

ANNUAL REPORT FOR 2021



Onslow Br. No. 134 Temporary Impact Site

Onslow County

WBS #: 17BP.3.R.48

COE Action ID: SAW-2017-02381

DWR Project #: 20171428



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SUMMARY

The Onslow Br. No. 134 Temporary Impact Site is located in Onslow County. This is an annual report for temporary impacts associated with the bridge replacement of Bridge No. 134 over Gibson Branch on White Oak Road. The temporary impact site was planted in January 2020.

The temporary impacts encompass approximately 0.11 acres. The area that was impacted is being monitored to ensure that it re-attains wetland jurisdictional status. Hydrologic monitoring is not required for this site; however, vegetation monitoring is required for three years.

A supplemental planting was completed in November 2020 with Baldcypress and Water Tupelo being planted. After the second year of monitoring, the Onslow Br. No. 134 Temporary Impact shows by visual observation that the temporarily impacted area is re-attaining jurisdictional wetland status. The planted tree species were surviving throughout the site.

NCDOT proposes to continue vegetation monitoring at the Onslow Br. No. 134 Temporary Impact Site in 2022.

1.0 INTRODUCTION

1.1 Project Description

The Onslow Br. No. 134 Temporary Impact Site is located in Onslow County at Bridge No. 134 over Gibson Branch on White Oak River Road (Figure 1). The temporary impacts encompass approximately 0.11 acres. The area that was impacted is being monitored to ensure that it re-attains jurisdictional wetland status. Hydrologic monitoring is not required for this site, however, vegetation monitoring is required for three years.

1.2 Purpose

In order for a temporary impact site to be considered successful, a site must meet vegetation success criteria. This report details the vegetation monitoring in 2021 at the Onslow Br. No. 134 Temporary Impact Site. Hydrologic monitoring was not required for the site.

1.3 Project History

January 2020	Wetland Reforestation Completed
October 2020	Vegetation Monitoring (Year 1)
November 2020	Supplemental Planting Completed
June 2021	Vegetation Monitoring (Year 2)

1.4 Debit Ledger

The restoration of the Onslow Br. No. 134 Temporary Impact Site was used entirely to compensate for temporary impacts on the Onslow Br. No. 134 project. There were no wetland mitigation credits generated from the restoration of the impacted area.

2.0 VEGETATION: ONSLOW BR. NO. 134 TEMPORARY IMPACT SITE (YEAR 2 MONITORING)

2.1 Success Criteria

ONSLOW BRIDGE NO. 134 TEMPORARY DETOUR RESTORATION PLAN

Monitoring of the restoration area will consist of visual/photograph annual reporting for a minimum of three years following planting. Following the third year of monitoring, NCDOT and Regulatory agencies will meet on-site to determine if the site temporarily impacted has retained jurisdictional status with planted and native species. If the site has not re-attained wetland jurisdictional status, NCDOT and the US Army Corps of Engineers will determine whether compensatory wetland mitigation will be required.

2.2 Description of Species

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

Quercus michauxii, Swamp Chestnut Oak

Nyssa sylvatica, Blackgum

Betula nigra, River Birch

Taxodium distichum, Baldcypress

Nyssa aquatica, Water Tupelo

2.3 Results of Vegetation Monitoring

The impacted area where the temporary impacts occurred is re-attaining wetland jurisdictional status. River Birch, Swamp Chestnut Oak, Baldcypress, and Water Tupelo were noted surviving throughout the site. Site was inundated with approximately 3 in. of water at the time of monitoring. Other species noted within the temporary impacted area included smartweed, stinkweed, sedge, woolgrass, fennel, red maple, black willow, sweetgum, and various grasses.

2.4 Conclusions

There were approximately 0.11 acres of temporary impacts. There were no plots established on the site. By visual observation, the Onslow Br. No. 134 Temporary Impact Site is re-attaining wetland jurisdictional status.

3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

NCDOT proposes to continue vegetation monitoring at the Onslow Br. No. 134 Temporary Impact Site in 2022.



