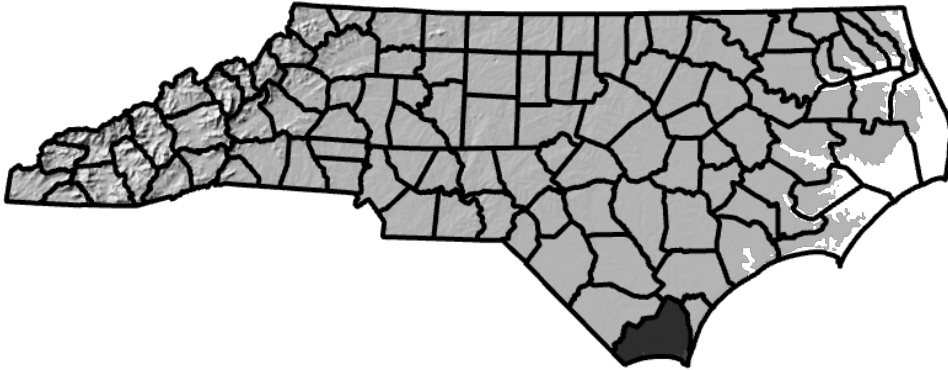


# ANNUAL REPORT FOR 2025



**Calabash River Mitigation and Temporary Impact Sites  
Brunswick County  
TIP No. BR-0160  
COE Action ID: SAW-2021-00593  
DWR Project #: 20211320  
CAMA Permit #: 28-23**



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

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## APPENDICES

Appendix A – Site Photos and Site Maps

## **SUMMARY**

The Calabash River Mitigation and Temporary Impact Sites are located in Brunswick County. This is an annual report for the wetland mitigation site and temporary impacts associated with TIP No. BR-0160 bridge replacement of Bridge Number 15 over the Calabash River on NC 179 Business (Beach Drive SW), hereafter, referred to as the Calabash River Site. Marsh grass planting was completed in April 2025.

The wetland mitigation site consists of 0.4 acres of coastal salt marsh restoration and will be monitored for 3 years or until mitigation success criteria are met. The temporary wetland impacts encompass approximately 0.232 acres due to wetland excavation and 0.098 acres due to hand clearing within 404/CAMA wetlands for this project and will be monitored for three years to ensure that it re-attains wetland jurisdictional status.

After the first year of monitoring, the Calabash River 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 1.

NCDOT proposes to continue monitoring at the Calabash River Site in 2026.

## 1.0 INTRODUCTION

### 1.1 Project Description

The Calabash River Site is located in Brunswick County (Figure 1). The wetland mitigation site consists of 0.4 acres of marsh restoration and will be monitored for 3 years or until mitigation success criteria are met. The temporary wetland impacts encompass approximately 0.232 acres due to wetland excavation and 0.098 acres due to hand clearing within 404/CAMA 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 Calabash River Site.

### 1.3 Project History

April 2025	Marsh Grass Planting Completed
October 2025	Vegetation Monitoring (Year 1)

### 1.4 Debit Ledger

The restoration of the Calabash River Site was used entirely to compensate for impacts on the BR-0160 project. There were no additional wetland mitigation credits generated from the wetland restoration areas.

## **2.0 VEGETATION: CALABASH RIVER MITIGATION AND TEMPORARY IMPACT SITES (YEAR 1 MONITORING)**

### **2.1 Success Criteria**

#### **Mitigation Plan Success Criteria and Monitoring:**

NCDOT shall monitor the restoration 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.

#### **CAMA permit:**

**Condition 27. TEMPORARY IMPACTS:** Due to the possibility that excavation, 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 an 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.

### **2.2 Description of Species**

The following wetland species were planted:

*Spartina alterniflora*, Smooth Cordgrass

*Spartina patens*, Saltmeadow Cordgrass

*Juncus roemerianus*, Black Needle Rush

### **2.3 Results of Vegetation Monitoring**

The mitigation site had planted marsh grass surviving across the entire site including smooth cordgrass and black needle rush. The site is getting regular tidal flushing. The mitigation site is on track to meet the vegetation success criteria at the end of the monitoring period.

