

## Categorical Exclusion Action Classification Form

STIP Project No.	<u>BR-0112</u>
WBS Element	<u>67112.1.1</u>
Federal Project No.	<u>N/A</u>

### A. Project Description:

This project replaces Edgecombe County Bridge No. 35 on SR 1616 (Sharp Point Road) over Otter Creek. The bridge will be replaced on the existing alignment while detouring traffic offsite (see Figure 1).

The purpose of this project is to replace Edgecombe County Bridge No. 35 on SR 1616 over Otter Creek. Bridge No. 35 is 122 feet long. The replacement structure will be a bridge approximately 145 feet long providing a minimum 33-foot 10 inch clear deck width. The bridge will include two 11-foot lanes and 6-foot 11 inch offsets. The bridge length is based on preliminary design information and is set by hydraulic requirements.

The approach roadway will extend approximately 193 feet from the south end of the new bridge and 158 feet from the north end of the new bridge. The approaches will be widened to include a 20-foot pavement width providing two 10-foot lanes. Three-foot shoulders will be provided on each side (7-foot shoulders where guardrail is included). The roadway will be designed as a Local Route with a 55 mile per hour design speed.

Traffic will be detoured off-site during construction (see Figure 1).

### B. Description of Need and Purpose:

NCDOT Bridge Management Unit records indicate Bridge No. 35 has a sufficiency rating of 49.08 out of a possible 100 for a new structure.

Bridge No. 35 is sixty-two years old. Components of both the concrete superstructure and substructure have experienced an increasing degree of deterioration that can no longer be addressed by maintenance activities. The posted weight limit on the bridge is down to 18 tons for single vehicles and 22 tons for truck-tractor semi-trailers. The bridge is approaching the end of its useful life. Replacement of the bridge will result in safer traffic operations.

The replacement of Bridge No. 35 is part of the *Growing Rural Economy and Agriculture through Transportation and Technology Enhancement or Replacement in North Carolina (GREATTER-NC)* Project under the United States Department of Transportation's 2018 Better Utilizing Investments to Leverage Development (BUILD) Grant program. The purpose of the grant and this bridge replacement project is to provide transportation infrastructure to support economic development and improve physical and digital connectivity in rural communities in North Carolina. The posted

weight restriction on Bridge No. 35 prohibits large or heavy vehicles, typically used in transporting agricultural and manufactured products, from using the bridge. Vehicles above the posted weight must detour 3.4 miles to avoid the bridge. Replacing the existing bridge will eliminate posted weight limits by providing a safe crossing for all legal loads and will make accommodations for broadband installation in order to support economic competitiveness.

C. Categorical Exclusion Action Classification:

Type IA

D. Proposed Improvements –

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

E. Special Project Information:

**Alternatives Discussion:**

No Build – The no build alternative would result in eventually closing the road which is unacceptable given the volume of traffic served by SR 1616.

Rehabilitation – The bridge was constructed in 1957 and the concrete and steel materials within the bridge are reaching the end of their useful life. Rehabilitation would require replacing the components which would constitute effectively replacing the bridge.

Onsite Detour – An onsite detour was not evaluated due to the presence of an acceptable offsite detour.

Staged Construction – Staged construction was not considered because of the availability of an acceptable offsite detour.

New Alignment – Given that the alignment for SR 1616 is acceptable, a new alignment was not considered as an alternative.

Offsite Detour (Preferred) - Traffic will be detoured offsite during the construction period. The offsite detour includes US 258, SR 1618 and SR 1617. Edgecombe County Schools Transportation responded that the offsite detour route would have a low impact on their operations. Edgecombe County Emergency Services responded that the offsite detour route would have a moderate impact on their operations. The condition of all roads, bridges, and intersections are acceptable without improvement and Division 4 concurs with the use of the detour.

**Design Issues:**

Traffic Current – 340 vpd, TTST - 3%, Dual – 3%

Rural Local Route – Sub Regional Tier Guidelines

Design Speed – 55 mph

A design exception will be required for the horizontal stopping sight distance for the horizontal curve at Bridge No. 35.

**Estimated Costs:**

The estimated costs are as follows:

R/W: \$ 1,200

Const: \$1,300,000

Total: \$ 1,301,200

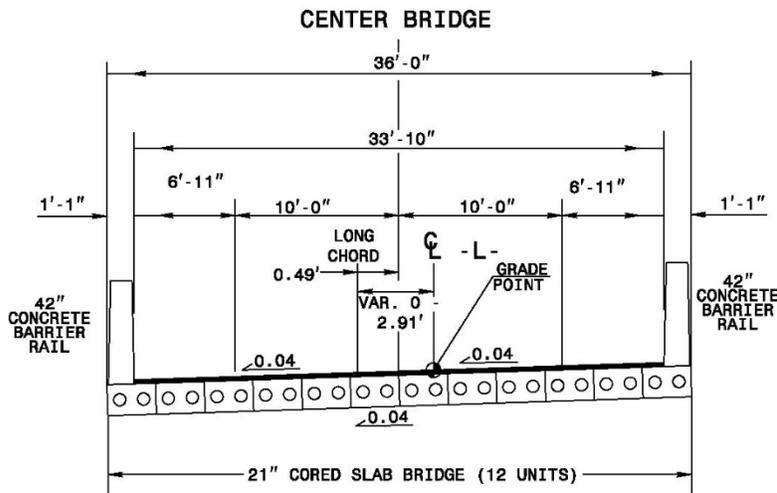
**Pedestrian and Bicycle Accommodations:**

This portion of SR 1616 is not a part of a designated bicycle route nor is it listed in the Transportation Improvement Program (TIP) as a bicycle project. Neither permanent nor temporary bicycle or pedestrian accommodations are required for this project.

