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March 10, 2023

Ms. A. Shonta Dunston  
Chief Clerk  
North Carolina Utilities Commission  
430 N. Salisbury Street  
Room 5063  
Raleigh, NC 27603

Re: In the Matter of  
Joint Application of Bald Head Island Transportation, Inc., Bald Head Island Limited  
LLC, and Bald Head Island Ferry Transportation, LLC, for Approval of Transfer of  
Common Carrier Certificate to Bald Head Island Transportation, LLC, and Permission  
to Pledge Assets  
**NCUC Docket No. A-41, Sub 22**  
***Spoil Basin Volume Report***

Dear Ms. Dunston:

Attached for filing in the above referenced docket on behalf of Bald Head Island  
Transportation, Inc. (BHIT), Bald Head Island Limited, LLC (BHIL), and Bald Head  
Island Ferry Transportation, LLC (BHIFT), collectively "Applicants", is the Spoil Basin  
Volume Report.

If you should have any questions concerning this filing, please do not hesitate to contact  
me.

Sincerely,

*/s/ M. Gray Styers, Jr.*

M. Gray Styers, Jr.

A Pennsylvania Limited Liability Partnership

California Colorado Delaware District of Columbia Florida Georgia Illinois Minnesota  
Nevada New Jersey New York North Carolina Pennsylvania South Carolina Texas Washington

Ms. A. Shonta Dunston  
Page Two  
March 10, 2023

Enclosure

cc: Parties and Counsel of Record  
William E. H. Creech – NC Public Staff  
Elizabeth D. Culpepper – NC Public Staff  
Lucy Edmondson – NC Public Staff  
Jessica Heironimus – NC Public Staff  
Gina Holt – NC Public Staff

**Bruce Marek, P.E.**

5489 Eastwind Rd  
Wilmington, NC 28403  
910-799-9245  
March 9, 2023

Charles A. Paul, III  
Chief Executive Officer  
Bald Head Island Limited, LLC  
PO Box 3069  
Bald Head Island, NC 28461

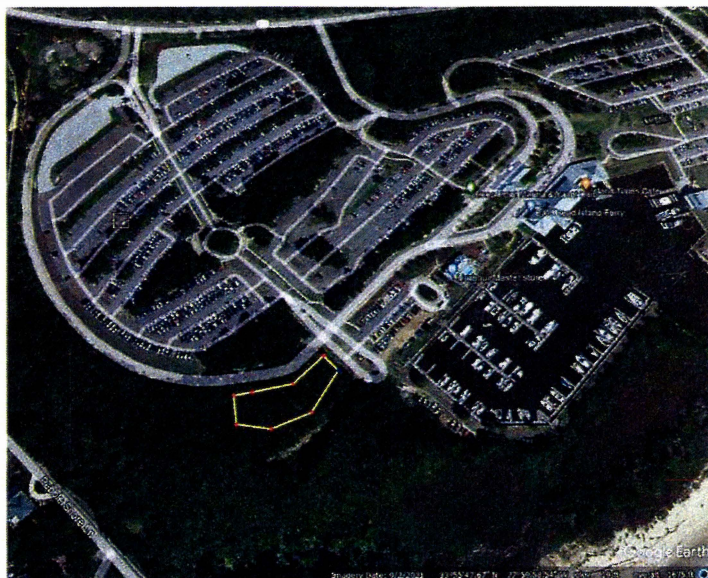
**Re: Bald Head Island Limited LLC Deep Point Marina, 1301 Ferry Road, Southport, NC Spoil Basin Volume Report. Updated Post 2022 Marina Dredging. CAMA #91-96.**

Bald Head Island Limited LLC (Limited/BHIL) has asked that I evaluate the current volumes of the Deep Point Spoil Basins as an update to the S&ME Capacity Report #4505-19-003B dated 1-19-21 based on Bateman Civil Survey Company As-Built Survey seal date 12/16-20, both included. The Bateman survey was provided in association with the transfer of property to BHITA (Bald Head Island Transportation Authority) by Bald Head Island Limited (BHIL), the current owner and operator of the Deep Point Terminal and adjacent marina. The remaining capacity volume stated prior to June 2019 was approximately 31,500 cubic yards."

With delayed completion of the transaction, BHIL constructed a second, smaller, appx 9000 cu yd spoil basin per Minor Modification to its CAMA 91-96 Major Permit and Revision to its Sediment & Erosion Control Permit Bruns-2017-049 Revised 8-19-21. Minor Mod date of 1-18-22. BHIL then engaged Coastal Dredging LLC to dredge the marina basin and barge staging area. By hydrographic pre and post surveys, appx 32,758 cu yds were dredged to the two basins in 2022.



