



Pre-Construction Notification (PCN) Form

For Nationwide Permits and Regional General Permits
(along with corresponding Water Quality Certifications)

April 13, 2022 Ver 4.3

Please note: fields marked with a red asterisk * below are required. You will not be able to submit the form until all mandatory questions are answered.

Also, if at any point you wish to print a copy of the E-PCN, all you need to do is right-click on the document and you can print a copy of the form.

Below is a link to the online help file.

<https://edocs.deq.nc.gov/WaterResources/0/edoc/624704/PCN%20Help%20File%202018-1-30.pdf>

A. Processing Information

Pre-Filing Meeting Date Request was submitted on: *

5/17/2021

If this is a courtesy copy, please fill in this with the submission date.

County (or Counties) where the project is located: *

Columbus

Is this a NCDMS Project? *

☐ Yes ☒ No

Click Yes, only if NCDMS is the applicant or co-applicant.

Is this project a public transportation project? *

☒ Yes ☐ No

This is any publicly funded by municipal, state or federal funds road, rail, airport transportation project.

Is this a NCDOT Project? *

☒ Yes ☐ No

(NCDOT only) T.I.P. or state project number:

WBS # *

67073.1.1

(for NCDOT use only)

1a. Type(s) of approval sought from the Corps: *

- ☒ Section 404 Permit (wetlands, streams and waters, Clean Water Act)
☐ Section 10 Permit (navigable waters, tidal waters, Rivers and Harbors Act)

Has this PCN previously been submitted? *

☐ Yes
☒ No

1b. What type(s) of permit(s) do you wish to seek authorization? *

- ☒ Nationwide Permit (NWP)
☐ Regional General Permit (RGP)
☐ Standard (IP)

1c. Has the NWP or GP number been verified by the Corps? *

☐ Yes ☒ No

Nationwide Permit (NWP) Number:

03 - Maintenance

NWP Numbers (for multiple NWPS):

List all NW numbers you are applying for not on the drop down list.

1d. Type(s) of approval sought from the DWR: *

check all that apply

- | | |
|---|--|
| <input checked="" type="checkbox"/> 401 Water Quality Certification - Regular | <input type="checkbox"/> 401 Water Quality Certification - Express |
| <input type="checkbox"/> Non-404 Jurisdictional General Permit | <input type="checkbox"/> Riparian Buffer Authorization |
| <input type="checkbox"/> Individual 401 Water Quality Certification | |

1e. Is this notification solely for the record because written approval is not required?

*

For the record only for DWR 401 Certification:

☐ Yes ☒ No

For the record only for Corps Permit:

☒ Yes ☐ No

1f. Is this an after-the-fact permit application? *

☐ Yes ☒ No

1g. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts?

If so, attach the acceptance letter from mitigation bank or in-lieu fee program.

☐ Yes ☒ No

Acceptance Letter Attachment

Click the upload button or drag and drop files here to attach document

FILE TYPE MUST BE PDF

1h. Is the project located in any of NC's twenty coastal counties? *

☐ Yes ☒ No

1j. Is the project located in a designated trout watershed? *

☐ Yes ☒ No

Link to trout information: <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Trout.aspx>

B. Applicant Information



1a. Who is the Primary Contact? *

NCDOT

1b. Primary Contact Email: *

jldilday1@ncdot.gov

1c. Primary Contact Phone: *

(xxx)xxx-xxxx

(919)707-6111

1d. Who is applying for the permit? *

☐ Owner
(Check all that apply)

☒ Applicant (other than owner)

1e. Is there an Agent/Consultant for this project? *

☐ Yes ☒ No

2. Owner Information

2a. Name(s) on recorded deed: *

NCDOT

2b. Deed book and page no.:

2c. Contact Person:

(for Corporations)

2d. Address *

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

Postal / Zip Code

27699-1598

State / Province / Region

NC

Country

USA

2e. Telephone Number: *

(xxx)xxx-xxxx

(919)707-6111

2f. Fax Number:

(xxx)xxx-xxxx

2g. Email Address: *

maturchy@ncdot.gov

3. Applicant Information (if different from owner)

3a. Name: *

Jason Dilday

3b. Business Name:

(if applicable)

3c. Address *

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

Postal / Zip Code

27699-1598

State / Province / Region

NC

Country

USA

3d. Telephone Number: *

(919)707-6111

(xxx)xxx-xxxx

3e. Fax Number:

(xxx)xxx-xxxx

3f. Email Address: *

jldilday1@ncdot.gov

C. Project Information and Prior Project History

1. Project Information

1a. Name of project: *

Bridge 5 on US76 over Gapway Swamp (BR-0073-Central)

1b. Subdivision name:

(if appropriate)

1c. Nearest municipality / town: *

Fair Bluff

2. Project Identification

2a. Property Identification Number:

(tax PIN or parcel ID)

2b. Property size:

(in acres)

2c. Project Address

Street Address

Address Line 2

City

Postal / Zip Code

State / Province / Region

Country

2d. Site coordinates in decimal degrees

Please collect site coordinates in decimal degrees. Use between 4-6 digits (unless you are using a survey-grade GPS device) after the decimal place as appropriate, based on how the location was determined. (For example, most mobile phones with GPS provide locational precision in decimal degrees to map coordinates to 5 or 6 digits after the decimal place.)

Latitude: *

34.275870

ex: 34.208504

Longitude: *

-79.041630

-77.796371

3. Surface Waters

3a. Name of the nearest body of water to proposed project: *

Gapway Swamp

3b. Water Resources Classification of nearest receiving water: *

C;Sw

[Surface Water Lookup](#)

3c. What river basin(s) is your project located in? *

Lumber

3d. Please provide the 12-digit HUC in which the project is located. *

030402031403

[River Basin Lookup](#)

4. Project Description and History

4a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: *

Land use in the project vicinity consists of forested communities, floodplain swamps, agricultural fields and minor residential development.

4b. Have Corps permits or DWR certifications been obtained for this project (including all prior phases) in the past? *

☐ Yes ☒ No ☐ Unknown

4f. List the total estimated acreage of all existing wetlands on the property:

5.5

4g. List the total estimated linear feet of all existing streams on the property:

(intermittent and perennial)

1000

4h. Explain the purpose of the proposed project: *

The purpose of this project is to replace a structurally deficient bridge.

4i. Describe the overall project in detail, including indirect impacts and the type of equipment to be used: *

This project will replace the current 4-span, 150 foot bridge with a 3-span, 165 foot bridge on US76 over Gapway Swamp in Columbus County. The project will utilize an off site detour. Standard road building equipment, such as trucks, bulldozers and cranes will be used.

5. Jurisdictional Determinations

5a. Have the wetlands or streams been delineated on the property or proposed impact areas? *

☒ Yes ☐ No ☐ Unknown

Comments:

5b. If the Corps made a jurisdictional determination, what type of determination was made? *

☒ Preliminary ☐ Approved ☐ Not Verified ☐ Unknown ☐ N/A

Corps AID Number:

Example: SAW-2017-99999

SAW-2021-00430

5c. If 5a is yes, who delineated the jurisdictional areas?

Name (if known): Eric Black
Agency/Consultant Company: Scenic Consulting Group
Other:

5d. List the dates of the Corp jurisdiction determination or State determination if a determination was made by the Corps or DWR.

PJD dated 6/21/2021.

6. Future Project Plans

6a. Is this a phased project? *

☐ Yes ☒ No

Are any other NWP(s), regional general permit(s), or individual permits(s) used, or intended to be used, to authorize any part of the proposed project or related activity? This includes other separate and distant crossing for linear projects that require Department of the Army authorization but don't require pre-construction notification.

D. Proposed Impacts Inventory

1. Impacts Summary

1a. Where are the impacts associated with your project? (check all that apply):

☒ Wetlands ☒ Streams-tributaries ☐ Buffers
☐ Open Waters ☐ Pond Construction

2. Wetland Impacts

If there are wetland impacts proposed on the site, then complete this question for each wetland area impacted.

"W." will be used in the table below to represent the word "wetland".

2a. Site # * (?)	2a1 Reason * (?)	2b. Impact type * (?)	2c. Type of W. *	2d. W. name *	2e. Forested *	2f. Type of Jurisdiction * (?)	2g. Impact area *
2	Roadway fill	P	Bottomland Hardwood Forest	WD	Yes	Both	0.080 (acres)

2g. Total Temporary Wetland Impact

0.000

2g. Total Permanent Wetland Impact

0.080

2g. Total Wetland Impact

0.080

2i. Comments:

An additional 0.13 acre of handclearing will occur in wetland WD.
0.01 Ac of Temporary Fill for Erosion Control in the Hand Clearing Area has been added.

3. Stream Impacts

If there are perennial or intermittent stream impacts (including temporary impacts) proposed on the site, then complete this question for all stream sites impacted.

"S." will be used in the table below to represent the word "stream".