**Anticipated Permit or Consultation Requirements:**

A Nationwide Permit will likely be required from the U.S. Army Corps of Engineers (USACE) for impacts to “Waters of the United States” resulting from this project. In addition, an NCDWR Section 401 Water Quality General Certification (GC) may be required prior to the issuance of a Section 404 Permit. The USACE holds the final discretion as to what permit will be required to authorize project construction.

**Typical Section for Bridge:**



**Public Involvement:**

A newsletter was sent to all property owners affected directly by this project. Property owners were invited to comment. No comments have been received to date.

F. Project Impact Criteria Checklists:

<u>Type I &amp; II - Ground Disturbing Actions</u>		Yes	No
<b><u>FHWA APPROVAL ACTIVITIES THRESHOLD CRITERIA</u></b> <b><u>(FHWA Signature Required If "Yes" Selected)</u></b>			
<p>If the proposed improvement (identified above in Sections C &amp; D) is a:</p> <ul style="list-style-type: none"> <li>• Type I Action for #s 2, 3, 6, 7, 8, 9, 12, 18, 21, 22, 23, 24, 25, 26, 27, 28, &amp;/or 30; &amp;/or</li> <li>• Type II Action</li> </ul> <p>then answer the threshold criteria questions (below) and questions 8 - 31 for ground disturbing actions.</p> <p>In addition, if any of questions 1-7 are marked "yes" then the CE will require FHWA approval.</p>			
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Does the project require an Individual Section 4(f) approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If any of questions 8 through 31 are marked "yes" then additional information will be required for those questions in Section G.			
<b><u>Other Considerations</u></b>		Yes	No
8	Does the project result in a finding of "may affect not likely to adversely affect" or less for listed species, or designated critical habitat under Section 7 of the Endangered Species Act (ESA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Does the project impact anadromous fish?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Does the project impact waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

14	Does the project include a Section 106 of the NHPA effects determination other than a no effect, including archaeological remains? Are there project commitments identified?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Other Considerations (continued)</u>		Yes	No
15	Does the project involve hazardous materials and landfills?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project involve any changes in access control?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Is the project inconsistent with the STIP or the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP) (where applicable)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project considered a Type I under the NCDOT's Noise Policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. Additional Documentation as Required from Section F

**Question 1 – Endangered Species:** The US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and

NCDOT for the northern long-eared bat (NLEB) (*Myotis septentrionalis*) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. The programmatic determination for NLEB for the NCDOT program is **May Affect, Likely to Adversely Affect**. The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Edgecombe County, where BR-0112 is located. This level of incidental take is authorized from the effective date of a final listing determination through April 30, 2020.

**Question 8 – Endangered Species:** Per the Natural Resources Technical Report the biological conclusion for the Tar River spiny mussel is unresolved. Surveys for this species will be conducted the NCDOT Biological Surveys Group if necessary.

**Question 10 – Buffer Rules** - This project is located in the Tar-Pamlico River Basin (USGS HUC 03020102). Potential jurisdictional features within the study area are therefore subject to streamside riparian zones protected under provisions administered by the North Carolina Department of Environmental Quality (NCDEQ).

**Question 16 – Floodplain:** This project is located in a FEMA Limited Detail study. The project will result in an increase of 0.01' in the 100 year Base Flood Elevation and will be processed as a Type 2d MOA through North Carolina Floodplain Mapping.

H. Project Commitments

See attached Project Commitments Greensheet.

I. Categorical Exclusion Approval

<b>STIP Project No.</b>	<u>BR-0112</u>
<b>WBS Element</b>	<u>67112.1.1</u>
<b>Federal Project No.</b>	<u>N/A</u>

**Prepared By:**

8/1/2019  
Date

DocuSigned by:  
*Greg S. Purvis*  
-----  
Greg S. Purvis, PE, Project Manager  
Wetherill Engineering



**Prepared For:** North Carolina Department of Transportation Structures Management Unit

**Reviewed By:**

8/6/2019  
Date

DocuSigned by:  
*Kevin Fischer*  
-----  
Kevin Fischer, PE Assistant State Structures Engineer – Program Management and Field Operations, Structures Management Unit North Carolina Department of Transportation

8/1/2019  
Date

DocuSigned by:  
*Philip S. Harris, III*  
-----  
Philip S. Harris, III, PE Unit Head – Environmental Analysis Unit North Carolina Department of Transportation

- Approved**
  - If Type I (Non-Ground Disturbing) Categorical Exclusion with an answer of “no” to question 3.
  - If Type I or Type II (Ground Disturbing) Categorical Exclusions with an answer of “no” to all of the threshold questions (1 through 7) of Section F.
  
- Certified**
  - If Type I (Non-Ground Disturbing) Categorical Exclusion with an answer of “yes” to question 3.
  - If Type I or Type II (Ground Disturbing) Categorical Exclusions with an answer of “yes” to any of the threshold questions (1 through 7) of Section F.
  - If classified as Type III Categorical Exclusion.

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

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

**PROJECT COMMITMENTS:**

**Edgecombe County  
Bridge No. 35 on SR 1616  
Over Otter Creek  
W.B.S. No. 67112.1.1  
T.I.P. No. BR-0112**

**NCDOT Division Four – Offsite Detour**

In order to have time to adequately reroute school busses, Edgecombe County Schools will be contacted at least one month prior to road closure. Contact person is Rhonda Wainwright– Director of Transportation at (252)-641-2665.

Edgecombe County Emergency Services will be contacted at least one month prior to road closure to make the necessary temporary reassignments to primary response units. Contact person is Mark Walters – Emergency Services Director at (252)-641-7843.

**NCDOT Hydraulic Unit – FEMA Coordination**

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).

