

**Granville County
Bridge No. 84 on SR 1141
over Tar River.
Federal Aid Project No. BRZ-1141(10)
W.B.S. No. 33477.1.1
State Project No. 8.2371301
T.I.P. No. B-4124**

CATEGORICAL EXCLUSION

UNITED STATES DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

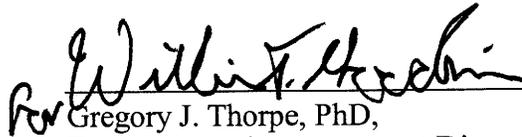
AND

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

10/22/07

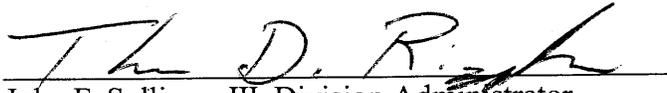
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Gregory J. Thorpe, PhD,
Environmental Management Director, PDEA

11/05/2007

DATE



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

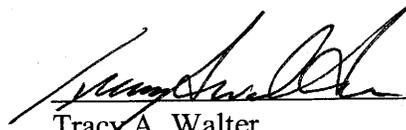
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CATEGORICAL EXCLUSION

Documentation Prepared in
Project Development and Environmental Analysis Branch By:

10/19/07

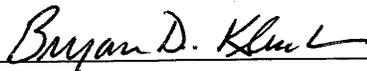
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Tracy A. Walter
Project Planning Engineer
Bridge Project Development Unit

10/19/07

DATE



Bryan D. Kluchar, PE
Project Engineer
Bridge Project Development Unit



PROJECT COMMITMENTS

**Granville County
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Division 5 Construction

The contractor will be required to submit for approval a bridge demolition plan before demolition can begin. The Resident Engineer will be required to send a copy of the demolition plan to USFWS for review and comment.

In order to have time to adequately reroute school busses, Granville County Schools should be contacted at least one month prior to road closure.

Granville County Emergency Services needs to be contacted at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

This project falls within the Tar-Pamlico river basin. Tar-Pamlico riparian buffer rules shall apply.

Install special sediment control fence along the top of the stream bank. Install silt fence along the toe of slope parallel to the stream. Once the disturbed areas of the project draining to the special sediment control fence have been stabilized, the special sediment control fence and all built up sediment adjacent to the fence will be removed to natural ground and stabilized with a native grass mix.

A temporary access road for conveying construction equipment in the floodplain/buffer will be stabilized with rock or timber matting. A rock work pad or timber matting will also be utilized between the streambank and the interior bent in the river for removal of the interior bent. The contractor may use a tarp placed around the interior bent to further minimize debris in the water.

Embankment construction and grading shall be managed in such a manner to prevent surface runoff/drainage from discharging in the riparian buffer at all times. All interim surfaces will be graded to drain to temporary erosion control devices. Temporary berms, ditches, etc. will be incorporated as necessary to prevent temporary runoff from discharging into the riparian buffer.

The NCDOT resident engineer is responsible for providing a written invitation to the North Carolina Wildlife Resource Commission: Non-game and Protected Species Branch and the US Fish and Wildlife Service prior to attend the Pre-Construction meeting.

Division 5 Construction, Roadside Environmental Unit

Design standards in sensitive watersheds will apply.

PD & EA Natural Environment Unit

NCDOT will complete a pre-construction mussel survey approximately 1-2 months prior to LET. Any and Federally Protected mussel species will be moved out of the project footprint. The Natural Environment Unit will provide a copy of the survey report to USFWS.

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INTRODUCTION: Bridge No. 84 is included in the latest approved North Carolina Department of Transportation (NCDOT) Transportation Improvement Program and is eligible for the Federal-Aid Bridge Replacement Program. The location is shown in Figure 1. No substantial environmental impacts are anticipated. The project is classified as a Federal "Categorical Exclusion".

This project was originally processed as a "Programmatic Categorical Exclusion" that was considered to be inadequate when USFWS requested to change from an informal Section 7 consultation to a Formal Section 7 consultation under the Endangered Species Act.

I. PURPOSE AND NEED STATEMENT

NCDOT Bridge Maintenance Unit records indicate Bridge No. 84 has a sufficiency rating of 20.5 out of a possible 100 for a new structure. The bridge is considered structurally deficient due to structural appraisal of 2 out of 9 according to Federal Highway Administration (FHWA) standards and therefore eligible for FHWA's Bridge Replacement Program. In addition, the structure is considered functionally obsolete due to a deck geometry appraisal of 3 out of a possible 9.

