STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

May 6, 2026

DANIEL H. JOHNSON
SECRETARY

U. S. Army Corps of Engineers
Water Resources Development Act (WRDA)
Transportation Permitting Branch

NC Division of Water Resources
Transportation Permitting Branch

ATTN: NCDOT Coordinator

NCDOT Coordinator

Subject: Application for: **Section 404 Permit and 401 Water Quality Certification** as the result of **Hurricane Helene** for the **Replacement of Bridge 139** over **North Fork Ivy Creek** on SR 2171 (Poverty Branch Road) in **Buncombe County**, Division 13, WBS DF18313.2011356.PR

Dear NCDOT Coordinators:

The North Carolina Department of Transportation (NCDOT) proposes the following project as the result of damage caused by Hurricane Helene in September 2024: Restoration of Bridge 139 over North Fork Ivy Creek.

Approvals Requested:

404 Nationwide Permit 3. Notification required due to 1) Greater than 0.008 acre of impacts other than temporary dewatering in a Designated Trout Watershed, and 2) A biological conclusion other than "No Effect"

401 General Certification 8562 Written authorization not required/ for the record only.

FEMA is the lead federal agency for this project.

Brief Damage Summary and Current Temporary/ Emergency Structure:

The previous 36-foot long, single-span bridge collapsed due to the storm. A temporary 90-foot long rail-car bridge is currently serving SR 2171 downstream of the previous bridge.

Proposed Replacement:
A new single-span, 55-foot-long bridge will replace the damaged bridge, in the same location.
The existing temporary bridge will continue to serve as temporary on-site detour during construction.

Avoidance and Minimization:
-The new bridge will be longer, increasing the hydraulic opening and accommodating floodplain connectivity.
-The proposed bridge will have no direct discharge into the creek.
-Stormwater runoff is discharged as far away from the stream and at the lowest velocities practicable.
-Bank stabilization is proposed to stabilize the stream banks.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

Telephone: (919) 707-6000
Customer Service: 1-877-368-4968
Website: www.ncdot.gov

Location:
1000 BIRCH RIDGE DRIVE
RALEIGH NC 27610

Proposed Activities in Streams:

Impact Site	Impact Category	Permanent Fill	Bank Stabilization	Temporary Impacts	Permit Proposed/ Impact Description
Site 1 **North Fork Ivy Creek**	Maintenance Exemption	--	--	--	--
	Non-Notifying	--	--	--	--
	Notification Required (Not After the fact)	--	72 lf 0.017 ac	--	Bank stabilization will be required to stabilize the banks.
		--	--	93 lf (0.026 ac)	Temporary dikes are required to dewater the banks to allow for upland excavation to accommodate the longer bridge.
	Notification Required (After the fact)	--	--	--	--
	Totals:	--	**72 lf 0.017 ac**	**93 lf 0.026 ac**	**Note, 72 lf of the temporary impacts are coincident to the permanent impacts.**

The information above is provided in accordance with the "U.S. Army Corps of Engineers, Wilmington District's Information for Hurricane Helene Recovery and Repair Work Conducted by the North Carolina Department of Transportation in Waters of the U.S." dated February 10, 2025.

Bridge Before:

Bridge after:

(PAR) bridge failure at end bent 1 north end

Endangered Species Act
Protected Species listed from IPaC[1] as of the date of this application:

Common Name	Habitat Present	Survey Dates	Proposed Biological Conclusion	FWS Concurrence Remarks
Gray bat	Yes	n/a	May Affect, Likely to Adversely Affect	Attached
Northern long-eared bat	Yes	n/a	May Affect, Likely to Adversely Affect	Attached
Tricolored bat	Yes	n/a	May Affect, Likely to Adversely Affect	Attached
Bog Turtle[2]	n/a	n/a	n/a	n/a
Eastern hellbender (Proposed)[3]	n/a	n/a	n/a	n/a
Monarch butterfly (Proposed)[3]	n/a	n/a	n/a	n/a

1 IPaC – Information for Planning and Consultation (US Fish and Wildlife Service)
2 Similarity of Appearance (Threatened); A species that is threatened due to similarity of appearance with another listed species
and is listed for its protection.
3 Due to the recent listings of Eastern hellbender and monarch butterfly within the proposed action area, NCDOT does not have complete information at this time. It is anticipated that construction will be complete by the timeframes proposed for full listing, should the species be formally listed.

Historic Resources Summary (documentation included)

106 Topic	Findings	
Historic Architecture	No Adverse Effects	
Archaeology	No Surveys Required	
Tribal Coordination	**Tribe**	**Response**
Tribal Coordination Letters were sent to the following Tribes on March 17, 2026:	Catawba Indian Nation	No response received
	Eastern Band of Cherokee Indians	No response received
	Muscogee (Creek) Nation	No response received
	Cherokee Nation	No response received
	United Keetoowah Band of Cherokee Indians in Oklahoma	No response received

If you have any questions or need additional information, please contact Michael Turchy, at maturchy@ncdot.gov or (919) 707-6157.

Sincerely,

Digitally signed by Michael Turchy

Michael A. Turchy
Environmental Coordination and Permitting Group Leader

ePCN

U.S. Army Corps of Engineers (USACE)

NATIONWIDE PERMIT PRE-CONSTRUCTION NOTIFICATION (PCN)

For use of this form, see 33 CFR 330; the proponent agency is CECW-CO-R.

Form Approved - OMB No. 0710-0003
Expires: 2027-10-31

DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Regulatory Program of the Corps of Engineers (Corps); Final Rule 33 CFR 320-332.

Principal Purpose Information provided on this form will be used in evaluating the nationwide permit pre-construction notification.

Routine Uses This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of the agency coordination process.

Disclosure Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can

The public reporting burden for this collection of information, 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PLEASE DO NOT RETURN YOUR RESPONSE TO THE ABOVE EMAIL.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (*see sample drawings and/or instructions*) and be submitted to the district engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
		05/06/2026	

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE (*agent is not required*)
First – Michael Middle – Last – Turchy	First – Middle – Last –
Company –	Company –
Company Title –	E-mail Address –
E-mail Address – maturchy@ncdot.gov	
6. APPLICANT'S ADDRESS	9. AGENT'S ADDRESS
Address – 1000 Birch Ridge Dr	Address –
City – Raleigh State – NC ZIP – 27610 Country – US	City – State – ZIP – Country –
7. APPLICANT'S PHONE NOs. with AREA CODE	10. AGENT'S PHONE NOs. with AREA CODE
a. Business b. c. Fax	a. b. c. Fax
+19197076157	

STATEMENT OF AUTHORIZATION

11. I hereby authorize, to act in my behalf as my agent in the processing of this nationwide permit pre-construction notification and to furnish, upon request, supplemental information in support of this nationwide permit pre-construction notification.

SIGNATURE OF APPLICANT DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME or TITLE (*see instructions*)

NCDOT / Helene Bridge 139 / North Fork Ivy Creek / Poverty Branch Road (SR 2171) / Buncombe / Div 13 / DF18313.2011356.PR

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

13. NAME OF WATERBODY, IF KNOWN (*if applicable*)

14. PROPOSED ACTIVITY STREET ADDRESS (*if applicable*)

Address: Poverty Branch Rd

City: Barnardsville State: NC Zip: 28709

15. LOCATION OF PROPOSED ACTIVITY (*see instructions*)

Latitude: 35.77884 °N Longitude: -82.455644 °W

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (*see instructions*)

Section – Township – Range –

County – Buncombe County Project Area – 5 Acres State Tax Parcel ID –

17. DIRECTIONS TO THE SITE

18. IDENTIFY THE SPECIFIC NATIONWIDE PERMIT(S) YOU PROPOSE TO USE

NWP 3 Maintenance

19. DESCRIPTION OF PROPOSED NATIONWIDE PERMIT ACTIVITY (*see instructions*)

NCDOT proposes the Replacement of Bridge 139 over North Fork Ivy Creek on Poverty Branch Road (SR 2171) in Buncombe County, Division 13, WBS DF18313.2011356.PR, due to Hurricane Helene.
State Department of Transportation/ Bridge Replacement Project

20. DESCRIPTION OF PROPOSED MITIGATION MEASURES (*see instructions*)

-The new bridge will be longer, increasing the hydraulic opening and accommodating floodplain connectivity.
-The proposed bridge will have no direct discharge into the creek.
-Stormwater runoff is discharged as far away from the stream and at the lowest velocities practicable.
-Bank stabilization is proposed to stabilize the stream banks.

21. PURPOSE OF NATIONWIDE PERMIT ACTIVITY (*Describe the reason or purpose of the project, see instructions*)

To restore a transportation facility (bridge) damaged or destroyed by Hurricane Helene.

22. QUANTITY OF WETLANDS, STREAMS, OR OTHER TYPES OF WATERS DIRECTLY AFFECTED BY PROPOSED NATIONWIDE PERMIT ACTIVITY (*see instructions*)

Acres | Linear Feet | Cubic Yards Dredged or Discharged

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site.

25. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. (*see instructions*)

26. If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and/or the loss of greater than 3/100-acre of stream bed and requires pre-construction notification, explain how the compensatory mitigation requirement in paragraph (c) and/or paragraph (d) of general condition 23 will be satisfied, or explain why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required for the proposed activity.

27. Is any portion of the nationwide permit activity already complete? ☐ Yes ☑ No

If Yes, describe the completed work:

28. List the name(s) of any species listed as endangered or threatened under the Endangered Species Act that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. (*see instructions*)

Eastern Hellbender,Gray bat,Monarch butterfly,Northern Long-Eared Bat,Tricolored bat
ADDITIONAL AFFECTED SPECIES:
gray bat, northern long-eared bat, tricolored bat: May Affect, Likely to Adversely Affect.
bog turtle, eastern hellbender, monarch butterfly: n/a
See attached Section 7 documentation.

29. List any historic properties that have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic property or properties. (*see instructions*)

<<<<<Historic Architecture: Effects Determination Required.>>>>>>
Archaeology: No Surveys required.
See attached section 106 documentation.

30. For a proposed NWP activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, identify the Wild and Scenic River or the "study river":

31. If the proposed NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, have you submitted a written request for section 408 permission from the Corps district having jurisdiction over that project? ☐ Yes ☑ No

If "yes", please provide the date your request was submitted to the Corps district:

32. If the terms of the NWP(s) you want to use require additional information to be included in the PCN, please include that information in this space or provide it on an additional sheet of paper marked Block 30. (*see instructions*)

33. Pre-construction notification is hereby made for one or more nationwide permit(s) to authorize the work described in this notification. I certify that the information in this pre-construction notification is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

Michael Turchy	05/06/2026		
SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE

The pre-construction notification must be signed by the person who desires to undertake the proposed activity (applicant) and, if the statement in Block 11 has been filled out and signed, the authorized agent.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

Instructions for Preparing a

Department of the Army

Nationwide Permit (NWP) Pre-Construction Notification (PCN)

Blocks 1 through 4. To be completed by the Corps of Engineers.

Block 5. Applicant's Name. Enter the name and the e-mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the preconstruction notification, please attach a sheet of paper with the necessary information marked Block 5.

Block 6. Address of Applicant. Please provide the full address of the party or parties responsible for the PCN. If more space is needed, attach an extra sheet of paper marked Block 6.

Block 7. Applicant's Telephone Number(s). Please provide the telephone number where you can usually be reached during normal business hours.

Blocks 8 through 11. To be completed, if you choose to have an agent.

Block 8. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, consultant, or any other person or organization. Note: An agent is not required.

Blocks 9 and 10. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

Block 11. Statement of Authorization. To be completed by the applicant, if an agent is to be employed.

Block 12. Proposed Nationwide Permit Activity Name or Title. Please provide a name identifying the proposed NWP activity, e.g., Windward Marina, Rolling Hills Subdivision, or Smith Commercial Center.

Block 13. Name of Waterbody. Please provide the name (if it has a name) of any stream, lake, marsh, or other waterway to be directly impacted by the NWP activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14. Proposed Activity Street Address. If the proposed NWP activity is located at a site having a street address (not a box number), please enter it in Block 14.

Block 15. Location of Proposed Activity. Enter the latitude and longitude of where the proposed NWP activity is located. Indicate whether the project location provided is the center of the project or whether the project location is provided as the latitude and longitude for each of the "corners" of the project area requiring evaluation. If there are multiple sites, please list the latitude and longitude of each site (center or corners) on a separate sheet of paper and mark as Block 15.

Block 16. Other Location Descriptions. If available, provide the Tax Parcel Identification number of the site, Section, Township, and Range of the site (if known), and / or local Municipality where the site is located.

Block 17. Directions to the Site. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site. You may also provide a description of the location of the proposed NWP activity, such as lot numbers, tract numbers, or you may choose to locate the proposed NWP activity site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed NWP activity site if known. If there are multiple locations, please indicate directions to each location on a separate sheet of paper and mark as Block 17.

Block 18. Identify the Specific Nationwide Permit(s) You Propose to Use. List the number(s) of the Nationwide Permit(s) you want to use to authorize the proposed activity (e.g., NWP 29).

Block 19. Description of the Proposed Nationwide Permit Activity. Describe the proposed NWP activity, including the direct and indirect adverse environmental effects the activity would cause. The description of the proposed activity should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal. Identify the materials to be used in construction, as well as the methods by which the work is to be done.

Provide sketches when necessary to show that the proposed NWP activity complies with the terms of the applicable NWP(s). Sketches usually clarify the activity and result in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed NWP activity (e.g.,a conceptual plan), but do not need to be detailed engineering plans.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 19.

Block 20. Description of Proposed Mitigation Measures. Describe any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed NWP activity. The description of any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or additional mitigation measures.

Block 21. Purpose of Nationwide Permit Activity. Describe the purpose and need for the proposed NWP activity. What will it be used for and why? Also include a brief description of any related activities associated with the proposed project. Provide the approximate dates you plan to begin and complete all work.

Block 22. Quantity of Wetlands, Streams, or Other Types of Waters Directly Affected by the Proposed Nationwide Permit Activity. For discharges of dredged or fill material into waters of the United States, provide the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained by the proposed NWP activity. For structures or work in navigable waters of the United States subject to Section 10 of the Rivers and Harbors Act of 1899, provide the amount of navigable waters filled, dredged, or occupied by one or more structures (e.g., aids to navigation, mooring buoys) by the proposed NWP activity.

For multiple NWPs, or for separate and distant crossings of waters of the United States authorized by NWPs 12 or 14, attach an extra sheet of paper marked Block 21 to provide the quantities of wetlands, streams, or other types of waters filled, flooded, excavated, or drained (or dredged or occupied by structures, if in waters subject to Section 10 of the Rivers and Harbors Act of 1899) for each NWP. For NWPs 12 and 14, include the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained for each separate and distant crossing of waters or wetlands. If more space is needed, attach an extra sheet of paper marked Block 22.

Block 23. Identify Any Other Nationwide Permit(s), Regional General Permit(s), or Individual Permit(s) Used to Authorize Any Part of Proposed Activity or Any Related Activity. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. For linear projects, list other separate and distant crossings of waters and wetlands authorized by NWPs 12 or 14 that do not require PCNs. If more space is needed, attach an extra sheet of paper marked Block 23.

Block 24. Compensatory Mitigation Statement for Losses of Greater Than 1/10-Acre of Wetlands and/or of Greater Than 3/100-Acre of Stream Bed When Pre-Construction Notification is Required. Paragraphs (c) and (d) of NWP general condition 23 require compensatory mitigation at a minimum one-for-one replacement ratio for all wetland losses that exceed 1/10-acre and/or for all losses of stream bed that exceed 3/100-acre, unless the district engineer determines in writing that either some other form of mitigation is more environmentally appropriate or the adverse environmental effects of the proposed NWP activity are no more than minimal without compensatory mitigation, and provides an activity-specific waiver of this requirement. Describe the proposed compensatory mitigation for wetland losses greater than 1/10 acre and/or for losses of stream bed that exceed 3/100-acre, or provide an explanation of why the district engineer should not require wetland and/or stream compensatory mitigation for the proposed NWP activity. If more space is needed, attach an extra sheet of paper marked Block 24.

Block 25. Is Any Portion of the Nationwide Permit Activity Already Complete? Describe any work that has already been completed for the NWP activity.

Block 26. List the Name(s) of Any Species Listed As Endangered or Threatened under the Endangered Species Act that Might be Affected by the Nationwide Permit Activity. If you are not a federal agency, and if any listed species or designated critical habitat might be affected or is in the vicinity of the proposed NWP activity, or if the proposed NWP activity is located in designated critical habitat, list the name(s) of those endangered or threatened species that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 7 of the Endangered Species Act.

Block 27. List Any Historic Properties that Have the Potential to be Affected by the Nationwide Permit Activity. If you are not a Federal agency, and if any historic properties have the potential to be affected by the proposed NWP activity, list the name(s) of those historic properties that have the potential to be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

Block 28. List the Wild and Scenic River or Congressionally Designated Study River if the Nationwide Permit Activity Would Occur in such a River. If the proposed NWP activity will occur in a river in the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" under the Wild and Scenic Rivers Act, provide the name of the river. For a list of Wild and Scenic Rivers and study rivers, please visit http://www.rivers.gov/.

Block 29. Nationwide Permit Activities that also Require Permission from the Corps Under 33 U.S.C. 408. If the proposed NWP activity also requires permission from the Corps under 33 U.S.C. 408 because it will temporarily or permanently alter, occupy, or use a Corps federal authorized civil works project, indicate whether you have submitted a written request for section 408 permission from the Corps district having jurisdiction over that project.

Block 30. Other Information Required For Nationwide Permit Pre Construction Notifications. The terms of some of the Nationwide Permits include additional information requirements for preconstruction notifications:

* NWP 3, Maintenance –information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals.
* NWP 31, Maintenance of Existing Flood Control Facilities –a description of the maintenance baseline and the dredged material disposal site.
* NWP 33, Temporary Construction, Access, and Dewatering –a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre project conditions.
* NWP 44, Mining Activities –if reclamation is required by other statutes, then a copy of the final reclamation plan must be submitted with the pre construction notification.
* NWP 45, Repair of Uplands Damaged by Discrete Events –documentation, such as a recent topographic survey or photographs, to justify the extent of the proposed restoration.
* NWP 48, Commercial Shellfish Aquaculture Activities –(1) a map showing the boundaries of the project area, with latitude and longitude coordinates for each corner of the project area; (2) the name(s) of the species that will be cultivated during the period this NWP is in effect; (3) whether canopy predator nets will be used; (4) whether suspended cultivation techniques will be used; and (5) general water depths in the project area (a detailed survey is not required).
* NWP 49, Coal Remining Activities –a document describing how the overall mining plan will result in a net increase in aquatic resource functions must be submitted to the district engineer and receive written authorization prior to commencing the activity.
* NWP 50, Underground Coal Mining Activities –if reclamation is required by other statutes, then a copy of the reclamation plan must be submitted with the pre construction notification.

If more space is needed, attach an extra sheet of paper marked Block 30.

Block 31. Signature of Applicant or Agent. The PCN must be signed by the person proposing to undertake the NWP activity, and if applicable, the authorized party (agent) that prepared the PCN. The signature of the person proposing to undertake the NWP activity shall be an affirmation that the party submitting the PCN possesses the requisite property rights to undertake the NWP activity (including compliance with special conditions, mitigation, etc.).

DELINEATION OF WETLANDS, OTHER SPECIAL AQUATIC SITES, AND OTHER WATERS

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current wetland delineation manual and regional supplement published by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. The 45 day PCN review period will not start until the delineation is submitted or has been completed by the Corps.

DRAWINGS AND ILLUSTRATIONS

General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross Section Map. Identify each illustration with a figure or attachment number. For linear projects (e.g. roads, subsurface utility lines, etc.) gradient

drawings should also be included. Please submit one original, or good quality copy, of all drawings on 8½x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations. Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross section). While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.

ADDITIONAL INFORMATION AND REQUIREMENTS

For proposed NWP activities that involve discharges into waters of the United States, water quality certification from the State, Tribe, or EPA must be obtained or waived (see NWP general condition 25). Some States, Tribes, or EPA have issued water quality certification for one or more NWPs. Please check the appropriate Corps district web site to see if water quality certification has already been issued for the NWP(s) you wish to use. For proposed NWP activities in coastal states, state Coastal Zone Management Act consistency concurrence must be obtained, or a presumption of concurrence must occur (see NWP general condition 26). Some States have issued Coastal Zone Management Act consistency concurrences for one or more NWPs. Please check the appropriate Corps district web site to see if Coastal Zone Management Act consistency concurrence has already been issued for the NWP(s) you wish to use.

Appendix B. Aquatic Resource Inventory:

Aquatic Resource Name	*State*	*Cowardin System*	*Cowardin Class*	*HGM Class*	*Local Waterway Name*	*Measurement Type*	*Measurement Amount*	*Measurement Units*	*Waters Type*	*Latitude*	*Longitude*
North Fork Ivy Creek	NORTH CAROLINA	RIVERINE	R1-RIVERINE, TIDAL		North Fork Ivy Creek	Linear	200	FOOT	DELIN.NOJD-404	35.77884	-82.455644

Appendix C. Impact Inventory:

Water Name	*Impact Name*	*Activity*	*Type of Material Being Discharged*	*Resource Type*	*Permanent Loss (Y/N)*	*Impact Duration*	*Amount Type*	*Proposed Length*	*Proposed Width*	*Proposed Amount*	*Amount Units*
North Fork Ivy Creek	Bank Stabilization	Discharge of fill material	Riprap	River/Stream	No	Permanent	Fill Area	72	10	720	Square Feet
North Fork Ivy Creek	Temporary dikes for bank dewatering	Discharge of fill material	Riprap	River/Stream	No	Temporary	Fill Area	93	12	1116	Square Feet

Provide any additional information you may have about the proposed quantity of wetlands, streams, or other types of waters directly affected by the proposed activity. This level of detail is helpful to better understand the type of impacts that are proposed for your project.