**NCDOT Division Four Construction, Resident Engineer’s Office -FEMA**

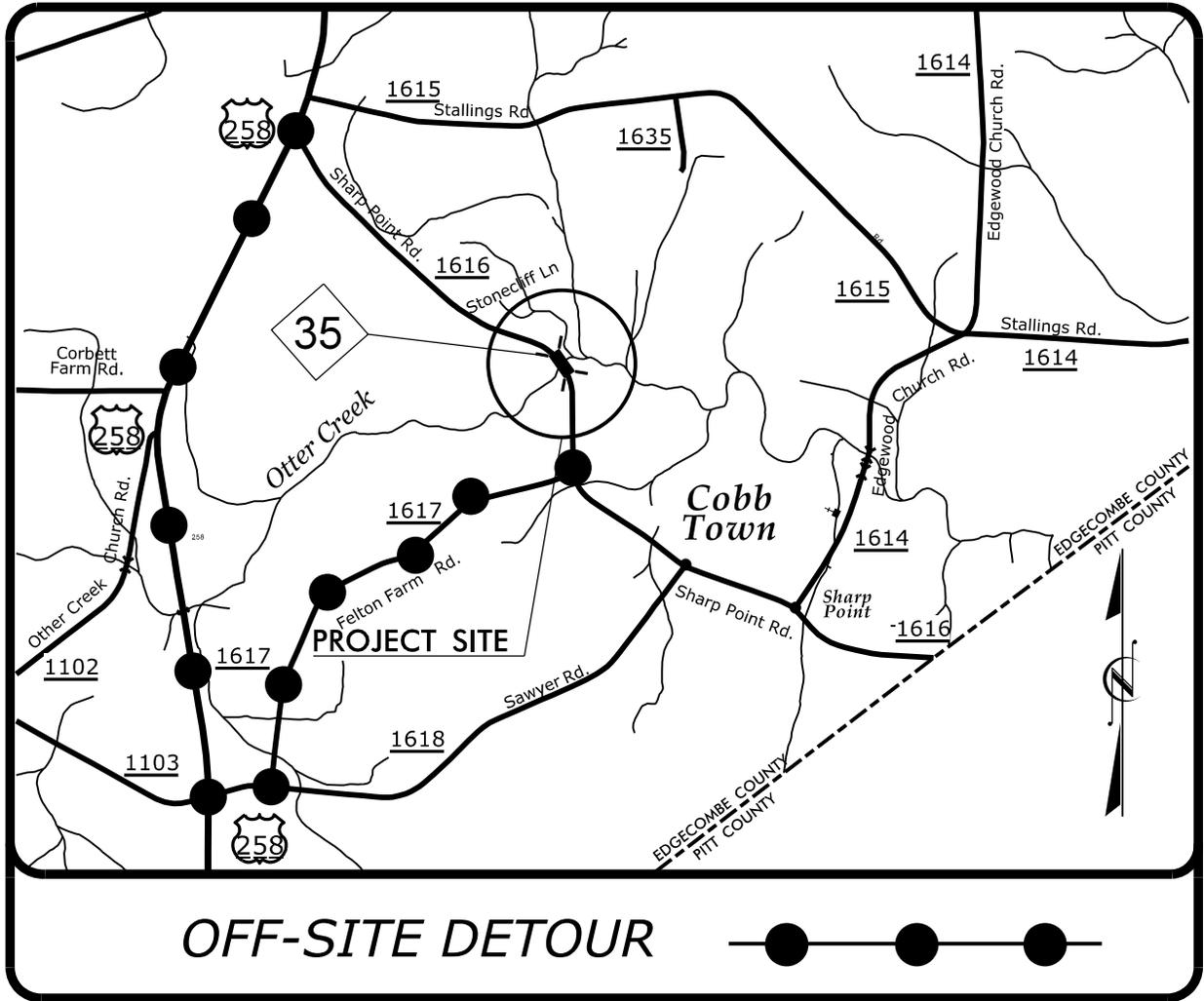
This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located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

**NCDOT Hydraulic Unit–Buffer Rules**

The Tar-Pamlico River Basin Rule applies to this project.

**NCDOT Environmental Analysis Unit – Section 7**

Section 7 will need to be resolved for the Tar River spiny mussel prior to permitting and construction.



**BR-0112**

REPLACE BRIDGE NO. 320035  
OVER OTTER CREEK  
ON SR 1616 (SHARP POINT ROAD)

EDGECOMBE COUNTY

WBS 67112.1.1

NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION 4

VICINITY MAP - FIGURE 1

**WETHERILL ENGINEERING**  
 TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

1223 Jones Franklin Rd.  
 Raleigh, N.C. 27606  
 License No. F-0377  
 Bus: 919 851 8077  
 Fax: 919 851 8107

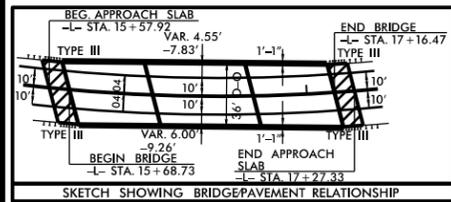
PROJECT REFERENCE NO. <b>BR-0112</b>	SHEET NO. <b>4</b>
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>DOCUMENT NOT CONSIDERED FINAL</b> UNLESS ALL SIGNATURES COMPLETED	

