

**Iredell County**  
**Bridge No. 69 on NC 115 (Wilkesboro Highway)**  
**over Rocky Creek**  
**Federal Aid Project No. BRSTP-0115(7)**  
**W.B.S. No. 38538.1.2**  
**S.T.I.P. No. B-4766**

CATEGORICAL EXCLUSION

UNITED STATES DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

AND

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

05-05-2015

DATE

*for* Richard W. Hancock, PE  
Richard W. Hancock, PE  
Manager, Project Development & Environmental Analysis Unit

5-5-15

DATE

*for* John F. Sullivan, III, Division Administrator  
John F. Sullivan, III, Division Administrator  
Federal Highway Administration

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CATEGORICAL EXCLUSION

Documentation Prepared By:  
Stantec Consultant Services

5/5/15

DATE



Ryan L. White, PE  
Project Manager



Documentation Prepared For:  
North Carolina Department of Transportation

5/5/15

DATE



Angela M. Sanderson  
Project Development Engineer

**PROJECT COMMITMENTS:**

**Iredell County  
Bridge No. 69 on NC 115  
Over Rocky Creek  
Federal Aid Project No. BRSTP-115(7)  
W.B.S. No. 38538.1.2  
S.T.I.P. No. B-4766**

**Division Twelve Construction, Resident Engineer's Office – Offsite Detour**

In order to have time to adequately reroute school buses, Iredell County Schools will be contacted at (704) 872-8931 at least one month prior to road closure.

Iredell County Emergency Services will be contacted at (704) 878-5353 at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

**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).

**Division Construction-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.

**GeoEnvironmental Section – Impacts to Underground Storage Tanks (UST's)**

If further design indicates potential impact to UST's, preliminary site assessments for soil and groundwater contamination will be performed prior to right of way purchase.

**Natural Environment Section– Northern Long-eared bat**

Construction authorization will not be requested until Endangered Species Act compliance is satisfied for the Northern Long-eared bat.

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**INTRODUCTION:** The replacement of Bridge No. 69 in Iredell County is included in the Draft 2016-2025 North Carolina Department of Transportation (NCDOT) State Transportation Improvement Program (S.T.I.P.). The location is shown in Figure 1. No substantial environmental impacts are anticipated. The project is classified as a Federal “Categorical Exclusion”.

## I. PURPOSE AND NEED STATEMENT

NCDOT Bridge Management Unit records indicate Bridge No. 69 has a sufficiency rating of 16.75 out of a possible 100 for a new structure. The bridge is considered functionally obsolete due to a deck geometry rating of 2 out of 9 according to the Federal Highway Administration (FHWA) standards. Bridge No. 69 has a current width between the rails of 20.83 feet and a clear roadway width of 20 feet. The approach roadway width is 20 feet as well. Due to prompt action notices, repairs were completed in 2006 and 2008 to bring the bridge’s sufficiency rating above 50.

## II. EXISTING CONDITIONS

The project is located along NC 115 in the community of New Hope, approximately one mile south of the intersection of NC 901 and NC 115 (see Figure 1). Development in the area is rural in nature. NC 115 is classified as a major rural collector in the Statewide Functional Classification System and it is a National Highway System Route.



On the north and southbound approaches to the bridge, NC 115 consists of two 10 lanes and 6-foot wide grass shoulders. The roadway grade is in a sag vertical curve through the project area. The existing bridge is on a tangent. The roadway is situated approximately 25.0 feet above the creek bed.

Bridge No. 69 is a five-span structure that consists of a reinforced concrete deck on I-beams with reinforced concrete spill-through abutments and reinforced concrete post/beam bents and has an overall length of 134 feet. The clear roadway width is 24.0 feet. The posted weight limit on this bridge is 26 tons for single vehicles and 37 tons for truck-tractor semi-trailer (TTST). The existing bridge was constructed in 1934.

There are no utilities attached to the existing structure. However, there are aerial power lines crossing the north and south approaches. Telephone lines are buried along the east side of NC 115 and cross over Rocky Creek, but cross over the creek on aerial poles.

The 2010 traffic volume of 2,100 vehicles per day (VPD) is expected to increase to 3,600 VPD by the year 2040 (see Appendix A). The projected volume includes five percent truck-tractor semi-trailer (TTST) and eight percent dual-tired vehicles (DT). The posted speed limit is 55 miles per hour in the project area. Six school buses cross the bridge daily on their morning and afternoon routes.

The January 2012 *Safety Review of STIP Project B-4766* indicates that there were ten accidents reported in the vicinity of Bridge No. 69 between March 1, 2010 and February 28, 2015. The report also notes that the geometry of the approach roadway and the narrowness of the bridge were potential contributing factors to these crashes.

This section of NC 115 is not part of a designated bicycle route nor is it listed in the S.T.I.P. as needing incidental bicycle accommodations. Sidewalks do not exist on the existing bridge and there is no indication of pedestrian usage on or near the bridge. Neither permanent nor temporary bicycle or pedestrian accommodations are required for this project.

West of the northbound approach is an unnamed tributary to Rocky Creek that parallels NC 115 for approximately 300 feet and ultimately crosses under NC 115 through an 18-inch reinforced concrete pipe culvert.

### **III. ALTERNATIVES**

#### **A. Preferred Alternative (Alternative 1)**

The Alternative Selection Meeting (ASM) was conducted on February 16, 2015. During the meeting, Alternative 1 was selected as the preferred alternative.

Alternative 1 proposes to replace Bridge No. 69 on the existing alignment while traffic is maintained on a temporary two lane offsite detour alignment that follows SR 1861 (Prospect Road), SR 1862 (Myers Mill Road), and NC 901(see Figure 1). The total length of the detour is approximately 7 miles. The replacement structure will consist of a bridge approximately 158-feet long. The bridge length is based on preliminary design information and is set by hydraulic requirements. The bridge will be of sufficient width to provide for two 12-foot lanes with 8-foot shoulders on each side. The roadway grade of the new structure will be approximately the same as the existing grade.

To reduce potential impacts to an un-named tributary to Rocky Creek that parallels NC 115 in the northwest quadrant of the project study area, two construction methods are under consideration:

- Construction of a 103 foot long retaining wall and 2:1 slopes along the west side of the northern bridge approach
- Construction of 1.5:1 slopes with rock plating or reinforcement along the west side of the northern bridge approach.

Additional design studies will be conducted to determine which construction method will be utilized to minimize the impacts to the un-named tributary to Rocky Creek.

## B. Alternatives Eliminated from Further Consideration

Alternative 2 proposed to construct a new structure approximately eight feet east of the existing structure. The proposed 158-foot long structure would be shifted eastward to avoid impacts to the parallel unnamed tributary of Rocky Creek. The structure proposed under Alternative 2 would have two 12-foot lanes and 8-foot shoulders. The improvements proposed under Alternative 2 would result in a much wider construction foot print extending beyond the existing right of way along NC 115.

Alternative 2 was not selected as the preferred alternative because of the right of way costs associated with the alternative are significantly higher than those associated with Alternative 1 (see Table 1) and the alternative conflicted with a proposed fiber optic cable that would be buried approximately 12 feet east of the existing edge of pavement.

The “do-nothing” alternative will eventually necessitate closure of the bridge. This is not acceptable due to the narrow horizontal clearance provided by Bridge No. 69.

Rehabilitation of the existing bridge is not feasible due to its age and deteriorated condition.

## IV. ESTIMATED COSTS

The estimated costs, based on 2015 prices, are as follows:

**Table 1: Construction Cost Estimates**

	<b>Alternative 1 (Preferred)</b>	<b>Alternative 2</b>
Structure	\$ 740,000	\$ 690,000
Roadway Approaches	\$ 297,000	\$480,000
Detour Traffic Control	\$ 20,000	\$23,000
Structure Removal	\$ 46,000	\$ 46,000
Misc. & Mob.	\$ 261,000	\$ 328,000
Eng. & Contingencies	\$ 236,000	\$ 233,000
<b>Total Construction Cost</b>	<b>\$ 1,600,000</b>	<b>\$ 1,800,000</b>
Right-of-way Costs	\$ 6,000	\$ 223,000
Utility Relocation Costs	\$ 73,000	\$ 73,000
<b>Total Project Cost</b>	<b>\$ 1,679,000</b>	<b>\$ 2,096,000</b>

## V. NATURAL ENVIRONMENT

The following paragraphs summarize the *Natural Resources Technical Report for The Replacement of Bridge 69 on NC 115 Over Rocky Creek* (NCDOT 2012c).

### Physical Characteristics

The study area is located in the upper piedmont plateau of North Carolina. The topography of the project study area consists of gently rolling to hilly



landscapes with elevations ranging from 1,000 to 1,055 feet above sea level. The surrounding land use is agricultural with low density residential.

**Water Resources**

The project study area falls within the Yadkin-Pee Dee River Basin [U.S. Geological Survey (USGS) Hydrological Unit 03040102]. There are three streams within the study area and their characteristics are provided in Tables 2 and 3. None of the water resources in the study area or within 1.0 mile of the study area are designated as Outstanding Resource Waters (ORW), High Quality Waters (HQW), or water supply watersheds (WS-I or WS-II). Also, none of the streams in the study area are listed on the North Carolina Final 2014 303(d) list of impaired waters (see Figure 4).

**Table 2: Water Resources in the Study Area**

	Map ID	NCDWQ Index Number	Best Usage Classification
Rocky Creek	Rocky Creek	12-108-11	C
UT to Rocky Creek	SA	12-108-11	C
UT to Rocky Creek	SB	12-108-11	C

**Table 3: Physical Characteristics of Water Resources in the Study Area**

	Bank Height (ft)	Bankful Width (ft)	Water Depth (in)	Channel Substrate	Velocity	Clarity
Rocky Creek	20	50	36	Sand, silt, gravel	Fast	Turbid
SA	5	3	3	Sand, cobble, gravel	Moderate	Clear
SB	5	10	24	Sand, silt, gravel, bedrock	Fast	Turbid

**Biotic Resources**

Three terrestrial communities were identified in the study area: maintained/disturbed, mesic mixed hardwood forest, and piedmont/mountain bottomland forest (see Figure 4). Table 4 summarizes the acreage of each type of biotic community in the study area.

