

## Type I and II Ground Disturbing Categorical Exclusion Action Classification Form

STIP Project No.	B-4786
WBS Element	38222.1.FR2
Federal Project No.	BRSTP-0013(41)

A. Project Description:

This project replaces Pitt County Bridge No. 38 on US 13 (Memorial Drive) over the Tar River. Bridge No. 38 (US 13 eastbound) will be closed during construction. Traffic will be detoured on-site during construction utilizing the US 13 westbound bridge for two-way traffic. See attached map.

B. Description of Need and Purpose:

The purpose of the project is to address a sixty-two-year-old bridge with a deteriorating concrete structure that can no longer be addressed by maintenance activities.

C. Categorical Exclusion Action Classification: (Check one)

- TYPE I  
 TYPE II

D. Proposed Improvements:

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

E. Special Project Information:

**Design –**

Traffic: Year 2017 – 13,100 vpd; Year 2039 – 17,200 vpd  
Trucks: TTST – 3%; Dual – 3%  
Rural Arterial using AASHTO Guidelines  
Design Speed – 60 mph  
No Design Exceptions Required

**Pedestrian and Bicycle Accommodations** - This portion of US 13 is not a part of a designated bicycle route nor is it listed in the State Transportation Improvement Program (STIP) as a bicycle project. The NCDOT Division of Bicycle and Pedestrian Transportation recommends 9-foot 6-inch shoulders to accommodate sidewalks and a wide outside lane for bicycle travel. Bridge No. 38 will include a 4-foot offset on the west and an 8-foot offset on the east with bicycle safe rails. The approaches will include 6-foot shoulders including 4-foot paved on the west side and 10-foot shoulders including 4-foot paved (13-foot shoulders with guardrail) on the east side.

F. Project Impact Criteria Checklists:

<u>Type I &amp; II - Ground Disturbing Actions</u>			
<u>FHWA APPROVAL ACTIVITIES THRESHOLD CRITERIA</u>			
If any of questions 1-7 are marked "yes" then the CE will require FHWA approval.		Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Does the project require an Individual Section 4(f) approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If any of questions 8 through 31 are marked "yes" then additional information will be required for those questions in Section G.			
<u>Other Considerations</u>		Yes	No
8	Does the project result in a finding of "may affect not likely to adversely affect" for listed species, or designated critical habitat under Section 7 of the Endangered Species Act (ESA)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Does the project impact anadromous fish?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Does the project impact waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14	Does the project include a Section 106 of the NHPA effects determination other than a no effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

G. Additional Documentation as Required from Section F

**Question #8:** Suitable habitat for the West Indian manatee occurs within the study area. A review of NCNHP records, updated March 2015, indicates no known occurrences of this species within 1.0 mile of the study area. NCDOT will adhere to "*Guidelines for Avoiding Impacts to the West Indian manatee, Precautionary Measures for Construction Activities in North Carolina Waters.*" The biological conclusion is "May Affect – Not Likely to Adversely Affect."

Habitat assessment and/or surveys will be performed for the Atlantic sturgeon. A review of NCNHP records, updated March 2015, indicates no known occurrences of this species within 1.0 mile of the study area. However, detailed surveys will be required to determine the presence or absence of this species. The biological conclusion is "May Affect – Not Likely to Adversely Affect."

Habitat assessment and/or surveys will be performed for the Tar River spiny mussel. A review of NCNHP records, updated March 2015, indicates no known occurrences of this species within 1.0 mile of the study area. However, detailed surveys will be required to determine the presence or absence of this species. The biological conclusion is "Unresolved."

The US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and NCDOT for the northern long-eared bat (NLEB) (*Myotis septentrionalis*) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. The programmatic determination for NLEB for the NCDOT program is "May Affect, Likely to Adversely Affect". The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Pitt County.

**Question #9:** This location of the Tar River is designated as a Primary Nursery Area and Anadromous Fish Spawning Area. Guidelines for anadromous fish passage including an in-water moratorium from February 15 to September 30 should be followed.

**Question #16:** Pitt County is a participant in the National Flood Insurance Program, administered by the Federal Emergency Management Agency (FEMA). The project is within a **Flood Hazard Zone, designated as Zone AE, for which the 100-year base flood elevations and corresponding regulatory floodway have been established.** The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project with regard to applicability of NCDOT'S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR). This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

H. Project Commitments

Pitt County  
Bridge No. 38 on US 13 over the Tar River  
Federal Project No. BRSTP-0013(41)  
WBS No. 38222.1.FR2  
STIP No. B-4786

**Anadromous Fish and Primary Nursery Area**

A moratorium on in-water work will be in place from February 15 to September 30 of any given year. Stream Crossing Guidelines for Anadromous Fish will be implemented in the design and construction of this project.

**Buffer Rules**

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

**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).

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.

**Tar River Spiny mussel**

Surveys for Tar River spiny mussel will be conducted prior to construction authorization of the project.