Main Spoil Basin along barge entry road  
Google Earth Images 9-2-21



Location of second Spoil Basin along Main Entry Road



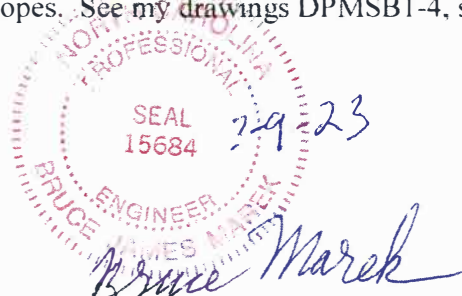
Per my design drawing C2B for the second spoil basin, seal date 8-20-21 the design spoil volume to elevation 22 FMSL was 9,200 cu ft. Top of Berm elevation for 4' freeboard is elevation 26 FMSL. Basin bottom is at 0 FMSL (into the groundwater a few feet). Autocad offsets of topo lines produced tight radii with the multiple inward offsets from top of berm which the basin builder rounded off, losing some volume. Conservatively, I estimate the as-built volume to the 22 FMSL max spoil height is 8500 cu yds. Based on 3-6-23 site visit, spoil/water had settled to appx 19 FMSL. Estimated remaining volume to 22 FMSL is appx 2,200 cu yds based on Autocad inside of basin areas of 22,350 sf at 22 FMSL, 21,000 sf at 21 FMSL, 19,800 sf at 20 FMSL and 18,600 sf at 19 FMSL.  $8,500 - 2,200 = 6,300 \pm$  cu yds of spoil is currently in the second basin.

Based on 2022 dredge quantity of 32,758 cu yds – 6,300 cu yds = 26,458 = 26,500 cu yds were placed in the main spoil basin. The Bateman 12/16/20 survey estimated that there was 27,409 cu yd availability to the 30 FMSL maximum spoil height level, and 38,143 cu yds to the 4' Freeboard height of 34 FMSL. Bateman had actual low point of berm at 33.73 FMSL.

The main spoil basin has a wood platform/walkway from the top of berm out to the water control structure/spillway riser. 11-4-22 Survey by ESP and Associates indicates the top of this "walkway" is elevation 36.47 FMSL and top of riser is 35.44'. 3-8-23 measurements for spoil height were 93" from top of walkway to riser bulkhead plus 22" to water =  $115''/12 = 9.58'$ . Water is sitting above the spoil, probably less than 1'. For round numbers using 11" would put spoil height at 10.5' below the 36.47 FMSL walkway, and again using round numbers top of spoil =  $36.47 - 10.5 = 26$  FMSL. Based on the 11-4-22 ESP Survey and using 1.75H:1V inside side slopes, the 30 FMSL area is 70,550 sf and the 26 FMSL area is 63,100 sf. Appx volume remaining to 30 FMSL in main spoil basin = 9,900 cu yds. Per the 11-4-22 Survey, the low point along the inside top perimeter was 33.15 FMSL. Grade stakes were then set to raise any low areas to a minimum of 34.5 FMSL. BHIL had maintenance work done, including clearing of brush and filling of the low points. While it was  $16 \frac{1}{2}''$  of fill at the ESP low point, numerically we only gained 0.5' of extra volume as Bateman rounded his 33.73' low point up to 34.0 for his calcs. Added volume below the 4' freeboard from 30 FMSL to 30.5 FMSL = 1,300 cu yds.  $9900 + 1300 = 11,200$  cu yds currently available in the main spoil basin at Deep Point. Plus the 2,200 cu yds available in the second spoil basin = 13,500 cu yds. Note that the average of 48 points along the inside perimeter of the top of the basin, spaced appx 25' on center, is 35.66'. there are sufficient high areas to raise the low point 6" to 35 FMSL, with a 4' freeboard storage height of 31 FMSL. That extra 0.5' would add 1,300 cu yds for a potential of 14,800 cu yds of available capacity.

Spoil Basin Volumes: in 2007, the bottom of the empty main spoil basin was 7 FMSL, with a few low areas at 6 FMSL. Using the 11-4-22 ESP inside top perimeter and offsetting downward and inward at 1.75H:1V if emptied, the volume from 8 FMSL to 30.5 FMSL is appx 43,300 cu yds. From 8 FMSL to 31 FMSL = 44,600 cu yds. From 7 FMSL to 31 FMSL = 44,600 cu yds. Note that the 1.75:1 is less steep than the 1.5H:1V inside side slopes of the new second basin. Same calcs using a conservative 2H:1V inside slope is 40,300 cu yds 8 FMSL to 30.5 FMSL and 41,300 cu yds for 7 FMSL to 30.5 FMSL if emptied. Note that 2H:1V is what Sediment and Erosion Control allows for outside of spoil basin side slopes. See my drawings DPMSB1-4, seal dated 3-9-23 and C2B 8-20-21.

