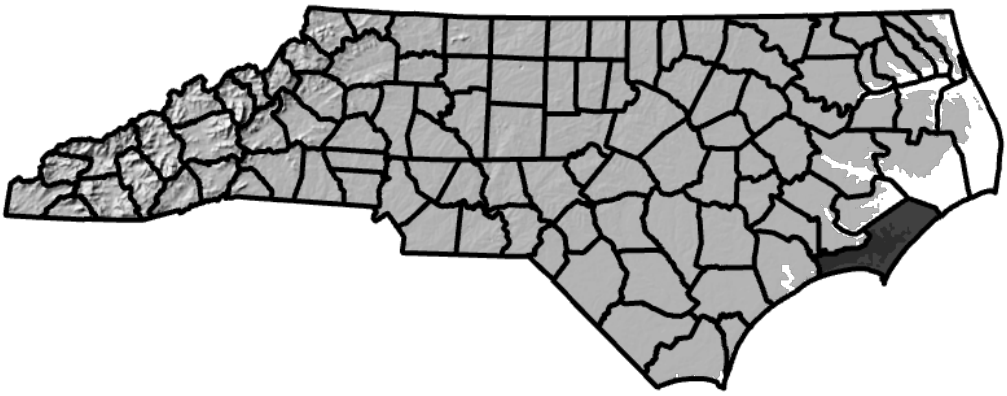
ANNUAL REPORT FOR 2025



Harker's Island Road Mitigation and Temporary Impact Sites
Carteret County
TIP No. B-4863
COE Action ID: SAW-2016-01147
DWR Project #: 20181657
CAMA Permit #: 27-19

Prepared By:
Roadside Environmental Unit and Environmental Analysis Unit
North Carolina Department of Transportation
August 2025

TABLE OF CONTENTS

FIGURES

APPENDICES

SUMMARY

The Harker's Island Road Mitigation and Temporary Impact Sites are located in Carteret County. This is an annual report for the wetland mitigation site and temporary impacts associated with TIP No. B-4863 bridge replacements of Bridge Numbers 73 and 96 over Harker's Island Straits on SR 1335 (Harker's Island Road), hereafter, referred to as the Harker's Island Road Site. Marsh grass planting within the mitigation site and temporary wetland impact site #3 was completed on May 8, 2024. All other temporary wetland impact sites were left to revegetate naturally.

The wetland mitigation site consists of 0.35 acres of marsh restoration and will be monitored for 5 years or until mitigation success criteria are met. The temporary wetland impacts encompass approximately 0.13 acres due to temporary fill, 0.05 due to wetland excavation, and 0.12 acres due to hand clearing within Coastal wetlands for this project and will be monitored for three years to ensure that it re-attains wetland jurisdictional status.

After the second year of monitoring, the Harker's Island Road Site shows by visual observation that the wetland mitigation site is on track to meet the vegetation success criteria and the temporary impact areas are re-attaining jurisdictional wetland status for Year 2.

NCDOT proposes to continue monitoring at the Harker's Island Road Site in 2026.

1.0 INTRODUCTION

1.1 Project Description

The Harker's Island Road Site is located in Carteret County (Figure 1). The wetland mitigation site consists of 0.35 acres of marsh restoration and will be monitored for 5 years or until mitigation success criteria are met. The temporary wetland impacts encompass approximately 0.13 acres due to temporary fill, 0.05 due to wetland excavation, and 0.12 acres due to hand clearing within Coastal wetlands for this project and will be monitored for three years to ensure that it re-attains wetland jurisdictional status.

1.2 Purpose

In order for a site to be considered successful, a site must meet the success criteria. This report details the monitoring in 2025 at the Harker's Island Road Site.

1.3 Project History

May 2024	Marsh Grass Planting Completed
September 2024	Vegetation Monitoring (Year 1)
August 2025	Vegetation Monitoring (Year 2)

1.4 Debit Ledger

The restoration of the Harker's Island Road Site was used entirely to compensate for impacts on the B-4863 project. There were no additional wetland mitigation credits generated from the wetland restoration areas.

2.0 VEGETATION: HARKER'S ISLAND ROAD MITIGATION AND TEMPORARY IMPACT SITES (YEAR 2 MONITORING)

2.1 Success Criteria

Mitigation Plan Success Criteria and Monitoring:

The vegetation component of the wetland site will be deemed successful if the target herbaceous species survives and has an average of 75 percent vegetation cover, not including any invasive species.

Hydrologic success will be based on achieving the target elevations based on the adjacent marsh elevations as documented in the as-built plans.

NCDOT shall monitor the mitigation site by visual observation and photo points for survival and aerial cover of vegetation. NCDOT shall monitor the site for a minimum of three years or until the site is deemed successful. Monitoring will be initiated upon completion of the site planting.

An annual monitoring report will be provided to the agencies for comment at the annual monitoring review meeting.