Bridge No. 84 has a forty-nine year old timber substructure with a typical life expectancy between 40 to 50 years due to the natural deterioration rate of wood. Rehabilitation of a timber structure is generally practical only when a few members are damaged or prematurely deteriorated. However, past a certain degree of deterioration, timber structures become impractical to maintain and upon eligibility are programmed for replacement. Bridge No. 84 has approached the end of its useful life.

II. EXISTING CONDITIONS

The project is located south of Berea and west of Culbreth (see Figure 1). Development in the area is agricultural and residential in nature.

SR 1141 is classified as a rural local route in the Statewide Functional Classification System and it is not a National Highway System Route. This route is not a designated bicycle route. However, the bridge is frequently used by recreational bicyclists. The Division of Bicycle and Pedestrian Transportation requested that bicycle safe rails be added to the project. Unfortunately, the request came at a time where final plans had been completed for the

structure and such a change would have required a complete redesign. Therefore, bicycle accommodations were not accounted for on the structure.

In the vicinity of the bridge, SR 1141 has a 19-foot pavement width with grass shoulders (see Figure 3). 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 23.0 feet above the creek bed.

Bridge No. 84 is a five-span structure that consists of timber deck on I-beams with an asphalt-wearing surface. The end bents consist of timber caps on timber pile abutments, and interior bents consist of timber caps on timber piles with concrete sills. The existing bridge (see Figure 3) was constructed in 1958. The overall length of the structure is 179 feet with a clear roadway width of 20.6 feet. The posted weight limit on this bridge is 14 tons for single vehicles and 17 tons for TTST's.

There are no utilities attached to the existing structure, but overhead power lines cross the Tar River just west of the bridge. Utility impacts are anticipated to be low.

The current traffic volume of 800 vehicles per day (VPD) is expected to increase to 1,200 VPD by the year 2035. The projected volume includes two percent truck-tractor semi-trailer (TTST) and four percent dual-tired vehicles (DT). The speed limit is not posted in the project area. Four school buses cross the bridge daily on their morning and afternoon routes.

There were no accidents reported in the vicinity of Bridge No. 84 during a recent three-year period.

III. ALTERNATIVES

A. Project Description

The replacement structure will consist of a bridge approximately 230-foot 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 11-foot lanes with 5.5-foot offsets on each side. The roadway grade of the new structure will be raised approximately five-foot above the existing grade.

B. Reasonable and Feasible Alternatives

One alternative for replacing Bridge No. 84 was studied in detail and described below.

Alternate 1

Alternate 1 involves replacement of the structure along the existing roadway alignment. Improvements to the approach roadways will be required for a distance of approximately 500 feet to the west and 800 feet to the east of the new structure. Design exceptions are not required for this project. Traffic will be detoured offsite (see Figure 1) during the construction period.

NCDOT Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects considers multiple project variables beginning with the additional time traveled by the average road user resulting from the offsite detour. The offsite detour for this project would include US 158, SR 1138, and SR 1147. The majority of traffic on the road is through traffic. The detour for the average road user would result in approximately six minutes additional travel time (2.64 miles additional travel). Up to a twelve-month duration of construction is expected on this project.

Based on the Guidelines, the criteria above indicate that on the basis of delay along the detour is acceptable. Granville County Emergency Services along with Granville County Schools Transportation have also indicated that the detour is acceptable. NCDOT Division 5 has indicated the condition of all roads, bridges and intersections on the offsite detour are acceptable without improvement and concurs with the use of the detour. Therefore, no additional funds will be required for detour improvements or maintenance.

C. Alternatives Eliminated From Further Consideration

The “do-nothing” alternative will eventually necessitate closure of the bridge. This is not acceptable due to the traffic service provided by SR 1141.

“Rehabilitation” of the existing timber bridge is not considered practical due to the substructure needing repair. Replacement of existing timber substructure piles would result in a complete structure replacement.

Staged Construction was not considered practical due to the availability of an offsite detour.

A new alignment alternative which would replace the structure to the south while maintaining traffic on the existing structure was considered and eliminated due to the environmental impacts and the availability of an acceptable offsite detour.

