

Type I and II Ground Disturbing Categorical Exclusion Action Classification Form

STIP Project No.	<u>B-5671</u>
WBS Element	<u>45626.1.1</u>
Federal Project No.	<u>N/A</u>

A. Project Description:

The proposed project involves replacing Bridge No. 87 on NC 97 over Swift Creek in Edgecombe County (refer to Vicinity Map). Right of way acquisition and construction are scheduled for state fiscal years 2019 and 2020.

Bridge No. 87 will be replaced on the existing alignment. The replacement structure will have a minimum clear roadway width of 32 feet and will include two twelve-foot lanes and four-foot shoulders on each side. The proposed bridge length of 200 feet is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be approximately the same as the existing structure.

The approach roadway will extend approximately 400' from both ends of the proposed bridge. The approach roadway will consist of two 12-foot lanes with 8-foot graded shoulders with 4 feet paved (11-foot with guardrail). The existing right-of-way width is 100 feet. It is anticipated that Permanent Drainage Easement (PDE) and Temporary Construction Easement (TCE) are needed to build the project.

Presently an off-site detour is planned by NCDOT, utilizing Tree Farm Road (SR 1254)/W Logsboro (SR 1253)/NC 33, which is a distance of 5.5 miles. Detours are shown on the attached Vicinity Map. It is also recommended to schedule construction during the summer months in order to minimize school impacts. Local access to active farming in the immediate vicinity of the bridge replacement can be maintained during construction.

B. Description of Need and Purpose:

The structure length of the Bridge No. 87 is 187 feet with a clear roadway width of 26.2 feet. The NCDOT Structure Management Unit records indicate the existing structure has a sufficiency rating of 64.71 out of a possible 100 for a new structure and a rating of 5 out of 9 for the superstructure and substructure. The bridge was built in 1951 and has had priority maintenance performed on the superstructure and substructure. This maintenance is only considered to be temporary. While the bridge is not currently structurally deficient, the bridge substructure is experiencing continuing deterioration, and the rating is expected to drop from good to fair condition prior to the planned bridge replacement. Replacement of the bridge is needed to provide safe access and mobility in the study area in the long term.

C. Categorical Exclusion Action Classification:



TYPE I B

D. Proposed Improvements –

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

E. Special Project Information:

Project Cost

The latest estimated costs are as follows:

Right of Way Acquisition:	\$2,600
Utilities:	\$8,172
Construction:	\$2,450,000
Total:	\$2,460,772

Anticipated Permit or Consultation Requirements: A Nationwide Permit or General Permit will likely be applicable. The USACE holds the final discretion as to what permit will be required to authorize project construction. If a Section 404 permit is required, then a Section 401 Water Quality Certification (WQC) from the NCDWR will be needed.

Estimated Traffic:

Current Year (2020):	3,434 vpd
Design Year (2040):	4,600 vpd
TTST:	5%
Dual:	8%
Design Speed:	60 MPH

Crash Rates:

The crash rate at this bridge is approximately 1.24 crashes per million vehicle miles traveled (MVMT).

Cultural Resources: This project was reviewed and cleared by NCDOT's cultural resources staff under the Programmatic Agreement for Minor Transportation Projects in North Carolina among the Federal Highway Administration, North Carolina Department of Transportation, North Carolina State Historic Preservation Office, North Carolina Office of State Archaeology, and Advisory Council on Historic Preservation. No surveys were required for historic architecture and archeology (see Attachment 1).

Bicycle and Pedestrian Accommodations: There is no presence of bicycle, pedestrian, greenway, or transit facilities; therefore, no bicycle or pedestrian accommodations are proposed for the project.

Bridge Demolition: The existing bridge is constructed of concrete. The replacement and demolition of this type of structure is likely to result in debris in the water based on standard demolition practices. NCDOT will ensure that the demolition process complies with environmental permit requirements.

Design Exceptions: There are no anticipated design exceptions for this project.

Alternatives Considered:

No Build – The no build alternative would result in eventually closing the road, which is anticipated to cause considerable disruption to transportation users due to the high traffic volumes served by NC 97.

