

# Type I or II Categorical Exclusion Action Classification Form

STIP Project No.	<b>BR-0068</b>
WBS Element	<b>67068.1.1</b>
Federal Project No.	<b>N/A</b>

## **A. Project Description:**

The proposed project involves replacing Bridge 110103 on NC 126 over Canoe Creek in Burke County (refer to Figure 1). The proposed project consists of constructing a new bridge to the north and using the existing bridge for maintenance of traffic during construction.

The existing roadway typical section consists of two 10' travel lanes with 5' shoulders. The existing bridge (#110103) has a vertical-concrete abutment type and currently has an ADT count of 2000 vehicles per day. The existing bridge is a 3-span structure with steel beams (Span 1: 29.1', Span 2: 30', Span 3: 29.9'), a concrete deck, end walls, guard rails, and has an overall length of 93 feet. Project BR-0068 is included in the NCDOT 2020-2029 State Transportation Improvement (STIP). Right-of-way and construction are currently scheduled in fiscal years (FY) 2023 and 2025, respectively.

## **B. Description of Need and Purpose:**

Bridge 110103 was built in 1964. Bridge 110103 has a 58-year-old superstructure consisting of reinforced concrete deck and railing with steel open beams. An NCDOT Structure Management Unit inspection dated 09/20/2021 found 13 general maintenance defects.

- Connection defects along plate girders at Span 2 Beam 2, Span 3 Beam 1, Span 3 Beam 2, and along the Steel pile at Bent 1 Pile 5.
- The plate girder at Span 1 Beam 4 had both a corrosion and connection defect.
- Exposed rebar defects were found along the reinforced concrete deck at Span 2 and the reinforced concrete pier cap at Bent 1 Cap 1.
- The concrete railing on the existing bridge does not meet current standards.

Rehabilitation on Bridge 110103 is not practicable due to the age and deteriorated conditions present. Components of both the concrete superstructure and substructure of Bridge 110103 have experienced an increasing degree of deterioration that can no longer be addressed by maintenance activities. The purpose of this project is to replace Bridge 110103 which is approaching the end of its useful life.

## **C. Categorical Exclusion Action Classification:**

**Type I(A) - Ground Disturbing Action**

## **D. Proposed Improvements:**

Project BR-0068 proposes to replace the existing Bridge 110103 with a new bridge constructed to the north, which will re-align NC 126 with the new bridge as well as improve an existing horizontal curve to the west of the bridge.

## E. Special Project Information:

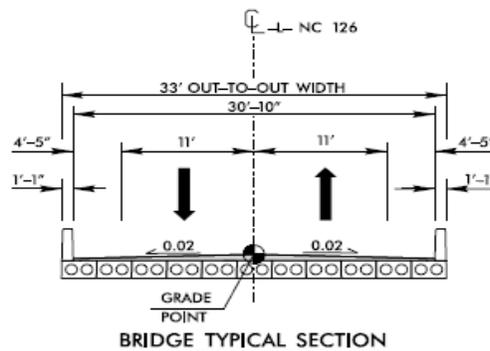
### Estimated Costs (as of July 21, 2022):

<b>Bridge 110103</b>	
Right of Way Cost	\$ 300,000.00
Utilities Cost	\$ 200,000.00
Construction Cost	\$3,300,000.00

### Estimated Traffic:

The current traffic volume of 2,000 vehicles per day (vpd) is expected to increase to 2,100 vpd by the year 2045. The projected volume includes three percent truck-tractor semi-trailer and six percent dual-tired vehicles. The road functional classification is Major Collector, the road context classification is rural, and road has a design speed of 50 Mph (45 MPH posted speed).

### Proposed Typical Section for Bridge:



### Design Exceptions:

There are no anticipated design exceptions for this project.

### Pedestrian and Bicycle Accommodations:

This portion of NC 126 is not part of a designated bicycle route nor is it listed in the Transportation Improvement Program (TIP) as a bicycle project. This project abuts a privately-owned land conservancy parcel with long term plans to be used as a park-like area. The NC 126 corridor may also become the location for the Overmountain Victory Trail, although the current plans for this trail do not show it along the NC 126 corridor. Given the low AADT, the rural nature, the proximity of a future park-like land use, and the potential for a trail in the future, NCDOT is proposing 4'-5" offsets as bicycle and pedestrian accommodations on both sides of the bridge. This will provide accommodations for current users as well as flexibility for future needs.