**BEGIN CONSTRUCTION**  
**-L- POC STA. 12 + 49.81**

**BEGIN NCDOT PROJECT BR-0112**  
**-L- POC STA. 13 + 76.00**

**END CONSTRUCTION**  
**-L- POC STA. 19 + 61.46**

**END NCDOT PROJECT BR-0112**  
**-L- POC STA. 18 + 74.50**

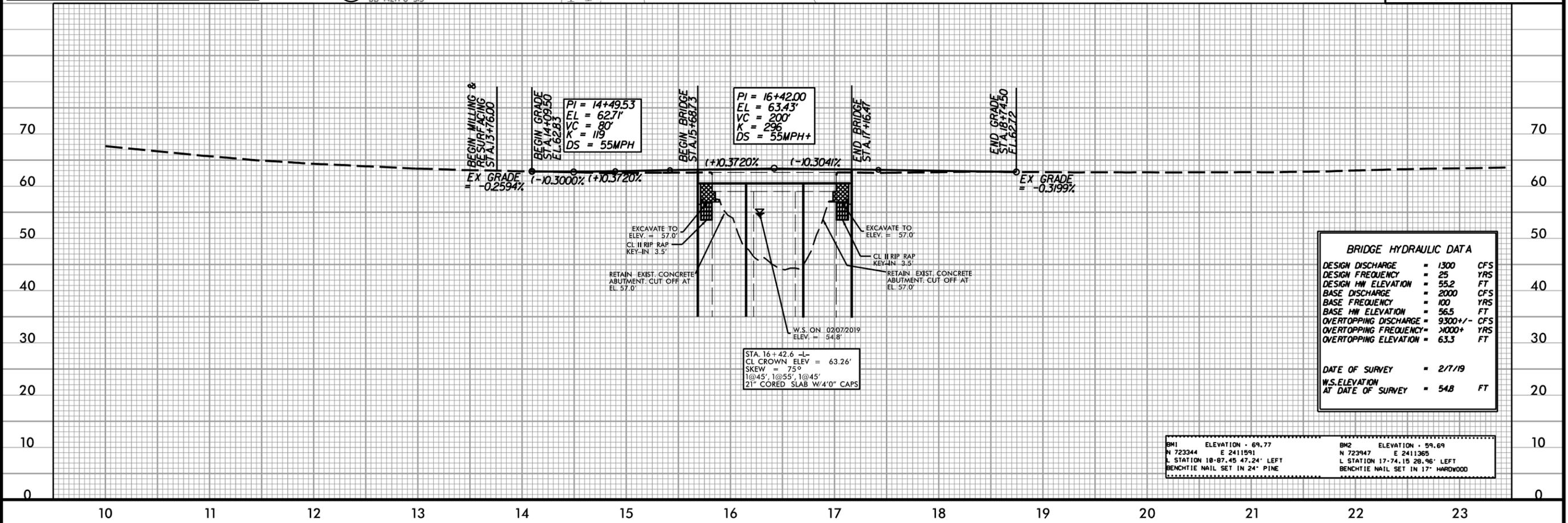


NOTE: DESIGN EXCEPTION REQUIRED FOR THE HORIZONTAL STOPPING SIGHT DISTANCE

2 JEAN MATTHEWS  
 DB 1421 PG 3/5

4 RODNEY M. WOOTEN ET AL  
 DB 146 PG 4/7

PI Sta 12+72.19 Δ = 22' 18" 15.0" (LT) D = 6' 23' 07.6" L = 349.30' T = 176.89' R = 897.29' DS = 45MPH+ SE = SEE PLANS * - MEETS SUBREGIONAL TIER GUIDELINES	PI Sta 16+22.69 Δ = 19' 51' 41.0" (LT) D = 6' 07' 01.6" L = 324.69' T = 163.99' R = 936.65' DS = 50MPH+ SE = SEE PLANS * - MEETS SUBREGIONAL TIER GUIDELINES	PI Sta 18+93.90 Δ = 13' 14' 24.8" (LT) D = 6' 01' 00.1" L = 220.06' T = 110.52' R = 952.28' DS = 50MPH+ SE = SEE PLANS * - MEETS SUBREGIONAL TIER GUIDELINES	PI Sta 21+31.78 Δ = 14' 20' 12.3" (LT) D = 6' 10' 13.0" L = 232.35' T = 116.79' R = 928.58' DS = 50MPH+ SE = SEE PLANS * - MEETS SUBREGIONAL TIER GUIDELINES
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**BRIDGE HYDRAULIC DATA**

DESIGN DISCHARGE	= 1300 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 55.2 FT
BASE DISCHARGE	= 2000 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 56.5 FT
OVERTOPPING DISCHARGE	= 9300+/- CFS
OVERTOPPING FREQUENCY	= >1000+ YRS
OVERTOPPING ELEVATION	= 63.3 FT
DATE OF SURVEY	= 2/7/19
W.S. ELEVATION AT DATE OF SURVEY	= 54.8 FT

BM1 ELEVATION = 69.77 N 723344 E 2411591 L STATION 18+67.45 47.24' LEFT BENCHMARK NAIL SET IN 24" PINE	BM2 ELEVATION = 59.69 N 723947 E 2411365 L STATION 17+74.15 28.95' LEFT BENCHMARK NAIL SET IN 17" HARDWOOD
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REVISIONS

7/31/2019  
 i:\p\sa\br-0112\_rdy\_psh.dgn

18-09-0082



## HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

### PROJECT INFORMATION

<b>Project No:</b>	BR-0112	<b>County:</b>	Edgecombe
<b>WBS No.:</b>	67112.1.1	<b>Document Type:</b>	
<b>Fed. Aid No:</b>		<b>Funding:</b>	X State    Federal
<b>Federal Permit(s):</b>	X Yes    No	<b>Permit Type(s):</b>	USACE
<b>Project Description:</b> Replace Bridge No. 35 on SR 1616 (Sharp Point Road) over Otter Creek (no off-site detour specified in review request).			

### SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

**DESCRIPTION OF REVIEW ACTIVITIES, RESULTS, AND CONCLUSIONS:** HPOWeb reviewed on 24 October 2018 and yielded one SS and no NR, SL, LD, or DE properties in the Area of Potential Effects (APE). Edgecombe County current GIS mapping and aerial photography indicated a mostly undeveloped APE of woodland and cultivated fields (viewed 24 October 2018). Those few buildings predating 1970 are unexceptional examples of their types and also stand on a large parcel approximately 1600 feet NW of the existing bridge, well beyond likely project impact. The previously recorded Wooten-Parker house (ED0913) at the SE end of the APE is no longer extant. Directly across from the house site on the west side of SR 161 (Sharp Point Road) is the Wooten Family Cemetery (PIN: 471211203200). While the cemetery does not appear to be NR eligible, it should be afforded the usual protections during construction. The cemetery, specifically the possibility of unmarked graves in the NCDOT ROW, is also addressed in the archaeological review for this project. Constructed in 1957, Bridge No. 35 is not eligible for the National Register as it is neither technologically nor aesthetically significant. Google Maps "Street View" confirmed the absence of critical architectural or landscape resources in the APE (viewed 24 October 2018).