	3a. Reason for impact [*] (?)	3b. Impact type [*]	3c. Type of impact [*]	3d. S. name [*]	3e. Stream Type [*] (?)	3f. Type of Jurisdiction [*]	3g. S. width [*]	3h. Impact length [*]
S1	Bank stabilization	Permanent	Bank Stabilization	Gapway Swamp	Perennial	Both	60 Average (feet)	50 (linear feet)
S2	Pile removal/bank stabilization	Temporary	Dewatering	Gapway Swamp	Perennial	Both	60 Average (feet)	31 (linear feet)

** All Perennial or Intermittent streams must be verified by DWR or delegated local government.

3i. Total jurisdictional ditch impact in square feet:

0

3i. Total permanent stream impacts:

50

3i. Total temporary stream impacts:

31

3i. Total stream and ditch impacts:

113

3j. Comments:

E. Impact Justification and Mitigation

1. Avoidance and Minimization

1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing the project: *

An offsite detour will be used during construction. The proposed bridge will be longer, with less interior bents, allowing for better hydraulic conveyance.
No deck drains on the bridge. See stormwater management plan for additional minimizations.

1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques: *

NCDOT Best Management Practices for Construction and Maintenance Activities will be employed during all facets of construction and demolition.

2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State

2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?

☐ Yes ☒ No

2b. If this project DOES NOT require Compensatory Mitigation, explain why:

Impacts for project are minimal, are not considered a "loss of Waters of the U.S." and do not exceed mitigation thresholds.

NC Stream Temperature Classification Maps can be found under the Mitigation Concepts tab on the Wilmington District's RIBITS website.

F. Stormwater Management and Diffuse Flow Plan (required by DWR)

*** Recent changes to the stormwater rules have required updates to this section .***

1. Diffuse Flow Plan

1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?

☐ Yes ☒ No

For a list of options to meet the diffuse flow requirements, click [here](#).

If no, explain why:

The Lumber River is not within a protected, riparian buffer basin.

2. Stormwater Management Plan

2a. Is this a NCDOT project subject to compliance with NCDOT's Individual NPDES permit NCS000250? *

☒ Yes ☐ No

Comments:

G. Supplementary Information



1. Environmental Documentation

1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land? *

☒ Yes ☐ No

1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)? *

☒ Yes ☐ No

1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) *

☐ Yes ☒ No

Comments: *

Type I Categorical Exclusions do not require submittal to the State Clearing House.

2. Violations (DWR Requirement)

2a. Is the site in violation of DWR Water Quality Certification Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), or DWR Surface Water or Wetland Standards or Riparian Buffer Rules (15A NCAC 2B .0200)? *

☐ Yes ☒ No

3. Cumulative Impacts (DWR Requirement)

3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality? *

☐ Yes ☒ No

3b. If you answered "no," provide a short narrative description.

Due to minimal transportation impact resulting from this bridge replacement, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect or cumulative effects study will not be necessary.

4. Sewage Disposal (DWR Requirement)

4a. Is sewage disposal required by DWR for this project? *

☐ Yes ☐ No ☒ N/A

5. Endangered Species and Designated Critical Habitat (Corps Requirement)

5a. Will this project occur in or near an area with federally protected species or habitat? *

☒ Yes ☐ No

5b. Have you checked with the USFWS concerning Endangered Species Act impacts? *

☒ Yes ☐ No

5c. If yes, indicate the USFWS Field Office you have contacted.

Raleigh

5d. Is another Federal agency involved? *

☐ Yes ☒ No ☐ Unknown

5e. Is this a DOT project located within Division's 1-8? *

☒ Yes ☐ No

5j. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? *

N.C. Natural Heritage Program database; USFWS-IPaC query; biological surveys for protected species identified for the project area, which include American alligator, red-cockaded woodpecker and Cooley's meadowrue. The American alligator does not require surveys. Habitat for red-cockaded woodpecker does not exist in the study area. Habitat for Cooley's meadowrue exists, but no specimens were observed in a survey conducted on June 29, 2022. The tricolored bat is currently listed as proposed endangered by FWS. In the event the species receives its official listing during project construction, it is anticipated to be covered under a programmatic agreement for the species.

6. Essential Fish Habitat (Corps Requirement)

6a. Will this project occur in or near an area designated as an Essential Fish Habitat? *

☐ Yes ☒ No

6b. What data sources did you use to determine whether your site would impact an Essential Fish Habitat? *

NMFS county index

7. Historic or Prehistoric Cultural Resources (Corps Requirement)

Link to the State Historic Preservation Office Historic Properties Map (does not include archaeological data: <http://gis.ncdcr.gov/hpweb/>)

7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)? *

☐ Yes ☒ No

7b. What data sources did you use to determine whether your site would impact historic or archeological resources? *

NEPA documentation

8. Flood Zone Designation (Corps Requirement)

Link to the FEMA Floodplain Maps: <https://msc.fema.gov/portal/search>

8a. Will this project occur in a FEMA-designated 100-year floodplain? *

☒ Yes ☐ No

8b. If yes, explain how project meets FEMA requirements:

NCDOT Hydraulics Unit coordination with FEMA.

8c. What source(s) did you use to make the floodplain determination? *

FEMA floodplain mapping

Miscellaneous

Comments

Please use the space below to attach all required documentation or any additional information you feel is helpful for application review. Documents should be combined into one file when possible, with a Cover Letter, Table of Contents, and a Cover Sheet for each Section preferred.

Click the upload button or drag and drop files here to attach document

BR-0073 Permit Drawings and CE.pdf

3.03MB

File must be PDF or KMZ

Signature

*

☒ By checking the box and signing below, I certify that:

- The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief; and
- The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.
- I have given true, accurate, and complete information on this form;
- I agree that submission of this PCN form is a "transaction" subject to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I agree to conduct this transaction by electronic means pursuant to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I understand that an electronic signature has the same legal effect and can be enforced in the same way as a written signature; AND
- I intend to electronically sign and submit the PCN form.

Full Name: *

Michael Turchy

Signature *

Michael Turchy

Date

12/15/2022



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR NCDOT PROJECTS

(Version 2.08; Released April 2018)

WBS Element: 67073.1.1 TIP No.: BR-0073 County(ies): Columbus Page 1 of 6

General Project Information

WBS Element:		67073.1.1	TIP Number:		BR-0073		Project Type:		Bridge Replacement		Date:		11/11/2022	
NCDOT Contact:		Galen Cail, P.E.				Contractor / Designer:		Richard Hiner						
	Address:		NCDOT Hydraulics Unit 1590 Mail Service Center Raleigh, NC 27699-1590					Address:		2801 Yorkmont Road Suite 100 Charlotte, NC 28208				
	Phone:		(919) 707-6711					Phone:		(704) 533-3630				
	Email:		gcail@ncdot.gov					Email:		richard.hiner@woodplc.com				
City/Town:		Columbus County				County(ies):		Columbus						
River Basin(s):		Lumber				CAMA County?		No						
Wetlands within Project Limits?		Yes												

Project Description

Project Length (lin. miles or feet):	0.20	Surrounding Land Use:	Woods, large rural lots, farmland, and natural areas south of Lumberton, NC				
	Proposed Project			Existing Site			
Project Built-Up Area (ac.)	0.9	ac.		0.6	ac.		
Typical Cross Section Description:	Two lane roadway with 12' lanes and paved shoulders. Bridge over Gapway Swamp			Two lane roadway with 12' lanes and paved shoulders. Bridge over Gapway Swamp			
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	1400	Year:	2045	Existing:	1,057	Year: 2021
General Project Narrative: (Description of Minimization of Water Quality Impacts)	The North Carolina Department of Transportation (NCDOT) Division 6 proposes to replace Bridge 230005 on US 76 over Gapway Swamp in Columbus County, NC. The proposed project corridor is approximately 0.2mi in length. The purpose of the project is to replace the existing bridge with a new bridge that meets current standards. The project is located on Andrew Jackson Hwy SW, just north of the NC/SC border. Bridge runoff is being picked up with a drainage structure in pipe outlet into a riprap pad. Minimization of wetland impacts is accomplished by using 3:1 fill slope and riprap toe protection along the southeast quadrant						

Waterbody Information

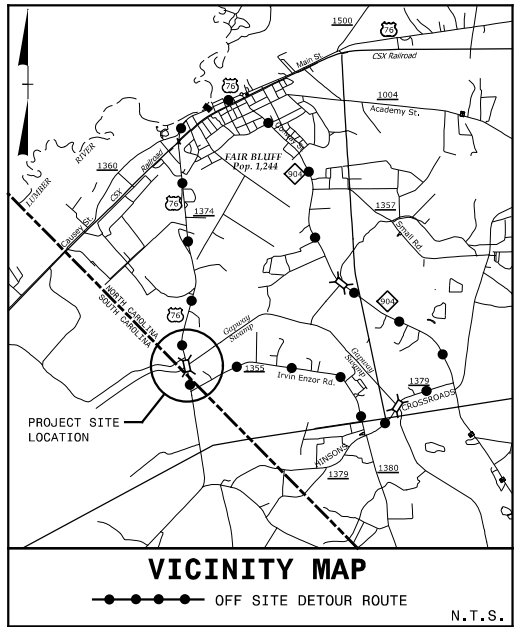
Surface Water Body (1):		Gapway Swamp		NCDWR Stream Index No.:		14-31			
NCDWR Surface Water Classification for Water Body			Primary Classification:		Class C				
			Supplemental Classification:		Swamp Waters (Sw)				
Other Stream Classification:		None							
Impairments:		None							
Aquatic T&E Species?		No		Comments:					
NRTR Stream ID:		SB				Buffer Rules in Effect:		N/A	
Project Includes Bridge Spanning Water Body?		Yes		Deck Drains Discharge Over Buffer?		N/A		Dissipator Pads Provided in Buffer?	
Deck Drains Discharge Over Water Body?				(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)		N/A	
(If yes, provide justification in the General Project Narrative)									