North Fork Ivy Creek will require 72 lf of bank stabilization to stabilize banks.

There will be 93 lf of temporary impacts as temporary dikes are required to dewater the banks to allow for upland excavation to accommodate the longer bridge.

Appendix H. Supporting Information:

Document Type	*Document Created Date (YYYY-MM-DD)*	*Document Label*	*Information Source/Citation*	*Uploaded file name*
Historic Properties Cultural Resources Information	2025-05-06	No NRHP Eligible or Listed Archaeological Sites Present	NCDOT	Buncombe 139 - 2025-05-06 No NRHP Eligible or Listed Archaeological Sites Present.pdf
Threatened Endangered Species Report	2025-09-04	USFWS Concurrence	USFWS/NCDOT	Buncombe 139 - 2025-09-04 USFWS Concurrence.pdf
Historic Properties Cultural Resources Information	2026-02-26	Assessment of Effects	NCDOT	Buncombe 139 - 2026-02-26 HAL - Assessment of Effects.pdf
Historic Properties Cultural Resources Information	2026-03-17	Tribal Coordination	NCDOT	Buncombe 139 - 2026-03-17 - Tribal Coordination.pdf
Project Plans	2026-04-21	Permit Drawings	NCDOT	Buncombe 139 - 2026-04-21 Permit Drawings.pdf
Other Information	2026-05-05	Cover Letter/ Additional Information	NCDOT	Buncombe 139 - 2026-05-06 Application Cover Letter.pdf

U.S. Army Corps of Engineers (USACE)

PERMIT INFORMATION SHEET

PERMIT FORM TYPE	DATE RECEIVED
ENG 6082	05/06/2026

TYPE OF PERMIT YOU'RE REQUESTING

☐ Standard ☐ Letter Of Permission ☑ General Permit

APPLICABLE STATUTORY AUTHORITY

☑ Section 404 Clean Water Act ☐ Section 10 Rivers and Harbors Act

☐ Section 103 of the Marine Protection, Research, and Sanctuaries Act

DO YOU PROPOSE COMPENSATORY MITIGATIONS?

No

COASTAL DISTRICT

WOULD THE PROJECT OCCUR IN THE TERRITORIAL SEAS OR OCEAN WATERS?

No

DESCRIBE THE ACTIVITY'S RELATIONSHIP TO THE BASELINE FROM WHICH THE TERRITORIAL SEA IS MEASURED

SECTION 408 USACE CIVIL WORKS PROJECTS

WILL THE PROPOSED ACTIVITY REQUIRES PERMISSION FROM THE USACE PURSUANT TO 33 U.S.C. 408 BECAUSE IT WILL ALTER OR TEMPORARILY OR PERMANENTLY OCCUPY OR USE A U.S. ARMY CORPS OF ENGINEERS FEDERALLY AUTHORIZED CIVIL WORKS PROJECT?

☐ Yes ☑ No ☐ I'm not sure

IF YES, HAVE YOU SUBMITTED A WRITTEN REQUEST FOR SECTION 408 PERMISSION FROM THE USACE DISTRICT HAVING JURISDICTION OVER THAT PROJECT?

☐ Yes ☑ No

GENERAL PERMIT INFORMATION

WILL THE PROPOSED ACTIVITY RESULT IN A LOSS TO WETLANDS OR WATERS THAT EXCEEDS NATIONAL OR DISTRICT THRESHOLDS?

No

U.S. Army Corps of Engineers (USACE)

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT – PARTNER APPENDIX

For use of this form, see 33 CFR 325. The proponent agency is CECW-COR.

AUTHORITIES: The Department of Army Corps of Engineers (Corps) and partner entities have established a joint process for activities impacting jurisdictional waterways that require review and/or approval of both the Corps and its partners. Department of Army permits are required by Section 10 of the Rivers & Harbors Act of 1899 for any structure(s) or work in or affecting navigable waters of the United States and by Section 404 of the Clean Water Act for the discharge of dredged or fill materials into waters of the United States, including adjacent wetlands. This supplemental information is provided to the partner entity along with the standard regulatory forms.

PARTNER INFORMATION

ORGANIZATION:	**PARTNER ID:**	**NAME AND CODE:**
NC Division of Water Resources (DWR)		**Form Name**: NATIONWIDE/GENERAL/INDIVIDUAL PERMIT - DWR 401 Application Form NC Division of Water Resources Application Information **Form Code**: NCDWR 401

In North Carolina, many activities covered by Nationwide and Regional General Permits, as well as Individual Permits, also require a 401 Water Quality Certification from the Division of Water Resources. To streamline the application process for both the U.S. Army Corps of Engineers (USACE) and the North Carolina Division of Environmental Quality (NCDEQ) - Division of Water Resources (DWR), we have collaborated on this joint application form.

This joint application form serves to fulfill reporting requirements for both agencies under Sections 401 and 404 of the Clean Water Act, and Section 10 of the Rivers and Harbor Act of 1899, for specific activities permitted through Nationwide Permits (NWPs), Regional General Permits (RGPs), and Individual Permits. The RRS is now the preferred method for submitting application information for these permits.

For questions, please contact the USACE at (910) 251-4633.

The Wilmington District and the North Carolina Department of Environmental Quality (NCDEQ) have collaborated to develop a Joint Permit Application (JPA) within the Regulatory Request System (RRS) for use with Nationwide Permits (NWP) and Regional General Permits (RGP), as well as, Individual Permits. This system functions similarly to previous versions of the Pre-Construction Notification form (also known as e-PCN). The RRS is an online platform that enables applicants to electronically upload and submit all required information to the reviewing agencies.

The RRS JPA fulfills the application and reporting requirements for both the U.S. Army Corps of Engineers (USACE) and NCDEQ for activities authorized under Sections 401 and 404 of the Clean Water Act, as well as Section 10 of the Rivers and Harbors Act of 1899.

Projects that fall within the North Carolina Division of Coastal Manangement (NCDCM) review area, will need to coordinate their application with NCDCM directly. To learn more, visit the [NCDCM website](https://www.deq.nc.gov/about/divisions/division-coastal-management).

USACE/NCDWR Joint Application Form for Nationwide Permits, Regional General Permits, and Individual Permits (along with corresponding Water Quality Certifications)

PLEASE NOTE: THE SYSTEM IS STILL UNDER DEVELOPMENT, AND DATA CURRENTLY DOES NOT TRANSMIT ELECTRONICALLY TO NCDEQ'S DIVISION OF WATER RESOURCES (DWR). UNTIL FURTHER NOTICE, APPLICANTS MUST SUBMIT COMPLETED RRS JPA DOCUMENTS THROUGH [NCDEQ'S "PROJECT SUBMITTAL INTERIM FORM" WEBSITE](https://edocs.deq.nc.gov/Forms/Supplemental-Information-Form).
[Additional Instructions](https://edocs.deq.nc.gov/WaterResources/Browse.aspx?dbid=0&startid=3890140)

SUPPLEMENTAL INFORMATION COLLECTED

ADDITIONAL CONTACT INFORMATION - Property Owner

- Is the owner the same as the applicant?
  - Yes

- Provide Primary Property Owner information
    - Please see the JPA_ContactReport.xlsx to review the provided contact data.

- Provide Additional Property Owner information
    - Please see the JPA_ContactReport.xlsx to review the provided contact data.

PROCESSING INFORMATION -

- Does the project involve maintenance dredging funded by the Shallow Draft Navigation Channel Dredging and Aquatic Weed Fund OR involve the distribution or transmission of energy or fuel (including natural gas, diesel, petroleum, or electricity)?
    - No

- Is this project connected with (American Rescue Plan Act) ARPA funding or S.L. 2023-134 (earmark)?
    - No

- Please select:
    - Not Applicable (Question not presented)

- Please provide the DWI ARPA Funding Project Number (ie: SRP-W-ARP-1234 or SRP-W-134-1234):
  *The DWI Funding Project number can be located on the "Letter of Intent to Fund" (LOIF) or "Offer and Acceptance Letter". If you do not know your DWI project #, please contact your DWI project manager or fund recipient (e.g., LGU).
    - Not Applicable (Question not presented)

- Is this a NC Division of Mitigation Services (NCDMS) Project? Note - Select Yes only if NCDMS is the applicant/co-applicant.
    - No

- Is this project a public transportation project?
    - Yes

- Is this a NC Department of Transportation (NCDOT) project?
    - Yes

- (NCDOT only) T.I.P. (Transportation Improvement Program) or state project number:
    - Not Applicable (Question not presented)

- (NCDOT only) WBS #
    - DF18313.2011356.PR

- Application for NC Division of Water Resources (DWR) Certification.
  Type(s) of approval sought from the DWR? (Select all that apply)
    - 401 Water Quality Certification - Courtesy Copy Only

- Is this a modification OR new project with existing ID?
    - No

- Please provide the DWR ID number.
    - Not Applicable (Question not presented)

- Is the project located in any of NC's twenty coastal counties?
    - No

- Is the project located within a NC Division of Coastal Management (DCM) Area of Environmental Concern (AEC)?
    - Not Applicable (Question not presented)

- Is the project located in a designated trout watershed? [Learn more about Trout](https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Trout.aspx)
    - Yes

- If yes, attach a copy of existing correspondence from the Wildlife Resource Commission Office.
    - Buncombe 139 - 2025-06-30 WRC Scoping Comments.pdf File(s) Uploaded

WATERS DETAILS -

- Name of nearest waterbody? [Surface Water Lookup](https://experience.arcgis.com/experience/7073e9122ab74588b8c48ded34c3df55/)
    - North Fork Ivy Creek

- Does the proposed activity impact perennial or intermittent streams?
    - Yes

- Please ensure that the Aquatic Resource Inventory section includes all perennial and intermittent streams and be sure to identify them with appropriate Cowardin codes.
  (Click the Aquatic Resources Inventory in the menu on the left to navigate to that section.)
  - Use the Cowardin Code "R2 or R3" for perennial. Use Cowardin Code "R4" for intermittent.
  ***IF NO CODE PROVIDED, WATERS WILL BE ASSUMED TO BE PERENNIAL.
    - Not Applicable (Question not presented)

NON-JD IMPACT DETAILS - NOTE: Questions only appear in this section when 'Non-404 Jurisdictional Waters Permit' has been included among the Type(s) of approval sought from the DWR.

- Will the project result in impacts to Non-404 JD waters?
    - Not Applicable (Question not presented)

- Please ensure that the associated Non-404 Jurisdictional Waters have been entered in the Aquatic Resource Inventory section of the Permit Application. Use the Aquatic Resource Type of "DELIN.NOJD-404".
  (Click the "Aquatic Resources Inventory" option in the menu on the left to navigate to that section.)

    - Not Applicable (Question not presented)

BUFFER IMPACTS AND MITIGATION SUMMARY - Additional impacts and mitigation not previously covered in this application: Buffers

- Will project occur in an area subject to state riparian buffer regulations?
    - No

- Will project result in any impacts within a protected riparian buffer?
    - Not Applicable (Question not presented)

- Which protected basin(s) is the project located within?
    - Not Applicable (Question not presented)

- Other Protected Basin
    - Not Applicable (Question not presented)

- Are the buffer regulations implemented by a delegated local government?
    - Not Applicable (Question not presented)

- Please specify which local government.
    - Not Applicable (Question not presented)

- Impact Details
    - Please see the JPA_DynamicTableReport.xlsx to review the provided data.

- Total Temporary Buffer Impacts
    - Not Applicable (Question not presented)

- Total Permanent Buffer Impacts
    - Not Applicable (Question not presented)

- Total Combined Buffer Impacts
    - Not Applicable (Question not presented)

- Will the project result in an impact within a protected riparian buffer that requires buffer mitigation?
    - Not Applicable (Question not presented)

- If yes, you must fill out this entire section - please contact DWR for more information.
  Identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required in the table below.
    - Please see the JPA_DynamicTableReport.xlsx to review the provided data.

- How is buffer mitigation proposed to be met?
    - Not Applicable (Question not presented)

- If payment to mitigation bank or NCDMS, attach a valid statement of availability or DMS acceptance letter. OR Attach mitigation plan for review.
    - Not Applicable (Question not presented)

STORMWATER MANAGEMENT PLAN -

- Does this project disturb >1 acre of land?
    - Yes

- Is this an NCDOT project subject to compliance with NCDOT's Individual NPDES permit NCS000250?
    - Yes

- Is this project subject to review and approval under a state post-construction stormwater program (DEMLR) or state-approved local government stormwater program?
    - Not Applicable (Question not presented)

- What entity has reviewed/is reviewing the Stormwater Management Plan?
    - Not Applicable (Question not presented)

- What is the Stormwater Management Plan status?
    - Not Applicable (Question not presented)

- Does this project meet the requirements for low density projects as defined in 15A NCAC 02H.1003(2)? For details on how Low Density Projects are characterized, click the help icon.
    - Not Applicable (Question not presented)

- For low density projects, submit documentation including built-upon area (BUA) delineation, percent BUA calculations, stormwater drainage plan, and designs for vegetated conveyances.
    - Not Applicable (Question not presented)

- For all High Density projects submit a Stormwater Management Plan that includes stormwater control measures for water quality treatment.
    - Not Applicable (Question not presented)

STORMWATER MANAGEMENT IN BUFFERED BASINS - All stormwater generated from high ground within regulated buffer basins must be in compliance with the stormwater management requirements of the applicable buffer rules.

NOTE: Questions only appear in this section when 'Will project occur in an area subject to state riparian buffer regulations?' is answered Yes.

- Does the project comply with the stormwater management requirements of the applicable buffer rules?
    - Not Applicable (Question not presented)

- Please explain why the project does not comply.
    - Not Applicable (Question not presented)

ENVIRONMENTAL DOCUMENTATION -

- Is an environmental document required under NCEPA (01 NCAC 25 .0100)?
    - Yes

- Has the document review been finalized by the State Clearing House?
    - Yes

- Comments
    - Not Applicable (Question not presented)

- Attach a copy of the SEPA final approval document.
    - Buncombe 139 - 2026-05-05 CE.pdf File(s) Uploaded

VIOLATIONS -

- 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)?
    - No

- Please explain.
    - Not Applicable (Question not presented)

CUMULATIVE IMPACTS -

- Will this project (based on past and reasonably anticipated future impacts) result in additional development?
    - No

- Provide a qualitative or quantitative cumulative impact analysis in accordance with the most recent DWR policy. [Learn more about Cumulative Impact Policy](https://files.nc.gov/ncdeq/Water%20Quality/Surface%20Water%20Protection/401/Policies_Guides_Manuals/CumulativeImpactPolicy.pdf)
    - Not Applicable (Question not presented)

- If not, provide a short narrative description.
    - Repair of bridge damaged during Hurricane Helene.

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[Additional Instructions](https://edocs.deq.nc.gov/WaterResources/Browse.aspx?dbid=0&startid=3890140)

Project Submittal Interim Form

Updated March 16, 2026

*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.*

Project Type: *

- (•) For the Record Only (Courtesy Copy)
- ( ) Modification/New Project with Existing ID
- ( ) Other Agency Comments
- ( ) Re-Issuance\Renewal Request
- ( ) New Project
- ( ) More Information Response
- ( ) Pre-Application Submittal
- ( ) Stream or Buffer Appeal

*** If this is a GP reissuance/renewal please reference the date of the plans and PCN that were originally verified.**

New Project - Please check the new project type if you are trying to submit a new project that needs an official approval decision.

Pre-Application Submittal – Please check the pre-application submittal if you just want feedback on your submittal and do not have the expectation that your submittal will be considered a complete application requiring a formal decision.

Modification/New Project With An Existing ID - Please check this box if you are submitting for a new phase of an existing project, a modification to an existing project or for any additional impacts to an existing project for an official approval decision.

More Information Response - Please check this type if you are responding to a request for information from staff and you have and ID# and version for this response.

Other Agency Comments - Please check this if you are submitting comments on an existing project.

Re-issuance\Renewal Request – Please check this if you are submitting for a re-issuance\renewal prior to expiration date for the corresponding 401/404. If submitting after the expiration date or if modification needed use Modification\New Project with Existing ID option.

Submittal Type: *

Application Attachments

Project Contact Information

Name:

Michael Turchy

Who is submitting the information?

Email Address: *

maturchy@ncdot.gov

Project Information

Project Name: *

NCDOT / Helene Bridge 139 / North Fork Ivy Creek / Poverty Branch Road (SR 2171) / Buncombe / Div 13 / DF18313.2011356.PR

Is this a public transportation project? *

(●) Yes ( ) No

Is this a DOT project? *

(●) Yes ( ) No

TIP#:

WBS#:

DF18313.2011356.PR

(Applies to DOT projects only)

Project Status

(●) Pre-let ( ) Under Construction ( ) Utility Relocation Underway

If you selected "Re-Issuance/Renewal Request" or "Modification/New Project with Existing ID" for your project type at the top of this form, please enter the current status of your project.

Is this application for a project associated with emergency response/repairs from Hurricane Helene impacts to your project or property? *

(●) Yes ( ) No

Is the project located within a NC DCM Area of Environmental Concern (AEC)? *

( ) Yes (●) No ( ) Unknown

Does this project involve maintenance dredging funded by the Shallow Draft Navigation Channel Dredging and Aquatic Weed Fund, electric generation projects located at an existing or former electric generating facility, or involve the distribution or transmission of energy or fuel, including natural gas, diesel, petroleum, or electricity? *

( ) Yes (●) No

Is this project connected with ARPA funding or S.L. 2023-134 (earmark)? *

( ) ARPA ( ) S.L. 2023-134 (earmark) (●) No

Is this application being filed jointly with another party involved with this project? *

( ) Yes (●) No

County (ies) *

Buncombe

Please upload all files that need to be submited.

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

Buncombe 139 - 2025-05-06 No NRHP Eligible or Listed Archaeological Sites Present.pdf	4.78MB
Buncombe 139 - 2025-06-30 WRC Scoping Comments.pdf	608.81KB
Buncombe 139 - 2025-09-04 USFWS Concurrence.pdf	606.9KB
Buncombe 139 - 2026-02-26 HAL - Assessment of Effects.pdf	389.58KB
Buncombe 139 - 2026-03-17 - Tribal Coordination.pdf	299.18KB
Buncombe 139 - 2026-04-21 Permit Drawings.pdf	2.37MB
Buncombe 139 - 2026-05-05 CE.pdf	940.19KB
Buncombe 139 - 2026-05-06 Application Cover Letter.pdf	417.42KB
Generated_Turchy_40188_45767_0_Appx_B_Aquatic_Resources.pdf	50.75KB
Generated_Turchy_40188_45767_0_Appx_C_Impacts.pdf	70.54KB
Generated_Turchy_40188_45767_0_Appx_H_Supporting_Files.pdf	51.98KB
Generated_Turchy_40188_45767_0_ENG_6082_PCN.pdf	547.51KB
Generated_Turchy_40188_45767_0_NCDWR 401_JPA_Report.pdf	94.39KB
Generated_Turchy_40188_45767_0_Permit_Additional_Info.pdf	217.89KB

Only pdf or kmz files are accepted.

Describe the attachments or add comments:

*

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

- I, the project proponent, hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief.
- I, 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 agree that submission of this online 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 online form.

Signature: *

Submittal Date:

Permit Drawings

North Carolina Department of Transportation

Highway Stormwater Program

STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS

(Version 3.02; Released April 23, 2024)

WBS Element: DF.18313.2011356.I **TIP/Proj No:** DF.18313.2011356.PR **County(ies):** Buncombe

General Project Information

WBS Element:	DF.18313.2011356.PR	**TIP Number:**	DF.18313.2011356.PR	**Project Type:**	Bridge Replacement	**Date:**	10/8/2025
NCDOT Contact:	Andy Hussey	**Contractor / Designer:**	Sungate Design Group				
Address:	1020 Birch Ridge Dr Room #16 Raleigh, NC 27610		**Address:**	5400 Etta Burke Ct Raleigh, NC 27606			
Phone:	(919)707-6641		**Phone:**	(919)710-8333			
Email:	lahussey@ncdot.gov		**Email:**	jdalton@sungatedesign.com			
City/Town:	Barnardsville	**County(ies):**	Buncombe				
River Basin(s):	French Broad	**CAMA County?**	No				
Wetlands within Project Limits?	No						

Project Description

Project Length (lin. miles or feet):	0.07	**Surrounding Land Use:**	Rural Residential, Commercial, Agricultural				
	Proposed Project			**Existing Site**			
Project Built-Upon Area (ac.)	0.16	ac.		0.13	ac.		
Typical Cross Section Description:	2-10' paved lanes w/ 3' grassed shoulders.			2-9' paved lanes w/ 2' grassed shoulders.			
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	740	Year: 2040	Existing:	370	Year:	2015

General Project Narrative: (Description of Minimization of Water Quality Impacts)

100139 is a NCDOT bridge replacement project in Buncombe County that involves the removal and replacment of bridge no. 100139 on Poverty Branch RD (SR 2171) over North Fork Ivy Creek which is in the French Broad River basin. The existing structure is a single span 36' bridge with a timber deck on steel I-beams with vertical concrete abutments. The proposed bridge is a 1@55', 21" cored slab bridge on a 75 degree skew with a vertical abutment on the south side and a 4' end bent cap with sloping spill through abutment on the north side. The proposed structure will have a larger hydraulic opening than the existing bridge. Existing drainage patterns are being maintained to the maximum extent practicable throughout the project. Class 'II' Rip Rap will be used to permanenlty stablize the banks under the proposed bridge and immediately up and downstream. No deck drains will be use over open water. Rip rap pads will be used at stormwater outfalls to dissipate energy and reduce erosion potential.