**No architectural survey is required for the project as currently defined.**

**WHY THE AVAILABLE INFORMATION PROVIDES A RELIABLE BASIS FOR REASONABLY PREDICTING THAT THERE ARE NO UNIDENTIFIED SIGNIFICANT HISTORIC ARCHITECTURAL OR LANDSCAPE RESOURCES IN THE PROJECT AREA:** APE equates with the study area provided in the review request (see attached). The comprehensive county architectural survey (1985), as well as later studies record no properties in the APE, besides that noted above and now no longer standing. County GIS/tax materials and other visuals support the absence of significant architectural and landscape resources in the APE. No National Register-listed properties are located in the APE.

**Should the project limits or any aspect of the project design change, please notify NCDOT Historic Architecture as additional review may be necessary.**

**SUPPORT DOCUMENTATION**

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

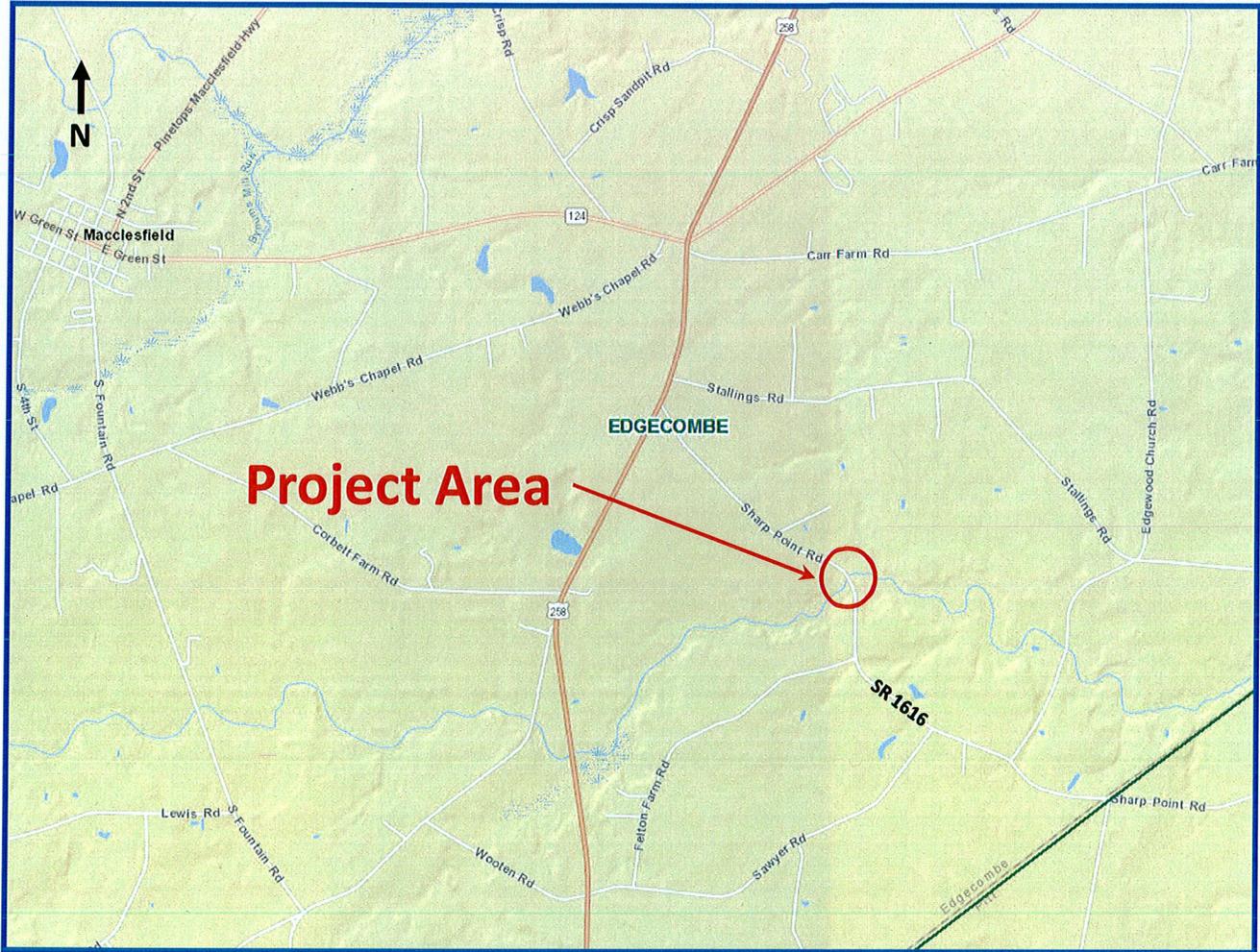
**FINDING BY NCDOT ARCHITECTURAL HISTORIAN**

Historic Architecture and Landscapes -- **NO SURVEY REQUIRED**

*Vanessa C. Patrick*  
NCDOT Architectural Historian

*30 April 2019*  
Date

BR-0112, Edgecombe County  
WBS No. 67112.1.1  
Tracking No. 18-09-0082



BR-0112 Bridge No. 35 Replacement Edgecombe County  
WBS No. 67112.1.1 Base map: HPOWeb, nts



18-09-0082



**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:* **BR-0112** *County:* **Edgecombe**  
*WBS No:* **67112.1.1** *Document:* **Federal CE**  
*F.A. No:* *Funding:*  State  Federal  
*Federal Permit Required?*  Yes  No *Permit Type:* **USACE**

***Project Description:*** This project proposes to replace Bridge 35 on SR 1616 (Sharp Point Rd) over Otter Creek in Edgecombe County, North Carolina. The archaeological Area of Potential Effects (APE) encompasses all areas of potential ground disturbing activity. (see attached shape file map).