CAMA permit:

Condition 39. TEMPORARY IMPACTS: Due to the possibility that temporary impacts due to compaction, fill, excavation, and shading for activities such as construction access, pilings, shading under the work platform, hand clearing, and/or other site alterations might prevent the temporary Coastal Wetland impact areas from re-attaining pre-project wetland functions, the permittee shall provide annual update on the Coastal Wetland areas temporarily impacted by this project. This annual update shall consist of photographs and a brief written report on the progress of these temporarily impacted areas in re-attaining their pre-project wetland functions. Within three years after project completion, the permittee shall hold another agency field meeting with DCM, DMF and any other appropriate agencies to determine if the Coastal Wetland areas temporarily impacted by this project have re-attained pre-project wetland functions. If at the end of three years DCM determines that the Coastal Wetland areas temporarily impacted by the project have not re-attained pre-project wetland functions, DCM will determine whether compensatory wetland mitigation shall be required.

Condition 46. MITIGATION: The permittee shall submit annual monitoring reports for a minimum of five years after mitigation site construction or until mitigation success criteria are met. Annual monitoring reports shall include photographs and a assessment of whether the site is achieving success based on the success criteria stated in the mitigation plan. Progress reports shall also be provided upon request. Monitoring may cease if the permittee can demonstrate that success criteria have been met and written concurrence is received from DCM.

2.2 Description of Species

The following wetland species were planted:

Spartina alterniflora, Smooth Cordgrass

Spartina patens, Saltmeadow Cordgrass

2.3 Results of Vegetation Monitoring

The impacted area where the temporary impacts occurred is re-attaining jurisdictional wetland status. Planted species are surviving. Sites are revegetating. Other species noted within the temporary wetland impact areas included *Scirpus* sp., saltgrass, marshelder, and various grasses.

By visual observation the mitigation site had planted marsh grass surviving across the site. The site appears to be getting regular tidal flushing. The site was monitored during low tide in 2025.

2.4 Conclusions

By visual observation, the Harker's Island Road Mitigation Site is on track to meet the vegetation success criteria at the end of the monitoring period and temporary wetland impacted areas are re-attaining jurisdictional wetland status.

3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

NCDOT proposes to continue monitoring at the Harker's Island Road Site in 2026.

Figure 1. Vicinity Map

APPENDIX A

SITE PHOTOS & SITE MAPS

Harker's Island Road Site

PP#1 – Site 1 Temp. Impacts

PP#2 – Site 1 Temp. Impacts

PP#3 – Site 1 Temp. Impacts

PP#4 – Site 2 Temp. Impacts

PP#5 – Site 3 Temp. Impacts

PP#6

August 2025

Harker’s Island Road Site

PP#7 – Site 9 Restoration Area

PP#8 – Site 9 Restoration Area

PP#9 – Site 9 Restoration Area

August 2025

09/08/49

TIP PROJECT: B-4863

CONTRACT:

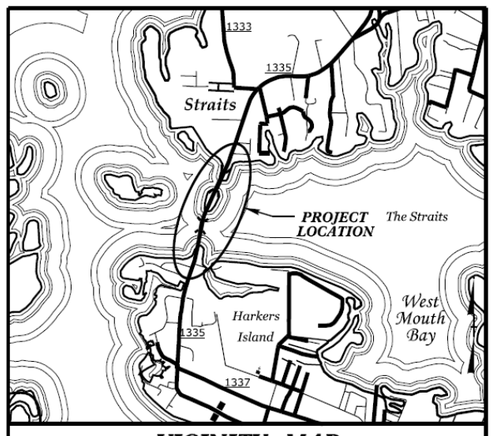
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

NWS PERMIT DRAWING PLANS
CARTERET COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4863	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
40212.1.3	N/A	PE, R/W, UTL