**West Indian Manatee**

Suitable habitat for the West Indian manatee is present in the project area. NCDOT will implement US Fish and Wildlife Service (USFWS) "*Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters*" from June to October.

**Wetlands**

Wetlands will be cleared by hand.

I. Categorical Exclusion Approval

STIP Project No. B-4786  
WBS Element 38222.1.FR2  
Federal Project No. BRSTP-0013(41)

Prepared By:

4-27-2017

Date

Clifton T Register  
Clifton T. Register, PE, Project Manager  
TGS Engineers



Prepared For:

Project Development and Environmental Analysis Unit  
North Carolina Department of Transportation

Reviewed By:

6.23.17

Date

Elmo E. Vance Jr  
Elmo Vance, Project Development Engineer  
North Carolina Department of Transportation

**Approved**

If all of the threshold questions (1 through 7) of Section F are answered "no," NCDOT approves this Categorical Exclusion.

**Certified**

If any of the threshold questions (1 through 7) of Section F are answered "yes," NCDOT certifies this Categorical Exclusion.

6.23.17

Date

Brian Yamamoto  
Brian Yamamoto, PE, Project Development Group Supervisor  
North Carolina Department of Transportation




FHWA Approved:

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

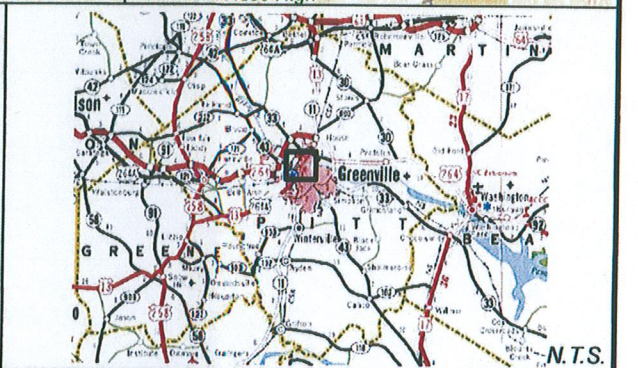
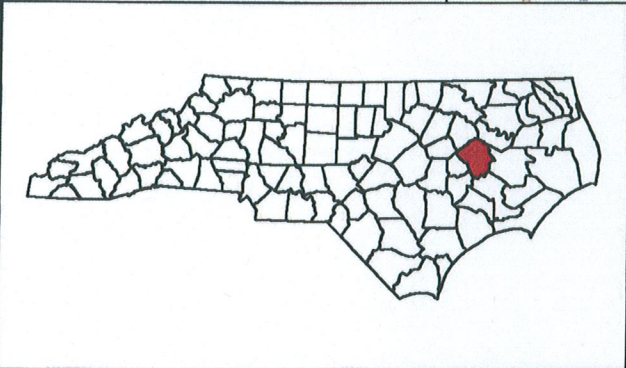
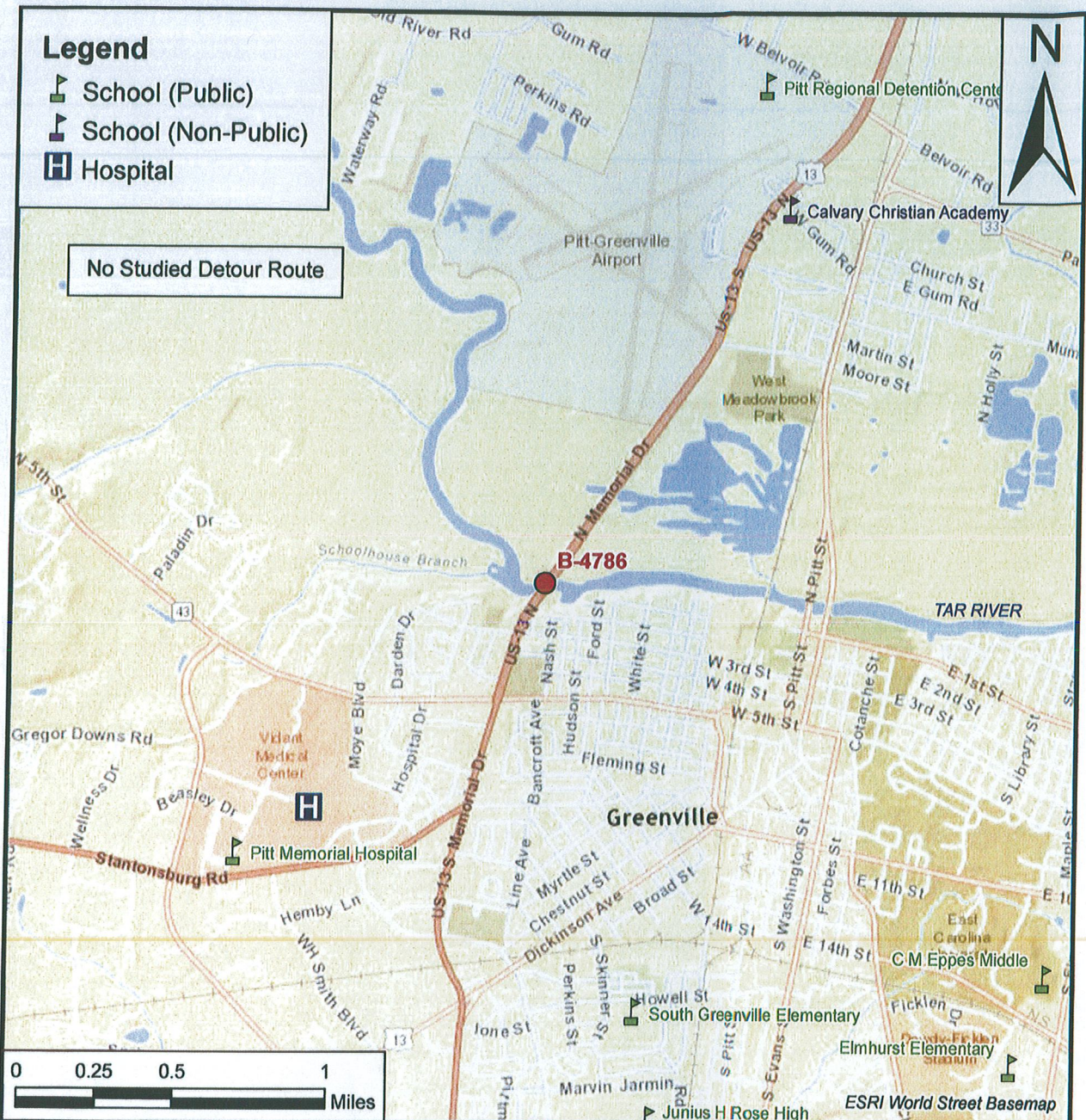
Date