### 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 or eligible ARCHAEOLOGICAL SITES present 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:***

To determine the cultural resource potential of the APE, numerous sources of information were considered. First, preliminary construction design, funding, and other data was examined for defining the potential impacts to the APE ground surfaces and for determining the level of effort necessary for compliance. In this case, the project is state-funded with federal (USACE) interaction and subject to Section 106 of the National Historic Preservation Act.

Next, a map review and site file search was conducted at the Office of State Archaeology (OSA) on Thursday, September 27, 2018. No previously documented archaeological sites are located within or proximal to the archaeological APE. Examination of National Register of Historic Places (NRHP), State Study Listed (SL), Locally Designated (LD), Determined Eligible (DE), and Surveyed Site (SS) properties employing resources available on the North Carolina State Historic Preservation Office (NCSHPO) website demonstrated that no resources with potential archaeological deposits were located in the

vicinity of the APE. Also, historic maps of Edgecombe County were appraised for former structure locations, land use patterns, cemeteries, or other confirmation of historic occupation in the project vicinity. Archaeological/historical reference materials were reviewed as well.

In addition, topographic, geologic, flood boundary, lidar, and NRCS soil survey maps were referenced for the evaluation of geomorphological, pedological, hydrological, and other environmental-type elements that may have resulted in past occupation at this location. Finally, review of aerial and on-ground images (NCDOT Spatial Data Viewer, Google, ARC-GIS) afforded first-hand perspectives of the overall study area which were useful for assessing localized disturbances, both natural and human induced, which compromise the integrity of archaeological sites/deposits. Based on environmental determinants, the APE is considered to have a moderate potential for the recovery of archaeological artifacts, deposits, or features. Also, according to the Falklands topographic map, a cemetery appears to be located at the southern project limits. An archaeological survey will therefore be recommended for the project.

An in-field reconnaissance and subsurface survey was conducted by NCDOT archaeologists Scott Halvorsen and Paul Mohler on November 13, 2018. First, a visual inspection of the entire APE was completed. No above-ground historic features were encountered. One cemetery was identified (Wooten Family Cemetery) extending into the archaeological APE at the southern project limits within the southwestern quadrant. The cemetery is currently active and contains at least 110 memorials/graves. While the oldest interments date to the mid nineteenth century, the majority were buried from 1930 – 1970. Avoidance is recommended for the Wooten Family Cemetery. If avoidance is not possible, then relocation may be necessary.

Shovel testing began in the southwestern quadrant, immediately north of the Wooten Family Cemetery. Due to spatial constraints (between cemetery & creek wetland) only two shovel test pits could be excavated within this project quadrant. All project shovel test pits were excavated along transects established approximately 75 feet from the SR 1616 center-line. The test pits were dug at 30 meter intervals along the transect, measured 30cm by 30cm in diameter, and were excavated to sterile subsoil. The two shovel tests excavated in the southwestern quadrant were nearly identical in profile and consisted of a first soil stratum of 10YR3/2 sandy loam to 25 -30cmts atop a second stratum that consisted of a 10YR6/4 sand to 60cmts. Stratum III contained a 10YR6/4 coarse sand matrix to 80cmts. Stratum IV was a strong brown clayey sand below 80cmts. No cultural artifacts or features were encountered during shovel testing of the southwestern quadrant.

The transect situated on the western side of SR 1616 extended through the northwestern quadrant. However, following visual and pedestrian inspection of the ground surfaces, it was determined that no shovel testing could be completed along the transect within the quadrant due to standing water and wetlands. A couple of shovel tests were attempted here, however both indicated a high water table and wet soils.

Next, shovel testing began along the eastern transect near the southern project limits in the southeastern quadrant. In total, 5 shovel test pits were excavated, each with nearly identical soil profiles. A typical shovel test pit contained a first soil stratum consisting of 10YR3/2 sandy loam to 25cmts atop a second stratum containing 10YR6/4 sand to 65 – 80cmts. Stratum III was a strong brown sandy clay subsoil. No archaeological artifacts or features were identified during the excavation of shovel tests in the southeastern quadrant.

Finally, shovel testing continued along the eastern transect within the northeastern quadrant. A total of 4 shovel test pits were excavated, each with nearly identical soil profiles. The first soil stratum contained

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a 10YR3/1 sandy loam to 25cmts atop a second stratum consisting of 10YR6/4 sand to 60 – 65cmts. Stratum III was a sandy clay subsoil below depths of 55 – 65cmts. No cultural artifacts were encountered during excavation of shovel tests in the northeastern quadrant.

Following investigation of the BR-0112 project area, no further archaeological consultation will be necessary. No archaeological sites were identified by the survey. One cemetery (Wooten Family Cemetery) is situated in the archaeological APE in the southwestern project quadrant. Avoidance of this resource is recommended during construction activities.