PERMIT DRAWING
SHEET 1 OF 17

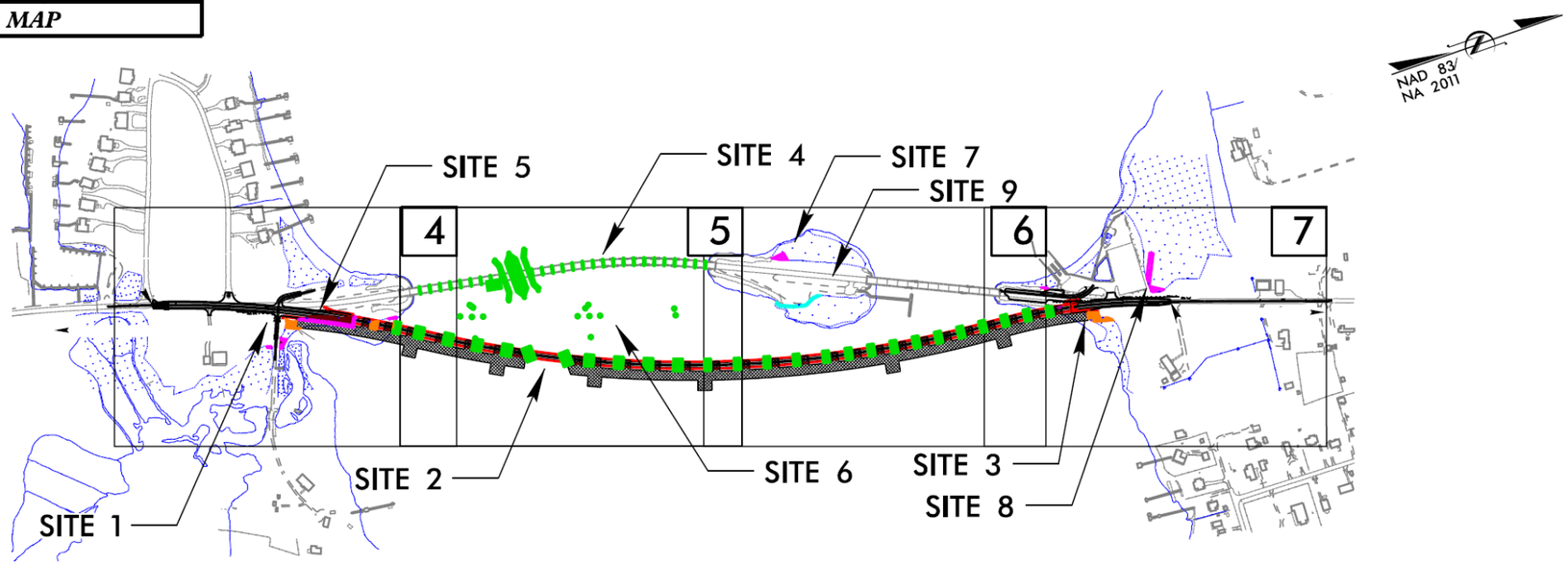


VICINITY MAP

LOCATION: REPLACEMENT OF BRIDGE NOS. 73 AND 96 CARRYING SR 1335 (HARKERS ISLAND RD) OVER THE STRAITS

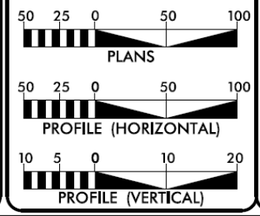
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE

WETLAND AND SURFACE WATER IMPACTS PERMIT



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2019 = 3,300
ADT 2040 = 4,200
K = 10 %
D = 60 %
T = 4 % *
V = 50 MPH
*(TTST=2% + DUAL=2%)
FUNC CLASS = MAJOR COLLECTOR

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4863	=	0.247 MILE +/-
LENGTH STRUCTURE TIP PROJECT B-4863	=	0.606 MILE +/-
TOTAL LENGTH TIP PROJECT B-4863	=	0.853 MILE +/-

PLANS PREPARED BY:
RS&H
1520 SOUTH BLVD, SUITE 200
CHARLOTTE, NC 28203
704-752-0610
FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JULY 10, 2018

LETTING DATE:
JULY 20, 2021

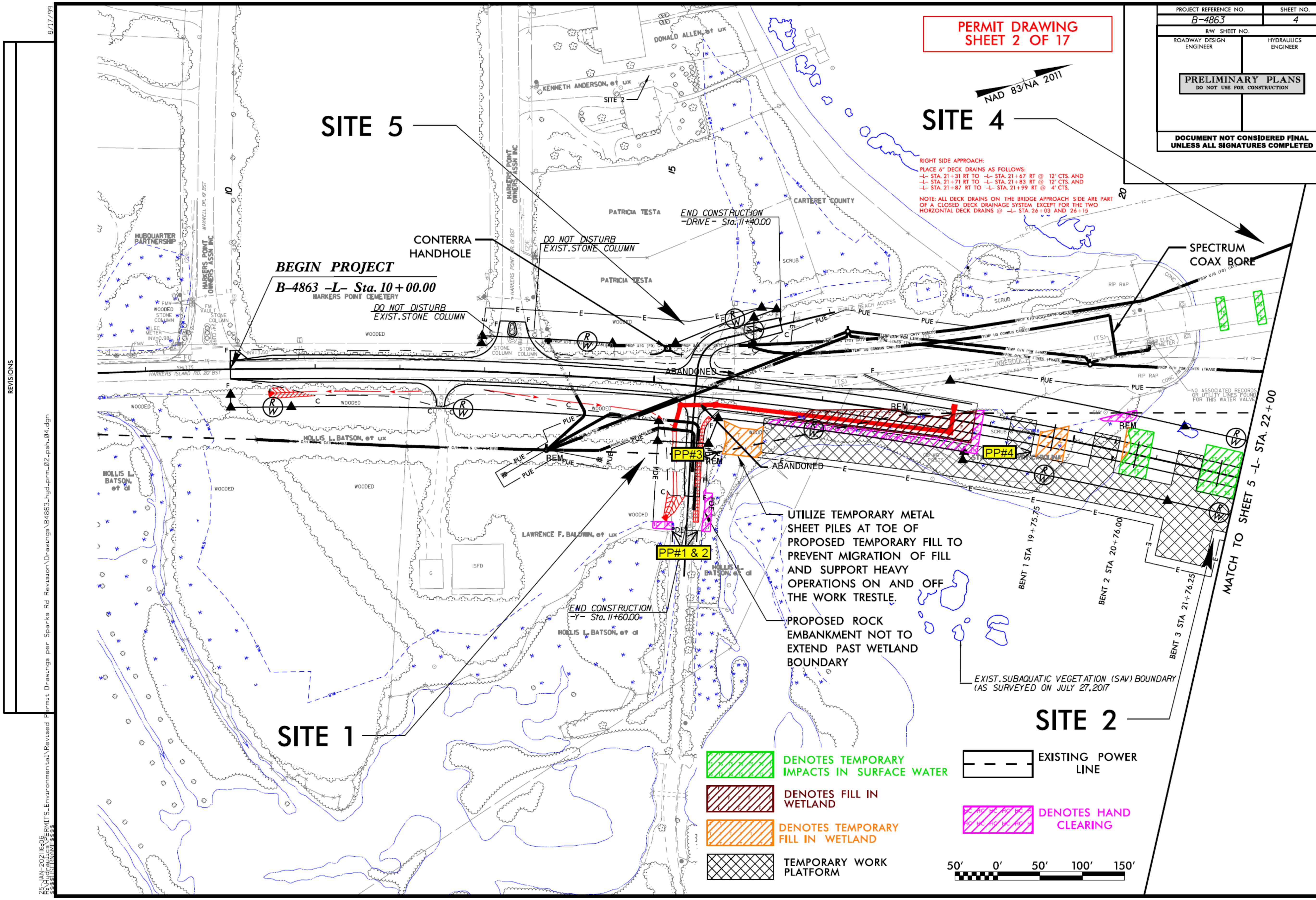
JENNIFER FARINO, PE
PROJECT ENGINEER
DREW MORROW, PE
PROJECT DESIGN ENGINEER
HON YEUNG, PE
NCDOT CONTACT

