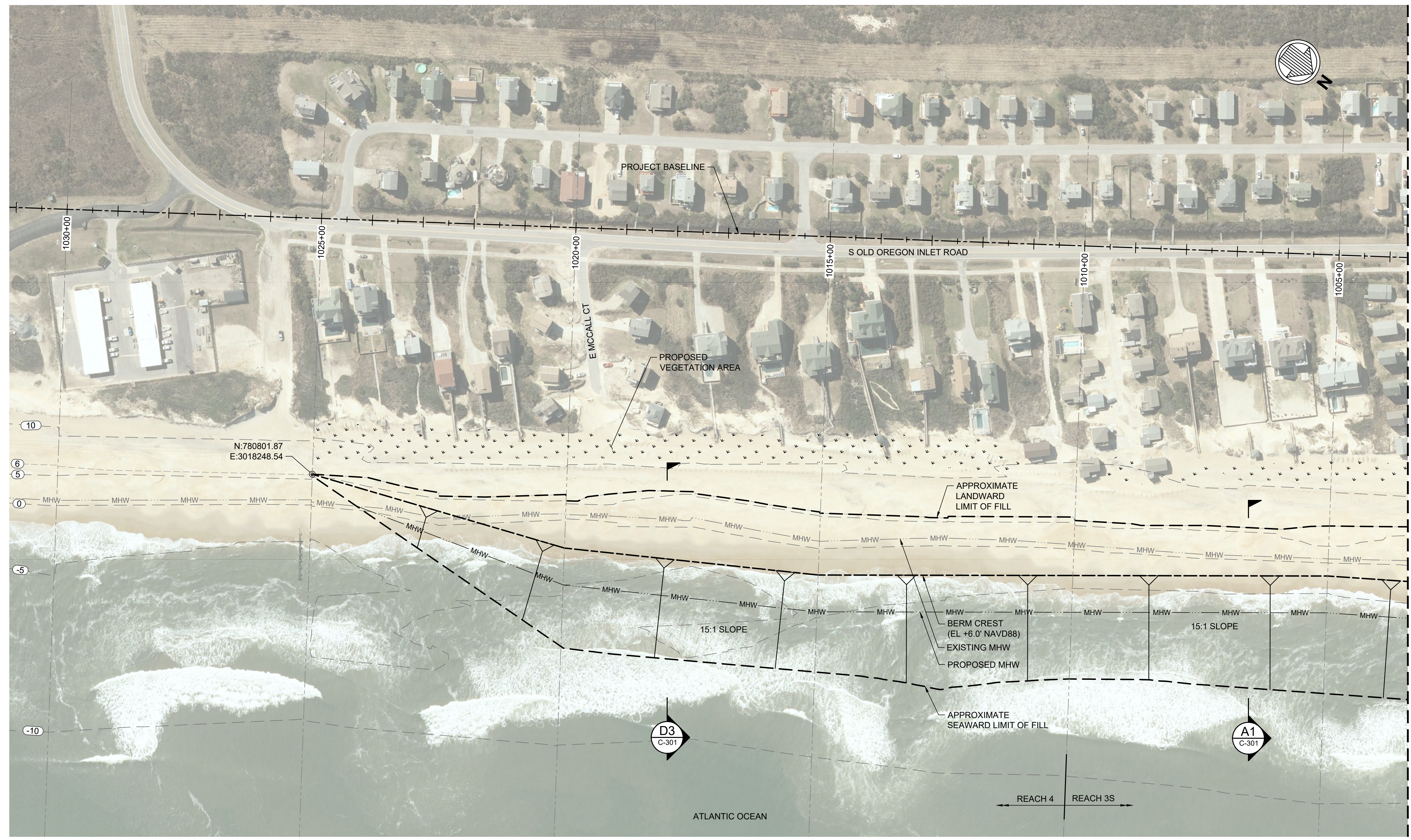
SITE PLAN SHEET 9 OF 9

Designed by:	NCV	Date:	JULY 09, 2021	Rev:	1
Drawn by:	VNM	MAN Project No.:	10979-04	Drawn by:	AS SHOWN
Reviewed by:	JDM	Drawn code:		Per Scale:	1" = (0 SHEET)
Submitted by:	MOFFATT & NICHOL				

