STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

J. ERIC BOYETTE
SECRETARY

February 11, 2025

U. S. Army Corps of Engineers
Regulatory Field Office
151 Patton Avenue, Room 208
Asheville, NC 28805

NC Division of Water Resources
Transportation Permitting Branch
450 West Hanes Mill Road, Suite 300
Winston-Salem, NC 27105

ATTN: Ms. Lori Beckwith, NCDOT Coordinator

ATTN: Ms. Kaylie Yankura, NCDOT Coordinator

Subject: **Application for Section 404 Nationwide Permit 14 and Section 401 Water Quality Certification under USACE Emergency Permitting Provisions for Hurricane Helene Response** for the Proposed Replacement of Bridge 125 on SR 1306 (Hicks Hollow Road) over the Elk River in Avery County, Division 11, TIP No. B-5835, Debit $323 from WBS 45788.1.2.

Dear Madams:

The North Carolina Department of Transportation (NCDOT) proposes to replace bridge number 125 on SR 1306 (Hicks Hollow Road) over the Elk River with a new bridge to the immediate north of the previous location.

Hurricane Helene Effects on the Proposed Action
This project was a previously programmed bridge replacement project in the design stage when Hurricane Helene destroyed the bridge. All design efforts were expedited to re-establish a reliable transportation infrastructure for Hicks Hollow Road.

NCDOT proposes the following justifications for the application of USACE's emergency permitting provisions:

Permitting Scenario		Justification
No Impacts / No Permit Required		There are impacts to Section 404 / 401 resources.
Exempt Activity		The proposed replacement structure will be outside of the previous structure's footprint.
Non-Notifying Permit Required		The proposed activity meets the notification thresholds for a NWP 14 due to: - Section 404/401 Resource Impacts - ESA Biological Conclusion other than "No Effect"
404/401 Permit Required	✓	The proposed activity will require Section 404/401 approvals.

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

Section 404/401 Impact Summary

Permanent Replacement Impacts:
As a result of replacing the previous bridge, there will be a total of 12 linear feet of permanent stream impacts for ditch outlet protection/stream bank stabilization, and 67 linear feet (0.06 ac) of temporary stream impacts for the construction of temporary causeways for the construction of the new structure.

After-the-Fact Emergency Temporary Impacts:
A temporary timber bridge with six 20' long 24" CMPs in the causeways (3 on either side of the 40' timber bridge) for residential access was placed downstream of the proposed bridge. NCDOT Division 13 has recently replaced the temporary timber bridge with a larger temporary 90' long rail car bridge that eliminated most of these pipes, as the causeways are smaller.

Section 7
Protected Species listed from IPaC as of the date of this application:

Common Name	Federal Status	Survey Date(s)	Habitat Present	Proposed Biological Conclusion
Gray bat	Endangered	07/17/2024, 06/11/2018	Yes	May Affect, Not Likely to Adversely Affect
Indiana bat	Endangered			
Northern long-eared bat	Endangered			
Tricolored bat	Proposed Endangered			
Virginia big-eared bat	Endangered			
Bog turtle	Threatened (Similarity of Appearance)	-	N/A	Not Required
Eastern hellbender	Proposed Endangered	-	Unknown	Not Required
Monarch butterfly	Proposed Threatened	-	Unknown	Not Required
Rock gnome lichen	Endangered	-	No	No Effect

The eastern hellbender and monarch butterfly were proposed for federal listing in December 2024. However, no restrictions will take effect until the proposal is finalized, which is expected in late 2025 or early 2026. Until then, proposed species do not receive protection under the Endangered Species Act (ESA), except that federal action agencies must ensure their actions do not jeopardize the species' existence.

The NCDOT Biological Surveys Group (BSG) will be submitting a "batched" concurrence request to the USFWS Asheville Regional Office for B-5835, as well as many other Hurricane Helene Response projects for NCDOT Division 11, in the near future.

Historic Resources
A memorandum of agreement (MOA) was signed for B-5835 on November 1, 2022. This MOA stated that this project would have an adverse effect upon Bridge No. 125, which was eligible for listing in the National Register of Historic Places (NRHP). On November 12, 2024, NCDOT submitted a MOA Resolution memo to the North Carolina Department of Natural & Cultural Resources stating that Bridge No. 125 had been washed away during Hurricane Helene and could not be salvaged.

Tribal Coordination
Tribal Coordination Letters (included as part of this application package) were sent on April 23, 2019, October 3, 2024, and February 11, 2025 to the following tribes:

- Catawba - Coordination Letter mailed on February 11, 2025. Awaiting response.
- Cherokee Nation - replied ("with no immediate concerns") on May 22, 2019.
- Eastern Band of Cherokee Indians
- Muscogee (Creek) Nation
- United Keetoowah Band of Cherokee Indians.

In addition to the above-referenced documents, please find enclosed Pre-Construction Notification (PCN), Stormwater Management Plan, and Permit Drawings.

A copy of this permit application will be posted on the NCDOT Website at: http://connect.ncdot.gov/resources/Environmental.

If you have any questions or need additional information, please contact Rob Crowther at recrowther@ncdot.gov or (919) 707-6112.

Sincerely,

for Michael A. Turchy
Environmental Coordination and Permitting Group Leader

ec: NCDOT Permit Application Standard Distribution List

Pre-Construction Notification

Pre-Construction Notification (PCN) Form

For Nationwide Permits and Regional General Permits

(along with corresponding Water Quality Certifications)

December 4, 2023 Ver 4.3

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

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

Below is a link to the online help file.

https://edocs.deq.nc.gov/WaterResources/DocView.aspx?dbid=0&id=2196924

A. Processing Information

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

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

◉ Yes ○ No

Is this project connected with ARPA funding? *

○ Yes ◉ No

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

Avery

Is this a NCDMS Project *

○ Yes ◉ No

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

DO NOT CHECK YES, UNLESS YOU ARE DMS OR CO-APPLICANT.

Is this project a public transportation project? *

◉ Yes ○ No

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

Is this a NCDOT Project? *

◉ Yes ○ No

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

B-5835

WBS # *

45788.1.2

(for NCDOT use only)

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

☑ Section 404 Permit (wetlands, streams and waters, Clean Water Act)

☐ Section 10 Permit (navigable waters, tidal waters, Rivers and Harbors Act)

Has this PCN previously been submitted? *

○ Yes

◉ No

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

☑ Nationwide Permit (NWP)

☐ Regional General Permit (RGP)

☐ Standard (IP)

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

○ Yes ◉ No

Nationwide Permit (NWP) Number: 14 - Linear transportation

NWP Numbers (for multiple NWPS):

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

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

check all that apply

- [ ] 401 Water Quality Certification - Regular
- [ ] 401 Water Quality Certification - Express
- [ ] Non-404 Jurisdictional General Permit
- [ ] Riparian Buffer Authorization
- [x] Individual 401 Water Quality Certification

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

*

For the record only for DWR 401 Certification: ○ Yes ◉ No

For the record only for Corps Permit: ○ Yes ◉ No

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

○ Yes ◉ No

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

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

○ Yes ◉ No

Acceptance Letter Attachment

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

FILE TYPE MUST BE PDF

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

○ Yes ◉ No

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

◉ Yes ○ No

You must submit a copy of the appropriate Wildlife Resource Commission Office.

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

B. Applicant Information

1a. Who is the Primary Contact? *

Rob Crowther

1b. Primary Contact Email: *

recrowther@ncdot.gov

1c. Primary Contact Phone: *

(xxx)xxx-xxxx

(919)707-6112

1d. Who is applying for the permit? *

- [ ] Owner
- [x] Applicant (other than owner)

(Check all that apply)

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

○ Yes ◉ No

2. Owner Information

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

NCDOT

2b. Deed book and page no.:

2c. Contact Person:

(for Corporations)

2d. Address *

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

State / Province / Region

NC

Postal / Zip Code

27699-1598

Country

US

2e. Telephone Number: *

(xxx)xxx-xxxx

(919)707-6108

2f. Fax Number:

(xxx)xxx-xxxx

2g. Email Address: *

ekcheely@ncdot.gov

3. Applicant Information (if different from owner)

3a. Name: *

Rob Crowther

3b. Business Name:

(if applicable)

3c. Address *

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

State / Province / Region

NC

Postal / Zip Code

27699-1598

Country

US

3d. Telephone Number: *

(919)707-6112

(xxx)xxx-xxxx

3e. Fax Number:

(xxx)xxx-xxxx

3f. Email Address: *

recrowther@ncdot.gov

C. Project Information and Prior Project History

1. Project Information

1a. Name of project: *

B-5835

1b. Subdivision name:

(if appropriate)

1c. Nearest municipality / town: *

Elk Park

2. Project Identification

2a. Property Identification Number:

(tax PIN or parcel ID)

2b. Property size:

(in acres)

2c. Project Address

Street Address

Address Line 2

City

State / Province / Region

Postal / Zip Code

Country

2d. Site coordinates in decimal degrees

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

Latitude: *

36.18022

ex: 34.208504

Longitude: *

-81.96415

-77.796371

3. Surface Waters

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

Elk River

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

B;Tr

Surface Water Lookup

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

Watauga

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

060101030201

River Basin Lookup

4. Project Description and History

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

The truss span of Bridge No. 125 was washed downstream during the impacts of Hurricane Helene. The timber deck/steel I-beam span remains in place, as do the existing abutments and pier. Immediately after the storm, a temporary timber bridge with six 20' long 24" CMPs in the causeways (3 on either side of the 40' timber bridge) for residential access was placed downstream of the proposed bridge. NCDOT Division 11 has recently replaced the temporary timber bridge with a larger temporary 90' long rail car bridge that eliminated most of these pipes, as the causeways are smaller.

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

○ Yes ◉ No ○ Unknown

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

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

(intermittent and perennial)

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

The original purpose of this project was to replace the one-lane Bridge No. 125. NCDOT records indicate that Bridge No. 125 was built in 1932. Due to the effects of Hurricane Helene on September 27, 2024, the project site conditions have changed. The truss span of existing Bridge No. 125 was washed downstream and is no longer considered within the project scope.

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

Bridge No. 125 is a timber deck on I-beams and truss structure 133 feet long. The replacement structure will be staged constructed to the north. The replacement structure will be a 3 span cored slab bridge approximately 150-feet long providing a clear deck width of 21-feet 10-inches. The bridge will include two 9-foot travel lanes and 1-foot 11-inch offsets. The bridge length is based on preliminary design information and is set by hydraulic requirements. The new structure will be raised approximately 1-foot.

Project construction will extend approximately 114 feet from the western end and 73 feet from the eastern end of the bridge. The project will be approximately 350 feet long. The approaches will include two 9-foot travel lanes with 2-foot shoulders (5-feet with guardrail). SR 1306 has a local functional classification and was designed using Sub-Regional Tier Guidelines
with a 20 mile per hour design speed. Traffic will be maintained on site during construction.

5. Jurisdictional Determinations

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

◉ Yes ○ No ○ Unknown

Comments:

Only perennial streams identified.

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

○ Preliminary ○ Approved ◉ Not Verified ○ Unknown ○ N/A

Corps AID Number:

Example: SAW-2017-99999

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

Name (if known): Kim Hamlin and Ryan Elliott

Agency/Consultant Company: TGS Engineers

Other:

6. Future Project Plans

6a. Is this a phased project? *

○ Yes ◉ No

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

D. Proposed Impacts Inventory

1. Impacts Summary

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

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

3. Stream Impacts

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

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

	3a. Reason for impact * (?)	3b.Impact type *	3c. Type of impact *	3d. S. name *	3e. Stream Type * (?)	3f. Type of Jurisdiction *	3g. S. width *	3h. Impact length *
S1	Site 1A - Causeway/Work Bridge	Temporary	Workpad/Causeway	Elk River	Perennial	Both	39 Average (feet)	67 (linear feet)
S2	Site 1B - Bank Stabilization	Permanent	Bank Stabilization	Elk River	Perennial	Both	39 Average (feet)	6 (linear feet)
S3	Site 1C - Bank Stabilization	Permanent	Bank Stabilization	Elk River	Perennial	Both	39 Average (feet)	6 (linear feet)

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

3i. Total jurisdictional ditch impact in square feet:

0

3i. Total permanent stream impacts:

12

3i. Total temporary stream impacts:

67

3i. Total stream and ditch impacts:

79

3j. Comments:

Permanent stream impacts at sites 1B and 1C are for bank stabilization of the Elk River at lateral base ditch outlets and do not constitute permanent loss of waters requiring compensatory mitigation.

E. Impact Justification and Mitigation

1. Avoidance and Minimization

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

The new bridge will be constructed immediately down stream of the previous bridge in order to minimize roadway realignment and will not discharge stormwater directly into the Elk River. Grass shoulders and ditches have been proposed to convey runoff where necessary. A single drainage structure with shoulder berm gutter has been utilized to protect the proposed fill slopes and discharge into a roadside ditch. Bank stabilization has been provided at the point of discharge for the roadside ditch to ensure the stability of the banks.

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

Best management practices and sedimentation and erosion control measures will be used during construction of the proposed project. No more than 50% of the width of the river shall be blocked at any one time during bridge demolition and construction. Causeways and emergency temporary bridges will be removed using the least impactful measures possible.

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

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

○ Yes ◉ No

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

Permanent stream impacts are limited to bank stabilization and drilled bridge piers which do not constitute a loss of waters.

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

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

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

1. Diffuse Flow Plan

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

○ Yes ◉ No

For a list of options to meet the diffuse flow requirements, click here.

If no, explain why:

2. Stormwater Management Plan

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

◉ Yes ○ No

Comments:

G. Supplementary Information

1. Environmental Documentation

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

(●) Yes ( ) No

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

(●) Yes ( ) No

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

(●) Yes ( ) No

2. Violations (DWR Requirement)

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

( ) Yes (●) No

3. Cumulative Impacts (DWR Requirement)

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

( ) Yes (●) No

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

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

4. Sewage Disposal (DWR Requirement)

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

( ) Yes ( ) No (●) N/A

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

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

(●) Yes ( ) No

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

( ) Yes (●) No

5d. Is another Federal agency involved? *

(●) Yes ( ) No ( ) Unknown

What Federal Agency is involved?

FHWA

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

( ) Yes (●) No

5f. Will you cut any trees in order to conduct the work in waters of the U.S.? *

(●) Yes ( ) No

5g. Does this project involve bridge maintenance or removal? *

( ) Yes (●) No

Link to the NLEB SLOPES document: http://saw-reg.usace.army.mil/NLEB/1-30-17-signed_NLEB-SLOPES&apps.pdf

5h. Does this project involve the construction/installation of a wind turbine(s)? *

( ) Yes (●) No

5i. Does this project involve (1) blasting, and/or (2) other percussive activities that will be conducted by machines, such as jackhammers, mechanized pile drivers, etc.? *

(●) Yes ( ) No

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

USFWS Information for Planning and Consultation (IPaC) (https://ipac.ecosphere.fws.gov/). Please see attached cover letter for additional information.

6. Essential Fish Habitat (Corps Requirement)

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

○ Yes ◉ No

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

NMFS EFH Mapper (https://www.habitat.noaa.gov/apps/efhmapper/).

7. Historic or Prehistoric Cultural Resources (Corps Requirement)

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

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

○ Yes ◉ No

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

Please see attached historic property and archeological documentation. Tribal coordination is also attached.

8. Flood Zone Designation (Corps Requirement)

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

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

◉ Yes ○ No

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

This project meets the FEMA requirements by obtaining State Floodplain Compliance (SFC) approval through the NCDOT Hydraulics Unit's Highway Floodplain Program.

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

FEMA National Flood Hazard Layer (NFHL) Viewer (https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd).

Miscellaneous

Comments

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

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

B-5835 Avery February 11 2025.pdf 10.55MB

File must be PDF or KMZ

Signature

*

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

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

Full Name: *

Erin K. Cheely

Signature *

Erin K. Cheely

Date

2/11/2025

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: 45788.1.2 **TIP/Proj No:** B-5835 **County(ies):** Avery

General Project Information

WBS Element:	45788.1.2	**TIP Number:**	B-5835	**Project Type:**	Bridge Replacement	**Date:**	10/24/2024
NCDOT Contact:	Olivia L. Pilkington			**Contractor / Designer:**	Christopher R. Lewis, PE (TGS Engineers)		
Address:	1000 Birch Ridge Dr. Raleigh, NC 27610			**Address:**	706 Hillsborough St. Suite 200 Raleigh, NC 27603		
Phone:	(919) 707-6029			**Phone:**	(919) 773-8887		
Email:	olpilkington@ncdot.gov			**Email:**	clewis@tgsengineers.com		
City/Town:	Elk Park			**County(ies):**	Avery		
River Basin(s):	Watauga			**CAMA County?**	No		
Wetlands within Project Limits?	No						

Project Description

Project Length (lin. miles or feet):	0.064 MI	**Surrounding Land Use:**	Mountainous				
	Proposed Project			**Existing Site**			
Project Built-Upon Area (ac.)	0.3	ac.		0.3	ac.		
Typical Cross Section Description:	Two 9' Lanes with 2' shoulders			Single lane 12' gravel road with minimal grass shoulder			
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	164	Year: 2041	Existing:	110	Year:	2021

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

B-5835 is the proposed replacement of an existing bridge #0125 over the Elk River in Avery County. The existing structure was a two span truss bridge with a total length of 133'. The existing bridge has since been washed away due to the flooding impacts of Hurricane Helene. The proposed replacement structure is a three span, 1 @ 30' , 1 @ 70', 1 @ 50' 24" Cored Slab bridge. The new structure will have a total length of 150' and will have spill thru rip rap abutments. The new structure and roadway will also accommodate two lanes of traffic for Hicks Hollow Rd. Grass shoulders and ditches have been proposed to convey runoff where necessary. A single drainage structure with shoulder berm gutter has been utilized to protect the proposed fill slopes and discharge into a roadside ditch. Bank stabilization has been provided at the point of discharge for the roadside ditch to ensure the stability of the banks.

North Carolina Department of Transportation

Highway Stormwater Program

STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS

(Version 3.02; Released April 23, 2024)

WBS Element:	45788.1.2	TIP/Proj No.:	B-5835	County(ies):	Avery	Page	2	of	2

General Project Information

Waterbody Information

Surface Water Body (1):	Elk River		**NCDWR Stream Index No.:**	8-22-(14.5)		
NCDWR Surface Water Classification for Water Body		**Primary Classification:**	Class B			
		Supplemental Classification:	Trout Waters (Tr)			
Other Stream Classification:						
Impairments:	None					
Aquatic T&E Species?	No	Comments:				
NRTR Stream ID:	Elk River			**Buffer Rules in Effect:**	N/A	
Project Includes Bridge Spanning Water Body?	Yes	**Deck Drains Discharge Over Buffer?**	N/A	**Dissipator Pads Provided in Buffer?**	No	
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)						

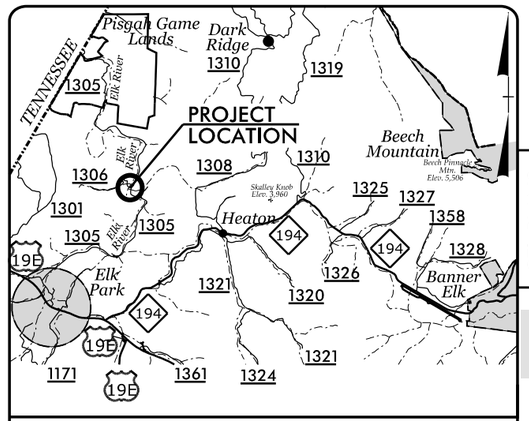
Surface Water Body (3):			**NCDWR Stream Index No.:**			
NCDWR Surface Water Classification for Water Body		**Primary Classification:**				
		Supplemental Classification:				
Other Stream Classification:						
Impairments:						
Aquatic T&E Species?		Comments:				
NRTR Stream ID:				**Buffer Rules in 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)						

09/08/99

TIP PROJECT: B-5835

CONTRACT:

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Plan Sheet Symbols
See Sheet 1C-1 For Survey Control Sheet



VICINITY MAP

CFI PLANS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

AVERY COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5835	1	

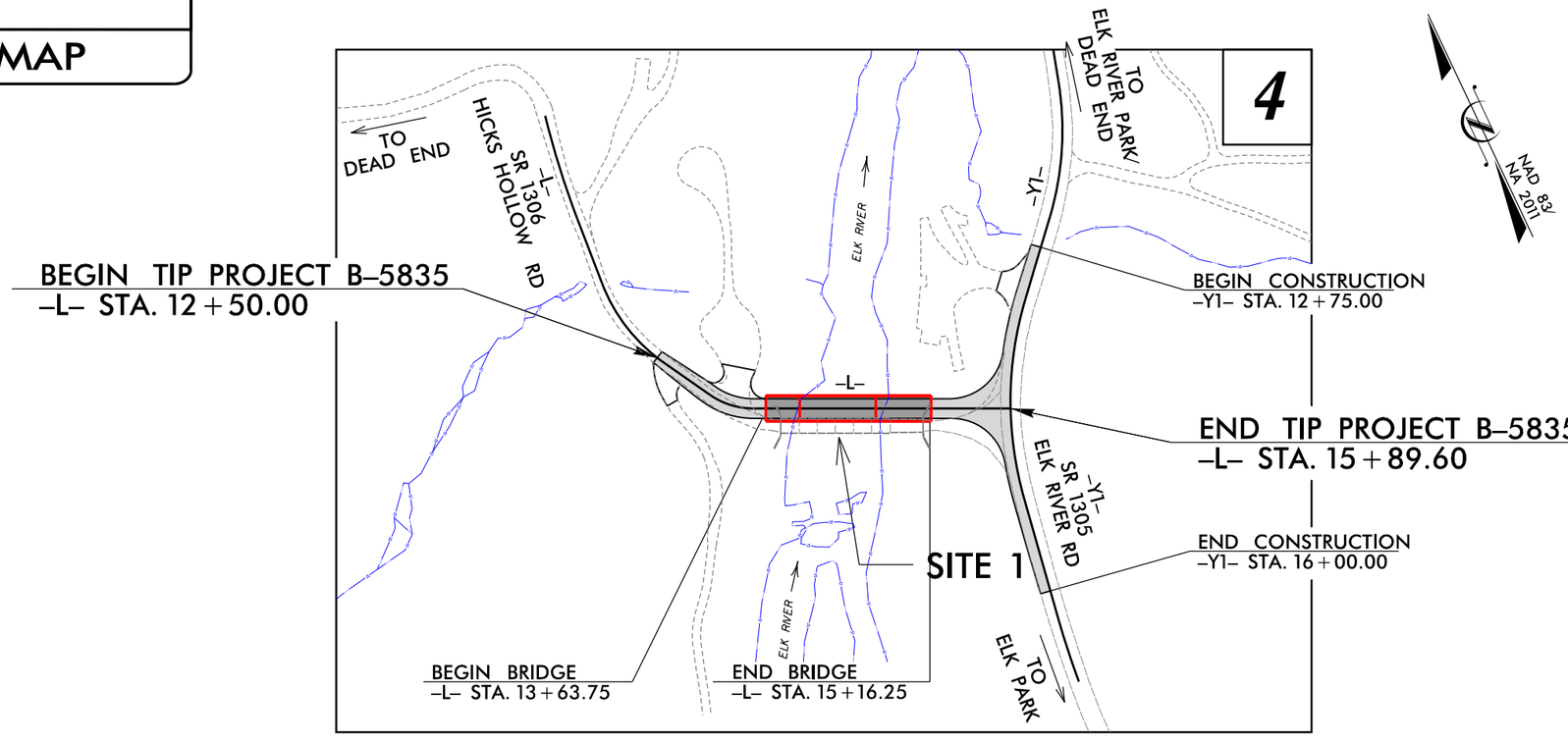
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
45788.1.2	N/A	PE
45788.2.1	BRZ-1306(030)	R/W
45788.2.2	N/A	UTIL.
45788.3.1	BRZ-1306(030)	CONST.