### Alternatives Discussion:

**No-Build** – The no build alternative would result in eventually closing NC 126 as the sufficiency rating for bridge 110103 further deteriorates. This is unacceptable given the volume of traffic and the connectivity provided by NC 126.

**Rehabilitation** – The bridge was constructed in 1964 and many of the substructure and superstructure materials are reaching the end of their useful life. Rehabilitation would require replacing many of these materials which would effectively constitute replacing the bridge.

**Off-site Detour** – An off-site detour was discussed but ultimately eliminated due to the length of the detour. An off-site detour would be over 5 miles in length and could negatively impact US 70 and NC 181.

**Staged construction** – Staged construction was not selected due to the utility impacts to the south of the existing bridge and the inability to construct a new bridge to the north.

**New alignment south of existing bridge** – A new alignment south of the existing bridge was not selected due to conflicts with underground utilities as well as negative impacts to the roadway alignment to the west of the project.

#### **Preferred Alternative:**

The preferred alternative is to replace Bridge No. 110103 on a new alignment north of the existing bridge. This will avoid conflicts with underground utilities south of the existing bridge and will improve horizontal curvature to the west of the existing structure. Traffic will be maintained on the existing bridge during construction.

After reviewing the expected traffic volumes as well as reviewing other nearby projects the decision was made to proceed with a cored slab design. While cored slab designs are not typically used on NC routes, the design is sufficient for the expected traffic and a recent project in the division with similar conditions also utilized a cored slab design. Division 13 supports the cored slab design.

The proposed structure will consist of a three-span structure with a total approximate length of 116'. It is expected that the deck will consist of two 11' lanes with 4'-5" offsets on both sides. The proposed superstructure will consist of a 24" cored slab which will meet today's standards. The proposed structure will also consist of a 33' out to out dimension with a clear roadway width of 30'-10".

The preferred alternative will impact the parcel north and east of the existing structure which is owned by the Foothills Conservancy of North Carolina. Extensive coordination occurred with the Foothills Conservancy during the alternative selection process and the group expressed support for this alternative as it will help to provide access to the parcel and is consistent with the Conservancy's long-term plans for the parcel.

#### **Agency Comments:**

Substantial comments from the resource agencies are captured in the environmental commitments or included in the appendix of this report.

#### **Public Involvement:**

NCDOT sent a letter to all property owners affected directly by this project. NCDOT invited property owners to comment if they had questions about the project. NCDOT will also be sending out a newsletter bringing awareness to the upcoming project. No comments have been received at this time.

There is no substantial controversy on social, economic, or environmental grounds concerning the project.

## 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, &amp;/or 30; &amp;/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"> <li>If any question 1-7 is checked “Yes” then NCDOT certification for FHWA approval is required.</li> <li>If any question 8-31 is checked “Yes” then additional information will be required for those questions in Section G.</li> </ul>				
<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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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.** NCDOT recommends a May Affect, Not Likely to Adversely Affect finding for gray bat and northern long-eared bat. These recommendations require concurrence from the US Fish and Wildlife Service, and NCDOT Environmental Coordination and Permitting staff will finalize this coordination as part of their normal Section 7 procedures.

**16.** This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

**26.** The Foothills Conservancy of North Carolina owns the property located northeast of the bridge, and the NC Land and Water Fund (NCLWF) holds easements on portions of the Conservancy property. NCDOT is coordinating with the Foothills Conservancy and NCLWF throughout the project development process, and all parties are aware that NCDOT will need to acquire easement from NCLWF prior to acquiring easement/ROW from the Conservancy. The Foothills Conservancy has expressed support for the project and is prepared for NCDOT to acquire necessary land through use of an easement or fee-simple purchase. The exact means of acquiring access to the necessary property will be determined prior to construction. Email documentation can be found in the appendix section of this document.