HYDRAULICS ENGINEER
SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER
SIGNATURE: P.E.

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION ·

23-DEC-2020 15:23
R:\Hydraulics\PERMITS_Environmental\Revised Permit Drawings per Sparks Rd Revision\Drawings\B4863_hyd_prm_01_tsh.dgn


PERMIT DRAWING
SHEET 2 OF 17
PROJECT REFERENCE NO. B-4863
SHEET NO. 4
RW SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
NAD 83/NA 2011
SITE 5
SITE 4
SITE 1
SITE 2
BEGIN PROJECT
B-4863 -L- Sta. 10+00.00
HARKERS POINT CEMETERY
CONTERRA HANDHOLE
DO NOT DISTURB EXIST. STONE COLUMN
END CONSTRUCTION -DRIVE- Sta. 11+40.00
PATRICIA TESTA
CARTERET COUNTY
DONALD ALLEN, et ux
KENNETH ANDERSON, et ux
HUBQUARTER PARTNERSHIP
HARKERS POINT OWNERS ASSN INC
HOLLIS L. BATSON, et ux
LAWRENCE F. BALDWIN, et ux
SPECTRUM COAX BORE
ABANDONED
PP#1 & 2
PP#3
PP#4
RIGHT SIDE APPROACH:
PLACE 6" DECK DRAINS AS FOLLOWS:
-L- STA. 21+31 RT TO -L- STA. 21+67 RT @ 12' CTS. AND
-L- STA. 21+71 RT TO -L- STA. 21+83 RT @ 12' CTS. AND
-L- STA. 21+87 RT TO -L- STA. 21+99 RT @ 4' CTS.
NOTE: ALL DECK DRAINS ON THE BRIDGE APPROACH SIDE ARE PART OF A CLOSED DECK DRAINAGE SYSTEM EXCEPT FOR THE TWO HORIZONTAL DECK DRAINS @ -L- STA. 26+03 AND 26+15
UTILIZE TEMPORARY METAL SHEET PILES AT TOE OF PROPOSED TEMPORARY FILL TO PREVENT MIGRATION OF FILL AND SUPPORT HEAVY OPERATIONS ON AND OFF THE WORK TRESTLE.
PROPOSED ROCK EMBANKMENT NOT TO EXTEND PAST WETLAND BOUNDARY
END CONSTRUCTION -Y- Sta. 11+60.00
EXIST. SUBAQUATIC VEGETATION (SAV) BOUNDARY (AS SURVEYED ON JULY 27, 2017)
BENT 1 STA 19+75.75
BENT 2 STA 20+76.00
BENT 3 STA 21+76.25
MATCH TO SHEET 5 -L- STA. 22+00
DENOTES TEMPORARY IMPACTS IN SURFACE WATER
DENOTES FILL IN WETLAND
DENOTES TEMPORARY FILL IN WETLAND
TEMPORARY WORK PLATFORM
EXISTING POWER LINE
DENOTES HAND CLEARING
50' 0' 50' 100' 150'
REVISIONS
8/17/99