PERMIT DRAWING
SHEET 1 OF 5

LOCATION: REPLACE BRIDGE NO. 125 OVER ELK RIVER ON SR 1306

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE

WETLAND AND SURFACE WATER IMPACTS PERMIT



BEGIN TIP PROJECT B-5835
-L- STA. 12+50.00

BEGIN CONSTRUCTION
-Y1- STA. 12+75.00

END TIP PROJECT B-5835
-L- STA. 15+89.60

END CONSTRUCTION
-Y1- STA. 16+00.00

NAD 83/ NA 2011

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD _____.
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

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

GRAPHIC SCALES

PLANS 30 15 0 30 60

PROFILE (HORIZONTAL) 50 25 0 50 100

PROFILE (VERTICAL) 10 5 0 10 20

DESIGN DATA

ADT 2021 = 110
ADT 2041 = 164
K = – %
D = – %
T = – % *
V = 20 MPH
* TTST =–% DUAL –%
FUNC CLASS = LOCAL
SUB-REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-5835	=	*0.035 mile*
LENGTH STRUCTURES TIP PROJECT B-5835	=	*0.029 mile*
TOTAL LENGTH TIP PROJECT B-5835	=	*0.064 mile*

Prepared For:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610
By:
TGS ENGINEERS
706 HILLSBOROUGH ST
SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
DECEMBER 13, 2024

LETTING DATE:
DECEMBER 16, 2025

V. MARCUS LOWERY, PE
PROJECT ENGINEER

OLIVIA L. PILKINGTON, PE
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: *P.E.*

ROADWAY DESIGN ENGINEER

SIGNATURE: *P.E.*

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

PROJECT REFERENCE NO.	SHEET NO.
B-5835	04

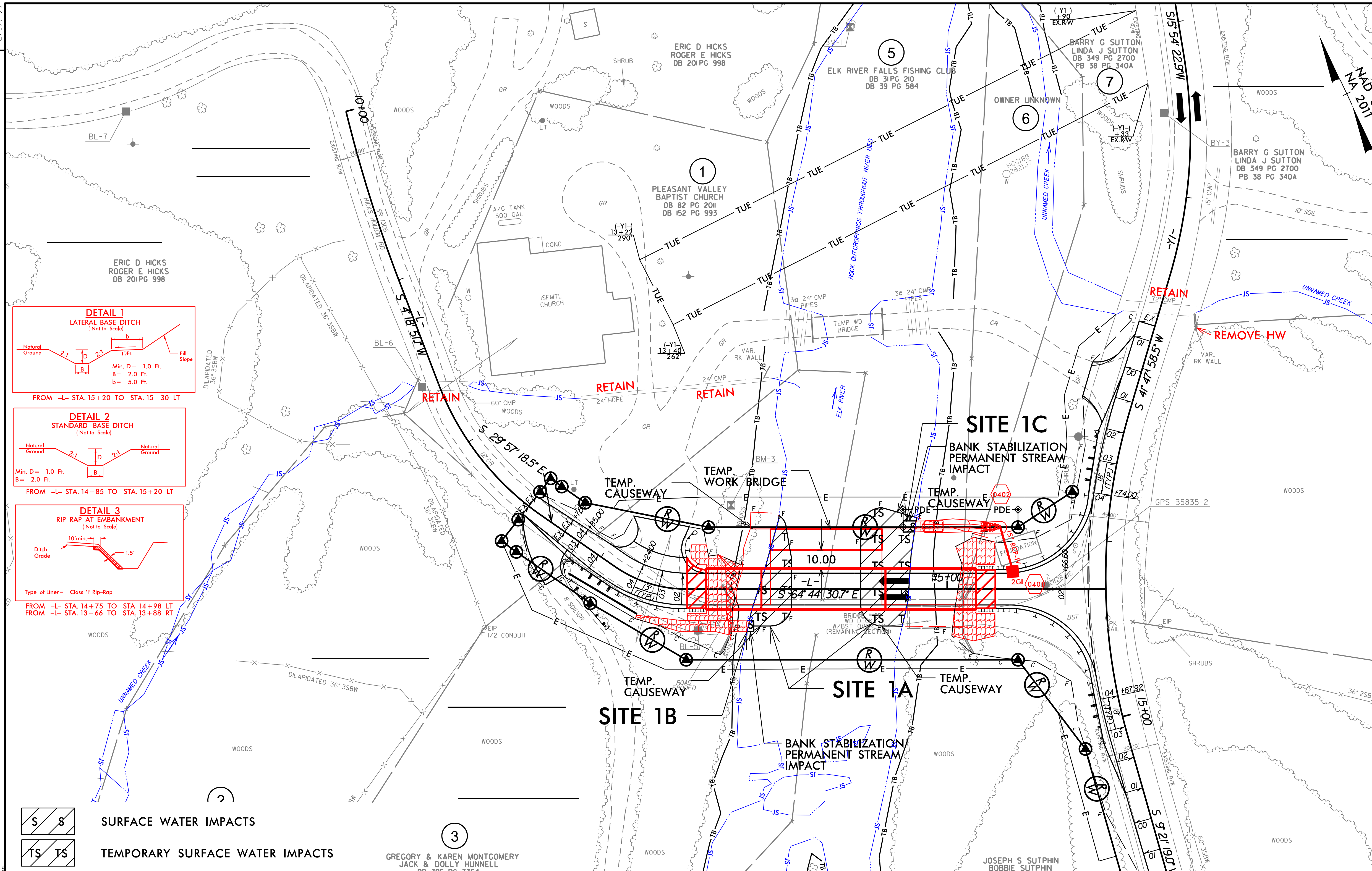
R/W SHEET NO.

ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
706 HILLSBOROUGH ST. SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

PERMIT DRAWING SHEET 2 OF 5



▨ S	SURFACE WATER IMPACTS
▨ TS	TEMPORARY SURFACE WATER IMPACTS

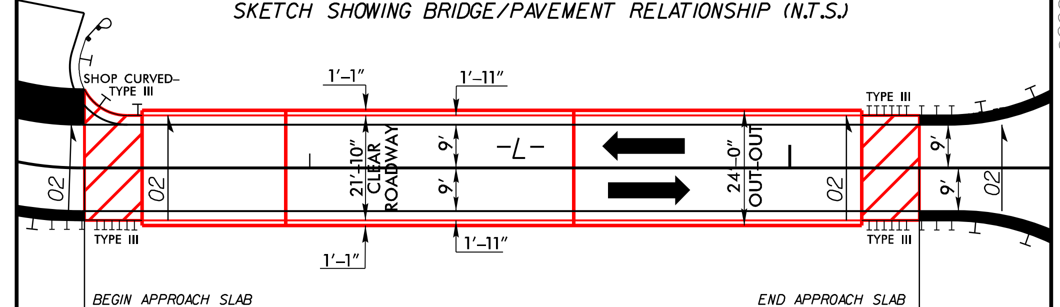
-L-

PI Sta 10+50.07	PI Sta 12+12.60	PI Sta 13+31.80
Δ = 7° 09' 43.1" (LT)	Δ = 34° 16' 09.6" (LT)	Δ = 34° 47' 12.2" (LT)
D = 7° 09' 43.1"	D = 35° 48' 35.5"	D = 81° 51' 04.0"
L = 100.00'	L = 95.70'	L = 42.50'
T = 50.07'	T = 49.33'	T = 21.93'
R = 800.00'	R = 160.00'	R = 70.00'
		SE = 0.04 (NON-STD.)
		Lr = 52'

-Y1-

PI Sta 11+83.41	PI Sta 14+21.07	PI Sta 16+58.19
Δ = 25° 53' 35.6" (RT)	Δ = 32° 26' 39.5" (LT)	Δ = 4° 31' 18.0" (LT)
D = 20° 27' 46.0"	D = 17° 21' 44.5"	D = 7° 38' 22.0"
L = 126.54'	L = 186.87'	L = 59.19'
T = 64.37'	T = 96.01'	T = 29.61'
R = 280.00'	R = 330.00'	R = 750.00'
	SE = 0.04 (NON-STD.)	
	Lr = 72'	

SKETCH SHOWING BRIDGE/PAVEMENT RELATIONSHIP (N.T.S.)



FDPS = FULL DEPTH PAVED SHOULDER

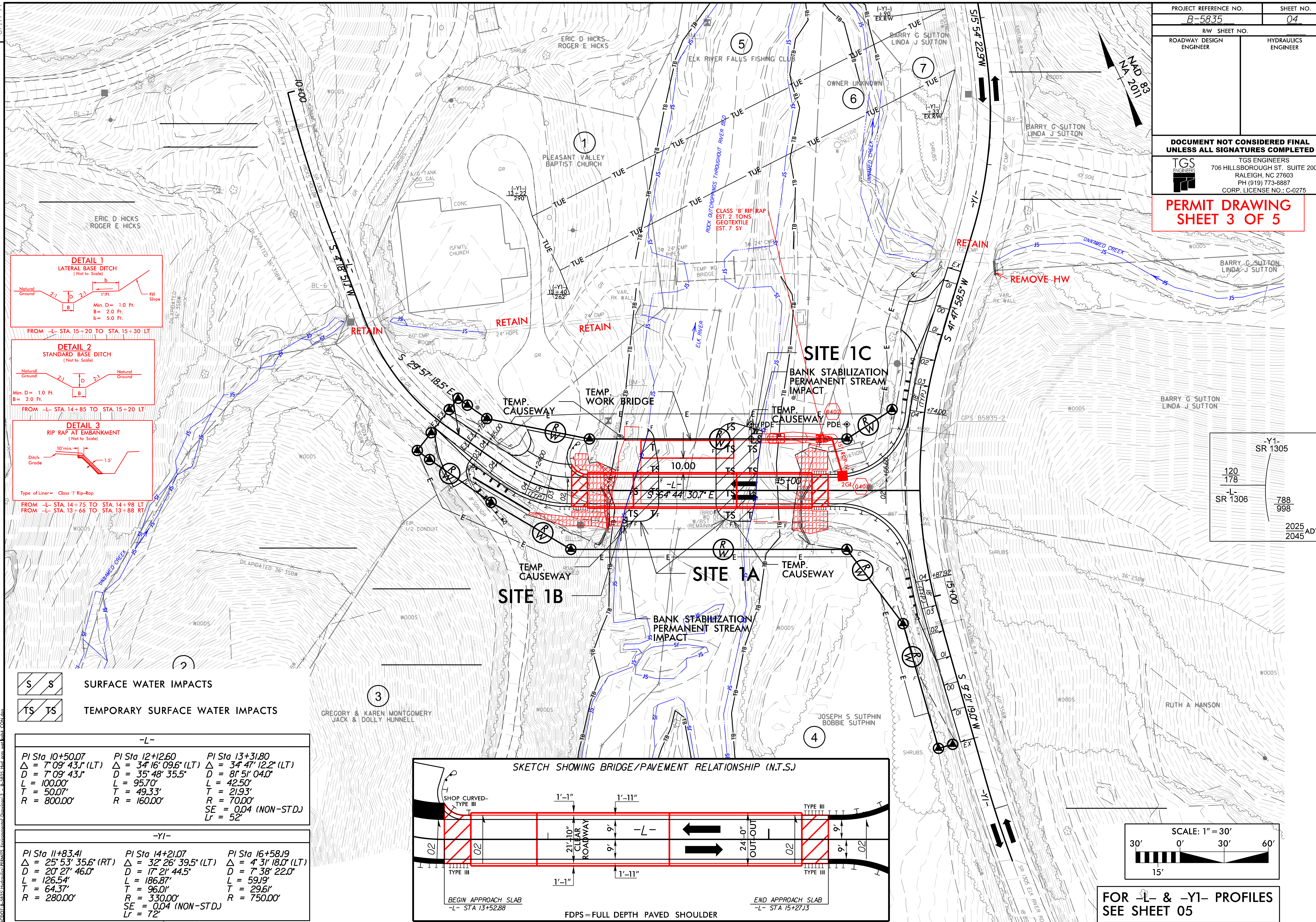
SCALE: 1" = 30'

FOR -L- & -Y1- PROFILES SEE SHEET 05

REVISIONS

8/17/99

12/12/2024
clewis
X:\NCDOT\B-5835\Hydraulics\PERMITS_Environmental\Drawings\2 - B-5835_Hyd_prm_wet_psh4.dgn


PROJECT REFERENCE NO. B-5835
SHEET NO. 04
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
TGS ENGINEERS
706 HILLSBOROUGH ST. SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275
PERMIT DRAWING
SHEET 3 OF 5
NAD 83 NA 2011
REVISIONS
8/17/99
DETAIL 1
LATERAL BASE DITCH
(Not to Scale)
Natural Ground
Fill Slope
Min. D= 1.0 Ft.
B= 2.0 Ft.
b= 5.0 Ft.
FROM -L- STA. 15+20 TO STA. 15+30 LT
DETAIL 2
STANDARD BASE DITCH
(Not to Scale)
Min. D= 1.0 Ft.
B= 2.0 Ft.
FROM -L- STA. 14+85 TO STA. 15+20 LT
DETAIL 3
RIP RAP AT EMBANKMENT
(Not to Scale)
10′min.
Ditch Grade
1.5′
Type of Liner= Class 'I' Rip-Rap
FROM -L- STA. 14+75 TO STA. 14+98 LT
FROM -L- STA. 13+66 TO STA. 13+88 RT
ERIC D HICKS
ROGER E HICKS
PLEASANT VALLEY BAPTIST CHURCH
ELK RIVER FALLS FISHING CLUB
OWNER UNKNOWN
BARRY G SUTTON
LINDA J SUTTON
GREGORY & KAREN MONTGOMERY
JACK & DOLLY HUNNELL
JOSEPH S SUTPHIN
BOBBIE SUTPHIN
RUTH A HANSON
S 4°18′51.1″ W
S 29°57′18.5″ E
S 64°44′30.7″ E
S 15°54′22.9″ W
S 41°47′58.5″ W
S 9°21′19.0″ W
HICKS HOLLOW RD SR 1306
SR 1305 ELK RIVER RD
ROCK OUTCROPPINGS THROUGHOUT RIVER BED
CLASS 'B' RIP RAP
EST. 2 TONS
GEOTEXTILE
EST. 7 SY
ELK RIVER
UNNAMED CREEK
RETAIN
REMOVE HW
TEMP WD BRIDGE
SITE 1C
BANK STABILIZATION
PERMANENT STREAM
IMPACT
TEMP. CAUSEWAY
TEMP. WORK BRIDGE
SITE 1A
SITE 1B
15′ RCP-IV
-Y1- SR 1305
120/178
-L- SR 1306
788/998
2025/2045 ADT
SURFACE WATER IMPACTS
TEMPORARY SURFACE WATER IMPACTS
SKETCH SHOWING BRIDGE/PAVEMENT RELATIONSHIP (N.T.S.)
SHOP CURVED-TYPE III
TYPE III
21′-10″ CLEAR ROADWAY
24′-0″ OUT-OUT
BEGIN APPROACH SLAB -L- STA 13+52.88
END APPROACH SLAB -L- STA 15+27.13
FDPS=FULL DEPTH PAVED SHOULDER
SCALE: 1″=30′
FOR -L- & -Y1- PROFILES SEE SHEET 05

-L-

PI Sta 10+50.07	PI Sta 12+12.60	PI Sta 13+31.80
△ = 7°09′43.1″ (LT)	△ = 34°16′09.6″ (LT)	△ = 34°47′12.2″ (LT)
D = 7°09′43.1″	D = 35°48′35.5″	D = 81°51′04.0″
L = 100.00′	L = 95.70′	L = 42.50′
T = 50.07′	T = 49.33′	T = 21.93′
R = 800.00′	R = 160.00′	R = 70.00′
		SE = 0.04 (NON-STD.)
		Lr = 52′

-Y1-

PI Sta 11+83.41	PI Sta 14+21.07	PI Sta 16+58.19
△ = 25°53′35.6″ (RT)	△ = 32°26′39.5″ (LT)	△ = 4°31′18.0″ (LT)
D = 20°27′46.0″	D = 17°21′44.5″	D = 7°38′22.0″
L = 126.54′	L = 186.87′	L = 59.19′
T = 64.37′	T = 96.01′	T = 29.61′
R = 280.00′	R = 330.00′	R = 750.00′
	SE = 0.04 (NON-STD.)	
	Lr = 72′	

12/12/2024
clewis
X:\NCDOT\B-5835\Hydraulics\PERMITS_Environmental\Drawings\3 - B-5835_Hyd_prm_wet_psh4_CON.dgn

TGS ENGINEERS
706 HILLSBOROUGH ST., SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

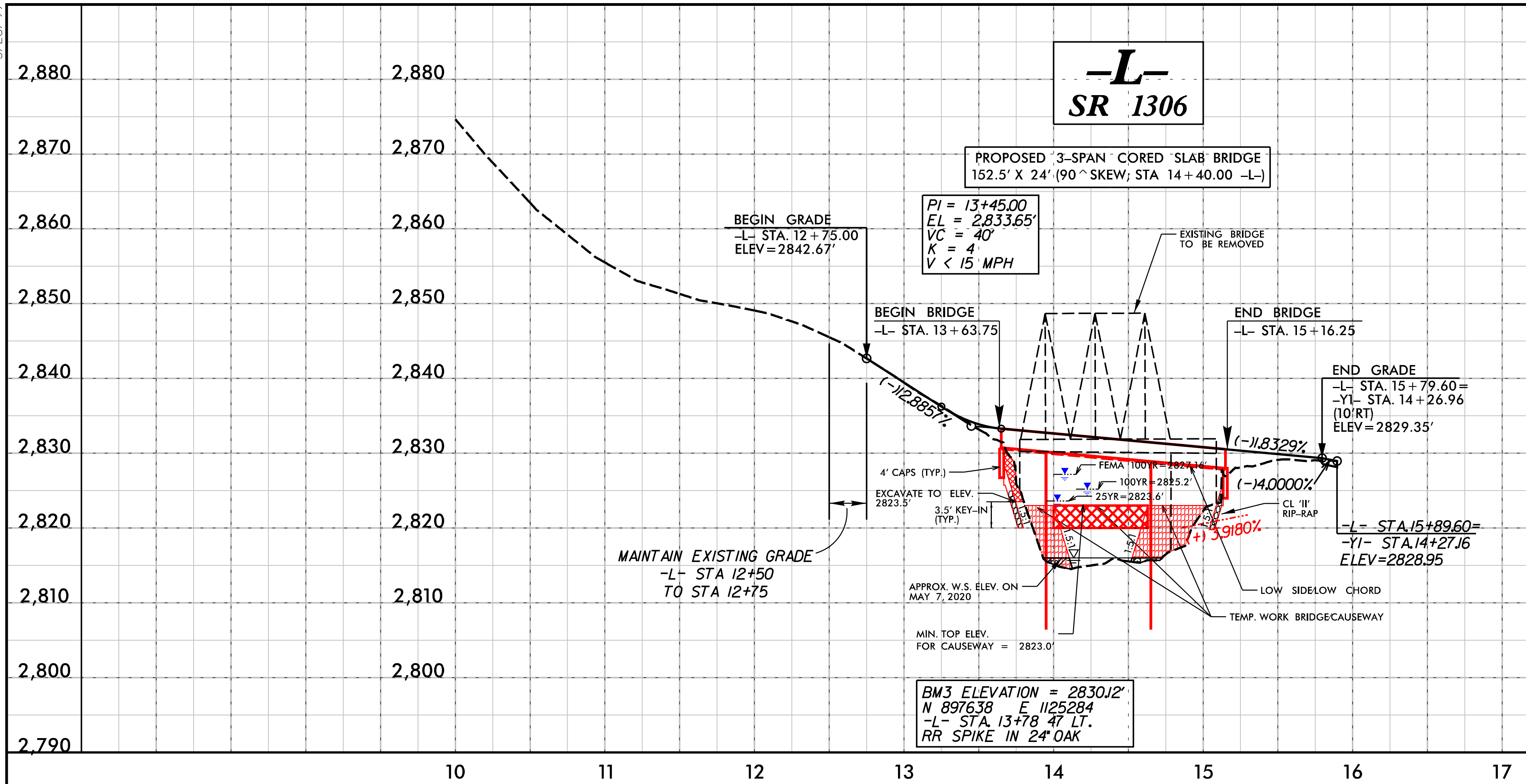
PROJECT REFERENCE NO.	SHEET NO.
B-5835	05
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 4 OF 5

EXISTING GROUND
PROPOSED GRADE
LEFT DITCH GRADE
RIGHT DITCH GRADE



BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	=	5800	CFS
DESIGN FREQUENCY	=	25	YRS
DESIGN HW ELEVATION	=	2823.6	FT
BASE DISCHARGE	=	8000	CFS
BASE FREQUENCY	=	100	YRS
BASE HW ELEVATION	=	2825.2	FT
OVERTOPPING DISCHARGE	=	15000+	CFS
OVERTOPPING FREQUENCY	=	500+	YRS
OVERTOPPING ELEVATION	=	2829.0*	FT
* LOW POINT AT -L- AND -Y1- INTERSECTION	=		FT
DATE OF SURVEY	=	MAY 7, 2020	
W.S. ELEVATION AT DATE OF SURVEY	=	2816.0	FT

▨ TEMPORARY SURFACE WATER IMPACTS

FOR -L- PLAN SEE SHEET 04

FOR -Y1- PLAN SEE SHEET 04

5/28/99
10/24/2024
clewis
X:\NCDOT\B-5835\Hydraulics\PERMITS_Environmental\Drawings\4_B-5835_Hyd_prm_wet_pfl.dgn

WETLAND AND SURACE WATER IMPACTS SUMMARY

			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1A	13+85 to 14+85	Causeway/Work Bridge							0.06		67	
1B	13+90	Bank Stabilization						< 0.01		6		
1C	14+78	Bank Stabilization						< 0.01		6		
TOTALS*:								< 0.01	0.06	12	67	0

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
12/12/2024
AVERY COUNTY
B-5835
45788.1.2

Protected Species/ Section 7

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

August 19, 2024

TO: Robert Crowther, Environmental Program Consultant
Environmental Coordination & Permitting Group, EAU

FROM: Melissa Miller, Environmental Program Consultant
Biological Surveys Group, EAU

SUBJECT: Section 7 survey results for the gray bat *(Myotis grisescens, MYGR)*, Indiana bat *(Myotis sodalis, MYSO)*, northern long-eared bat *(Myotis septentrionalis, MYSE)*, Virginia Big-eared bat (*Corynorhinus townsendii virginianus, COTO*) and tricolored bat (*Perimyotis subflavus, PESU*) associated with the replacement of Bridge Number 050125 over Elk River on SR 1306 in Avery County, **TIP No. B-5835.**

The North Carolina Department of Transportation (NCDOT, Division 11) proposes to replace Bridge No. 050125 over Elk River on SR 1306 in Avery County, TIP No. B-5835. The existing bridge is a two span structure with metal beams, timber deck and guard rails, and concrete end walls. The overall length of the bridge is 133 feet. No culverts meeting NCDOT's Standard Operating Procedures for Preliminary Bat Habitat Assessments were identified meeting the criteria of greater than 3 feet wide and 60 feet in length during this site visit.

On July 17, 2024, NCDOT biologists assessed all of the structures in the project study area. Crevices suitable for roosting are not present on the structure. No evidence of bats (bats, staining, guano) was observed on the structure. Bridge No. 050125 was previously surveyed by NCDOT biologists in 2018 and by Copperhead in 2019. No evidence of bats was observed during any previous survey. Trees greater than 3"dbh occur within the project footprint. One snag greater than 5"dbh was observed in the project study area. No caves or mines occur within a half mile of the project study area. Large, continuous forests are present in the project vicinity, providing potential foraging and commuting habitat.

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

As of August 19, 2024, USFWS Information Planning and Consultation (IPaC) site lists the following federally protected bat species as potentially affected by activities within the project area(https://ipac.ecosphere.fws.gov/).

Species	Federal Status	Habitat Present*	Distance to Nearest Record**
MYGR	Endangered	Yes	8.9 mile SW
MYSO	Endangered	Yes	52 mile SW
MYSE	Endangered	Yes	1.8 mile N
COTO	Endangered	Yes	2.4 mile NE
PESU	Proposed Endangered	Yes	2.8 mile SW

*See detailed habitat information in table below
**Nearest known record from latest NHP, WRC, or NCDOT data

Presence (✓) or Probable Absence (X) of various habitat types for bat species potentially occurring in project area.

Species	Summer Roosting		Winter Roosting	Foraging Habitat	Commuting Habitat
	Tree	Structure			
MYGR	NA	X	X	✓	✓
MYSO	✓	X	X	✓	✓
MYSE	✓	X	X	✓	✓
COTO	NA	NA	X	✓	✓
PESU	✓	X	X	✓	✓

A Biological Conclusion of May Affect Not Likely to Adversely Affect is given to the above species based on the presence of suitable foraging, commuting and/or roosting habitat. No evidence of federally listed bats was found on the structure, no caves or mines are in the area, and a large area of alternative available suitable habitat exists in the project vicinity. After consulting with Division 11 staff, it has been determined that the existing bridge deck cannot be removed during the winter months. Trees can be cut during the winter months. Blasting is not anticipated for this project, but it may occur. Several tools will be used during project construction including but not limited to pneumatic wrenches, pile drivers and jackhammers. This equipment is vibratory or percussive in nature. The maximum noise level for activities that will occur as part of this project is 101-110 dBA, attributed to a combination of tools listed above. No nighttime construction is anticipated therefore, no temporary lighting will be used. Permanent roadway lighting does exist in the project area. By implementing avoidance and minimization measures as described above, this project is Not Likely to Adversely Affect federally listed bats.

If you need any additional information, please contact Melissa Miller at 919-707-6127.

Archaeology

16-01-0131

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 Group.

PROJECT INFORMATION

Project No:	B-5835	*County:*	Avery
WBS No:	45788.1.1	*Document:*	Categorical Exclusion
F.A. No:	BRZ-1306(030)	*Funding:*	☐ State ☒ Federal

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

Project Description: Replace Bridge 125 on SR 1306 over the Elk River in Avery County. The Area of Potential Effects (A.P.E.) encompasses approximately 11.7 acres around the bridge. (The bridge is oriented at approximately east-west.) The A.P.E. includes a 329-meter (1,078-ft.) long area on both sides of SR 1305 to the east of the bridge, and a 188-meter (618-ft.) long area on both sides of SR 1306 to the west of the bridge. No design plans were provided.