Rehabilitation – The superstructure of the bridge is prestressed concrete channel with timber piles. The bridge was built in 1951. The timber and steel joists within the bridges are reaching the end of their useful life. Rehabilitation would require replacing the joists which would constitute effectively replacing the bridge.

Off-site Detour (Recommended) - An off-site detour was evaluated due to low traffic volumes served by NC 97. There are two options being considered for the offsite detour. The detour route includes Tree Farm Road (SR 1254)/W Logsboro (SR 1253)/NC 33 (~5.5 miles). It is anticipated that construction will be scheduled during the summer months to minimize school impacts.

On-site Detour – An on-site detour was not evaluated due available nearby routes.

Staged Construction – Staged construction was not considered because of the availability of an acceptable off-site detour.

New Alignment – Given that the alignment for NC 97 is acceptable, a new alignment was not considered as an alternative.

Public Involvement: A landowner notification letter was sent to all property owners affected directly by this project on February 16, 2016, and property owners were invited to comment. No comments have been received to date.

F. Project Impact Criteria Checklists:

<u>Type I & II - Ground Disturbing Actions</u>			
<u>FHWA APPROVAL ACTIVITIES THRESHOLD CRITERIA</u>			
If any of questions 1-7 are marked "yes" then the CE will require FHWA approval.		Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGPA)?	<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 of questions 8 through 31 are marked "yes" then additional information will be required for those questions in Section G.			
<u>Other Considerations</u>		Yes	No
8	Does the project result in a finding of "may affect not likely to adversely affect" for listed species, or designated critical habitat under Section 7 of the Endangered Species Act (ESA)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Is the project located in anadromous fish spawning waters?	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>
14	Does the project include a Section 106 of the NHPA effects determination other than a no effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Other Considerations (continued)</u>		Yes	No
15	Does the project involve hazardous materials and/or landfills?	<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?	<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 or the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP) (where applicable)?	<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), 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's 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

Question 1: Northern Long-Eared Bat - The US Fish and Wildlife Service (USFWS) has developed a 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) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. The programmatic determination for NLEB for the NCDOT program is "May Affect, Likely to Adversely Affect".

The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Edgecombe County, where the project is located.

Tar River Spiny mussel: May Affect - Likely to Adversely Affect - Based on the presence of two historic NCNHP EOs and one current EO within the 5-mile buffer of the project bridge and habitat for the species present in the project vicinity, completion of the project may affect the Tar River Spiny mussel. Consultation with USFWS will be complete prior to construction.

Question 8: As of June 27, 2018, the United States Fish and Wildlife Service (USFWS) lists four federally protected species for Edgecombe County. In addition, the National Marine Fisheries Service (NMFS) listed two species for the county. Habitat requirements for these species are based on the current best available information from referenced literature and/or USFWS.

Scientific Name	Common Name	Federal Status	Habitat Present	Biological Conclusion
<i>Picoides borealis</i>	Red-cockaded woodpecker	E	Yes	No Effect
<i>Elliptio steinstansana</i>	Tar River spiny mussel	E	Yes	MA-LAA
<i>Acipenser oxyrinchus oxyrinchus</i>	Atlantic sturgeon	E	No	No Effect
<i>Acipenser brevirostrum</i>	Shortnose sturgeon	E	No	No Effect
<i>Alasmidonta heterodon</i>	Dwarf Wedgemussel	E	Yes	No Effect
<i>Elliptio lanceolate</i>	Yellow lance	T	Yes	MA-NLAA

E - Endangered

T - Threatened

MA-LAA – May affect, likely to adversely affect

MA-NLAA - May affect, not likely to adversely affect

Informal concurrence from USFWS will be required prior to construction.

Mussels - Swift Creek is located in the Tar-Pamlico River Basin. As of April 24, 2018, the U.S. Fish and Wildlife Service (USFWS) Raleigh Office webpage indicated three species of mussels currently protected under the Endangered Species Act (ESA) that occur or have the potential to occur in Edgecombe County: the Dwarf Wedgemussel (*Alasmidonta heterodon*), Tar River Spiny mussel (*Parvaspina steinstansana*), and the Yellow Lance (*Elliptio lanceolata*). The Atlantic Pigtoe (*Fusconaia masoni*) is currently being evaluated by USFWS to determine if it warrants listing under the ESA and the Green Floater (*Lasmigona subviridis*) will be evaluated. These species are also known from, or have the potential to be found in, the Tar-Pamlico River Basin in Edgecombe County.