4700 FALLS OF NEUSE RD., SUITE 300
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 NC FIRM NO. F-0105

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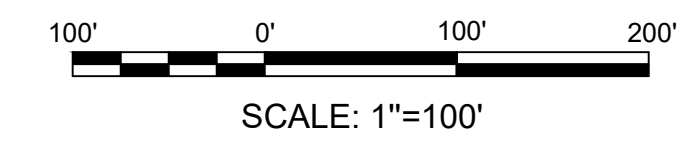
Sheet Reference No.
C-118
 INDEX: 18 OF 19



- NOTES:**
- CONTOURS REFERENCE NAVD88 AND ARE INTERPRETED FROM A JUNE 2020 SURVEY CONDUCTED BY MCKIM & CREED.
 - DUNE VEGETATION SHALL BE INSTALLED WITHIN THE IDENTIFIED AREAS, AT THE TOWN'S DISCRETION.

LEGEND:

↓ ↓ ↓ ↓ ↓ PROPOSED VEGETATION AREA



SCALE: 1"=100'
 REVISION 1-2021-08-31
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File: Q:\RA\10979-04\20 CAD\1_Active\1_10979-04 Nags Head Sheets - Permit\1097904-C-118 - Plotted: 8/31/2021 6:43 PM by CAMPBELL, IRA; Saved: 8/31/2021 6:16 PM by ICAMPBELL