09/08/99

TIP PROJECT: BR-0073

CONTRACT: C204795

See Sheet 1A For Index of Sheets



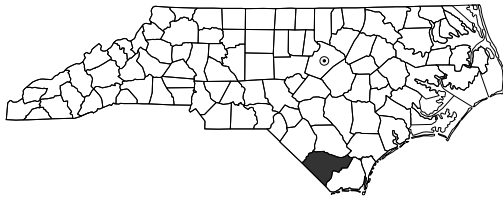
75% PLANS SUBMITTAL

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

COLUMBUS COUNTY

LOCATION: *BRIDGE NO. 230005 ON US 76 OVER GAPWAY SWAMP*

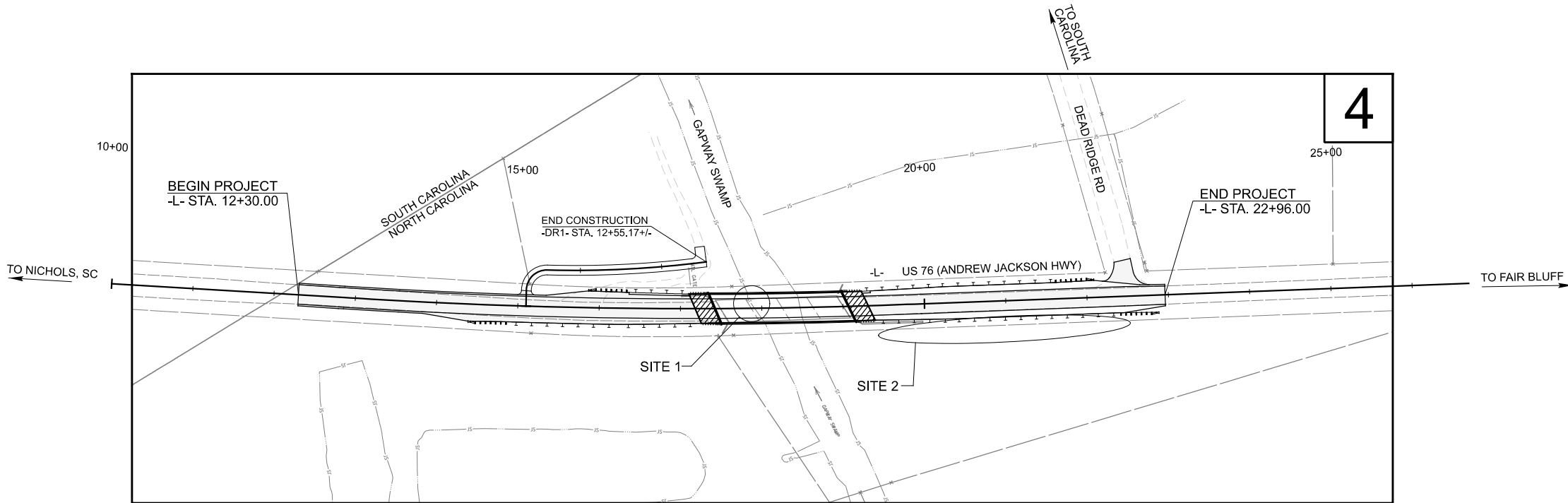
TYPE OF WORK: *GRADING, DRAINAGE, PAVING, & STRUCTURE*



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0073	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
67073.1.1		PE	
67073.2.1		R/W & UTIL.	

PERMIT DRAWING
SHEET 1 OF 5

WETLAND AND SURFACE WATER IMPACTS PERMIT



CLEARING ON THIS PROJECT WILL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II MODIFIED.
THIS PROJECT IS NOT LOCATED WITHIN ANY MUNICIPAL BOUNDARIES.
THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2021 = 1,057
ADT 2045 = 1,400
K = N/A
D = N/A
T = 9% *
V = 60 MPH
* TTST = 5% DUALS = 4%
FUNC CLASS =
PRINCIPAL ARTERIAL
STATEWIDE TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT BR-0073 = 0.175 MILES
LENGTH STRUCTURES TIP PROJECT BR-0073 = 0.031 MILES
TOTAL LENGTH TIP PROJECT BR-0073 = 0.206 MILES

PLANS PREPARED BY:

wsp
4021 STIRRUP CREEK DRIVE
DURHAM, NC 27703
NC ENG F-1253
2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MAY 31, 2022

LETTING DATE:
APRIL 18, 2023

PLANS PREPARED FOR:

DIVISION OF HIGHWAYS
STRUCTURES MGMT UNIT
1000 BIRCH RIDGE DRIVE
RALEIGH, NC 27610

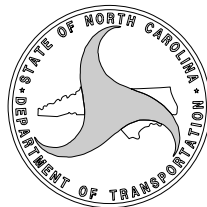
CHRISTOPHER H. LEE, PE
PROJECT ENGINEER

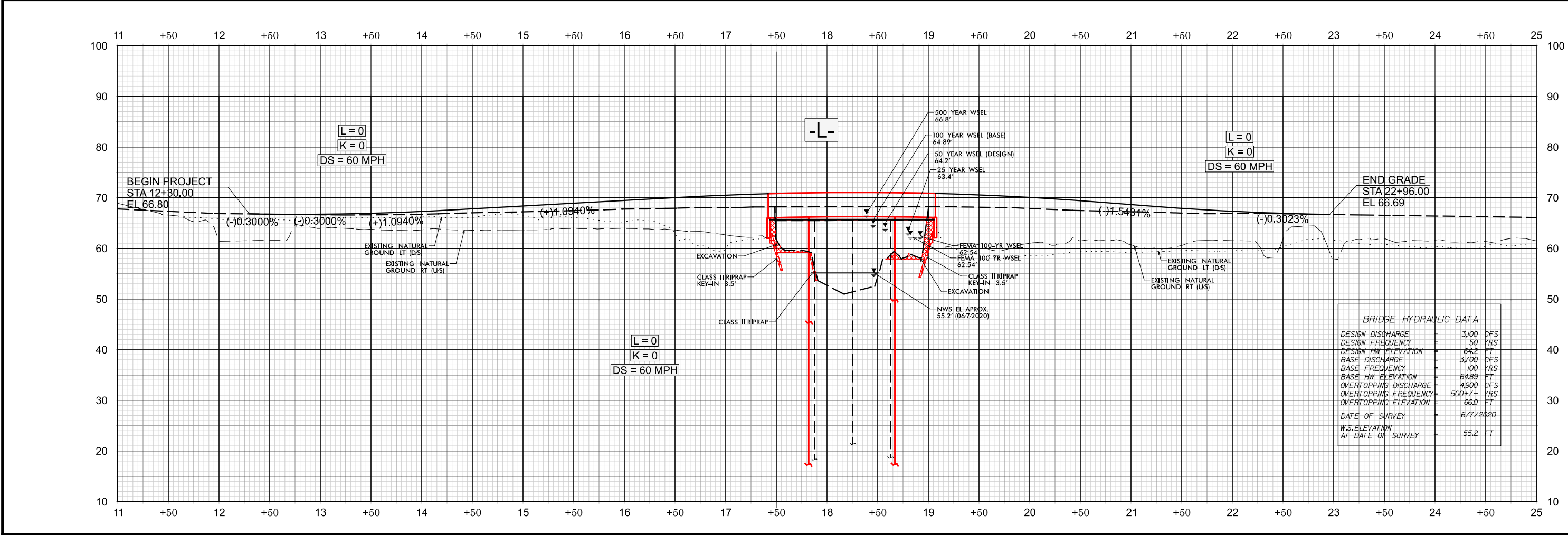
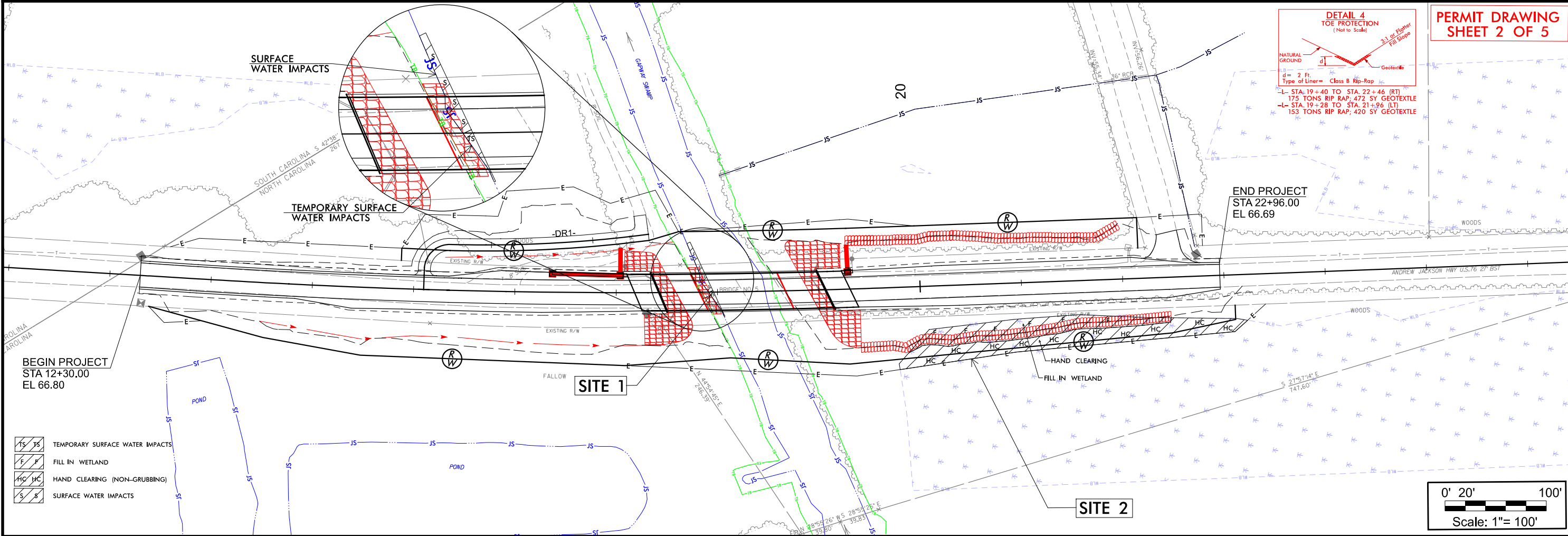
DAVID STUTTS, PE
NCDOT CONTACT:
PROJECT ENGINEER - PEP/PROGRAM MGMT

HYDRAULICS ENGINEER

SIGNATURE: _____
ROADWAY DESIGN ENGINEER

SIGNATURE: _____
P.E.