North Carolina Department of Transportation

Highway Stormwater Program

STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS

(Version 3.02; Released April 23, 2024)

WBS Element: DF.18313.2011356.I **TIP/Proj No.:** DF.18313.2011356.PR **County(ies):** Buncombe

General Project Information

Waterbody Information

Surface Water Body (1):	North Fork Ivy Creek		**NCDWR Stream Index No.:**	6-96-1-(1)		
NCDWR Surface Water Classification for Water Body		**Primary Classification:**	Water Supply II (WS-II)			
		Supplemental Classification:	High Quality Waters (HQW)	Trout Waters (Tr)		
Other Stream Classification:	None					
Impairments:	None					
Aquatic T&E Species?	No	Comments:				
NRTR Stream ID:				**Buffer Rules in Effect:**	N/A	
Project Includes Bridge Spanning Water Body?	Yes	**Deck Drains Discharge Over Buffer?**	No	**Dissipator Pads Provided in Buffer?**		
Deck Drains Discharge Over Water Body?	No	(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)		
(If yes, provide justification in the General Project Narrative)						

Surface Water Body (2):			**NCDWR Stream Index No.:**			
NCDWR Surface Water Classification for Water Body		**Primary Classification:**				
		Supplemental Classification:				
Other Stream Classification:						
Impairments:						
Aquatic T&E Species?		Comments:				
NRTR Stream ID:				**Buffer Rules in Effect:**		
Project Includes Bridge Spanning Water Body?		**Deck Drains Discharge Over Buffer?**		**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)		
(If yes, provide justification in the General Project Narrative)						

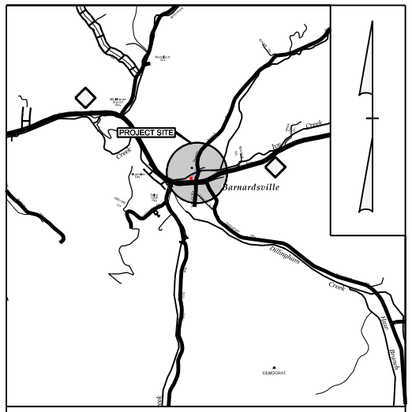
Surface Water Body (3):			**NCDWR Stream Index No.:**			
NCDWR Surface Water Classification for Water Body		**Primary Classification:**				
		Supplemental Classification:				
Other Stream Classification:						
Impairments:						
Aquatic T&E Species?		Comments:				
NRTR Stream ID:				**Buffer Rules in Effect:**		
Project Includes Bridge Spanning Water Body?		**Deck Drains Discharge Over Buffer?**		**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)		
(If yes, provide justification in the General Project Narrative)						

01/16/24

TIP PROJECT: DF18313.2011356.PR

CONTRACT:

See Sheet 1A For Index of Sheets



VICINITY MAP (NTS)

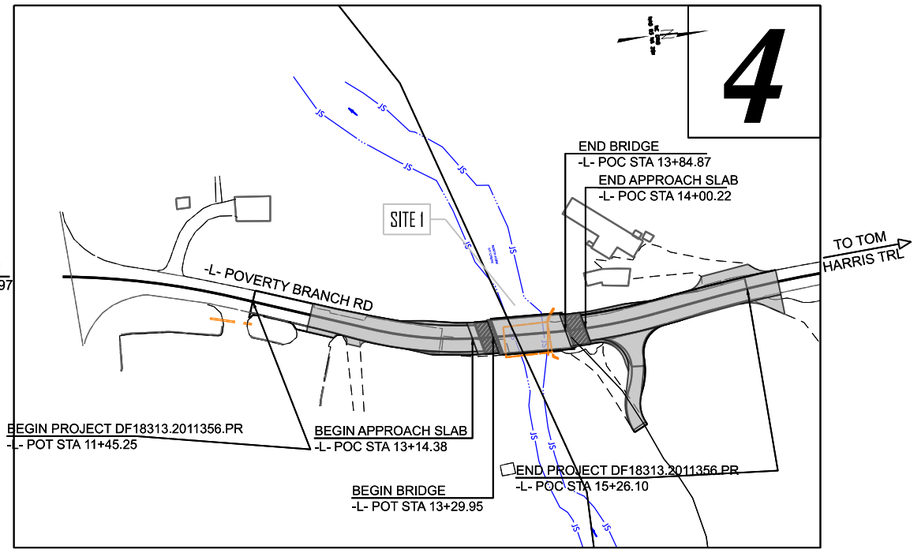
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BUNCOMBE COUNTY

LOCATION: *REPLACE BRIDGE #100139 OVER NORTH FORK IVY CREEK ON NC 197 (N FORK RD)*

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

WETLAND AND SURFACE WATER IMPACTS PERMIT



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	DF18313.2011356.PR	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
DF18313.2011356.PR	N/A	PE

PERMIT DRAWING SHEET 1 OF 5

DATE: 4/21/2026

NCDOT CONTACT:
DAN DUFFIELD
DCDUFFIELD@NCDOT.GOV

NOTES:
THIS PROJECT IS WITHIN THE MUNICIPAL LIMITS OF BARNARDSVILLE
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

PLANS: 20 10 0 20 40

PROFILE (HORIZONTAL): 20 10 0 20 40

PROFILE (VERTICAL): 10 5 0 10 20

DESIGN DATA

ADT 2025 = 590
ADT 2045 = 800
K = %
D = %
T = % *
V = 25 MPH
* TTST = DUAL
FUNC CLASS =
RURAL LOCAL
SUBREGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY	=	0.055 MILES
LENGTH OF STRUCTURE	=	0.013 MILES
TOTAL LENGTH	=	0.068 MILES

PREPARED IN THE OFFICE OF:
FOR NCDOT

AMERICAN Engineering
11525 N. Community House Road | Suite 325
Charlotte, NC 28277 | 704.375.2438

SUNGATE DESIGN GROUP, P.A.
5400 ETTA BURKE CT., STE. 102
RALEIGH, NORTH CAROLINA 27606
PH: 919.615.1810
ENG FIRM LICENSE NO. C-490

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

ALLISON C. JOHNSON, PE
PROJECT ENGINEER

BENJAMIN C. PICKERING II, PE
PROJECT DESIGN ENGINEER

DAN DUFFIELD
NCDOT CONTACT

HYDRAULICS ENGINEER

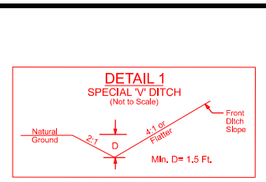
SIGNATURE: *P.E.*

ROADWAY DESIGN ENGINEER

SIGNATURE: *P.E.*

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

11/14/23



FROM STA. 14+54 TO STA. 14+80 -L- RT
FROM STA. 20+32 TO STA. 20+72 -DR1- LT

0' 10' 40'
Scale: 1"= 40'

PERMIT DRAWING SHEET 2 OF 5

DATE: 4/21/2026

PB 1

DF18313.2011356.PR

004

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BUNCOMBE COUNTY

ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PREPARED BY
AMERICAN Engineering
11525 N. Community House Road | Suite 325
Charlotte, NC 28277 | 704.375.2438

SUNGATE DESIGN GROUP, P.A.
940 EDITH BURNS CT., STE. 100
RALEIGH, NORTH CAROLINA 27609
TEL: (919) 8556745
ENGINEERING LICENSE NO. C4690

S S SURFACE WATER IMPACTS

TS TS TEMPORARY SURFACE WATER IMPACTS

NAD 83 NA 2011

① RICHARD K. STONE
DB 3360 PG 501

② MTN. SHINE,LLC.
DB 6227 PG 1653
PB 77 PG 128

③ GREGORY S. RHINEHART
JENNIFER B. RHINEHART
DB 5130 PG 208
PB 167 PG 194

④ BERNARD COATS
KATHERYN COATS
DB 2467 PG 554

⑤ MTN. SHINE,LLC.
DB 6227 PG 1653
PB 77 PG 128

⑥ JAMES M. GOLDSMITH
DB 6049 PG 176

⑦ DEMAREE TRUST
DB 5556 PG 1146

-L- START 10+00.00

-L- PC 12+36.69

-L- PT 11+29.77

-L- PT 13+27.90

-L- PC 13+75.06

-L- PT 14+54.06

-L- PC 14+97.13

-L- N10°12'55.0"W

-DET- POB 10+00.00

-DET- PT 10+65.32

-DET- PC 12+12.34

-DET- PT 12+49.57

-DET- PC 12+97.57

-DET- POE 13+48.10

SAG 10+97.33 2197.015'

SITE 1

-DR1- N82°34'19.6"E

-DR1- PC 20+27.52

-DR1- PT 20+51.59

-DR1- S69°51'02.6"E

-DR1- PC 20+57.18

-DR1- PT 20+82.12

-DR1- N62°30'53.3"E

FINISHED FLOOR ELEVATION = 2199.2947

SPEC. 'V' DITCH SEE DETAIL 1

15" ALTERNATE

CL 'B' RIP RAP EST. 3 TONS EST. 11 SY GF

CL 'B' RIP-RAP EST. 1 TONS EST. 5 SY GF

CL 'II' RIP RAP BANK STABILIZATION EST. 43 TONS EST. 113 SY GF SEE DETAIL 2

CL 'II' RIP RAP BANK STABILIZATION EST. 58 TONS EST. 153 SY GF SEE DETAIL 2

CL 'SHEET METAL TO TOP OF BERM

SHOULDER BERM GUTTER FROM 13+40 -L- TO 13+60 -L- TO BEGIN APP. SLOPE

EXCAVATE TO ELEV 2195.5' EST. 56 CY DDE

EXISTING BRIDGE TO BE REMOVED

WOOD/ STEEL PAVED DECK

REMOVE

RETAIN

15" RCP

SR 2171 POVERTY BRANCH ROAD 18' BST

RIVERSTREET NETWORKS BARNARDSVILLE, COPPER

RIVERSTREET NETWORKS BARNARDSVILLE, FO

MTL CAR SHELTER

DEMAREE TRUST DB 5556 PG 1146

MTN. SHINE,LLC. DB 6227 PG 1653 PB 77 PG 128

DETAIL 2
BANK STABILIZATION
(Not to Scale)
1.0'min.
2'
Place Geotextile Under Riprap In Locations Directed by Engineer
Press Riprap Into Channel Bottom Until Refusal
Type of Liner= CL II Rip-Rap, Keyed-In

FROM STA. 13+34 TO STA. 13+71 -L-

REVISIONS

11/14/23

PERMIT DRAWING SHEET 3 OF 5

DATE: 4/21/2026

Scale: 1"= 40'

0' 10' 40'

DF18313.2011356.PR

004

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BUNCOMBE COUNTY

ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

PRELIMINARY PLANS
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ENGINEERING LICENSE NO. C-4490

REVISIONS

S S SURFACE WATER IMPACTS

TS TS TEMPORARY SURFACE WATER IMPACTS

DETAIL 1
SPECIAL 'V' DITCH
(Not to Scale)

Natural Ground | 2:1 | D | 4:1 or Flatter | Front Ditch Slope

Min. D= 1.5 Ft.

FROM STA. 14+54 TO STA. 14+80 -L- RT
FROM STA. 20+32 TO STA. 20+72 -DR1- LT

DETAIL 2
BANK STABILIZATION
(Not to Scale)

1.0'min. | 2' | Place Geotextile Under Riprap in Locations Directed by Engineer | Press Riprap Into Channel Bottom Until Refusal

Type of Liner= CL II Rip-Rap, Keyed-In

FROM STA. 13+34 TO STA. 13+71 -L-

① RICHARD K. STONE
DB 3360 PG 501

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⑥ JAMES M. GOLDSMITH
DB 6049 PG 176

⑦ DEMAREE TRUST
DB 5556 PG 1146

-L- START 10+00.00

-L- PC 11+29.77

-L- PT 11+29.77

-L- PC 12+36.69

-L- PT 13+27.90

-L- PC 13+75.06

-L- PT 14+54.06

-L- PC 14+97.13

-L- PT 15+48.10

-DET- POB 10+00.00

-DET- PT 10+65.32

-DET- PC 12+11.34

-DET- PT 12+49.57

-DET- PC 12+57.57

-DR1- N82°34'19.6"E

-DR1- PC 20+27.52

-DR1- PT 20+51.59

-DR1- S69°51'02.6"E

-DR1- PC 20+57.18

-DR1- PT 20+82.12

-DR1- N62°30'53.3"E

SITE 1

SAG 10+97.33 2197.015'

REMOVE

RETAIN

15" ALTERNATE

SHOULDER BERM GUTTER FROM 13+07 -L- RT TO BEGIN APP. FOR

TB-2GI

CL 'B' RIP RAP EST. 3 TONS EST. 11 SY GF

CL 'B' RIP RAP EST. 1 TONS EST. 5 SY GF

CL 'B' RIP RAP EST. 2 TONS EST. 7 SY GF

CL II RIP RAP BANK STABILIZATION EST. 58 TONS EST. 153 SY GF SEE DETAIL 2

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FINISHED FLOOR ELEVATION = 2199.2947

SR 2171 POVERTY BRANCH ROAD 18' BST

NC 197

RIVERSTREET NETWORKS BARNARDSVILLE, COPPER

RIVERSTREET NETWORKS BARNARDSVILLE, FO

DEMAREE TRUST DB 5556 PG 1146

MTL CAR SHELTER

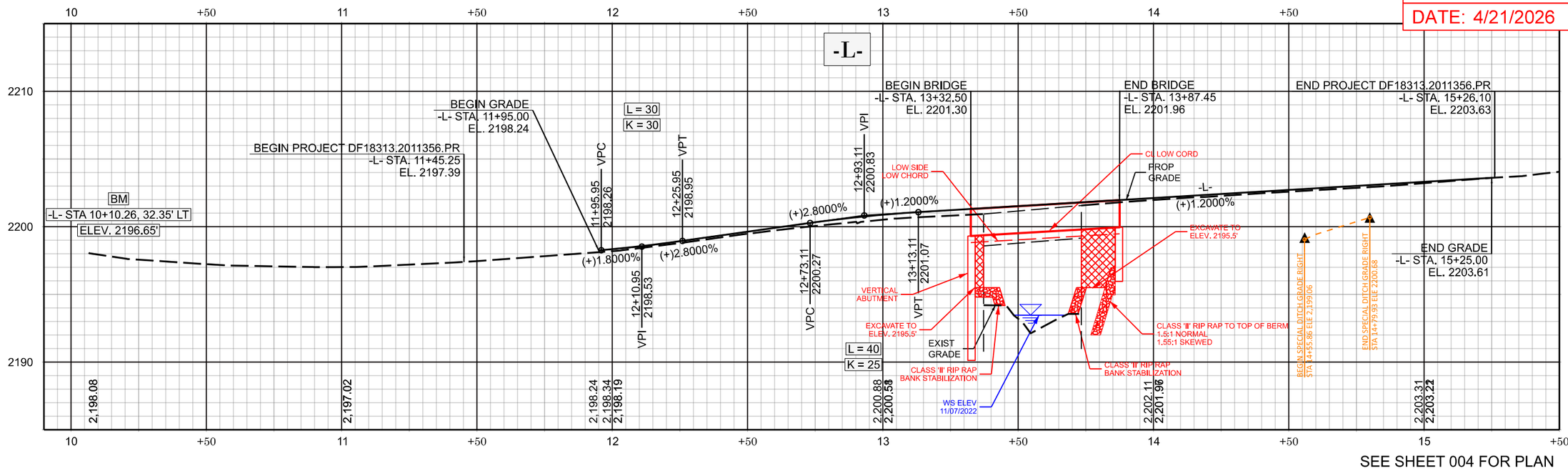
MTN. SHINE,LLC, DB 6227 PG 1653 PB 77 PG 128

FOR -CHAIN- PROFILE, SEE SHEET ??

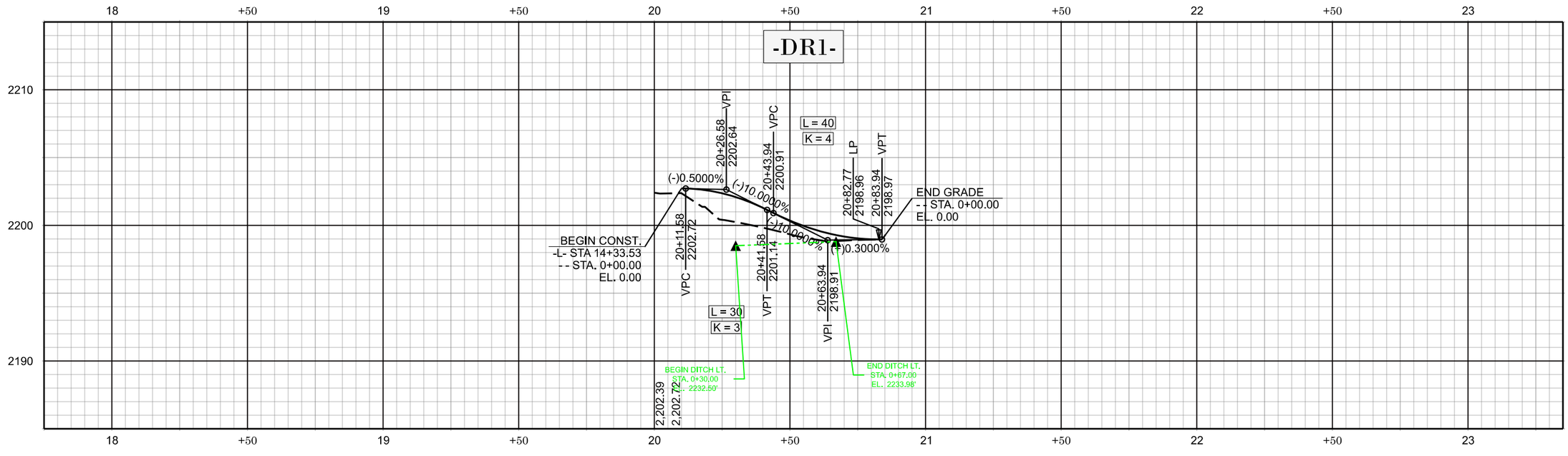
SUNGATE/belam - 4/21/2026

11/14/23

PERMIT DRAWING
SHEET 4 OF 5
DATE: 4/21/2026



SEE SHEET 004 FOR PLAN



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NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
BUNCOMBE COUNTY

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SUNGATE DESIGN GROUP, P.A.

REVISIONS

WETLAND AND SURFACE 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	13+18 to 13+70-L-	BANK STABILIZATION						0.017		72		
		TEMP. CONST. ACCESS							0.026		93	
TOTALS*:			**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.03**	**72**	**93**	**0**

*Rounded totals are sum of actual impacts

NOTES:

Bridge Open Area

Existing = **185.7 SF**

Proposed = **243.7 SF**

Temporary Channel Impacts

72 LF of Temporary Channel Impacts are coincident to the Permanent Impacts

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
04-21-2026
BUNCOMBE COUNTY
DF18313.2011356.PR

Revised 2018 Feb

ESA Consultation

Biological and Conference Opinions and Informal Consultations – Batch Format

Replace Multiple Crossing Structures Destroyed by Tropical Storm Helene in Buncombe, Madison, McDowell, Mitchell, and Yancey Counties, North Carolina

Service Log #25-276 through 25-299

Prepared by:

U.S. Fish and Wildlife Service
Asheville Ecological Services Office
160 Zillicoa Street
Asheville, North Carolina 28801

GARY PEEPLES Digitally signed by GARY PEEPLES
Date: 2025.09.04 09:55:36 -04'00'

Gary Peeples
Field Supervisor
Asheville Ecological Services Field Office
Asheville, North Carolina

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Consultation History

- **December 2, 2024**: Discussion between U.S. Fish and Wildlife Service (Service) and North Carolina Department of Transportation (NCDOT) regarding consultation batching processes and applicable avoidance and minimization and conservations measures for projects related to Tropical Storm (TS) Helene damage.
- **December 3-6, 2024**: Email correspondence between the Service and NCDOT discussing aspects of batching process and need for a virtual discussion.
- **December 11, 2024**: Virtual meeting between NCDOT and the Service to discuss batching process and avoidance and minimization and conservations measures.
- **August 14, 2025:** NCDOT submitted batched request for informal and formal consultation to the Service.
- **August 18, 2025:** Service asked NCDOT if three projects located in McDowell County submitted to the Western North Carolina programmatic biological opinion for bats would be better suited in this Helene batch submission.
- **August 19, 2025:** NCDOT added three projects in McDowell County to this Helene batch submission.

Background

On September 27, 2024, TS Helene moved across a large swath of Western North Carolina (WNC). Extreme rainfall and high winds resulted in catastrophic damage across much of the region. Record flooding occurred throughout several watersheds, destroying thousands of transportation sites as well as homes and entire communities. Widespread landslides and timber fall contributed to the damage. In the wake of this disastrous event, the North Carolina Department of Transportation (NCDOT) is tasked with responding to, repairing, and [to the extent possible] replacing the transportation infrastructure destroyed by TS Helene. The following informal and formal consultations are presented in batched format to streamline and expedite review of one group of many similar projects. The format utilized in this consultation is intended for TS Helene-related projects and is tailored to the unique challenges and constraints precipitated by this event. Biological determinations presented below are based on the best available scientific data at the time of this document and incorporate the expertise of WNC's Service and partner resource agency biologists.