Bruce Marek, P.E.  
NC # 156834



Deep Point Marina, Southport, NC Spoil Basin Volume Report

Page 2 of 2  
Bruce Marek, P.E. 3-9-23



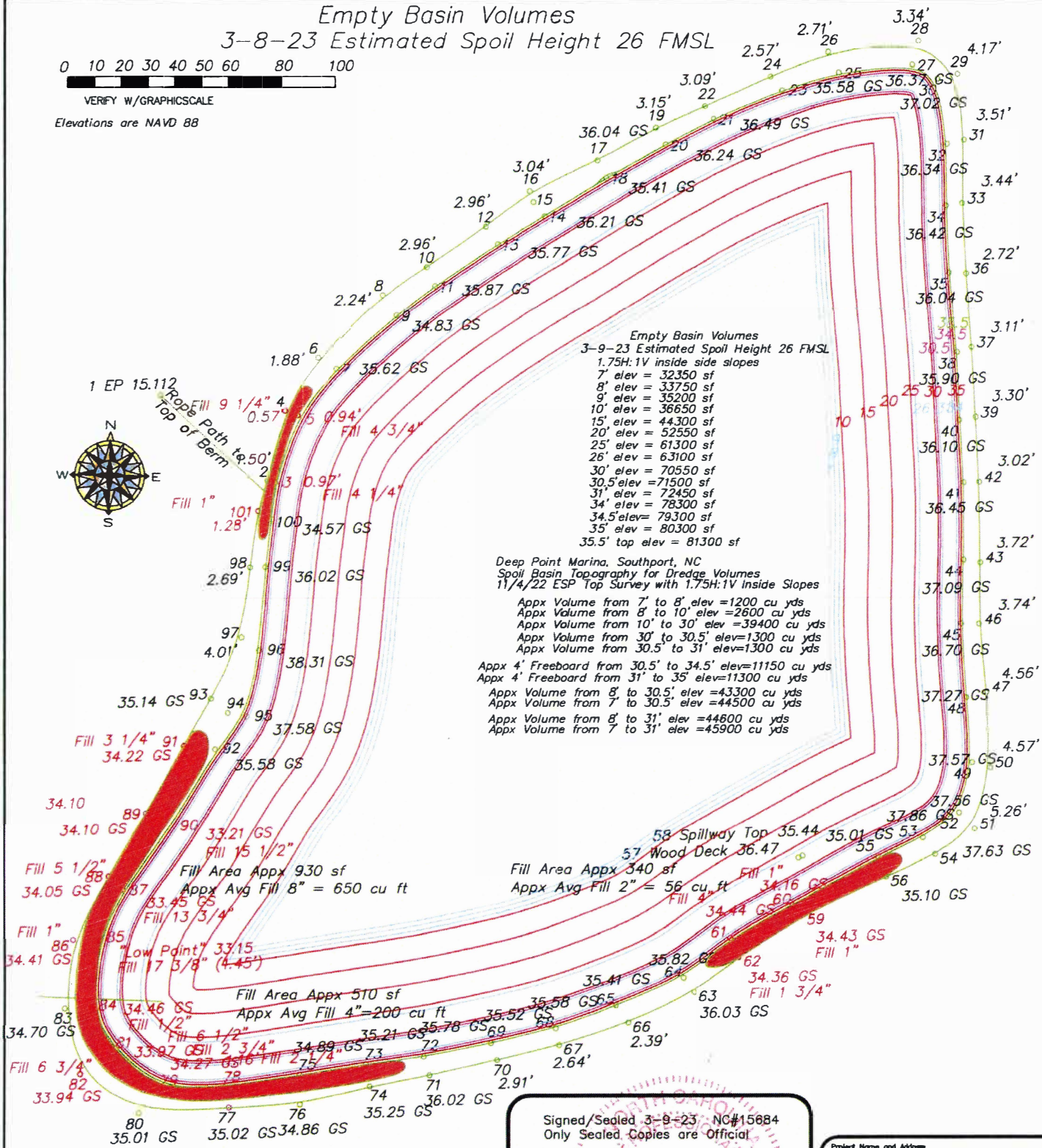
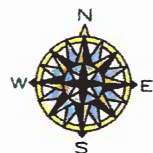
# Empty Basin Volumes

3-8-23 Estimated Spoil Height 26 FMSL

0 10 20 30 40 50 60 80 100

VERIFY W/GRAPHICSCALE

Elevations are NAVD 88



Empty Basin Volumes  
3-9-23 Estimated Spoil Height 26 FMSL  
1.75H:1V inside side slopes  
7' elev = 32350 sf  
8' elev = 33750 sf  
9' elev = 35200 sf  
10' elev = 36650 sf  
15' elev = 44300 sf  
20' elev = 52550 sf  
25' elev = 61300 sf  
30' elev = 70550 sf  
30.5' elev = 71500 sf  
31' elev = 72450 sf  
34' elev = 78300 sf  
34.5' elev = 79300 sf  
35' elev = 80300 sf  
35.5' top elev = 81300 sf

Deep Point Marina, Southport, NC  
Spoil Basin Topography for Dredge Volumes  
11/4/22 ESP Top Survey with 1.75H:1V Inside Slopes  
Appx Volume from 7' to 8' elev = 1200 cu yds  
Appx Volume from 8' to 10' elev = 2600 cu yds  
Appx Volume from 10' to 30' elev = 39400 cu yds  
Appx Volume from 30' to 30.5' elev = 1300 cu yds  
Appx Volume from 30.5' to 31' elev = 1300 cu yds  
Appx 4' Freeboard from 30.5' to 34.5' elev = 11150 cu yds  
Appx 4' Freeboard from 31' to 35' elev = 11300 cu yds  
Appx Volume from 8' to 30.5' elev = 43300 cu yds  
Appx Volume from 7' to 30.5' elev = 44500 cu yds  
Appx Volume from 8' to 31' elev = 44800 cu yds  
Appx Volume from 7' to 31' elev = 45900 cu yds

Fill Area Appx 930 sf  
Appx Avg Fill 8" = 650 cu ft

Fill Area Appx 510 sf  
Appx Avg Fill 4" = 200 cu ft

Signed/Sealed 3-9-23 NC#15684  
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SEAL  
15684 3-9-23

*Bruce Marek*

BRUCE MAREK, P.E.  
5489 EASTWIND RD  
WILMINGTON, NC 28403  
910-799-9245

Project Name and Address  
DEEP POINT MARINA  
CAMA # 91-96  
SPOILS BASIN VOLUME  
11-4-22 ESP Top of Berm with  
1.75H:1V Inside Side Slopes