BR-0073

3RDI 004

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED
STATE OF NORTH CAROLINA

ROADWAY DESIGN UNIT

PREPARED BY

wsp

4021 STIRRUP CREEK DRIVE
DURHAM, NC 27703
NC ENG P-1253

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

REVISIONS

DETAIL 4
TOE PROTECTION
(Not to Scale)

NATURAL GROUND

d = 2 Ft
Type of Liner = Class B Rip-Rap

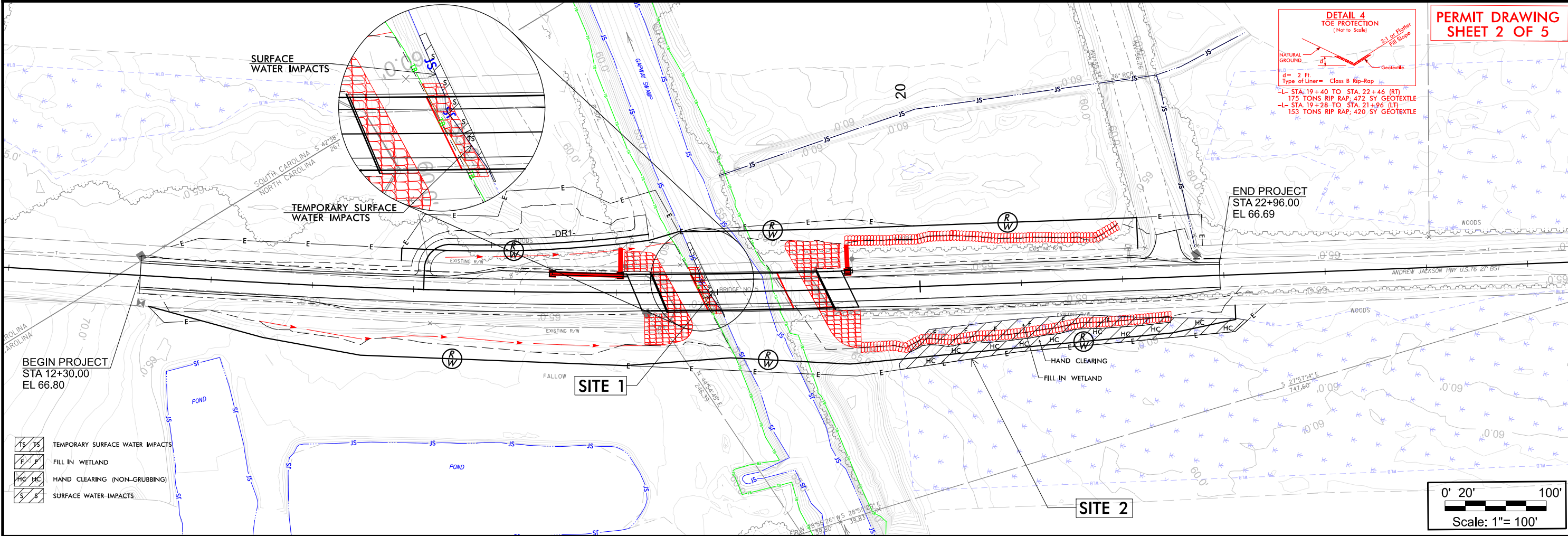
3:1 or flatter
Fill Slope

Geotextile

-L- STA. 19+40 TO STA. 22+46 (RT)
175 TONS RIP RAP, 472 SY GEOTEXTILE
-L- STA. 19+28 TO STA. 21+96 (LT)
153 TONS RIP RAP, 420 SY GEOTEXTILE

PERMIT DRAWING
SHEET 2 OF 5

BRIDGE HYDRAULIC DATA	
DESIGN DISCHARGE	= 3,000 CFS
DESIGN FREQUENCY	= 50 YRS
DESIGN HW ELEVATION	= 64.2 FT
BASE DISCHARGE	= 3,700 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 64.89 FT
OVERTOPPING DISCHARGE	= 4,900 CFS
OVERTOPPING FREQUENCY	= 500+/- YRS
OVERTOPPING ELEVATION	= 66.0 FT
DATE OF SURVEY	= 6/7/2020
W.S. ELEVATION AT DATE OF SURVEY	= 55.2 FT



**DETAIL 4
TOE PROTECTION**
(Not to Scale)

NATURAL
GROUND

d = 2 Ft.
Type of Liner = Class B Rip-Rap

3:1 or flatter
Fill Slope

Geotextile

-L- STA. 19+40 TO STA. 22+46 (RT)
175 TONS RIP RAP, 472 SY GEOTEXTILE
-L- STA. 19+28 TO STA. 21+96 (LT)
153 TONS RIP RAP, 420 SY GEOTEXTILE

**PERMIT DRAWING
SHEET 2 OF 5**

BR-0073

3RDI 004

ROADWAY DESIGN
ENGINEER

HYDRAULICS
ENGINEER

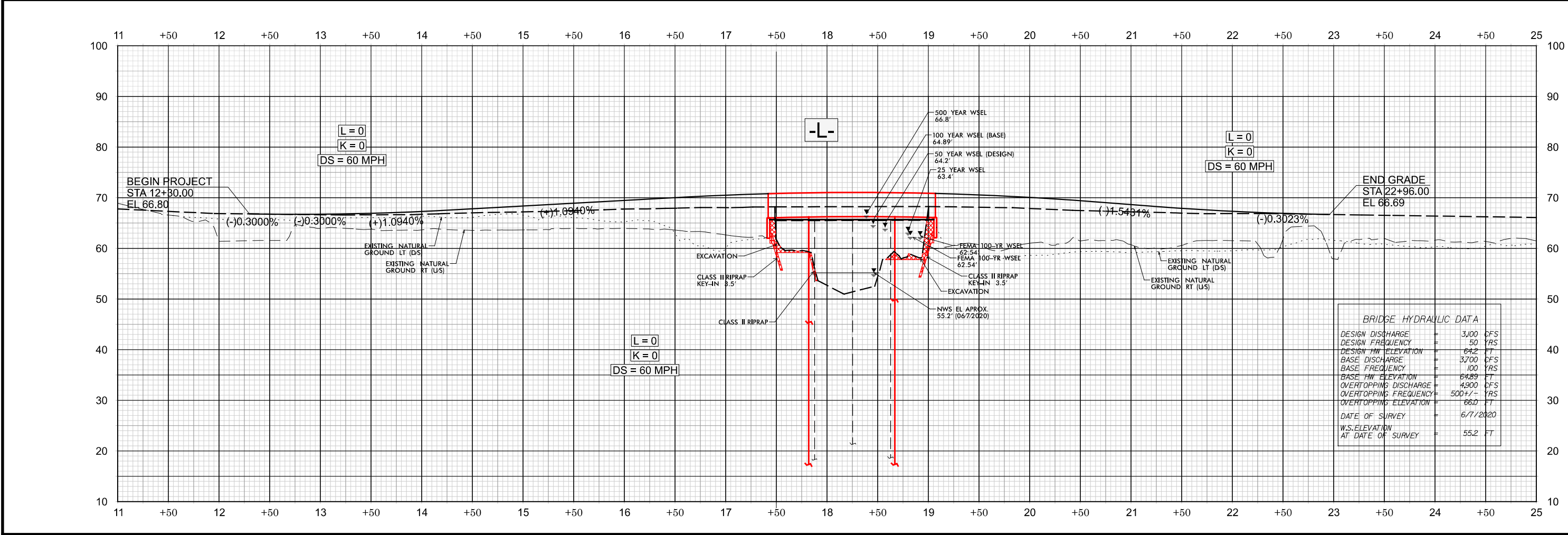
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED
STATE OF NORTH CAROLINA