## **H. Project Commitments**

**Burke County**  
**Replace Bridge 110103 on NC 126 over Canoe Creek**  
**Federal Project No. N/A**  
**WBS No. 67068.1.1**  
**TIP No. BR-0068**

### **Hydraulics - Preconstruction**

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP) to determine status of project with regard to applicability of NCDOT's Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR)\* and subsequent final Letter of Map Revision (LOMR).

### **Hydraulics – Construction**

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed As-built construction plans to the Hydraulics Unit upon completion of structure construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically

**I. Categorical Exclusion Approval:**

STIP Project No. BR-0068  
WBS Element 67068.1.1  
Federal Project No. N/A

**Prepared By:**

09/22/2022 DocuSigned by:  
Dimitri O. Gambrell  
Date Dimitri O. Gambrell – Project Management Unit  
North Carolina Department of Transportation

**Prepared For:**

North Carolina Department of Transportation

**Reviewed By:**

09/22/2022 DocuSigned by:  
Kevin E. Moore  
Date Kevin E. Moore, PE – Senior Project Manager  
North Carolina Department of Transportation

- 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.

09/22/2022 DocuSigned by:  
Beverly Robinson  
Date Beverly G. Robinson, CPM – Team Lead  
North Carolina Department of Transportation

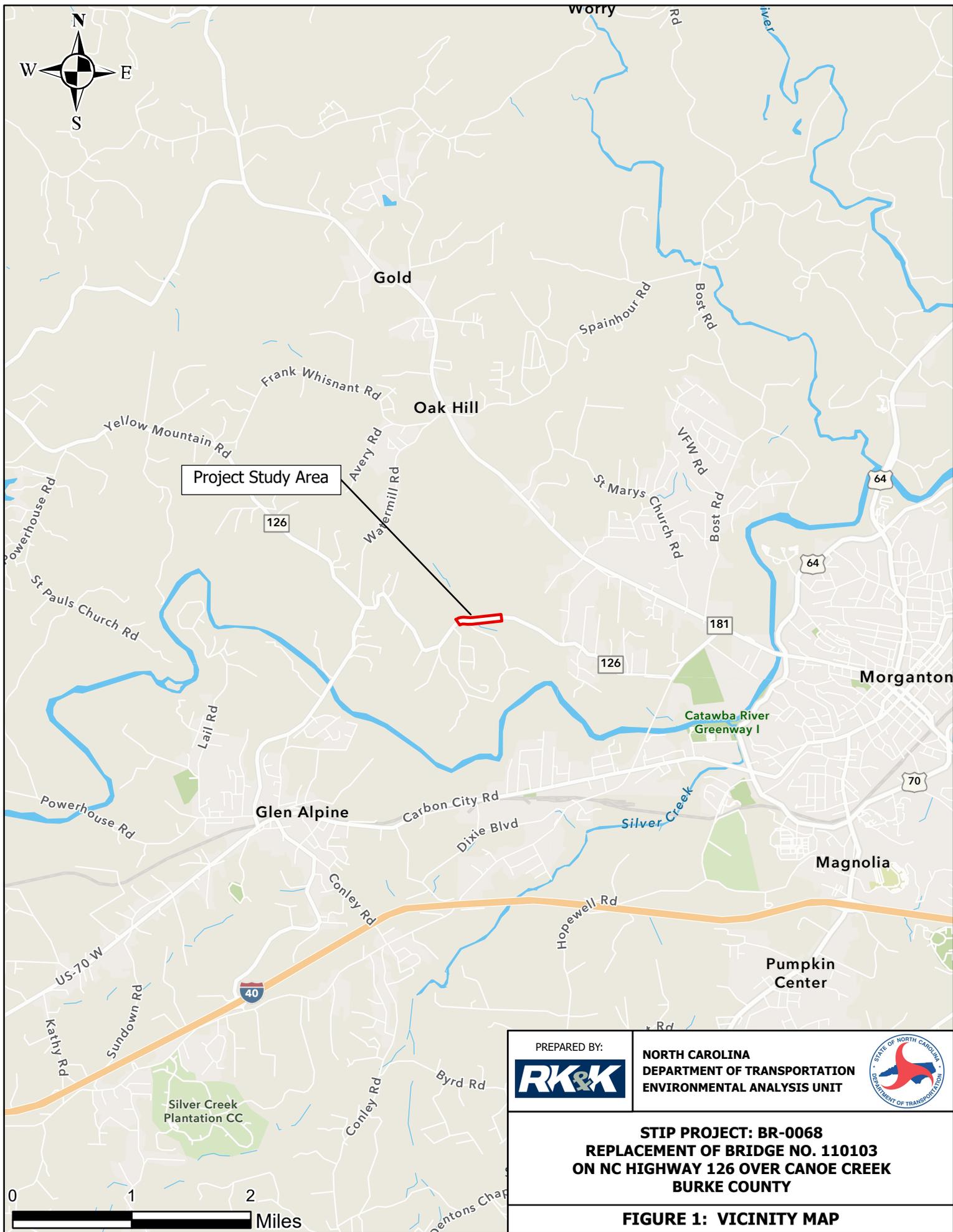
**FHWA Approved:** For Projects Certified by NCDOT (above), FHWA signature required.