Project  
DEEP PT SPOILS BASIN  
Date  
3-9-23  
Scale  
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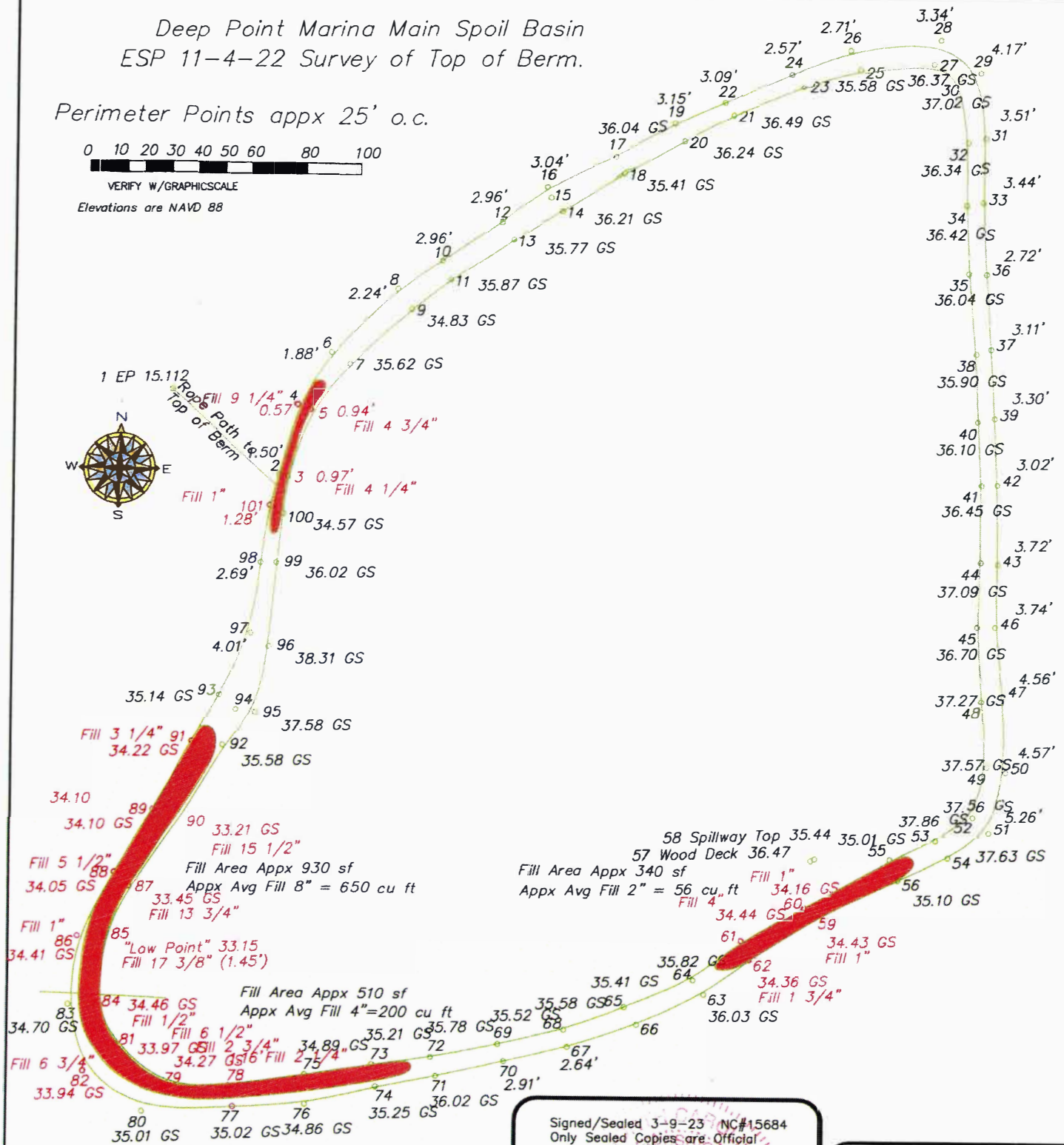
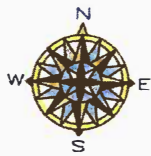
# Deep Point Marina Main Spoil Basin ESP 11-4-22 Survey of Top of Berm.

Perimeter Points appx 25' o.c.

0 10 20 30 40 50 60 80 100

VERIFY W/GRAPHICSCALE

Elevations are NAVD 88



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15684  
3-9-23  
Bruce Marek  
Professional Engineer  
James M. Marek

BRUCE MAREK, P.E.  
5489 EASTWIND RD  
WILMINGTON, NC 28403  
910-799-9245

Project Name and Address

DEEP POINT MARINA  
CAMA # 91-96  
SPOILS BASIN VOLUME  
11-4-22 ESP Top of Berm

Project  
DEEP PT SPOILS BASIN

Date  
3-9-23

Scale  
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Sheet

DPMSB  
2



Deep Point Marina Main Spoil Basin  
ESP 11-4-22 Survey of Top of Berm.