Projects

The table below represents the projects reviewed in this batch of TS Helene-related projects. Work will involve the replacement of damaged or wholly destroyed crossing structures, which may include minimal tree clearing, grading, demolition, and in-water construction. The current estimated timeline is for these projects to begin in 2025 and be completed by late 2026-early 2027. Additional description of the project-associated activities is provided in Section 2 of this document.

Table 1. Batched Consultation Projects – Crossing Structures

Structure Number	Waterbody	County	Location	Status	Service Log No.

100110	Broad River	Buncombe	35.4949, -82.2734	Bridge completely gone	25-279
100132	Ivy Creek	Buncombe	35.7897, -82.5338	Bridge completely gone	25-280
100135	Ivy Creek	Buncombe	35.7878, -82.5149	Bridge completely gone	25-281
100139	N. Fork Ivy Creek	Buncombe	35.7788, -82.4556	Bridge damaged but remains, collapsed Crews removed bridge from water	25-282
100147	Dillingham Creek	Buncombe	35.7550, -82.4041	Bridge damaged but remains	25-283
100175	N. Fork Ivy Creek	Buncombe	35.7994, -82.3692	Bridge completely gone	25-284
100200	N. Fork Ivy Creek	Buncombe	35.7994, -82.3692	Bridge completely gone	25-285
100307	Shope Creek	Buncombe	35.6460, -82.4470	Bridge damaged but remains	25-286
100428	Beetree Creek	Buncombe	35.6331, -82.4181	Bridge damaged but remains	25-287
560042	Ivy Creek	Madison	35.7940, -82.6133	Bridge completely gone	25-288
580044	Curtis Creek	McDowell	35.6452, -82.1590	Bridge damaged but remains	25-289
580119	N. Fork Catawba River	McDowell	35.8751, -81.9425	Bridge completely gone	25-290
580285	N. Fork Catawba River	McDowell	35.9047, -81.9427	Bridge completely gone	25-291
580345	Armstrong Creek	McDowell	35.8109, -82.0512	Bridge damaged but remains	25-292
600123	Charles Creek	Mitchell	36.0730, -82.1134	Bridge completely gone	25-293
600152	Left Fork Cane Creek	Mitchell	36.0208, -82.0883	Pipes damaged but remain	25-294
600154	Cane Creek	Mitchell	36.0161, -82.1717	Bridge completely gone	25-295
990100	Ayles Creek	Yancey	35.8795, -82.2229	Bridge destroyed, temporarily replaced with metal rail car bridge	25-296
990014	Banks Creek	Yancey	35.8945, -82.3701	Bridge completely gone	25-297
990156	Colberts Creek	Yancey	35.8010, -82.2080	Bridge destroyed, temporarily installed 3 small culverts	25-298
990047	Mine Fork	Yancey	35.9687,-82.2844	Bridge damaged but remains	25-299
580023	Lake Tahoma	McDowell	35.7281, -82.0924	Bridge damaged but remains	25-276

580079	Buck Creek	McDowell	35.7356, -82.1295	Bridge damaged but remains	25-277
580083	Buck Creek	McDowell	35.7384, -82.1348	Bridge damaged but remains	25-278

Informal Consultation

The NCDOT assessed each project location addressed in this document for the presence of suitable habitat for listed species and for the potential effects of project work on listed species with suitable habitat present. The following table outlines the project locations and associated "No Effect" (NE) determinations, with supporting biological rationale. For this batch of projects there were no "May Affect, Not Likely to Adversely Affect" (NLAA) determinations for any species.

Table 2. Species NE Determinations

Structure Number	Waterbody	Service Log No.	NE and NLAA Species
100110	Broad River	25-279	**NE**: white irisette (Sisyrinchium dichotomum), rock gnome lichen (*Gymnoderma lineare*) **Rationale**: Absence of suitable habitat
100147	Dillingham Creek	25-283	**NE**: rock gnome lichen **Rationale**: Absence of suitable habitat
100175	N. Fork Ivy Creek	25-284	**NE**: rock gnome lichen **Rationale**: Absence of suitable habitat
100200	N. Fork Ivy Creek	25-285	**NE**: rock gnome lichen **Rationale**: Absence of suitable habitat
580044	Curtis Creek	25-289	**NE:** small whorled pogonia (*Isotria medeoloides*) **Rationale**: Absence of suitable habitat
580119	N. Fork Catawba River	25-290	**NE**: small whorled pogonia **Rationale**: Absence of suitable habitat
580285	N. Fork Catawba River	25-291	**NE**: small whorled pogonia **Rationale**: Absence of suitable habitat
580345	Armstrong Creek	25-292	**NE**: small whorled pogonia, rock gnome lichen **Rationale**: Absence of suitable habitat
600123	Charles Creek	25-293	**NE**: Virginia spiraea (Spiraea virginiana), rock gnome lichen **Rationale**: Absence of suitable habitat
600152	Left Fork Cane Creek	25-294	**NE**: Virginia spiraea, rock gnome lichen **Rationale**: Absence of suitable habitat
600154	Cane Creek	25-295	**NE**: Virginia spiraea **Rationale**: Absence of suitable habitat
990100	Ayles Creek	25-296	**NE**: Virginia spiraea, small whorled pogonia **Rationale**: Absence of suitable habitat
990014	Banks Creek	25-297	**NE**: Virginia spiraea, small whorled pogonia **Rationale**: Absence of suitable habitat
990156	Colberts Creek	25-298	**NE**: Virginia spiraea, small whorled pogonia

			Rationale: Absence of suitable habitat
990047	Mine Fork	25-299	**NE**: Virginia spiraea, small whorled pogonia **Rationale**: Absence of suitable habitat
580023	Lake Tahoma	25-276	**NE**: rock gnome lichen, small whorled pogonia **Rationale**: Absence of suitable habitat
580079	Buck Creek	25-277	**NE**: rock gnome lichen, small whorled pogonia **Rationale**: Absence of suitable habitat
580083	Buck Creek	25-278	**NE**: rock gnome lichen, small whorled pogonia **Rationale**: Absence of suitable habitat

In instances where suitable habitat is absent from the action area, or where project actions would not result in impacts to suitable habitat within the action area, we agree that NE determinations are appropriate.

We believe the requirements under section 7 of the ESA are fulfilled for the species addressed above in relation to the designated projects. However, obligations under section 7 of the ESA must be reconsidered if: (1) new information reveals impacts of this proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) this proposed action is subsequently modified in a manner that was not considered in this review, or (3) a new species is listed or critical habitat is determined that may be affected by the proposed action.

A species proposed for listing under the ESA is one that the Service or the National Marine Fisheries Service has determined, based on the best available scientific and commercial data may warrant listing as either endangered or threatened. This proposal is a formal step in the process of providing federal protection to species facing potential extinction across all or a significant portion of their range. Species proposed for listing are not afforded protection under the ESA; however, as soon as a listing becomes effective, the protections set forth in the ESA will apply.

On December 13, 2024, eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*) was proposed for listing as endangered under the ESA. Information provided by NCDOT after the originally submitted consultation request for the subject projects indicates that NCDOT has chosen not to conference on eastern hellbender but will consider the species and coordinate with partner resource agencies as project actions move forward.

Biological Opinion and Conference Opinion

1. Introduction

A biological and conference opinion (Opinion) is the document that states the opinion of the Service in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543) (ESA), as to whether a Federal action is likely to jeopardize the continued existence of species listed as endangered or threatened; or result in the destruction or adverse modification of designated critical habitat.

This document transmits the Service's biological and conference opinions (Opinion) and is based on our review of the proposal to replace several crossing structures (Table 1) and their effects on the federally endangered gray bat (*Myotis grisescens*), federally endangered northern long-eared bat (*Myotis septentrionalis*), and federally proposed endangered tricolored bat (*Perimyotis subflavus*). This Opinion is

based on information provided in the assessment submitted to the Service by the NCDOT, field investigations, correspondence between NCDOT and the Service, communications with experts on the affected species, and other sources of information as cited. The Federal Highway Administration is the lead Federal action agency for these projects, with consultation authority delegated to the NCDOT.

2. Proposed Action

As defined in the Service's section 7 regulations (50 CFR 402.02), "*action*" means "*all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas*." The "*action area*" is defined as "*all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action*." The direct and indirect effects of the actions and activities must be considered in conjunction with the effects of other past and present Federal, state, or private activities, as well as the cumulative effects of reasonably certain future state or private activities within the action areas.

2.1 Action Areas

The project action areas are all areas of construction and include any portions of the project waterbodies, as indicated in Table 3, that may be affected by direct or indirect effects. The action areas are comprised of the:

1.) Project construction limits including all project related work such as tree-clearing and grading.
2.) Limits of sedimentation effect, anticipated to extend 100 meters (m) (328 feet (ft)) upstream from each bridge and 400 m (1,314 ft) downstream from each crossing structure in each respective river.

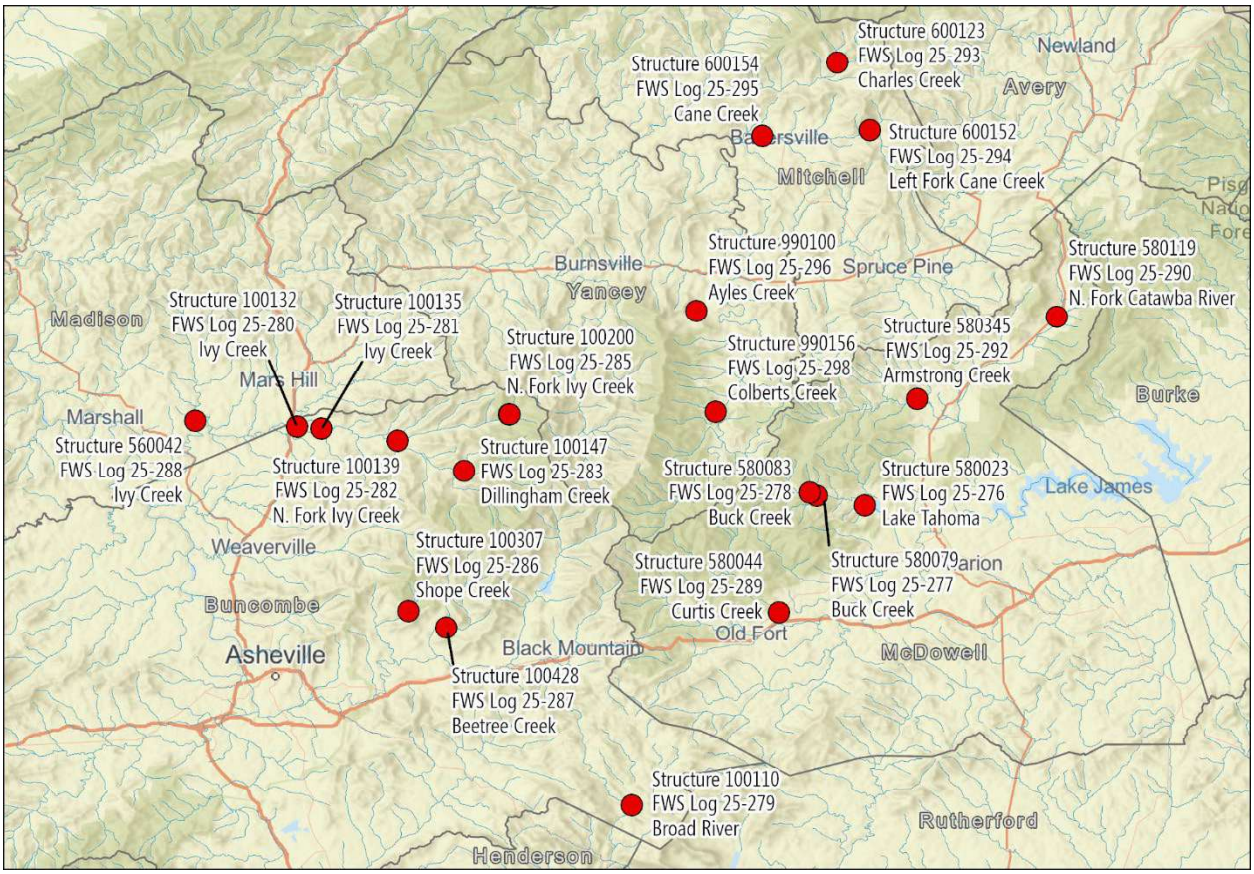
Table 3. Projects that are likely to Adversely Affect (LAA) Listed Species

Structure Number	Waterbody	County	Location	Service Log No.	Taxa Determination
100110	Broad River	Buncombe	35.4949, -82.2734	25-279	Plants: NE Bats: LAA Aquatics: NE
100132	Ivy Creek	Buncombe	35.7897, -82.5338	25-280	Plants: NE Bats: LAA Aquatics: NE
100135	Ivy Creek	Buncombe	35.7878, -82.5149	25-281	Plants: NE Bats: LAA Aquatics: NE
100139	N. Fork Ivy Creek	Buncombe	35.7788, -82.4556	25-282	Plants: NE Bats: LAA Aquatics: NE
100147	Dillingham Creek	Buncombe	35.7550, -82.4041	25-283	Plants: NE Bats: LAA Aquatics: NE

100175	N. Fork Ivy Creek	Buncombe	35.7994, -82.3692	25-284	Plants: NE Bats: LAA Aquatics: NE
100200	N. Fork Ivy Creek	Buncombe	35.7994, -82.3692	25-285	Plants: NE Bats: LAA Aquatics: NE
100307	Shope Creek	Buncombe	35.6460, -82.4470	25-286	Plants: NE Bats: LAA Aquatics: NE
100428	Beetree Creek	Buncombe	35.6331, -82.4181	25-287	Plants: NE Bats: LAA Aquatics: NE
560042	Ivy Creek	Madison	35.7940, -82.6133	25-288	Plants: NE Bats: LAA Aquatics: NE
580044	Curtis Creek	McDowell	35.6452, -82.1590	25-289	Plants: NE Bats: LAA Aquatics: NE
580119	N. Fork Catawba River	McDowell	35.8751, -81.9425	25-290	Plants: NE Bats: LAA Aquatics: NE
580345	Armstrong Creek	McDowell	35.8109, -82.0512	25-292	Plants: NE Bats: LAA Aquatics: NE
600123	Charles Creek	Mitchell	36.0730, -82.1134	25-293	Plants: NE Bats: LAA Aquatics: NE
600152	Left Fork Cane Creek	Mitchell	36.0208, -82.0883	25-294	Plants: NE Bats: LAA Aquatics: NE
600154	Cane Creek	Mitchell	36.0161, -82.1717	25-295	Plants: NE Bats: LAA Aquatics: NE
990100	Ayles Creek	Yancey	35.8795, -82.2229	25-296	Plants: NE Bats: LAA Aquatics: NE
990156	Colberts Creek	Yancey	35.8010, -82.2080	25-298	Plants: NE Bats: LAA Aquatics: NE
580023	Lake Tahoma	McDowell	35.7281, -82.0924	25-276	Plants: NE Bats: LAA Aquatics: NE

580079	Buck Creek	McDowell	35.7356, -82.1295	25-277	Plants: NE Bats: LAA Aquatics: NE
580083	Buck Creek	McDowell	35.7384, -82.1348	25-278	Plants: NE Bats: LAA Aquatics: NE

Figure 1. Projects that are Likely to Adversely Affect (LAA) Listed Species



2.2 Project Description

The details of the proposed project designs for each of the crossing structures in Table 1 are not yet known, given the mass response/repair/rebuild efforts for the hundreds of infrastructure failure projects due to TS Helene destruction. The scale of destruction from TS Helene, and associated response efforts, compel a batched consultation response, and the design-build process be expedited. Thus, exact designs and associated action area impact details are not known at the time of this review. However, project activities and estimated impacts, based on the "knowns" associated with NCDOT's crossing structure replacement work, are available. At the time of this consultation, the expectation is that the majority of the replacement bridges will be concrete box beam or cored slab structures and the culvert structures will be the same or similar materials to those previously in place. The general and expected elements of these crossing structure replacement projects are described below. The current estimated timeline is for these

projects to be carried out over the next two years.

In-water impacts
Considering the range in structure and waterbody sizes analyzed in this review, and basing amounts on past similarly-sized structure and waterbody NCDOT crossing structure projects in WNC, the estimate of combined temporary and permanent in-water impacts for these projects range from 0.01 – 0.35 acres (or 4,356 – 15,246 square feet) per structure. Some structure replacements will fall in the lower portion of that range of in-water impacts while some will fall in the higher range. These impacts may be in the form of work pad causeways, bent removal and/or placement, and placement of stream-bank stabilization materials.

Tree Clearing, Access Roads, and Demolition
The maximum estimate for tree clearing at structure replacement locations is 0.10 acre. That amount will likely be less at most locations, given the variability in site conditions and the extreme scour (and resulting loss of riparian vegetation) during TS Helene flooding. The season during which clearing will occur is not known for each location. Clearing and grading will occur to allow for access roads and general construction functionality.

Where damaged structures or portions of damaged structures remain in place, demolition will occur. The details of demolition activities and seasonality of demolition will vary by project.

2.3 Avoidance and Minimization and Conservation Measures

NCDOT will employ the following agency Standards, Guides, and Best Practices to avoid and minimize project mediated activities that could negatively impact listed/proposed species or their habitat.

2.3.1 Avoidance and minimization measures (AMMs)

General (regardless of species): The following General AMMs will be implemented on all projects to minimize impacts to listed/proposed species and habitat:

- General AMM1 - NCDOT will ensure that all operators, employees, and contractors working in areas of suitable habitat for federally listed/proposed species are aware of all NCDOT environmental commitments, including all applicable AMMs and all associated NCDOT guidance documents.

- General AMM2 - Best management practices (BMP) and sediment and erosion control (SEC) measures will be utilized to prevent non-point source pollution, control storm water runoff, and minimize sediment damage to avoid and reduce overall water quality degradation.

- General AMM3 - Areas of disturbance, such as tree clearing, grubbing, and grading, will be limited to the maximum extent possible.

Bats - The General AMMs will minimize impacts to listed and proposed bat species. **To the maximum extent possible**, the following AMMs will also be incorporated into project work – though implementation of all bat AMMs below cannot be guaranteed at the time of this consultation, given the scale, scope, and timeline constraints addressed previously.

- Bat AMM Noise - Percussive activities will occur only after tree clearing within the action area has been completed, helping to reduce the exposure of any tree-roosting bats within the action area to high decibel noise.

- Bat AMM Lighting - No new lighting will be added to the action area. Any lighting needed for night work will be directed at the work area and shielded from surrounding waters/landscape, only on when needed, no brighter than necessary, and blue light emissions will be limited.

- Bat AMM Riparian Planting - Disturbed riparian areas will be replanted with native, fast-growing tree and shrub species where feasible, with the understanding that plantings likely cannot be done in utility/drainage/construction easements.

Aquatics- The General AMMs above will minimize impacts to listed/proposed aquatic species. **To the maximum extent possible**, the following AMMs will also be incorporated into project work – though implementation of all aquatic AMMs below cannot be guaranteed at the time of this consultation, given the scale, scope, and timeline constraints addressed previously.

- Aquatic AMM Structure - To the maximum extent possible, structure will be built in the same location as the previous structure, with minimal impact [such as in-water bents] to water resource, built to NCDOT's current improved highway and hydraulic standards.

- Aquatic AMM Equipment - To the maximum extent possible, heavy machinery will not be utilized within the waterbody. Additionally, staging and storage areas for equipment and materials will be managed in such a way to ensure that potential spills and leaks do not have access to the waterbody.

- Aquatic AMM Temporary and Permanent Fill - Any temporary fill (i.e. causeways) or permanent (i.e. bents/piers) fill in excess of what was previously present will be avoided and minimized to the maximum extent possible.

- Aquatic AMM Abutments - Existing abutments will be completely removed unless removal results in destabilizing of banks or increases the adverse effect to listed/proposed aquatic species.

- Aquatic AMM Deck Drains - Deck drains that empty directly to the waterbody below will not be included in new bridge designs. Surface water drainage transport will be designed to incorporate improved treatment prior to drainage entering the waterbody.

- Aquatic AMM Erosion Control Matting - Coir fiber matting will be utilized instead of plastic or other synthetic matting.

2.3.2 Conservation Measures (CMs)

CMs represent actions, pledged in the project description, that the action agency will implement to further the recovery of the species under review. The beneficial effects of CMs are considered in making determinations of whether the projects will jeopardize the species under consideration in this document.

Bat CM - Tree Clearing Bat Fund Contribution: For individual bridge projects that are LAA bat species during tree removal, the NCDOT will contribute a payment* to the N.C. Nongame Terrestrial Species Fund (or other Service-approved Fund) in support of the recovery of federally protected bat species.

Bat CM Structure Removal Bat Fund Contribution: For individual bridge projects that are LAA bat species during structure removal, the NCDOT will contribute a payment** to the N.C. Nongame Terrestrial Species Fund (or other Service-approved Fund) in support of the recovery of federally listed bat species.

*Contributions made will be based on a 2:1 ratio multiplier specified for the non-volant pup season (May 15-July 31). This ratio offers the most protective coverage based on the current unknowns surrounding time-of-year clearing. The amount will be determined using the United States Department of Agriculture Farm Real Estate Value for North Carolina for 2024 ($5,190/acre).
https://www.nass.usda.gov/Publications/Todays_Reports/reports/land0824.pdf
If tree clearing amount is unknown, an assumed clearing acreage of 0.1 acre will be used based on estimates from previous clearing work at crossing structures (NCDOT 2015). The formula is calculated as follows:
$5,190 x 0.1 ac = 519 x 2 (critical life stage multiplier) = $1,038 contribution.