**Table 4: Biotic Resources**

<b>Community</b>	<b>Coverage (ac.)</b>
Maintained/Disturbed	3.0
Mesic Mixed Hardwood Forest	1.3
Piedmont/Mountain Bottomland Forest	3.3
<b>Total</b>	<b>7.6</b>

**Jurisdictional Topics**

Three jurisdictional streams were identified in the study area and their characteristics are shown in table 5. USACE and NCDWQ stream delineation forms are included in Appendix C of the *Natural Resources Technical Report for The Replacement of Bridge 69 on NC 115 Over Rocky Creek*. All jurisdictional streams in the study area have been designated as warm water streams for the purposes of mitigation.

**Table 5: Jurisdictional Characteristics of Water Resources in the Study Area**

<b>Map ID</b>	<b>Length (ft)</b>	<b>Classification</b>	<b>Compensatory Mitigation Required</b>	<b>River Basin Buffer</b>
Rocky Creek	400	Perennial	Yes	Not Subject
SA	373	Perennial	Yes	Not Subject
SB	310	Perennial	Yes	Not Subject
<b>Total</b>	<b>1,083</b>			

No jurisdictional wetlands were identified in the study area.

**Permits**

A Nationwide Permit (NWP) 23 will be applicable for the proposed project. A NWP 33 may also apply for temporary construction activities such as stream dewatering or the construction of work bridges. If a Section 404 permit is required, then a Section 401 Water Quality Certification from NCDWQ will be needed as well.

**Wetland and Stream Mitigation**

NCDOT will attempt to avoid and minimize impacts to streams to the greatest extent practicable during the final design and construction of the preferred alternative. This includes constructing retaining walls or utilizing steeper slopes, where practicable to keep construction impacts out of streams. On-site stream mitigation opportunities will be investigated as designs of the preferred alternative is investigated. If on-site mitigation is not feasible, mitigation will be provided by the NC Department of Environment and Natural Resources Ecosystem Enhancement Program (EEP).

**Federally Protected Species**

The three United States Fish and Wildlife Service (USFWS) federally protected species listed for Iredell County as of April 9, 2015 are shown in Table 6.

**Table 6: Federally Listed Threatened and Endangered Species**

Scientific Name	Common Name	Federal Status	Habitat Present	Biological Conclusion
<i>Glyptemys muhlenbergii</i>	Bog turtle	T(S/A)	No	Not Required
<i>Myotis septentrionalis</i>	Northern long-eared bat	E	Yes	Unresolved
<i>Hexastylis naniflora</i>	Dwarf-flowered heartleaf	T	No	No Effect

E – Endangered

T – Threatened

T(S/A) – Threatened due to similarity of appearance

**Bog Turtle (*Glyptemys muhlenbergii*)**

**Threatened (similarity of appearance)**

**Family: Emydidae**

**Federally Listed: 1997**

**Biological Conclusion: Not Required**

Bog turtle habitat consists of open, groundwater supplied (springfed), graminoid dominated wetlands along riparian corridors or on seepage slopes. These habitats are designated as mountain bogs by the NCNHP, but they are technically poor, moderate, or rich fens that may be associated with wet pastures and old drainage ditches that have saturated muddy substrates with open canopies. Potential habitat is found in the western piedmont and mountain counties from 700 to 4,500 feet in elevation.

The Bog turtle is listed as threatened due to similarity of appearance and does not require a Section 7 Consultation with the USFWS. This project is not expected to affect the bog turtle because suitable habitat does not exist within the study area. NCNHP records, updated April 2015 indicate that there are no known bog turtle occurrences within 1.0 mile of the study area.

**Northern Long-eared bat (*Myotis septentrionalis*)**

**Endangered**

**Family: Vespertilionidae**

**Federally Listed: 2015**

**Biological Conclusion: Unresolved**

In North Carolina, the Northern long-eared (NLEB) bat occurs in the mountains, with scattered records in the piedmont and coastal plain. The species is not known to be a long-distance migrant and caves and subterranean mines are extremely rare in eastern North Carolina. During the summer, the NLEB roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. The NLEB has also been found, rarely, roosting in structures like barns and sheds, under eaves of buildings, behind window shutters, on bridges, and in bat houses.

Suitable habitat for the NLEB does exist in the study area.

Construction authorization will not be requested until Endangered Species Act compliance is satisfied for the Northern Long-eared bat.

**Dwarf-flowered heartleaf (*Hexastylis naniflora*)**

**Endangered**

**Family: Aristolchiaceae**

**Federally Listed: 1989**

**Biological Conclusion: No Effect**

Dwarf-flowered heartleaf is endemic to the western piedmont and foothills of North and South Carolina. The species is found in moist to rather dry forests along bluffs; boggy areas next to streams and creek heads; and adjacent hillsides, slopes, and ravines. Requiring acidic, sandy loam soils, the species is found in soil series such as Pacolet, Madison, and Musella, among others. Occurrences are generally found on a north facing slope. Undisturbed natural communities such as Piedmont/Coastal Plain Heath Bluff, Dry-Mesic Oak Hickory Forest, and Mesic Mixed Hardwood Forest hold the most viable occurrences. However, less viable remnant occurrences are found in disturbed habitats, including logged, grazed, mown, and residential/commercial developed lands; areas converted to pasture, orchards, and tree plantations; roadside rights-of-way; and on upland slopes surrounding manmade ponds or lakes.

No suitable habitat for the dwarf-flowered heartleaf exists in the project study area. NCNHP records, updated April 2015 indicate that there are no known Dwarf-flowered heartleaf occurrences within 1.0 mile of the study area.

**VI. HUMAN ENVIRONMENT**

**Section 106 Compliance Guidelines**

This project is subject to compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and implemented by the Advisory Council on Historic Preservation’s Regulations for Compliance with Section 106, codified at Title 36 CFR Part 800. Section 106 requires Federal agencies to take into account the effect of their undertakings (federally funded, licensed, or permitted) on properties included in or eligible for inclusion in the National Register of Historic Places and afford the Advisory Council a reasonable opportunity to comment on such undertakings.

**Historic Architecture**

In a letter dated October 28, 2014, the N.C. Historic Preservation Office (HPO) states that there are no properties listed or eligible for listing on the National Register (NR) of Historic Places within the project’s area of potential effects (APE). The form is attached in the Appendix A.

**Archaeology**

In a letter dated November 5, 2014, the NCDOT Archaeology Section states that there are no NR listed archaeological sites within the project’s APE, subsurface investigations did not reveal the presence of any archaeological resources considered eligible for the NR, and there are no NR-eligible or listed archaeological sites present or affected by the project. The form is attached in the Appendix A.

**Community Impacts**

The following information summarizes the findings from the *B-4766 Iredell County Community Impact Assessment* (NCDOT 2012b). No adverse impact on families or communities is anticipated. Right-of-way acquisition will be limited. No relocatees are expected with implementation of the proposed alternative.

No adverse effect on public facilities or services is expected. The project is not expected to adversely affect social, economic, or religious opportunities in the area.

The project is consistent with the Iredell County 2030 Horizon Plan and does not in conflict with any plan, existing land use, or zoning regulation. No change in land use is expected to result from the construction of the project.



The project will have temporary access impacts to properties immediately adjacent to the bridge as there are three driveways within 250 feet of the southern end of the bridge. The 7.0 mile long offsite-detour (see figure 1) will utilize SR 1861 (Prospect Road), SR 1862 (Myers Mill Road), and NC 901. The offsite detour will add additional travel time for citizens, school buses (six roundtrips per day), EMS, and businesses that utilize NC 115 within the study area. Prior to initiation of construction activities, NCDOT will contact Iredell County Schools and the Iredell County Emergency Services to notify them of the pending road closure and detour.

The project will not have a disproportionately high and adverse human health and environmental effect on any minority or low-income population.

Based on coordination with Local Offices (Planning, Iredell County Schools, and EMS) the project is expected to have a Moderate Impact on local public services.

The Farmland Protection Policy Act requires all federal agencies or their representatives to consider the potential impact to prime farmland of all land acquisition and construction projects. All construction will take place along existing alignment. As is required by the Farmland Protection Policy Act, the Form NRCS-CPA-106 has been completed (see Appendix C) according to FHWA guidelines. Since this project received a total point value of 109, this project falls below the NRCS minimal criteria of 160 and will not be evaluated further for farmland impacts. No other alternatives other than those already discussed in this CE will be considered without a re-evaluation of the project's potential impacts upon farmland. This project will not have a significant impact to farmlands.

## **Noise & Air Quality**

### **Air Quality**

This project is an air quality neutral project in accordance with 40 CFR 93.126. It is not required to be included in the regional emissions analysis (if applicable) and project level CO or PM2.5 analyses are not required. This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. Therefore, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. Consequently, this effort is exempt from analysis for MSATs. Any burning of vegetation shall be performed in accordance with applicable local laws and regulations of the North Carolina State Implementation Plan (SIP) for air quality compliance with 15 NCAC 2D.0520.

## **Noise Impacts**

Noise levels may increase during project construction; however, these impacts are not expected to be substantial considering the relatively short-term nature of construction noise and the limitation of construction to daytime hours. The transmission loss characteristics of nearby natural elements and man-made structures are believed to be sufficient to moderate the effects of intrusive construction noise.

## **VII. GENERAL ENVIRONMENTAL EFFECTS**

The project is expected to have an overall positive impact. Replacement of an inadequate bridge will result in safer traffic operations.

According to the *B-4766 Iredell County Community Impact Assessment*, the bridge replacement will not have an adverse effect on the quality of the human or natural environment with the use of the current North Carolina Department of Transportation standards and specifications.

The proposed project will not require right-of-way acquisition or easement from any land protected under Section 4(f) of the Department of Transportation Act of 1966.

An examination of local, state, and federal regulatory records by the GeoEnvironmental Section and noted in the B-4766 Geotechnical Report for Planning (NCDOT 2012a) identified one (1) petroleum underground storage tank (UST) within the project limits. The UST site is located approximately 55 feet west of the centerline of the NC 115, south of Bridge #69. The site is anticipated to present low geoenvironmental impacts of the project. If further design indicates potential impacts to the UST site, a preliminary site assessment for soil and groundwater contamination will be performed prior to right of way acquisition.

Iredell County is a participant in the National Flood Insurance Program, which is regulated by the Federal Emergency Management Agency (FEMA). There are no practical alternatives to crossing the floodplain area. Any shift in alignment will result in an impact area of about the same magnitude. The proposed project is not anticipated to increase the level or extent of upstream flood potential. However, NCDOT will coordinate with the NC Floodplain Mapping Program to determine the status of the project with regard to the applicability of NCDOT's Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent Letter of Map Revision (LOMR). Also, because Rocky Creek is a FEMA-regulated stream, sealed as-built construction plans will be submitted to NCDOT's Hydraulics Unit upon completion of construction to certify that the drainage structures and roadway embankments located within the 100-year floodplain were built as shown in the plans.