Perimeter Points appx 25' o.c.  
Elevations are NAVD 88

5	67844.63	2305047	34.094	GS
6	67867.08	2305044	35.028	GS
7	67866.56	2305052	35.622	GS
8	67898.78	2305055	35.39	GS
9	67894.43	2305063	34.841	GS
11	67910.65	2305071	35.871	GS
10	67915.47	2305065	36.116	GS
12	67938.95	2305078	36.113	GS
13	67935.14	2305085	35.77	GS
14	67952.43	2305096	36.206	GS
15	67955.13	2305090	35.41	GS
16	67958.04	2305087	36.192	GS
17	67979.64	2305104	36.342	GS
18	67975.36	2305110	36.493	GS
19	68000.37	2305118	36.297	GS
20	67996.36	2305124	36.24	GS
21	68013.29	2305136	36.491	GS
22	68016.01	2305131	36.24	GS
23	68034.45	2305154	36.182	GS
24	68036.96	2305148	35.721	GS
25	68049.82	2305170	35.586	GS
26	68054.82	2305163	35.865	GS
27	68064.85	2305193	36.368	GS
28	68073.97	2305191	36.495	GS
29	68069.85	2305210	37.322	GS
30	68064.49	2305204	37.019	GS



38	67977.66	2305256	35.902	GS
39	67959.59	2305273	36.452	GS
40	67955.83	2305268	36.087	GS
41	67935.78	2305280	36.218	GS
42	67938.61	2305285	36.171	GS
43	67911.82	2305299	36.869	GS
44	67909.83	2305293	37.094	GS
45	67888.09	2305303	36.699	GS
46	67891.01	2305309	36.887	GS
47	67869.63	2305323	37.717	GS
48	67864.35	2305317	37.271	GS
49	67843.55	2305330	37.527	GS
50	67845.03	2305337	37.722	GS
51	67821.84	2305342	38.41	GS
52	67824.54	2305334	37.565	GS
53	67809.94	2305326	37.686	GS
54	67806.65	2305333	37.634	GS
55	67796.02	2305314	35.009	GS
56	67790.77	2305320	35.095	GS
57	67782.43	2305288	36.47	WOOD DECK
58	67783.7	2305289	35.44	CMP
59	67763.69	2305299	34.425	GS
60	67765.47	2305294	34.16	GS
61	67744.06	2305279	34.441	GS
62	67739.1	2305285	34.357	GS
63	67719.81	2305276	36.03	GS
64	67722.81	2305270	35.817	GS
65	67702.15	2305252	35.419	GS
66	67698.61	2305259	35.539	GS
67	67679.7	2305240	35.791	GS



74	67633.91	2305184	35.251	GS
75	67625.92	2305159	34.891	GS
76	67616.27	2305164	34.856	GS
77	67603.16	2305141	35.02	GS
78	67609.16	2305136	34.315	GS
79	67597.71	2305115	34.27	GS
80	67586	2305112	35.008	GS
81	67603.68	2305092	34.963	GS
82	67589.11	2305086	33.943	GS
83	67608.25	2305070	34.7	GS
84	67612.62	2305079	34.459	GS
85	67636.6	2305070	33.152	GS
86	67632.36	2305061	34.41	GS
87	67657.49	2305069	33.346	GS
88	67659.51	2305062	34.048	GS
89	67686.53	2305064	34.095	GS
90	67687.37	2305075	34.21	GS
91	67715.43	2305065	34.221	GS
92	67719.61	2305076	35.579	GS
93	67735.68	2305066	35.141	GS
94	67733.84	2305074	36.775	GS
95	67735.88	2305081	37.587	GS
96	67760.13	2305074	38.312	GS
97	67761.39	2305066	37.163	GS
98	67786.03	2305057	35.843	GS
99	67788.73	2305062	36.019	GS
100	67805.92	2305056	34.566	GS
101	67806.25	2305050	34.427	GS
1	67827.88	2304998	15.112	EP

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BRUCE MAREK, P.E.  
5489 EASTWIND RD  
WILMINGTON, NC 28403  
910-799-9245

Project Name and Address

DEEP POINT MARINA  
CAMA # 91-96  
SPOILS BASIN VOLUME  
11-4-22 ESP Top of Berm

Sheet

Project  
DEEP PT SPOILS BASIN

Date

3-9-23

Scale

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DPMSB

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Mar 10 2023

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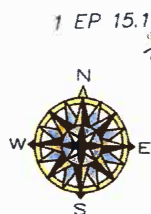


# Empty Basin Volumes 3-8-23 Estimated Spoil Height 26 FMSL

0 10 20 30 40 50 60 80 100



VERIFY W/GRAPHICSCALE  
Elevations are NAVD 88



1 EP 15.112  
Rope Path to 50'

Fill 9 1/4" 4  
0.57' 5 0.94'

Fill 1" 101  
1.28' 100

98 2.69' 99

97 4.01' 96

95 35.14 GS 93

Fill 3 1/4" 91  
34.22 GS

34.10 89  
34.10 GS

Fill 5 1/2" 88  
34.05 GS

Fill 1" 86  
34.41 GS

83 34.70 GS

Fill 6 3/8" 82  
33.94 GS

80 35.01 GS

77 35.02 GS

76 34.86 GS

74 35.25 GS

71 36.02 GS

67 2.64'

66 2.39'

if 2H:1V inside side slopes

2H:1V inside side slopes  
7' elev = 26950 sf  
8' elev = 28400 sf  
9' elev = 29300 sf  
10' elev = 31450 sf  
15' elev = 39750 sf  
20' elev = 48800 sf  
25' elev = 56600 sf  
26' elev = 60650 sf  
30' elev = 69050 sf  
30.5' elev = 70150 sf  
31' elev = 71200 sf  
34' elev = 77850 sf  
34.5' elev = 79000 sf  
35' elev = 80150 sf  
35.5' top elev = 81300 sf