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).*

# **APPENDIX A**

## **Figures**



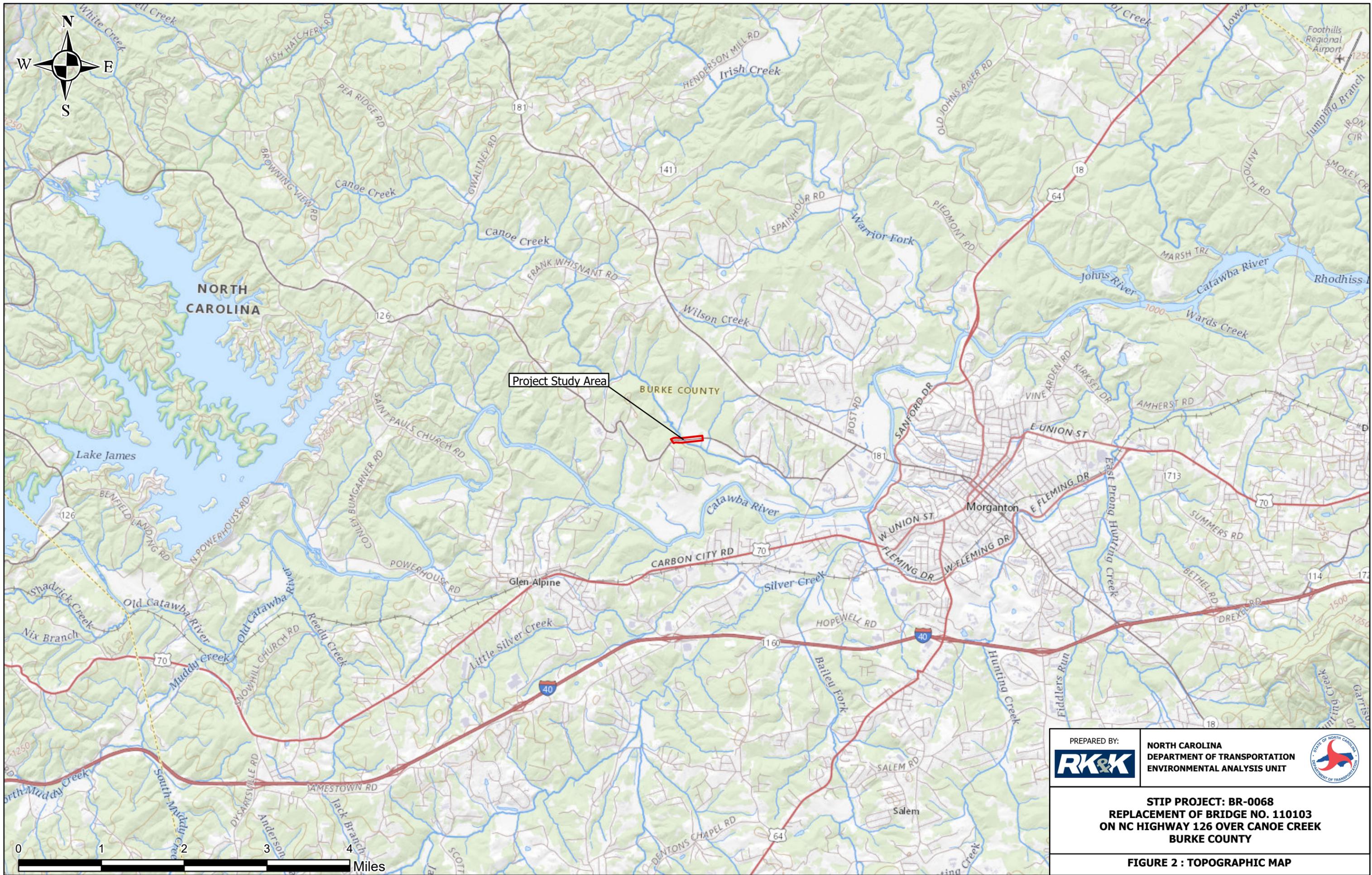
PREPARED BY:  
**RK&K**

**NORTH CAROLINA**  
 DEPARTMENT OF TRANSPORTATION  
 ENVIRONMENTAL ANALYSIS UNIT



**STIP PROJECT: BR-0068**  
**REPLACEMENT OF BRIDGE NO. 110103**  
**ON NC HIGHWAY 126 OVER