This portion of Swift Creek is designated as Significant Aquatic Habitat by the NC Natural Heritage Program. A mussel survey was recommended, and NCWRC recommends following design standards for sensitive watersheds.

A mussel survey was conducted on November 2, 2016. The survey results indicate that the survey location supports a moderate native freshwater mussel fauna. None of the target mussel species were documented during the survey. However, suitable habitat for all target species exists in Swift Creek in the project vicinity. Although some are considered historic, NCNHP EOs for all but one of the target species are found within the 5-mile buffer of the project bridge.

Based on the presence of a historic NCNHP EO for the species at the project location, a current EO within the 5-mile buffer of the project bridge, and habitat for the species in the project vicinity, completion of the project may affect the Tar River Spiny mussel.

Biological Conclusion for Yellow Lance: May Affect - Not Likely to Adversely Affect

Based on the presence of NCNHP EOs within the 5-mile buffer of the project bridge and habitat for both species present in the project vicinity, if the Atlantic Pigtoe and Green Floater were to be listed as protected species under the ESA, the conclusions for these species are given below.

Question 9: Swift Creek has been designated as an inland Anadromous Fish Spawning Area (AFSA) by the North Carolina Wildlife Resources Commission (NCWRC). No fish monitoring data or benthic monitoring data is available for any streams in the study area or within 1.0 mile of the study area. An in-water work moratorium will be in effect from February 15 to June 30.

Question 10: Streamside riparian zones within the study area are protected under provisions of the Tar Pamlico Buffer Rules administered by NCDWR. Potential impacts to protected stream buffers will be determined once a final alignment and design have been determined.

H. Project Commitments

**Edgecombe County
Bridge No. 87 on NC 97 over Swift Creek
WBS No. 45626.1.1
TIP No. B-5671**

NCDOT Division 4 Construction Moratorium

Town Creek is designated by the North Carolina Wildlife Resources Commission (NCWRC) as an Anadromous Fish Spawning Area. As a result, an in-water construction moratorium will be in effect from February 15 to June 30.

NCDOT Division 4

Due to possible disruption of access and EMS response delays and public schools transportation, it is recommended that NCDOT coordinate with the county EMS ((252) 641-7835) and Public Schools ((252) 641-2600) to minimize potential impact.

NCDOT Division 4 Buffer Rules – Protected Species

Streamside riparian zones within the study area are protected under provisions of the Tar Pamlico Buffer Rules administered by NCDWR. Potential impacts to protected stream buffers will be determined once a final alignment and design have been determined. In addition, formal consultation for Tar River Spiny mussel and informal concurrence for Yellow lance from USFWS will be required prior to construction.

I. Categorical Exclusion Approval

STIP Project No.	<u>B-5671</u>
WBS Element	<u>45626.1.1</u>
Federal Project No.	<u>N/A</u>

Prepared By:

9/3/2019

Date

DocuSigned by:

Dewayne Sykes

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Dewayne L. Sykes, P.E. Roadway Practice Lead
KCI Associates of NC, PA

Prepared For:

North Carolina Department of Transportation Structures Management Unit

Reviewed By:

9/9/2019

Date

DocuSigned by:

Philip S. Harris, III

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Philip Harris III, PE, CPM – Environmental Analysis Unit Head
North Carolina Department of Transportation

Approved

If all of the threshold questions (1 through 7) of Section F are answered “no,” NCDOT approves this Categorical Exclusion.

Certified

If any of the threshold questions (1 through 7) of Section F are answered “yes,” NCDOT certifies this Categorical Exclusion.