**Structures with documented bat use are generally larger than the average bridge, with a median size of 0.10 acre (length x width) (Service 2020b). Therefore 0.10 acre per crossing structure is used to calculate the amount of suitable bat habitat lost for projects involving structure impacts. However, the impacts to bats that may be displaced during structure demolition/construction are considered temporary in nature because the replacement structures are understood to provide adequate roosting habitat, as addressed in the project description. Additionally, the structures being analyzed here are all damaged and understood to provide reduced areas of suitable bat roosting habitat. Therefore, the 1.5:1 ratio multiplier was determined to be appropriate. If the structures are demolished between March 15 – November 15 (the period during which gray bats could be present on the landscape, which also encompasses the northern long-eared bat and tricolored bat active seasons) a structure-related payment will be made; if not, no structure-related payment will be made. The formula is calculated as follows: $5,190 x 0.1 ac = 519 x 1.5 (temporary impact multiplier) = $779 contribution/structure.

3. Status of the Species

This section summarizes best available data about the biology and current condition of the gray bat (*Myotis grisescens*), northern long-eared bat (*Myotis septentrionalis*), and tricolored bat (*Perimyotis subflavus*) throughout their ranges that are relevant to formulating an opinion about the actions. More in-depth species information such as species status assessments can be found at the species-specific pages at the Service's Environmental Conservation Online System (ECOS): ecos.fws.gov/ecp/

3.1 Gray Bat

Scientific Name: *Myotis grisescens*
Status: Endangered
Date of Listing: April 28, 1976
Critical Habitat: None designated

3.1.1 Description and Life History

The gray bat is a medium-sized insectivorous bat with an overall length of about 3.5 inches and a wingspan of 10 to 11 inches. As the name implies, gray bats have gray fur, but the hair often bleaches to reddish-brown by early summer. The gray bat largely occurs in limestone karst areas, meaning a landscape marked by caves, sinkholes, springs and other features, of the southeastern and midwestern United States.

Gray bats use caves year-round for roosting and hibernating. Seasonal occupancy of caves differs between summer roost and winter hibernacula, and gray bats are known to migrate more than 300 miles between the two. While gray bats are predominantly found roosting in caves, they are known to roost in structures including buildings, bridges and culverts. Bats emerge from summer roosts early in the evening and forage along waterbodies adjacent to forested areas. The species has been documented traveling from a few miles to 20 or more miles between their day roosts and nightly foraging areas.

Adult bats mate upon arrival at the wintering caves in September or early October. Hibernation occurs in deep vertical caves in the winter, where colder temperatures are preferable. Gray bats require consistently cold temperatures to maintain hibernation and conserve energy in the winter months. The adult females will emerge from hibernation in late March or early April. At that time, the females who have mated will begin their pregnancy, dispersing to maternity caves. Males and juveniles emerge shortly after the females and disperse to bachelor caves. Gray bats are documented using bridges and culverts as roosting habitat during the spring, summer, and fall and show strong philopatry to their summer ranges and typically use the same roost sites year after year (Tuttle 1976; Martin 2007). Gray bats are most observed in bridges with concrete and their preferred roosting location is in the vertical expansion joints of a bridge deck above piers (NCDOT 2023a), though they can also roost in clogged deck drains and other sheltered areas on crossing structures. According to approximately 2,000 bridge surveys conducted throughout WNC from 2000 - 2023, gray bats have been recorded roosting in bridges at a usage rate of 3% (NCDOT 2023a), with bridge use observed in the covered area from March – November. Up to 1,000 individuals, including males and females, have been observed day-roosting throughout the summer in expansion joints between box beams at two separate bridges (Weber et al. 2020). Sporadic summer use of other concrete type bridges has also been noted for smaller numbers of day-roosting gray bats (NCDOT, 2023a). Gray bats have also been observed within culverts, most commonly of concrete material.

Gray bats primarily forage over open water bodies, such as rivers, streams, lakes, and reservoirs, and associated riparian areas (Tuttle 1976; LaVal et al. 1977; Weber et al. 2020). On a macroscale, gray bats feed in aquatic-based habitats where specific types of insect prey are abundant (Brack and LaVal 2006). Bats typically travel individually or in small groups that forage in an area for a short period before moving to another area. Studies suggest that gray bats visit multiple foraging areas during the night and travel frequently between these areas.

3.1.2 Status and Distribution

The primary range of gray bats is concentrated in the cave regions of Alabama, Arkansas, Kentucky, Missouri and Tennessee, though its overall range stretches from Virginia to Oklahoma, and Missouri to Alabama. WNC is on the eastern edge of the bat's range. In North Carolina, the gray bat is currently documented from 14 western counties and is possible in an additional 10 counties. Most gray bat occurrences in WNC are centered on the French Broad and Pigeon River watersheds. Gray bats are generally present in North Carolina from March 15 to November 15, when they leave for winter hibernacula. It is believed that many of the gray bats in North Carolina migrate to hibernacula in Tennessee, using the French Broad River as a commuting pathway. The closest active hibernaculum is

near Newport, Tennessee (Weber et al. 2020), approximately 20 miles from the border with Haywood and Madison Counties in North Carolina.

Ellison et al. (2003) of the U.S. Geological Survey (USGS) statistically analyzed 1,879 observations of gray bats obtained from 334 roost locations in 14 south-central and southeastern states. They determined that 94.4% of the populations showed stable or increasing populations while 6% revealed a decreasing population. For populations where there was a downward population trend, decreases in population numbers were mostly attributed to continued problems with human disturbance. This increasing population trend has been reflected in the work of Sasse et al. (2007), Martin (2007), and again by Elliott in 2008 in looking at high-priority caves. It is estimated that more than 95% of the species range-wide population hibernate in only 9 caves.

Emergence counts conducted by Indiana State University researchers at known roosts in WNC from 2018-2019 suggested there were at least 2,820 gray bats in the French Broad River basin (Weber et al. 2020). Due to 2024 flooding associated with TS Helene, these numbers may be significantly lower now, though at the time of this document, the impacts from Helene on imperiled species numbers are still unknown. Throughout WNC, there are 58 current element occurrences of the gray bat based on N.C. Natural Heritage Program, NCWRC, and NCDOT records; most are from built structures (largely bridges). The number of gray bats found at each occurrence range from 1 to about 1,500 bats, with some roosts surveyed in the Weber et al. (2020) study hosting >1,000 gray bats during certain times of the season. The most recent winter population estimate of gray bats in the closest hibernaculum to the action area (Rattling Cave, near Newport TN) was 250,689 bats (TWRA 2019).

3.1.3 Threats

Cave disturbance and alteration, loss of forested habitat, pollution of waterways, and significant natural factors including those caused by climate change (flooding, freezing, and forest destruction) are threats to gray bats. Gray bats have been infected by the invasive fungus *Pseudogymnoascus destructans,* the causative agent of white-nose syndrome (WNS), a fungal disease contributing to the declines of several bat species in the U.S.; however, WNS is not considered a major threat to the species.

3.2 Northern long-eared Bat

Scientific Name: *Myotis septentrionalis*
Status: Endangered
Date of Listing: April 1, 2015 as Threatened; November 30, 2022 as Endangered
Critical Habitat: None designated

3.2.1 Description and Life History

The northern long-eared bat is a wide-ranging species, found in 37 states and eight provinces in North America. The species typically overwinters in caves and mines and spends the remainder of the year in forested habitats. As its name suggests, the northern long-eared bat is distinguished by its long ears, particularly as compared to other bats in the genus *Myotis*.

Northern long-eared bats are a forest bat species that roosts in a variety of forest types and structures. They are known to roost in trees and have also been documented using roost sites such as buildings, artificial roosts, and bridges. During the active season, northern long-eared bats typically roost singly or in maternity colonies underneath bark or more often in cavities or crevices of both live trees and snags (Service 2023). Males' and non-reproductive females' summer roost sites may also include cooler locations, such as caves and mines (Service 2023). According to approximately 2,000 bridge surveys

conducted throughout western North Carolina from 2000 - 2023, northern long-eared bats have been recorded roosting in western North Carolina bridges at a usage rate of 0.2% (NCDOT 2023a) with use documented to occur from May - October. With one exception, all bridge roost records in North Carolina are associated with a water crossing. There are no records of northern long-eared bats roosting in culverts in North Carolina, though they have been documented using culverts in other states. Northern long-eared bats will overwinter in caves or mines and have been documented using railroad tunnels, storm sewers, and bunkers. Length of hibernation varies depending on location. They may hibernate singly or in small groups and can be found hibernating in open areas but typically prefer caves with deep crevices, cracks, and bore holes that protect from drafts. They typically hibernate from September or October to March or April. More than 780 hibernacula have been documented within the northern long-eared bat range.

Prior to hibernation, between mid-August and mid-November, bat activity will increase during the evenings at the entrance of a hibernaculum (fall swarming). Suitable fall swarming habitat is like roosting, foraging, and commuting habitat selected during the summer and is most typically within 4-5 miles of a hibernaculum (Service 2023). Likewise, in the spring they emerge from and stage near hibernacula before moving to maternity areas typically in early April to mid-May; however, they may leave as early as March. Northern long-eared bats also roost in trees near hibernacula during spring staging, and Thalken et al. (2018) found that roost trees were situated within 1.2 miles (2km) of hibernacula during spring staging and the early maternity season. The species migrates relatively short distances between maternity areas and hibernacula.

Northern long-eared bats are more likely to forage under the canopy on forested hillsides and ridges (Nagorsen and Brigham 1993) rather than along riparian areas (Brack and Whitaker 2001; LaVal et al. 1977). Because of this, alternative water sources like seasonal woodland pools may be an important source of drinking water for these bats (rather than just streams and ponds; Francl 2008). Mature forests may be an important habitat type for foraging (Service 2015). Northern long-eared bats have a diverse diet including moths, beetles, flies, leafhoppers, caddisflies, and arachnids (Service 2020a), which they catch while in flight or by gleaning insects off vegetation (Ratcliffe and Dawson 2003).

3.2.2 Status and Distribution

The species' range includes all or portions of 37 eastern and mid-western states and the District of Columbia in the U.S. The northern long-eared bat's range also includes eight Canadian provinces. In WNC, the species range includes all or portions of 26 counties in the western portion of the state.

Prior to the emergence of WNS, northern long-eared bat was abundant and widespread throughout much of its range with 737 occupied hibernacula, a maximum count of 38,181 individuals and its range being spread across >1.2 billion acres in 29 states and 3 Canadian provinces. Numbers vary temporally and spatially, but abundance and occurrence on the landscape were stable (Cheng et al. 2022, p. 204; Wiens et al. 2022, p. 233). Currently, declining trends in abundance and occurrence are evident across much of northern long-eared bat's summer range. Range-wide summer occupancy declined by 80% from 2010–2019. Data collected from mobile acoustic transects found a 79% decline in range-wide relative abundance from 2009–2019 and summer mist-net captures declined by 43–77% compared to pre-WNS capture rates.

There are approximately 169 element occurrences for northern long-eared bat in NC, based on N.C. Natural Heritage Program records, 19 of which are considered historical. The number of bats found at each occurrence ranges from one to more than 80. There have been 22 documented hibernacula, all in caves or mines; however, northern long-eared bats have not been observed using hibernacula in North

Carolina since 2014 (NCWRC personal communication September 2022). The Service estimates that there has been an occupancy drop of 85% and a 24% loss of winter colony sites across the Southeast Representation Unit (RPU) overall since 2006 when white-nose syndrome was first documented (Service 2022a).

3.2.3 Threats

The primary factor influencing the viability of the northern long-eared bat range-wide population is WNS. Other primary factors that influence the decline in northern long-eared bat numbers include wind energy mortality, effects from climate change, and habitat loss.

3.3 Tricolored Bat

Scientific Name: *Perimyotis subflavus*
Status: Proposed Endangered
Date of Proposed Listing: September 14, 2022
Critical Habitat: None proposed

3.3.1 Description and Life History

The tricolored bat is one of the smallest bats in North America. The once common species is wide-ranging across the eastern and central US and portions of southern Canada, Mexico and Central America. As its name suggests, the tricolored bat is distinguished by its unique tricolored fur that appears dark at the base, lighter in the middle and dark at the tip.

During the spring, summer, and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves. Additionally, tricolored bats have been observed roosting among pine needles, eastern red cedar (*Juniperus virginiana*), within artificial roost structures, beneath porch roofs, bridges, concrete bunkers, and rarely within caves. Female tricolored bats form maternity colonies and switch roost trees regularly. Maternity colonies typically consist of one to several females and pups. They usually have twins in late spring or early summer, which are capable of flight in four weeks.

During the winter, across much of their range tricolored bats hibernate in caves and mines; although, in the southern United States, where caves are sparse, they often hibernate in culverts, as well as sometimes in tree cavities and abandoned water wells. In the southern US, hibernation length is shorter compared to northern portions of the range. Hibernating tricolored bats do not typically form large clusters; most commonly roost singly, but sometimes in pairs, or in small clusters of both sexes away from other bats (Service 2021). Tricolored bat hibernacula following population crashes from WNS generally host <100 individuals (Service 2021), though solitary hibernation can often occur with this species (Whitaker and Hamilton 1998).

Before entering hibernacula for the winter, tricolored bats demonstrate ‘swarming’ behavior. The peak swarming period for tricolored bats in much of WNC/eastern Tennessee generally starts in mid to late August and extends into November and is a sensitive period for bats. Suitable fall swarming habitat is like roosting, foraging, and commuting habitat selected during the summer. Spring staging is the time period between winter hibernation and spring migration to summer habitat (Service 2023). During this time, bats begin to gradually emerge from hibernation, exit the hibernacula to feed, but re-enter the same or alternative hibernacula to resume daily bouts of torpor (state of mental or physical inactivity). Tricolored bats also roost in trees near hibernacula during spring staging.

Tricolored bats are opportunistic feeders and consume small insects including caddisflies, moths, beetles, wasps, flying ants and flies. The species most commonly forages over waterways and along forest edges.

3.3.2 Status and Distribution

Tricolored bats have a very wide range that encompasses most of the eastern US from Canada to Florida and west to New Mexico (39 states). They can be found throughout North Carolina and are one of the most encountered cave-dwelling species seen in winter, albeit at much lower densities than prior to the arrival of WNS in the state.

There are 147 NC element occurrences of the tricolored bat based on N.C. Natural Heritage Program records, seven of which are considered historical. The number of bats found at each occurrence range from 1 to 3,000 bats. There have been 79 tricolored bat hibernacula documented, including caves (50), mines (22), root cellars (4), and culverts (3). According to approximately 2,000 bridge surveys conducted throughout western North Carolina from 2000 - 2023, tricolored bats have been recorded roosting in bridges at a usage rate of 1.3% (NCDOT 2023a). Tricolored bat bridge use has been documented to occur in western North Carolina from April – October (with one outlier record from 2013 citing February use). Approximately 900 culvert surveys have been conducted in western North Carolina from 2010 – 2023 (NCDOT 2023b) with year-round data coverage. Tricolored bats have been found using culverts in western North Carolina, again at a relatively low rate (0.8% observed use). Culvert use has been observed in western North Carolina from January – April.

For tricolored bats, the Service split the bat's range into three Representation Units (RPUs), two of which, the Northern and Southern RPUs, include the western and eastern halves of WNC, respectively. The Service estimates that, since 2006, the Northern RPU has experienced a 17% decline in summer occupancy and a 57% decline in the number of winter colonies, while the Southern RPU has experienced a 37% decline in summer occupancy and a 24% decline in the number of winter colonies (Service 2021).

3.3.3 Threats

WNS is the primary driver of the species' decline and is predicted to continue to be the primary influence into the future. Wind energy-related mortality is also considered a consequential driver to the bat's viability. Although habitat loss is considered pervasive across the species' range, severity has likely been low given historical abundance and spatial extent; however, as tricolored bat's spatial extent is projected to decline in the future (i.e., consolidation into fewer winter and summer colonies) negative impacts (e.g., loss of a hibernaculum or maternity colony) may be significant.

4. Environmental Baseline

The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process [50 CFR §402.02].

The project action areas contain the existing crossing structures and the roadway approaches, along with the existing utilities and surrounding riparian areas in which project work will occur, and are located in the Environmental Protection Agency Blue Ridge Ecoregion in WNC. Past impacts include the original construction and placement of the crossing structures within waterbodies to facilitate transportation in the surrounding locations. Because this document addresses several projects, more detailed information

regarding other human activities at each location is not included for the purposes of this consultation review.

4.1 Listed and Proposed Bats Within the Action Areas

Structures

Portions of damaged McDowell County crossing structures 023, 044, 079, 083; and Mitchell County crossing structure 152 remain in place; however, suitable structural roosting habitat on all structures is extensively reduced and degraded from pre-storm conditions. For gray bats, primary roost structures can support several hundred to over 1,000 individuals, but most structures with observed gray bat roosting in WNC contain only one to 10 individuals. The bridges or culverts that support higher numbers of gray bats are typically larger than average. Northern long-eared bats are only known to roost on bridges in WNC typically between one and two individuals at any given time. Tricolored bats are known to roost on both bridges and culverts typically between 1-2 individuals per structure. In more detail, Natural Heritage data shows three gray bat and one tricolored bat bridge roost locations in McDowell County. Within the action areas of these damaged crossing structures, given the degraded and reduced roosting habitat available, and based on existing WNC data, it is estimated that one individual per species could be present within each structure at each crossing location.

Trees

Gray bats are not considered "tree-roosting" species. While individuals have been observed utilizing trees in rare occasions, they are generally considered a cave/structure-specific roosting species; therefore, no gray bats are expected to be roosting in trees within the action areas. Northern long-eared bats and tricolored bats roost in trees during the warmer months. Buncombe County projects 110, 132, 135, 139 147, 175, 200, and 307, Madison County projects 042, McDowell projects 023, 044, 079, 083, 119, 345, and 428, Mitchell County projects 123, 152, and 154, and Yancey County projects 100 and 156 may involve tree clearing, but no project anticipates clearing more than 0.1 acres. Given the minimal amount of riparian vegetation and trees remaining within the action areas, it is unlikely that high number of bats would be utilizing the small amount of available habitat. Based on that rationale, 1 individual per species (of northern long-eared bat or tricolored bat) could be present in trees within the action area per crossing structure location.

5. Effects of the Action

Under section 7(a)(2) of the ESA, "effects of the action" refers to the consequences, both direct and indirect, of an action on the species or critical habitat. The effects of the proposed action are added to the environmental baseline to determine the future baseline, which serves as the basis for the determination in this Opinion. Should the effects of the Federal action result in a situation that would jeopardize the continued existence of the species, we may propose reasonable and prudent alternatives that the Federal agency can take to avoid a violation of section 7(a)(2).

5.1 Gray Bat, Northern Long-eared Bat, and Tricolored Bat

5.1.1 Proximity of the Action, Nature of the Effect, and Disturbance Duration for Bats

Based on the description of the action and the species' biology, stressors to gray bat, northern long-eared bat, and tricolored bat have been identified and are shared below. The proximity of these actions will be within the entire action area of each project, including the structures, waterways, riparian zone, and any existing forested areas. Duration of disturbance is expected primarily during the construction phase of project work.

5.1.2 Effects Analysis for Bats

Replacement structures: Due to the constraints associated with the TS Helene response, such as the high volume of projects and timeline unknowns, the exact designs of replacement crossing structures are not known at the time of this document. However, according to information provided by NCDOT, most replacement bridge structures are expected to be either cored slab or box beam bridges. Such precast concrete bridges may provide suitable bat roosting habitat depending on factors such as spacing between beams/girders, arrangement above any bents, and other design elements that could result in potential roosting crevices. Generally, concrete is a favorable material for roosting due to its thermal stability.

Direct Impacts – Direct effects are caused by the action and occur at the same time and place (50 CFR 402.02).

Structure Work

The demolition of remaining portions of structures, if conducted while bats are present, could result in causing bats to flush, which would expose them to risk of predation and would cause increased energy expenditure and create the need for bats to find alternative roost locations. It could also result in physical wounding or death. High-decibel percussive noises associated with demolition or construction may cause nearby roosting bats to flush, exposing them to harm and increased energy expenditure. Additionally, while adults may be able to flush, any non-volant pups present would be left behind with mortality as the likely outcome. In summary, these activities, should they occur while bats are present, are likely to adversely affect gray bat, northern long-eared bat, and tricolored bat in the form of harm.

Tree Removal

The removal of suitable roost trees, if conducted while northern long-eared bats, or tricolored bats are present, could result in causing bats to flush, which would expose them to risk of predation, would cause increased energy expenditure, and create the need for bats to find alternative roost locations. It could also result in physical wounding or death. Given the presence of alternative forested habitat near the action areas, bats could likely find trees for roosting. Harm would be expected in the increased exposure to predation from flushing and from the potential for wounding or killing when trees are felled. Additionally, while adults may be able to flush, any non-volant pups would be left behind and would likely perish. In summary, these activities, should they occur while bats are present, are likely to adversely affect northern long-eared bat and tricolored bat in the form of harm.

Indirect Impacts – Indirect effects are defined as those that are caused by the proposed action and are later in time but are still reasonably certain to occur (50 CFR 402.02).

If bats were utilizing structures or trees (when considering northern long-eared bat and tricolored bat) within the action areas as roost sites prior to demolition/clearing/construction and return to those roost sites to find the habitat gone or altered, the bats may then have to expend extra energy in finding alternative roosting areas. While this could occur, it is considered unlikely to result in adverse effects given that replacement structures are expected to offer suitable roosting features, and alternative forested habitat is available near the action areas.