ROADWAY DESIGN UNIT

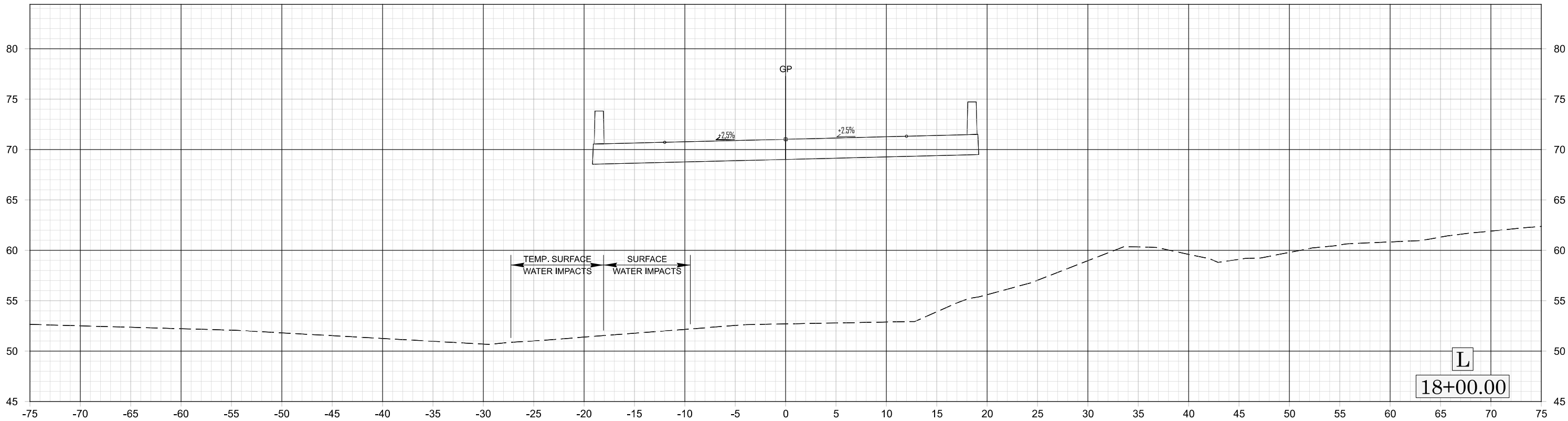
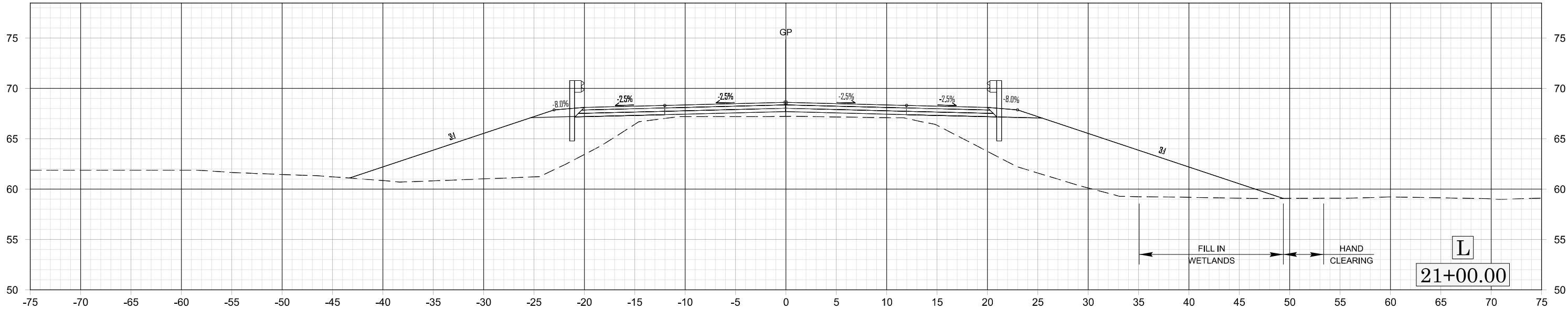
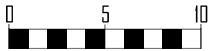
PREPARED BY
wsp
4021 STIRRUP CREEK DRIVE
DURHAM, NC 27703
NC ENG P-1253

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

REVISIONS



BRIDGE HYDRAULIC DATA	
DESIGN DISCHARGE	= 3,000 CFS
DESIGN FREQUENCY	= 50 YRS
DESIGN HW ELEVATION	= 64.2 FT
BASE DISCHARGE	= 3,700 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 64.89 FT
OVERTOPPING DISCHARGE	= 4,900 CFS
OVERTOPPING FREQUENCY	= 500+/- YRS
OVERTOPPING ELEVATION	= 66.0 FT
DATE OF SURVEY	= 6/7/2020
W.S. ELEVATION AT DATE OF SURVEY	= 55.2 FT



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	18+00 (Bridge)	Bridge abutment + excavation						< 0.01	< 0.01	50	31	
2	-L- 19+67 to 23+40 (RT)	Roadway fill	0.08				0.13					
TOTALS*:			0.08				0.13	< 0.01	< 0.01	50	31	0

NOTES:

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
11/11/2022
COLUMBUS COUNTY
BR-0073
67073.1.1

Type I or II Categorical Exclusion Action Classification Form

TIP Project No.	BR-0073
WBS Element	67073.1.1
Federal Project No.	N/A

A. Project Description:

The project proposes to replace Bridge No. 230005 on US 76 (Andrew Jackson Hwy SW) over Gapway Swamp to the south of Fair Bluff in Columbus County, North Carolina near the South Carolina border (Figure 1). The proposed replacement will be on the same alignment as the current bridge. The proposed design speed is 60 miles per hour and is under the statewide tier classification. Lane widths on the current bridge are 12-feet for a total of 24-feet with 2-feet wide paved shoulders. The current bridge span is 150-feet, while the proposed bridge will be a total of 165-feet in length. The total proposed bridge width is 36-feet, with 12-foot lane widths and 6-foot shoulders on the bridge and bridge approaches, refer to the Vicinity map (Figure 1).

B. Description of Need and Purpose:

The primary purpose of the proposed project is to replace the structurally deficient bridge over Gapway Swamp. Bridge No. 230005 was built in 1927 and was identified as structurally deficient with National Bridge Inspection ratings due to a 4 (substructure) out of 9 in the March 2019 Structure Safety Inspection Report. This report also identified poor quality of the deck, foundation piles, and abutments.

C. Categorical Exclusion Action Classification:

Type I(A) - Ground Disturbing Action

D. Proposed Improvements:

28. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade bridge and roadway, if the actions meet the constraints in 23 CFR 771.117(e)(1-6).

E. Special Project Information:

Vicinity map (Figure 1) and other documentation attached.

Alternatives

Alternatives identified with the project include a No Build and Offsite Detour.

No Build Alternative:

There would be no changes made to the existing bridge. This alternative would not address the need to replace a structurally deficient bridge. This alternative was not considered acceptable due to the traffic this road serves.

Offsite Detour Alternative:

This alternative would provide a detour around the project site with traffic turning right on Irwin Enzor Road North (SR 1355) for 2.25 miles, turn left onto Hinsons Crossroads for 1.0 mile, turn left onto N.C. 904 for 3.6 miles to U.S. 76 in Fairbluff, N.C.

ADT/Traffic Information

2021 ADT: 1,057

2045 ADT: 1,400

Public Involvement

A newsletter was prepared and sent to the mailing list prepared for landowners in the project area. Additionally, the project was set up for comments at publicinput.com. The public involvement generated 1 phone comment and 1 comment directly on the project website. There were also 56 views of the project website with two comments. A summary of concerns are listed below:

- Offsite detour, specifically SR 1355, contains cracks and wear indentations from years of use and will potentially worsen with additional traffic use.
- Right-of-way impacts to property. Property owners whose property would potentially be purchased as a result of the project had questions about the right-of-way acquisition and impacts.

Estimated Project Costs

Construction costs completed on 3/24/2022 were \$3,900,000.

Right of Way estimates completed on 10/21/2021 were \$154,000.

Utility costs were \$0.00.

Total project costs are \$4,054,000.

Protected Species

The United States Fish and Wildlife (USFWS) and National Marine Fisheries Service (NMFS) lists twenty-three federally protected species, under the Endangered Species Act (ESA) for Columbus County, NC and Horry County, SC. A determination of “No Effect” was made for 21 species. A determination of “May Affect, Not Likely to Adversely Affect” was made for the wood stork, and a determination of “May Affect, Likely to Adversely Affect” was made for the northern long-eared bat (NLEB). The USFWS programmatic biological evaluation (PBE) for the wood stork and the programmatic biological opinion (PBO) for the northern long-eared bat are discussed in Section G below.

Water Resources

Water resources within the project area which may be subject to regulatory jurisdiction, include 0.64-acres of surface water (ponds), 5.36-acres of wetlands and 1,051-linear feet of streams. Impacts to jurisdictional waters are anticipated and a United States Army Corps of Engineers (USACE) Nationwide Permit is anticipated to be required.

Permits

The project will require CWA USACE permit; NCDEQ 401 Certification; NC DEQ NPDES permit

Archaeology

A “No Archaeological Survey Required Form” dated October 1, 2019, states: There are no archaeological resources present within the Area of Potential Effects (APE). For archaeological review, this federally permitted undertaking should be considered compliant with Section 106. See attached report.

Historic Architecture and Landscapes

A "No Survey Required Form" for historic architecture and landscapes dated October 16, 2018, states: The reconnaissance architectural survey of the county (1998) and later studies record no properties in the APE. County GIS/tax materials and other visual support the absence of significant architectural and landscape resources. No National Register-listed properties are located within the APE. See attached report.