D. Preferred Alternative

Bridge No. 84 will be replaced at the existing location as shown by Alternative 1 in Figure 2. NCDOT Division 5 concurs with the selection of Alternative 1 as the preferred alternative.

IV. ESTIMATED COSTS

The estimated costs, based on 2007 prices, are as follows:

	Alternative 1 Preferred
Structure	\$ 915,000
Roadway Approaches	\$ 506,000
Detour Structure and Approaches	- 0 -
Structure Removal	\$ 41,000
Misc. & Mob.	\$ 172,000
Eng. & Contingencies	\$ 266,000
Total Construction Cost	\$ 1,900,000
Right-of-way Costs	\$ 60,000
Utility Costs	\$ 35,000
Total Project Cost	\$ 1,995,000

V. NATURAL ENVIRONMENT

Physical Characteristics

The project area is underlain by the Large River Valleys and Flood Plain System soil region in the Piedmont physiographic province of North Carolina. Large river valleys with narrow floodplains characterize the region. Sediments in the river valleys range from gravel to sand. Sand and gravel deposits are found on existing and historic point bars in river channels, with areas of large rocky substrate. The project area is located within a relatively level, narrow floodplain valley surrounded by moderately steep valley walls. Elevations in the project area range from a high of approximately 440 feet National Geodetic Vertical Datum (NGVD) on the east and west slope of the Tar River floodplain to a low of approximately 390 feet NGVD within the Tar River channel.

Water Resources

The project area is located within sub-basin 030201 of the Tar River Basin (DWQ 1999). This area is part of USGS Hydrologic Unit 03020101 of the South Atlantic/Gulf Region. This section of the Tar River has been assigned Stream Index Number 28-(1) by the N.C. Division of Water Quality (DWQ 1997).

Classifications are assigned to waters of the State of North Carolina based on the existing or contemplated best usage of various streams or segments of streams in the basin. A best usage classification of WS-IV NSW has been assigned to this reach of the Tar River. The designation of WS-IV denotes waters protected as water supplies which are generally in moderately to highly developed watersheds. The supplemental classification of NSW is intended for waters needing additional nutrient management due to their being subject to

excessive growth of microscopic or macroscopic vegetation. No designated High Quality Waters (HQW), Outstanding Resource Waters (ORW), Water Supply I (WS-I), or Water supply II (WS-II) waters occur within 1.0 mile of the project area (DWQ 2001).

Biotic Resources

Five distinct plant communities were identified within the project area: disturbed/maintained land, mesic mixed hardwood forest, mixed pine forest, bottomland hardwood forest, and early successional bottomland hardwood forest. Plant community designations are based on a classification system utilized by the NHP.

Jurisdictional Topics

Surface Waters and Wetlands

Surface waters within the embankments of the Tar River are subject to jurisdictional consideration under Section 404 of the Clean Water Act as waters of the United States (33 CFR Section 328.3). NWI mapping indicates that the Tar River exhibits characteristics of a lower, perennial, riverine system with an unconsolidated bottom.

Vegetated wetlands are defined by the presence of three primary criteria: hydric soils, hydrophytic vegetation, and evidence of hydrology at or near the surface for a portion of the growing season. No vegetated wetlands subject to jurisdictional consideration under Section 404 of the Clean Water Act as “waters of the United States” occur within the project area.

Permits

In accordance with provisions of Section 404 of the Clean Water Act (33 USC 1344), a section 404 Nationwide Permit (NWP) 23 from the USACE is likely to be applicable for all impacts to Waters of the United States resulting from the proposed project. A NWP 33 may be required if temporary construction including cofferdams, access and dewatering are required for this project. A North Carolina Division of Water Quality (DWQ) Section 401 Water Quality General Certification is required prior to the issuance of the Section 404 NWP 23 and/or NWP 33.

Existing Bridge Removal

The existing structure will be removed using the guidelines established within the Best Management Practices for Construction and Maintenance Activities. Temporary fill anticipated to result from bridge demolition is approximately 25 cubic yards.

Federally Protected Species

Plants and animals with a federal classification of Endangered or Threatened are protected under the provisions of Section 7 and Section 9 of the Endangered Species Act of 1973. The United States Fish and Wildlife Service (USFWS) lists four species under federal protection for Granville County as of August 22, 2007.

