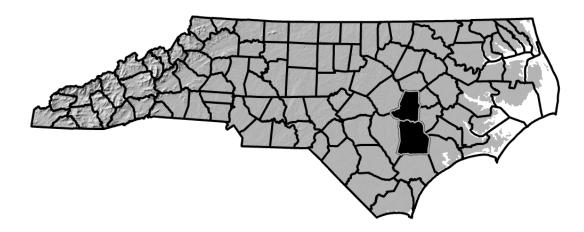
ANNUAL REPORT FOR 2023



Bridge # 117 over Northeast Cape Fear River on Bennetts Bridge Road Temporary Impact Site Duplin and Wayne Counties

TIP No. B-4844

COE Action ID: SAW-2019-00896 DWR Project #: 20200258 ver. 2



Prepared By:
Roadside Environmental Unit and Environmental Analysis Unit
North Carolina Department of Transportation
September 2023

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APPENDICES

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SUMMARY

Bridge No. 117 over Northeast Cape Fear River on Bennetts Bridge Road Temporary Impact Site is located in Duplin and Wayne Counties and hereafter referred to as the Northeast Cape Fear River Temporary Impact Site. This is an annual report for temporary impacts associated with TIP No. B-4844 bridge replacement of Bridge No. 117 over Northeast Cape Fear River on Bennetts Bridge Road. The project reforestation was completed in late winter of 2023.

The temporary impacts encompass approximately 0.44 acres for temporary fill and 0.40 for hand clearing within a wetland for the bridge project. The area that was impacted is being monitored for two years to ensure that it re-attains wetland jurisdictional status.

After the first year of monitoring, the Northeast Cape Fear River Temporary Impact Site shows by visual observation that the temporarily impacted area is re-attaining jurisdictional wetland status. The temporary impact wetland had planted seedlings surviving over approximately half of the site. However, there were areas of the site that were inundated with approximately 1.5 to 2 feet of water that had very few seedlings surviving.

NCDOT proposes to replant the inundated areas of the site during the 2023/2024 planting window and to continue monitoring at the Northeast Cape Fear River Temporary Impact Site in 2024.

1.0 INTRODUCTION

1.1 Project Description

The Northeast Cape Fear River Temporary Impact Site is located in Duplin and Wayne Counties at Bridge 117 over Northeast Cape Fear River on Bennetts Bridge Road (Figure 1). The temporary impacts encompass approximately 0.44 acres for temporary fill and 0.40 for hand clearing within a wetland for the bridge project. The area that was impacted is being monitored for two years to ensure that it re-attains jurisdictional wetland status.

1.2 Purpose

In order for a temporary impact site to be considered successful, a site must meet the success criteria. This report details the monitoring in 2023 at the Northeast Cape Fear River Temporary Impact Site.

1.3 Project History

Late Winter 2023 September 2023 Project Reforestation Vegetation Monitoring (Year 1)

1.4 Debit Ledger

The restoration of the Northeast Cape Fear River temporary impact site was used entirely to compensate for temporary impacts on the B-4844 project. There were no wetland mitigation credits generated from the restoration of the temporary impacted area.

2.0 VEGETATION: NORTHEAST CAPE FEAR RIVER TEMPORARY IMPACT SITE (YEAR 1 MONITORING)

2.1 Success Criteria

ACOE permit:

Temporary Onsite Detour

Condition #5. The post construction removal of any temporary bridge structures/fill must return the project site to its preconstruction contours and elevations. The impacted areas shall be re-vegetated with appropriate native species including woody species.

Due to the possibility that compaction and/or other site Condition #6. alterations might prevent the temporary wetland impact area from reattaining jurisdictional wetland status; the permittee shall provide an update on the wetland areas temporarily impacted by the temporary on-site detour. The permittee shall notify the Corps of Engineers, Wilmington District (Corps) when the permitted work is completed. The update shall be based on site conditions two growing seasons after completion of the work and shall consist of photographs and a brief report on the progress of the areas in reattaining wetland jurisdictional status. Upon submission of this update to the Corps, the permittee shall schedule a potential field meeting, if requested by the Corps, to determine if the wetland areas temporarily impacted by this project have reattained jurisdictional wetland status. If the wetland areas temporarily impacted by this project have not reattained jurisdictional wetland status, the Corps shall determine if compensatory wetland mitigation for the temporary wetland impacts is to be required.

2.2 Description of Species

The following wetland species were planted in the temporary impact area:

Type 1 – Live Stakes

Salix nigra, Black Willow

Cornus amomum, Silky Dogwood

Type 2 – Bareroot Seedlings

Nyssa sylvatica var. biflora, Swamp Blackgum Taxodium distichum, Baldcypress Betula nigra, River Birch Quercus nigra, Water Oak

2.3 Results of Vegetation Monitoring

The impacted area where the temporary impacts occurred is re-attaining jurisdictional wetland status and planted seedlings including bald cypress, swamp blackgum, river birch, and water oak were noted surviving. However, there were areas of the site that were inundated with approximately 1.5 to 2 feet of water that had very few seedlings surviving. Other species noted within the temporary impacted area included sweetgum, fennel, cattail, tulip poplar, red maple, woolgrass, soft rush, black willow, and various grasses.

2.4 Conclusions

There were approximately 0.44 acres for temporary fill and 0.40 for hand clearing within a wetland at the Northeast Cape River Temporary Impact Site. There were no plots established on the site. By visual observation, the Northeast Cape River Temporary Impact Site shows that the impacted areas are re-attaining jurisdictional wetland status and the planted seedlings were surviving over approximately half of the site. However, there were areas of the site that were inundated with approximately 1.5 to 2 feet of water that had very few seedlings surviving.