Mark	Description	Date	Appr.
0	ISSUED FOR PERMIT	2021-07-09	BJ

TOWN OF NAGS HEAD POST-DORIAN BEACH RENOURISHMENT PROJECT

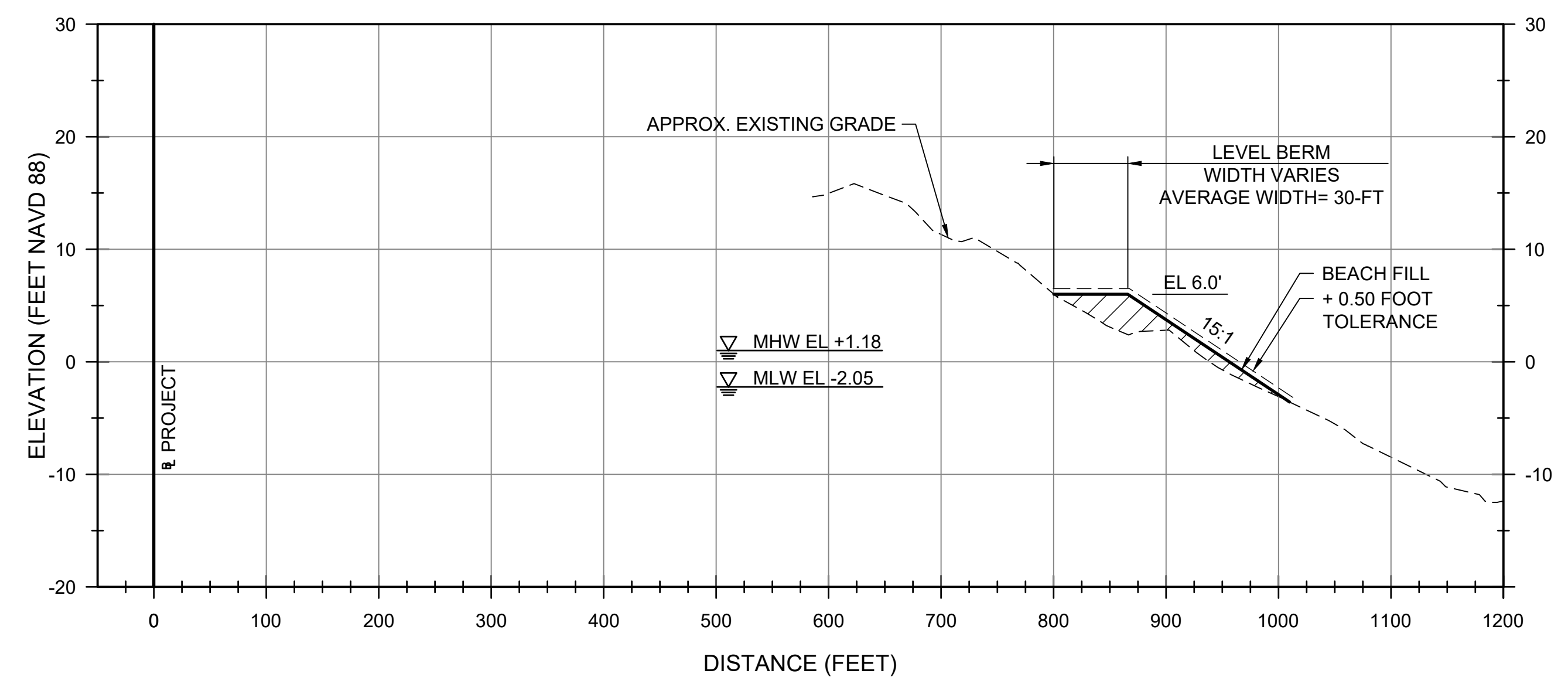
TYPICAL SECTIONS

Designed by:	NCV	Drawn by:	VNM	Reviewed by:	JDM	Submitted by:	MOFFATT & NICHOL
Date:	JULY 09, 2021	M&N Project No.:	10979-04	Drawing code:		Drawing Scale:	AS SHOWN
Per Scale:	1"=10' (0 SHEET)						

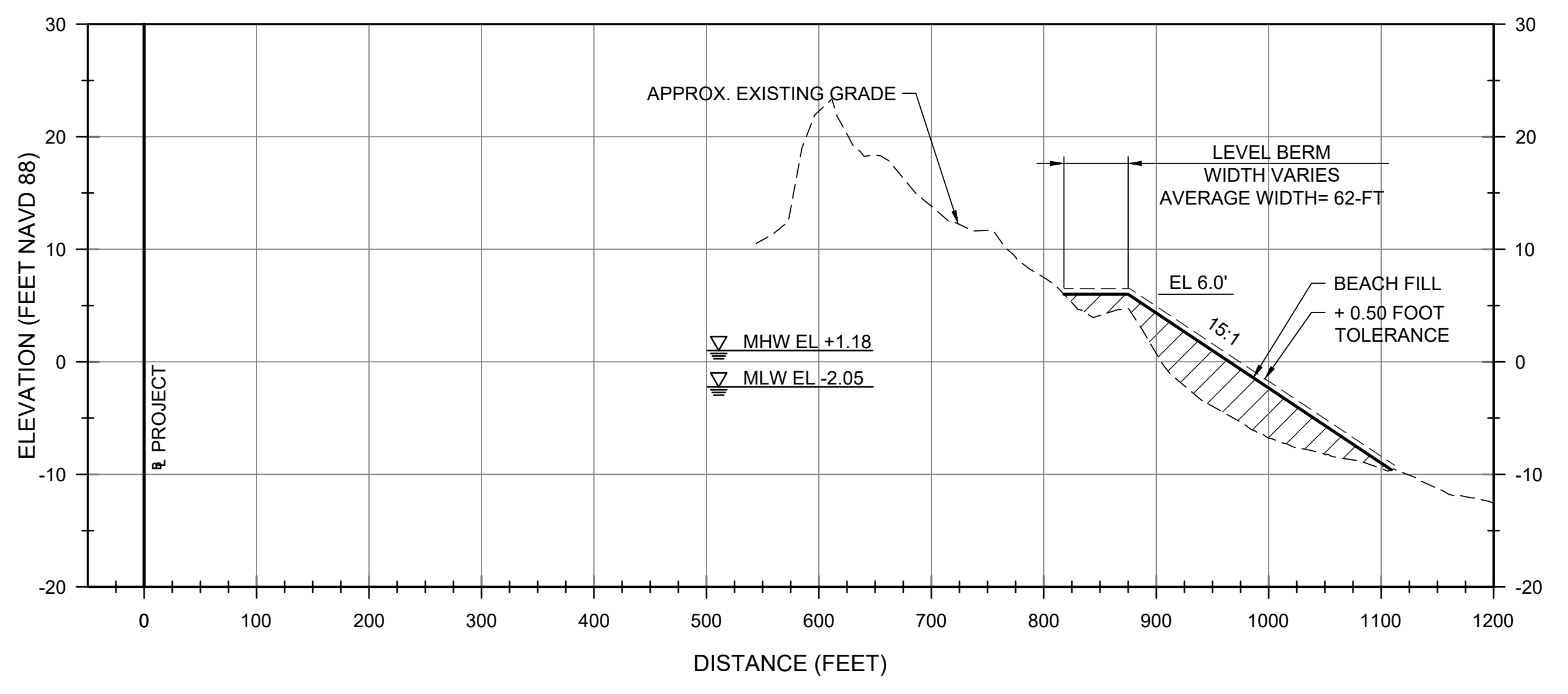
4700 FALLS OF NEUSE RD., SUITE 300
 FARMINGTON, NC 27834
 919-781-4626
 moftatt & nichol
 NC FIRM NO. F-0105