CANOE CREEK**  
**BURKE COUNTY**

**FIGURE 1: VICINITY MAP**



PREPARED BY:  
**RK&K**

**NORTH CAROLINA**  
 DEPARTMENT OF TRANSPORTATION  
 ENVIRONMENTAL ANALYSIS UNIT



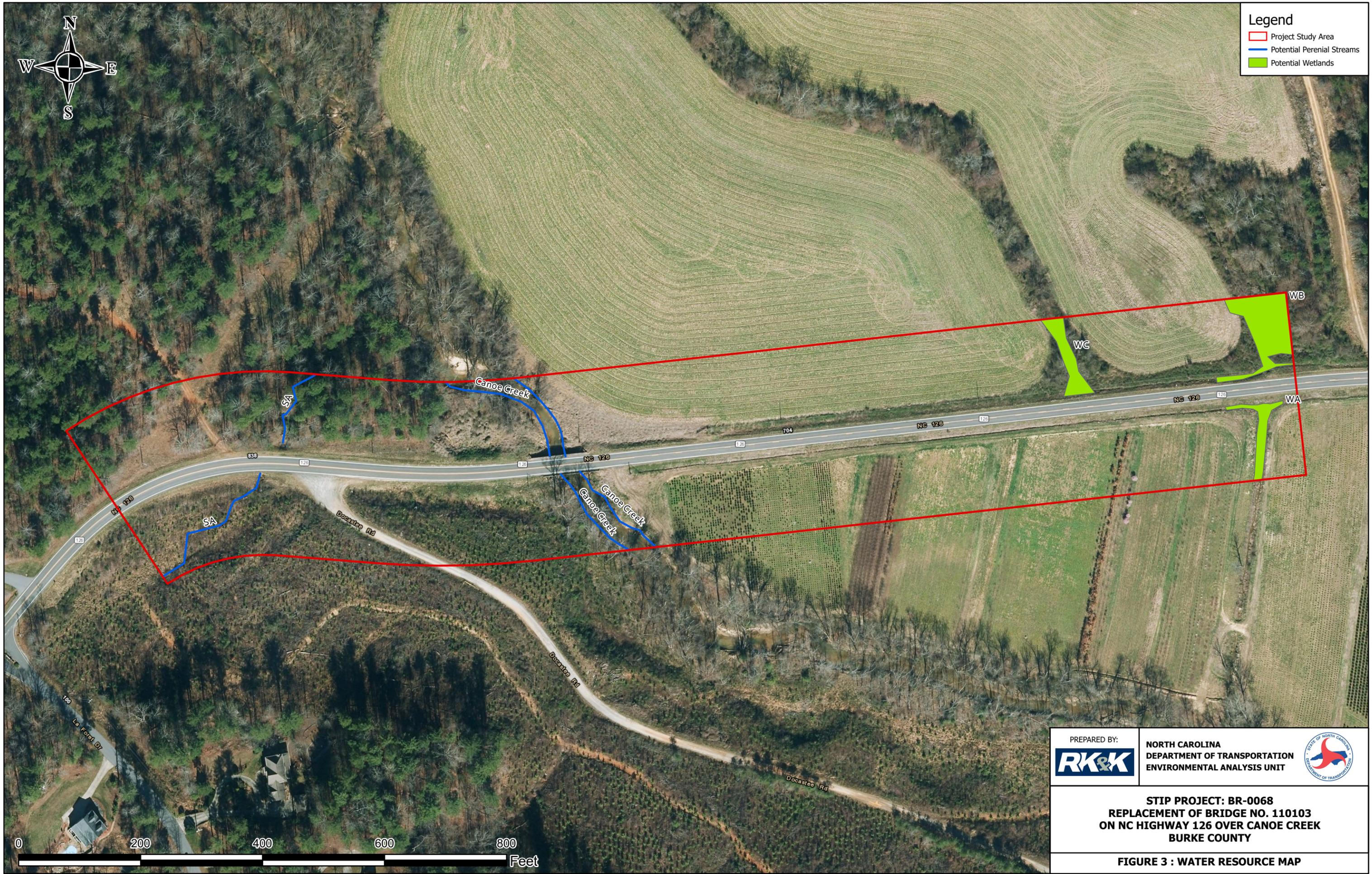
**STIP PROJECT: BR-0068**  
**REPLACEMENT OF BRIDGE NO. 110103**  
**ON NC HIGHWAY 126 OVER CANOE CREEK**  
**BURKE COUNTY**