SUMMARY OF ARCHAEOLOGICAL FINDINGS

The North Carolina Department of Transportation (NCDOT) Archaeology Group 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:
see attached report

SUPPORT DOCUMENTATION

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

Other:

Signed:
CALEB SMITH **11/29/2016**

NCDOT ARCHAEOLOGIST Date

Archaeological Survey for the Proposed Replacement of Bridge No. 125 on SR 1306 (Hicks Hollow Rd.) over Elk River, Avery County, North Carolina

By Brooke Brilliant, Archaeological Consultants of the Carolinas, Inc.
November 2016

Introduction

Bridge No. 125 is located on SR 1306 (Hicks Hollow Rd.) in northwest Avery County approximately 2.8 kilometers (1.7 miles) northeast of the town of Elk Park (Figure 1). Bridge 125, which runs approximatley east-west, is located just northwest of the intersection of SR 1306 and SR 1305 (Elk River Road). The bridge is located in a narrow river valley surrounded by mountainous terrain (Figure 2). Two unnamed tributaries join either side of Elk River just north of the bridge. The bridge vicinity is characterized by floodplain and ridge toe side slope distinguished by cleared and forested areas. Four houses and multiple outbuildings are located within the project area. The archaeological Area of Potential Effects (APE) for this project encompasses approximately 11.7 acres around Bridge No 125. The APE includes an area extending approximately 348.2 meters (1,142.4 ft) north-south and 258.9 meters (849.4 ft) east-west.

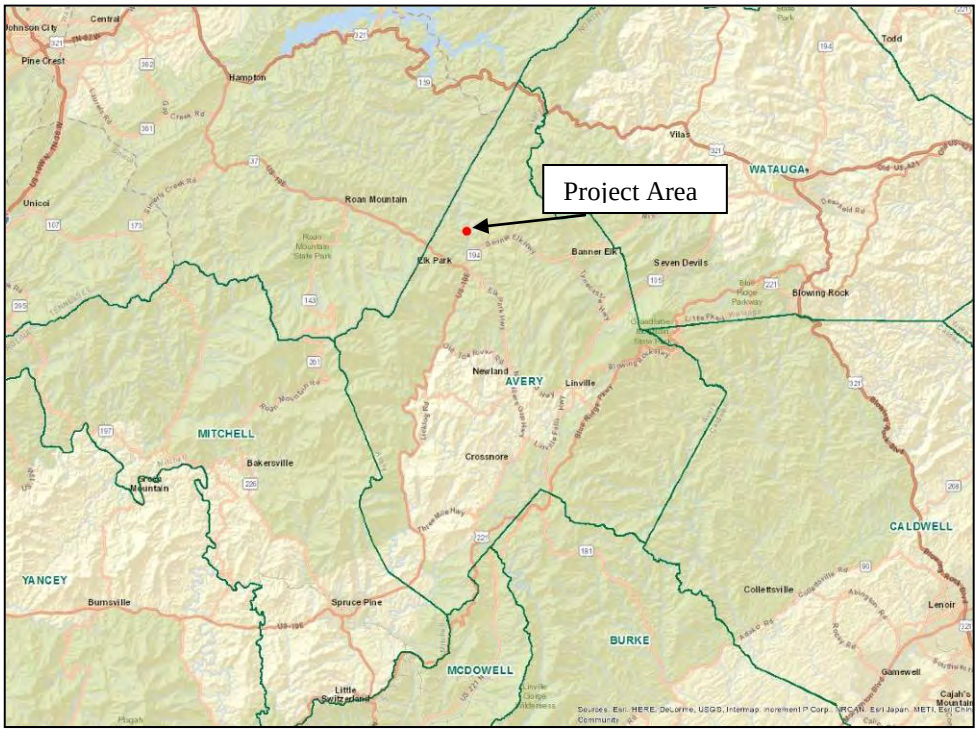


Figure 1. Location of Bridge No. 125 in Avery County.

A visual reconnaissance of the project area was conducted by North Carolina Department of Transportation (NCDOT) archaeologists Scott Halvorsen and Caleb Smith on 25 February 2016. The reconnaissance determined that the southeast quadrant has high potential for archaeological sites and the southwest, northwest, and northeast quadrants have low potential for archaeologial sites.

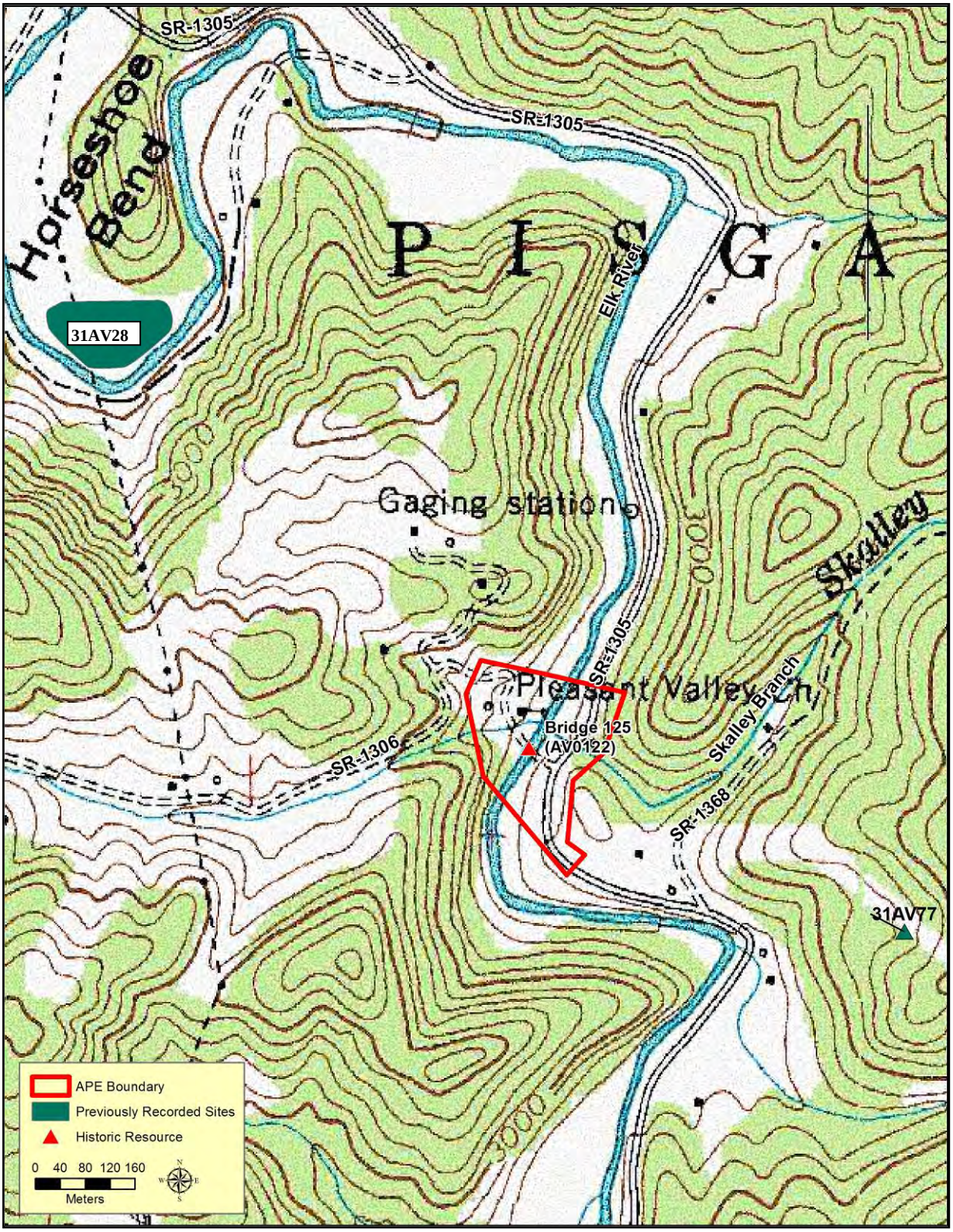


Figure 2. Topographic map of Bridge No. 125 (1960 USGS *Elk Park, N.C.* 1:24,000 scale topographic map [photo revised 1978]).

The archaeological survey was conducted by Brooke Brilliant and Katherine Carter of Archaeological Consultants of the Carolinas, Inc. (ACC) on 6 October 2016. The following description was submitted to the NCDOT by ACC in November 2016.

Background Research

Background research consisted of an examination of topographic and historic maps and the listings of previously recorded sites, previous archaeological surveys, and previous environmental reviews at the Office of State Archaeology (OSA) in Raleigh.

A review of the historic maps including the 1938 Avery County Highway map (NCSHPWC 1938) and USGS topographic maps dating from 1893 to 1960 (USGS 1893, 1895, 1899, 1902, 1934, 1944, 1953, 1955, 1960), depict the area as extremely remote and very sparsely populated. The 1934 USGS topographic map is the first to show SR 1306 and Pleasant Valley Church (Figure 3). The 1934 and 1940 USGS topographic maps show SR 1306 following a different course than the current road, suggest this road was rerouted before 1960. The 1960 USGS map shows the roads as they are currently and depicts three structures in the project vicinity (Figure 4). One of these is the Pleasant Valley Church located in the northwest quadrant, on the north side of SR 1306. This church is still in use. In general, the historic maps show little development in the area throughout the twentieth century.

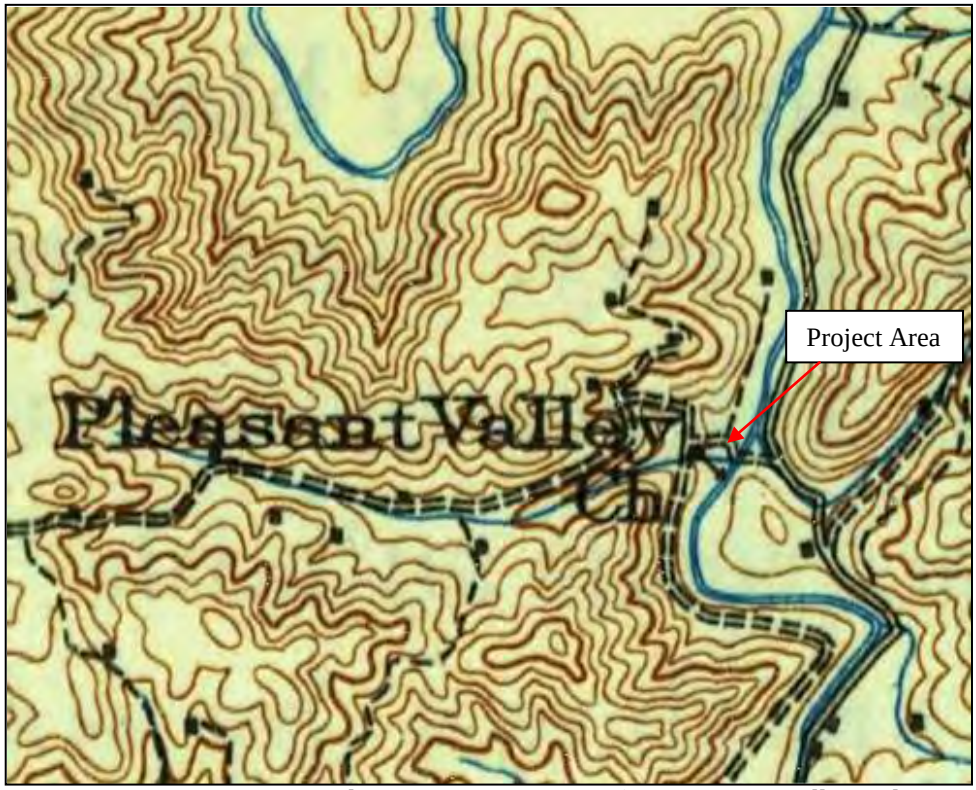


Figure 3. 1934 map showing project area (1934 USGS *Elk Park, NC,* 1:24,000 scale topographic map).

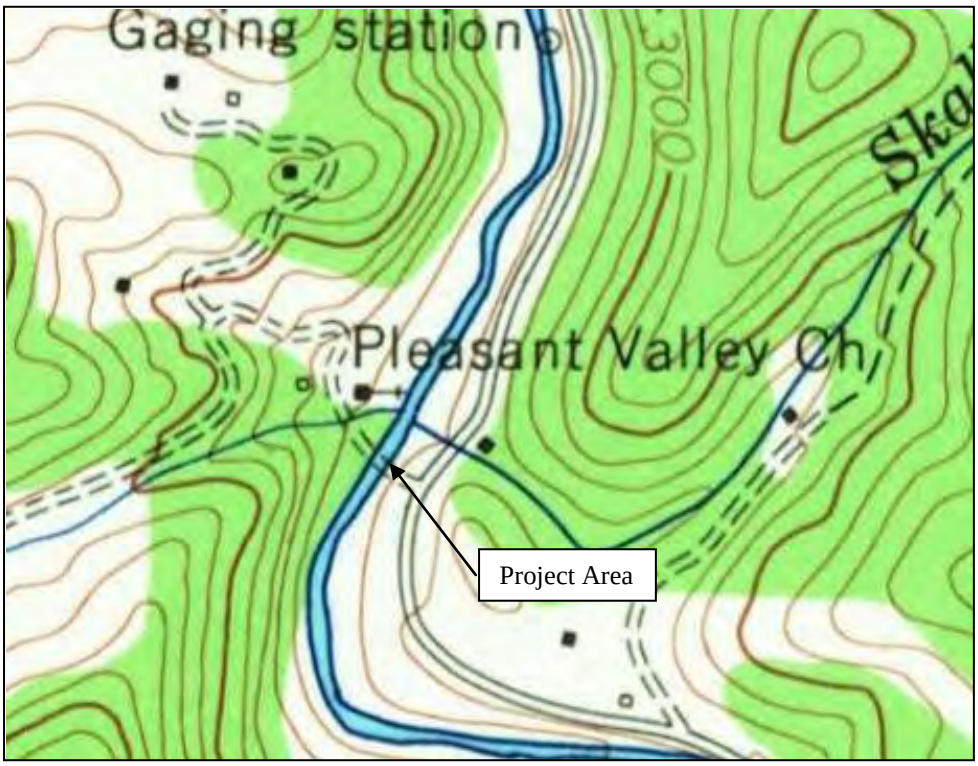


Figure 4. 1960 map showing project area (1960 USGS *Elk Park, NC,* 1:24,000 scale topographic map)**.**

The APE has not been included in any previous archaeological surveys. However, two previously recorded archaeological resources (31AV28 and 31AV77) are located within a 0.8 kilometer (0.5 mi) radius of the APE (see Figure 2). Both sites are unassessed for the National Register of Historic Places (NRHP). Site 31AV28 is located on the floodplain of Elk River at Horseshoe Bend, northwest of the project area. This site is an unknown component prehistoric lithic scatter (Site Form on File). Resource 31AV77 was documented in 1994 by 3D Environmental during an archaeological survey of the TVA transmission line to Beech Mountain. This resource is located southeast of the project area and is a historic isolated find (Shumate 1994). There no little other information about this resource available.

Background research also included an examination of records on recorded historic resources using the Department of Historic Resources Survey and Planning Division's mapping application web site. One recorded historic resource (AV0122) is in the project tract (see Figure 2). Resource AV0122 is Bridge No. 125, which the NCDOT proposes to replace. It is a Pratt through truss bridge, and one of only three historic bridges in Avery County. The state bridge records indicate this bridge was erected in 1932, but the pinned connections and general character of the bridge, suggest it dates to circa 1915. This bridge may have been built around 1915, but moved to its current location in 1932. The relocation of bridges is a common practice within the state. Several modifications have been made to Bridge No. 125 to maintain the bridge. These modifications include: welding the beams to the floor beams, replacement and strengthening of original connections, and replacement of original railings. Despite these changes, the bridge is still considered to be an exemplar of the pin-connected Pratt through truss type bridge in North Carolina (NCDOT: Historic Bridge Detail 2016).

The seven primary soil types located in the APE of Bridge No. 125 are Chestnut-Ashe complex, Cullasaja cobbly loam, Edneyville-Chestnut complex, Nikwasi loam, Rosman sandy loam, Saunook loam, and Saunook-Nikwasi complex (USDA 2016). These soil types are described in Table 1.

Table 1. Summary of Soils Present in the Bridge No .125 APE (USDA 2016).

Soil Name	Description	Location
Chestnut-Ashe complex	Well drained to somewhat excessively drained; 5-95% slope; forms on mountain slopes from residuum weathered from felsic, high grade, or metamorphic rock	Southwest and northwest quadrants
Cullasaja cobbly loam	Well drained; 30-50% slope; bouldery; forms on coves from cobbly and stony colluvium derived from igneous and metamorphic rock	Southern portion of northwest quadrant
Edneyville-Chestnut complex	Well drained; 30-50% slope; stony and granitic; forms on ridges and mountain slopes from residuum weathered from granite and gneiss that is affected by soil creep in the upper solum	Northwestern section of the northwest quadrant and eastern portion of the southeast quadrant
Nikwasi loam	Poorly drained and frequently flooded; 0-3% slope; forms on depressions on floodplains from loamy alluvium over sandy and gravelly alluvium	Northeastern corner of the northwest quadrant
Rosman sandy loam	Well drained and frequently flooded; 0-5% slope; forms on floodplains from loamy alluvium	Western portion of the southeast quadrant
Saunook loam	Well drained; 8-15% slope; forms on coves, drainageways, and fans on mountain slopes from colluvium derived from igneous and metamorphic rock	Central portion of the southeast quadrant
Saunook-Nikwasi complex	Well drained or poorly drained; 2-15% slope; forms on coves, drainageways, and fans on mountain slopes, as well as on depressions on floodplains; originates from colluvium derived from igneous and metamorphic rock and extremely gravelly course sand	Southern portion of the northeast quadrant

Archaeological Survey

The archaeological survey consisted of the examination of 39 shovel test locations along nine transects. Shovel tests were excavated at 30 meter (98.4 ft) intervals along each transect. These tests measured at least 30 centimeters (11.8 in) in diameter and were excavated a minimum of 5 centimeters (2.0 in) into sterile subsoil. All test fill was screened through 0.64 centimeter (0.25 in) wire mesh. Each shovel test was backfilled upon completion. Shovel tests were not excavated at locations with slope of greater than 15 percent or in clearly disturbed contexts. Global Positioning System (GPS) readings using a sub-meter accuracy Trimble GeoExplorer handheld GPS receiver were taken at each shovel test location, except in situations of extreme slope or other potentially dangerous conditions. In all areas, shovel testing was supplemented by comprehensive examination of all exposed ground surface. Figure 5 shows the shovel test locations on an aerial, and Figure 6 shows the shovel tests on a LiDAR image. LiDAR, an acronym for *Light Detection and Ranging*, is a remote sensing method which uses lasers to collect three dimensional data about the ground surface (Jones 2010). A hill-shading effect can be applied to a LiDAR image to better view topographic features. This technique uses a hypothetical light source to create shadows which highlight minute changes in the ground surface (Jones 2010; Schuckman and Renslow 2014). The LiDAR image exemplifies areas of extreme slope within portions of all of the quadrants.

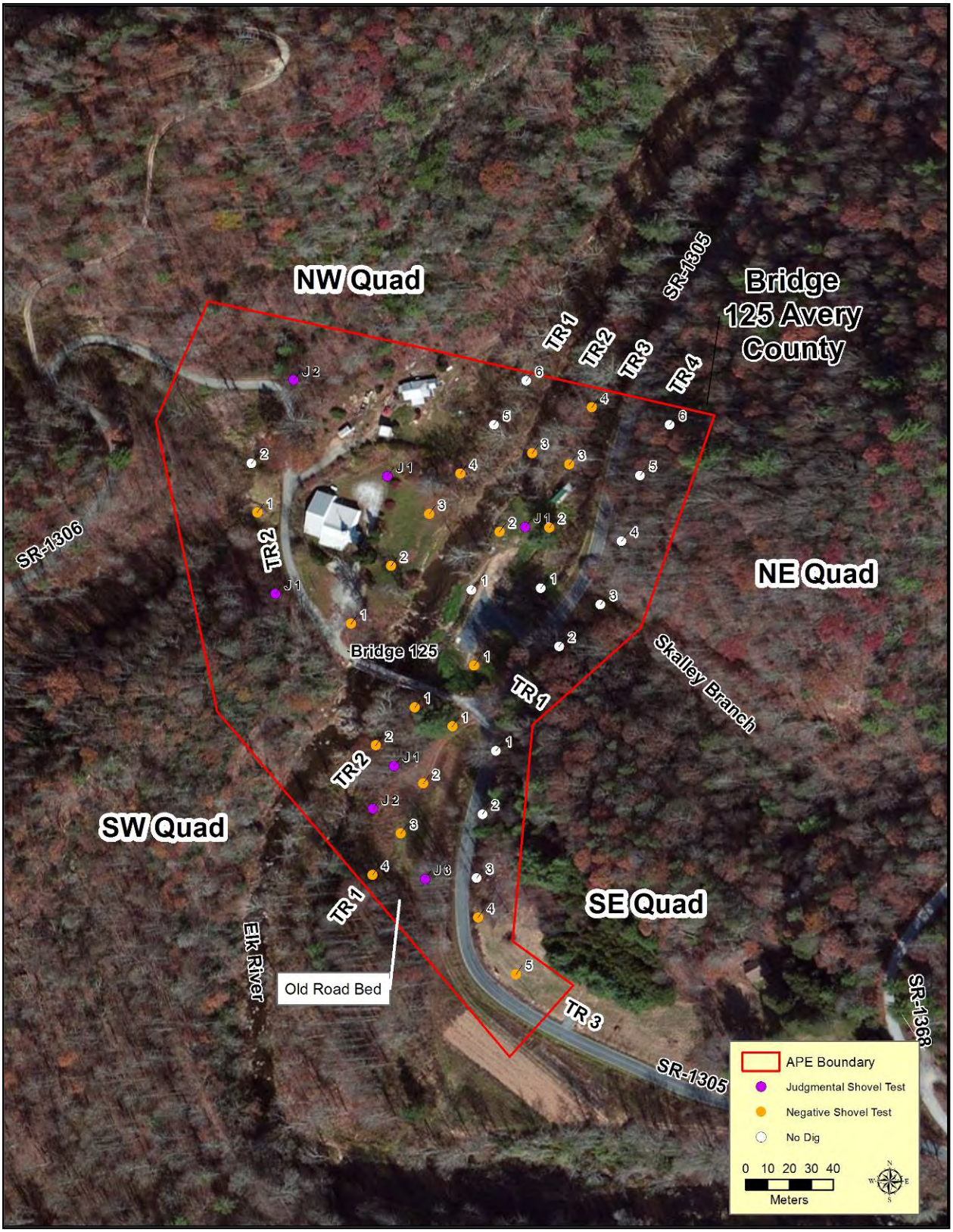


Figure 5. Aerial photograph showing shovel test locations within the project area.

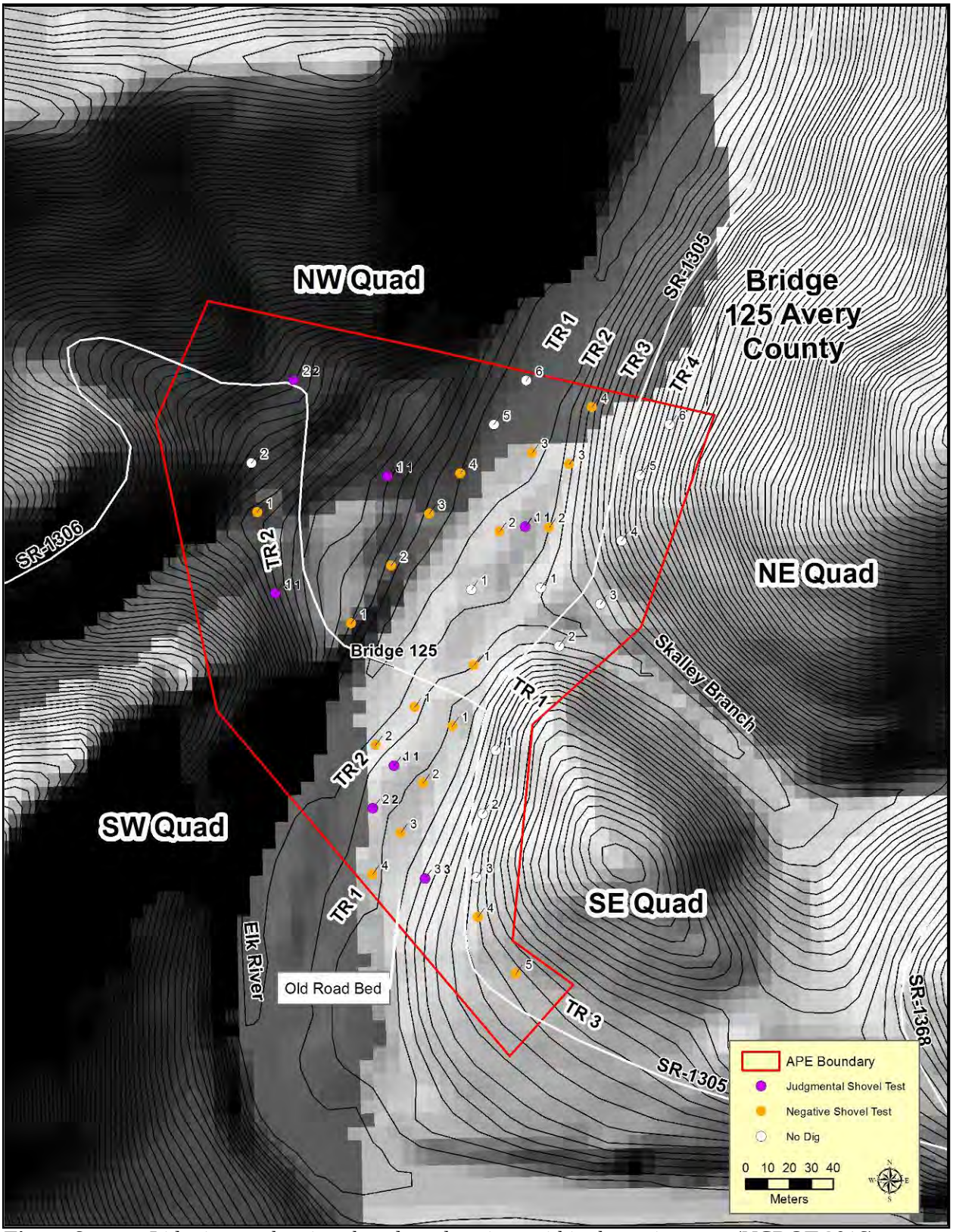


Figure 6. Lidar image showing shovel test locations within the project area (NCDOT 2016).