The Federal Highways Administration has determined that a U.S. Coast Guard Permit is not required for this project.

## **VIII. COORDINATION & AGENCY COMMENTS**

NCDOT has sought input from the following agencies as a part of the project development: U.S. Army Corps of Engineers, NC Department of Environment & Natural Resources, U.S. Fish & Wildlife Service, N.C. Wildlife Resource Commission, N.C. Division of Parks & Recreation, North Carolina State Historic Preservation Office, and the **Iredell** County Planning Department,

The **U.S. Fish and Wildlife Service (USFWS)** noted that surveys for the dwarf-flowered heartleaf should be completed between March and May. They also noted that if wetlands are present that surveys for the bog turtle should be conducted. The USFWS also noted that they recommend clear spanning bridge structures to accommodate active channel width.

**Response:** Surveys completed on April 4, 2012, have determined that there is no suitable habitat for the Dwarf-flowered heartleaf or the Bog turtle in the project study area. Subsequent review of the NCNHP records indicate that there are no known Dwarf-flowered heartleaf or Bog turtle occurrences within 1.0 mile of the study area.

**Response:** The proposed bridge will span the active channel width.

The **Iredell County** and the **N.C. Division of Water Quality**, and the **U.S. Army Corps of Engineers** had no special concerns for this project.

## **IX. PUBLIC INVOLVEMENT**

A letter dated March 12, 2012, was sent to all property owners affected directly by this project notifying them of the on-going environmental studies. Property owners were advised to contact the Project Development Engineer if they had general questions about the proposed project or impacts to their property.

As previously noted, the preferred alternative was selected on February 16, 2015. A postcard was mailed out on March 27, 2015 notifying property owners in the vicinity of the project of the selected alternative, the anticipated off-site detour route, and the proposed construction schedule.

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

## **X. CONCLUSION**

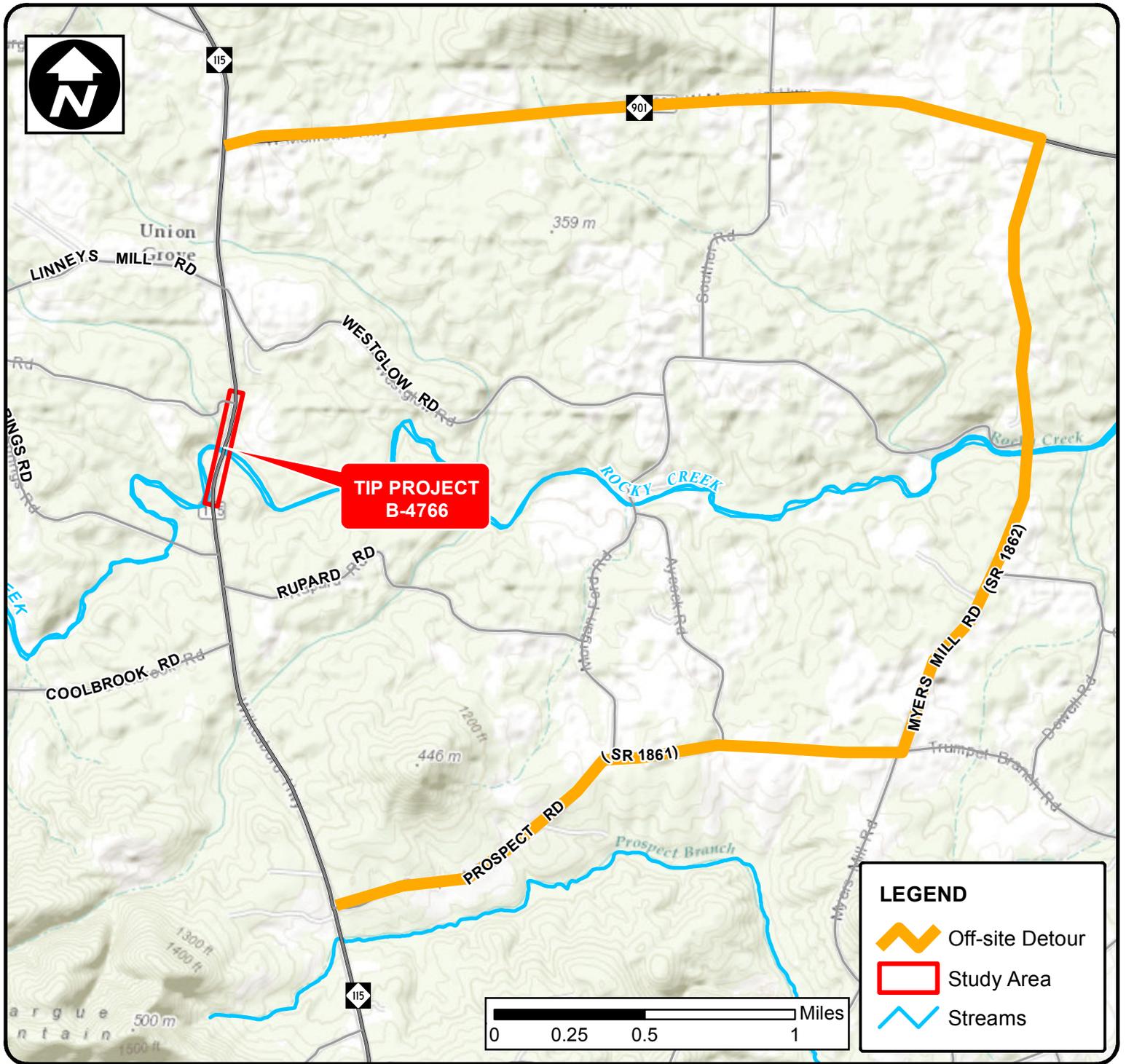
On the basis of the above discussion, it is concluded that no substantial adverse environmental impacts will result from implementation of the project. The project is therefore considered to be a federal “Categorical Exclusion” due to its limited scope and lack of substantial environmental consequences.

## References

North Carolina Department of Transportation (NCDOT). 2011a *B-4766 Geotechnical Report for Planning*. North Carolina Department of Transportation Geotechnical Unit. Raleigh, NC..

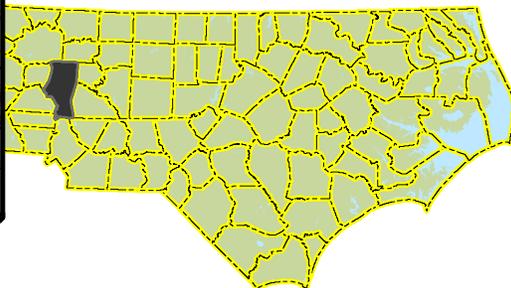
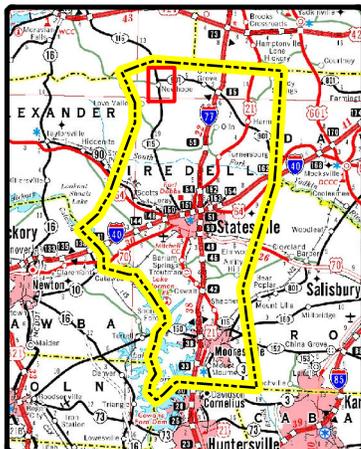
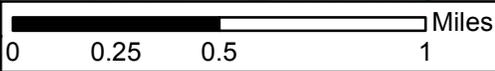
North Carolina Department of Transportation (NCDOT) 2012b *B-4766 Iredell Community Impact*. North Carolina Department of Transportation Public Involvement and Community Studies, Raleigh, NC.

North Carolina Department of Transportation (NCDOT). 2012c. Natural Resources Technical Report *Natural Resources Technical Report for The Replacement of Bridge 69 on NC 115 Over Rocky Creek*. North Carolina Department of Transportation Natural Environment Section. Raleigh, NC.