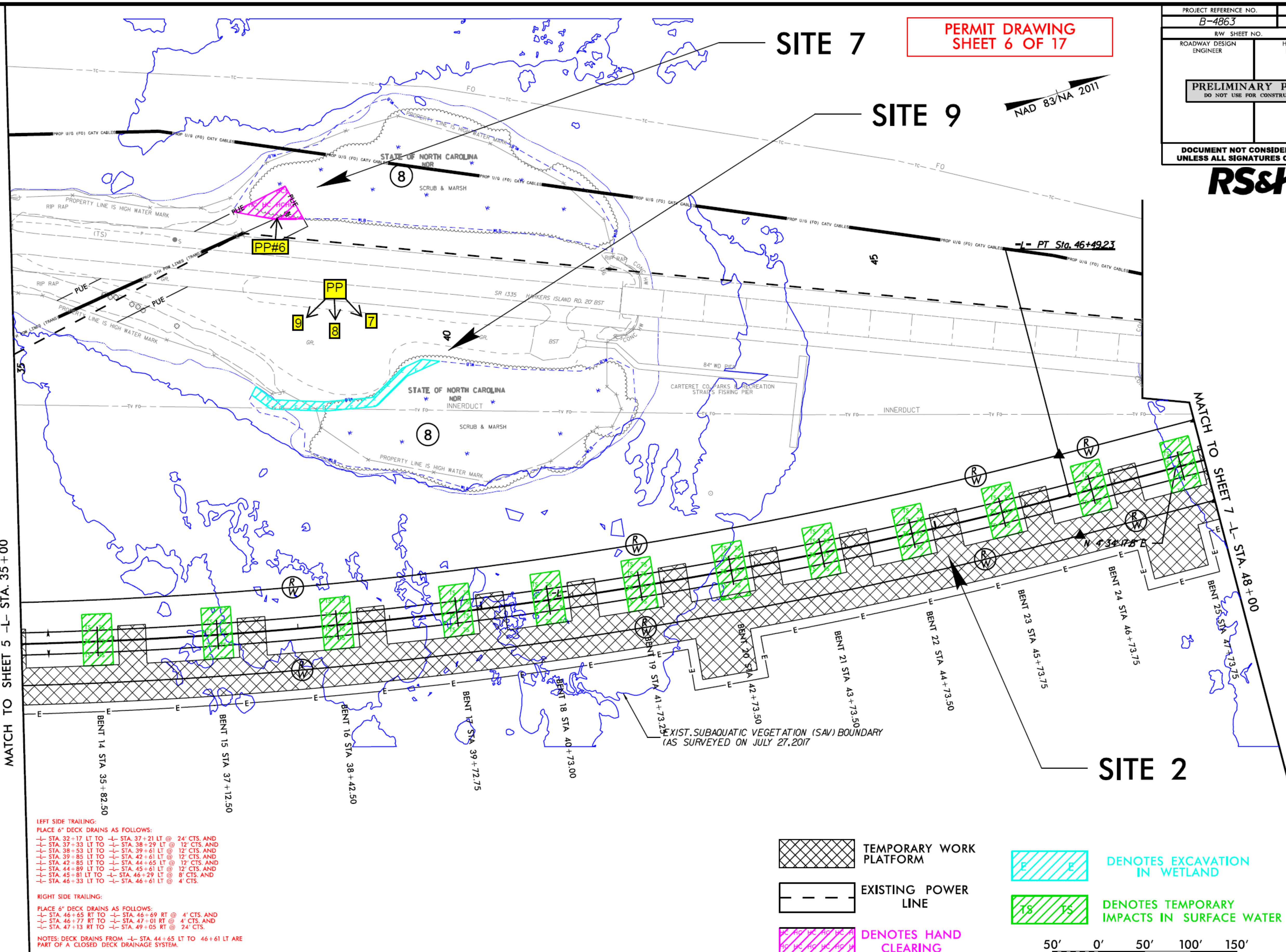
PROJECT REFERENCE NO.	SHEET NO.
B-4863	6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

RS&H

PERMIT DRAWING
SHEET 6 OF 17



SITE 7
SITE 9
SITE 2
NAD 83/NA 2011
STATE OF NORTH CAROLINA
SCRUB & MARSH
PP#6
PP
-L- PT Sta. 46+49.23
SR 1335 HARKERS ISLAND RD. 20' BST
CARTERET CO. PARKS & RECREATION STRAITS FISHING PIER
INNERDUCT
N 4°34'17.8" E
MATCH TO SHEET 5 -L- STA. 35+00
MATCH TO SHEET 7 -L- STA. 48+00
BENT 14 STA 35+82.50
BENT 15 STA 37+12.50
BENT 16 STA 38+42.50
BENT 17 STA 39+72.75
BENT 18 STA 40+73.00
BENT 19 STA 41+73.25
BENT 20 STA 42+73.50
BENT 21 STA 43+73.50
BENT 22 STA 44+73.50
BENT 23 STA 45+73.75
BENT 24 STA 46+73.75
BENT 25 STA 47+73.75
EXIST. SUBAQUATIC VEGETATION (SAV) BOUNDARY (AS SURVEYED ON JULY 27, 2017)
TEMPORARY WORK PLATFORM
EXISTING POWER LINE
DENOTES HAND CLEARING
DENOTES EXCAVATION IN WETLAND
DENOTES TEMPORARY IMPACTS IN SURFACE WATER
50' 0' 50' 100' 150'

LEFT SIDE TRAILING:

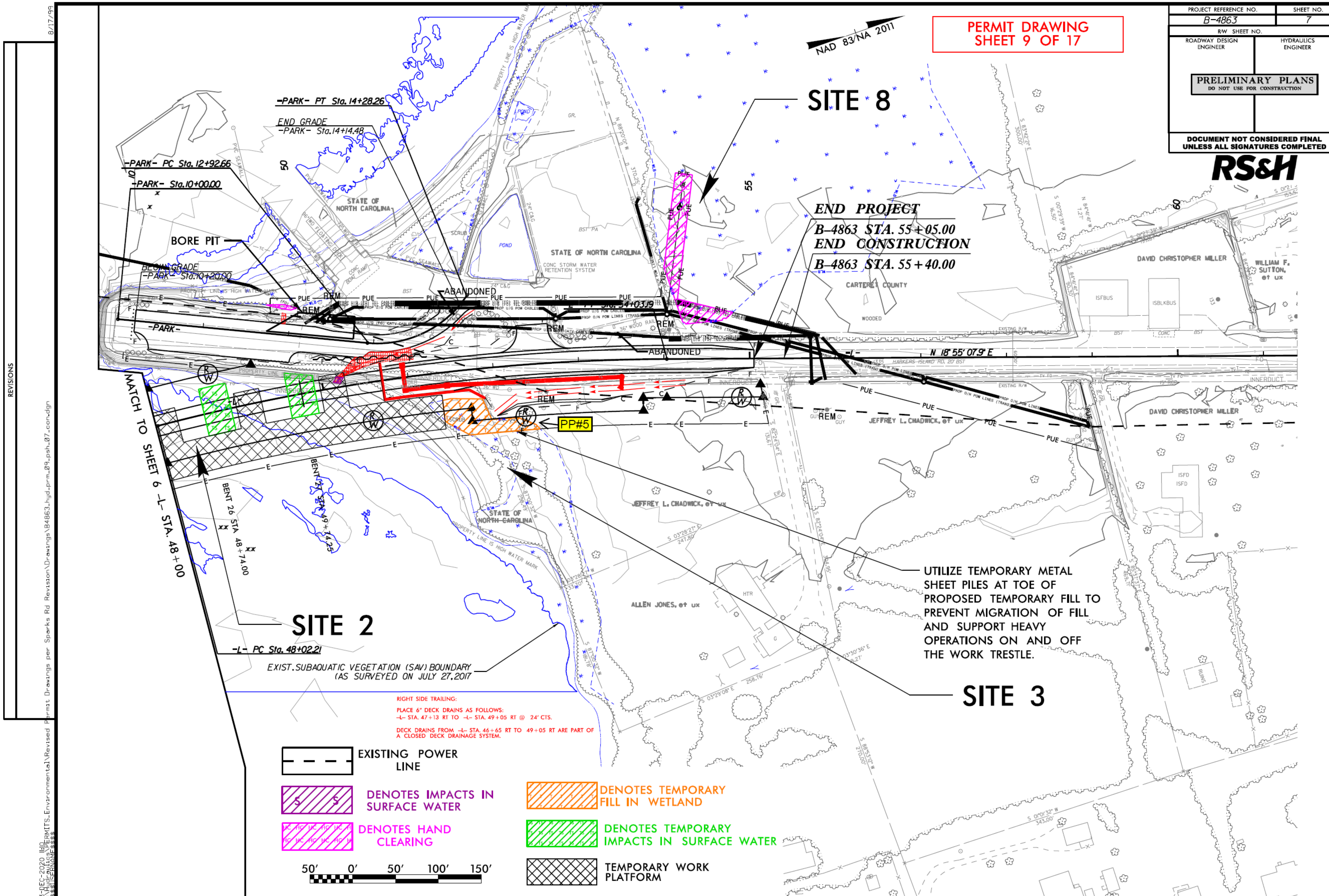
PLACE 6" DECK DRAINS AS FOLLOWS:
-L- STA. 32+17 LT TO -L- STA. 37+21 LT @ 24' CTS. AND
-L- STA. 37+33 LT TO -L- STA. 38+29 LT @ 12' CTS. AND
-L- STA. 38+53 LT TO -L- STA. 39+61 LT @ 12' CTS. AND
-L- STA. 39+85 LT TO -L- STA. 42+61 LT @ 12' CTS. AND
-L- STA. 42+85 LT TO -L- STA. 44+65 LT @ 12' CTS. AND
-L- STA. 44+89 LT TO -L- STA. 45+61 LT @ 12' CTS. AND
-L- STA. 45+81 LT TO -L- STA. 46+29 LT @ 8' CTS. AND
-L- STA. 46+33 LT TO -L- STA. 46+61 LT @ 4' CTS.

RIGHT SIDE TRAILING:

PLACE 6" DECK DRAINS AS FOLLOWS:
-L- STA. 46+65 RT TO -L- STA. 46+69 RT @ 4' CTS. AND
-L- STA. 46+77 RT TO -L- STA. 47+01 RT @ 4' CTS. AND
-L- STA. 47+13 RT TO -L- STA. 49+05 RT @ 24' CTS.

NOTES: DECK DRAINS FROM -L- STA. 44+65 LT TO 46+61 LT ARE PART OF A CLOSED DECK DRAINAGE SYSTEM.

DECK DRAINS FROM -L- STA. 46+65 RT TO 49+05 RT ARE PART OF A CLOSED DECK DRAINAGE SYSTEM.