Deep Point Marina, Southport, NC  
Spoil Basin Topography for Dredge Volumes  
11/4/22 ESP Top Survey with 2H:1V Inside Slopes

Appx Volume from 7' to 8' elev = 1000 cu yds  
Appx Volume from 8' to 10' elev = 2200 cu yds  
Appx Volume from 10' to 30' elev = 36850 cu yds  
Appx Volume from 30' to 30.5' elev = 1250 cu yds  
Appx Volume from 30.5' to 31' elev = 1300 cu yds  
Appx 4' Freeboard from 30.5' to 34.5' elev = 11050 cu yds  
Appx 4' Freeboard from 31' to 35' elev = 11200 cu yds  
Appx Volume from 8' to 30.5' elev = 40300 cu yds  
Appx Volume from 7' to 30.5' elev = 41300 cu yds  
Appx Volume from 8' to 31' elev = 42600 cu yds  
Appx Volume from 7' to 31' elev = 43900 cu yds

Fill Area Appx 930 sf  
Appx Avg Fill 8" = 650 cu ft

Fill 13 3/4" 65  
"Low Point" 33.15  
Fill 17 3/8" (1.45')

Fill Area Appx 510 sf  
Appx Avg Fill 4" = 200 cu ft

Fill 6 1/2" 81  
33.97 GS

Fill 2 3/4" 79  
34.27 GS

Fill 2 1/4" 78  
34.89 GS

73 35.21 GS

72 35.78 GS

70 36.02 GS

69 35.58 GS

68 35.41 GS

if 2H:1V inside side slopes

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Fill 2 3/4" 79  
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73 35.21 GS

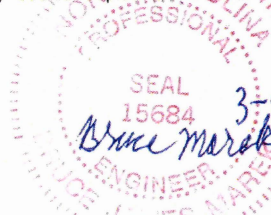
72 35.78 GS

70 36.02 GS

69 35.58 GS

68 35.41 GS

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5489 EASTWIND RD  
WILMINGTON, NC 28403  
910-799-9245

Project Name and Address

DEEP POINT MARINA  
CAMA # 91-96  
SPOILS BASIN VOLUME  
11-4-22 ESP Top of Berm with  
2H:1V Inside Side Slopes

Project  
DEEP PT SPOILS BASIN

Date  
3-9-23

Scale  
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Sheet

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4

Deep Point Marina Main Spoil Basin  
11-4-22 ESP Survey Points  
Inside top of berm

Bruce Marek, P.E.  
5489 Eastwind Rd  
Wilmington, NC 28403

ESP 11-4-22 Pt# 3	34.12 FMSL NAVD88
ESP 11-4-22 Pt# 5	34.09 FMSL NAVD88
ESP 11-4-22 Pt# 7	35.62 FMSL NAVD88
ESP 11-4-22 Pt# 9	34.83 FMSL NAVD88
ESP 11-4-22 Pt# 11	35.87 FMSL NAVD88
ESP 11-4-22 Pt# 13	35.77 FMSL NAVD88
ESP 11-4-22 Pt# 14	36.21 FMSL NAVD88
ESP 11-4-22 Pt# 18	35.41 FMSL NAVD88
ESP 11-4-22 Pt# 20	36.24 FMSL NAVD88
ESP 11-4-22 Pt# 21	36.49 FMSL NAVD88
ESP 11-4-22 Pt# 23	36.18 FMSL NAVD88
ESP 11-4-22 Pt# 25	35.58 FMSL NAVD88
ESP 11-4-22 Pt# 27	36.37 FMSL NAVD88
ESP 11-4-22 Pt# 30	37.02 FMSL NAVD88
ESP 11-4-22 Pt# 32	36.34 FMSL NAVD88
ESP 11-4-22 Pt# 34	36.42 FMSL NAVD88
ESP 11-4-22 Pt# 35	36.04 FMSL NAVD88
ESP 11-4-22 Pt# 38	35.90 FMSL NAVD88
ESP 11-4-22 Pt# 40	36.10 FMSL NAVD88
ESP 11-4-22 Pt# 41	36.45 FMSL NAVD88
ESP 11-4-22 Pt# 44	37.09 FMSL NAVD88
ESP 11-4-22 Pt# 45	36.70 FMSL NAVD88
ESP 11-4-22 Pt# 48	37.27 FMSL NAVD88
ESP 11-4-22 Pt# 49	37.57 FMSL NAVD88
ESP 11-4-22 Pt# 52	37.56 FMSL NAVD88
ESP 11-4-22 Pt# 53	37.86 FMSL NAVD88
ESP 11-4-22 Pt# 55	35.01 FMSL NAVD88
ESP 11-4-22 Pt# 60	34.16 FMSL NAVD88
ESP 11-4-22 Pt# 61	34.44 FMSL NAVD88
ESP 11-4-22 Pt# 64	35.82 FMSL NAVD88
ESP 11-4-22 Pt# 65	35.41 FMSL NAVD88
ESP 11-4-22 Pt# 68	35.58 FMSL NAVD88
ESP 11-4-22 Pt# 69	35.52 FMSL NAVD88
ESP 11-4-22 Pt# 72	35.78 FMSL NAVD88
ESP 11-4-22 Pt# 73	35.21 FMSL NAVD88
ESP 11-4-22 Pt# 75	34.89 FMSL NAVD88
ESP 11-4-22 Pt# 78	34.31 FMSL NAVD88
ESP 11-4-22 Pt# 79	34.27 FMSL NAVD88
ESP 11-4-22 Pt# 81	33.96 FMSL NAVD88
ESP 11-4-22 Pt# 84	34.46 FMSL NAVD88
ESP 11-4-22 Pt# 85	33.15 FMSL NAVD88
ESP 11-4-22 Pt# 87	33.35 FMSL NAVD88
ESP 11-4-22 Pt# 90	33.21 FMSL NAVD88
ESP 11-4-22 Pt# 92	35.58 FMSL NAVD88
ESP 11-4-22 Pt# 95	37.58 FMSL NAVD88
ESP 11-4-22 Pt# 96	38.31 FMSL NAVD88
ESP 11-4-22 Pt# 99	36.02 FMSL NAVD88
ESP 11-4-22 Pt# 100	34.57 FMSL NAVD88