**LEGEND**

-  Off-site Detour
-  Study Area
-  Streams

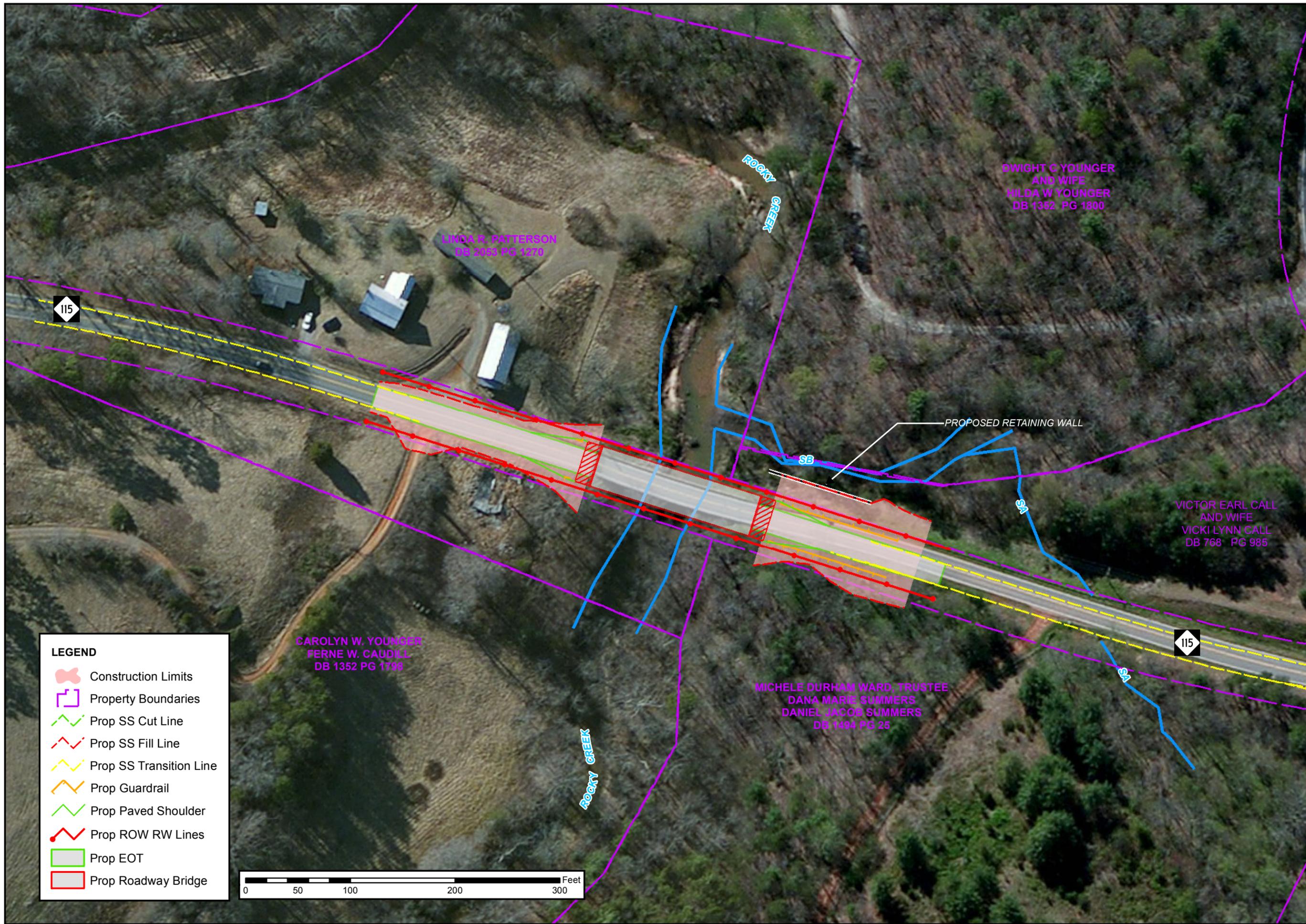


 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS BRANCH

**REPLACEMENT OF BRIDGE # 69 ON NC 115 OVER ROCKY CREEK**

IREDELL COUNTY  
 TIP PROJECT B-4766

**FIGURE 1: VICINITY MAP**



115

115

LINDA R. PATTERSON  
DB 2053 PG 1770

DWIGHT C YOUNGER  
AND WIFE  
HILDA W YOUNGER  
DB 1352 PG 1800

CAROLYN W. YOUNGER  
FERNE W. CAUDILL  
DB 1352 PG 1798

VICTOR EARL CALL  
AND WIFE  
VICKI LYNN CALL  
DB 768 PG 985

MICHELE DURHAM WARD, TRUSTEE  
DANA MARIE SUMMERS  
DANIEL JACOB SUMMERS  
DB 1494 PG 25

PROPOSED RETAINING WALL

SB

SB

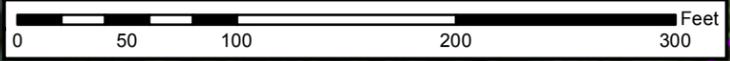
SB

Rocky CREEK

Rocky CREEK

**LEGEND**

-  Construction Limits
-  Property Boundaries
-  Prop SS Cut Line
-  Prop SS Fill Line
-  Prop SS Transition Line
-  Prop Guardrail
-  Prop Paved Shoulder
-  Prop ROW RW Lines
-  Prop EOT
-  Prop Roadway Bridge



NORTH CAROLINA DEPARTMENT  
OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
PROJECT DEVELOPMENT AND  
ENVIRONMENTAL ANALYSIS BRANCH

**ALTERNATIVE 1  
REPLACEMENT OF BRIDGE # 69  
ALONG NC 115 OVER ROCKY CREEK**



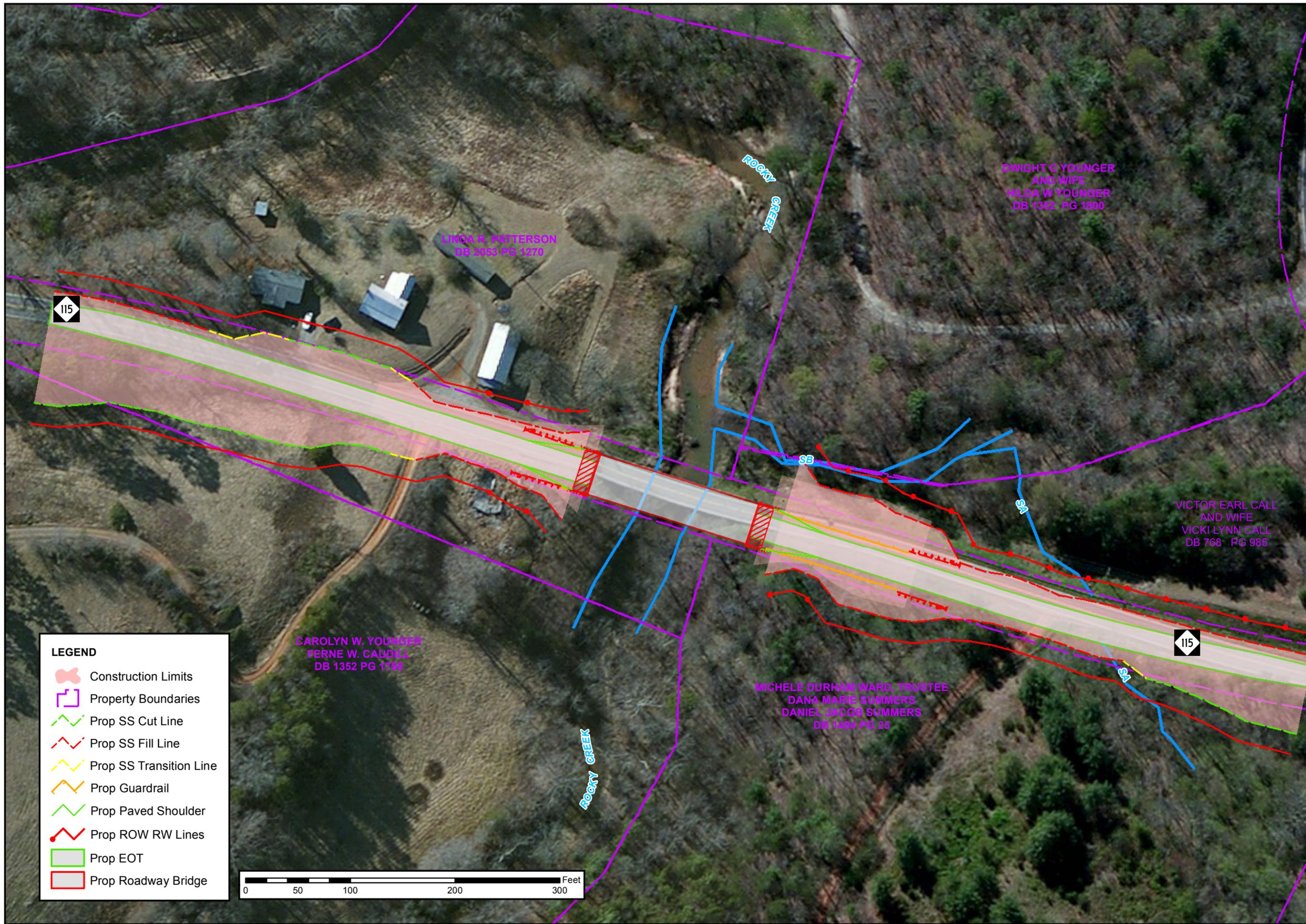
County: IREDELL

Div: 12 TIP# B-4766

WBS: 38538.1.2

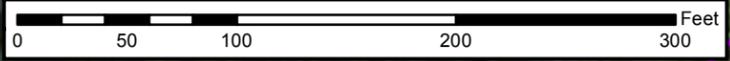
Date: MARCH 2015

**Figure  
2**



**LEGEND**

- Construction Limits
- Property Boundaries
- Prop SS Cut Line
- Prop SS Fill Line
- Prop SS Transition Line
- Prop Guardrail
- Prop Paved Shoulder
- Prop ROW RW Lines
- Prop EOT
- Prop Roadway Bridge



NORTH CAROLINA DEPARTMENT  
OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
PROJECT DEVELOPMENT AND  
ENVIRONMENTAL ANALYSIS BRANCH