SEAL

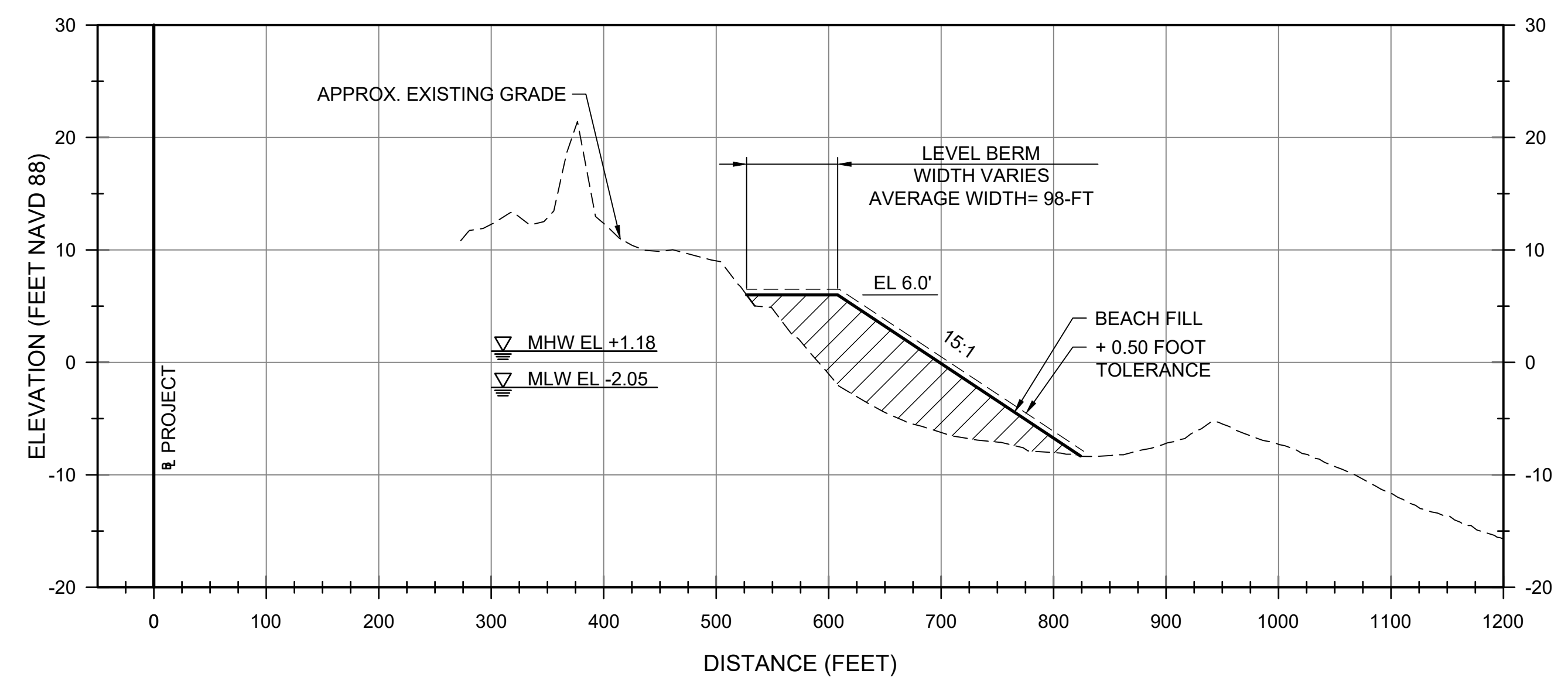
Sheet Reference No.
C-301
 INDEX: 19 OF 19