Dwarf wedgemussel (*Alasmidonta heterodon*) **Endangered**
Biological Conclusion: May Affect, Likely to Adversely Affect

Surveys for Dwarf Wedgemussel have been conducted at the project site at 1-6 year intervals since 1986 providing either live specimens or remnant shells. Recent surveys have not produced neither a live specimen nor a shell, but have identified the area to contain excellent habitat for the Dwarf Wedgemussel. In addition, numerous other mussel species were identified to exist in the project area which are believed to commonly co-exist with the Dwarf Wedgemussel. Therefore, there is a high probability that the Dwarf Wedgemussel remains to exist in the project area.

Smooth Coneflower (*Echinacea laevigata*) **Endangered**
Biological Conclusion: No Effect

The smooth coneflower occurs in open and disturbed areas with basic soils. An evaluation of the project area determined that the disturbed/maintained road shoulders provide the only suitable habitat for smooth coneflower. Systematic surveys were conducted within the road shoulders during the site visit, but no species of smooth coneflower was found. NHP has no documentation of smooth coneflower within 2.0 miles of the project .

Harperella (*Ptilimnium nodosum*) **Endangered**
Biological Conclusion: No Effect

Harperella requires swift to moderate flowing water to prepare bare and scoured areas within the stream channel for suitable habitat. The Tar River within the project study area contains several small islands and patchy scoured shorelines. The area of suitable habitat within the Tar River and its adjacent shoreline were systematically surveyed during the field visit, but no harperella was found. NHP has no documentation of harperella in the project vicinity.

Bald Eagle (*Haliaeetus leucocephalus*) **Protected**
Biological Conclusion: Not Applicable

The bald eagle has been de-listed and is not subject to Section 7 consultation and a biological conclusion is not required. However, the bald eagle remains protected by the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act and subject to the USFWS National Bald Eagle Management Guidelines. Therefore, under the guidelines a radius up to 660 feet from the edge of the project boundary is imposed for road construction activities. No habitat or eagles were seen within 660 feet of the project boundary. The project does not contain suitable nesting, perching, or foraging habitat for the bald eagle.

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

The Historic Preservation Office (HPO) reviewed the subject project noted that at that time NCDOT was in the process of surveying and evaluating eligibility of bridges within the state for the National Register (see letter dated March 21, 2002). This bridge has since been evaluated and found not to be eligible.

Archaeology

The State Historic Preservation Office (HPO) reviewed the subject project. There are no known archaeological sites within the proposed project area, and no archaeological investigation need to be conducted.

Community Impacts

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 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 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. There are no soils classified as prime, unique, or having state or local importance in the vicinity of the project. Therefore, the project will not involve the direct conversion of farmland acreage within these classifications.

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

Noise & Air Quality

This project is exempt from the requirement to determine conformity per 40 CFR 93.126 (reconstructing bridges (no additional travel lanes)). 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 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.

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.

Section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. 303) protects the use of publicly owned parks, recreational areas, wildlife/waterfowl refuges, and historic properties. The proposed project will not require right-of-way acquisition or easement from any land protected under Section 4(f).

An examination of records at the North Carolina Department of Environment and Natural Resources, Division of Environmental Management, Groundwater Section and the North Carolina Department of Human Resources, Solid Waste Management Section revealed no underground storage tanks or hazardous waste sites in the project area.

Granville County is a participant in the National Flood Insurance Program. 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.

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 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 Granville County Planning Department.

U.S. Fish & Wildlife Service provided information relating it's concern for endangered species and requested that this project be processed through informal Section 7 consultation. In 2007, USFWS rescinded concurrence and requested the project be processed as a formal Section 7 consultation.

Response: NCDOT is providing the documentation suitable for formal consultation as required by Section 7 of the Endangered Species Act of 1973.

U.S. Army Corps of Engineers requested to be included in all correspondence relating to the formal Section 7 consultation after being advised of the change.

Response: Request granted.

Granville County Planning Department, through contact with the Division of Bicycle and Pedestrian Transportation, identified the project area as a greenway corridor and requested that accommodations be made for a future greenway trail.

Response: The NCDOT is unable to provide for this request due to the uncertainty of a location for the future greenway trail.

N.C. Division of Parks & Recreation, and the North Carolina State Historic Preservation had no special concerns.