3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

NCDOT proposes to replant the inundated areas of the site during the 2023/2024 planting window and to continue monitoring at the Northeast Cape Fear River Temporary Impact Site in 2024.

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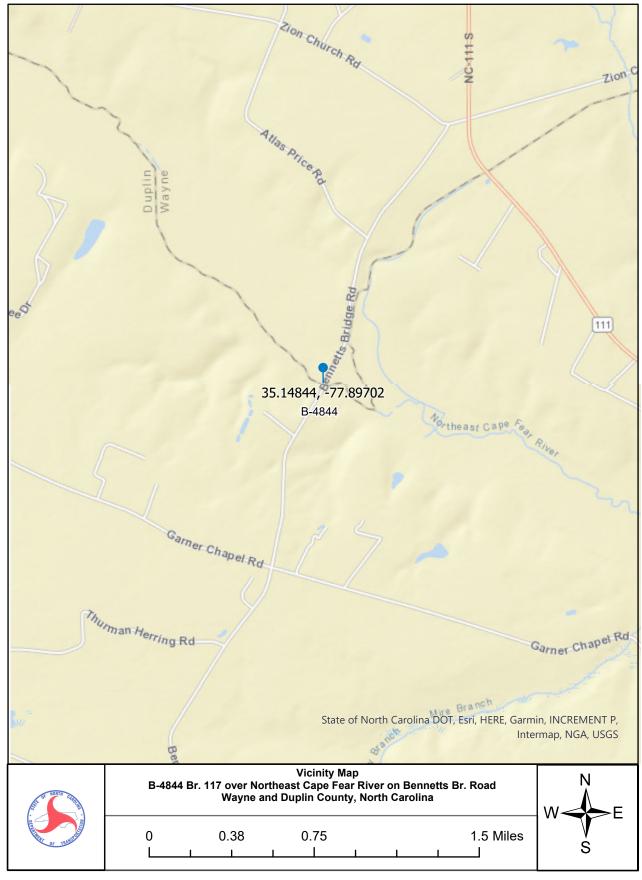


Figure 1. Vicinity Map

APPENDIX A SITE PHOTOS & SITE MAP

Northeast Cape Fear River Temporary Impact Site



PP#1



PP#3

September 2023



PP#2



PP#4

END PROJECT BEGIN PROJECT VICINITY MAP

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

PERMIT DRAWING SHEET 1 OF 9

STATE	STATE PROJECT REFERENCE NO.		NO.	SHEETS		
N.C.	l	3–4844		1		
STATE PROJ. NO.		F. A. PROJ. NO.		DESCRIPTION		
38614.1.FD2		BRZ-1958(005)		PE		
38614.2.2		BRZ-1958(005)		R/W		
38614.3.3		BRZ-1958(005)		CONST.		

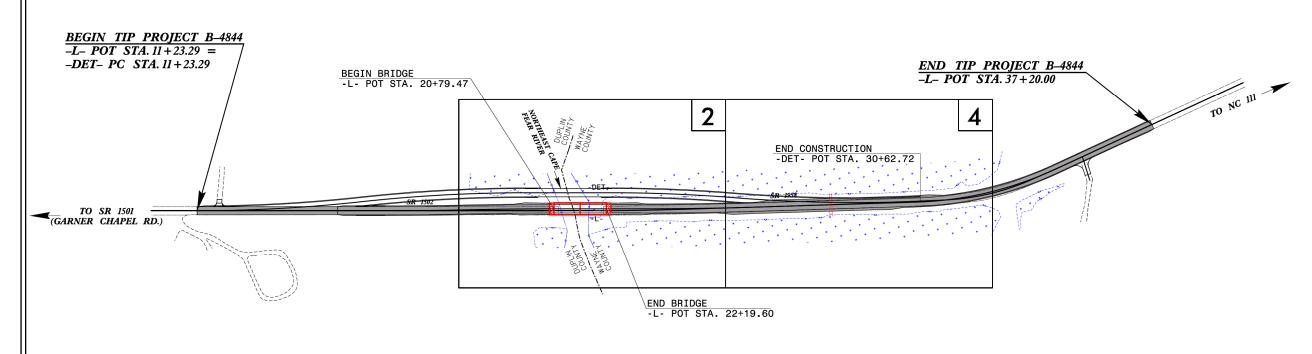
DUPLIN/WAYNE COUNTIES

LOCATION: REPLACE BRIDGE NO. 950117 OVER NORTHEAST CAPE FEAR RIVER ON SR 1958/1502 (BENNETTS BRIDGE RD.)

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



WETLAND AND SURFACE WATER IMPACTS PERMIT



GRAPHIC SCALES 50 25 0 PLANS PROFILE (HORIZONTAL) PROFILE (VERTICAL)

DESIGN DATA ADT 2019 = 2.150ADT 2039 = 3,150

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO

THE LIMITS ESTABLISHED BY METHOD III.

K = N/AD = 3.0 %T = N/AV = 60 MPH* TTST = 3.0 DUAL 3%

FUNC CLASS = LOCAL, RURAL SUBREGIONAL TIER PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4844 = 0.465 MILES LENGTH OF STRUCTURE TIP PROJECT B-4844 = 0.027 MILES TOTAL LENGTH OF TIP PROJECT B-4844 = 0.492 MILES

NCDOT CONTACT: RACHEL EVANS, PE DIVISION 4 PROJECT MANAGER PLANS PREPARED FOR THE NCDOT BY: STV ENGINEERS, INC.

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: PATRICK A. LIVINGSTON, PE MARCH 1, 2019

LETTING DATE: STARKE W. HIPP, EI June 23, 2020

HYDRAULICS ENGINEER

ROADWAY DESIGN **ENGINEER**