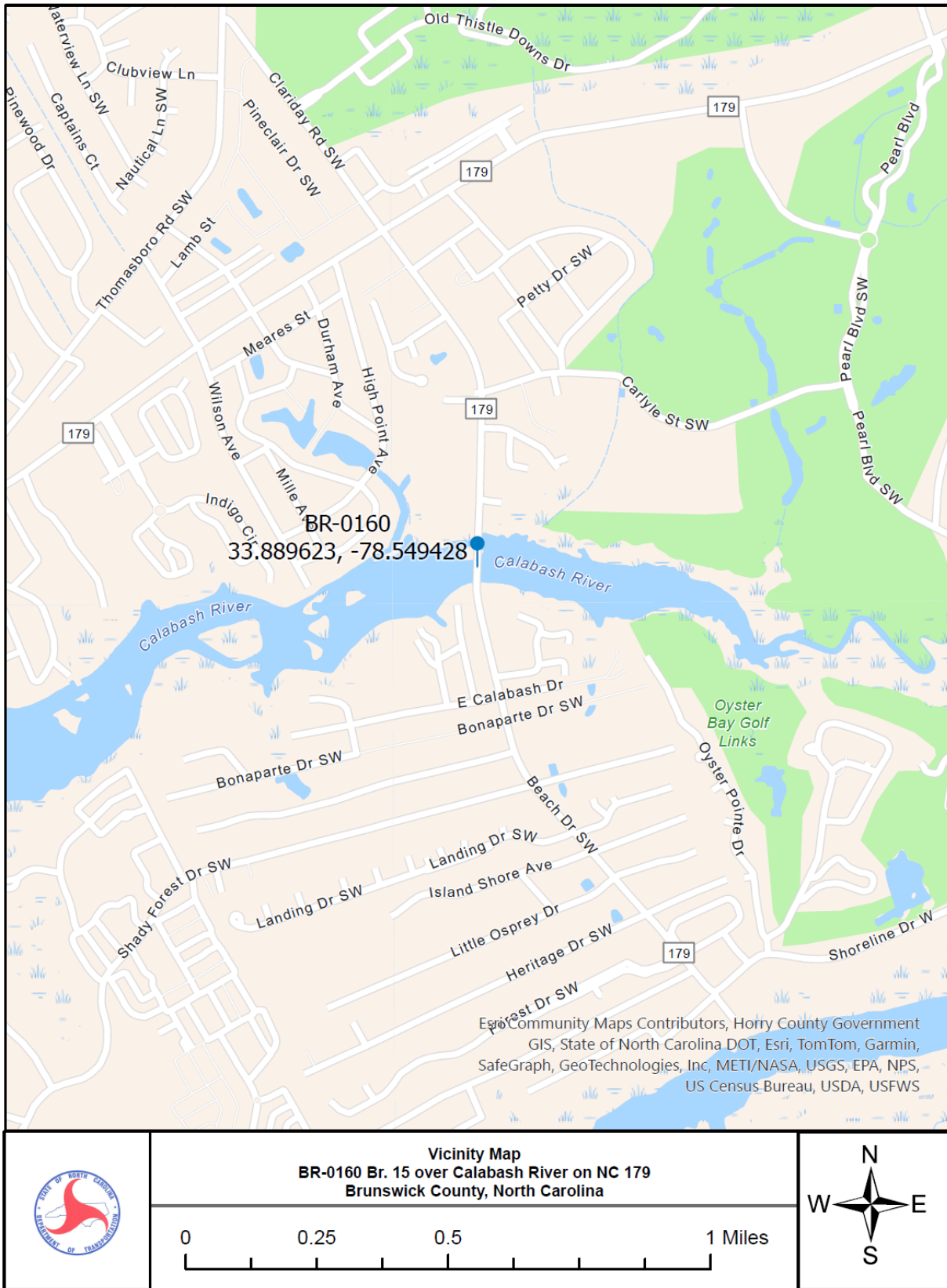
Temporary impact Sites 2, 3, and 4 are re-attaining jurisdictional wetland status. Sites are revegetating with smooth cordgrass, saltmeadow cordgrass, and black needle rush.

## **2.4 Conclusions**

By visual observation, the Calabash River 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 Calabash River Site in 2026.