Northeast Quadrant. The APE in the northeast quadrant primarily encompasses a floodplain between the bridge and SR 1305 (Figure 7). A campground is located in this area. The campground is characterized by a gravel area in the southern portion of the quadrant and a grassy area for campfires in the central portion of the quadrant. A transmission line also extends across this portion of the quadrant. Two recreational vehicles were parked on the gravel area of campground and a permanent building utilized as a washhouse is located in this vicinity, just north of the bridge. The campground can be accessed by a gravel driveway that extends west from SR 1305. Skalley Creek joins the Elk River just north of the bridge on the western side of the SR 1305. Also, a small unnamed creek parallels the western side of SR 1305. This creek separates the campground area from a small linear segment of land on the western side of SR 1305. A dirt path runs north through this segment of the quadrant. The eastern side of SR 1305 is characterized by wooded steep slope (Figure 8). An old gravel road extends east from SR 1305, across from the campground.

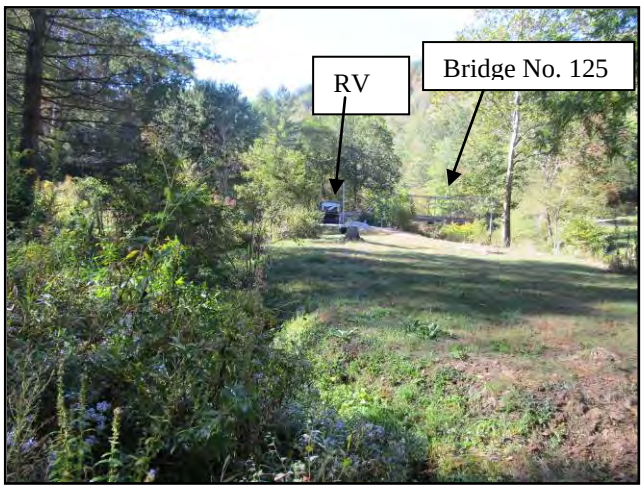


Figure 7. View of eastern portion of the northeast quadrant, looking southwest.

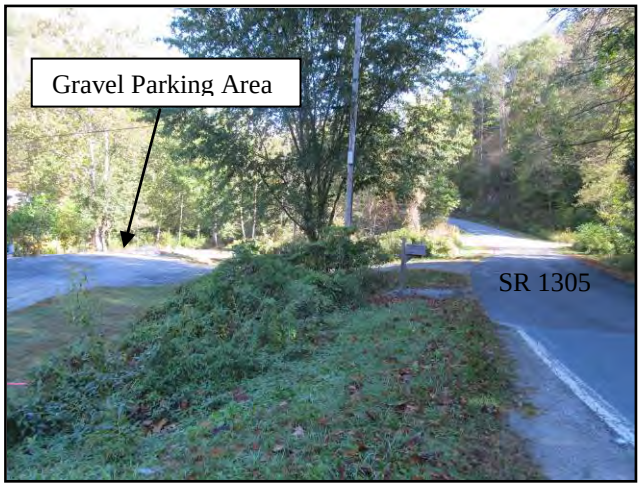


Figure 8. View of western portion of the northeast quadrant, looking north/northeast.

A total of 15 shovel test locations was examined in the northeast quadrant along four transects and in one judgemental location. Transects 1 and 2 and one judgemental shovel test were located in the grassy campground area on the western side of SR 1306, between the Elk River and a small unnamed creek. Shovel Test 1 along Transect 2 was not excavated due to its proximity to a gravel parking area. Transect 3 followed a dirt path on the western side of SR 1305, between the road and the unnamed creek. Transect 3 Shovel Test 1 was not excavated due to its proximity to a gravel driveway. Transect 4 was located on the eastern side of SR 1306 on wooded side slope. None of the shovel tests along Transect 4 were excavated due to steep slope, and in the in the case of Shovel Test 3, proximity to an old gravel road. Ground surface visibility around the old road was excellent (greater than 50 percent) and the surface was examined in this area. No archaeological remains were identified in the northeast quadrant.

There was much variability between the exposed shovel test profiles in the northeast quadrant. The majority of the shovel tests exposed up to 35 centimeters (13.8 in) of grayish brown silty or sandy loam overlying dark grayish brown loamy sand or strong brown silty sand (Table 2). One shovel test (Transect 1 Shovel Test 1) contained mottled clay below 5 centimeters (2.0 in), suggesting the area has been disturbed as a result of the gravel parking area and campground. Also, Transect 3 Shovel Test 4 contained a third soil strata consisting of strong brown coarse sand. Aside from the disturbed profile from Transect 1 Shovel Test 1, soil profiles generally agree with the expected soil profile for the area.

Table 2. Shovel Test Locations Examined in the Northeast Quadrant.

Transect Shovel Test	Dig/No Dig/ Surface	Comments
TR1 ST1	Dig	0-5 cm (0-2.0 in) grayish brown (10YR5/2) silty loam Below 5 cm (2.0 in) yellowish brown (10YR5/6) clay mottled with strong brown (7.5YR5/6) clay Located in grassy area next to campground
TR2 ST1	No Dig	Not excavated due to gravel lot
TR2 ST2	Dig	0-40 cm (0-15.8 in) grayish brown (10YR5/2) silty loam Located in grassy campground area
TR2 ST3	Dig	0-40 cm (0-15.8 in) grayish brown (10YR5/2) silty loam with abundant large cobbles Located in grassy campground area
TR3 ST1	No Dig	Not excavated due to proximity to gravel drive
TR3 ST2	Dig	0-35 cm (13.8 in) grayish brown (10YR5/2) sandy loam 35-60 cm (13.8-23.6 in) dark gray (10YR4/1) loamy hydric sand Located in wooded area adjacent to dirt path
TR3 ST3	Dig	0-10 cm (0-3.9 in) grayish brown (10YR5/2) silty loam 10-60 cm (3.9-23.6 in) strong brown (7.5YR5/6) silty sandy Located in wooded area adjacent to dirt path
TR3 ST4	Dig	0-5 cm (0-2.0 in) yellowish brown (10YR5/6) silty loam 5-55 cm (2.0-21.7 in) strong brown (7.5YR5/6) silty sand 55-60 cm (21.7-23.6 in) strong brown (7.5YR5/6) coarse sand with some rocks Located in wooded area adjacent to dirt path
TR4 ST1	No Dig	Not excavated due to steep slope
TR4 ST2	No Dig	Not excavated due to steep slope
TR4 ST3	Surface	Not excavated due proximity to old gravel road
TR4 ST4	No Dig	Not excavated due to steep slope
TR4 ST5	No Dig	Not excavated due to steep slope
TR4 ST6	No Dig	Not excavated due to steep slope
Judgemental 1	Dig	0-40 cm (0-15.8 in) grayish brown (10YR5/2) silty loam with abundant large cobbles Located in grassy campground area

Northwest Quadrant. The northwest quadrant is characterized primarily by wooded ridge side slope in the northern and western portions of the quadrant (Figure 9) and by a strip of grassy floodplain adjacent to the river in the eastern portion of the quadrant (Figure 10). Pleasant Valley Church is situated on the eastern side of SR 1306 on a terrace overlooking Elk River (Figure 11). As mentioned above, this church is first mapped on the 1934 topographic map (USGS 1934; see Figure 3). A gravel parking lot is located east and north of the church and a gravel driveway leads from the church and intersects SR 1306 just west of Bridge No. 125. A second gravel driveway diverges from SR 1306 in the northern portion of the quadrant. This driveway leads to a currently occupied residence. A small outbuilding is located on the eastern side of the gravel drive (Figure 12).

A total of 10 shovel test locations was examined along two transects in the northwest quadrant. Shovel test locations were not placed in areas of extreme slope in the northern and western portions of the quadrant. The residents of the house located in the quadrant were engaged in conversation with the police. Therefore, the area in the immediate vicinity of the residence was not investigated. Transect 1 was located on the eastern side of SR 1306 and ran parallel to Elk River, through the grassy floodplain. Shovel Tests 5 and 6 on Transect 1 were in a low area and were not excavated. A judgemental shovel test (Judgemental 1) was also placed in the grassy area northeast of the church, but gravel prevented its excavation. Transect 2 was run along the western side of SR 1306, parallel to the

Figure 9. View of western portion of the northwest quadrant, looking south.

Figure 10. View of grassy floodplain in the northwest quadrant, looking northeast.

Figure 11. View of church, gravel parking area, and driveway in the northwest quadrant, looking north.

Figure 12. View of residence and outbuilding in the northwest quadrant, looking northeast.

road. Shovel Tests 2 along this transect was not excavated due to slope. A piece of iron hardware, possibly a lock, and barbed wire were found on the ground surface in the vicinity of Transect 2 Shovel Test 2. These objects are modern and were not collected. A judgemental shovel test (Judgemental 2) was also placed in a relatively flat area on the eastern side of SR 1306 in the northern portion of the quadrant.

A representative shovel test for the floodplain portion of the northwest quadrant exposed 20 centimeters (7.9 in) of dark grayish brown hydric loamy sand overlying very dark grayish brown hydric sand (Table 3). This soil profile is relatively similar to the soil profile expected for the area. The shovel tests excavated in the steeper western and northern portions of the quadrant exposed 8 centimeters (3.2 in) of yellowish brown sandy loam overlying strong brown loamy clay. This soil profile differs from the expected soil profile for these areas in strata depth and soil texture, suggesting the area has been impacted heavily by erosion. No archaeological remains were located in the northwest quadrant.

Table 3. Shovel Test Locations Examined in the Northwest Quadrant.

Shovel Test	Dig/No Dig	Comments
TR1 ST1	Dig	0-8 cm (0-3.2 in) light olive brown (2.5Y5/3) silty clay loam Below 8 cm (3.2 in) dense rock Located in grassy area
TR1 ST2	Dig	0-20 cm (0-7.9 in) dark grayish brown (10YR4/1) hydric loamy sand Below 20 cm (7.9 in) very dark grayish brown (10YR3/1) hydric sand Located in grassy area
TR1 ST3	Dig	0-20 cm (0-7.9 in) dark grayish brown (10YR4/1) hydric loamy sand Below 20 cm (7.9 in) very dark grayish brown (10YR3/1) hydric sand Located in grassy area
TR1 ST4	Dig	0-20 cm (0-7.9 in) dark grayish brown (10YR4/1) hydric loamy sand Below 20 cm (7.9 in) very dark grayish brown (10YR3/1) hydric sand Located in grassy area
TR1 ST5	No Dig	Not excavated due to low area and hydric soils in vicinity
TR1 ST6	No Dig	Not excavated due to low area and hydric soils in vicinity
TR2 ST1	Dig	0-8 cm (0-3.2 in) yellowish brown (10YR3/4) sandy loam Below 8 cm (3.2 in) strong brown (7.5YR4.6) loamy clay
TR2 ST2	No Dig	Not excavated due to slope Iron hardware and barbed wire located on surface
Judgemental 1	No Dig	Not excavated due to gravel
Judgemental 2	Dig	0-8 cm (0-3.2 in) yellowish brown (10YR3/4) sandy loam Below 8 cm (3.2 in) strong brown (7.5YR4.6) loamy clay Located in a wooded area

Southwest Quadrant. The southwest quadrant consists of steep ridge side slope characterized by hardwoods (Figure 13). A gravel drive intersects SR 1306 just west of the bridge and meanders up the slope (Figure 14).

One shovel test (Judgemental 1) was dug in a relatively flat area on the western side of SR 1306. The majority of the quadrant was too steep for the excavation of shovel tests. Judgemental 1 exposed 35 centimeters (13.8 in) of dark brown (10YR4/4) gravelly sandy clay loam overlying dense gravel. This soil profile is similar to the expected soil profile for the area. No archaeological remains were located during the investigation of the southwest quadrant.

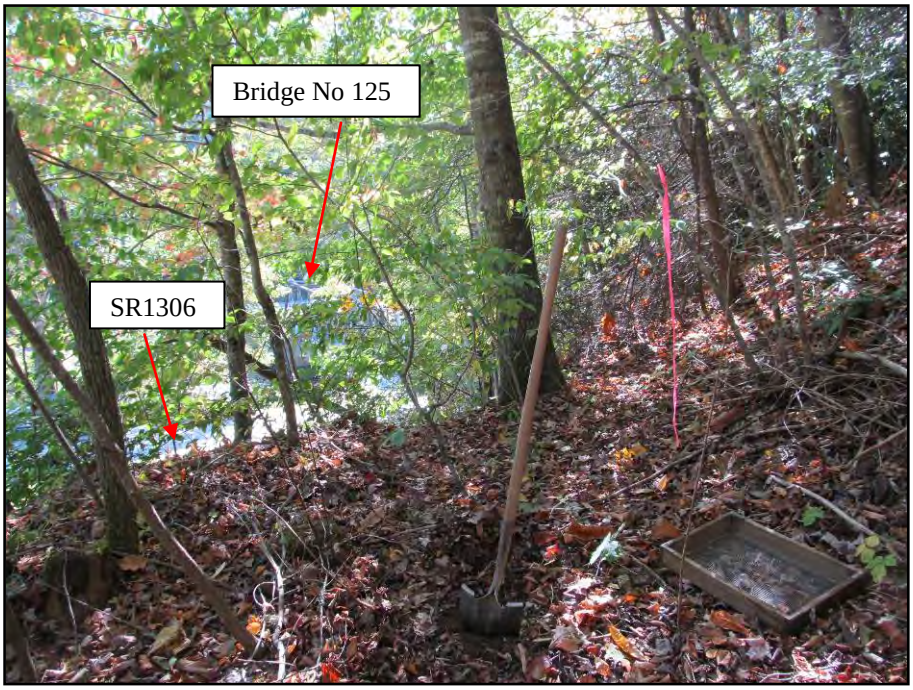


Figure 13. View of slope in southwest quadrant, looking southeast.

Figure 14. View of gravel drive in the southwest quadrant, looking southwest.

Figure 15. View of floodplain in southeast quadrant, looking south/southwest.

Southeast Quadrant. The southeast quadrant encompasses a segment of floodplain vegetated with tall brush and scattered hardwoods between Elk River and SR 1305 (Figure 15). Ridge toe slope encroaches into the southern portion of this segment of the quadrant. Also, an old road bed runs through the southwestern portion of the quadrant (see Figures 5 and 6). Ridge toe slope, characterized by mixed pines and hardwoods, is the dominant landform on the eastern side of SR 1305. A small grassy level area is located at the base of the ridge toe in the southern most portion of the quadrant on the eastern side of SR 1305.

Figure 16. View of slope in eastern portion of the southeast quadrant, looking south.

Figure 17. View of level area in eastern portion of the southeast quadrant, looking north.

Fourteen shovel test locations were examined along three transects in the southeast quadrant. Transects 1 and 2 were started 15 meters (49.2 ft) off SR 1306 and run roughly parallel to SR 1305 on its western side. Judgmental Shovel Tests 1 and 2 were placed along the river bank and Judgemental 3 was placed in a flat area on the western side of SR 1305 in the southern portion of the quadrant. Shovel Tests were not placed in the southernmost portion of the quadrant on the western side of SR 1305 due to steep slope. One transect (Transect 3) was run parallel to SR 1305 on the eastern side of the road. Shovel Tests 1 through 3 along Transect 3 were not excavated due to steep slope.

The majority of shovel test profiles exposed in the floodplain portion of the quadrant consisted of 15 to 20 centimeters (5.9 to 7.9 in) of light olive brown or dark grayish brown silty loam with gravel overlying dense gravel or olive brown compact silty loam. However, shovel test profiles were variable in this portion of the quadrant. Two shovel tests (Transect 2 Shovel Tests 1 and 2) in this area also exposed 65 centimeters (25.6 in) of grayish brown silty loam. The two shovel tests excavated in the eastern portion of the quadrant also varied. Transect 3 Shovel Test 4 exposed 5 centimeters (2.0 in) of grayish brown silty loam overlying grayish brown clay. Transect 3 Shovel Test 5 was more similar to shovel test profiles in the western portion of the quadrant and exposed 10 cm (3.9 in) of light olive brown gravelly

silty loam overlying dense gravel. Despite some diversity, the shovel tests profiles generally agreed with those expected for the area.

Table 3. Shovel Test Locations Examined in the Southeast Quadrant.

Shovel Test	Dig/No Dig	Comments
TR1 ST1	Dig	0-15 cm (0-5.9 in) dark grayish brown (10YR4/2) silty loam Below 15 cm (5.9 in) olive brown (2.5Y 4/4) compact silty clay Located in area of high brush
TR1 ST2	Dig	0-20 cm (0-7.9 in) light olive brown (2.5Y5/3) silty loam with gravel Below 20 cm (7.9 in) olive brown (2.5Y4/4) compact silty loam Located in area of high brush
TR1 ST3	Dig	0-15 cm (0-5.9 in) light olive brown (2.5Y5/3) silty loam with gravel Below 15 cm (5.9 in) dense gravel Located in area of high brush
TR1 ST4	Dig	0-15 cm (0-5.9 in) light olive brown (2.5Y5/3) silty loam with gravel Below 15 cm (5.9 in) dense gravel Located in area of high brush
TR2 ST1	Dig	0-65 cm (0-25.6 in) grayish brown (10YR5/2) silty loam Located in area of high brush
TR2 ST2	Dig	0-65 cm (0-25.6 in) grayish brown (10YR5/2) silty loam Located in area of high brush
TR3 ST1	No Dig	Not excavated due to steep slope
TR3 ST2	No Dig	Not excavated due to steep slope
TR3 ST3	No Dig	Not excavated due to steep slope
TR3 ST4	Dig	0-5 cm (0-2.0 in) grayish brown (10YR5/2) silty loam 5-20 cm (2.0-7.9 in) grayish brown (10YR5/2) silty clay Located in area of high grass
TR3 ST5	Dig	0-10 cm (0-3.9 in) light olive brown (2.5Y5/3) silty loam with gravel Below 10 cm (3.9) dense gravel Located in area of high grass
Judgemental 1	Dig	0-20 cm (0-7.9 in) light olive brown (2.5Y5/3) silty loam with gravel Below 20 cm (7.9 in) olive brown (2.5Y4/4) compact silty loam Located in area of high brush
Judgemental 2	Dig	0-20 cm (0-7.9 in) light olive brown (2.5Y5/3) silty loam with gravel Below 20 cm (7.9 in) olive brown (2.5Y4/4) compact silty loam Located in area of high brush
Judgemental 3	Dig	0-10 cm (0-3.9 in) strong brown (7.5YR4/6) clay Located in area of high brush

Conclusion. No archaeological remains were identified during the Bridge No. 125 survey. Based on the results of this investigation, the replacement of Bridge No. 125 will not impact any significant archaeological resources.

References Cited

Jones, David M., editor

2010 The *Light Fantastic: Using Airborne Lidar in Archaeological Survey*., English Heritage Publishing, Swindon, UK.

North Carolina State Highway and Public Works Commission (NCSHPWC)

1938 Avery County, NC map. North Carolina State Highway and Public Works Commission. United States Public Roads Administration, Raleigh, NC.

North Carolina Department of Transportation (NCDOT)

2016 Lidar image. Electronic Document. http://connect.ncdot.gov/resource/gis/Pages/Cont-Elev_v2.aspx, accessed October 2016.

North Carolina Department of Transportation (NCDOT) Historic Bridge Detail

2016 Historic Bridges of North Carolina, Avery County Bridge 125. Electronic Document. http://www.ncdot.gov/projects/ncbridges/historic/search/detail.htm?c=5&s=125, accessed October 2016.

Schuckman, Karen and Mike Renslow

2014 Slope, Aspect and Hillshade. Electronic Document. www. education.psu.edu/lidar, accessed October 2016.

Shumate, Scott M.

1994 An Archaeological Survey of the TVA Transmission Line to Beech Mountain, Avery County, North Carolina, 3D Environmental, Boone, NC

United States Department of Agriculture (USDA)

2016 Web Soil Survey. Electronic Document. www.websoilsurvey.nrcs.usda.gov, accessed October 2016.

United States Geological Survey (USGS)

1893 *Cranberry, NC* USGS 1:125,000 topographic quadrangle.
1895 *Cranberry, NC* USGS 1:125,000 topographic quadrangle.
1899 *Cranberry, NC* USGS 1:125,000 topographic quadrangle..
1902 *Cranberry, NC* USGS 1:125,000 topographic quadrangle.
1934 *Elk Park, NC* USGS 1:24,000 topographic quadrangle.
1944 *Linville, NC* USGS 1:6,250 topographic quadrangle.
1953 *Winston-Salem, NC* USGS 1:250,000 topographic quadrangle.
1955 *Winston-Salem, NC* USGS 1:250,000 topographic quadrangle.
1960 *Elk Park, NC* USGS 1:24,000 topographic quadrangle (photo revised 1978).
1994 *Elk Park, NC* USGS 1:24,000 topographic quadrangle.

Historic Architecture and Landscapes

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

November 12, 2024

Ms. Renee Gledhill-Earley
Environmental Review Coordinator, State Historic Preservation Office
North Carolina Department of Natural & Cultural Resources
4617 Mail Service Center
Raleigh, North Carolina 27699-4617

Dear Renee:

RE: Memorandum of Agreement: Replace Bridge 125 on SR 1306 (Hicks Hollow Rd) over Elk River in Avery County, TIP B-5835, WBS 45788.1.1, PA No. 16-01-0131

The North Carolina Department of Transportation (NCDOT) proposed to replace Avery County Bridge 125, a bridge determined eligible for National Register Listing. Following a Finding of Adverse Effect, a Memorandum of Agreement was signed on November 1, 2022. Photographic Recordation was completed on November 3, 2022. Due to the effects of Hurricane Helene on September 27, 2024, the project site conditions have changed. The truss span of existing Bridge No. 125 was washed downstream and cannot be salvaged. The remaining stipulation of offering the bridge to the Historic Bridge Reuse Program cannot be fulfilled. Please let me know if you have any additional questions regarding this project. I can be reached at (919) 707-6088 or by email at slreap@ncdot.gov.

Sincerely,

Shelby Reap

Shelby Reap
Historic Architecture Team

CC: Lori Beckwith, USACE

Mailing Address: NC DEPARTMENT OF TRANSPORTATION PDEA-HUMAN ENVIRONMENT SECTION MAIL SERVICE CENTER 1598 RALEIGH NC, 27699-1598

Telephone: (919) 707-6000 *Fax:* (919) 212-5785 *Customer Service:* 1-877-368-4968

Website: www.ncdot.gov

Location: 1020 BIRCH RIDGE RD RALEIGH NC 27610

Telephone: (919) 707-6000
Fax: (919) 212-5785
Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Location: 1000 BIRCH RIDGE RD RALEIGH NC 27610

HISTORIC ARCHICTECTURE 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:	B-5835	***County***:	Avery
WBS No.:	45788.1.1	***Document Type:***	CE
Fed. Aid No:	BRZ-1306(030)	***Funding***:	☐ State ☒ Federal
Federal Permit(s):	☒ Yes ☐ No	***Permit Type(s)***:	NWP
Project Description: Replace Bridge No. 125 on SR 1306 (Hicks Hollow Rd) over Elk River.			

SUMMARY OF HISTORIC ARCHICTECTURE AND LANDSCAPES REVIEW

Description of review activities, results, and conclusions:
Avery County Bridge No. 125 (AV0125) was determined eligible in the 2005 Historic Bridge Survey. On March 31, 2016 an NCDOT architectural historian conducted a field survey to document the bridge and investigate Pleasant Valley Church which is located next to the bridge. Built in 1957, the church does not possess any of the criteria which would make it eligible for National Register listing. Avery County Bridge No. 125 retains its integrity and National Register eligibility.