**ALTERNATIVE 2  
REPLACEMENT OF BRIDGE #69  
ALONG NC 115 OVER ROCKY CREEK**



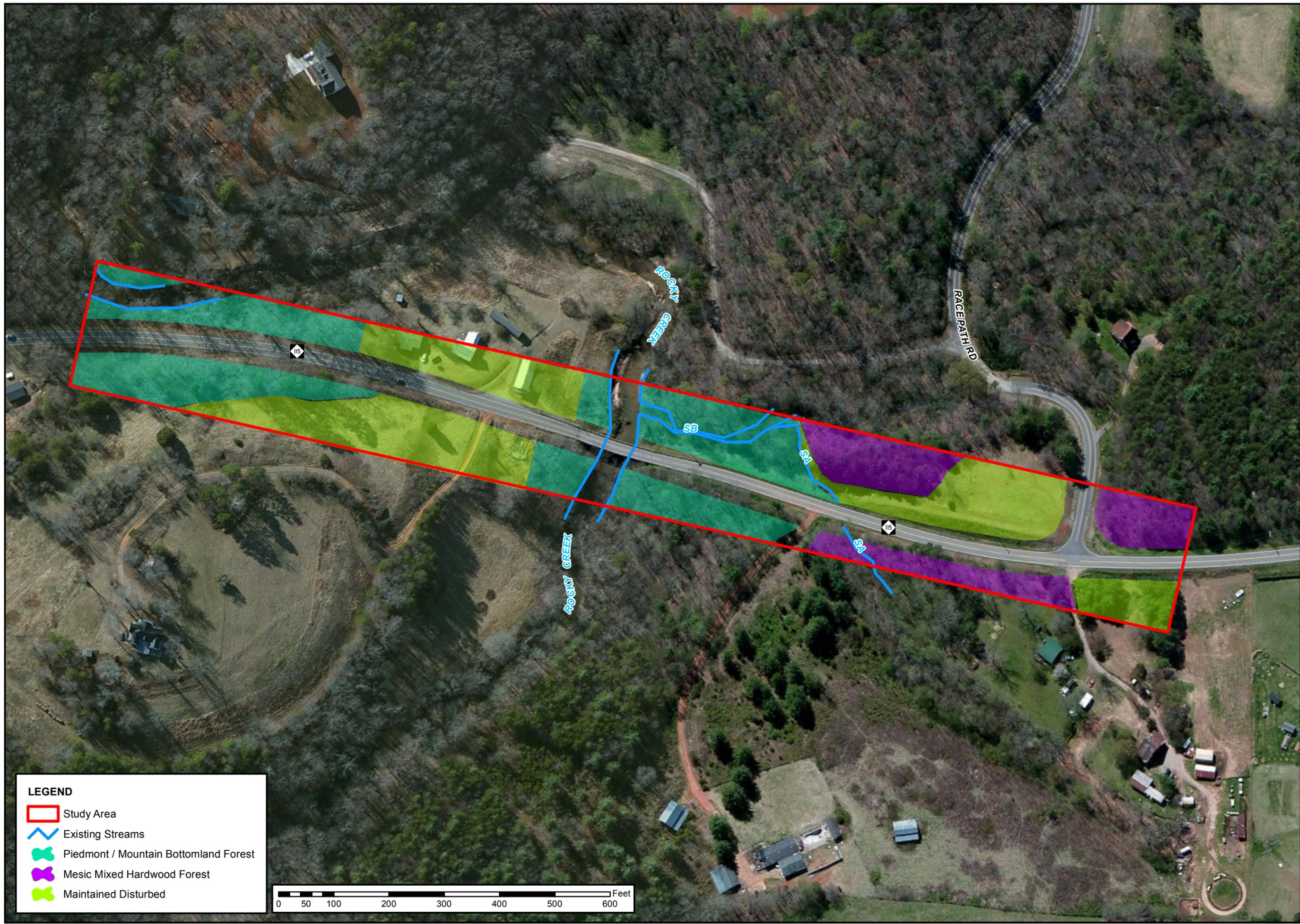
County: IREDELL

Div: 12 TIP# B-4766

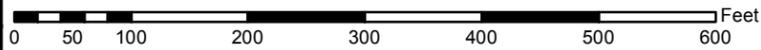
WBS: 38538.1.2

Date: MARCH 2015

**Figure  
3**



- LEGEND**
- Study Area
  - ~ Existing Streams
  - Piedmont / Mountain Bottomland Forest
  - Mesic Mixed Hardwood Forest
  - Maintained Disturbed



NORTH CAROLINA DEPARTMENT  
OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
PROJECT DEVELOPMENT AND  
ENVIRONMENTAL ANALYSIS BRANCH

**TERRRESTRIAL COMMUNITIES &  
JURISDICTIONAL RESOURCES  
REPLACEMENT OF BRIDGE # 69  
ALONG NC 115 OVER ROCKY CREEK**



County: IREDELL

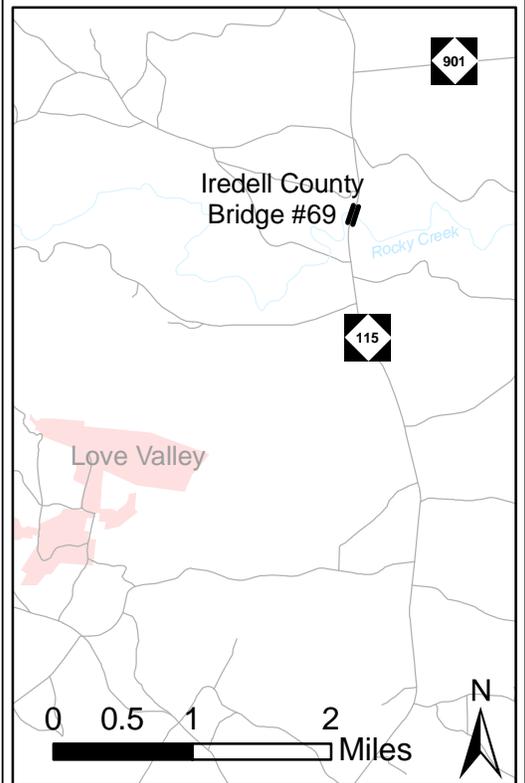
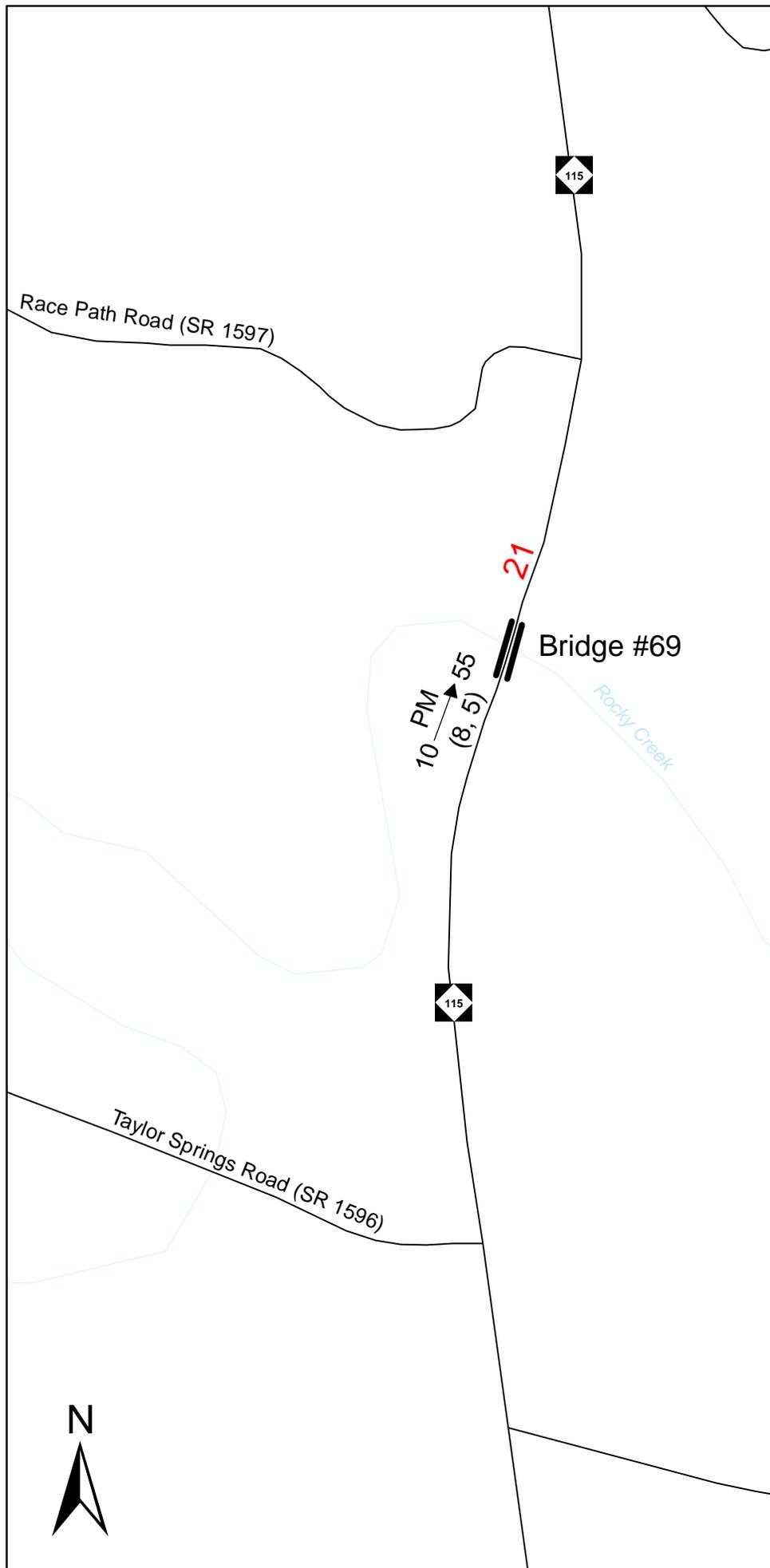
Div: 12	TIP# B-4766
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WBS:  
38538.1.2

Date:  
MARCH 2015

**Figure  
4**

**APPENDIX A**  
**TRAFFIC FORECAST**

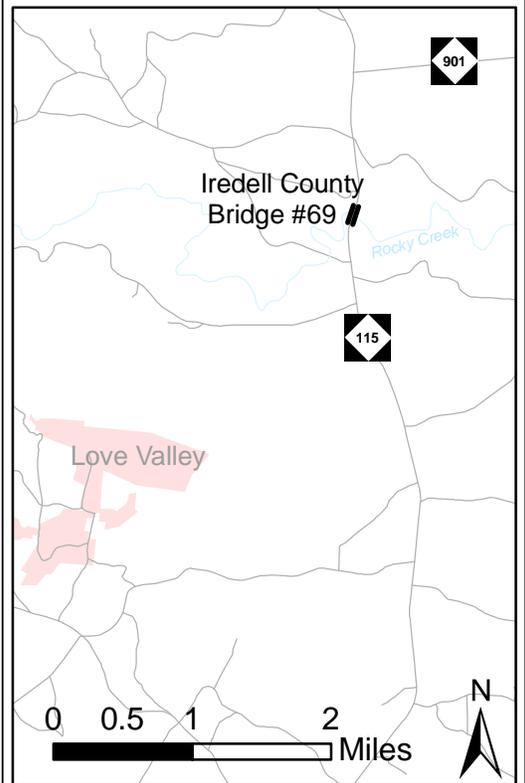
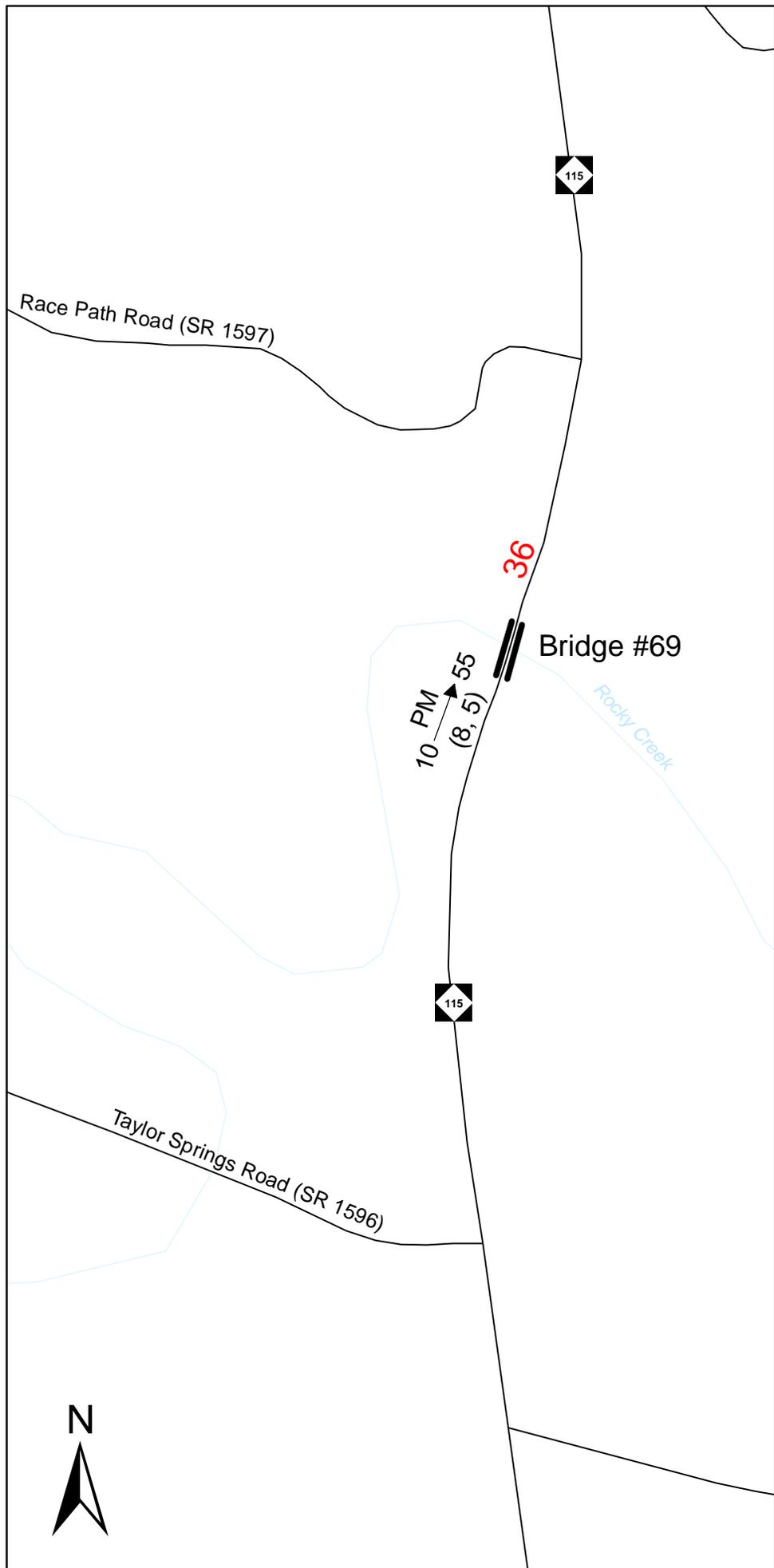