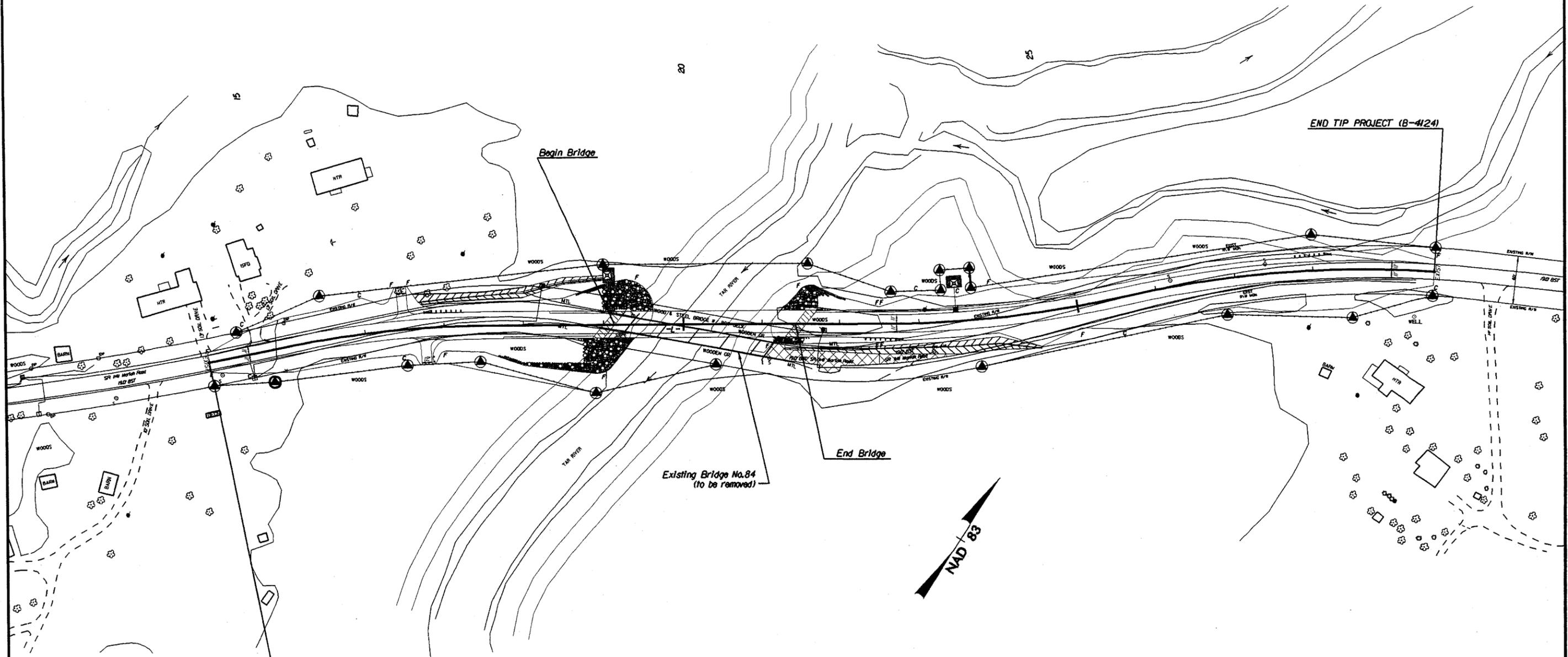
IX. PUBLIC INVOLVEMENT

A letter was sent by the Location & Surveys Unit to all property owners affected directly by this project. Property owners were invited to comment. No comments have been received to date.

There is not substantial controversy on social, economic, or environmental grounds concerning the project.