ASSESSMENT OF EFFECTS

Property Name:	Avery County Bridge No. 125	***Status***:	DOE
Survey Site No.:	AV0125	***PIN***:	

Effects
☐ No Effect ☐ No Adverse Effect ☒ Adverse Effect

Explanation of Effects Determination:
The bridge will be dismantled and removed from its location.

List of Environmental Commitments:

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

Shelby Reap — Nov. 22, 2016

NCDOT Architectural Historian — Date

Renee Gledhill-Earley — 11.22.16

State Historic Preservation Office Representative — Date

FHWA, for the Division Administrator, or other Federal Agency — Date

FHWA intends to use SHPO's concurrence as a basis of a "de minimis" finding for the following properties, pursuant to Section 4(f):

Avery County Bridge No. 125 (AV0125)

Tribal Coordination

TGS ENGINEERS

706 Hillsborough St.
SUITE 200
Raleigh, NC 27603

PHONE (919) 773-8887 FAX (919) 773-8839

TGS Engineers

April 23, 2019

MEMORANDUM TO: Erin Thompson
Tribal Historic Preservation Officer
United Keetoowah Band of Cherokee Indians in Oklahoma

FROM: Stacy Oberhausen, PE, CPM
Project Manager
TGS Engineers

SUBJECT: Project Name: **STIP B-5835**
Replace Bridge No. 050125 on a new alignment to the north on Hicks Hollow Road (S.R. 1306) over the Elk River in Avery County, NC.

Thompson Gordon Shook Engineers, Inc., d/b/a TGS Engineers, has been retained by NCDOT to provide comprehensive professional engineering and environmental services for the subject project. Included as part of these services, TGS Engineers will complete an environmental document prepared in accordance with the National Environmental Policy Act.

STIP Project B-5835 is included in the current NCDOT STIP. This project includes replacement of Bridge Number 050125 on a new alignment to the north on Hicks Hollow Road (S.R. 1306) over the Elk River in Avery County, NC.

We would appreciate any information you might have that would be helpful in evaluating potential environmental impacts for this project. Please respond by Thursday, May 23, 2019, so that your comments can be used in the selection of alternatives to be studied for this project. Copies of the Vicinity Map (Fig. 1), USGS Topographic Map (Fig. 2), and Study Area Map (Fig. 3) are attached for your use.

If you have any questions concerning this project, please contact me at soberhausen@tgsengineers.com / (919) 773-8887 (ext. 116).

Attachments

TGS ENGINEERS

TGS Engineers
706 Hillsborough St.
SUITE 200
Raleigh, NC 27603
PHONE (919) 773-8887 FAX (919) 773-8839

April 23, 2019

MEMORANDUM TO: Elizabeth Toombs
Tribal Historic Preservation Officer
Cherokee Nation

FROM: Stacy Oberhausen, PE, CPM
Project Manager
TGS Engineers

SUBJECT: Project Name: **STIP B-5835**
Replace Bridge No. 050125 on a new alignment to the north on Hicks Hollow Road (S.R. 1306) over the Elk River in Avery County, NC.

Thompson Gordon Shook Engineers, Inc., d/b/a TGS Engineers, has been retained by NCDOT to provide comprehensive professional engineering and environmental services for the subject project. Included as part of these services, TGS Engineers will complete an environmental document prepared in accordance with the National Environmental Policy Act.

STIP Project B-5835 is included in the current NCDOT STIP. This project includes replacement of Bridge Number 050125 on a new alignment to the north on Hicks Hollow Road (S.R. 1306) over the Elk River in Avery County, NC.

We would appreciate any information you might have that would be helpful in evaluating potential environmental impacts for this project. Please respond by Thursday, May 23, 2019, so that your comments can be used in the selection of alternatives to be studied for this project. Copies of the Vicinity Map (Fig. 1), USGS Topographic Map (Fig. 2), and Study Area Map (Fig. 3) are attached for your use.

If you have any questions concerning this project, please contact me at soberhausen@tgsengineers.com / (919) 773-8887 (ext. 116).

Attachments

TGS ENGINEERS

706 Hillsborough St.
SUITE 200
Raleigh, NC 27603

PHONE (919) 773-8887 FAX (919) 773-8839

TGS Engineers

April 23, 2019

MEMORANDUM TO: Charlotte Wolf
106 Coordinator
United Keetoowah Band of Cherokee Indians in Oklahoma

FROM: Stacy Oberhausen, PE, CPM
Project Manager
TGS Engineers

SUBJECT: Project Name: **STIP B-5835**
Replace Bridge No. 050125 on a new alignment to the north on Hicks Hollow Road (S.R. 1306) over the Elk River in Avery County, NC.

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Attachments

TGS ENGINEERS

706 Hillsborough St.
SUITE 200
Raleigh, NC 27603

PHONE (919) 773-8887 FAX (919) 773-8839

TGS Engineers

April 23, 2019

MEMORANDUM TO: Stephen Yerka
Tribal Historic Preservation Specialist
Eastern Band of Cherokee Indians

FROM: Stacy Oberhausen, PE, CPM
Project Manager
TGS Engineers

SUBJECT: Project Name: **STIP B-5835**
Replace Bridge No. 050125 on a new alignment to the north on Hicks Hollow Road (S.R. 1306) over the Elk River in Avery County, NC.

Thompson Gordon Shook Engineers, Inc., d/b/a TGS Engineers, has been retained by NCDOT to provide comprehensive professional engineering and environmental services for the subject project. Included as part of these services, TGS Engineers will complete an environmental document prepared in accordance with the National Environmental Policy Act.

STIP Project B-5835 is included in the current NCDOT STIP. This project includes replacement of Bridge Number 050125 on a new alignment to the north on Hicks Hollow Road (S.R. 1306) over the Elk River in Avery County, NC.

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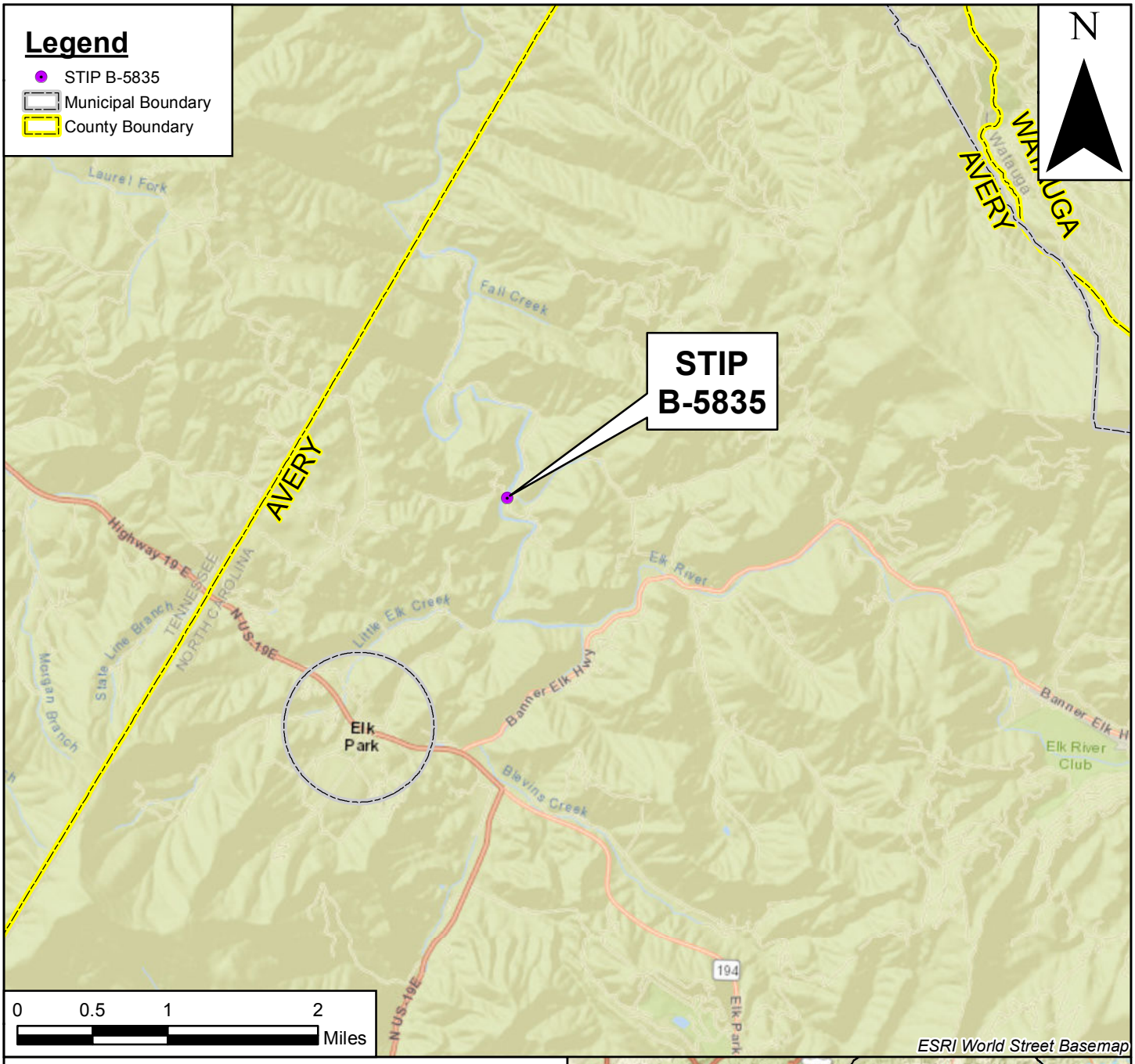
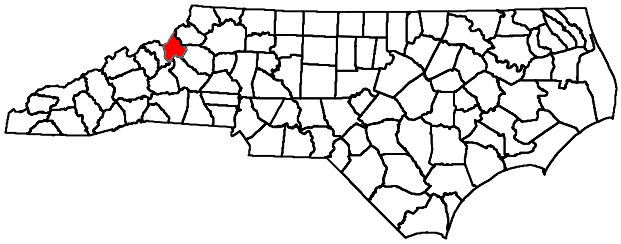
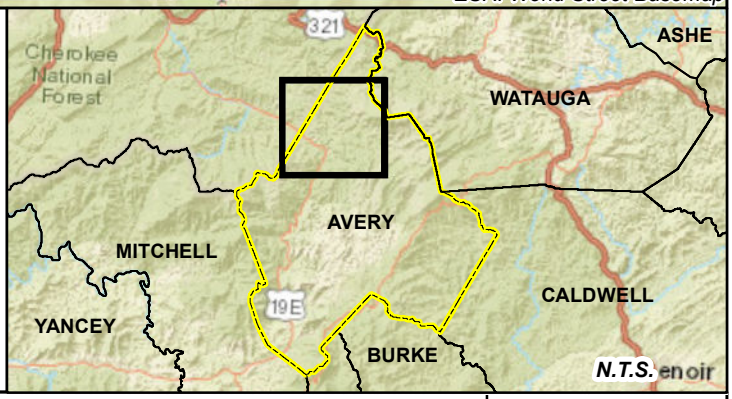
Attachments



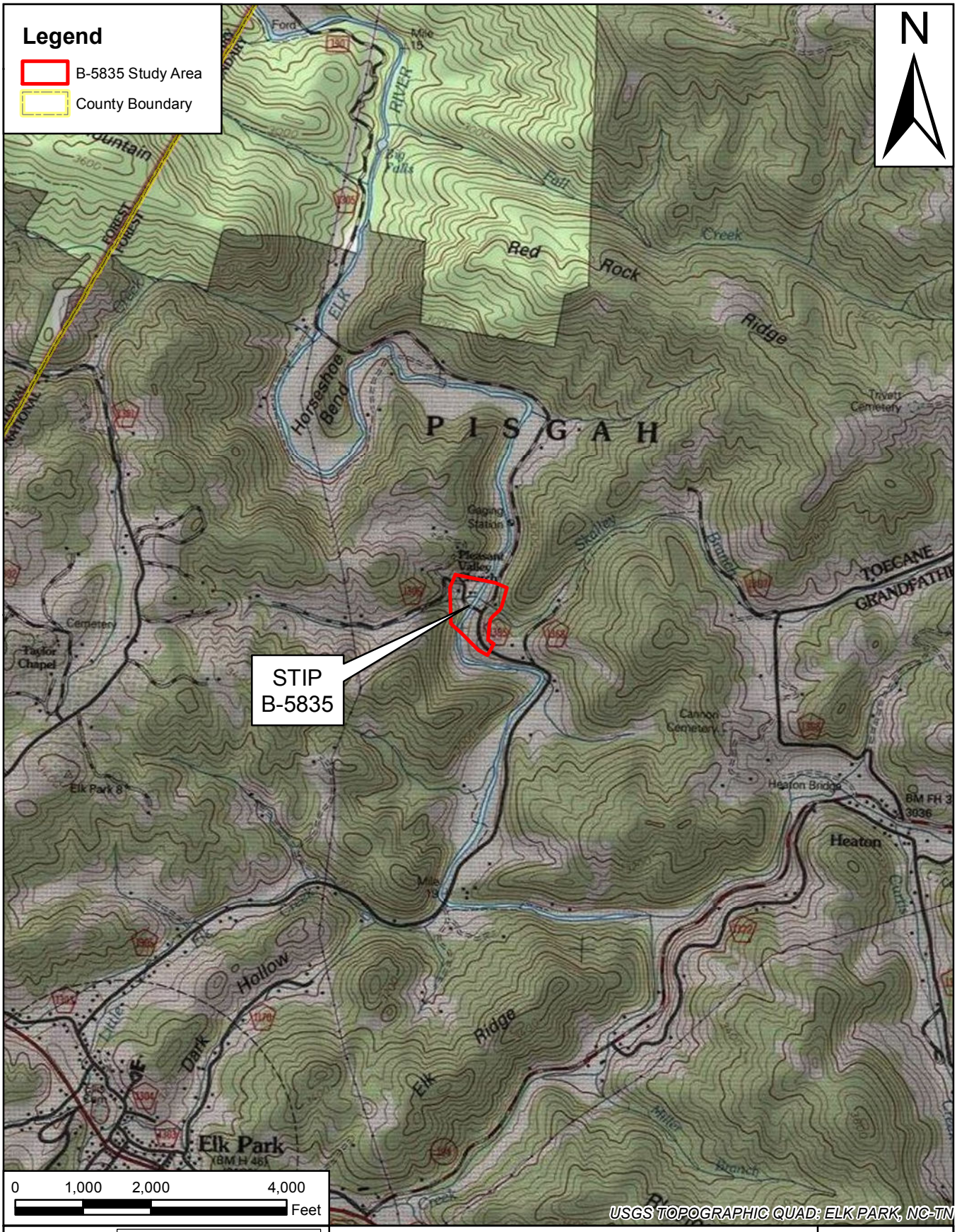




County: AVERY	
Div: 11	STIP# B-5835
WBS: 45788.1.1	
Prepared By: TGS	
Date: 4/4/2019	

VICINITY MAP
STIP PROJECT B-5835
REPLACE BRIDGE #125 ON SR 1306
(HICKS HOLLOW RD.) OVER ELK RIVER
AVERY COUNTY

FIGURE
1



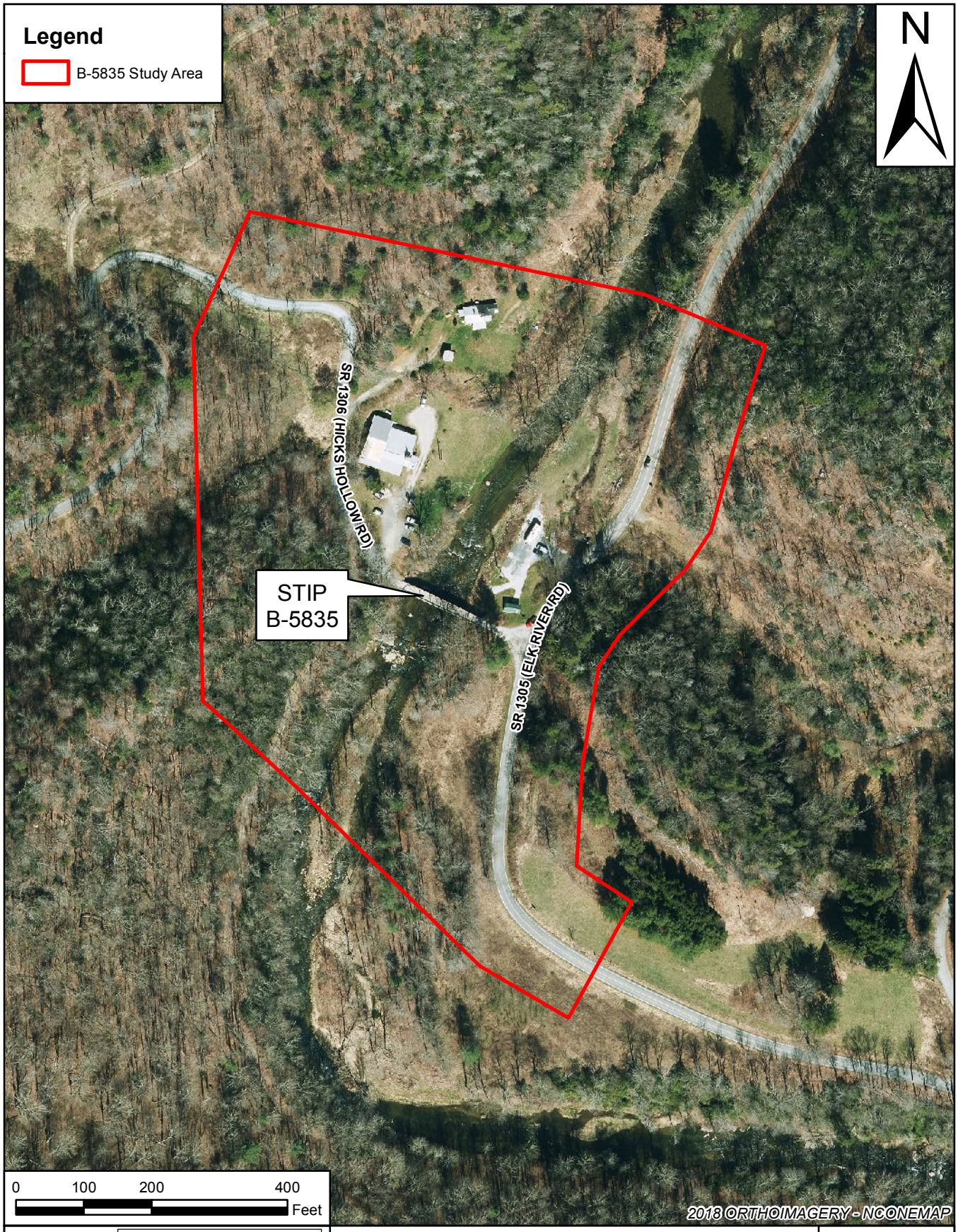
County: AVERY	
Div: 11	STIP# B-5835
WBS: 45778.1.1	
Prepared By: TGS	
Date: 4-4-2019	

USGS MAP

STIP PROJECT B-5835
REPLACE BRIDGE #125 ON SR 1306
(HICKS HOLLOW ROAD) OVER ELK RIVER
AVERY COUNTY

FIGURE

2



County: AVERY	
Div: 11	STIP# B-5835
WBS: 45778.1.1	
Prepared By: TGS	
Date: 4-4-2019	

STUDY AREA MAP

STIP PROJECT B-5835
REPLACE BRIDGE #125 ON SR 1306
(HICKS HOLLOW ROAD) OVER ELK RIVER
AVERY COUNTY

FIGURE

3

GWYᏰ DᏃᏢ
CHEROKEE NATION®
P.O. Box 948 • Tahlequah, OK 74465-0948 • 918-453-5000 • cherokee.org

Office of the Chief

Bill John Baker
Principal Chief
ᎤᏢ Gh ᏗSSᏯᏍᎩ
ᎤEᎾGᏯ

S. Joe Crittenden
Deputy Principal Chief
ᏍᎩ. KG ᏗEᎩᏍᎩ
ᎳᏢᏁ DᏓᎶᏁ ᎤEᎾGᏯ

May 22, 2019

David Stutts
North Carolina Department of Transportation
100 Birch Ridge Drive
Raleigh, NC

Re: STIP B-5835, Replace Bridge No. 050125 on a New Alignment to the North on Hicks Hollow Road (S.R. 1306) over the Elk River

Mr. David Stutts:

The Cherokee Nation (Nation) is in receipt of your correspondence about **STIP B-5835, Replace Bridge No. 050125 on a New Alignment to the North on Hicks Hollow Road (S.R. 1306) over the Elk River**, and appreciates the opportunity to provide comment upon this project. Please allow this letter to serve as the Nation's interest in acting as a consulting party to this proposed project.

The Nation maintains databases and records of cultural, historic, and pre-historic resources in this area. Our Historic Preservation Office reviewed this project, cross referenced the project's legal description against our information, and found no instances where this project intersects or adjoins such resources. Thus, the Nation does not foresee this project imparting impacts to Cherokee cultural resources at this time.

However, the Nation requests that the North Carolina Department of Transportation (NCDOT) halt all project activities immediately and re-contact our Offices for further consultation if items of cultural significance are discovered during the course of this project.

Additionally, the Nation requests that NCDOT conduct appropriate inquiries with other pertinent Tribal and Historic Preservation Offices regarding historic and prehistoric resources not included in the Nation's databases or records.

If you require additional information or have any questions, please contact me at your convenience. Thank you for your time and attention to this matter.

Wado,

Elizabeth Toombs, Tribal Historic Preservation Officer
Cherokee Nation Tribal Historic Preservation Office
elizabeth-toombs@cherokee.org
918.453.5389

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

February 11, 2025

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

Dr. Haire,

The North Carolina Department of Transportation proposes to replace bridge number 125 on SR 1306 (Hicks Hollow Road) over the Elk River with a new bridge to the immediate north of the previous location as project B-5835 in Avery County. This project was a previously programmed bridge replacement project in the design stage when Hurricane Helene destroyed the bridge. All design efforts were expedited to re-establish a reliable transportation infrastructure for Hicks Hollow Road. Final design plans have been prepared for project B-5835, and it is being permitted. 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 project vicinity map and archaeological survey report is attached.

The coordinates of this project are approximately: 36.1802, -81.96411

We would appreciate any information you might have that would be helpful in evaluating potential environmental impacts of the project.

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 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 March 14, 2025, so that your comments can be used in the evaluation of this project. If you have any questions concerning this project, or would like any additional information, please contact me at recrowther@ncdot.gov or (919) 707-6112.

Sincerely,

Robert Crowther

Robert Crowther, PWS
NCDOT Environmental Coordination and Permitting
ec:
Matt Wilkerson, NCDOT Archaeology Team Leader
Lori Beckwith, USACE Project Manager

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

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

October 3, 2024

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

To Whom It May Concern,

The North Carolina Department of Transportation (NCDOT) is performing the project development, environmental, and engineering studies to replace Bridge No. 050125 on S.R. 1306 (Hicks Hollow Road) over the Elk River in Avery County, NC. The U.S. Army Corps of Engineers (USACE) is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA). A project vicinity map is attached. The coordinates of this project are approximately 36.180197, -81.964112.

We would appreciate any information you might have that would be helpful in evaluating potential environmental impacts of the project. NCDOT has completed a review of the subject project and concluded that no National Register of Historic Places eligible or listed archaeological sites are present at the project site. Documentation of these findings is attached to this letter.

In accordance with Section 106 of the NHPA, we request that you please inform us of any historic properties of traditional religious or cultural importance that you are aware of that may be affected 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 November 4, 2024, so that your comments can be used in the development of this project. If you have any questions concerning this project, or would like any additional information, please contact me at kjhining@ncdot.gov or (336) 903-9129.