**2012** AVERAGE ANNUAL DAILY TRAFFIC  
**BASE YEAR - NO BUILD**  
**SHEET 1 - 1**

**LEGEND**

- $K \xrightarrow{\text{PM}} D$   
(d, t)
- ### No. of Vehicles Per Day (VPD) in 100s
- 1- Less than 50 VPD
- X Movement Prohibited
- Roadway
- K Design Hour Factor (%)
- PM PM Peak Period
- D Peak Hour Directional Split
- Indicates Direction of D
- (d,t) Duals, TT-STs (%)

<b>TIP: B-4766</b>		<b>WBS: 38538.1.2</b>	
<b>COUNTY: Iredell</b>		<b>DIVISION: 12</b>	
<b>DATE: May 22, 2012</b>			
<b>PREPARED BY: David Keilson</b>			
<b>LOCATION: NC 115 Bridge #69 over Rocky Creek</b>			
<b>PROJECT: Bridge Replacement</b>			



**2040** AVERAGE ANNUAL DAILY TRAFFIC  
**BASE YEAR - NO BUILD**  
**SHEET 2 - 1**

**LEGEND**

- $K \xrightarrow{\text{PM}} D$   
(d,t)
- ### No. of Vehicles Per Day (VPD) in 100s
- 1- Less than 50 VPD
- X Movement Prohibited
- Roadway
- K Design Hour Factor (%)
- PM PM Peak Period
- D Peak Hour Directional Split
- Indicates Direction of D
- (d,t) Duals, TT-STs (%)

<b>TIP: B-4766</b>		<b>WBS: 38538.1.2</b>	
<b>COUNTY: Iredell</b>		<b>DIVISION: 12</b>	
<b>DATE: May 22, 2012</b>			
<b>PREPARED BY: David Keilson</b>			
<b>LOCATION: NC 115 Bridge #69 over Rocky Creek</b>			
<b>PROJECT: Bridge Replacement</b>			

**APPENDIX B**  
**CORRESPONDENCE**



North Carolina Department of Environment and Natural Resources

Division of Water Quality

Beverly Eaves Perdue  
Governor

Coleen H. Sullins  
Director

Dee Freeman  
Secretary

**MEMORANDUM**

DATE: December 14, 2011

TO: Dionne C. Brown, Bridge Project Planning Engineer, NCDOT

FROM: Polly Lespinasse, NC Division of Water Quality, Mooresville Regional Office

SUBJECT: **Scoping Review of NCDOT's Proposed Bridge Replacement Project, STIP Project No. B-4766, Replacement of Bridge No. 69 on NC 115 over Rocky Creek in Iredell County**

In reply to your electronic correspondence dated December 13, 2011, and received electronically on December 29, 2010, in which you requested comments for the above referenced project, the NC Division of Water Quality (DWQ) offers the following comments:

**General Comments Regarding Bridge Replacement Projects**

1. Any anticipated bank stabilization associated with culvert installations or extensions should be addressed in the Categorical Exclusion (CE) document. It is understood that final designs are not determined at the time the CE is developed. However, the CE should discuss the potential for bank stabilization necessary due to culvert installation.
2. Any anticipated dewatering or access structures necessary for construction of bridges should be addressed in the CE. It is understood that final designs are not determined at the time the CE is developed. However, the CE should discuss the potential for dewatering and access measures necessary due to bridge construction.
3. DWQ is very concerned with sediment and erosion impacts that could result from this project. NCDOT shall address these concerns by describing the potential impacts that may occur to the aquatic environments and any mitigating factors that would reduce the impacts.
4. If foundation test borings are necessary; it shall be noted in the document. Geotechnical work is approved under General 401 Certification Number 3687/Nationwide Permit No. 6 for Survey Activities.
5. If a bridge is being replaced with a hydraulic conveyance other than another bridge, DWQ believes the use of a Nationwide Permit may be required. Please contact the US Army Corp of Engineers to determine the required permit(s).

### **General Comments if Replacing the Bridge with a Culvert**

1. Placement of culverts and other structures in waters, streams, and wetlands shall be below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by DWQ. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the NC DWQ for guidance on how to proceed and to determine whether or not a permit modification will be required.
2. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel shall be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage.
3. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures shall be properly designed, sized and installed.

Thank you for requesting our input at this time. The NCDOT is reminded that issuance of a 401 Water Quality Certification requires that appropriate measures be implemented to ensure that water quality standards are met and designated uses are not degraded or lost. If you have any questions or require additional information, please contact Polly Lespinasse at (704) 663-1699.

cc: Liz Hair, US Army Corps of Engineers, Asheville Field Office (electronic copy)  
Chris Militscher, Environmental Protection Agency (electronic copy)  
Marla Chambers, NC Wildlife Resources Commission (electronic copy)  
Marella Buncick, US Fish and Wildlife Service (electronic copy)  
Sonia Carrillo, DWQ Central Regional Office (electronic copy)  
File Copy

## Brown, Dionne C

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**From:** Brown, Dionne C  
**Sent:** Tuesday, December 13, 2011 11:35 AM  
**To:** Chang, David S; Wainaina, Njoroge W; Box, Gordon H; Walls, Richard J; Harris, James B; Strickland, Neal O; Trivedi, Kumar A; Mosher, Robert F; Memory, John R; Perfetti, Gregory R; Garrett, Paul; Leggett, Calvin W; Lane, Doug; Bourne, John S; Holder, Michael L; Rackley, Steven D; Grissom, Daniel C; Keilson, David P  
**Subject:** STIP No. B-4766 Start of Study

Hello All

The Project Development and Environmental Analysis Unit is starting the project development, environmental and engineering studies for the replacement of Bridge No. 69 in Iredell County. A Field Scoping Meeting is scheduled for the Summer of 2012.

We would appreciate any information you might have that would be helpful in evaluating potential environmental impacts of the project including recommendation of alternates to be studied. Your comments will be used in the preparation of a federally funded Categorical Exclusion, prepared in accordance with the National Environmental Policy Act. Please respond by March 13, 2012 so that your comments can be used in the selection of alternatives to be studied for this project. Copies of the vicinity map and aerial are located on the Project Store (Roadway Server) at:

Y:\TIPProjects-B\B4766\PDEA\Project\_Development\Images

If you have any questions concerning this project, please contact Dionne C. Brown at (919) 707-6171. Please include the TIP Project Number in all correspondence and comments.

Ms. Dionne C. Brown  
Bridge Project Planning Engineer  
Project Development and Environmental Analysis- Bridge Section  
**\*\*919-707-6171\*\* NEW**  
[dcbrown@ncdot.gov](mailto:dcbrown@ncdot.gov)



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Asheville Field Office  
160 Zillicoa Street  
Asheville, North Carolina 28801

December 20, 2011

Ms. Dionne C. Brown  
Project Development and Environmental Analysis Branch  
North Carolina Department of Transportation  
1598 Mail Service Center  
Raleigh, North Carolina 27699-1598

Dear Ms. Brown:

Subject: STIP Project No. B-4766; Replacement of Bridge No. 69 on NC 115 over Rocky Creek in Iredell County, North Carolina

We have received your request for information pertaining to the subject bridge replacement project and are providing the following comments in accordance with the National Environmental Policy Act (42 U.S.C. 4332(2)(c)); Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-667e); Migratory Bird Treaty Act (16 U.S.C. 703, et seq.) (MBTA); and section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543).

**Fish and Wildlife Resources** – A full list of federally endangered and threatened species and species of concern, with known occurrence in Iredell County, is available at the U.S. Fish and Wildlife Service (USFWS) website at: <http://www.fws.gov/nc-es/es/countyfr.html>. Please note that there are records of the bog turtle (*Clemmys muhlenbergii*<sup>1</sup>) and the threatened dwarf-flowered heartleaf (*Hexastylis naniflora*) in Iredell County. A qualified botanist should survey the project study area for the dwarf-flowered heartleaf during its flowering season (March through May). If wetlands are present within the project study area, a survey for bog turtles should be conducted by personnel familiar with bog turtle surveys. If either species is present, please contact our office.

