

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-foot 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"/>	

<u>Other Considerations for Type I and II Ground Disturbing Actions (continued)</u>		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.	<u>BR-0073</u>
WBS Element	<u>67073.1.1</u>
Federal Project No.	<u>N/A</u>

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:

A39835FEE0DF44D3...
 Colin Meior
 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.

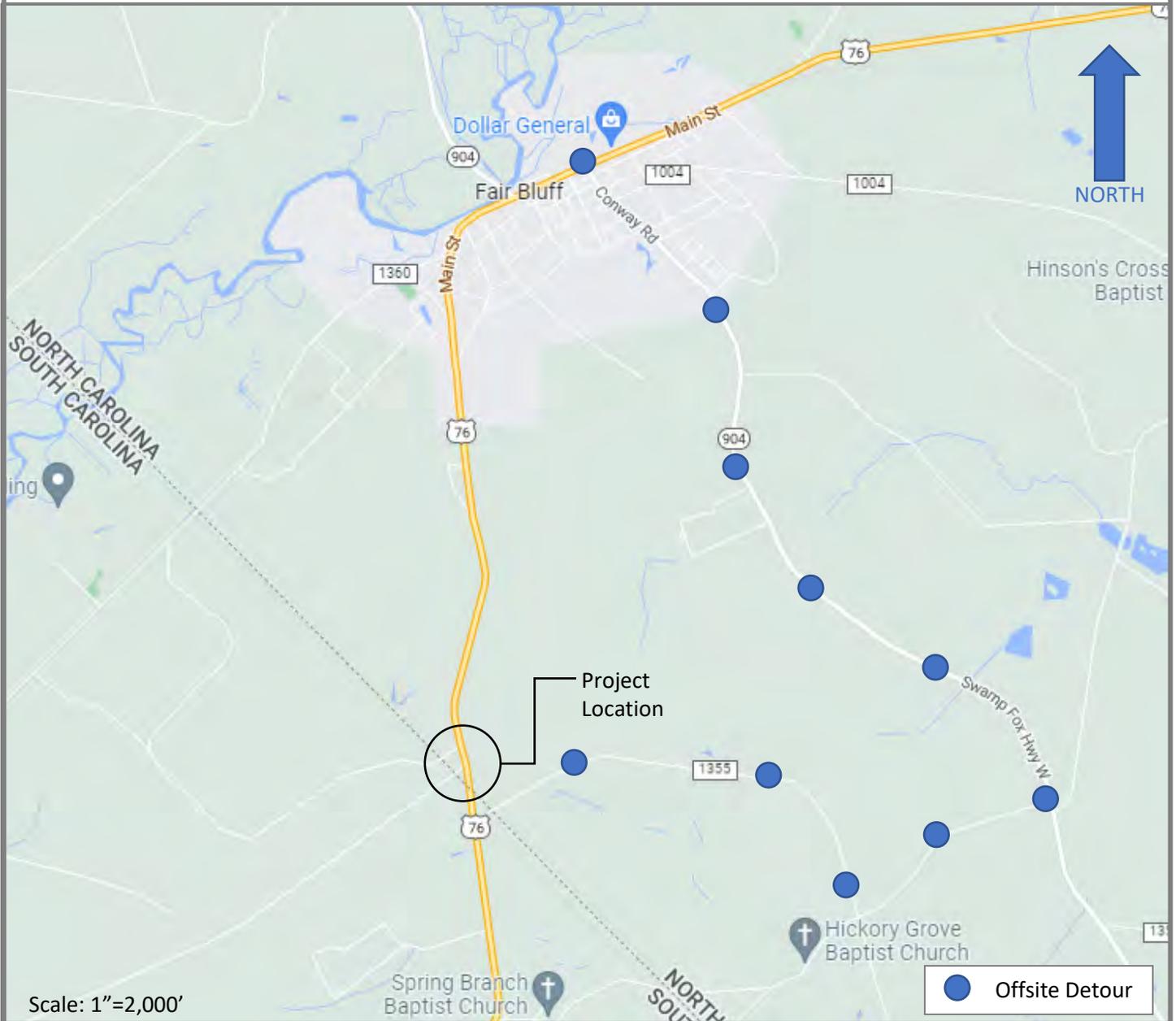
N/A
 Date for John F. Sullivan, III, PE, Division Administrator
 Federal Highway Administration

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



Scale: 1"=2,000'

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: **BR -0073 Br No 005** *County:* **Columbus**
WBS No: **67073.1.1** *Document:* **CE**
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:	X State Federal
Federal Permit(s):	X 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

X 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

TIP PROJECT: BR-0073

CONTRACT:

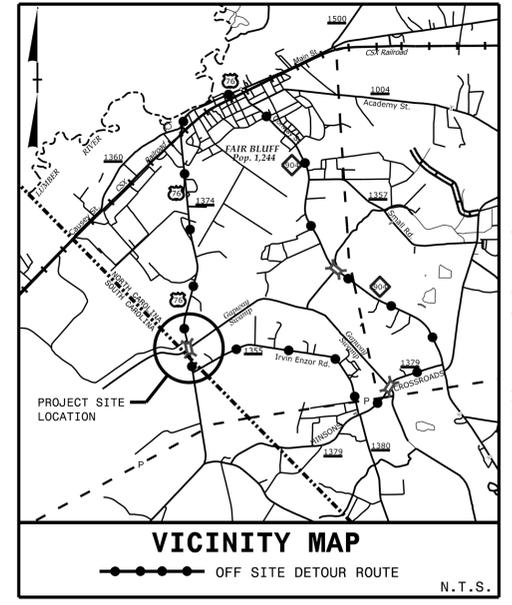
See Sheet 1A For Index of Sheets

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

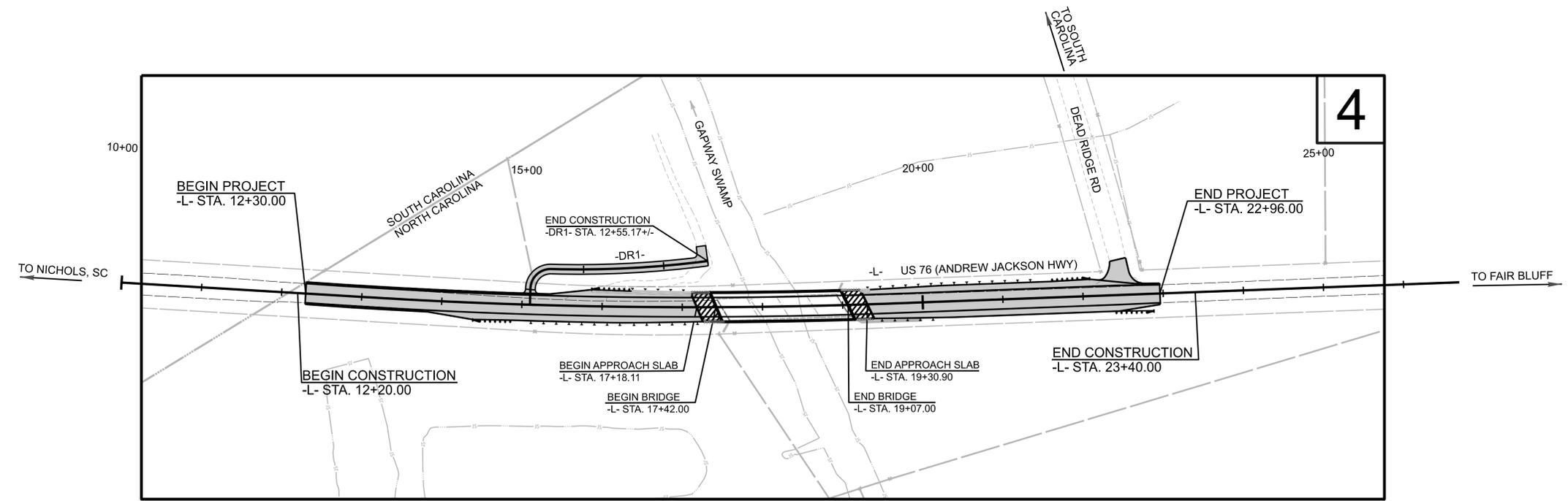
COLUMBUS COUNTY

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.	



75% PLANS SUBMITTAL



4

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

<p>GRAPHIC SCALES</p> <p>50 25 0 50 100 PLANS</p> <p>50 25 0 50 100 PROFILE (HORIZONTAL)</p> <p>10 5 0 10 20 PROFILE (VERTICAL)</p>	<p>DESIGN DATA</p> <p>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</p>	<p style="text-align: center;">PROJECT LENGTH</p> <p>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</p>	<p>PLANS PREPARED BY: wood. 4021 STIRRUP CREEK DRIVE DURHAM, NC 27703 NC ENG E-1253 2018 STANDARD SPECIFICATIONS</p> <p>RIGHT OF WAY DATE: MAY XX, 2022</p> <p>LETTING DATE: JANUARY 17, 2023</p>	<p>PLANS PREPARED FOR: DIVISION OF HIGHWAYS STRUCTURES MGMT UNIT 1000 BIRCH RIDGE DRIVE RALEIGH, NC 27610</p> <p>CHRISTOPHER H. LEE, PE PROJECT ENGINEER</p> <p>DAVID STUTTS, PE NC DOT CONTACT PROJECT ENGINEER - PEP/PROGRAM MGMT</p>	<p><i>HYDRAULICS ENGINEER</i></p> <p>_____ SIGNATURE: P.E.</p> <p><i>ROADWAY DESIGN ENGINEER</i></p> <p>_____ SIGNATURE: P.E.</p>	
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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 STURRUP 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