9/4/2019

Date

DocuSigned by:

Kevin Fischer

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Kevin Fischer, PE
Structures Management Unit
North Carolina Department of Transportation

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

9/4/2019

Date

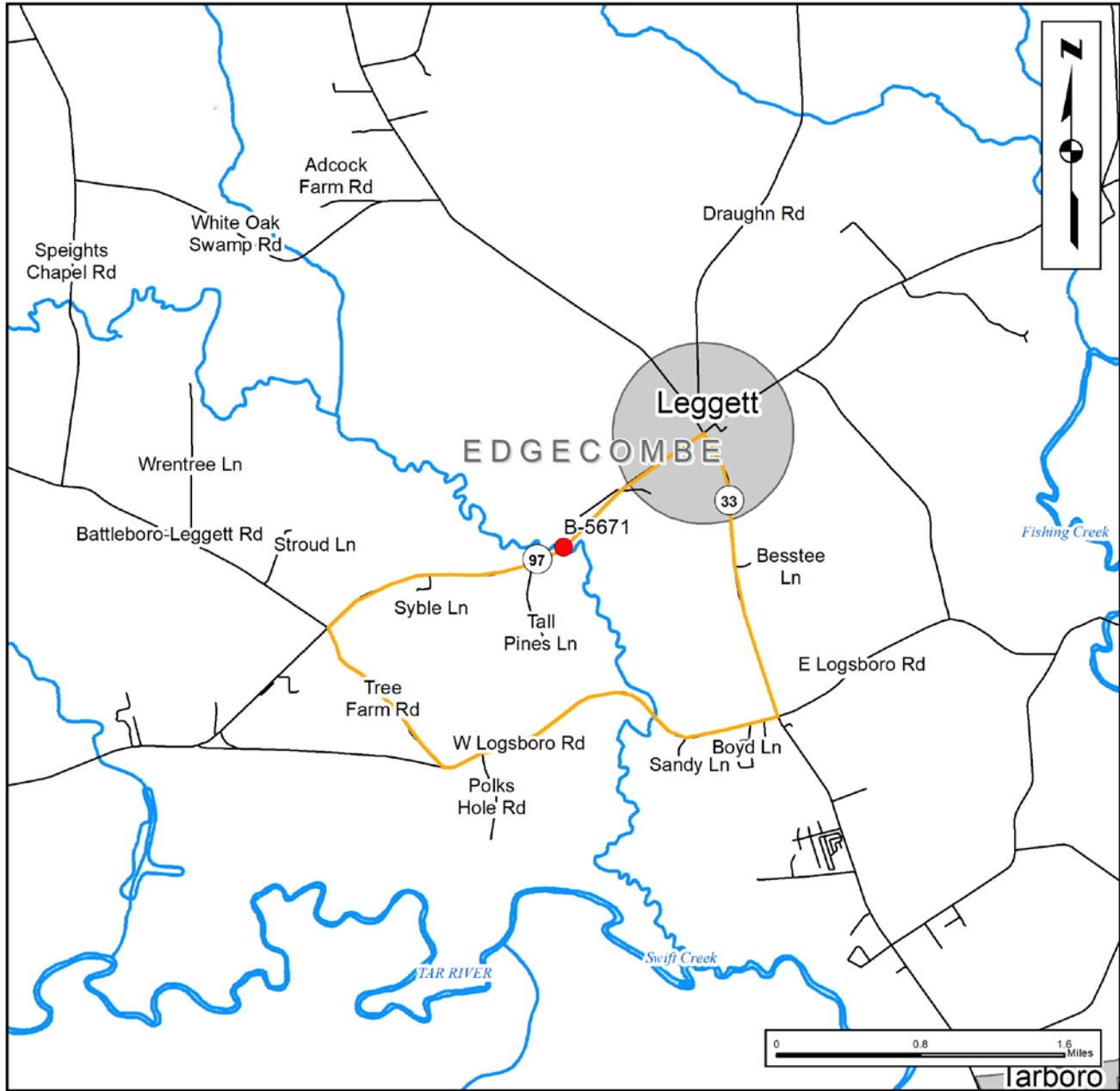
DocuSigned by:

Bill Marley

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

Vicinity Map



— Detour Route

	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS UNIT
	EDGECOMBE COUNTY REPLACE BRIDGE NO. 87 ON NC 97 OVER A SWIFT CREEK TIP PROJECT B-5671
VICINITY MAP	