Operational Effects

Because these projects are limited to the replacement of damaged or destroyed crossing structures and their approaches, which will not result in changes to traffic volumes, any operational effects above the existing baseline conditions are not expected to occur; or, if they do occur, are expected to be minimal.

5.2 Cumulative Effects

Cumulative effects are defined as "those effects of future state or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation" (50 CFR 402.02). Future federal actions unrelated to the proposed action are not considered because they require separate consultation pursuant to Section 7 of the ESA.

These structure replacements are not expected to induce land development or substantially change the function of the roadways. Any potential effects are anticipated to be localized and consistent with baseline land use patterns. Many private landowners and local governments are recovering from TS Helene and rebuilding homes/businesses and infrastructure. Therefore, there will likely be increased construction in WNC Counties for an undefined period of time. Some of this work will be conducted during seasons when bats are active on the landscape, potentially increasing exposure to construction-related stressors. However, other effects from these private actions cannot be determined at this time.

6. Conclusion and Jeopardy Determination

After reviewing the current status of gray bat, northern long-eared bat, and tricolored bat, the environmental baselines for the action areas, the effects analyses and cumulative effects, the Service's biological and conference opinions are shared below.

6.1 Gray Bat, Northern Long-eared Bat, and Tricolored Bat

On September 14, 2022, the Service published a proposal in the Federal Register to list the tricolored bat as endangered under the ESA. As a result, NCDOT requested a conference for the tricolored bat as the projects may be on-going after the effective date of any final listing rule, if one is published. It is the Service's biological and conference opinion that the proposed actions are not likely to jeopardize the continued existence of gray bat, northern long-eared bat, or tricolored bat. This opinion is based on the following factors: Effects of the actions occur as a result the planned replacement of Buncombe County crossing structures 110, 132, 135, 139, 147, 175, 200, 307, and 428; Madison County crossing structure 042; McDowell County crossing structures 023, 044, 079, 083, 119, and 345; Mitchell County crossing structures 123, 152, and 154; and Yancey County crossing structures 100 and 156. These action areas comprise only a small amount of active season habitat within the overall ranges of these species. No changes in the long-term viability of gray bat, northern long-eared bat, or tricolored bat are expected because, given the low numbers of each species which could be expected to occur at each crossing structure location (that is, an estimate of 1 individual per species per structure and an estimate of 1 northern long-eared bat and 1 tricolored bat per forested area within each action area), and the occurrence range-wide of each species – gray bat in 14 states, northern long-eared bat in 37 states, and tricolored bat in 39 states as well as in portions of other North and Central American countries – only a miniscule percentage of those overall populations may be affected. Crossing structure construction activities are likely to negatively affect gray bat, northern long-eared bat, and tricolored bat within the action areas, but the incorporated conservation measures are expected to reduce impacts.

7. Incidental Take Statement

Section 9 of the Endangered Species ESA and Federal regulations pursuant to section 4(d) of the Endangered Species Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take "*means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct*" (16 U.S.C §1532). Harm is further defined by the Service as "*an act which actually kills or injures wildlife. Such act may include significant habitat*

modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR 17.3). Incidental taking "*means any taking otherwise prohibited, if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity*" (50 CFR 17.3). Harass is defined by the Service as "*an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering*" (50 CFR 17.3). Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to, and not intended as part of, the agency action is not considered to be prohibited under the Endangered Species Act, provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

7.1 Amount of Take for Gray Bat, Northern Long-eared Bat, and Tricolored Bat

The Service anticipates incidental take of gray, northern long-eared, and tricolored bats may result from the demolition (if applicable) and construction of crossing structures 110, 132, 135, 139, 147, 175, 200, 307, and 428 (Buncombe County); 042 (Madison County); 023, 044, 079, 083, 119, and 345 (McDowell County); 123, 152, and 154 (Mitchell County); and 100 and 156 (Yancey County). Specifically, take of these species may occur as a result of flushing, wounding, or direct mortality during demolition activities (if applicable); or, for northern long-eared bat and tricolored bat, take may occur as a result of clearing suitable roost trees during times of year that these bats could be tree-roosting within the action area, which may similarly result in flushing, wounding, or direct mortality during clearing activities.

Incidental take of bats is difficult to measure or detect given that 1) the animals are small, cryptic, and generally difficult to observe, 2) finding dead or injured bats during or following project implementation is unlikely, and 3) some incidental take is in the form of non-lethal harm and not directly observable. Given this, the 1) maximum estimated tree clearing (for northern long-eared bat and tricolored bat only) and 2) number of structures replaced, are used as surrogate measures of take for this Opinion. Additionally, as discussed in the Environmental Baseline, no more than one individual of gray bat or two individuals of northern long-eared bat or tricolored bat (given structure and tree roosting) are estimated to be present within the action areas of each crossing structure.

Therefore, the incidental take permitted by the Opinion would be exceeded if:

1. *Tree clearing amount exceeds 0.10 acre at a single structure location for the crossing structures listed at the beginning of section 7.2.
2. Any more than one structure is demolished/replaced per crossing structure, as listed at the beginning of section 7.2.

**For northern long-eared bat and tricolored bat only*

Exceedance of take as defined above will represent new information that was not considered in this Opinion and shall result in reinitiation of this consultation. The incidental take of gray bat, northern long-eared bat, and tricolored bat is expected to be in the form of harm, wounding, or death.

7.2 Reasonable and Prudent Measures

The Service believes the following reasonable and prudent measure(s) are necessary and appropriate to minimize take of gray bat, northern long-eared bat, and tricolored bat. These non-discretionary measures reduce the level of take associated with project activities and include only actions that occur within the action area.

1. NCDOT shall ensure that the contractor(s) understands and follows the measures listed in the "Conservation Measures", "Reasonable and Prudent Measures," and "Terms and Conditions" sections of this Opinion.
2. NCDOT shall minimize the area of disturbance within the action areas to only the area necessary for the safe and successful implementation of the proposed actions.
3. NCDOT shall monitor and document any take numbers and the surrogate measures of take and report those to the Service in a batched format.

7.3 Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the Applicant must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline required reporting and/or monitoring requirements. When incidental take is anticipated, the terms and conditions must include provisions for monitoring project activities to determine the actual project effects on listed fish or wildlife species (50 CFR §402.14(i)(3)). These terms and conditions are nondiscretionary. If this conference opinion is adopted as a biological opinion following a listing or designation, these terms and conditions will be non-discretionary.

1. NCDOT shall adhere to all measures as listed in the Avoidance and Minimization and Conservation Measures section as summarized in this Opinion.
2. The NCDOT will immediately inform the Service if the amount or extent of incidental take in the incidental take statement is exceeded.
3. When incidental take is anticipated, the Terms and Conditions must include provisions for monitoring project activities to determine the actual project effects on listed fish or wildlife species (50 CFR §402.14(i)(3)). In order to monitor the impact of incidental take, the NDOT must report the action impacts on the species to the Service according to the following:
    a. The NCDOT will submit a report each year not later than September 30 identifying, per individual project (via Service Log # and NCDOT identifiers), the following for the preceding calendar year ending December 31:
        i. Acreage and dates of tree removal (if any), if LAA for bats (excepting gray bat).
        ii. Dates of structure removal (if any), if LAA for bats.
        iii. List of implemented AMMs and BMPs [as listed in Section 2.3].

8. Conservation Recommendations

Section 7(a)(l) of the Endangered Species ESA directs Federal agencies to use their authorities to further the purposes of the Endangered Species ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

- **Eastern Hellbender**: Proximity to eastern hellbender occurrence records was noted for the following crossing structures: Buncombe County structures 132, 135, and 139, and Yancey County structure 298. Ahead of work at this location, coordinate with the NCWRC and the Service to survey for/relocate any hellbender that may be within the action area and vulnerable to impacts from project work.
- **State Species of Concern**: Proximity to aquatic species with North Carolina designations was noted for Buncombe County crossing structures 132, 135, 175, and 200, Madison County crossing structure 042, McDowell County crossing structure 044, and Mitchell County crossing structure 123. While these species are not currently afforded legal protection under the ESA, we recommend the most

protective sediment and erosion control measures possible be used in waters occupied by these species, and we encourage you to coordinate any relocation efforts of such species with the NCWRC.

- **Refueling and Materials Storage**: Refuel construction equipment outside the 100-year floodplain or at least 200 feet from all water bodies (whichever distance is greater) and protected with secondary containment. Store hazardous materials, fuel, lubricating oils, or other chemicals outside the 100-year floodplain or at least 200 feet from all water bodies (whichever distance is greater).
- **Provide Terrestrial Wildlife Passage**: Where riparian corridors suitable for wildlife movement occur adjacent to a project, a spanning structure that also spans a portion of the floodplain and provides or maintains a riprap-free level path underneath for wildlife passage would provide a safer roadway and facilitate wildlife passage. A 10-foot strip may be ideal, though smaller widths can also be beneficial. Alternatively, a "wildlife path" can be constructed with a top-dressing of finer stone (such as smaller aggregate or on-site alluvial material) to fill riprap voids if full bank plating is required. If a multi-barrel culvert is used, the low flow barrel(s) should accommodate the entire stream width and the other barrel should have sills to the floodplain level and be back-filled to provide dry, riprap-free wildlife passage and well as periodic floodwater passage.

For the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, we request notification of the implementation of any conservation recommendations.

9. Reinitiation Notice

This concludes formal consultation on the action(s) outlined in the consultation request dated December 12, 2024. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

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Archaeology

Project Tracking No.

25-03-0002

NO NATIONAL REGISTER OF HISTORIC PLACES ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES PRESENT 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 Team.

PROJECT INFORMATION

Project No:	**Bridge 139**	*County:*	Buncombe
WBS No:	DF18313.2011356	*Document:*	Federal CE
F.A. No:	na	*Funding:*	☐ State ☒ Federal
Federal Permit Required?	☒ Yes ☐ No	*Permit Type:*	FHWA, USACE, & FEMA

Project Description:

The project calls for the replacement of Bridge No. 139 on SR 2171 (Poverty Branch Road) over North Fork Ivy Creek in Buncombe County. The archaeological Area of Potential Effects (APE) for the project is defined as an approximately 570-foot (173.74 m) long corridor running 260 feet (79.25 m) north and 310 feet (94.49 m) south along Poverty Branch Road. The corridor narrowing at the northern and southern ends is approximately 80 to 140 feet (24.38 to 42.67 m) wide extending 40 to 70 feet (12.19 to 21.34 m) to either side of the centerline. The APE also extends an additional 160 feet (48.77 m) east and 100 feet (30.48 m) west along North Fork Ivy Creek extending between 20 and 40 feet (6.10 to 12.19 m) from the waterway. In all, the APE encompasses approximately 2 acres.

Federal funds and permits are anticipated. As a result, this archaeological review was conducted in accordance with Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance (36 CFR Part 800).

SUMMARY OF ARCHAEOLOGICAL FINDINGS

***The North Carolina Department of Transportation (NCDOT) Archaeology Team has reviewed the subject project and determined**:*

☒ There are no National Register listed ARCHAEOLOGICAL SITES within the project's area of potential effects. (Attach any notes or documents as needed.)

☐ No subsurface archaeological investigations were required for this project.

☒ Subsurface investigations did not reveal the presence of any archaeological resources.

☒ Subsurface investigations did not reveal the presence of any archaeological resources considered eligible for the National Register.

☒ All identified archaeological sites located within the APE have been considered and all compliance for archaeological resources with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.

Brief description of review activities, results of review, and conclusions:
NCDOT has conducted an archaeological reconnaissance and field investigation for the replacement of Bridge 139 in Buncombe County, North Carolina. The project is located in Barnardsville and plotted in the southern half of the Barnardsville USGS 7.5' topographic quadrangle (Figure 1).

Background Research

A site files search was conducted using data from the Office of State Archaeology (OSA) on April 9, 2025. No previously recorded archaeological sites are within the project area, but 18 sites (31BN42, 31BN47, 31BN48, 31BN159, 31BN160, 31BN161, 31BN163, 31BN486, 31BN487, 31BN488, 31BN489, 31BN851, and 31BN1339–31BN1344) are within a mile.

No systematic archaeological survey and testing have been carried out within the project area, but TRC Environmental Corporation (TRC) did investigate the replacement of Bridge No. 154 on SR 1003 (Paint Fork Road), which is located just to the west of Bridge No. 139 (Johnson 2024). The well-drained floodplain and stream terrace tested at Bridge No. 154 are the same as those found at Bridge No. 139. TRC's investigation identified six newly recorded precontact and/or historic sites (31BN1339–31BN1344) and evaluated two previous recorded precontact sites (31BN486 and 31BN487). From this investigation, the precontact component at site 31BN486 was determined to be eligible for the National Register, while the remaining seven sites were recommended as not eligible within the project limits. None of these sites have the potential to extend into the current project's APE. An additional 10 sites (31BN42, 31BN47, 31BN48, 31BN159, 31BN160, 31BN161, 31BN163, 31BN488, 31BN489, and 31BN851) have also been reported withing a mile of Bridge No. 139. Most of these sites are situated on the floodplain or stream terraces associated with Ivy Creek. Site 31BN851 is the exception having been located in a saddle along a ridge. Due to the high density of sites in close proximity along the Ivy Creek waterways, systematic shovel testing was recommended for the current project area. However, Hurricane Helene and the recovery efforts have greatly disturbed the floodplain and stream terraces within the project area and vicinity since the previous archaeological investigations.

According to the North Carolina State Historic Preservation Office (SHPO) online database (HPOWEB 2025), the properties south of the bridge are in the determined eligible Barnardsville Historic District (BN6885). However, contributing archaeological deposits to the eligibility of the district will not be encountered by the bridge replacement project.

Historic maps were reviewed as well for significant and notable features in the landscape. Most maps prior to the 20th century provide only general details concerning the region illustrating just major roads and settlements. The 1900 USGS Mount Mitchell topographic map is one of the first to show a reliable location for the project (Figure 2). This map depicts an unimproved road and a crossing over North Fork Ivy Creek similar to the current alignment. At least one structure is plotted to the southeast, possibly at the location of the current post office. The 1920 *Soil Map for Buncombe County*, likewise, illustrates the same road layout, but the southeast structure is missing (Perkins et al. 1920) (Figure 3). The later 1938 highway map for Buncombe County shows the same road alignment with increased development including seasonal businesses south of the creek and residential properties to the north (NCSHPWC 1938) (Figure 4). While evidence for historic resources was possible according to the maps, the field investigation identified no historic sites.

The USDA soil survey shows five soil types within the project limits prior to disturbance from Hurrican Helene (Figure 5) (USDA NRCS 2025). These include the Dellwood-Reddies complex (DeA), French loam (FrA), the Mars Hill-Walnut complex (MvE), Rosman fine sandy loam (ReA), and Statler loam (StB). The floodplain is composed of the Dellwood-Reddies, French, and Rosman series. The French is a somewhat poorly drained, while the other two are moderately well drained to well drained. Slope is less than 3 percent, and the area is subject to occasional flooding. The French is not typically suited for early settlement activities due to persistent wetness, but the presence of structures suggest it maybe drier than expected. The stream terraces are made up of Statler series. These are well drained soils with a slope of less than 5 percent. The

well drained soils including the Dellwood-Reddies and Rosman series are ideal for early occupations due to being dry and fairly level and, therefore, may contain intact cultural deposits. However, disturbance was found to be high with soil replaced by fill material after the hurricane. The northwestern hillside consists of the Mars Hill-Walnut complex and covers only a minor portion of the project area. Although well drained, slope is 30 to 50 percent. Slope of 15 percent or more is not usually tested since intact deposits are unlikely.

Fieldwork Results

The archaeological field reconnaissance and survey for the proposed replacement of Bridge 139 in Buncombe County was conducted on April 30, 2025. The investigation included a visual inspection and the excavation of six shovel tests (STs) (see Figure 2). Shovel tests were placed in the southwest and southeast quadrant at approximately 15-meter (ca. 49 ft) apart. No shovel tests were excavated in areas with obvious ground disturbance or covered over by impervious material. Shovel tests were eventually halted once it became clear that fill had recently been deposited at potential testing locations within the APE.

The APE for the project is situated north to south over North Fork Ivy Creek with NC 197 to the south running perpendicular east to west to the crossing (see Figure 5). NC 197 is outside of the APE. North Fork Ivy Creek drains west and joins Ivy Creek approximately 950 feet (ca. 290 m) away. These waterways are part of the French Broad drainage basin. The project area resides mostly along the floodplain with a stream terrace at the southern end. Steep hillside slope is to the northwest. Most of the area is residential with housing and out-buildings, but a Post Office is present at the NC 197 intersection. Pavement covers this property on the east side of Poverty Branch Road. Tree cover and secondary vegetation are light with most properties open with grassy lawns (Figures 6–8). Although recent recovery efforts have cleaned up the properties, ground disturbance is severe in all the quadrants from Hurricane Helene. Property owners reported that the project area was scoured by fast moving floodwaters. After the flooding, they deposited fill and landscaped the lawns with heavy machinery. However, fill had not been deposited in the northeast quadrant, and it remained eroded at the time of the investigation (Figure 9).

Surface visibility was fair over the APE with a light density of low-growing grass covered with straw having just been seeded, but no artifacts were observed. Six shovel tests were excavated at 15-m (ca. 49 ft) intervals with three each in the southeast and southwest quadrants (see Figures 5–7). No tests were placed north of the creek due to obvious soil erosion, fill, and steep slope (see Figures 8 and 9). All six shovel tests consist of various fill layers that extend to at least 50 to 75 cm (ca. 20 to 30 in) below the surface (Figure 10). Deeper excavations were prevented by large stones (likely riprap) within the fill. No intact soil layers or subsoil was encountered in any of the STs. After talking with landowners, it was apparent that additional tests would yield more fill and not provide any useful information. Further subsurface testing was halted. Due to prior ground disturbance, no significant or intact archaeological deposits will be impacted by the project.

Recommendations

The archeological investigations into the replacement of Bridge 139 in Buncombe County identified no sites. All six STs were negative for cultural material yielding only fill, and no resources were seen along the surface. The floodplain and stream terraces are heavily disturbed from soil erosion and landscaping associated with Hurricane Helene and its recovery efforts. Other areas are covered with gravel or pavement. In addition, the hillside in the northwest quadrant is over 15 percent and requires no testing. As a result, the area has no horizontal or vertical integrity along with the low potential for evidence of early occupations. It is very unlikely that any intact soil other than subsoil is under the disturbance layer. No further archaeological work is recommended for this project. However, additional testing will be necessary if the APE expands.

This project falls within a North Carolina County in which the Catawba Indian Nation, the Eastern Band of Cherokee Indians, the Cherokee Nation, the United Keetoowah Band of Cherokee Indians, and Muscogee (Creek) Nation have expressed an interest. We recommend that you ensure that this documentation is

forwarded to the tribe using the process described in the current NCDOT Tribal Protocol and PA Procedures Manual.

SUPPORT DOCUMENTATION

See attached: ☒ Map(s) ☐ Previous Survey Info ☒ Photos ☐ Correspondence

Other: historic map images

Signed:

MAY 6, 2025

C. Damon Jones — Date
NCDOT ARCHAEOLOGIST

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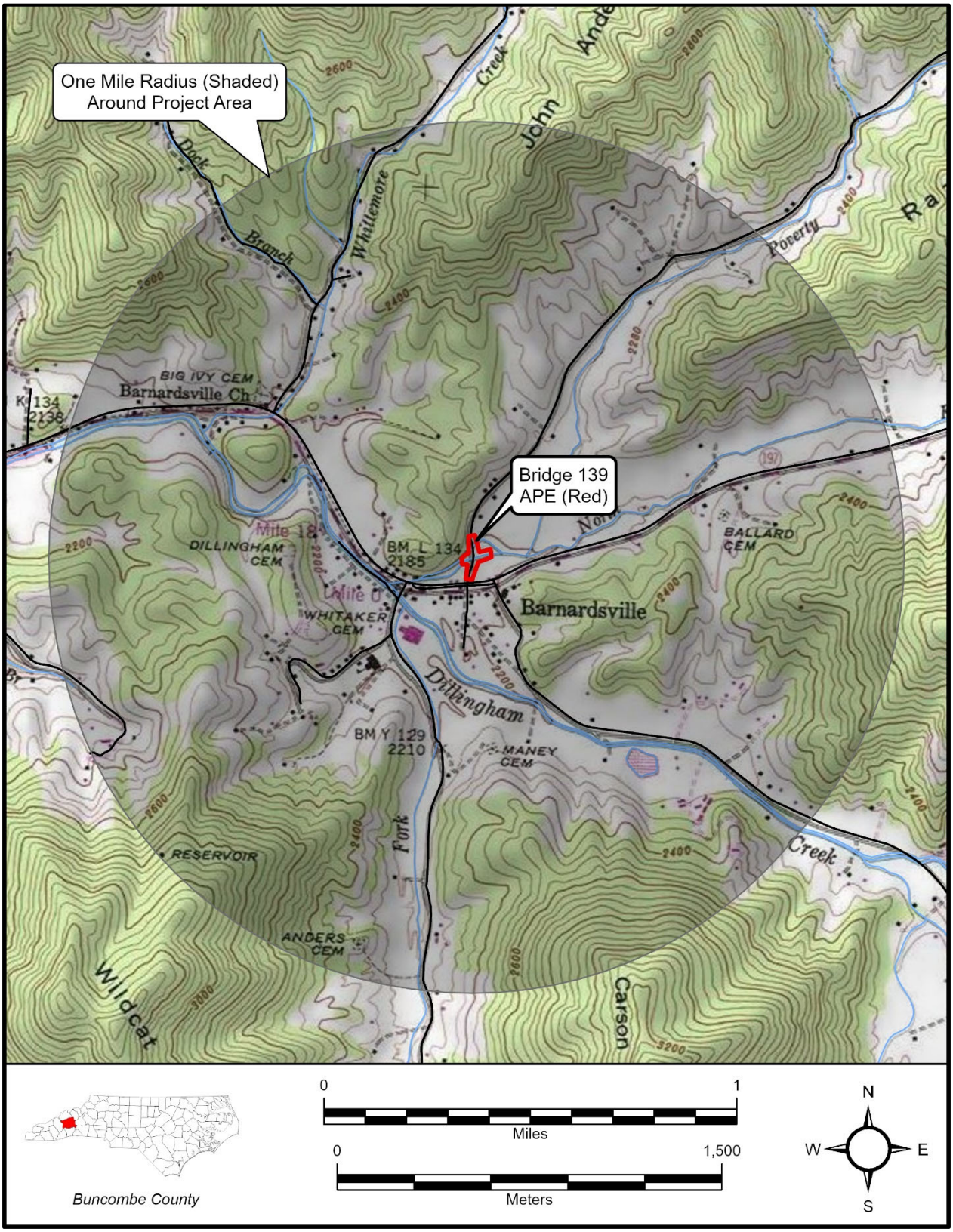


Figure 1. Topographic Setting of the Project Area, Barnardsville (2016) NC USGS 7.5′ Topographic Quadrangle.