**FIGURE 2 : TOPOGRAPHIC MAP**



**Legend**

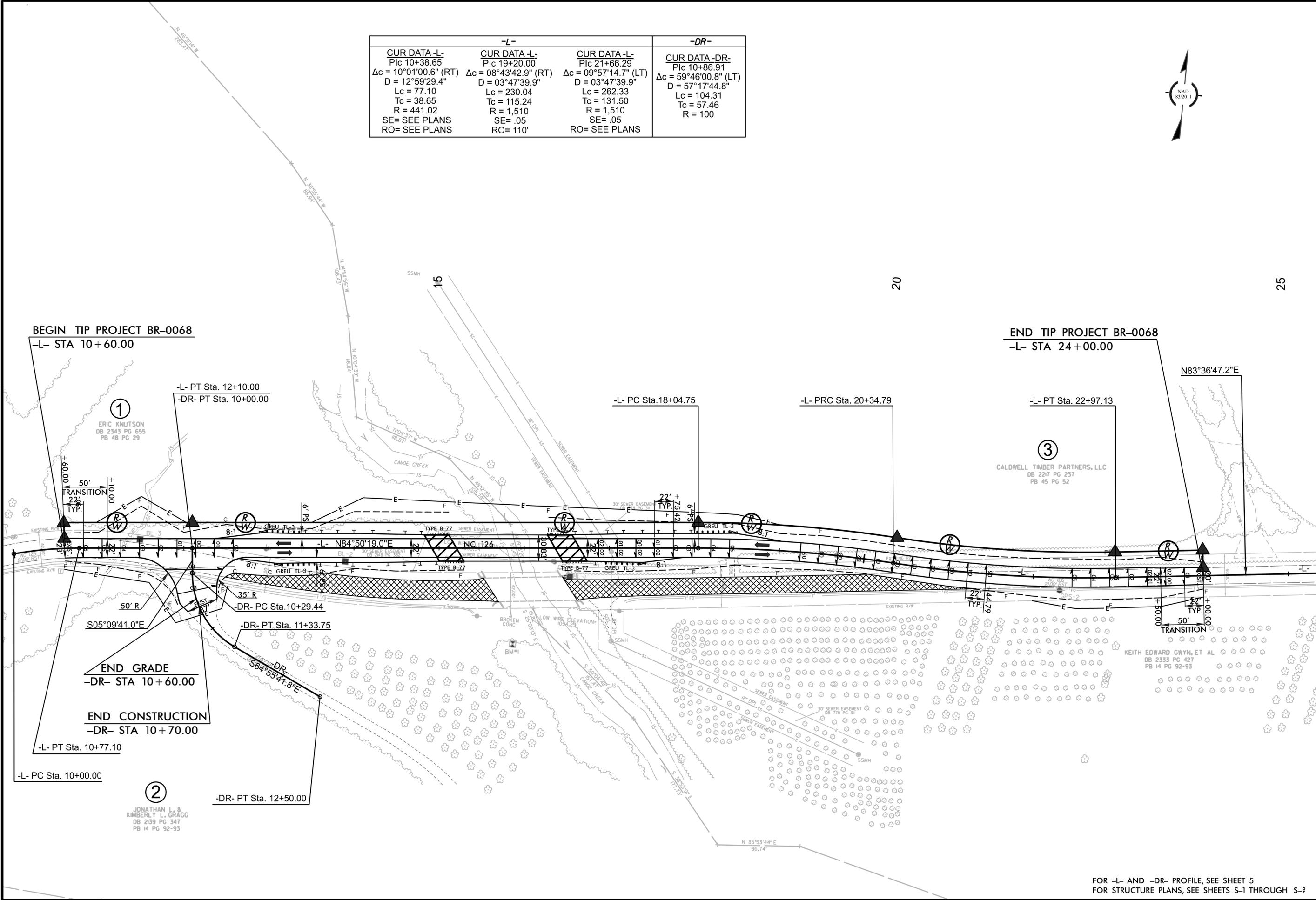
-  Project Study Area
-  Potential Perennial Streams
-  Potential Wetlands