**Recommendations for Replacing Structures that Cross Rivers and Streams** – We generally recommend the use of clear spanning bridge structures designed at a minimum to accommodate the

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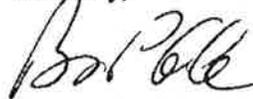
<sup>1</sup>In the November 4, 1997, *Federal Register* (55822-55825), the northern population of the bog turtle (from New York south to Maryland) was listed as T (threatened), and the southern population (from Virginia south to Georgia) was listed as T(S/A) (threatened due to similarity of appearance). The T(S/A) designation bans the collection and interstate and international commercial trade of bog turtles from the southern population. The T(S/A) designation has no effect on land management activities by private landowners in North Carolina, part of the southern population of the species. In addition to its official status as T(S/A), the U.S. Fish and Wildlife Service considers the southern population of the bog turtle as a federal species of concern due to habitat loss.

active channel width. The use of culverts is discouraged. Properly sized spanning structures will provide for aquatic species passage and accommodate debris and bed material movement. Furthermore, spanning structures usually: (1) can be constructed with minimal in-stream impacts, (2) do not require stream channel realignment, and (3) retain the natural streambed conditions; and the horizontal and vertical clearances may be designed to allow for human and wildlife passage beneath the structure. If possible, bridge supports (bents) should not be placed in the stream. Bents can collect debris during flood events, resulting in the scouring of bridge foundations. In-stream bents can also result in hydrologic changes, such as bedload scour or deposition, which may adversely affect in-stream habitat. Deck drains of the spanning structure should not discharge directly into the stream; instead, they should drain through a vegetated area before entering the stream. The removal of vegetation in riparian areas should be minimized. Armoring the banks with riprap should be minimized. The reseeded of disturbed areas should be performed promptly after grading, and seed mixes should consist of native vegetation in order to prevent the spread of invasive plant species. New structures should be constructed without the use of in-stream causeways or work pads whenever possible. When causeways are necessary, using the largest washed stone practicable for the application will prevent unnecessary damage to in-stream habitat and will facilitate complete removal.

**Migratory Birds** – The MBTA, 16 U.S.C. 703-712, prohibits the taking, killing, possession, transportation, and importation of migratory birds (including the bald eagle), their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. To avoid impacts to migratory birds, we recommend conducting a visual inspection of the bridge and any other migratory bird nesting habitat within the project area during the migratory bird nesting season (March through September). If migratory birds are discovered nesting in the project impact area, including on the existing bridge, the NCDOT should avoid impacting the nests during the migratory bird nesting season (March through September). If birds are discovered nesting on the bridge during years prior to the proposed construction date, the NCDOT, in consultation with the USFWS, should develop measures to discourage birds from establishing nests on the bridge by means that will not result in the take of birds or eggs, or the NCDOT should avoid construction and demolition activities during the nesting period.

If we can be of assistance or if you have any questions about these comments, please contact Mr. Jason Mays of our staff at 828/258-3939, Ext. 226. In any future correspondence concerning this project, please reference our Log Number 4-2-12-040.

Sincerely,



Brian P. Cole  
Field Supervisor

cc:

- Ms. Liz Hair, Asheville Regulatory Field Office, U.S. Army Corps of Engineers, 151 Patton Avenue, Room 208, Asheville, NC 28801-5006
- Ms. Marla J. Chambers, Western NCDOT Permit Coordinator, North Carolina Wildlife Resources Commission, 12275 Swift Road, Oakboro, NC 28129
- Ms. Polly Lespinasse, Mooresville Regional Office, North Carolina Division of Water Quality, 610 East Center Avenue, Suite 301, Mooresville, NC 28115

## **Brown, Dionne C**

---

**From:** Huang, Herman  
**Sent:** Friday, December 16, 2011 11:44 AM  
**To:** Brown, Dionne C  
**Cc:** Gurganus, Stephen J (Steve) - HEU  
**Subject:** B-4637, B-4766, B-4814

Dionne,

We have received your EIRs for B-4637, B-4766, and B-4814. We expect to submit the CIAs to you by the requested date of June 15, 2012. Please feel free to contact us if you have any questions.

-- Herman

Herman F. Huang, Ph.D.  
Community Studies  
North Carolina Department of Transportation  
Phone: 919-707-6074  
Fax: 919-212-5785

Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

11-12-0032

**SURVEY REQUIRED FORM****PROJECT INFORMATION**

Project No: B-4766 County: Iredell  
 WBS No: 38538.1.2 Document: PCE or CE  
 F.A. No: BRSTP-0115(7) Funding:  State  Federal  
 Federal (USACE) Permit Required?  Yes  No Permit Type: unknown

*Project Description:*

NCDOT intends to replace Bridge No. 69 on NC 115 over Rocky Creek with a new structure. At the time of the cultural resources review, the alignment, location, detour route, and natural of USACE permits were unknown. Nevertheless, a broad study corridor, 500 feet (152.4 meters) wide and 2000 feet (609.6 meters) long was proposed.

**SUMMARY OF CULTURAL RESOURCES REVIEW – SURVEY REQUIRED***Brief description of review activities, results of review, and conclusions:*

An examination of the maps and files archived at the North Carolina Office of State Archaeology was conducted on January 5, 2011. While no previously identified archaeological sites were recorded within the current APE for the proposed bridge replacement project, local topography suggests a relatively good probability for archaeological resources. The mapping from the Iredell County soil survey suggests much of this same area may be moderately eroded (a situation that will degrade the integrity of any archaeological sites in the area). A reconnaissance investigation to determine the necessity and efficacy of subsurface testing is recommended.

**SUPPORT DOCUMENTATION**

See attached: Aerial photograph of the study area; detail of the Osbornville, NC (1970) 7.5-minute series topographic map; NRCS web soil survey information (<http://websoilsurvey.nrcs.usda.gov/app/>).

**FINDING BY NCDOT CULTURAL RESOURCES PROFESSIONAL -- SURVEY REQUIRED**

Archaeology

Historic Architecture

(circle one)

  
 NCDOT Cultural Resources Specialist

01-31-12

Date

 \_\_\_\_\_  
 Proposed fieldwork completion date



SR 1597- RACE PATH ROAD

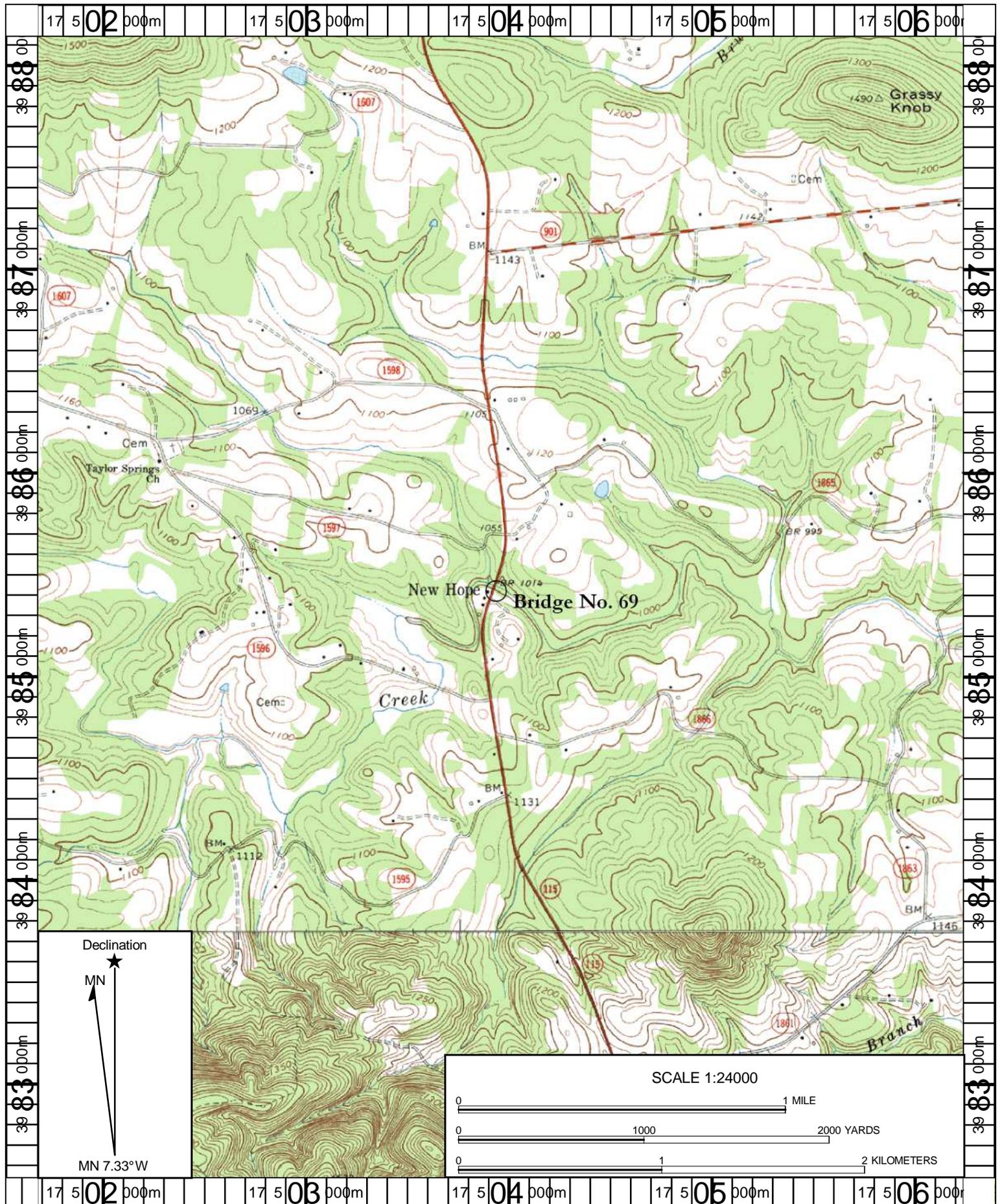
NC 115



NORTH CAROLINA DEPARTMENT  
OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
PROJECT DEVELOPMENT AND  
ENVIRONMENTAL ANALYSIS BRANCH