**Figure 1. Vicinity Map**

## **APPENDIX A**

### **SITE PHOTOS & SITE MAPS**

# Calabash River Site



PP#1 (Site 2)



PP#2 (Site 2)



PP#3 (Site 3)



PP#4 (Site 4)

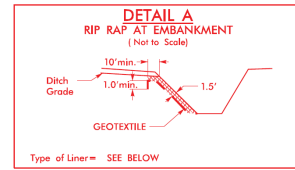
October 2025



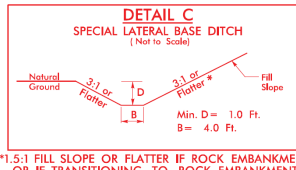


PROJECT REFERENCE NO. BR-0160	SHEET NO. 5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

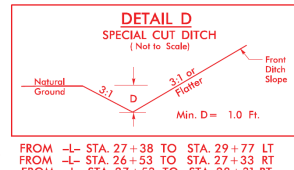
NAD 83/NA 2011



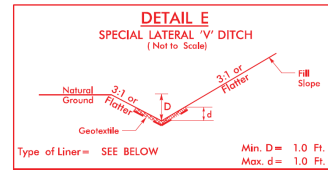
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12 TONS CL '1' RIP-RAP; 17 SY GEOTEXTILE  
FROM -L- STA. 24+48 TO STA. 24+79 LT  
25 TONS CL '1' RIP-RAP; 35 SY GEOTEXTILE  
SBG: BEGIN -L- 24+91 END 25+10 RT



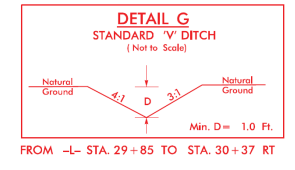
1.5:1 FILL SLOPE OR FLATTER IF ROCK EMBANKMENT OR IF TRANSITIONING TO ROCK EMBANKMENT FROM -L- STA. 24+97 TO STA. 26+40 LT



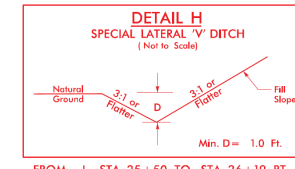
FROM -L- STA. 27+38 TO STA. 29+77 LT  
FROM -L- STA. 24+53 TO STA. 27+33 RT  
FROM -L- STA. 27+53 TO STA. 28+31 RT  
FROM -L- STA. 28+54 TO STA. 29+00 RT



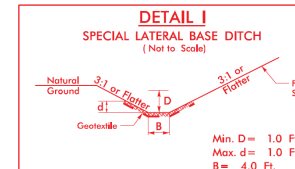
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FROM -L- STA. 29+85 TO STA. 30+37 RT