PROJECT REFERENCE NO.
B-4863
SHEET NO.
7
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
RS&H
PERMIT DRAWING
SHEET 9 OF 17
NAD 83/NA 2011
SITE 8
SITE 2
SITE 3
END PROJECT
B-4863 STA. 55+05.00
END CONSTRUCTION
B-4863 STA. 55+40.00
-PARK- PT Sta. 14+28.26
END GRADE
-PARK- Sta.14+14.48
-PARK- PC Sta. 12+92.66
-PARK- Sta.10+00.00
BORE PIT
BEGIN GRADE
-PARK- Sta.10+20.00
STATE OF NORTH CAROLINA
CARTERET COUNTY
DAVID CHRISTOPHER MILLER
WILLIAM F. SUTTON, et ux
JEFFREY L. CHADWICK, et ux
ALLEN JONES, et ux
ABANDONED
PP#5
N 18°55' 07.9" E
MATCH TO SHEET 6 -L- STA. 48+00
BENT 26 STA 48+74.00
-L- PC Sta. 48+02.21
EXIST. SUBAQUATIC VEGETATION (SAV) BOUNDARY (AS SURVEYED ON JULY 27, 2017
UTILIZE TEMPORARY METAL SHEET PILES AT TOE OF PROPOSED TEMPORARY FILL TO PREVENT MIGRATION OF FILL AND SUPPORT HEAVY OPERATIONS ON AND OFF THE WORK TRESTLE.
RIGHT SIDE TRAILING:
PLACE 6" DECK DRAINS AS FOLLOWS:
-L- STA. 47+13 RT TO -L- STA. 49+05 RT @ 24' CTS.
DECK DRAINS FROM -L- STA. 46+65 RT TO 49+05 RT ARE PART OF A CLOSED DECK DRAINAGE SYSTEM.
EXISTING POWER LINE
DENOTES IMPACTS IN SURFACE WATER
DENOTES HAND CLEARING
DENOTES TEMPORARY FILL IN WETLAND
DENOTES TEMPORARY IMPACTS IN SURFACE WATER
TEMPORARY WORK PLATFORM
50' 0' 50' 100' 150'
REVISIONS
8/17/99

WETLAND AND SURACE WATER IMPACTS SUMMARY

			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-Y- 11+66 RT	Prop Rip Rap Pad Instal					< 0.01					
1	-L- 15+90 to 16+60 RT	Temp Work Platform Access		0.03								
1	-L- 16+40 to 18+90	Prop Bridge Approach	0.11				0.07					
1	-Y- 11+40 LT	Prop Rock Embankment					< 0.01					
2	-L- 18+90 to 50+50	Proposed Bridge	< 0.01	0.04				0.02	1.41			
2	-L- 16+35 to 51+37	Temp Work Platform							0.56			
3	-L- 49+72 LT	Parking Lot Clearing Limits					< 0.01					
3	-L- 51+37 to 52+50 RT	Temp Work Platform Access		0.06								
3	-L- 50+20 LT	Rip Rap at Ditch Outlet						< 0.01				
4	-L- 21+20 to 34+75 LT	Existing Bridge Removal							0.72			
5	-L- 15+88 RT	Guy Wire Removal					< 0.01					
5	-L- 18+05 RT	Pole Removal					< 0.01					
5	-L- 20+50 LT	Pole/Guy Wire Removal					< 0.01					
6	-L- 23+88 to 33+07 LT	Proposed Poles						< 0.01	0.02			
6	-L- 23+90 to 33+07 LT	Pole Removal							0.02			
6	-L- 23+27 to 29+75 LT	Guy Wire Removal							0.05			
7	-L- 37+66 to 38+48 LT	Proposed Guy Wire	< 0.01				0.03					
8**	-L- 54+21 LT	Proposed Guy Wire	< 0.01				0.09					
9	-L- 37+70 to 39+88 LT	Excavation in Wetland			0.05							
TOTALS*:			0.11	0.13	0.05		0.23	0.02	2.79	0	0	0