Sincerely,

Kevin Hining

Kevin Hining

Division Environmental Officer
NCDOT Highway Division 11

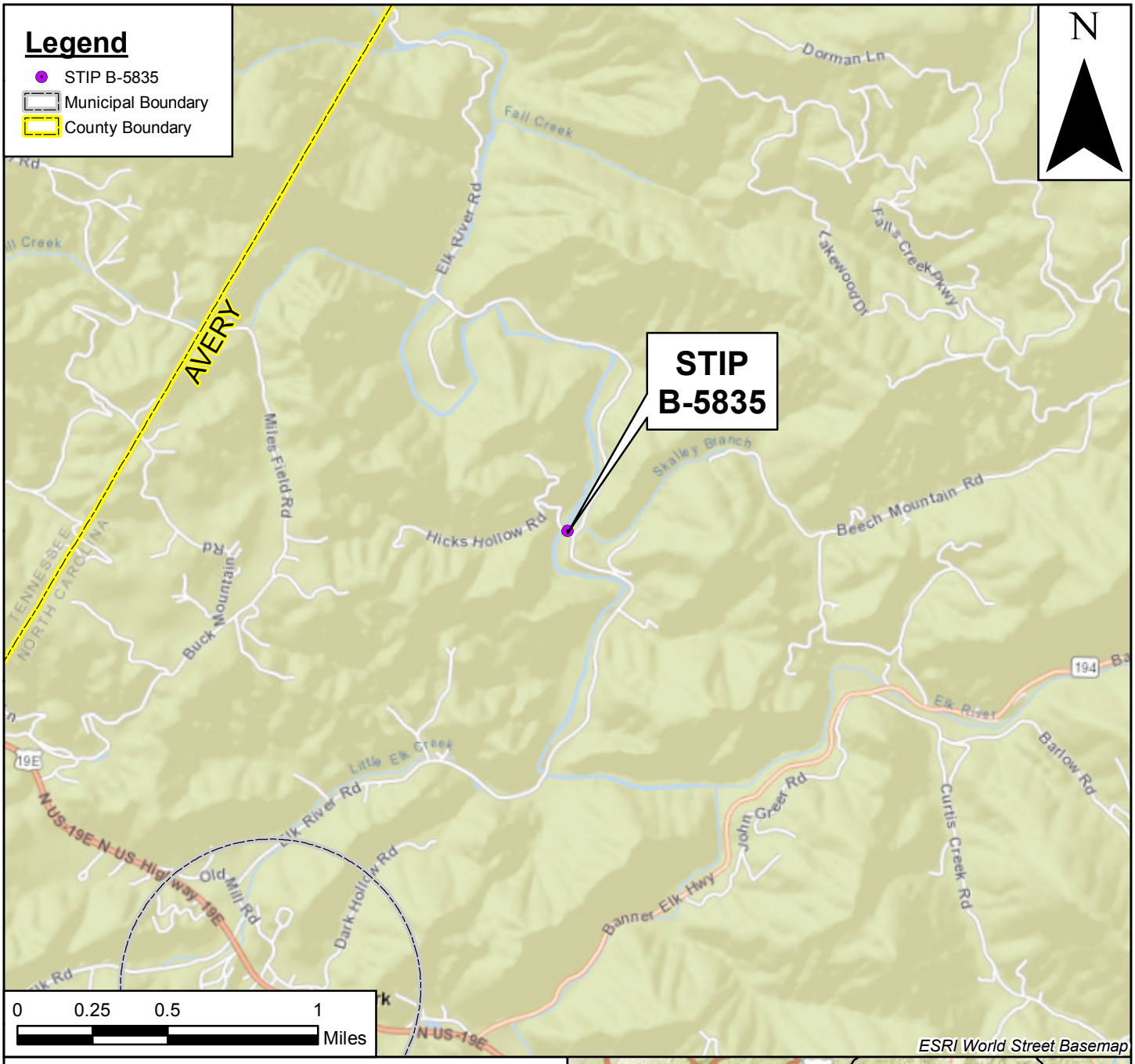
CC: Lori Beckwith, United States Army Corps of Engineers (USACE)
Matt Wilkerson, Archaeology Team Lead, Environmental Analysis Unit, NCDOT

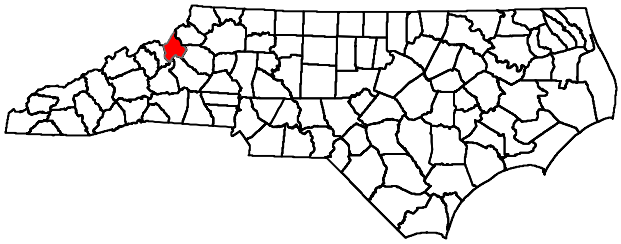
Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION 11
801 STATESVILLE ROAD
NORTH WILKESBORO, NC 28659

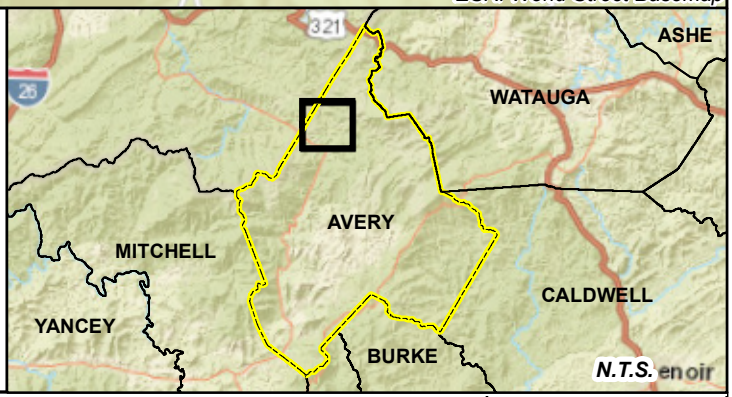
Telephone: (336) 903-9101
Fax: (336) 667-4549
Customer Service: 1-877-368-4968

Location:
801 STATESVILLE ROAD
NORTH WILKESBORO, NC 28659

Website: ncdot.gov







County:	AVERY
Div: 11	TIP# B-5835
WBS:	45788.1.1
Prepared By:	TGS
Date:	08.19.2024

VICINITY MAP
TIP PROJECT B-5835

REPLACE BRIDGE #125
SR 1306 (HICKS HOLLOW RD.) OVER THE ELK RIVER
AVERY COUNTY

FIGURE
1

16-01-0131

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 Group.

PROJECT INFORMATION

Project No:	B-5835	*County:*	Avery
WBS No:	45788.1.1	*Document:*	Categorical Exclusion
F.A. No:	BRZ-1306(030)	*Funding:*	☐ State ☒ Federal

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

Project Description: Replace Bridge 125 on SR 1306 over the Elk River in Avery County. The Area of Potential Effects (A.P.E.) encompasses approximately 11.7 acres around the bridge. (The bridge is oriented at approximately east-west.) The A.P.E. includes a 329-meter (1,078-ft.) long area on both sides of SR 1305 to the east of the bridge, and a 188-meter (618-ft.) long area on both sides of SR 1306 to the west of the bridge. No design plans were provided.

SUMMARY OF ARCHAEOLOGICAL FINDINGS

The North Carolina Department of Transportation (NCDOT) Archaeology Group 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:
see attached report

SUPPORT DOCUMENTATION

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

Other:

Signed:
CALEB SMITH **11/29/2016**

NCDOT ARCHAEOLOGIST Date

Archaeological Survey for the Proposed Replacement of Bridge No. 125 on SR 1306 (Hicks Hollow Rd.) over Elk River, Avery County, North Carolina

By Brooke Brilliant, Archaeological Consultants of the Carolinas, Inc.
November 2016

Introduction

Bridge No. 125 is located on SR 1306 (Hicks Hollow Rd.) in northwest Avery County approximately 2.8 kilometers (1.7 miles) northeast of the town of Elk Park (Figure 1). Bridge 125, which runs approximatley east-west, is located just northwest of the intersection of SR 1306 and SR 1305 (Elk River Road). The bridge is located in a narrow river valley surrounded by mountainous terrain (Figure 2). Two unnamed tributaries join either side of Elk River just north of the bridge. The bridge vicinity is characterized by floodplain and ridge toe side slope distinguished by cleared and forested areas. Four houses and multiple outbuildings are located within the project area. The archaeological Area of Potential Effects (APE) for this project encompasses approximately 11.7 acres around Bridge No 125. The APE includes an area extending approximately 348.2 meters (1,142.4 ft) north-south and 258.9 meters (849.4 ft) east-west.

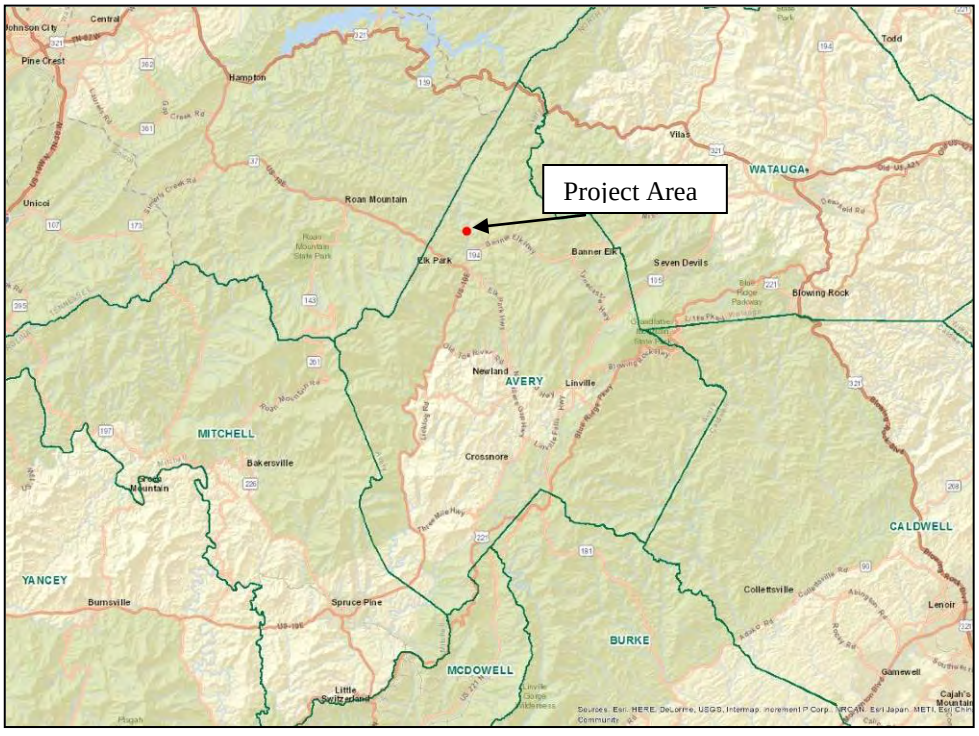


Figure 1. Location of Bridge No. 125 in Avery County.

A visual reconnaissance of the project area was conducted by North Carolina Department of Transportation (NCDOT) archaeologists Scott Halvorsen and Caleb Smith on 25 February 2016. The reconnaissance determined that the southeast quadrant has high potential for archaeological sites and the southwest, northwest, and northeast quadrants have low potential for archaeologial sites.

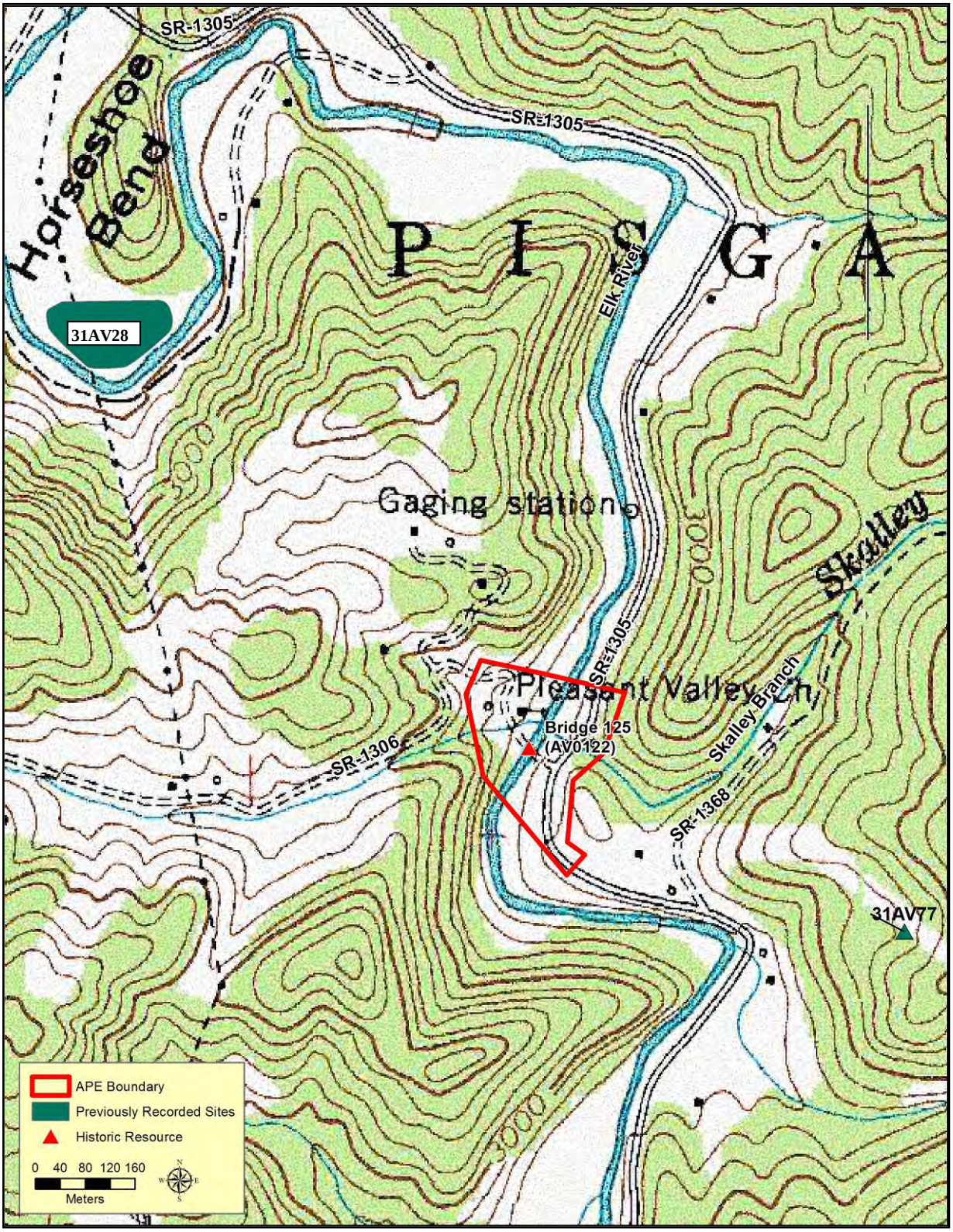


Figure 2. Topographic map of Bridge No. 125 (1960 USGS *Elk Park, N.C.* 1:24,000 scale topographic map [photo revised 1978]).

The archaeological survey was conducted by Brooke Brilliant and Katherine Carter of Archaeological Consultants of the Carolinas, Inc. (ACC) on 6 October 2016. The following description was submitted to the NCDOT by ACC in November 2016.

Background Research

Background research consisted of an examination of topographic and historic maps and the listings of previously recorded sites, previous archaeological surveys, and previous environmental reviews at the Office of State Archaeology (OSA) in Raleigh.

A review of the historic maps including the 1938 Avery County Highway map (NCSHPWC 1938) and USGS topographic maps dating from 1893 to 1960 (USGS 1893, 1895, 1899, 1902, 1934, 1944, 1953, 1955, 1960), depict the area as extremely remote and very sparsely populated. The 1934 USGS topographic map is the first to show SR 1306 and Pleasant Valley Church (Figure 3). The 1934 and 1940 USGS topographic maps show SR 1306 following a different course than the current road, suggest this road was rerouted before 1960. The 1960 USGS map shows the roads as they are currently and depicts three structures in the project vicinity (Figure 4). One of these is the Pleasant Valley Church located in the northwest quadrant, on the north side of SR 1306. This church is still in use. In general, the historic maps show little development in the area throughout the twentieth century.

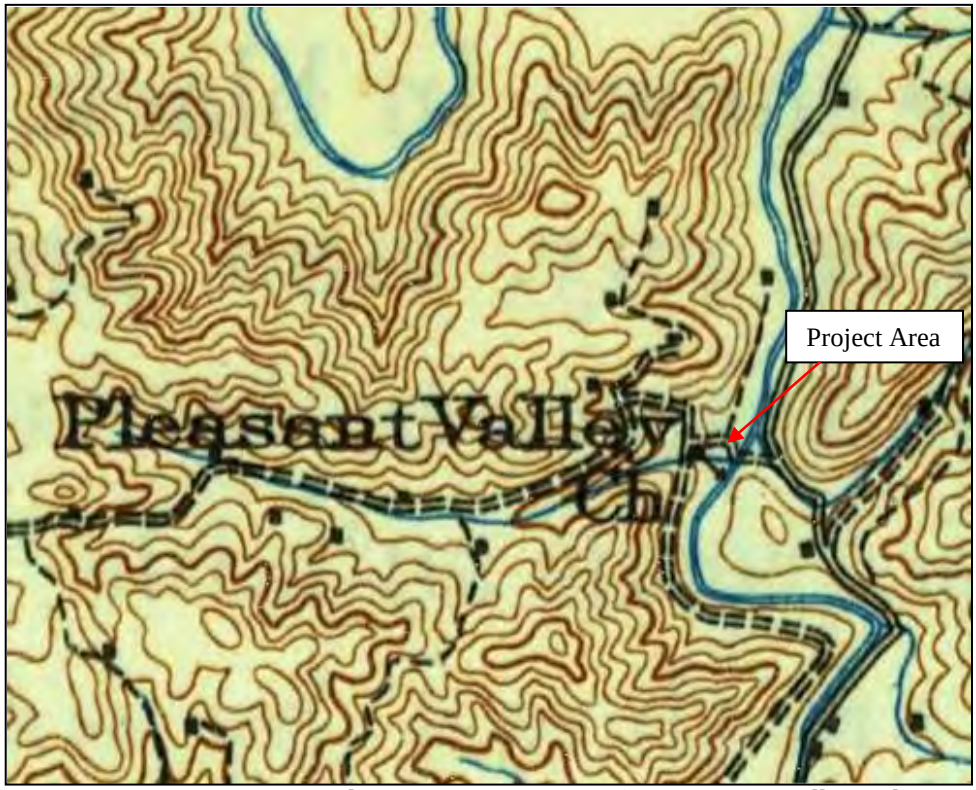


Figure 3. 1934 map showing project area (1934 USGS *Elk Park, NC,* 1:24,000 scale topographic map).

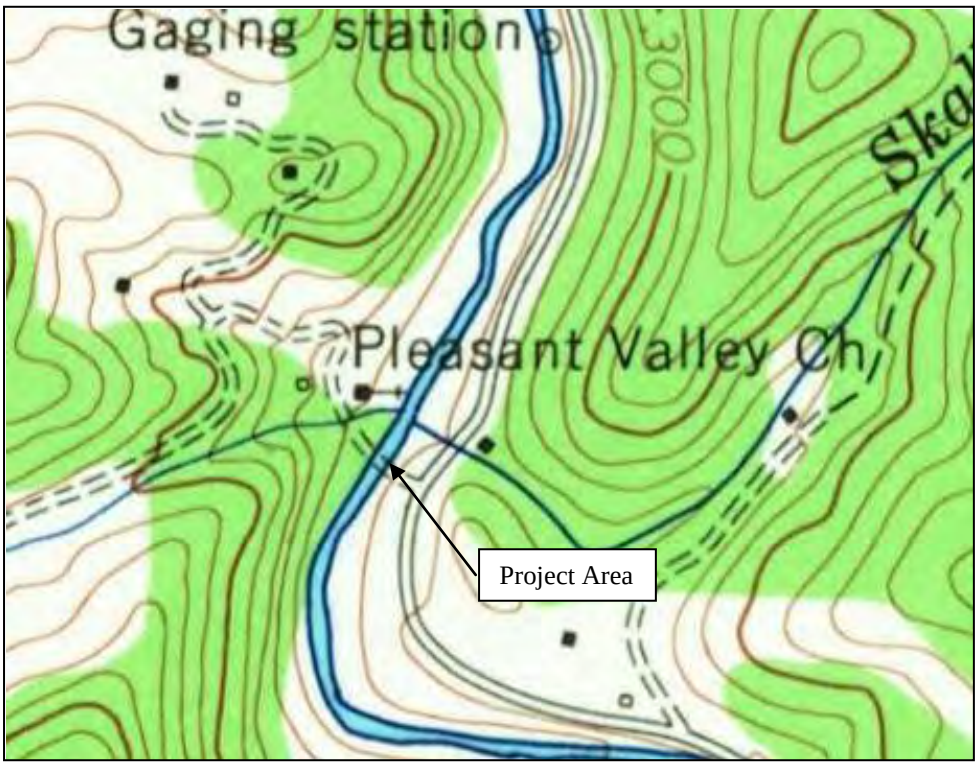


Figure 4. 1960 map showing project area (1960 USGS *Elk Park, NC,* 1:24,000 scale topographic map)**.**

The APE has not been included in any previous archaeological surveys. However, two previously recorded archaeological resources (31AV28 and 31AV77) are located within a 0.8 kilometer (0.5 mi) radius of the APE (see Figure 2). Both sites are unassessed for the National Register of Historic Places (NRHP). Site 31AV28 is located on the floodplain of Elk River at Horseshoe Bend, northwest of the project area. This site is an unknown component prehistoric lithic scatter (Site Form on File). Resource 31AV77 was documented in 1994 by 3D Environmental during an archaeological survey of the TVA transmission line to Beech Mountain. This resource is located southeast of the project area and is a historic isolated find (Shumate 1994). There no little other information about this resource available.

Background research also included an examination of records on recorded historic resources using the Department of Historic Resources Survey and Planning Division's mapping application web site. One recorded historic resource (AV0122) is in the project tract (see Figure 2). Resource AV0122 is Bridge No. 125, which the NCDOT proposes to replace. It is a Pratt through truss bridge, and one of only three historic bridges in Avery County. The state bridge records indicate this bridge was erected in 1932, but the pinned connections and general character of the bridge, suggest it dates to circa 1915. This bridge may have been built around 1915, but moved to its current location in 1932. The relocation of bridges is a common practice within the state. Several modifications have been made to Bridge No. 125 to maintain the bridge. These modifications include: welding the beams to the floor beams, replacement and strengthening of original connections, and replacement of original railings. Despite these changes, the bridge is still considered to be an exemplar of the pin-connected Pratt through truss type bridge in North Carolina (NCDOT: Historic Bridge Detail 2016).

The seven primary soil types located in the APE of Bridge No. 125 are Chestnut-Ashe complex, Cullasaja cobbly loam, Edneyville-Chestnut complex, Nikwasi loam, Rosman sandy loam, Saunook loam, and Saunook-Nikwasi complex (USDA 2016). These soil types are described in Table 1.

Table 1. Summary of Soils Present in the Bridge No .125 APE (USDA 2016).

Soil Name	Description	Location
Chestnut-Ashe complex	Well drained to somewhat excessively drained; 5-95% slope; forms on mountain slopes from residuum weathered from felsic, high grade, or metamorphic rock	Southwest and northwest quadrants
Cullasaja cobbly loam	Well drained; 30-50% slope; bouldery; forms on coves from cobbly and stony colluvium derived from igneous and metamorphic rock	Southern portion of northwest quadrant
Edneyville-Chestnut complex	Well drained; 30-50% slope; stony and granitic; forms on ridges and mountain slopes from residuum weathered from granite and gneiss that is affected by soil creep in the upper solum	Northwestern section of the northwest quadrant and eastern portion of the southeast quadrant
Nikwasi loam	Poorly drained and frequently flooded; 0-3% slope; forms on depressions on floodplains from loamy alluvium over sandy and gravelly alluvium	Northeastern corner of the northwest quadrant
Rosman sandy loam	Well drained and frequently flooded; 0-5% slope; forms on floodplains from loamy alluvium	Western portion of the southeast quadrant
Saunook loam	Well drained; 8-15% slope; forms on coves, drainageways, and fans on mountain slopes from colluvium derived from igneous and metamorphic rock	Central portion of the southeast quadrant
Saunook-Nikwasi complex	Well drained or poorly drained; 2-15% slope; forms on coves, drainageways, and fans on mountain slopes, as well as on depressions on floodplains; originates from colluvium derived from igneous and metamorphic rock and extremely gravelly course sand	Southern portion of the northeast quadrant

Archaeological Survey

The archaeological survey consisted of the examination of 39 shovel test locations along nine transects. Shovel tests were excavated at 30 meter (98.4 ft) intervals along each transect. These tests measured at least 30 centimeters (11.8 in) in diameter and were excavated a minimum of 5 centimeters (2.0 in) into sterile subsoil. All test fill was screened through 0.64 centimeter (0.25 in) wire mesh. Each shovel test was backfilled upon completion. Shovel tests were not excavated at locations with slope of greater than 15 percent or in clearly disturbed contexts. Global Positioning System (GPS) readings using a sub-meter accuracy Trimble GeoExplorer handheld GPS receiver were taken at each shovel test location, except in situations of extreme slope or other potentially dangerous conditions. In all areas, shovel testing was supplemented by comprehensive examination of all exposed ground surface. Figure 5 shows the shovel test locations on an aerial, and Figure 6 shows the shovel tests on a LiDAR image. LiDAR, an acronym for *Light Detection and Ranging*, is a remote sensing method which uses lasers to collect three dimensional data about the ground surface (Jones 2010). A hill-shading effect can be applied to a LiDAR image to better view topographic features. This technique uses a hypothetical light source to create shadows which highlight minute changes in the ground surface (Jones 2010; Schuckman and Renslow 2014). The LiDAR image exemplifies areas of extreme slope within portions of all of the quadrants.