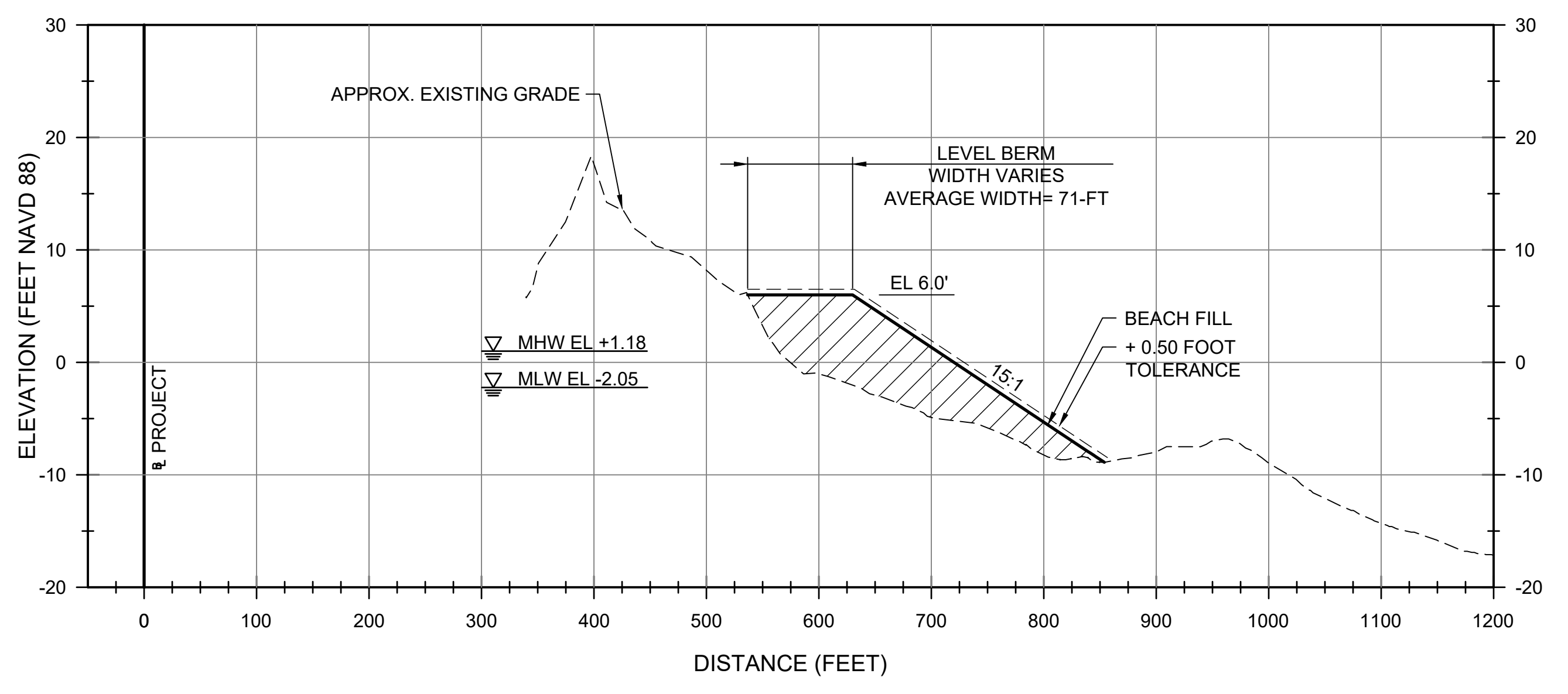
D1 REACH 2 TYPICAL SECTION
 C-110 SCALE: 1"=100'
 C-111, C-112, C-113



D4 REACH 3N TYPICAL SECTION
 C-114 SCALE: 1"=100'
 C-115, C-116

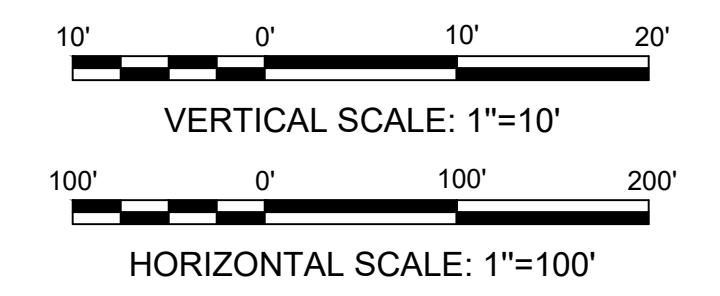


A1 REACH 3S TYPICAL SECTION
 C-116 SCALE: 1"=10'
 C-117 & C-118



D3 REACH 4 TYPICAL SECTION
 C-118 SCALE: 1"=100'

NOTE:
 PROPOSED DUNE VEGETATION NOT SHOWN FOR CLARITY.



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