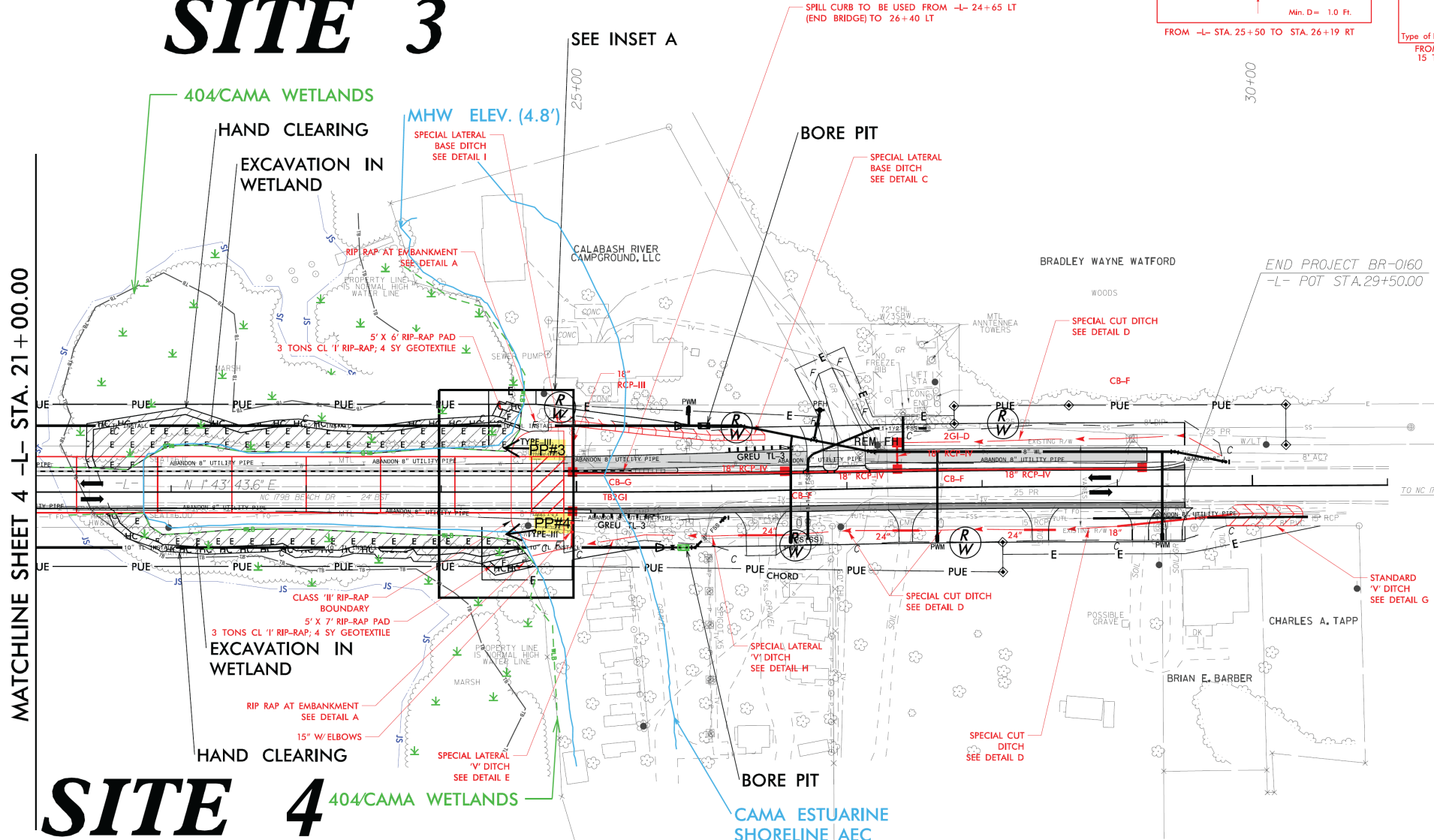


FROM -L- STA. 25+50 TO STA. 26+19 RT



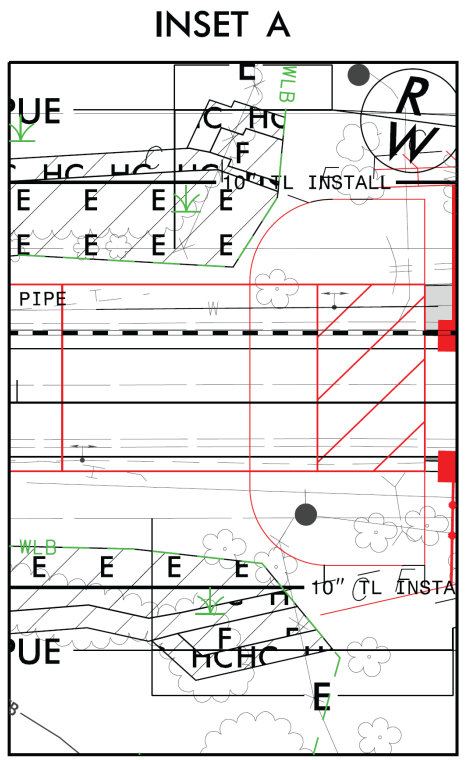
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# SITE 3

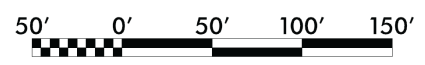


**PERMIT DRAWING  
SHEET 5 OF 17**

**RS&H** 8521 SIX FORKS ROAD, SUITE 400  
RALEIGH, NC 27615  
NC FIRM LICENSE No: F-0493



- DENOTES EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES HAND CLEARING



FOR -L- PROFILE, SEE SHEET NO. 6

10/17/22

REVISIONS

8/17/99  
10-JUN-2022 12:02  
R:\Hydro\Projects\PERMITS\Environmental\Drawings\SH\BR0160\_hyd\_prm\_05\_psh\_05.dgn



- Black Needle Rush
- Smooth Cordgrass
- Saltmeadow Cordgrass

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**SITE MAP - MARSH GRASS PLANTING  
BR-0160 BR. 15 OVER CALABASH RIVER ON NC 179  
BRUNSWICK COUNTY, NORTH CAROLINA**