X. CONCLUSION

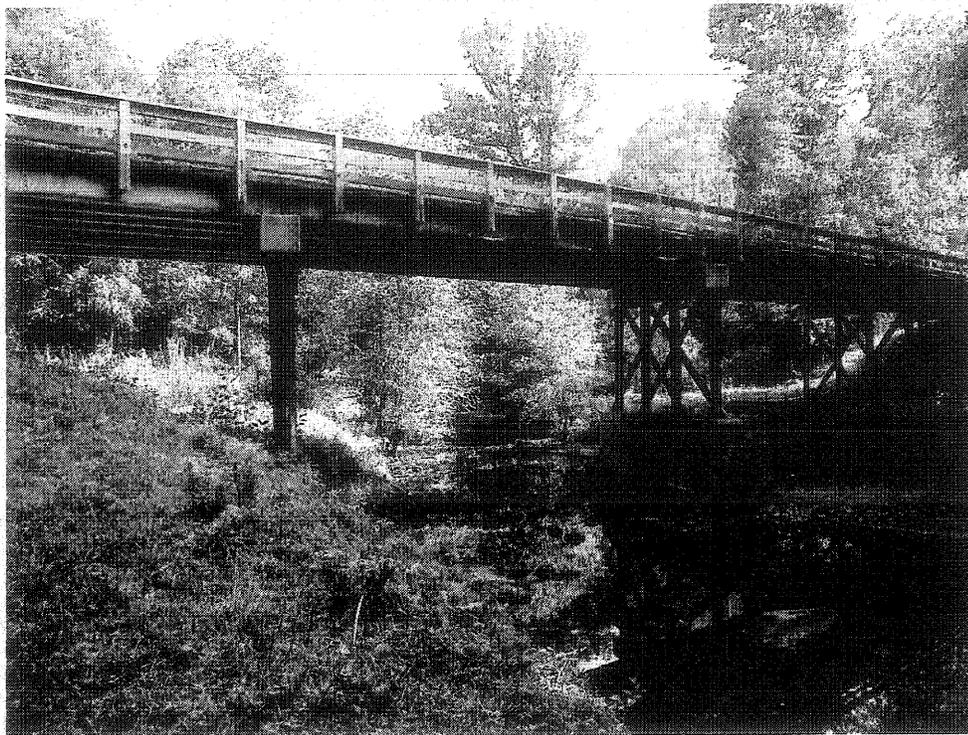
On the basis of the above discussion, it is concluded that no substantial adverse environmental impacts will result from implementation of the project. The project is therefore considered to be a federal "Categorical Exclusion" due to its limited scope and lack of substantial environmental consequences.



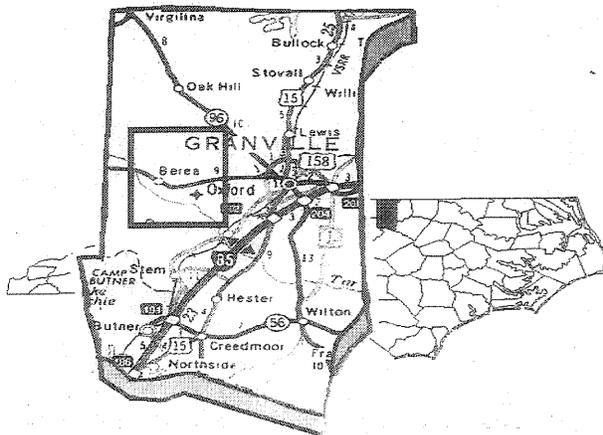
	<p>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS BRANCH</p>
<p>GRANVILLE COUNTY REPLACE BRIDGE NO. 84 ON SR 1141 OVER TAR RIVER B-4124</p>	
<p>FIGURE 2</p>	

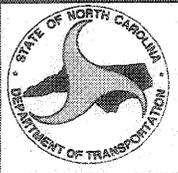


Bridge Looking West



North Side of Bridge



	<p>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS BRANCH</p>
<p>GRANVILLE COUNTY REPLACE BRIDGE NO. 84 ON SR 1141 OVER TAR RIVER B-4124</p>	
<p>Figure 3</p>	



Heather Capps

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

David L. S. Brook, Administrator

Division of Historical Resources
David J. Olson, Director

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary
Jeffrey J. Crow, Deputy Secretary
Office of Archives and History
March 21, 2002

MEMORANDUM

TO: William D. Gilmore, Manager
Project Development and Environmental Analysis Branch
Division of Highways
Department of Transportation

FROM: David Brook

SUBJECT: Replacement of Bridge 84 on SR 1141, B-4124, Granville County, ER 02-8592

We appreciate the project being plotted on the USGS quadrangle. This facilitated our review.

There are no recorded archaeological sites within the project boundaries. However, the project area has never been systematically surveyed to determine the location or significance of archaeological resources. Therefore we recommend an archaeological survey be conducted of the project area.