Filled to 34.5 FMSL  
Filled to 34.5 FMSL



Filled to 34.5 FMSL  
Filled to 34.5 FMSL

Low Point

Filled to 34.5 FMSL  
Filled to 34.5 FMSL  
Filled to 34.5 FMSL  
Filled to 34.5 FMSL  
Filled to 34.5 FMSL  
Filled to 34.5 FMSL

48 Points

35.66 FMSL Average



Permit Class  
**MODIFICATION/MINOR**

Permit Number  
**91-96**

STATE OF NORTH CAROLINA  
Department of Environmental Quality  
and  
Coastal Resources Commission

# Permit

for

X Major Development in an Area of Environmental Concern  
pursuant to NCGS 113A-118

X Excavation and/or filling pursuant to NCGS 113-229

Issued to Bald Head Island Limited, LLC, PO Box 3069, Bald Head Island, NC 28461

Authorizing development in Brunswick County at Deep Point Marina, adj to the Cape Fear

River, as requested in the permittee's letter dated 9/15/2021,

including the attached workplan drawings (4) (C1, C2A, C2E, C3) dated (8/16/21, 8/15/21, 8/20/21, 7/23/21)

respectively.

This permit, issued on January 18, 2022, is subject to compliance with the application (where consistent with the permit), all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to fines, imprisonment or civil action; or may cause the permit to be null and void.

## Dredge Material Disposal

- 1) Unless specifically altered herein, this Minor Modification authorizes the construction of a second dredge material basin and disposal area to accommodate material from the dredging at Deep Point Marina, all as expressly and specifically set forth in the attached letter and workplan drawings. Any additional development activities may require a modification of this permit.
- 2) No dredge material shall be placed within 30 feet of the normal high-water line.

(See attached sheet for additional conditions)

This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date.

This permit must be accessible on-site to Department personnel when the project is inspected for compliance.

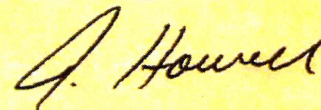
Any maintenance work or project modification not covered hereunder requires further Division approval.

All work must cease when the permit expires on

December 31, 2025

In issuing this permit, the State of North Carolina agrees that your project is consistent with the North Carolina Coastal Management Program.

Signed by the authority of the Secretary of DEQ and the Chair of the Coastal Resources Commission.



Braxton C. Davis, Director  
Division of Coastal Management

This permit and its conditions are hereby accepted.



Signature of Permittee



**ADDITIONAL CONDITIONS**

- 3) All excavated materials shall be confined above normal high water and landward of regularly or irregularly flooded marsh behind adequate dikes or other retaining structures to prevent spillover of solids into any marsh or surrounding waters. The barriers shall be maintained and functional until the site is graded and stabilized.
- 4) The terminal end of the pipeline shall be positioned at or greater than 50 feet from any part of the dike and a maximum distance from spillways to allow settlement of suspended sediments.
- 5) The dredge pipe alignment shall follow the alignment as depicted in the workplan drawings sheet (C1, dated 8/16/21).
- 6) A water control structure shall be installed at the intake end of the effluent pipe to assure compliance with water quality standards.
- 7) The disposal area effluent shall be contained by pipe, trough, or similar device to a point at or beyond the normal low water level to prevent gully erosion and unnecessary siltation.
- 8) The diked disposal area shall be constructed a sufficient distance from the normal high-water level or any marsh and sufficiently maintained to eliminate the possibility of dike erosion or dredge material deposition into surrounding wetlands or waters.
- 9) The dredge material disposal area shall be inspected and approved by a representative of the Division of Coastal Management prior to the commencement of any dredging activities.

**General**

- 10) The permittee and/or his or her contractor shall meet with a representative of the Division prior to project initiation.
- 11) This Minor Modification shall be attached to the original Permit No. 91-96, which was issued to the permittee on 6/3/96, as well as all subsequent modifications, refinements, and renewals, and copies of all documents must be readily available on site when Division personnel inspect the project for compliance.
- 12) All conditions and stipulations of the active permit remain in force unless specifically altered herein.

**NOTE:** This permit does not eliminate the need to obtain any additional state, federal or local permits, approvals or authorizations that may be required.