*Rounded totals are sum of actual impacts

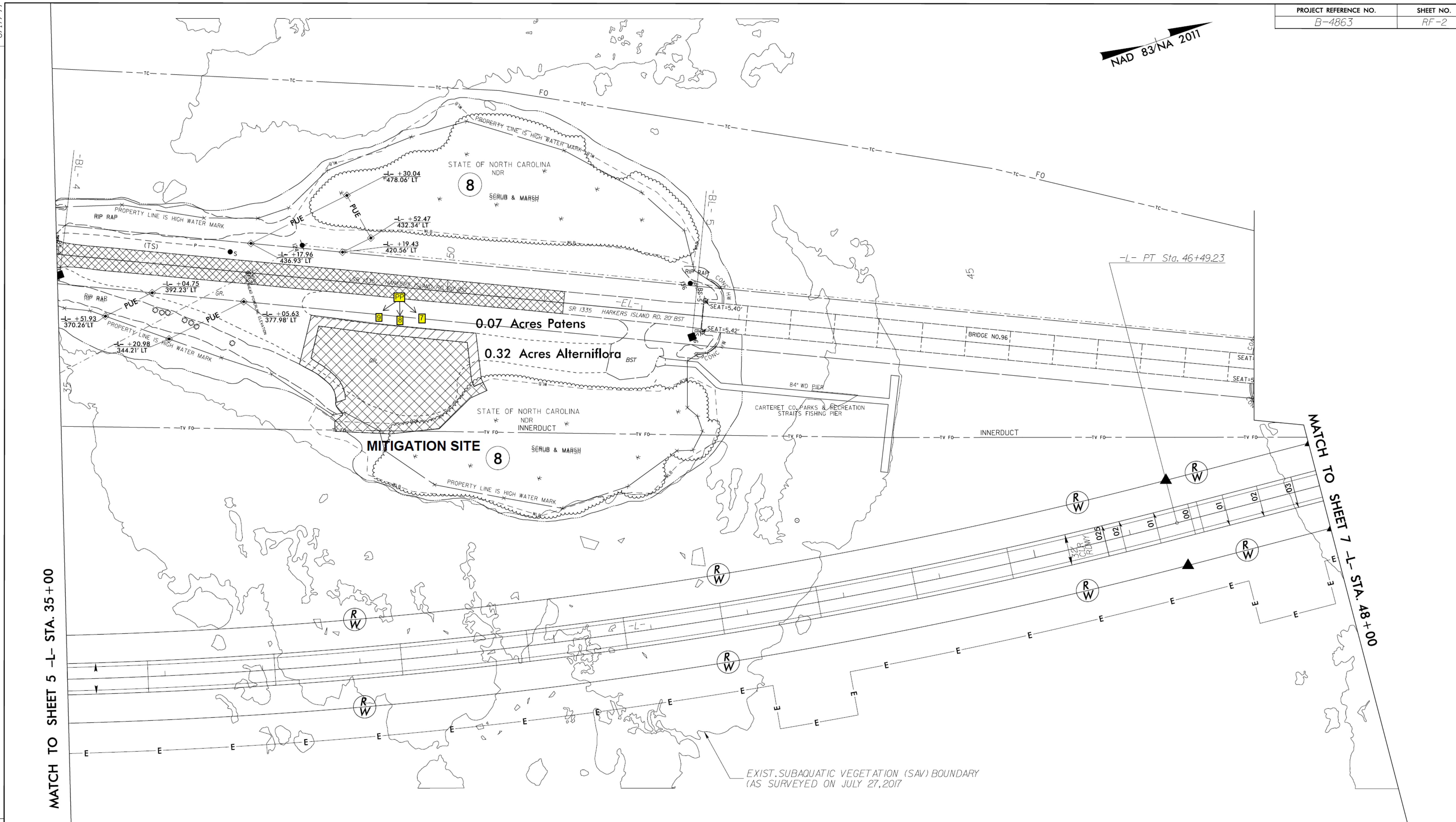
**Site 8 wetland impacts are 404 jurisdiction,
all other wetland impacts are CAMA jurisdiction.

NOTES:
Total Permanent Fill in Wetlands = 4,621 sq.ft.
Total Hand Clearing = 3,462 sq.ft.
Temp Work Platform
20' spans @ 3,080' = 156 pile rows. Each Pile Row has 100 sq.ft. of Temp SW Impacts. Main platform has 156*100 sq.ft = 15,600 sq.ft. Temp SW Impacts
Finger and Turnarounds calculated by the same method with 6,075 sq.ft and 2,700 sq.ft. of Temp SW Impacts respectively. Total = 15,600 + 6,075 + 2,700 = 24,375 sq.ft.

Revised 2016 09 09

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
1/25/2021
Carteret County
B-4863
40212.1.3
SHEET 17 OF 17

PROJECT REFERENCE NO.	SHEET NO.
B-4863	RF-2



NAD 83/NA 2011
STATE OF NORTH CAROLINA
NDR
SCRUB & MARSH
0.07 Acres Patens
0.32 Acres Alterniflora
MITIGATION SITE
SR 1335 HARKERS ISLAND RD. 20' BST
BRIDGE NO. 96
CARTERET CO. PARKS & RECREATION STRAITS FISHING PIER
84' WD PIER
INNERDUCT
-L- PT Sta. 46+49.23
PROPERTY LINE IS HIGH WATER MARK
RIP RAP
PUE
EXIST. SUBAQUATIC VEGETATION (SAV) BOUNDARY (AS SURVEYED ON JULY 27, 2017)
MATCH TO SHEET 5 -L- STA. 35+00
MATCH TO SHEET 7 -L- STA. 48+00

WETLAND MITIGATION PLANTING AREA 1
SPARTINA PATENS, SALT MEADOW CORDGRASS

WETLAND MITIGATION PLANTING AREA 2
SPARTINA ALTERNIFLORA, SMOOTH CORDGRASS

NOTE: INSTALL FLOATING TURBIDITY CURTAIN AS DIRECTED .

NOTE: INSTALL SILT FENCE TO CONTAIN WORK SITE AND STOCKPILES AS DIRECTED.

NOTE: GRADE MITIGATION AREA TO MATCH THE ELEVATION OF THE ADJACENT MARSH (APPROXIMATELY 1,000 CY EXCAVATION).

REVISIONS

8/17/99