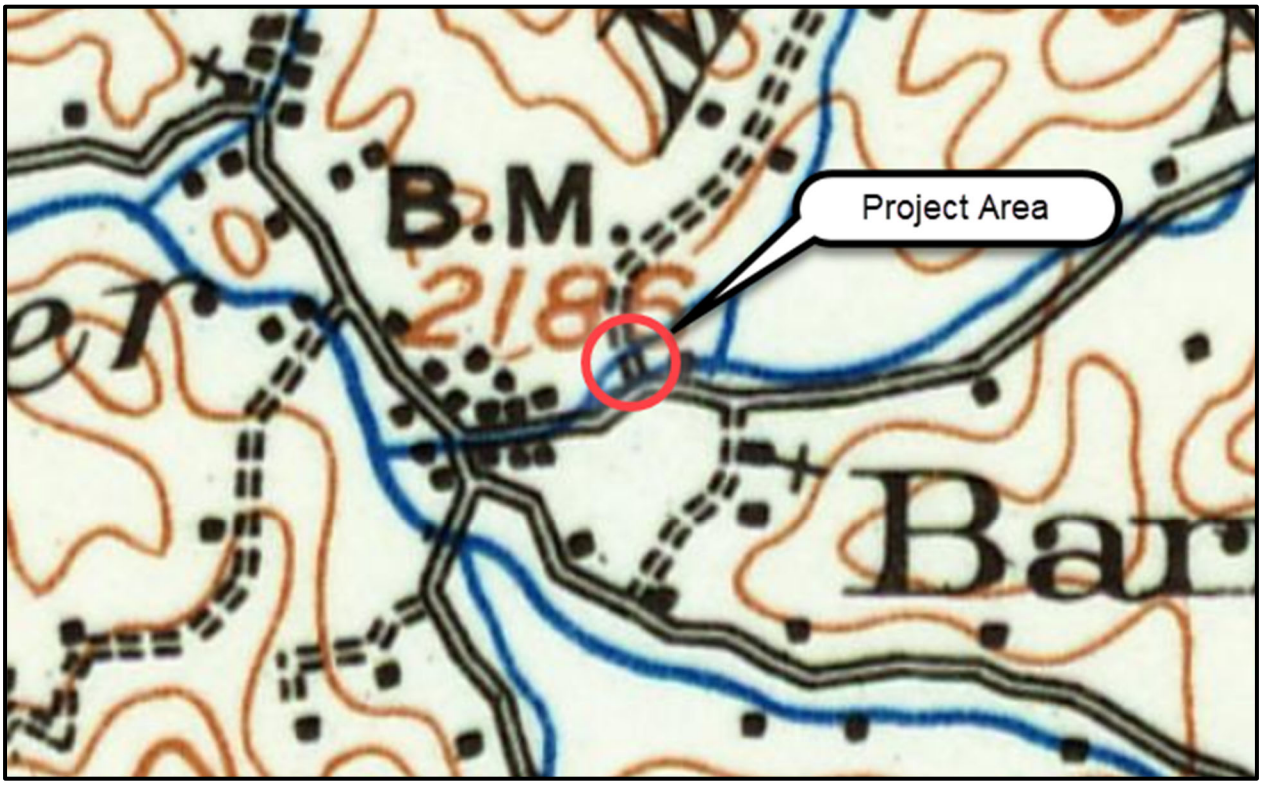


Figure 2. The 1900 USGS Mount Mitchell Topographic map showing the location of the project area.

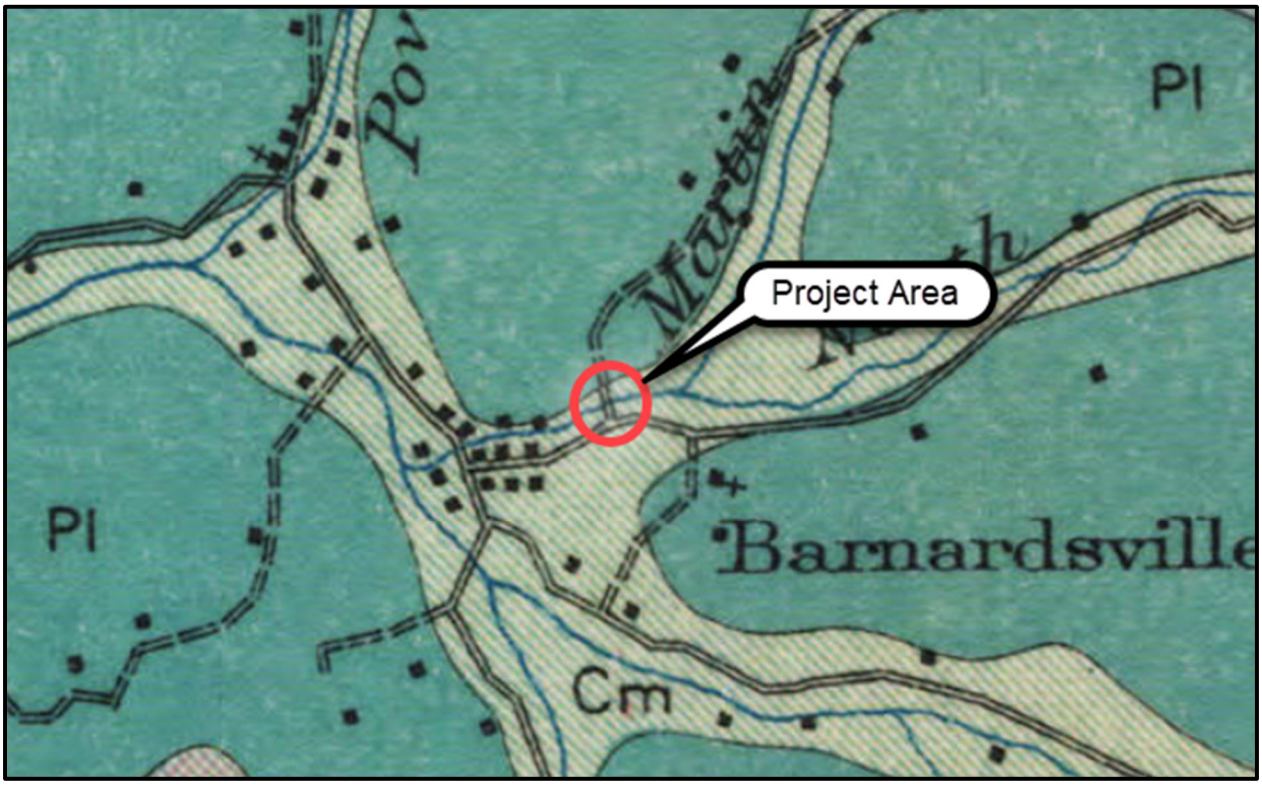


Figure 3. The 1920 *Soil Map for Buncombe County* showing the location of the project area.

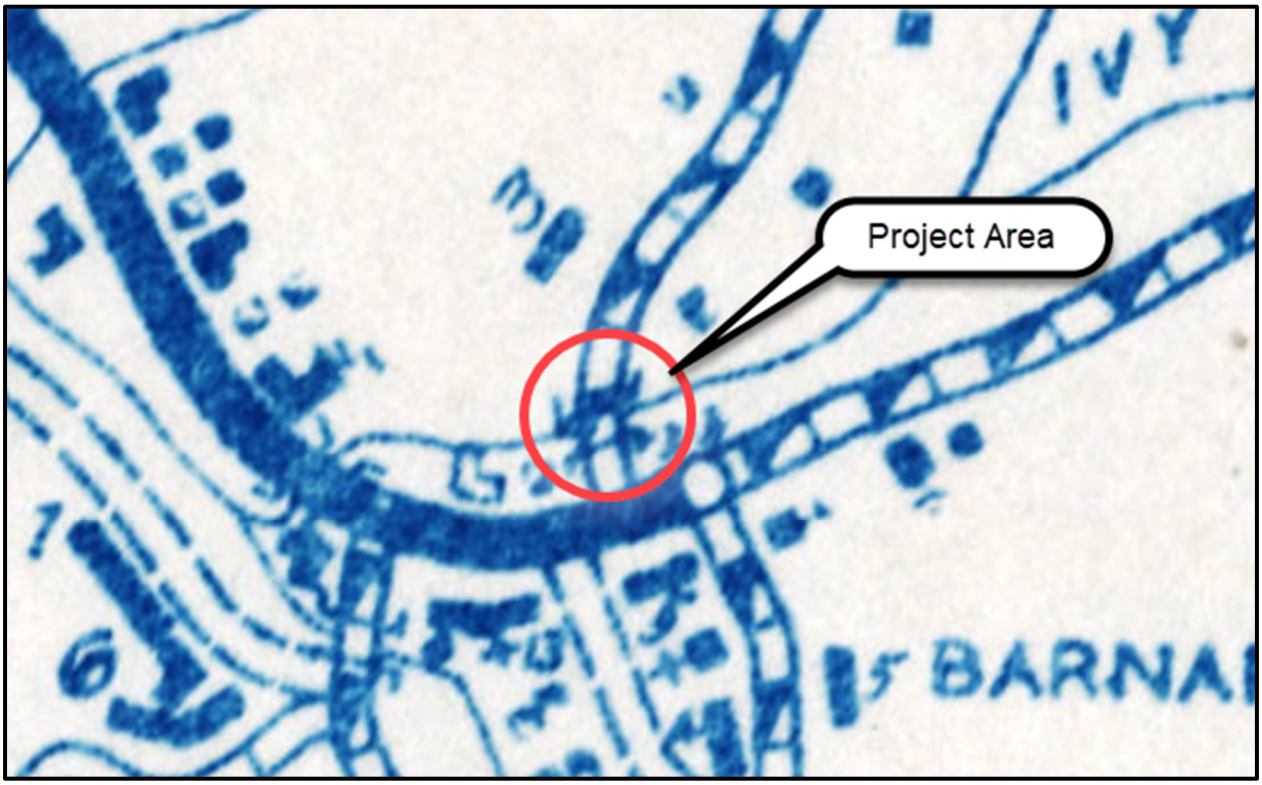


Figure 4. The 1938 *North Carolina State Highway Map for Buncombe County* showing the location of the project area.

Figure 5. Aerial photograph of the APE showing development, landforms, soils, and ST locations.

Figure 6. View of the southwest quadrant showing the floodplain/stream terrace and lawn with fill after Hurricane Helene recovery, looking south.

Figure 7. View of the southeast quadrant showing the floodplain/stream terrace and lawn with fill after Hurricane Helene recovery, looking south.

Figure 8. View of the north quadrant showing the floodplain, hillslope, and lawn with fill after Hurricane Helene recovery, looking north.

Figure 9. View of the northeast quadrant showing soil erosion from flooding, looking north.

Figure 10. Profile of STs #1.

Historic Architecture & Landscapes

HISTORIC ARCHITECTURE AND LANDSCAPES ASSESSMENT OF EFFECTS 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:		***County***:	Buncombe
WBS No.:	HELENE-100139[ET]6578	***Document Type***:	Federal CE
Fed. Aid No:		***Funding***:	☐ State ☒ Federal
Federal Permit(s):	☒ Yes ☐ No	***Permit Type(s)***:	
Project Description: Bridge No. 139 on Poverty Branch Road (SR 2171) over North Fork Ivy Creek.			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

Description of review activities, results, and conclusions:
Review of HPO quad maps, HPO GIS information, historic designations roster, and indexes was undertaken on March 13, 2025. Based on this review, the bridge location falls within the Barnardsville Historic District (BN6885). An assessment of effects is required.

ASSESSMENT OF EFFECTS

Property Name:	Barnardsville Historic District	***Status***:	Determined Eligible
Survey Site No.:	BN6885	***PIN***:	

Effects

☐ No Effect ☒ No Adverse Effect ☐ Adverse Effect

Explanation of Effects Determination:
There is no adverse effect as the proposed work will not impact the defining characteristics of the district.

List of Environmental Commitments:

FHWA Intends to use the State Historic Preservation Office's concurrence as a basis for a "de minimis" finding for the following properties, pursuant to Section 4(f):
Barnardsville Historic Distict (BN6885)

SUPPORT DOCUMENTATION

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

FINDING BY NCDOT AND STATE HISTORIC PRESERVATION OFFICE

Historic Architecture and Landscapes – ASSESSMENT OF EFFECTS

DocuSigned by:
Katherine Husband
C47FECA930B040B...

02/26/2026

NCDOT Architectural Historian — Date

Signed by:
Renee Gledhill-Earley
C26A1556A275464...

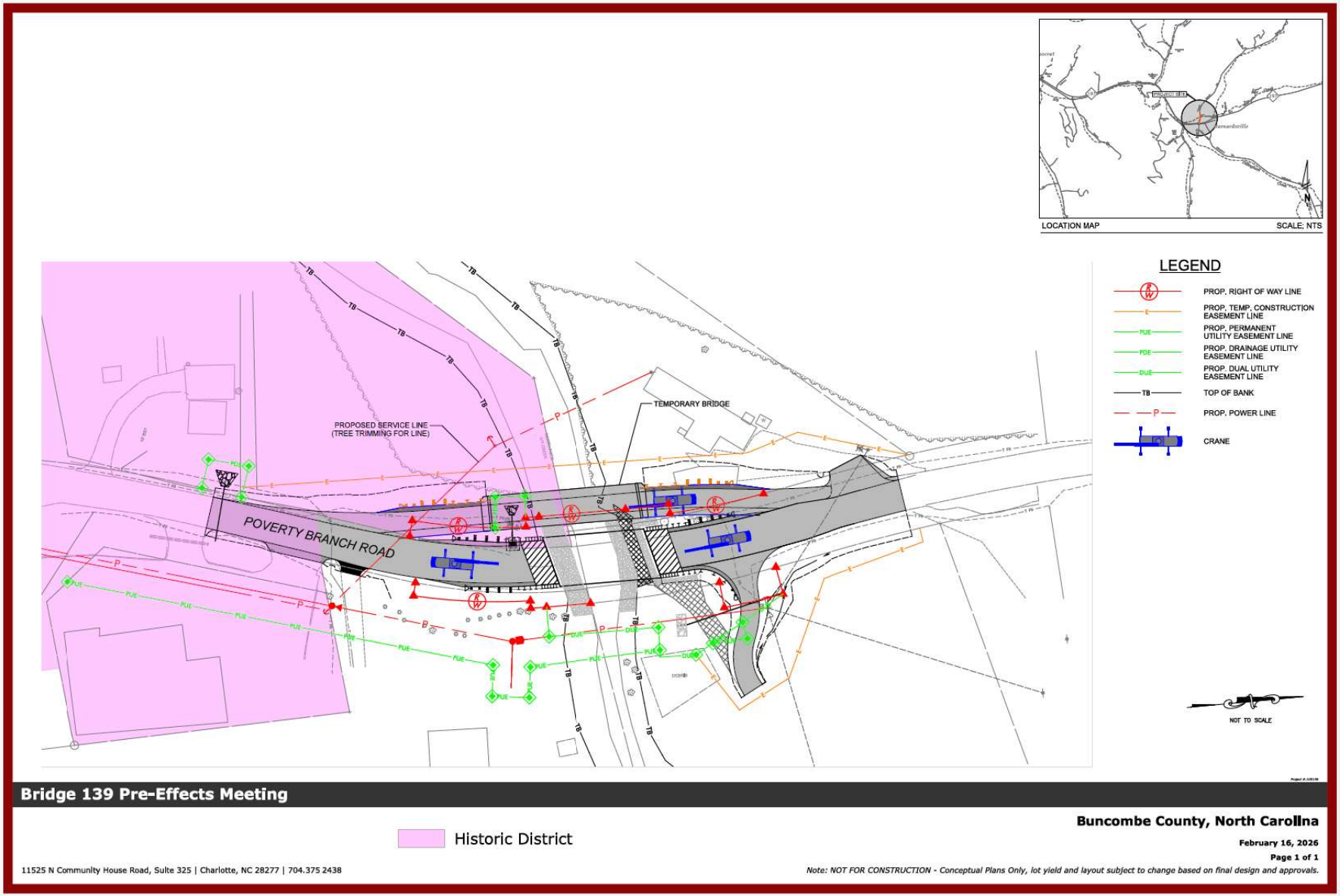
02/26/2026

State Historic Preservation Office Representative — Date

Signed by:
Seth Wilcher
9967A500F8714F0...

02/26/2026

Federal Agency Representative — Date


LOCATION MAP
SCALE: NTS
LEGEND
PROP. RIGHT OF WAY LINE
PROP. TEMP. CONSTRUCTION EASEMENT LINE
PROP. PERMANENT UTILITY EASEMENT LINE
PROP. DRAINAGE UTILITY EASEMENT LINE
PROP. DUAL UTILITY EASEMENT LINE
TOP OF BANK
PROP. POWER LINE
CRANE
PROPOSED SERVICE LINE (TREE TRIMMING FOR LINE)
TEMPORARY BRIDGE
POVERTY BRANCH ROAD
NOT TO SCALE
Bridge 139 Pre-Effects Meeting
Buncombe County, North Carolina
Historic District
February 16, 2026
Page 1 of 1
11525 N Community House Road, Suite 325 | Charlotte, NC 28277 | 704.375 2438
Note: NOT FOR CONSTRUCTION - Conceptual Plans Only, lot yield and layout subject to change based on final design and approvals.

Tribal Coordination

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

DANIEL H. JOHNSON
SECRETARY

Russell Townsend
Eastern Band of Cherokee Indians (EBCI)
Tribal Historic Preservation Officer
2877 Governor's Island Road
Bryson City, NC 28713

Dr. Wenonah Haire
Catawba Indian Nation
Tribal Historic Preservation Officer
1536 Tom Steven Road
Rock Hill, SC 29730

Elizabeth Toombs
Cherokee Nation
Tribal Historic Preservation Officer
PO BOX 948
Tahlequah, OK 74465

Roger Cain
United Keetoowah Band of Cherokee Indians
Section 106 Coordinator
PO Box 746
Tahlequah, OK 74465

Muscogee (Creek) Nation
Section 106 Coordinator
PO BOX 580
Okmulgee OK 74447

March 17, 2026

Dear Tribal Nations,

The North Carolina Department of Transportation is starting the project development, environmental, and engineering studies to replace seven (7) bridges across Western North Carolina that were damaged and/or destroyed during Tropical Storm Helene. The Federal Highway Administration (FHWA) is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA) and a Permit is anticipated under the Section 404 Process with the USACE. A list of the projects with location information is enclosed.

We would appreciate any information you might have that would be helpful in evaluating potential environmental impacts of the project including recommendation of alternates to be studied. Your comments may be used in the preparation of a NEPA/ State Environmental Policy Act (SEPA) Environmental Document.

In accordance with Section 106 of the NHPA, we also request that you inform us of any historic properties of traditional religious or cultural importance that you are aware of that may be affected

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH, NC 27699-1598

Telephone: (919) 707-6000
Fax: (919) 250-4224
Customer Service: 1-877-368-4968

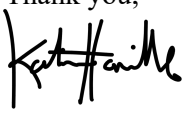
Website: www.ncdot.gov

Location:
1000 BIRCH RIDGE DRIVE
RALEIGH, NC 27610

by the proposed project. Be assured that, in accordance with confidentiality and disclosure stipulations in Section 304 of the NHPA, we will maintain strict confidentiality about certain types of information regarding historic properties.

Please respond by April 16th so that your comments can be used in the scoping of this project. If you have any questions concerning this project, or would like any additional information, please contact me at keharville@ncdot.gov or (919) 707-6105.