**SUPPORT DOCUMENTATION**

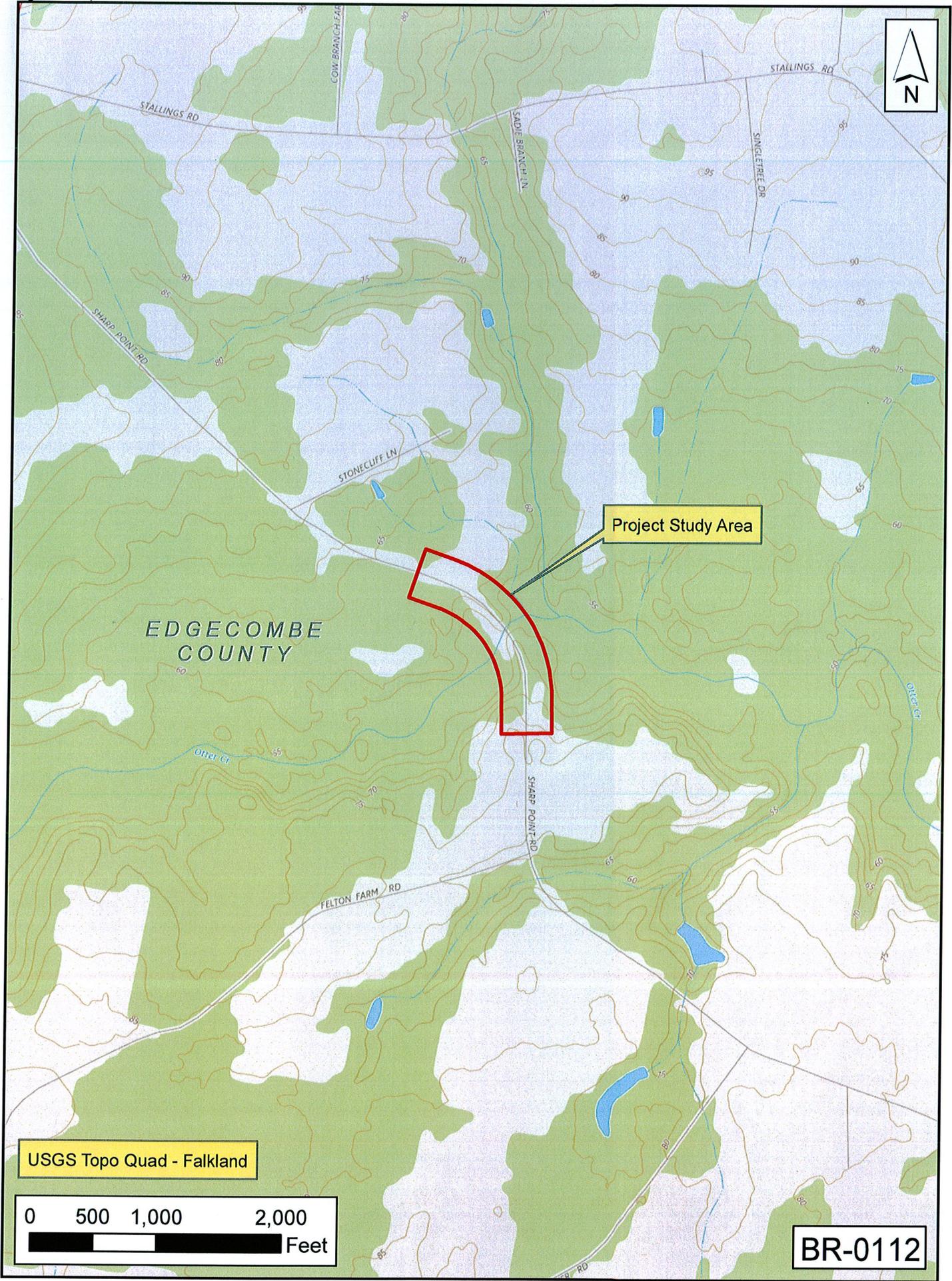
See attached:  Map(s)     Previous Survey Info     Photos     Correspondence  
Signed:

*Matt Eric Hulver*

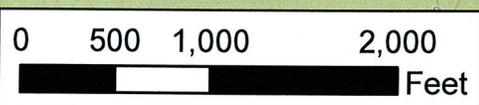
*5.17.2019*

**NCDOT ARCHAEOLOGIST**

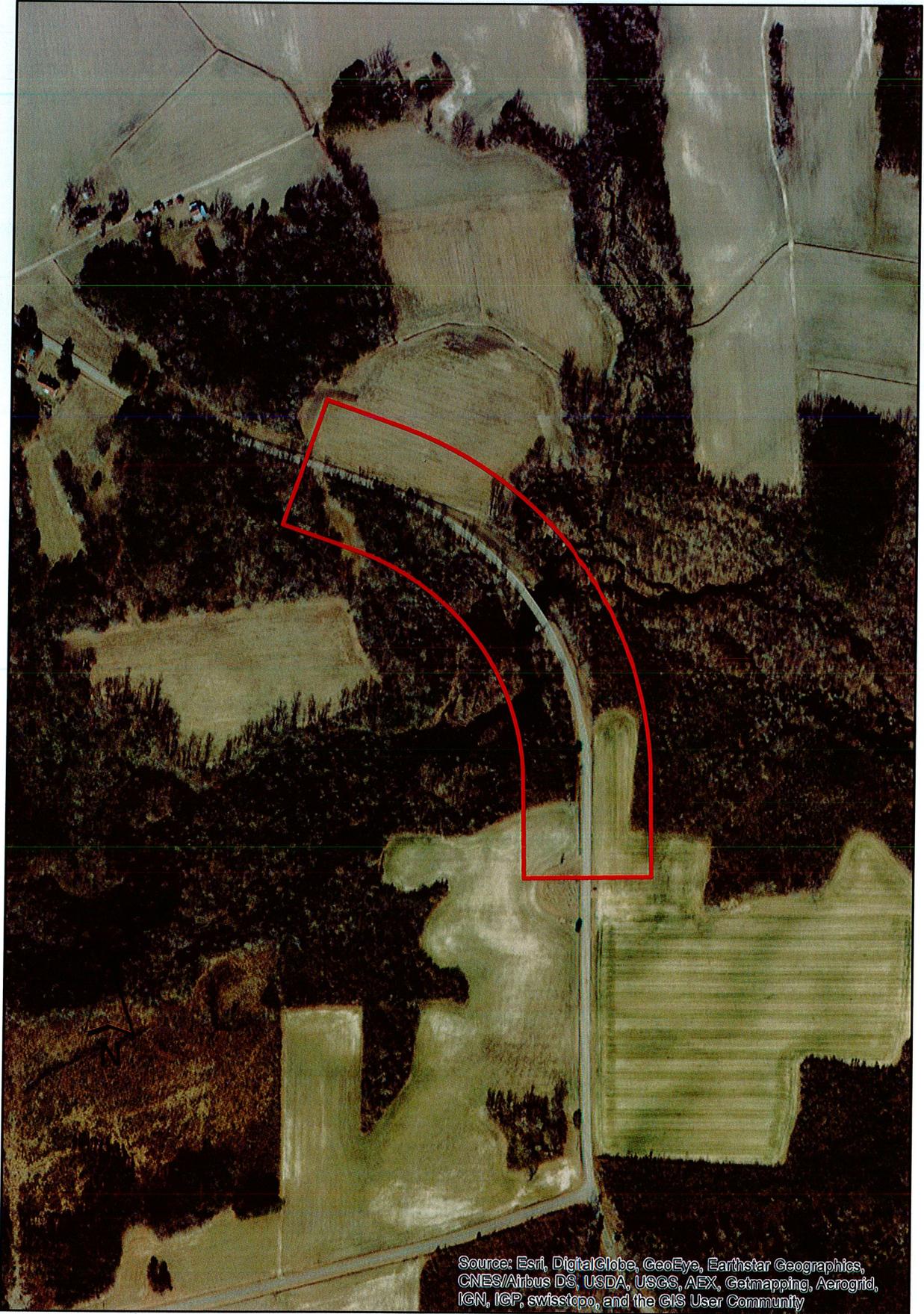
**Date**



USGS Topo Quad - Falkland

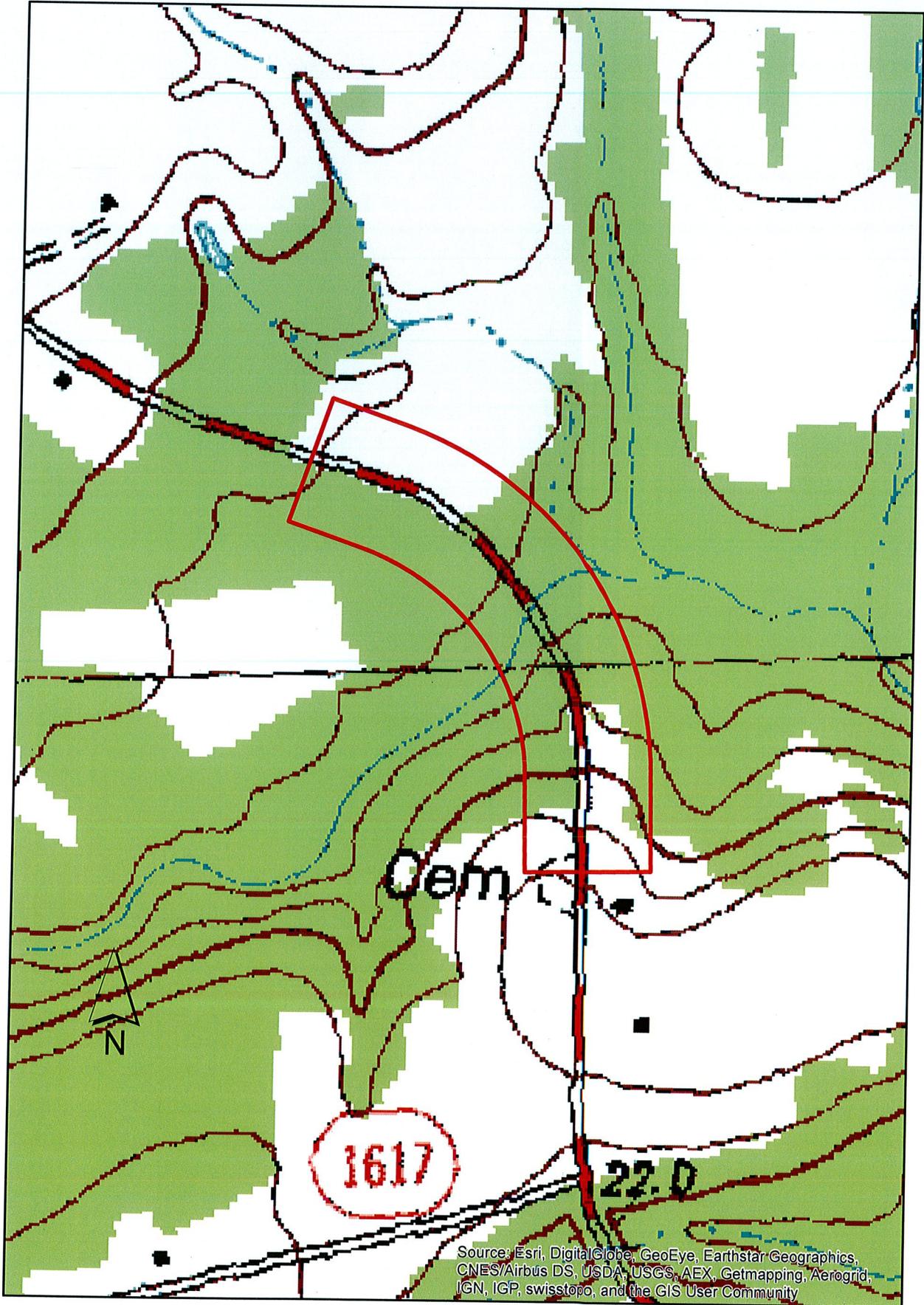


BR-0112



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

ARC-GIS aerial shape file map showing the boundaries and location of the APE in Edgecombe County, North Carolina.



Portion of the Falklands topographic map relating the boundaries and location of the APE in Edgecombe County, North Carolina.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

ARC-GIS aerial shape file map relating the boundaries and location of the APE, the location of negative shovel test pits (blue diamond), and the Wooten Family Cemetery (pale blue polygon) in Edgecombe County, North Carolina.