The principal investigator for the project will need to apply for a permit in accordance with North Carolina Archaeological Resources Protection Act (ARPA) since the project is on state-owned or controlled property. Applications for permits may be obtained from the Office of State Archaeology, 4619 Mail Service Center, Department of Cultural Resources, Raleigh, NC 27699-4619. Issuance of an ARPA permit may take up to thirty days, so applications should be submitted well in advance of the planned archaeological investigation.

Because the Department of Transportation is in the process of surveying and evaluating the National Register eligibility of all of its concrete bridges, we are unable to comment on the National Register eligibility of the subject bridge. Please contact Mary Pope Furr, in the Architectural History Section, to determine if further study of the bridge is needed.

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

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763. In all future communication concerning this project, please cite the above-referenced tracking number.

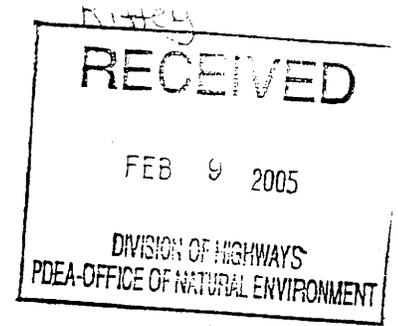
cc: Matt Wilkerson, NCDOT

	Location	Mailing Address	Telephone/Fax
Administration	507 N. Blount St. Raleigh, NC	4617 Mail Service Center, Raleigh 27699-4617	(919) 733-4763 • 733-8655
Restoration	515 N. Blount St. Raleigh, NC	4617 Mail Service Center, Raleigh, 27699-4617	(919) 733-6547 • 733-4480
Survey & Planning	515 N. Blount St. Raleigh, NC	4617 Mail Service Center, Raleigh, 27699-4617	(919) 733-4763 • 733-4480



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726



February 2, 2005

Philip Harris, III, PE
North Carolina Department of Transportation
Project Development and Environmental Analysis
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Dear Mr. Harris:

This letter is in response to your letter of January 19, 2005 which provided the U.S. Fish and Wildlife Service (Service) with the biological determination of the North Carolina Department of Transportation (NCDOT) that the replacement of Bridge No. 84 on SR 1141 over the Tar River in Granville County (TIP No. B-4124) may affect, but is not likely to adversely affect the federally endangered dwarf wedgemussel (*Alasmidonta heterodon*). In addition, NCDOT has determined that the project will have no effect on the federally protected bald eagle (*Haliaeetus leucocephalus*), harperella (*Ptilimnium nodosum*) and smooth coneflower (*Echinacea laevigata*). These comments are provided in accordance with section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

Mussel surveys conducted in 1986, 1992 and 1998 by the North Carolina Wildlife Resources Commission (NCWRC) have revealed the presence of the dwarf wedgemussel in the vicinity of Bridge No. 84. According to the information provided, subsequent surveys conducted by NCDOT and a consultant in 2002 and 2004, respectively, did not locate the dwarf wedgemussel. The 2004 survey extended 100 meters upstream and 400 meters downstream of the bridge.

Service biologists Gary Jordan and Dale Suiter met with NCDOT staff and NCWRC staff on-site on November 13, 2002 to discuss the project. During the meeting, several conservation measures were discussed and agreed upon by all parties. These conservation measures are listed in your attached November 24, 2004 Biological Evaluation.

Based on the recent mussel survey results and the commitment to the conservation measures listed in the Biological Evaluation, the Service concurs with your determination that the proposed bridge replacement may affect, but is not likely to adversely affect the dwarf wedgemussel. However, since the dwarf wedgemussel has been previously found three times at or near the site, and since the let date for the project is November 2006, we request that another survey be conducted prior to the let date. The survey should be timed so as to allow sufficient time for a formal consultation should dwarf wedgemussel be found at the site. We recommend a late 2005 or early 2006 survey. NCDOT has agreed to relocate mussels out of the project

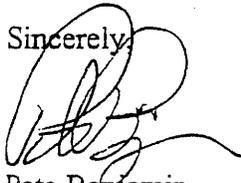
footprint and immediate vicinity. In order for NCDOT to relocate the federally endangered dwarf wedgemussel, NCDOT must have an Incidental Take Statement provided in a Biological Opinion issued by the Service. After receiving a complete Biological Assessment, the Service requires up to 135 days to complete a Biological Opinion.