Jurisdictional Features Map

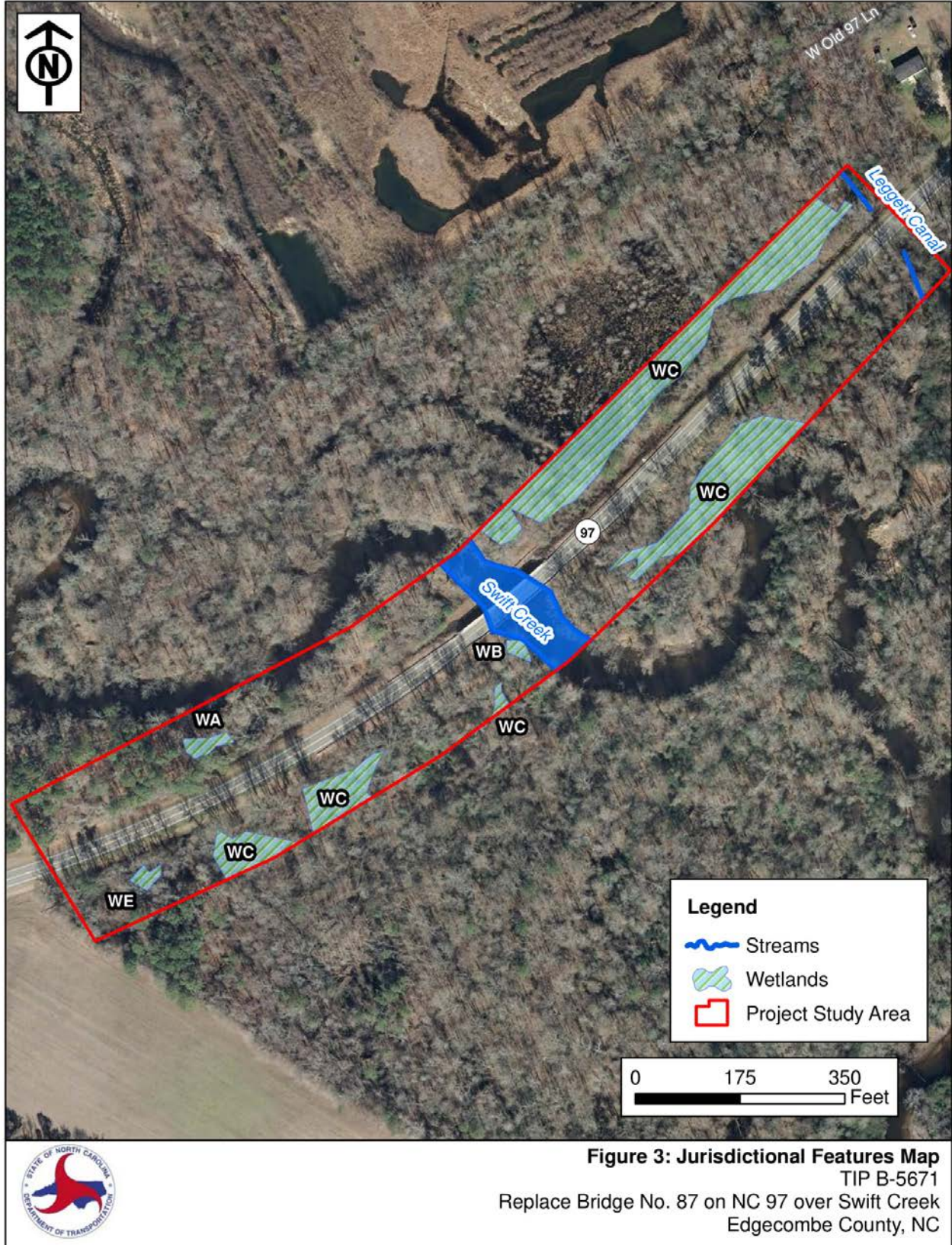


Figure 3: Jurisdictional Features Map
TIP B-5671
Replace Bridge No. 87 on NC 97 over Swift Creek
Edgecombe County, NC

Attachments:

- 1. Cultural Resources**
- 2. Design Sheet**