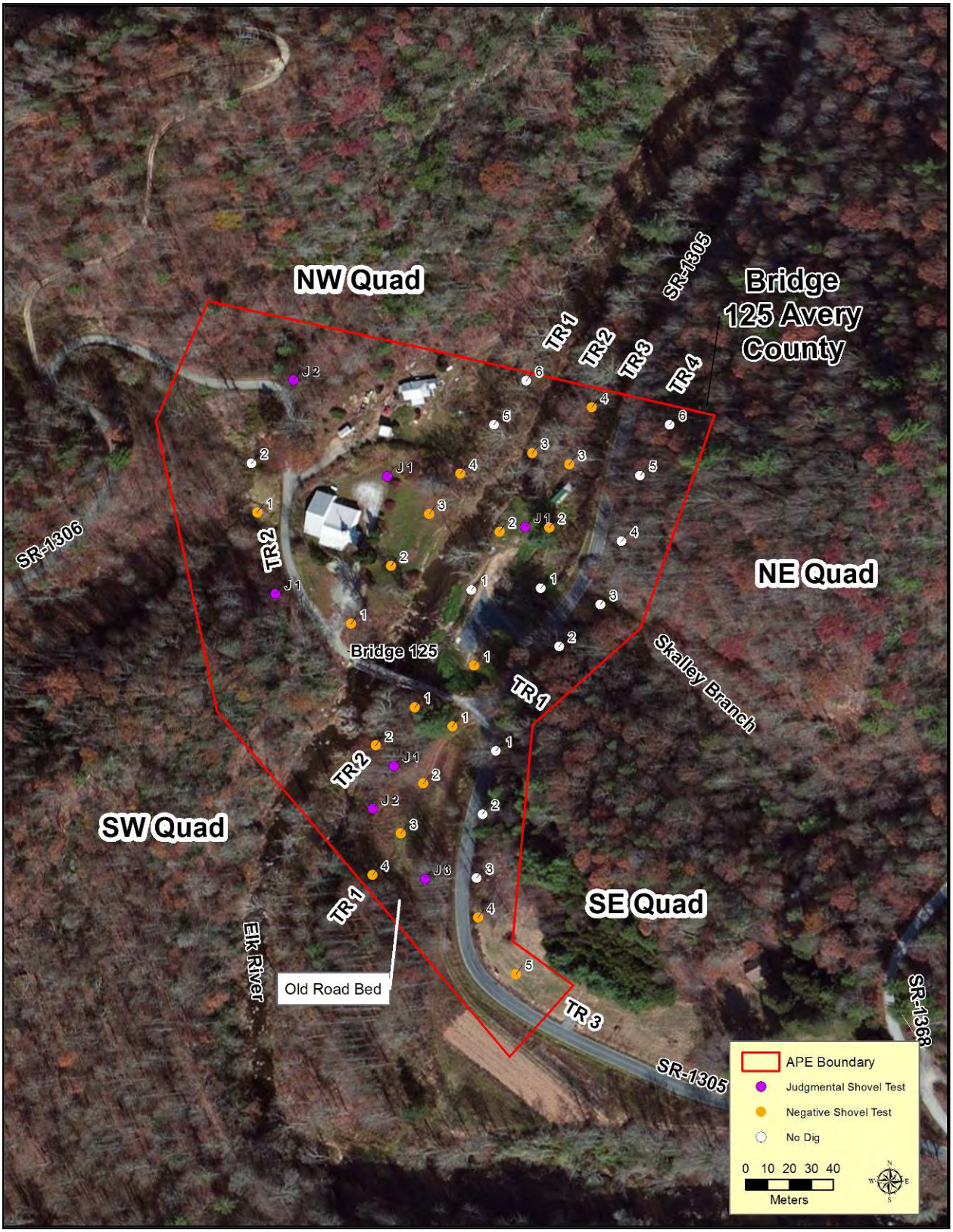


Figure 5. Aerial photograph showing shovel test locations within the project area.

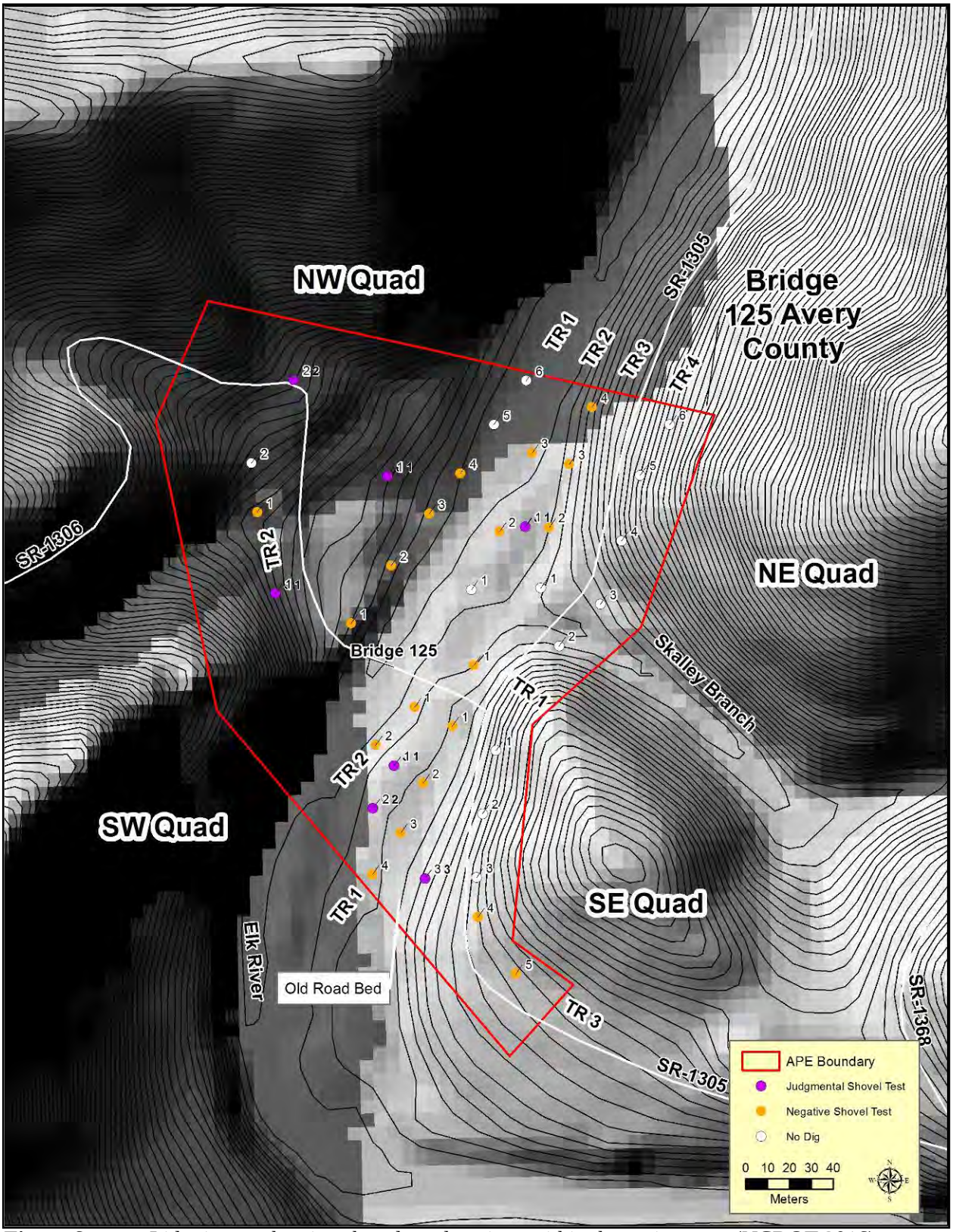


Figure 6. Lidar image showing shovel test locations within the project area (NCDOT 2016).

Northeast Quadrant. The APE in the northeast quadrant primarily encompasses a floodplain between the bridge and SR 1305 (Figure 7). A campground is located in this area. The campground is characterized by a gravel area in the southern portion of the quadrant and a grassy area for campfires in the central portion of the quadrant. A transmission line also extends across this portion of the quadrant. Two recreational vehicles were parked on the gravel area of campground and a permanent building utilized as a washhouse is located in this vicinity, just north of the bridge. The campground can be accessed by a gravel driveway that extends west from SR 1305. Skalley Creek joins the Elk River just north of the bridge on the western side of the SR 1305. Also, a small unnamed creek parallels the western side of SR 1305. This creek separates the campground area from a small linear segment of land on the western side of SR 1305. A dirt path runs north through this segment of the quadrant. The eastern side of SR 1305 is characterized by wooded steep slope (Figure 8). An old gravel road extends east from SR 1305, across from the campground.

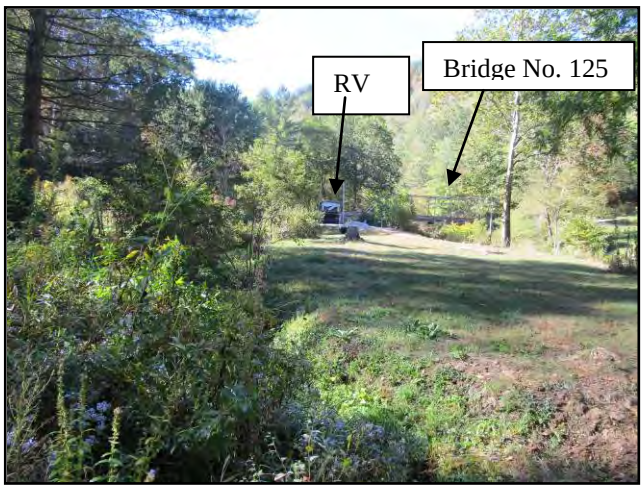


Figure 7. View of eastern portion of the northeast quadrant, looking southwest.

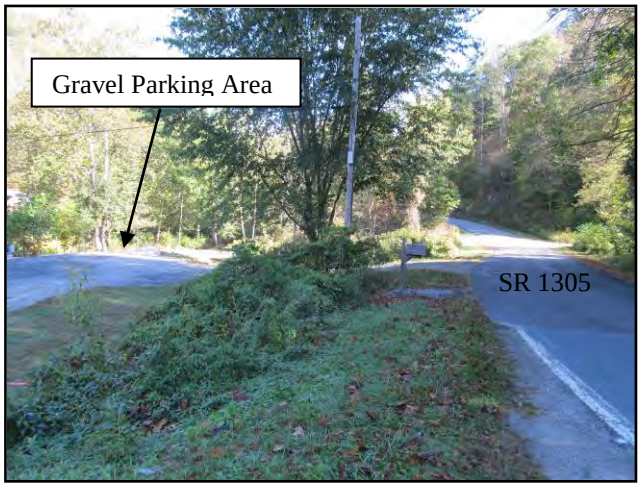


Figure 8. View of western portion of the northeast quadrant, looking north/northeast.

A total of 15 shovel test locations was examined in the northeast quadrant along four transects and in one judgemental location. Transects 1 and 2 and one judgemental shovel test were located in the grassy campground area on the western side of SR 1306, between the Elk River and a small unnamed creek. Shovel Test 1 along Transect 2 was not excavated due to its proximity to a gravel parking area. Transect 3 followed a dirt path on the western side of SR 1305, between the road and the unnamed creek. Transect 3 Shovel Test 1 was not excavated due to its proximity to a gravel driveway. Transect 4 was located on the eastern side of SR 1306 on wooded side slope. None of the shovel tests along Transect 4 were excavated due to steep slope, and in the in the case of Shovel Test 3, proximity to an old gravel road. Ground surface visibility around the old road was excellent (greater than 50 percent) and the surface was examined in this area. No archaeological remains were identified in the northeast quadrant.

There was much variability between the exposed shovel test profiles in the northeast quadrant. The majority of the shovel tests exposed up to 35 centimeters (13.8 in) of grayish brown silty or sandy loam overlying dark grayish brown loamy sand or strong brown silty sand (Table 2). One shovel test (Transect 1 Shovel Test 1) contained mottled clay below 5 centimeters (2.0 in), suggesting the area has been disturbed as a result of the gravel parking area and campground. Also, Transect 3 Shovel Test 4 contained a third soil strata consisting of strong brown coarse sand. Aside from the disturbed profile from Transect 1 Shovel Test 1, soil profiles generally agree with the expected soil profile for the area.

Table 2. Shovel Test Locations Examined in the Northeast Quadrant.

Transect Shovel Test	Dig/No Dig/ Surface	Comments
TR1 ST1	Dig	0-5 cm (0-2.0 in) grayish brown (10YR5/2) silty loam Below 5 cm (2.0 in) yellowish brown (10YR5/6) clay mottled with strong brown (7.5YR5/6) clay Located in grassy area next to campground
TR2 ST1	No Dig	Not excavated due to gravel lot
TR2 ST2	Dig	0-40 cm (0-15.8 in) grayish brown (10YR5/2) silty loam Located in grassy campground area
TR2 ST3	Dig	0-40 cm (0-15.8 in) grayish brown (10YR5/2) silty loam with abundant large cobbles Located in grassy campground area
TR3 ST1	No Dig	Not excavated due to proximity to gravel drive
TR3 ST2	Dig	0-35 cm (13.8 in) grayish brown (10YR5/2) sandy loam 35-60 cm (13.8-23.6 in) dark gray (10YR4/1) loamy hydric sand Located in wooded area adjacent to dirt path
TR3 ST3	Dig	0-10 cm (0-3.9 in) grayish brown (10YR5/2) silty loam 10-60 cm (3.9-23.6 in) strong brown (7.5YR5/6) silty sandy Located in wooded area adjacent to dirt path
TR3 ST4	Dig	0-5 cm (0-2.0 in) yellowish brown (10YR5/6) silty loam 5-55 cm (2.0-21.7 in) strong brown (7.5YR5/6) silty sand 55-60 cm (21.7-23.6 in) strong brown (7.5YR5/6) coarse sand with some rocks Located in wooded area adjacent to dirt path
TR4 ST1	No Dig	Not excavated due to steep slope
TR4 ST2	No Dig	Not excavated due to steep slope
TR4 ST3	Surface	Not excavated due proximity to old gravel road
TR4 ST4	No Dig	Not excavated due to steep slope
TR4 ST5	No Dig	Not excavated due to steep slope
TR4 ST6	No Dig	Not excavated due to steep slope
Judgemental 1	Dig	0-40 cm (0-15.8 in) grayish brown (10YR5/2) silty loam with abundant large cobbles Located in grassy campground area

Northwest Quadrant. The northwest quadrant is characterized primarily by wooded ridge side slope in the northern and western portions of the quadrant (Figure 9) and by a strip of grassy floodplain adjacent to the river in the eastern portion of the quadrant (Figure 10). Pleasant Valley Church is situated on the eastern side of SR 1306 on a terrace overlooking Elk River (Figure 11). As mentioned above, this church is first mapped on the 1934 topographic map (USGS 1934; see Figure 3). A gravel parking lot is located east and north of the church and a gravel driveway leads from the church and intersects SR 1306 just west of Bridge No. 125. A second gravel driveway diverges from SR 1306 in the northern portion of the quadrant. This driveway leads to a currently occupied residence. A small outbuilding is located on the eastern side of the gravel drive (Figure 12).

A total of 10 shovel test locations was examined along two transects in the northwest quadrant. Shovel test locations were not placed in areas of extreme slope in the northern and western portions of the quadrant. The residents of the house located in the quadrant were engaged in conversation with the police. Therefore, the area in the immediate vicinity of the residence was not investigated. Transect 1 was located on the eastern side of SR 1306 and ran parallel to Elk River, through the grassy floodplain. Shovel Tests 5 and 6 on Transect 1 were in a low area and were not excavated. A judgemental shovel test (Judgemental 1) was also placed in the grassy area northeast of the church, but gravel prevented its excavation. Transect 2 was run along the western side of SR 1306, parallel to the

Figure 9. View of western portion of the northwest quadrant, looking south.

Figure 10. View of grassy floodplain in the northwest quadrant, looking northeast.

Figure 11. View of church, gravel parking area, and driveway in the northwest quadrant, looking north.

Figure 12. View of residence and outbuilding in the northwest quadrant, looking northeast.

road. Shovel Tests 2 along this transect was not excavated due to slope. A piece of iron hardware, possibly a lock, and barbed wire were found on the ground surface in the vicinity of Transect 2 Shovel Test 2. These objects are modern and were not collected. A judgemental shovel test (Judgemental 2) was also placed in a relatively flat area on the eastern side of SR 1306 in the northern portion of the quadrant.

A representative shovel test for the floodplain portion of the northwest quadrant exposed 20 centimeters (7.9 in) of dark grayish brown hydric loamy sand overlying very dark grayish brown hydric sand (Table 3). This soil profile is relatively similar to the soil profile expected for the area. The shovel tests excavated in the steeper western and northern portions of the quadrant exposed 8 centimeters (3.2 in) of yellowish brown sandy loam overlying strong brown loamy clay. This soil profile differs from the expected soil profile for these areas in strata depth and soil texture, suggesting the area has been impacted heavily by erosion. No archaeological remains were located in the northwest quadrant.

Table 3. Shovel Test Locations Examined in the Northwest Quadrant.

Shovel Test	Dig/No Dig	Comments
TR1 ST1	Dig	0-8 cm (0-3.2 in) light olive brown (2.5Y5/3) silty clay loam Below 8 cm (3.2 in) dense rock Located in grassy area
TR1 ST2	Dig	0-20 cm (0-7.9 in) dark grayish brown (10YR4/1) hydric loamy sand Below 20 cm (7.9 in) very dark grayish brown (10YR3/1) hydric sand Located in grassy area
TR1 ST3	Dig	0-20 cm (0-7.9 in) dark grayish brown (10YR4/1) hydric loamy sand Below 20 cm (7.9 in) very dark grayish brown (10YR3/1) hydric sand Located in grassy area
TR1 ST4	Dig	0-20 cm (0-7.9 in) dark grayish brown (10YR4/1) hydric loamy sand Below 20 cm (7.9 in) very dark grayish brown (10YR3/1) hydric sand Located in grassy area
TR1 ST5	No Dig	Not excavated due to low area and hydric soils in vicinity
TR1 ST6	No Dig	Not excavated due to low area and hydric soils in vicinity
TR2 ST1	Dig	0-8 cm (0-3.2 in) yellowish brown (10YR3/4) sandy loam Below 8 cm (3.2 in) strong brown (7.5YR4.6) loamy clay
TR2 ST2	No Dig	Not excavated due to slope Iron hardware and barbed wire located on surface
Judgemental 1	No Dig	Not excavated due to gravel
Judgemental 2	Dig	0-8 cm (0-3.2 in) yellowish brown (10YR3/4) sandy loam Below 8 cm (3.2 in) strong brown (7.5YR4.6) loamy clay Located in a wooded area

Southwest Quadrant. The southwest quadrant consists of steep ridge side slope characterized by hardwoods (Figure 13). A gravel drive intersects SR 1306 just west of the bridge and meanders up the slope (Figure 14).

One shovel test (Judgemental 1) was dug in a relatively flat area on the western side of SR 1306. The majority of the quadrant was too steep for the excavation of shovel tests. Judgemental 1 exposed 35 centimeters (13.8 in) of dark brown (10YR4/4) gravelly sandy clay loam overlying dense gravel. This soil profile is similar to the expected soil profile for the area. No archaeological remains were located during the investigation of the southwest quadrant.

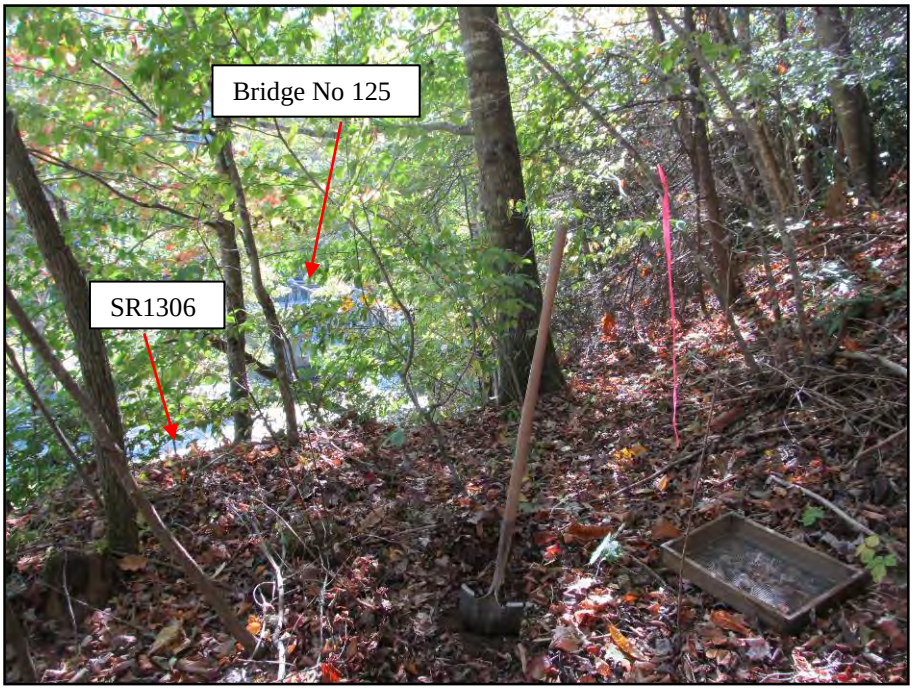


Figure 13. View of slope in southwest quadrant, looking southeast.

Figure 14. View of gravel drive in the southwest quadrant, looking southwest.

Figure 15. View of floodplain in southeast quadrant, looking south/southwest.

Southeast Quadrant. The southeast quadrant encompasses a segment of floodplain vegetated with tall brush and scattered hardwoods between Elk River and SR 1305 (Figure 15). Ridge toe slope encroaches into the southern portion of this segment of the quadrant. Also, an old road bed runs through the southwestern portion of the quadrant (see Figures 5 and 6). Ridge toe slope, characterized by mixed pines and hardwoods, is the dominant landform on the eastern side of SR 1305. A small grassy level area is located at the base of the ridge toe in the southern most portion of the quadrant on the eastern side of SR 1305.

Figure 16. View of slope in eastern portion of the southeast quadrant, looking south.

Figure 17. View of level area in eastern portion of the southeast quadrant, looking north.

Fourteen shovel test locations were examined along three transects in the southeast quadrant. Transects 1 and 2 were started 15 meters (49.2 ft) off SR 1306 and run roughly parallel to SR 1305 on its western side. Judgmental Shovel Tests 1 and 2 were placed along the river bank and Judgemental 3 was placed in a flat area on the western side of SR 1305 in the southern portion of the quadrant. Shovel Tests were not placed in the southernmost portion of the quadrant on the western side of SR 1305 due to steep slope. One transect (Transect 3) was run parallel to SR 1305 on the eastern side of the road. Shovel Tests 1 through 3 along Transect 3 were not excavated due to steep slope.

The majority of shovel test profiles exposed in the floodplain portion of the quadrant consisted of 15 to 20 centimeters (5.9 to 7.9 in) of light olive brown or dark grayish brown silty loam with gravel overlying dense gravel or olive brown compact silty loam. However, shovel test profiles were variable in this portion of the quadrant. Two shovel tests (Transect 2 Shovel Tests 1 and 2) in this area also exposed 65 centimeters (25.6 in) of grayish brown silty loam. The two shovel tests excavated in the eastern portion of the quadrant also varied. Transect 3 Shovel Test 4 exposed 5 centimeters (2.0 in) of grayish brown silty loam overlying grayish brown clay. Transect 3 Shovel Test 5 was more similar to shovel test profiles in the western portion of the quadrant and exposed 10 cm (3.9 in) of light olive brown gravelly

silty loam overlying dense gravel. Despite some diversity, the shovel tests profiles generally agreed with those expected for the area.

Table 3. Shovel Test Locations Examined in the Southeast Quadrant.

Shovel Test	Dig/No Dig	Comments
TR1 ST1	Dig	0-15 cm (0-5.9 in) dark grayish brown (10YR4/2) silty loam Below 15 cm (5.9 in) olive brown (2.5Y 4/4) compact silty clay Located in area of high brush
TR1 ST2	Dig	0-20 cm (0-7.9 in) light olive brown (2.5Y5/3) silty loam with gravel Below 20 cm (7.9 in) olive brown (2.5Y4/4) compact silty loam Located in area of high brush
TR1 ST3	Dig	0-15 cm (0-5.9 in) light olive brown (2.5Y5/3) silty loam with gravel Below 15 cm (5.9 in) dense gravel Located in area of high brush
TR1 ST4	Dig	0-15 cm (0-5.9 in) light olive brown (2.5Y5/3) silty loam with gravel Below 15 cm (5.9 in) dense gravel Located in area of high brush
TR2 ST1	Dig	0-65 cm (0-25.6 in) grayish brown (10YR5/2) silty loam Located in area of high brush
TR2 ST2	Dig	0-65 cm (0-25.6 in) grayish brown (10YR5/2) silty loam Located in area of high brush
TR3 ST1	No Dig	Not excavated due to steep slope
TR3 ST2	No Dig	Not excavated due to steep slope
TR3 ST3	No Dig	Not excavated due to steep slope
TR3 ST4	Dig	0-5 cm (0-2.0 in) grayish brown (10YR5/2) silty loam 5-20 cm (2.0-7.9 in) grayish brown (10YR5/2) silty clay Located in area of high grass
TR3 ST5	Dig	0-10 cm (0-3.9 in) light olive brown (2.5Y5/3) silty loam with gravel Below 10 cm (3.9) dense gravel Located in area of high grass
Judgemental 1	Dig	0-20 cm (0-7.9 in) light olive brown (2.5Y5/3) silty loam with gravel Below 20 cm (7.9 in) olive brown (2.5Y4/4) compact silty loam Located in area of high brush
Judgemental 2	Dig	0-20 cm (0-7.9 in) light olive brown (2.5Y5/3) silty loam with gravel Below 20 cm (7.9 in) olive brown (2.5Y4/4) compact silty loam Located in area of high brush
Judgemental 3	Dig	0-10 cm (0-3.9 in) strong brown (7.5YR4/6) clay Located in area of high brush

Conclusion. No archaeological remains were identified during the Bridge No. 125 survey. Based on the results of this investigation, the replacement of Bridge No. 125 will not impact any significant archaeological resources.