F. Project Impact Criteria Checklists:

F2. Ground Disturbing Actions – Type I (Appendix A) & Type II (Appendix B)				
<p>Proposed improvement(s) that fit Type I Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix A) including 2, 3, 6, 7, 9, 12, 18, 21, 22 (ground disturbing), 23, 24, 25, 26, 27, 28, &/or 30; &/or Type II Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix B) answer the project impact threshold questions (below) and questions 8 – 31.</p> <ul style="list-style-type: none"> <i>If any question 1-7 is checked "Yes" then NCDOT certification for NFHWA approval is required.</i> <i>If any question 8-31 is checked "Yes" then additional information will be required for those questions in Section G.</i> 				
<u>PROJECT IMPACT THRESHOLDS</u> (FHWA signature required if any of the questions 1-7 are marked "Yes".)			Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6	Does the project require an Individual Section 4(f) approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any question 8-31 is checked "Yes" then additional information will be required for those questions in Section G.				
<u>Other Considerations</u>			Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or is the project covered by a Programmatic Agreement under Section 7?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9	Is the project located in anadromous fish spawning waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11	Does the project impact Waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Other Considerations for Type I and II Ground Disturbing Actions (continued)		Yes	No
14	Does the project include a Section 106 of the National Historic Preservation Act (NHPA) effects determination other than a No Effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project involve any changes in access control or the modification or construction of an interchange on an interstate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Is the project inconsistent with the STIP, and where applicable, the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project considered a Type I under the NCDOT Noise Policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. Additional Documentation as Required from Section F (ONLY for questions marked 'Yes'):8. Wood Stork

The U.S. Fish and Wildlife Service (USFWS) issued a programmatic biological evaluation (PBE) for the wood stork (*Mycteria americana*) for certain transportation projects in Divisions 1-8 with a federal nexus which fall under one of the included categories. Additionally, in Bladen, Brunswick, Columbus, Duplin, Robeson, and Sampson Counties, NCDOT has committed to surveying each individual project site for the presence of wood storks and their foraging and nesting habitat during the reproductive season of April 15 – July 15. Surveying outside this timeframe is acceptable if the project occurs entirely within existing NCDOT right-of-way and work will occur outside the timeframe. If a survey determines that a project is within “line-of-sight” of nests, roosts, or foraging congregations (> 5 wood storks), NCDOT will consult with the Service under separate consultation. The PBE will ensure compliance with Section 7 of the Endangered Species Act for ten years (effective through June 30, 2031) for NCDOT projects that fall within the counties and the categories included in the PBE. Project TIP BR-0073 bridge replacement on US 76 over Gapway Swamp is located in Columbus County. A survey for wood stork was conducted on July 25 and July 26, 2019, and no wood storks, nests, or roosts were observed, therefore the project falls within the PBE parameters and the biological conclusion for wood stork for is “*May Affect, Not Likely to Adversely Affect*”.

Northern Long-eared Bat

The USFWS has revised the previous programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and NCDOT for the northern long-eared bat (NLEB) (*Myotis septentrionalis*) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. Although this programmatic covers Divisions 1-8, NLEBs are currently only known in 22 counties, but may potentially occur in 8 additional counties within Divisions 1-8. NCDOT, FHWA, and USACE have agreed to two conservation measures which will avoid/minimize mortality of NLEBs. These conservation measures only apply to the 30 current known/potential counties shown on Figure 2 of the PBO at this time. The programmatic determination for NLEB for the NCDOT program is “***May Affect, Likely to Adversely Affect***”. The PBO will ensure compliance with Section 7 of the Endangered Species Act for ten years (effective through December 31, 2030) for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Columbus County, where TIP BR-0073 is located.

H. Project Commitments (attach as Green Sheet to CE Form):

NCDOT PROJECT COMMITMENTS

TIP Project No. **BR-0073**
Bridge No. 230005 on US 76 Over Gapway Swamp
Columbus County
Federal Aid Project No. N/A
WBS Element 67073.1.1

NCDOT Division 6 Construction – Offsite Detour.

NCDOT Division 6 will contact the Columbus County School District at (910) 642-5168 at least one month prior to construction to coordinate construction activities with school transportation schedules.

Columbus County Emergency Services will be contacted at (910) 640-6610 at least one month prior to construction to make any necessary temporary reassignments to primary response units.

I. Categorical Exclusion Approval:

TIP Project No.	BR-0073
WBS Element	67073.1.1
Federal Project No.	N/A

Prepared By:

7/19/2022

Date

DocuSigned by:



B94D0D406DA6494...

Laura J. Meyer, Senior Scientist
Wood Environment & Infrastructure Solutions, Inc.

Prepared For:

NC Department of Transportation – Structures Management
Unit

Reviewed By:

7/19/2022

Date

DocuSigned by:



A99836FEEDDF44D3...

Colin Mellor
NCDOT Environmental Policy Unit

**Approved**

- If NO grey boxes are checked in Section F (pages 2 and 3), NCDOT approves the Type I or Type II Categorical Exclusion.

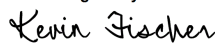
**Certified**

- If ANY grey boxes are checked in Section F (pages 2 and 3), NCDOT certifies the Type I or Type II Categorical Exclusion for FHWA approval.
- If classified as Type III Categorical Exclusion.

7/19/2022

Date

DocuSigned by:



ED19A18D98EC496...

Kevin Fischer, PE
North Carolina Department of Transportation

FHWA Approved: For Projects Certified by NCDOT (above), FHWA signature required.

Date

N/A

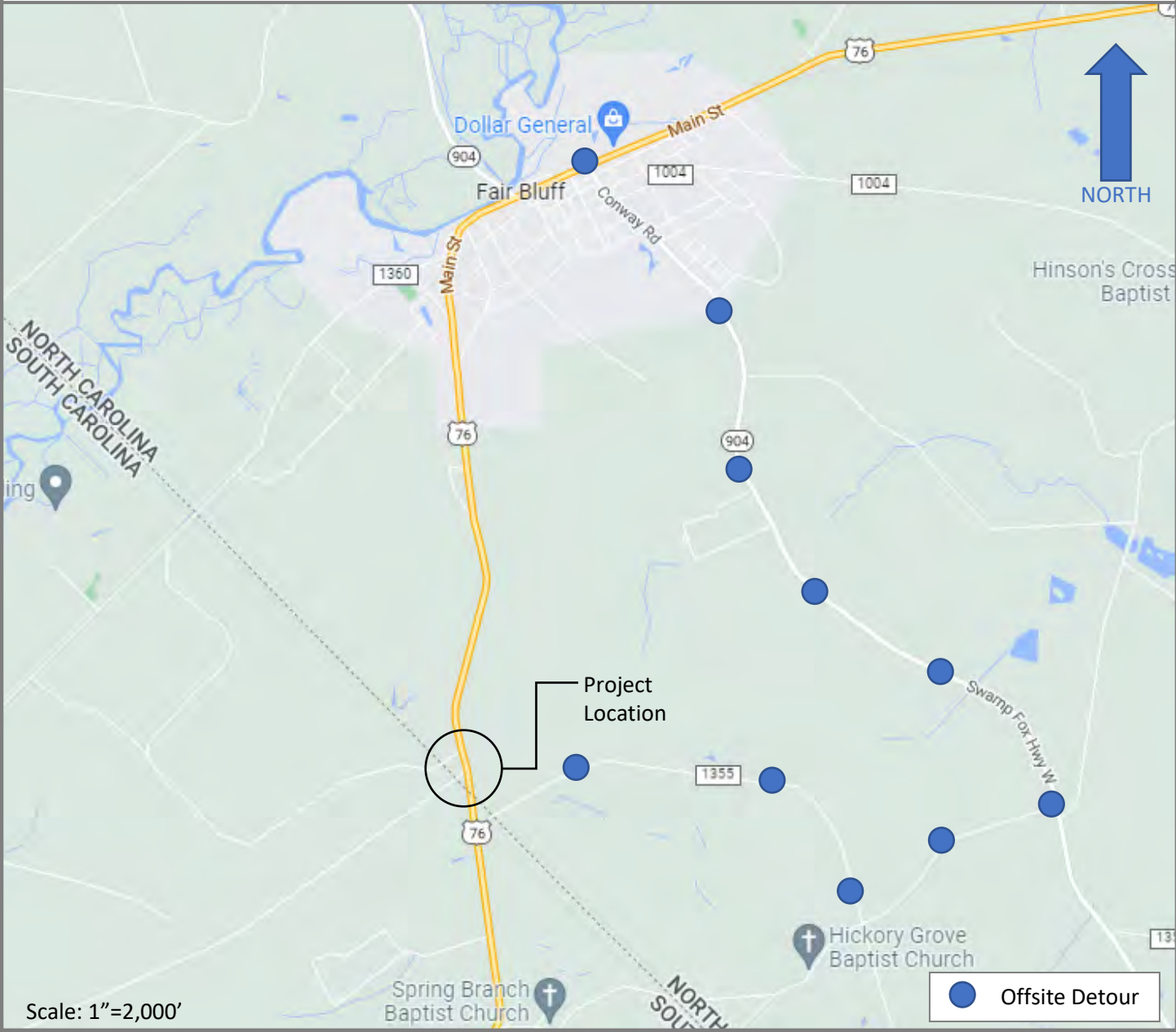
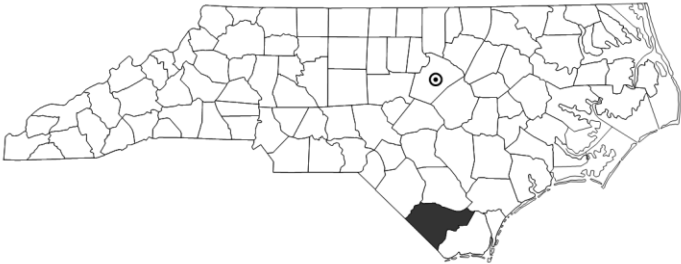
for John F. Sullivan, III, PE, Division Administrator
Federal Highway Administration

Note: Prior to ROW or Construction authorization, a consultation may be required (please see Section VII of the NCDOT-FHWA CE Programmatic Agreement for more details).