Figure 1. Vicinity Map

APPENDIX A

SITE PHOTOS & SITE MAP

Onslow Br. No. 134 Temporary Impact Site

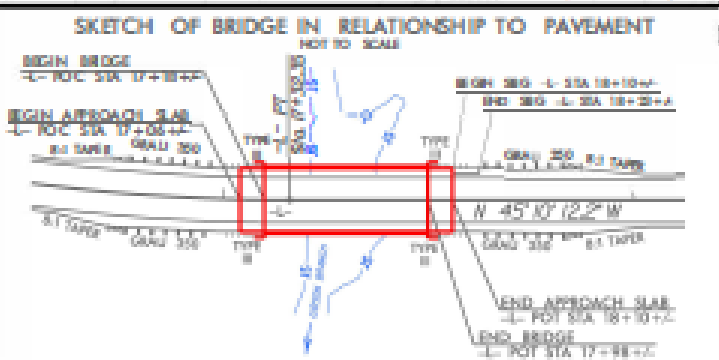
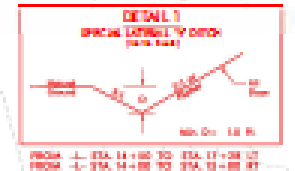
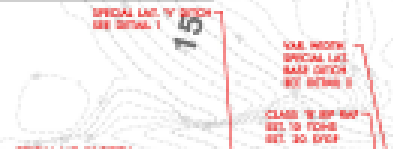
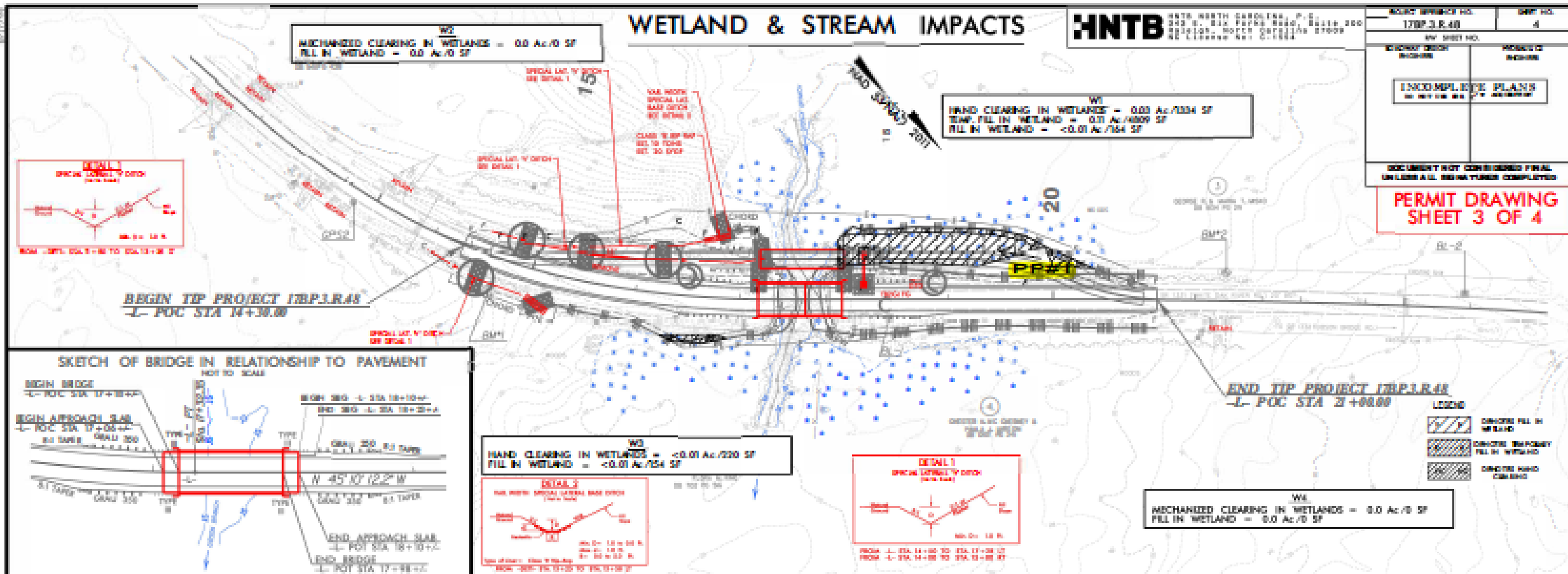