References Cited

Jones, David M., editor

2010 The *Light Fantastic: Using Airborne Lidar in Archaeological Survey*., English Heritage Publishing, Swindon, UK.

North Carolina State Highway and Public Works Commission (NCSHPWC)

1938 Avery County, NC map. North Carolina State Highway and Public Works Commission. United States Public Roads Administration, Raleigh, NC.

North Carolina Department of Transportation (NCDOT)

2016 Lidar image. Electronic Document. http://connect.ncdot.gov/resource/gis/Pages/Cont-Elev_v2.aspx, accessed October 2016.

North Carolina Department of Transportation (NCDOT) Historic Bridge Detail

2016 Historic Bridges of North Carolina, Avery County Bridge 125. Electronic Document. http://www.ncdot.gov/projects/ncbridges/historic/search/detail.htm?c=5&s=125, accessed October 2016.

Schuckman, Karen and Mike Renslow

2014 Slope, Aspect and Hillshade. Electronic Document. www. education.psu.edu/lidar, accessed October 2016.

Shumate, Scott M.

1994 An Archaeological Survey of the TVA Transmission Line to Beech Mountain, Avery County, North Carolina, 3D Environmental, Boone, NC

United States Department of Agriculture (USDA)

2016 Web Soil Survey. Electronic Document. www.websoilsurvey.nrcs.usda.gov, accessed October 2016.

United States Geological Survey (USGS)

1893 *Cranberry, NC* USGS 1:125,000 topographic quadrangle.
1895 *Cranberry, NC* USGS 1:125,000 topographic quadrangle.
1899 *Cranberry, NC* USGS 1:125,000 topographic quadrangle..
1902 *Cranberry, NC* USGS 1:125,000 topographic quadrangle.
1934 *Elk Park, NC* USGS 1:24,000 topographic quadrangle.
1944 *Linville, NC* USGS 1:6,250 topographic quadrangle.
1953 *Winston-Salem, NC* USGS 1:250,000 topographic quadrangle.
1955 *Winston-Salem, NC* USGS 1:250,000 topographic quadrangle.
1960 *Elk Park, NC* USGS 1:24,000 topographic quadrangle (photo revised 1978).
1994 *Elk Park, NC* USGS 1:24,000 topographic quadrangle.

NEPA/SEPA Document

Type I or II Categorical Exclusion Action Classification Form

TIP No.: B-5835

WBS No.: 45788.1.1

FA No.: BRZ-1306(030)

Hurricane Helene Update:
Due to the effects of Hurricane Helene on September 27, 2024, the project site conditions have changed. The truss span of existing Bridge No. 125 was washed downstream and is no longer considered within the project scope. The timber deck/steel I-beam span remains in place, as do the existing abutments and pier. A temporary bridge for residential access will be placed downstream of the proposed bridge and traffic will be maintained on this temporary bridge during construction.

A. Project Description:
The replacement of Bridge No. 125 over the Elk River on SR 1306 (Hicks Hollow Road) in Avery County. See Figure 1 – Vicinity Map.

Bridge No. 125 is a timber deck on I-beams and truss structure 133 feet long. The replacement structure will be staged constructed to the north. The replacement structure will be a 3 span cored slab bridge approximately 150-feet long providing a clear deck width of 21-feet 10-inches. The bridge will include two 9-foot travel lanes and 1-foot 11-inch offsets. The bridge length is based on preliminary design information and is set by hydraulic requirements. The new structure will be raised approximately 1-foot.

Project construction will extend approximately 114 feet from the western end and 73 feet from the eastern end of the bridge. The project will be approximately 350 feet long. The approaches will include two 9-foot travel lanes with 2-foot shoulders (5-feet with guardrail).

SR 1306 has a local functional classification and was designed using Sub-Regional Tier Guidelines with a 20 mile per hour design speed. Traffic will be maintained on site during construction.

B. Description of Need and Purpose:
The purpose of this project is to replace the one-lane Bridge No. 125. NCDOT records indicate that Bridge No. 125 was built in 1932. The bridge is considered functionally obsolete due to a structural evaluation of 3 out of 9 and a deck geometry of 3 out of 9 according to FHWA standards. The posted weight limit on the bridge is down to 20 tons for SV and 20 tons for TTST.

C. Categorical Exclusion Action Classification:

Type: I(A) - Ground Disturbing Action

D. Proposed Improvements:

23 CFR 771.117 (c)

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:

Pedestrian and Bicycle Accommodations:
There is currently no bicycle or pedestrian accommodation within or near the project study area. The Avery County Comprehensive Transportation Plan recommends on-road bicycle accommodations needing improvement along Elk River Road, including east of the project study area. B-5835 is located north of Elk Park in rural Avery County. The surrounding land use is rural and forested undeveloped. IMD concurs that bicycle and pedestrian do not need to be evaluated with this project.

Tribal Coordination:
There are five recognized tribes with interests in Avery County (Catawba Indian Nation, Cherokee Nation, Eastern Band of Cherokee Indians, United Keetoowah Band of Cherokee Indians, and Muscogee (Creek) Nation). The Tribal Nations were notified of the project in April 2019. The Cherokee Nation requested to be notified if cultural materials are encountered during ground disturbance, construction, or demolition activities.

Archaeological Resources:
An archaeological survey was conducted in November 2016. No cultural artifacts or archaeological remains were identified during excavation of the shovel tests nor were any artifacts observed on the ground surfaces. A finding of No National Register Eligible or Listed Archaeological Sites Present or Affected was rendered for this project on November 29, 2016.

F. Project Impact Criteria Checklists:

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

Proposed improvement(s) that fit Type I Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix A) including 2, 3, 6, 7, 9, 12, 18, 21, 22 (ground disturbing), 23, 24, 25, 26, 27, 28, &/or 30; &/or Type II Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix B) answer the project impact threshold questions (below) and questions 8 – 31.

- *If any question 1-7 is checked "Yes" then NCDOT certification for FHWA approval is required.*
- *If any question 8-31 is checked "Yes" then additional information will be required for those questions in Section G.*

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)?	☐	☑
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)?	☐	☑
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?	☐	☑
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	☐	☑
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	☐	☑
6	Does the project require an Individual Section 4(f) approval?	☐	☑

7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?	☐	☑
If any question 8-31 is checked "Yes" then additional information will be required for those questions in Section G.			
<u>Other Considerations</u>		Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or is the project covered by a Programmatic Agreement under Section 7?	☑	☐
9	Is the project located in anadromous fish spawning waters?	☐	☑
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)?	☐	☑
11	Does the project impact Waters of the United States in any of the designated mountain trout streams?	☑	☐
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	☐	☑
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	☐	☑
<u>Other Considerations for Type I and II Ground Disturbing Actions (continued)</u>		Yes	No
14	Does the project include a Section 106 of the National Historic Preservation Act (NHPA) effects determination other than a No Effect, including archaeological remains?	☑	☐
15	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.?	☐	☑
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?	☑	☐
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)?	☐	☑
18	Does the project require a U.S. Coast Guard (USCG) permit?	☐	☑
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	☐	☑
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	☐	☑
21	Does the project impact federal lands (e.g., U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	☐	☑
22	Does the project involve any changes in access control or the modification or construction of an interchange on an interstate?	☐	☑
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	☐	☑
24	Will maintenance of traffic cause substantial disruption?	☐	☑
25	Is the project inconsistent with the STIP, and where applicable, the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP)?	☐	☑

26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	☐	☑
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	☐	☑
28	Does the project include a *de minimis* or programmatic Section 4(f)?	☐	☑
29	Is the project considered a Type I under the NCDOT Noise Policy?	☐	☑
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	☐	☑
31	Are there other issues that arose during the project development process that affected the project decision?	☐	☑

G. Additional Documentation as Required from Section F:

Question 8: Protected Species

The USFWS IPaC data, reviewed on August 15, 2024, identified seven species that could occur in or near the project area.

Gray bat: A search of the NCNHP database, updated January 2024, indicates no known occurrences of this species within 1.0 mile of the study area. Foraging habitat is present in the study area. A biological conclusion of May Affect Not Likely to Adversely Affect was rendered for the gray bat.

Indiana bat: A search of the NCNHP database, updated January 2024, indicates no known occurrence of this species within 1.0 mile of the study area. Foraging habitat is present in the study area. A biological conclusion of May Affect Not Likely to Adversely Affect was rendered for the Indiana bat.

Virginia big-eared bat: A search of the NCNHP database, updated January 2024, indicates no known occurrence of this species within 1.0 mile of the study area. Foraging habitat is present in the study area. A biological conclusion of May Affect Not Likely to Adversely Affect was rendered for the Virginia big-eared bat.

Northern Long-eared bat: A review of NCNHP records, updated January 2024, indicates the nearest NLEB hibernacula record is 2.6 miles south of the project, and no known NLEB roost trees occur within 150-feet of the project area. Habitat is present in the study area. A biological conclusion of May Affect Not Likely to Adversely Affect was rendered for the Northen Long-eared bat.

Tricolored bat: USFWS has added the tricolored bat (*Perimyotis subflavus*) as "Proposed Endangered" and may be listed for the project study area. While proposed species are not afforded protection under the ESA, NCDOT will have the opportunity to survey for this prior to construction. NCNHP records, updated January 2024, indicate no known occurrences of this species within 1.0 mile of the study area. Foraging habitat is present in the study area. A biological conclusion of May Affect Not Likely to Adversely Affect was rendered for the tricolored bat.

Rock Gnome lichen: A review of the NCNHP records, updated January 2024, indicates no known occurrences of this species within 1.0 mile of the study area. Habitat is not present in the study area. A biological conclusion of No Effect was rendered for the tricolored bat.

Species listed as Threatened due Similarity of Appearance (bog turtle) and Candidate species (monarch butterfly) are not afforded protection under Section 7 of the ESA and do not require Section 7 consultation with the USFWS. Biological conclusions for the bog turtle and monarch butterfly are

not required. A search of the NCNHP database, updated January 2024, indicates no known occurrences of these species within 1.0 mile of the study area.

Bald and Golden Eagle Protection Act: A desktop-GIS assessment of the project study area, as well as the area within a 1.13-mile radius (1.0 mile plus 660 feet) of the project limits, was performed on October 29, 2018, using 2017 color aerials. The Elk River is large enough to support habitat for bald eagles. A review of the NCNHP database, updated January 2024, revealed no known occurrences of this species within 1.0 mile of the project study area. Due to the lack of known occurrences, and minimal impact anticipated for the project, it has been determined that this project will not affect this species.

Question 11: Designated Mountain Trout Streams
The Elk River within the study area is listed as trout water by NCDWR. NCWRC recommends a moratorium prohibiting in-stream work and land disturbance within the 25-foot trout buffer from October 15 to April 15 to protect the egg and fry stages of trout. NCWRC recommends that sediment and erosion control measures adhere to the Design Standards in Sensitive Watersheds.

Question 14: Historic Architecture – Section 106
Avery County Bridge 125 (AV0125) was determined eligible in the 2005 Historic Bridge Survey. A historic architectural field survey was conducted on March 31, 2016, to document the bridge and investigate Pleasant Valley Church which is located next to the bridge. Constructed in 1957, the church does not possess any of the criteria which would make it eligible for National Register eligibility. An Assessment of Effects was conducted on November 22, 2016, and Avery County Bridge 125 received an Adverse Effect determination. Avery County Bridge 125 will be dismantled and removed from its existing location.

FHWA, NCDOT, and NCSHPO entered into a MOA on November 1, 2022. A Programmatic 4(f) was approved by FHWA on September 26, 2024. There are two stipulations to mitigate the effects of Avery Bridge 125: 1) Photographic Recordation; and 2) Placement of Bridge No. 125 in the NCDOT Bridge Relocation and Reuse Program.

Question 16: FEMA Floodplain
Avery 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, designated as Zone AE**, **for which the 100-year base flood elevations and corresponding regulatory floodway have been established.** The Elk River is a FEMA mapped stream studied by the North Carolina Floodplain Mapping Program by Limited Details methods. The bridge is located on DFIRM Panel 1829.

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.

H. Categorical Exclusion Approval:

State Project No: **B-5835**

Prepared By:

10/23/2024
Date

DocuSigned by:
Stacy Y. Baldwin, PE
Stacy Y. Baldwin, PE, CPM
TGS Engineers

Prepared For: Olivia L. Pilkington, PE, NCDOT - Project Management Unit, NCDOT

Reviewed By:

10/23/2024
Date

Signed by:
Marissa R. Cox
Marissa R. Cox, Western Region Team Lead
Environmental Policy Unit, NCDOT

☑ **Approved**

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

☐ **Certified**

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

10/24/2024
Date
Great.

Signed by:
John Jamison, PWS, CPM
John Jamison, PWS, CPM
Unit Manager, Environmental Policy Unit, NCDOT

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

Date

N/A
for Yolonda K. Jordan, Division Administrator
Federal Highway Administration

PROJECT COMMITMENTS

Replace Bridge 125 over the Elk River on SR 1306 (Hicks Hollow Road)
TIP No.: B-5835
Avery County
Federal Aid Number: BRZ-1306(030)
WBS No.: 45788.1.1

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

Construction Office - Construction in FEMA Floodplain
This project involves construction activities on or adjacent to FEMA-regulated stream(s). 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. The Hydraulics Unit will then verify either: (1) the drainage structure(s) and roadway embankment located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically; or (2) any changes made to the plans were reviewed and approved to meet FEMA SFHA compliance; or (3) appropriate mitigation measures will be achieved prior to project close-out.

Roadside Environmental Unit - Design Standards in Sensitive Watersheds
The permittee shall use Design Standards in Sensitive Watersheds in areas draining to Trout waters.

EAU – Cultural Resources - Historic Architecture
Per the November 2022 MOU, NCDOT will record the existing conditions of Avery County Bridge 125 in accordance with the Historic Structures and Landscape Recordation Plan prior to the initiation of construction.

EAU – Cultural Resources - Historic Architecture
Bridge No. 125 has been identified as a candidate for the NCDOT Bridge Relocation and Reuse Program. The bridge will be advertised on the NCDOT Bridge Reuse Program website for relocation and reuse at a new location.

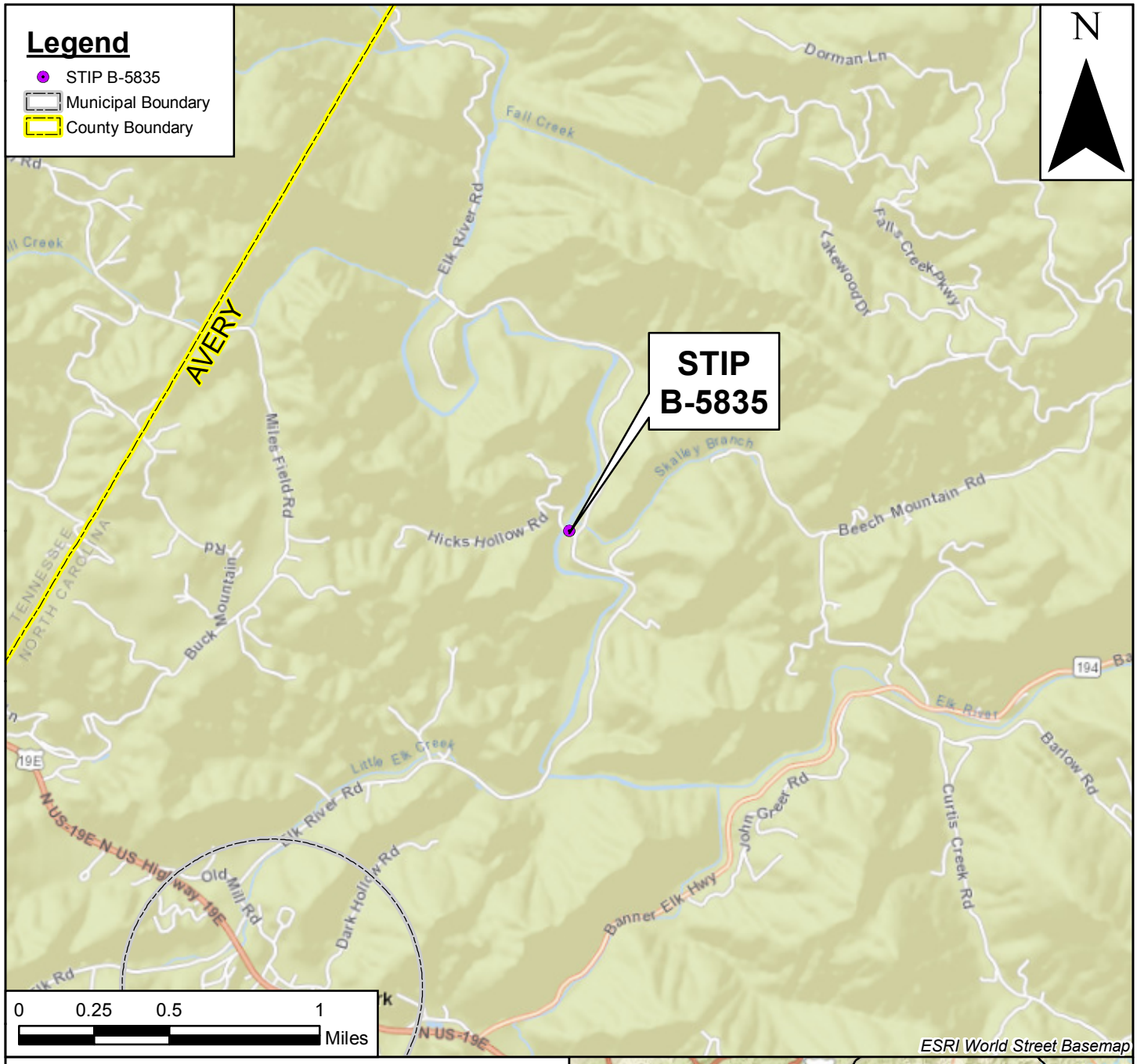
Division Environmental Staff - Trout Moratorium
A moratorium prohibiting in-stream work and land disturbance within the 25-foot trout buffer is recommended from October 15 to April 15 to protect the egg and fry stages of trout.

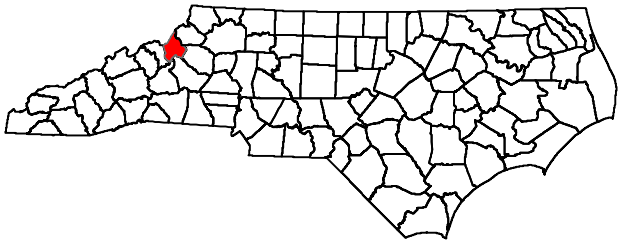
COMMITMENTS FROM PERMITTING

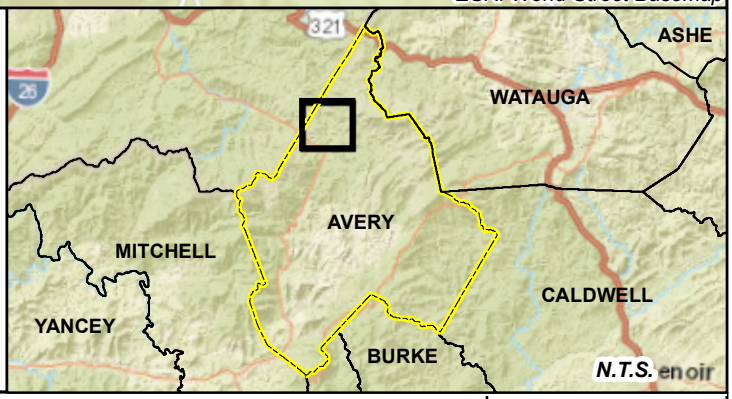
No commitments developed during project permitting.

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

Replace Bridge 125 over the Elk River on SR 1306 (Hicks Hollow Road)
WBS No.: 45788.1.1
Federal Aid No.: BRZ-1306(030)





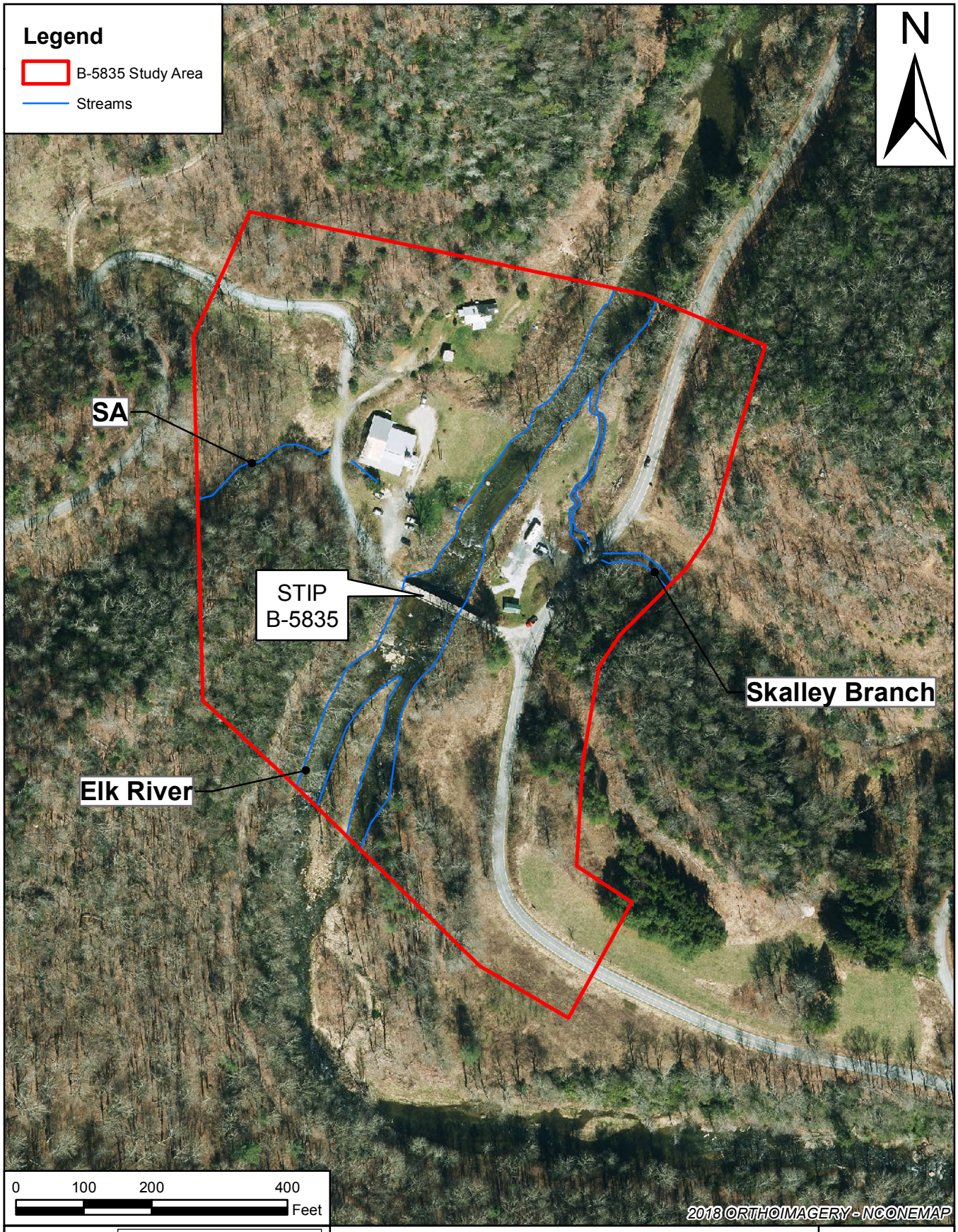


County:	AVERY
Div: 11	TIP# B-5835
WBS:	45788.1.1
Prepared By:	TGS
Date:	08.19.2024

VICINITY MAP
TIP PROJECT B-5835

REPLACE BRIDGE #125
SR 1306 (HICKS HOLLOW RD.) OVER THE ELK RIVER
AVERY COUNTY

FIGURE
1



County:	AVERY
Div: 11	TIP# B-5835
WBS:	45778.1.1
Prepared By:	TGS
Date:	08.19.2024 REV

ENVIRONMENTAL FEATURES MAP

TIP No. B-5835
REPLACE BRIDGE #125
SR 1306 (HICKS HOLLOW ROAD) OVER THE ELK RIVER
AVERY COUNTY

FIGURE

2