BR-0073

Vicinity Map

Replacement of Bridge No. 230005 on US 76 over Gapway Swamp
Brunswick County, NC



18-09-0049



NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.



PROJECT INFORMATION

Project No: **B R -0073 Br No 005** County: **Columbus**
 WBS No: **67073.1.1** Document: **C E**
 F.A. No: Funding: ☒ State ☐ Federal

Federal Permit Required? ☒ Yes ☐ No Permit Type: **usace**

Project Description: NCDOT proposes to replace Bridge No. 0005 on US 76 (Andrew Jackson SW) over Gapway Swamp in Columbus County near the South Carolina Border. The proposed replacement will likely be in place on the same alignment. An offsite detour has been identified and is preferred, though a generous study area allows for multiple alternatives. At this stage of development, the project length is 0.38 miles, or about 2000 feet. Likewise, the study area is 400 feet wide, though is mostly considered a buffer to the actual construction work. For purposes of this review, the archaeological Area of Potential Effects (APE) is the entire length of the project and will include the expanded ROW and all necessary easements. This is a state funded undertaking that will require USACE permitting, therefore Section 106 of the National Historic Preservation Act applies for archaeological review.

SUMMARY OF CULTURAL RESOURCES REVIEW

Brief description of review activities, results of review, and conclusions:

The bridge to be replaced is in a rural setting, over a ditched canal through Gapway Swamp. USGS mapping (Fair Bluff) and aerial photography was studied (see Figures 1 and 2). Bing streetview tools were available at this location and used, showing wooded, swampy terrain with the South Carolina side being cleared along the canalized swamp. There are no structures nearby the APE. Small ponds have been dug in the southeastern quadrant of the project.

According to USGS mapping and GIS resources (data layer created by NCDOT archaeologist Paul J. Mohler), no cemetery is present at the APE or immediately nearby. The proposed detour route should be reviewed for the presence of cemeteries if roadway modifications are required.

No known archaeological sites are present at or within the APE according to research conducted at the Office of State Archaeology. Site 31Cb4 is present about two miles north of the APE. Few systematic surveys have been conducted in the nearby area.

In addition to reviewing the USGS mapping, which depicts the surrounding area as swamp, and GIS layers related to flooding and wetlands, soils mapping was also examined. The majority of the APE is Muckalee sandy loam (Mk), a frequently flooded landform. A small portion of Kureb sand is present southwest of the bridge at the South Carolina border. Swampy soils are not especially attractive to habitation and therefore are considered to be low probability to contain archaeological sites.

A review of historic maps was conducted. The current highway route near the bridge has not changed in the past one hundred years, including the bridge which was last rebuilt in 1927. Little of interest was noted at the project APE location.

18-09-0049***Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:***

The bridge replacement for a small existing structure is proposed to be constructed using an offsite detour. New impacts to undisturbed soils are minor on this replace in place project over Gapway Swamp. Much of the APE has already been modified by the construction associated with the previous bridge and roadway, and also excavation of small ponds southeast of the bridge. The swamp through which the project crosses is considered undesirable terrain for habitation and is not favorable for the presence of intact, significant archaeological sites where impacts are likely to be the greatest. There are no known archaeological resources present within the APE. For archaeological review, this federally permitted undertaking should be considered compliant with Section 106.

Note, this projects falls within a county in which the Catawba Indian Nation and Waccamaw Siouan Tribe has expressed interest. We recommend that the Division contact each federal agency to determine their Section 106 Tribal Consultation requirements. Please let us know if you have any questions.

SUPPORT DOCUMENTATION

See attached: ☒ Map(s) ☐ Previous Survey Info ☐ Photos ☐ Correspondence
☐ Photocopy of County Survey Notes Other:

FINDING BY NCDOT ARCHAEOLOGIST**NO ARCHAEOLOGY SURVEY REQUIRED**

NCDOT ARCHAEOLOGIST

10/01/2019

Date

18-09-0049



HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

PROJECT INFORMATION

Project No:	BR-0073	County:	Columbus
WBS No.:	67073.1.1	Document Type:	
Fed. Aid No:		Funding:	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal
Federal Permit(s):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Permit Type(s):	USACE
Project Description: Replace Bridge No. 5 on US 76 over Gapway Swamp (no off-site detour planned).			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

Description of review activities, results, and conclusions: HPOWeb reviewed on 16 October 2018 and yielded no NR, SL, LD, DE, or SS properties in the Area of Potential Effects (APE). Columbus County current GIS mapping, aerial photography, and tax information indicated an APE of woodland, wetland, and cultivated fields with no above-ground resources apart from the existing bridge (viewed 16 October 2018). Constructed in 1927, Bridge No. 5 is not eligible for listing in the National Register according to the NCDOT Historic Bridge Inventory as it is neither aesthetically, nor technologically significant. Google Maps "Street View" confirmed the absence of critical historic structures and landscapes in the APE (viewed 16 October 2018).

No architectural survey is required for the project as currently defined.

Why the available information provides a reliable basis for reasonably predicting that there are no unidentified significant historic architectural or landscape resources in the project area: APE equates with the study area provided in the review request (see attached). The reconnaissance architectural survey of the county (1998) and later studies record no properties in the APE. County GIS/tax materials and other visuals support the absence of significant architectural and landscape resources. No National Register-listed properties are located within the APE.

**Should any aspect of the project design change, please notify
NCDOT Historic Architecture as additional review may be necessary.**

SUPPORT DOCUMENTATION

☒ Map(s) ☐ Previous Survey Info. ☐ Photos ☐ Correspondence ☐ Design Plans

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes / NO SURVEY REQUIRED

Vanessa C. Patrick

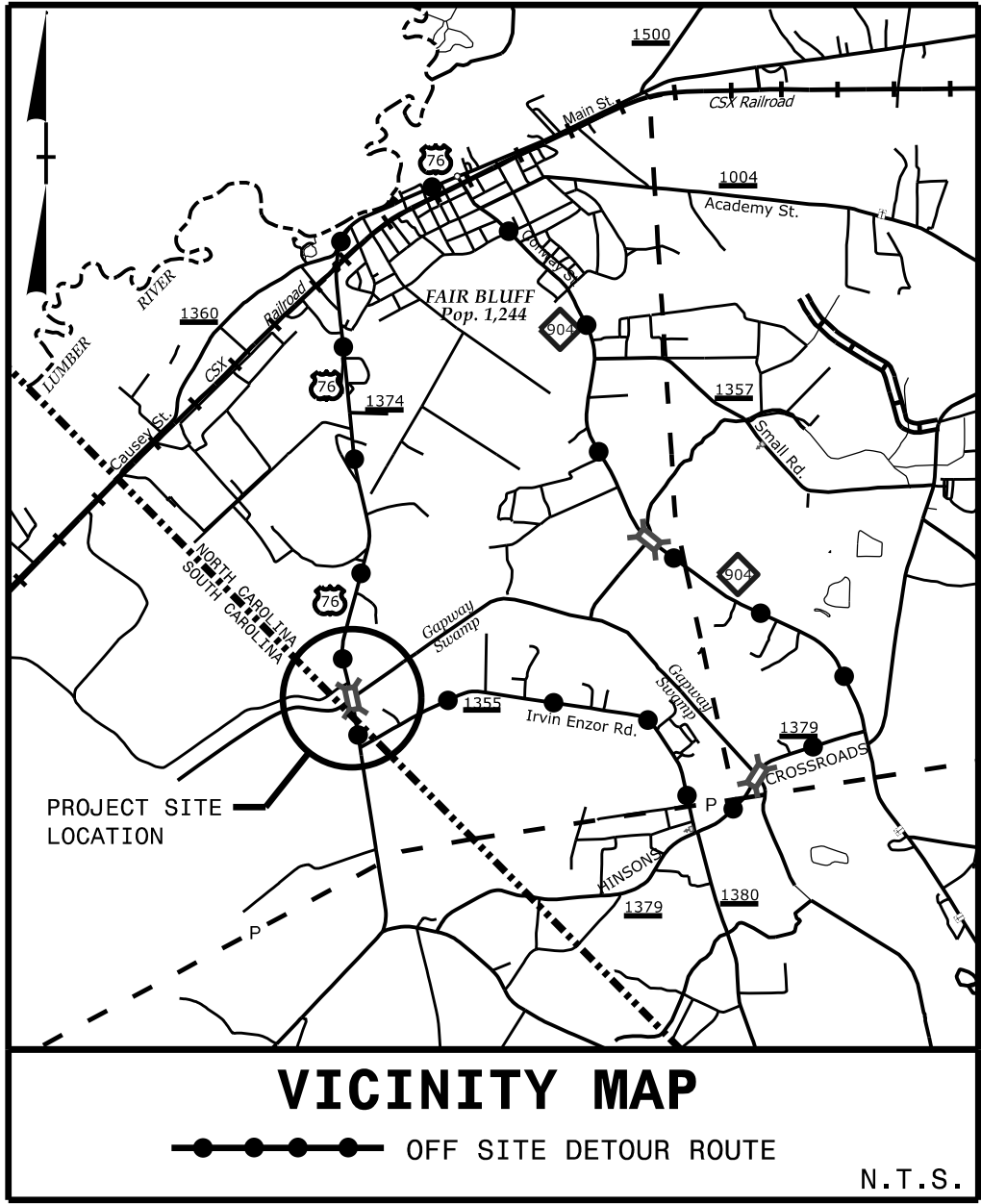
16 October 2018

NCDOT Architectural Historian

Date

09/08/99
TIP PROJECT: BR-0073
CONTRACT:

See Sheet 1A For Index of Sheets

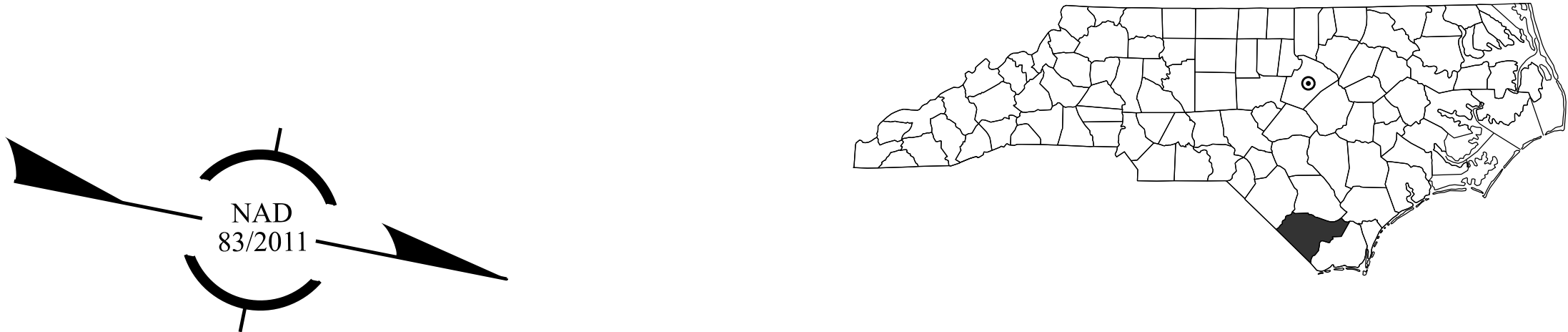


75% PLANS SUBMITTAL

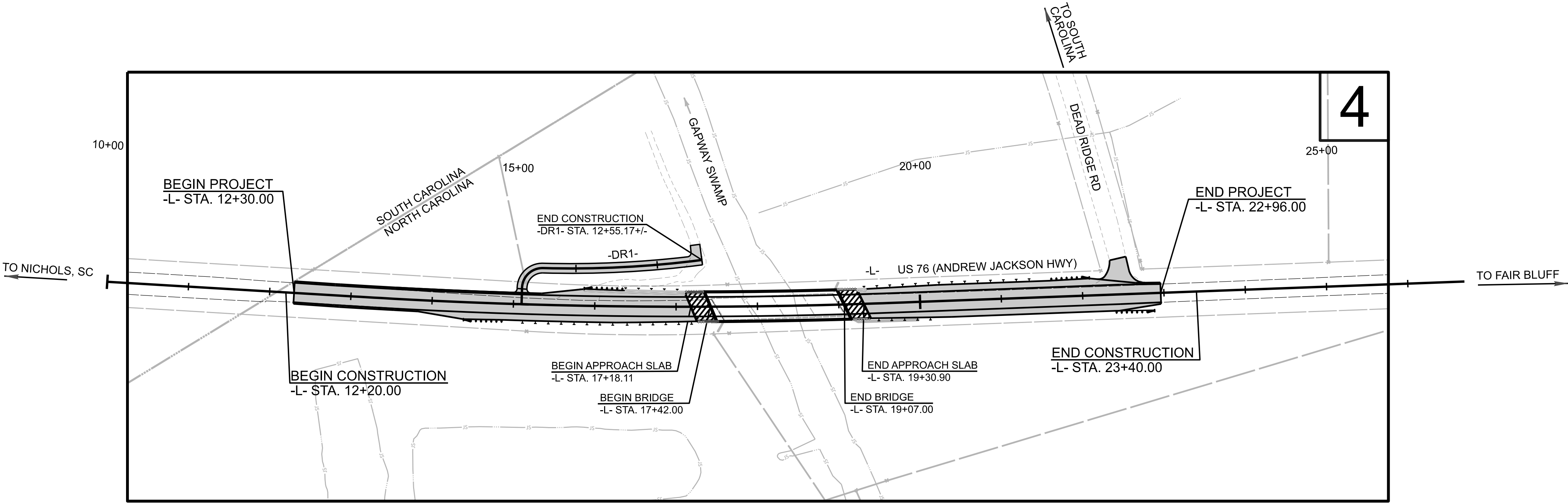
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
COLUMBUS COUNTY

LOCATION: *BRIDGE NO. 230005 ON US 76 OVER GAPWAY SWAMP*

TYPE OF WORK: *GRADING, DRAINAGE, PAVING, & STRUCTURE*



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0073	11	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
67073.1.1		PE	
67073.2.1		R/W & UTIL.	



CLEARING ON THIS PROJECT WILL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II MODIFIED.
THIS PROJECT IS NOT LOCATED WITHIN ANY MUNICIPAL BOUNDARIES.
THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2021 = 1,057
ADT 2045 = 1,400
K = N/A
D = N/A
T = 9% *
V = 60 MPH
* TTST = 5% DUALS = 4%
FUNC CLASS =
PRINCIPAL ARTERIAL
STATEWIDE TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT BR-0073 = 0.175 MILES
LENGTH STRUCTURES TIP PROJECT BR-0073 = 0.031 MILES
TOTAL LENGTH TIP PROJECT BR-0073 = 0.206 MILES

PLANS PREPARED BY:
wood.
4021 STIRRUP CREEK DRIVE
DURHAM, NC 27703
NC ENG E-1253
2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MAY XX, 2022

LETTING DATE:
JANUARY 17, 2023

PLANS PREPARED FOR:
DIVISION OF HIGHWAYS
STRUCTURES MGMT UNIT
1000 BIRCH RIDGE DRIVE
RALEIGH, NC 27610

CHRISTOPHER H. LEE, PE
PROJECT ENGINEER

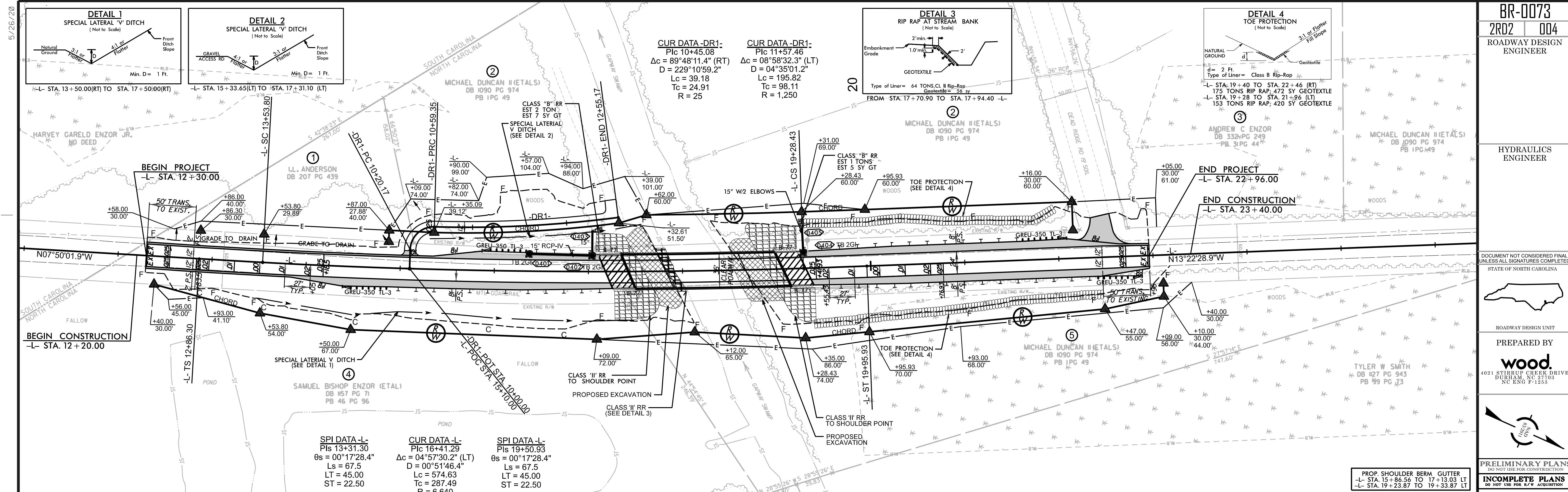
DAVID STUTTS, PE
NCDOT CONTACT:
PROJECT ENGINEER - PEP/PROGRAM MGMT

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



BR-0073
2RD2 004
ROADWAY DESIGN
ENGINEER

HYDRAULICS
ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED
STATE OF NORTH CAROLINA

ROADWAY DESIGN UNIT

PREPARED BY
wood
4021 STIRRUP CREEK DRIVE
DURHAM, NC 27703
NC ENG P-1253

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