**NOTE:** The U.S. Army Corps of Engineers assigned the project Action ID SAW-1996-02657.

**NOTE:** The Division of Water Resources assigned the proposed project DWR Project No. 1995-1268v3.

**NOTE:** A minor modification application processing fee of \$100 was received by DCM for this project.







January 19, 2021

Bald Head Island Transportation Authority  
c/o McGuire Woods, LLP  
300 North Third Street, Suite 320  
Wilmington, North Carolina 28401

Attention: Ms. Susan Rabon  
Mr. Dickson McLean

c/o Henry Kitchen, McGuire Woods

via email: [hkitchen@mcquirewoods.com](mailto:hkitchen@mcquirewoods.com)

Reference: **Updated Spoil Area Capacity Report  
Deep Point Marina**  
Southport, North Carolina  
S&ME Project No. 4305-19-003B

Dear Ms. Rabon:

S&ME, Inc. (S&ME) is pleased to submit this updated spoil area capacity report for the Deep Point Marina located in Southport, North Carolina. The work was completed in general accordance with our proposal number 43-2000259, dated March 17, 2020.

## Project And Site Information

Current and future operations of the Bald Head Island Transportation Authority (BHITA) ferry terminals will require the continued dredging of the marina's waterways. The dredged spoils for the Deep Point Marina are currently placed onsite in the dredge spoil area shown in the attached **Figures 1 and 2**. Prior to transfer of the property to BHITA, Bald Head Island Limited (BHIL), the current owner and operator of the marina, stated they would provide the remaining capacity volume told to BHITA at the beginning of the property transaction process. That remaining capacity volume stated prior to June 2019 was approximately 31,500 cubic yards.

A *Spoil Area Capacity Report*, dated June 4, 2019, prepared by S&ME for BHITA, was prepared to estimate the remaining capacity of the dredge spoil area as of April 30, 2019. At that time the remaining capacity of the spoil area at the Deep Point Marina was determined to be 14,950 cubic yards while maintaining four feet of freeboard below the top of the lowest point on the exterior berm. The remaining capacity of the spoil area is 25,640 cubic yards with no freeboard. This was less than the remaining capacity volume presented to BHITA by BHIL.

In an effort to provide the required remaining capacity of the dredge spoil basin prior to property transfer, BHIL representatives removed spoils from the basin and placed at another location on the marina property in November 2020.





## Updated Spoil Area Capacity Report

### Deep Point Marina

Southport, North Carolina  
S&ME Project No. 4305-19-003B

OFFICIAL COPY

Mar 10 2023

To determine the remaining capacity of this spoil area, after the November 2020 removal of spoils from the basin, BHITA requested S&ME to perform an updated capacity survey. S&ME contracted with a local North Carolina professional licensed surveyor (PLS), Bateman Civil Survey Company (Bateman), to conduct the onsite surveying.

## ♦ Description of Activities and Observations

### Deep Point Marina

Bateman surveyed the dredge spoil area by walking the berm and the interior surface of the spoil area on December 10, 2020. The survey also utilized a drone on December 11, 2020. The majority of the areas were accessible.

## ♦ Capacity Results

### Deep Point Marina

Based on the survey, the remaining capacity of the spoil area at the Deep Point Marina is 27,409 cubic yards while maintaining four feet of freeboard below the top of the lowest point on the exterior berm. In 2019, the BHIL personnel noted that the terminal was to maintain four foot of freeboard in the spoil area. The remaining capacity of the spoil area is 38,143 cubic yards without the four feet of freeboard.

There may likely be some consolidation or subsidence of the spoil over time, which may increase the storage volume. The survey map prepared by Bateman Civil Survey is attached.

## Closing

S&ME appreciates the opportunity to provide our services on this project. Please contact us if you have any questions regarding this report or if we may be of further assistance.

Sincerely,

S&ME, Inc.

Claudia Irvin  
Project Professional  
[cirvin@smeinc.com](mailto:cirvin@smeinc.com)  
919-954-6208

Wayne Watterson, P.E.  
Senior Engineer  
[wwatterson@smeinc.com](mailto:wwatterson@smeinc.com)  
336-288-7180

Attachments - Figure 1 – Site Map – Deep Point Marina  
Figure 2 – Dredge Spoil Area – Deep Point Marina  
Mainland Dredge Spoil Pond Capacity As-Built Survey





Drawing Path: T:\Projects\2019\ENR4305-19-003A Deep Point Marina Capacity Services\GIS\SPOIL\_AREA.mxd plotted by abentz 06-04-2019



**REFERENCE:**

GIS BASE LAYERS WERE OBTAINED FROM THE 2016 NCONEMAP AERIAL ORTHOIMAGERY LAYER AND THE 2016 BRUNSWICK COUNTY PARCEL SHAPEFILE. THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. ALL FEATURE LOCATIONS DISPLAYED ARE APPROXIMATED. THEY ARE NOT BASED ON CIVIL SURVEY INFORMATION, UNLESS STATED OTHERWISE.



**DREDGE SPOIL AREA - DEEP POINT MARINA**

DEEP POINT MARINA SPOIL AREA CAPACITY REPORT  
1301 FERRY ROAD  
SOUTHPORT, BRUNSWICK COUNTY, NORTH CAROLINA

SCALE:  
1" = 125'

DATE:  
6-4-19

PROJECT NUMBER  
4305-19-003A

FIGURE NO.

2