Photo 1

WETLAND & STREAM IMPACTS



PROJECT SHEET NO. 170P-3.R-40		SHEET NO. 4	
BY SHEET NO.	PROJECT NO.	UNCOMPLETED PLANS	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			
PERMIT DRAWING SHEET 3 OF 4			



W2
MECHANIZED CLEARING IN WETLANDS = 0.0 Ac/0 SF
FILL IN WETLAND = 0.0 Ac/0 SF

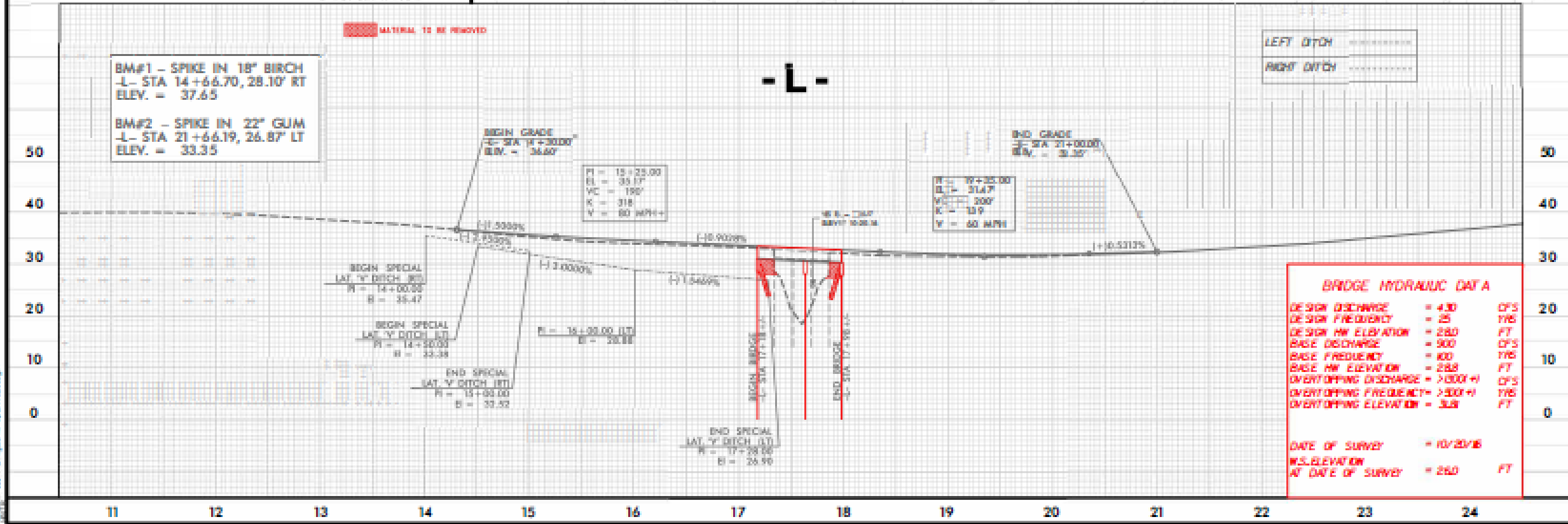
W1
HAND CLEARING IN WETLANDS = 0.0 Ac/1034 SF
TEMP. FILL IN WETLAND = 0.0 Ac/4809 SF
FILL IN WETLAND = <0.01 Ac/164 SF

W3
HAND CLEARING IN WETLANDS = <0.01 Ac/220 SF
FILL IN WETLAND = <0.01 Ac/154 SF

W4
MECHANIZED CLEARING IN WETLANDS = 0.0 Ac/0 SF
FILL IN WETLAND = 0.0 Ac/0 SF

LEGEND

	DITCHES FILL IN WETLAND
	DITCHES BY FARMY FILL IN WETLAND
	DITCHES BY ROAD CLEARING



BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 430	CFS
DESIGN FREQQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 28.0	FT
BASE DISCHARGE	= 900	CFS
BASE FREQQUENCY	= 60	YRS
BASE HW ELEVATION	= 28.8	FT
OVERTOPPING DISCHARGE	= >300 (+)	CFS
OVERTOPPING FREQQUENCY	= >300 (+)	YRS
OVERTOPPING ELEVATION	= 3.8	FT
DATE OF SURVEY	= 10/25/18	
WS ELEVATION AT DATE OF SURVEY	= 26.0	FT