IREDELL COUNTY  
REPLACE BRIDGE NO. 69 ON NC 115  
OVER ROCKY CREEK  
B-4766

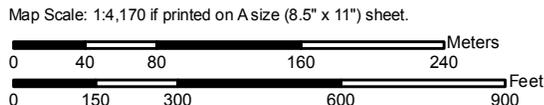
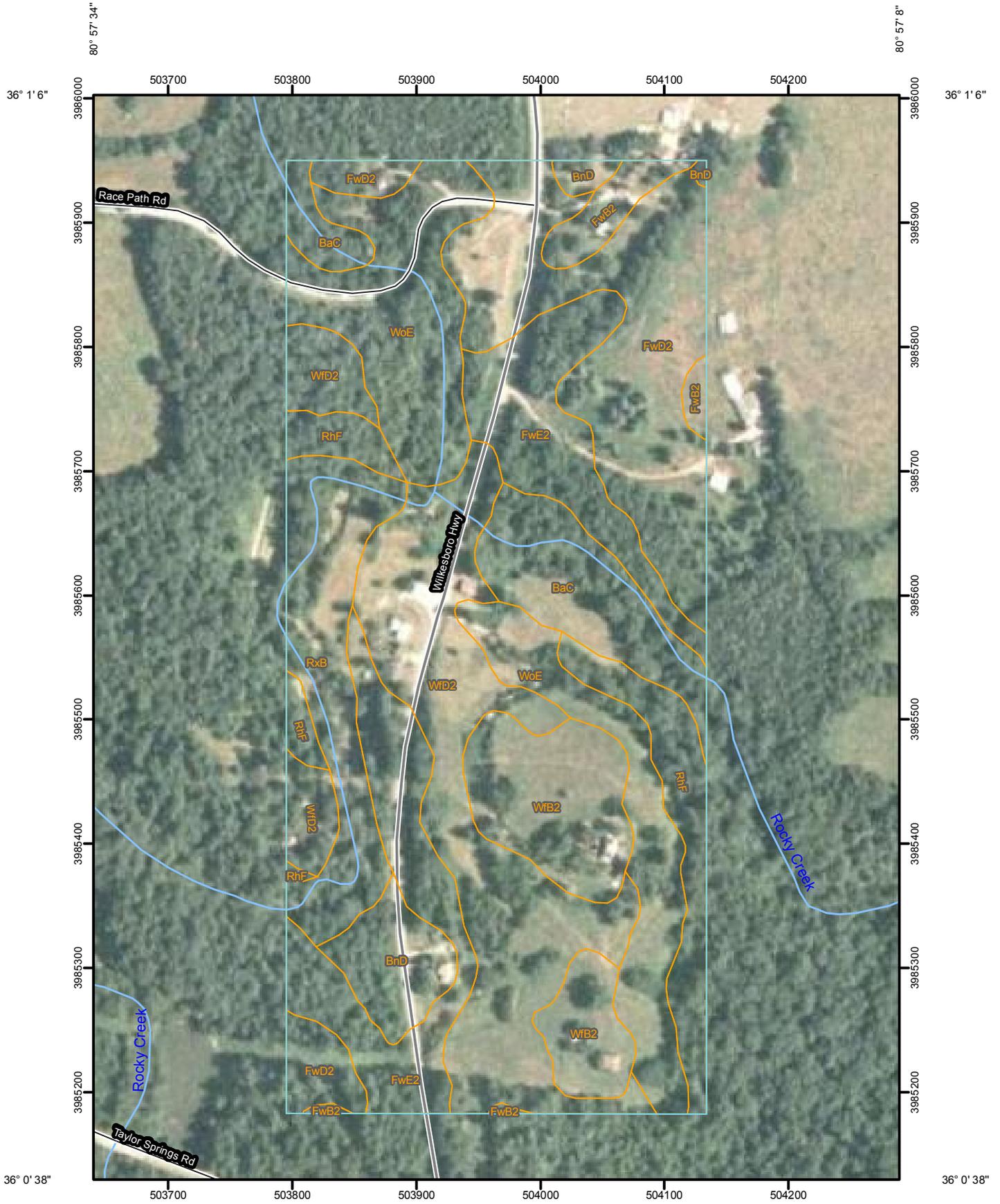
1" = 400'



Name: OSBORNVILLE (NC)  
 Date: 1970  
 Scale: 1 inch = 2,000 ft.

Location: 17 0503954 E 3985343 N

(B-4766 replacement of Bridge No. 69 on NC 115)



## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Units

### Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

 Very Stony Spot

 Wet Spot

 Other

### Special Line Features

-  Gully
-  Short Steep Slope
-  Other

### Political Features

 Cities

### Water Features

 Streams and Canals

### Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

## MAP INFORMATION

Map Scale: 1:4,170 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
Coordinate System: UTM Zone 17N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Iredell County, North Carolina  
Survey Area Data: Version 17, Mar 18, 2011

Date(s) aerial images were photographed: 7/17/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Iredell County, North Carolina (NC097)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BaC	Bandana-Tate-Nikwasi complex, 0 to 15 percent slopes, frequently flooded	4.4	6.9%
BnD	Braddock-Clifford complex, 8 to 15 percent slopes	2.3	3.5%
FwB2	Fairview sandy clay loam, 2 to 8 percent slopes, moderately eroded	1.3	2.0%
FwD2	Fairview sandy clay loam, 8 to 15 percent slopes, moderately eroded	10.6	16.5%
FwE2	Fairview sandy clay loam, 15 to 25 percent slopes, moderately eroded	8.8	13.8%
RhF	Rhodhiss-Stott Knob complex, 25 to 60 percent slopes, stony	4.0	6.1%
RxB	Ronda-Comus complex, 0 to 5 percent slopes, occasionally flooded	5.0	7.8%
WfB2	Woolwine-Fairview-Westfield complex, 2 to 8 percent slopes, moderately eroded	5.4	8.4%
WfD2	Woolwine-Fairview-Westfield complex, 8 to 15 percent slopes, moderately eroded	12.5	19.4%
WoE	Woolwine-Fairview-Westfield complex, 15 to 25 percent slopes, stony	10.0	15.6%
<b>Totals for Area of Interest</b>		<b>64.3</b>	<b>100.0%</b>



**North Carolina Department of Cultural Resources**  
**State Historic Preservation Office**

Ramona M. Bartos, Administrator

Governor Pat McCrory  
Secretary Susan Kluttz

Office of Archives and History  
Deputy Secretary Kevin Cherry

September 29, 2014

MEMORANDUM

TO: Vanessa Patrick  
Human Environment Unit  
NC Department of Transportation

FROM: Renee Gledhill-Earley   
Environmental Review Coordinator

SUBJECT: Replace Bridge 69 on NC 115 over Rocky Creek, B-4766, PA 11-12-0032,  
Iredell County, ER 14-1925

Thank you for transmitting the Historic Structure Survey Report for above-referenced undertaking. We have reviewed the report and offer the following comments.

We do not concur with the report's evaluation that the Redmond's Mill Complex is eligible for listing in the National Register of Historic Places. While the mill (ID0818) was included in the Iredell County survey during the 1980s and the entire complex, including the mill, house and store, was designated as a local landmark in 1993, much has changed since then. The mill has been demolished and a shed-roof section of the store is no longer standing.

Because, the key resource to the historic importance of the industrial complex was the mill, and it is no longer standing, the house and altered store do not appear to be eligible. Without the mill, and given the loss of integrity to the store, the two buildings do not retain enough integrity to portray the historic importance of the industrial complex.

While the buildings alone are not eligible for listing in the National Register, there may be reason to consider the complex eligible, if the archaeological remains of the mill are found to be significant. Thus, we will await the results of the archaeological survey and testing of the site before offering a final opinion on the complex's being able to qualify for listing in the National Register under Criterion A for industry.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact me at 919-807-6579 or [renee.gledhill-earley@ncdcr.gov](mailto:renee.gledhill-earley@ncdcr.gov). In all future communication concerning this project, please site the above referenced tracking number.

cc: Mary Pope Furr, NCDOT  
Matt Wilkerson, NCDOT

[mfurr@ncdot.gov](mailto:mfurr@ncdot.gov)  
[mtwilkerson@ncdot.gov](mailto:mtwilkerson@ncdot.gov)

**APPENDIX C**  
**FARMLAND CONVERSION**

U.S. Department of Agriculture

**FARMLAND CONVERSION IMPACT RATING**

<b>PART I (To be completed by Federal Agency)</b>		Date Of Land Evaluation Request 2/13/13			
Name Of Project B-4766		Federal Agency Involved FHWA			
Proposed Land Use Bridge replacement		County And State Iredell, NC			
<b>PART II (To be completed by NRCS)</b>		Date Request Received By NRCS 2/13/2013			
Does the site contain prime, unique, statewide or local important farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form).</i>		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Acres Irrigated -	Average Farm Size 115 AC
Major Crop(s) HAY, SOYBEANS, CORN	Farmable Land In Govt. Jurisdiction Acres: 284,606 % 75	Amount Of Farmland As Defined In FPPA Acres: 240,557 % 63			
Name Of Land Evaluation System Used Iredell	Name Of Local Site Assessment System -	Date Land Evaluation Returned By NRCS 2/15/2013			
<b>PART III (To be completed by Federal Agency)</b>		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly		1.5			
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site		1.5	0.0	0.0	0.0
<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>					
A. Total Acres Prime And Unique Farmland		-			
B. Total Acres Statewide And Local Important Farmland		1.0			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted		0			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value		73			
<b>PART V (To be completed by NRCS) Land Evaluation Criterion</b> Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)		43	0	0	0
<b>PART VI (To be completed by Federal Agency)</b> Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))		Maximum Points			
1. Area In Nonurban Use		15	15		
2. Perimeter In Nonurban Use		10	6		
3. Percent Of Site Being Farmed		20	5		
4. Protection Provided By State And Local Government		20	0		
5. Distance From Urban Builtup Area		15	15		
6. Distance To Urban Support Services		15	15		
7. Size Of Present Farm Unit Compared To Average		10	0		
8. Creation Of Nonfarmable Farmland		10	0		
9. Availability Of Farm Support Services		5	5		
10. On-Farm Investments		20	5		
11. Effects Of Conversion On Farm Support Services		10	0		
12. Compatibility With Existing Agricultural Use		10	0		
TOTAL SITE ASSESSMENT POINTS		160	66	0	0
<b>PART VII (To be completed by Federal Agency)</b>					
Relative Value Of Farmland (From Part V)		100	0/43	0	0
Total Site Assessment (From Part VI above or a local site assessment)		160	66	0	0
TOTAL POINTS (Total of above 2 lines)		260	66/109	0	0
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/>			
Reason For Selection:					

(See instructions on reverse side)

This form was electronically produced by National Production Services Staff

Form AD-1006 (10-83)