Thank you,



Katie Harville
NEPA Program Consultant

cc: Matt Wilkerson, NCDOT Archaeology Group Leader

enclosed: Table of 7 crossing locations

Helene Express Design Build Bridge Replacements
Western North Carolina - March 2026

Structure #	Type	County	Latitude	Longitude	WBS #	Street Name
100132	Bridge	Buncombe	35.7897	-82.5338	DF18313.2011366	Hobson Branch Rd.
100135	Bridge	Buncombe	35.7878	-82.51495	DF18313.2011306	Ivy Hill Rd.
100139	Bridge	Buncombe	35.7788	-82.4556	DF18313.2011356	Poverty Branch Rd.
600152	Culvert	Mitchell	36.0208	-82.0883	DF18313.2061235	Cane Creek Cemetary Rd.
990116	Bridge	Yancey	35.98084	-82.42664	DF18313.2100487	Bald Mountain Rd.
990165	Bridge	Yancey	35.98427	-82.4531	DF18313.2100486	Roaring Fork Rd.
990234	Bridge	Yancey	35.985	-82.2273	DF18313.2100558	Big Brush Creek Rd.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
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1598 MAIL SERVICE CENTER
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Telephone: (919) 707-6000
Fax: (919) 250-4224
Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Location:
1000 BIRCH RIDGE DRIVE
RALEIGH, NC 27610

From: Harville, Katie E
To: elizabeth-toombs@cherokee.org; russtown@ebci-nsn.gov; syerka@ebci-nsn.gov; section106@muscogeenation.com
Cc: Wilkerson, Matt T; lisa.ebci.thpo@gmail.com
Subject: NCDOT Helene | Section 106 | Tribal Consultation | Division 13 Crossing Repairs/Replacements (7)
Date: Tuesday, March 17, 2026 8:09:00 AM
Attachments: image001.png
DR-4827_Div13_106_TribalCoord_2026-03-17.pdf

Good Morning,

I hope you and yours are well today.

Please see the attached letter detailing seven crossing repair locations in Western North Carolina for your review and comment. I have also included the table of crossings below.

Structure #	Type	County	Latitude	Longitude	WBS #	Street Name
100132	Bridge	Buncombe	35.7897	-82.5338	DF18313.2011366	Hobson Branch Rd.
100135	Bridge	Buncombe	35.7878	-82.51495	DF18313.2011306	Ivy Hill Rd.
100139	Bridge	Buncombe	35.7788	-82.4556	DF18313.2011356	Poverty Branch Rd.
600152	Culvert	Mitchell	36.0208	-82.0883	DF18313.2061235	Cane Creek Cemetary Rd.
990116	Bridge	Yancey	35.98084	-82.42664	DF18313.2100487	Bald Mountain Rd.
990165	Bridge	Yancey	35.98427	-82.4531	DF18313.2100486	Roaring Fork Rd.
990234	Bridge	Yancey	35.985	-82.2273	DF18313.2100558	Big Brush Creek Rd.

Happy to answer any questions you may have. Your time is much appreciated.

Note: A hard copy of this letter is being mailed to the Catawba Nation on 3/17/2026 via the U.S. Postal Service.

Best,

Katie Harville
NEPA Program Consultant
North Carolina Department of Transportation

919 707 6105 office or Teams
keharville@ncdot.gov
Book time to meet with me
NCDOT Environmental Policy Unit

NEPA Document

Type I or II Categorical Exclusion Action Classification Form

STIP Project No.	Bridge 139 (100139), Buncombe County, Division 13
WBS Element	DF18313.2011356.PR
Federal Project No.	Federal Aid Number

A. Project Description:

The North Carolina Department of Transportation (NCDOT) intends to replace Bridge 100139 over North Fork Ivy Creek on Poverty Branch Road in Buncombe County, North Carolina (Division 13). See vicinity map.

B. Description of Need and Purpose:

The Purpose of the project is to replace a structure damaged by floodwaters associated with Tropical Storm Helene which made landfall in Florida on September 26, 2024. The repair/replacement work is needed to restore essential traffic in Western North Carolina.

C. Categorical Exclusion Action Classification:

Type I(B) - Ground Disturbing Action

D. Proposed Improvements:

9. The following actions for transportation facilities damaged by an incident resulting in an emergency declared by the Governor of the State and concurred in by the Secretary, or a disaster or emergency declared by the President pursuant to the Robert T. Stafford Act (42 U.S.C. 5121):
a) Emergency repairs under 23 U.S.C. 125; and
b) The repair, reconstruction, restoration, retrofitting, or replacement of any road, highway, bridge, tunnel, or transit facility (such as a ferry dock or bus transfer station), including ancillary transportation facilities (such as pedestrian/bicycle paths and bike lanes), that is in operation or under construction when damaged and the action:
i) Occurs within the existing right-of-way and in a manner that substantially conforms to the preexisting design, function, and location as the original (which may include upgrades to meet existing codes and standards as well as upgrades warranted to address conditions that have changed since the original construction); and
ii) Is commenced within a 2-year period beginning on the date of the declaration.
and/or

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:

NCDOT conducted a desktop GIS analysis for potential natural and human environment features between November 2024 and May 2025. The study area was defined as a 200-foot buffer around the bridge location. NCDOT is utilizing an Emergency Express Design-Build contracting process to expedite this process. If additional ROW is required, or if the final design results in potential impacts outside of the study area, NCDOT will re-evaluate and document any additional effects.

NCDOT is providing comprehensive public outreach to our western NC communities in lieu of site-specific outreach. As site-specific information becomes available, NCDOT will use its various outreach platforms to inform the public.

A Direct and Indirect Screening Tool (DIST) was used to assess potential impacts to the local community, farm lands, and pedestrian accomodations (see project site). The bridge location is surrounded by protected farmland. If additional right-of-way becomes necessary and three (3) or more acres of protected farmland are expected to be converted into right-of-way, the NCDOT Project Manager should coordinate completion of the Preliminary Screening of Farmland Conversion Impacts and if warranted, submission of the NRCS farmland conversion form to NRCS for further evaluation.

Coordination letters/emails were sent to the Eastern Band of Cherokee, Catawba Indian Nation, United Keetoowah Band of Cherokee Indians, and the Muscogee (Creek) Nation, on March 17, 2026 (see project site) with request for comment by April 17, 2026. In their response letter of April 21, 2026, the Catawba Indian Nation requested that they "be notified if Native American artifacts and/or human remains are located during the ground disturbance phase of this project." No additional responses were received as of the date of this document.

NCDOT conducted a review of the potential cultural resources present within the study area boundary between April and May 2025. A review of potential archeological resources determined further investigations were necessary to determine the presence of intact deposits. Subsurface investigations were completed by NCDOT Archaeologists in April 2025. No sites were identified and no further archaeological work was recommended for this project. A "No archaeological sites present" form was completed in May 2025 (see project site).

NCDOT conducted a review of potential historic architecture between April and July 2025 and determined that the project is partially within the National Register-eligible Barnardsville Historic District (BN6885). An assessment of effects was required. The project was presented to NC HPO and FHWA on February 26, 2026. All parties concurred with a finding of *No Adverse Effect* and an "Assessment of Effects" form was completed (see project site). FHWA intends to use the HPO's concurrence as a basis for a "de minimis" finding, pursuant to Section 4(f).

The United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool was reviewed between May and July 2025, and in April 2026. USFWS lists the following species below as federally protected with potential to be found within the project study area as of this date:

Species Name	Scientific Name	ESA Status	Biological Conclusion	Habitat Present
Gray Bat	*Myotis grisescens*	Endangered	MALAA	Yes
Northern long-eared Bat	*Myotis septentrionalis*	Endangered	MALAA	Yes
Tricolored Bat	*Perimyotis subflavus*	Proposed Endangered	MALAA	Yes
Monarch Butterfly	*Danaus plexippus*	Proposed Threatened	N/A	Unknown
Eastern Hellbender	*Cryptobranchus alleganiensis*	Proposed Endangered	N/A	Unknown

The U.S. Fish and Wildlife Service (USFWS) proposed to list the monarch butterfly as a threatened species under the Endangered Species Act (ESA) in December 2024. However, as of December 2025 the final decision has been delayed, and the status has been moved to "long-term action," meaning no final ruling is expected for at least another year. No regulatory protections will take effect until the listing is finalized. Until that time, proposed species do not receive formal ESA protections, though federal action agencies are still required to ensure that their actions do not jeopardize the continued existence of the species. Action agencies may initiate consultation with the USFWS to obtain a conference opinion. If and when the listing is finalized, and at the agency's request, the Service may

adopt the conference opinion as a biological opinion—provided no relevant new information has emerged and no substantial changes to the proposed action have occurred.

The Eastern Hellbender was proposed for federal listing under the Endangered Species Act (ESA) in December 2024. However, no regulatory protections will take effect until the listing is finalized, which is anticipated in late 2025 or early 2026. Until that time, proposed species do not receive formal Endangered Species Act (ESA) protections. However, federal action agencies are still required to ensure that their actions do not jeopardize the continued existence of the species. Federal action agencies may initiate consultation with the U.S. Fish and Wildlife Service (USFWS) to obtain a conference opinion. If and when the listing is finalized, and at the agency's request, the Service may adopt the conference opinion as a biological opinion—provided no relevant new information has emerged and no substantial changes to the proposed action have occurred.

F. Project Impact Criteria Checklists:

F2. Ground Disturbing Actions – Type I (Appendix A) & Type II (Appendix B)

For 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, 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.

- If any question 1-7 is checked "Yes" then NCDOT certification for FHWA approval is required.
- If any question 1-30 is checked "Yes" then additional information will be required for those questions in Section G.

Source documents should be cited for each question as appropriate. If no source is needed or available, denote as "n/a". Please note that some "no" answers should have a corresponding email/memo/report cited for that NCDOT discipline. Project reports or memos/emails should be linked to their location on the project's Precon site; other publications (e.g. the STIP) can be linked directly. Example: (Source: NCDOT HE-0001 NRTR [HE-0001_NRTR.pdf, 2022])

PROJECT IMPACT THRESHOLDS (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) in which a "likely to adversely affect determination" has been made? (Source: NCDOT "Batched Format Consultation" with FWS, 2025)	☒	☐
2	Does the project result in effects subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)? (Source: NCDOT BSG Review, 2025)	☐	☒
3	Does the project generate substantial controversy or public opposition, regarding human and/or natural environment concerns, following appropriate public involvement? (Source: DIST, 2025)	☐	☒
[redacted]	[redacted]	☐	☐
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition? (Source: Design Recommendation Plan Set, 2026)	☐	☒
6	Does the project require an Individual Section 4(f) approval? (Source: EPU GIS Screening, 2025)	☐	☒
7	Does the project result in adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or result in an adverse effect on a National Historic Landmark (NHL)? Source: NCDOT Cultural Resources review and effects assessment, 2026)	☐	☒
Other Considerations		Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or resolved utilizing a Section 7 programmatic agreement? Include in Section G any utilization of a Section 7 Programmatic Agreement. (Source: NCDOT BSG Review, 2025)	☐	☒
9	Is the project located in anadromous fish spawning waters? (Source: EPU GIS Screening, 2025)	☐	☒
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)? (Source: EPU GIS Screening, 2025)	☒	☐
11	Does the project impact waters of the United States in any of the designated mountain trout streams? (Source: EPU GIS Screening, 2025)	☒	☐
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit? (Source: EPU GIS Screening, 2025)	☐	☒

13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility? (Source: EPU GIS Screening, 2025)	☐	☒
14	Does the project include a Section 106 of the National Historic Preservation Act (NHPA) effects findings other than a No Effect, including archaeological remains? No matter the effect finding, list any commitments (conditions) in Section I made in association with the effect finding detailed in Section G. (Source: NCDOT Cultural Resources review and effects assessment, 2026)	☒	☐
15	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.? (Source: Design Recommendation Plan Set, 2026)	☐	☒
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? (Source: Design Recommendation Plan Set, 2026)	☒	☐
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)? (Source: EPU GIS Screening, 2025)	☐	☒
18	Does the project require a U.S. Coast Guard (USCG) permit? (Source: EPU GIS Screening, 2025)	☐	☒
19	Does the project involve Coastal Barrier Resources Act (CBRA) resources? (Source: EPU GIS Screening, 2025)	☐	☒
20	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River? (Source: EPU GIS Screening, 2025)	☐	☒
21	Does the project impact federal lands (e.g., U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands? (Source: EPU GIS Screening, 2025)	☐	☒
22	Does the project involve any changes in access control to the interstate (modification or construction of an interchange)? (Source: Design Recommendation Plan Set, 2026)	☐	☒
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness? (Source: DIST, 2025)	☐	☒
24	Will maintenance of traffic or detours cause substantial disruption? (Source: Design Recommendation Plan Set, 2026)	☐	☒
25	Is the project inconsistent with the NCDOT's federally approved 4-year STIP or NCDOT's BMIP, and where applicable, the Metropolitan Planning Organization's (MPO) Transportation Improvement Program (TIP)? (Source: Emergency Response project, not in STIP)	☒	☐
26	Does the project require the acquisition of lands under the protection of the Land and Water Conservation Fund, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, Dedicated Nature Preserves, 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? (Source: ATLAS Screening, 2025)	☐	☒
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)? (Source: ATLAS Screening, 2025)	☐	☒
28	Does the project "use" Section 4(f) property, and/or result in a *de minimis* determination? (Source: NCDOT Cultural Resources review and effects assessment, 2026)	☒	☐
29	Is the project considered a Type I under the NCDOT Noise Policy? (Source: NA-replace-in-kind)	☐	☒
30	Does the project impact VAD-enrolled property, or prime or important farmland soil, as defined by the Farmland Protection Policy Act (FPPA)? (Source: DIST, 2025)	☐	☒

G. Additional documentation as required from Section F; documentation should address the context and intensity (or severity) of the impact. (Required for all questions marked 'Yes.')

1. A "Batched Format Consultation" was completed by NCDOT Biological Surveys Group in August 2025 to address multiple crossing structures damaged by Tropical Storm Helene in Buncombe, Madison, McDowell, Mitchell, and Yancey Counties. The USFWS confirmed the biological conclusions for listed species in July 2025 (see project site) by issuing either a Biological Opinion, Conference Opinion or Informal Concurrence. NCDOT will follow the Avoidance and Minimization Measures and Conservation Measures included in the green sheet below as well as those listed in the Biological Opinion.

10. The project is located within a WS-II;Tr,HQW stream. NCDOT anticipates incorporating Design Standards for Sensitive Watersheds per 15A NCAC 04B .0124. If a USACE 404 permit is required for the project, additional information related to stream impacts will be addressed there.

11. North Fork Ivy Creek (River) is a designated trout water per NCDWR Surfacewater Classification system. If a USACE 404 permit is required for this project, it may include requirements related to trout moratoriums. In their comments of June 30, 2025 (see project site), NCWRC acknowledges that the trout moratorium for October 15 to April 15th, 2026, has been waived for work at this site but that subsequent moratoria periods should apply.

14. A No Adverse Effect determination for impacts to Barnardsville Historic District (BN6885) was issued on Feruary 26, 2026.

16. The County is a participant in the Federal Flood Insurance Program, administered by the Federal Emergency Management Agency (FEMA). The project is within a Flood Hazard Zone for which the 100-year base flood elevations and corresponding regulatory floodway/non-encroachment area have been established. The project intersects a FEMA mapped stream studied by the North Carolina Floodplain Mapping Program.

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). 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.

25. This project is an emergency relief project due to Tropical Storm Helene impacts. Per 40 CFR § 93.126, it is exempt from the requirement to determine conformity because it does not involve substantial functional, locational or capacity changes (23 CFR 450.218(g)).

28. FHWA intends to use the HPO's concurrence on the Febraury 26, 2026 *No Adverse Effect* determination as a basis for a "de minimis" finding, pursuant to Section 4(f).

H. Categorical Exclusion Approval:

STIP Project No.	Bridge 139 (100139), Buncombe County, Division 13
WBS Element	DF18313.2011356.PR
Federal Project No.	Federal Aid Number

Prepared By:

04/30/2026
Date

Signed by: C5D40DDBAC76416...
Katie Harville, NEPA Program Consultant
Environmental Policy Unit, NCDOT

Prepared For: NCDOT Division 13

Reviewed By:

05/05/2026
Date

Signed by: 78BFB0F950D342E...
Marissa Cox, Western Regional Team Lead
North Carolina Department of Transportation

☐ **Approved**

- If NO grey boxes are checked in Section F, NCDOT approves the Type I or Type II Categorical Exclusion.

☑ **Certified**

- If ANY grey boxes are checked in Section F, NCDOT certifies the Type I or Type II Categorical Exclusion for FHWA approval.

05/05/2026
Date

Signed by: CA084B4A6412432...
John Jamison, Environmental Policy Unit Manager
North Carolina Department of Transportation

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

05/05/2026
Date

DocuSigned by: F932DEEC5B6240F...
for Yolonda K. Jordan, Division Administrator
Federal Highway Administration

Note: Prior to ROW or Construction authorization, a consultation may be required (please see Section VIII of the NCDOT-FHWA CE Programmatic Agreement for more details). Upload final documentation to ATLAS workbench and add commitments to the green sheet and Commitments dashboard.

PROJECT COMMITMENTS

REPLACE BRIDGE 139 (10039) OVER NORTH FORK IVY CREEK ON SR2171 POVERTY BRANCH RD (PERM)
County: Buncombe
WBS: DF18313.2011356.PR

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

Division Environmental Staff, Project Management (PMU/SMU/Division) - AVOIDANCE & MINIMIZATION MEASURES (AMMs) FOR LISTED BAT SPECIES

The following General AMMs will be used to minimize impacts to listed/proposed bat species.

•Bat AMM Noise: Percussive activities will occur only after the tree clearing within the action area has been completed, helping to reduce the exposure of any tree-roosting bats within the action area to high decibel noise.

•Bat AMM Lighting: No new permanent lighting will be added to the action area. Any lighting needed for night work will be directed at the work area and shielded from surrounding waters/landscape, only on when needed, no brighter than necessary, and blue light emissions will be limited.

•Bat AMM Riparian Planting: Disturbed riparian areas will be replanted with native, fast growing tree and shrub species where feasible, with the understanding that plantings likely cannot be done in utility/drainage/construction easements.

Division Environmental Staff, Project Management (PMU/SMU/Division) - AVOIDANCE & MINIMIZATION MEASURES (AMMs) FOR LISTED BAT SPECIES & HABITAT

The following General AMMs will be used to minimize impacts to listed/proposed species and habitat.

•General AMM1: NCDOT will ensure all operators, employees, and contractors working in areas of suitable habitat for federally listed/proposed species are aware of all NCDOT environmental commitments, including all applicable AMMs and all associated NCDOT guidance documents.

•General AMM2: Best management practices (BMP) and sediment and erosion control (SEC) measures will be utilized to prevent non-point source pollution, control storm water runoff, and minimize sediment damage to avoid and reduce overall water quality degradation.

•General AMM3: Areas of disturbance, such as tree clearing, grubbing, and grading, will be limited to the maximum extent possible.

Project Management (PMU/SMU/Division) - CONSERVATION MEASURES FOR LISTED BAT SPECIES

This project is anticipated to require tree clearing and structure removal which is likely to adversely affect (MALAA) listed bat species. NCDOT will contribute a payment to the N.C. Bat Conservation Fund in support of the recovery of federally listed bat species.

Hydraulics, Project Management (PMU/SMU/Division) - CONSTRUCTION IN FEMA SFHA COORDINATION

This project involves construction activities in or adjacent to FEMA-regulated stream(s) and needs to comply with the Disaster Specific Guidance (DSG) on the Repair/Replacement of Publicly Owned Roads and Bridges in Special Flood Hazard Areas (SFHAs) for the Ongoing Tropical Storm Helene Recovery . Therefore, the Division shall: (1) construct all vertical and horizontal elements within the floodplain as designed; and (2) consult with the Hydraulics Unit of any planned deviation of these elements within the floodplain prior to commencing any such changes; and (3) submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction; and (4) submit post-construction Hydraulic modeling and SFC package to the Hydraulics Unit upon completion of project construction.

Division Environmental Staff - CONTACT NCWRC - HELLBENDER SALAMANDER

North Carolina Wildlife Resources Commission (NCWRC) requests that NCDOT Construction or Division Environmental Offices coordinate with NCWRC to assess and potentially relocate Hellbenders from this project site. It is recommended that they contact the NCWRC liaison, David McHenry (david.mchenry@ncwildlife.org; (828) 476-1966), at least two months before construction begins.

Project Management (PMU/SMU/Division) - FARMLAND

If additional right-of-way becomes necessary and three (3) or more acres of protected farmland are expected to be converted into right-of-way, the NCDOT Project Manager should coordinate completion of the Preliminary Screening of Farmland Conversion Impacts and if warranted, submission of the NRCS farmland conversion form to NRCS for further evaluation.

EAU - ECAP, Division Environmental Staff - NCWRC TROUT WATERS & SENSITIVE DESIGN STANDARDS

North Fork Ivy Creek (River) is a designated trout water per NCDWR Surfacewater Classification system. If a USACE 404 permit is required for this project, it may include requirements related to trout moratoriums. In their comments of June 30, 2025 (see project site), NCWRC acknowledges that the trout moratorium for October 15 to April 15th, 2026, has been waived for work at this site but that subsequent moratoria periods should apply. In addition, NCDOT will implement Design Standards in Sensitive Waters for this project.

COMMITMENTS FROM PERMITTING

No permitting commitments developed to date.

*****END OF PROJECT COMMITMENTS*****

DF18313.2011356.PR
REPLACE BRIDGE 139 (10039) OVER NORTH FORK IVY CREEK ON SR2171 POVERTY BRANCH RD (PERM)
Last Modified Date: 04/30/2026

Bridge Number	Division	County	Location Description	Latitude	Longitude
100139	13	Buncombe	SR 2171 (Poverty Branch Rd/Spruce St) from 800ft north of Bridge #100139 to NC 197/SR 2231 (Barnardsville Hwy)	35.778814	-82.455686

HNTB North Carolina, P.C.
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