In addition to relocating federally protected species, we request, at a minimum, that all federal species of concern (e.g. Atlantic pigtoe (*Fusconaia masoni*)) and the currently undescribed *Lampsilis* species be relocated to suitable habitat. We also encourage NCDOT to relocate all mussel species out of the project footprint and immediate vicinity. Mussel relocation should occur just prior to project construction. It is understood that NCDOT will develop a relocation plan with input from the Service and NCWRC.

Based on the lack of habitat, the Service concurs with your determination that the project will have no effect on the bald eagle. Based on the plant survey results, the Service concurs with your determination that the project will have no effect on harperella and smooth coneflower. We believe that the requirements of section 7(a)(2) of the ESA have been satisfied to date. We remind you that obligations under section 7 consultation must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered in this review; (2) this action is subsequently modified in a manner that was not considered in this review; or (3) a new species is listed or critical habitat determined that may be affected by this identified action.

The Service appreciates the opportunity to review this project. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520 (Ext. 32).

Sincerely,



Pete Benjamin
Ecological Services Supervisor

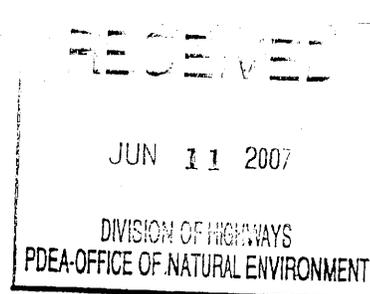
cc: Eric Alsmeyer, USACE, Raleigh, NC
Nicole Thomson, NCDWQ, Raleigh, NC
Travis Wilson, NCWRC, Creedmoor, NC
Chris Militscher, USEPA, Raleigh, NC



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

June 8, 2007



Gregory J. Thorpe, Ph.D.
North Carolina Department of Transportation
Project Development and Environmental Analysis
Attn: Deanna Riffey
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Dear Dr. Thorpe:

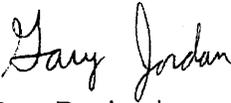
On February 2, 2005, the U.S. Fish and Wildlife Service (Service) provided concurrence with the biological determination of the North Carolina Department of Transportation (NCDOT) that the replacement of Bridge No. 84 on SR 1141 over Tar River in Granville County (TIP No. B-4124) may affect, but is not likely to adversely affect the federally endangered dwarf wedgemussel (*Alasmidonta heterodon*) and Tar spiny mussel (*Elliptio steinstansana*). The concurrence was provided in accordance with section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543). The concurrence was based, in part, upon information current at that time and upon several conservation measures that NCDOT agreed to implement.

In June 2005, NCDOT requested a modification of the conservation measures, and the Service approved the modifications. In September 2005, NCDOT made minor changes in alignment and grade designs. The Service stated that the section 7 concurrence would remain valid. In June 2007 the NCDOT again requested a modification of the conservation measures. Upon additional review of the project and after obtaining additional information regarding the dwarf wedgemussel, **the Service has decided to withdraw our previous concurrence.**

We now believe that the project has significant potential to have an adverse affect on the dwarf wedgemussel. Therefore, a formal section 7 consultation for this project is appropriate. In addition to B-4124, we believe that B-3841, B-4522, B-4523 and B-4524 should also undergo formal section 7 consultation. In the interest of streamlining the process, and due to the fact that all five projects are in the upper Tar Basin and in close proximity, we believe that a "batched" consultation would be appropriate. In other words, one Biological Assessment which addresses all five projects would be prepared by NCDOT and FHWA. In response, one Biological Opinion which addresses all five projects would be prepared by the Service. Our Biological Opinion would provide an Incidental Take Statement which would allow NCDOT to relocate any federally listed mussels should they be observed during the final preconstruction surveys.

Mr. Gary Jordan of my staff is communicating with appropriate Natural Environment Unit staff to initiate this process. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520 (Ext. 32).

Sincerely,

for 
Pete Benjamin
Field Supervisor

cc: Eric Alsmeyer, USACE, Raleigh, NC
Rob Ridings, NCDWQ, Raleigh, NC
Travis Wilson, NCWRC, Creedmoor, NC
Chris Militsher, USEPA, Raleigh, NC
John Sullivan, FHWA, Raleigh, NC
David Harris, NCDOT, Raleigh, NC