PREPARED BY: 	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION ENVIRONMENTAL ANALYSIS UNIT 
<b>STIP PROJECT: BR-0068 REPLACEMENT OF BRIDGE NO. 110103 ON NC HIGHWAY 126 OVER CANOE CREEK BURKE COUNTY</b>	
<b>FIGURE 3 : WATER RESOURCE MAP</b>	



-L-		-DR-	
CUR DATA -L- P/c 10+38.65 $\Delta c = 10^{\circ}01'00.6''$ (RT) D = 12°59'29.4" Lc = 77.10 Tc = 38.65 R = 441.02 SE= SEE PLANS RO= SEE PLANS	CUR DATA -L- P/c 19+20.00 $\Delta c = 08^{\circ}43'42.9''$ (RT) D = 03°47'39.9" Lc = 230.04 Tc = 115.24 R = 1,510 SE= .05 RO= 110'	CUR DATA -L- P/c 21+66.29 $\Delta c = 09^{\circ}57'14.7''$ (LT) D = 03°47'39.9" Lc = 262.33 Tc = 131.50 R = 1,510 SE= .05 RO= SEE PLANS	CUR DATA -DR- P/c 10+86.91 $\Delta c = 59^{\circ}46'00.8''$ (L) D = 57°17'44.8" Lc = 104.31 Tc = 57.46 R = 100



REVISIONS

# **APPENDIX B**

## **Reference Letters**

## Reference Links

### **Natural Resources Technical Report**

[NRTR Document](#)

### **United Keetoowah Band**

[UKB Comments](#)

### **Fonta Flora State Trail Master Plan**

[FFST Master Plan Document](#)

### **United States Environmental Protection Agency (EPA) Region 4**

[U.S EPA Region 4 Comments](#)

### **The Cherokee Nation**

[Cherokee Nation Comments](#)

### **North Carolina Department of Environmental Quality**

[NCDEQ Comments](#)

### **United States Department of the Interior**

[USFWS Comments](#)

### **Foothills Conservancy**

[Foothills Conservancy Coordination](#)

### **Archaeology**

[No National Register Eligible or Listed Archaeological Sites Present or Affected](#)

### **Architecture**

[Historic Architecture and Landscapes No Survey Required Form](#)

### **Direct and Indirect Screening Tool**

[Final DIST Document](#)