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

**Legend**

-  School (Public)
-  School (Non-Public)
-  Hospital

No Studied Detour Route



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

**VICINITY MAP**  
 Pitt County, NC  
 Replace Bridge No. 38 on US 13  
 over Tar River  
 B-4786

Date: 1-8-2015

**Figure 1**

15-02-0007



**HISTORIC ARCHITECTURE AND LANDSCAPES  
NO HISTORIC PROPERTIES PRESENT OR AFFECTED FORM**

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

**PROJECT INFORMATION**

<b>Project No:</b>	B-4786	<b>County:</b>	Pitt
<b>WBS No.:</b>	38222.1.FR2	<b>Document Type:</b>	PCE
<b>Fed. Aid No:</b>	BRSTP-0013(41)	<b>Funding:</b>	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal
<b>Federal Permit(s):</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Permit Type(s):</b>	unknown
<b>Project Description:</b> Replace Bridge No. 38 on US 13 over the Tar River.			

**SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW**

- There are no National Register-listed or Study Listed properties within the project's area of potential effects.
- There are no properties less than fifty years old which are considered to meet Criteria Consideration G within the project's area of potential effects.
- There are no properties within the project's area of potential effects.
- There are properties over fifty years old within the area of potential effects, but they do not meet the criteria for listing on the National Register.
- There are no historic properties present or affected by this project. (Attach any notes or documents as needed.)

**Date of field visit:** n/a

**Description of review activities, results, and conclusions:**

On February 5, 2015 a search of NC HPOWEB GIS Service map and Pitt County Online Parcel Information System reveals one identified historic site and several properties greater than 50 years are within the Area of Potential Effects (APE) for this project. Scott Power of the Eastern Office of the NC Historic Preservation Office was contacted via email regarding the potential for an expansion of the Skinnerville-Greenville Heights Historic District. Mr. Power replied that though there are some historic churches west of the district there is not enough cohesiveness to warrant an expansion of the district. He stated that to his knowledge there are no eligible properties within the APE. On March 4, 2015 an NCDOT Architectural Historian conducted a site visit and documented properties within the APE. NCDOT agrees with Mr. Power that there are no properties which rise to the level of significance needed to be eligible for National Register listing either individually or as a historic district. The NC HPOWEB GIS Service map indicates that the C. M. Epps High School (PT 1525) is gone. NCDOT believes that building does still exist though it has been converted to a community center. The APE does border the

Historic Architecture and Landscapes NO HISTORIC PROPERTIES PRESENT OR AFFECTED form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.



parcel on which the former school is located but any project work in that area would be confined to NCDOT right-of-way which is not visible from the former school building. No historic properties will be affected by this bridge replacement.

**SUPPORT DOCUMENTATION**

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

**FINDING BY NCDOT ARCHITECTURAL HISTORIAN**

Historic Architecture and Landscapes – **NO HISTORIC PROPERTIES PRESENT OR AFFECTED**

Shelby Reap  
NCDOT Architectural Historian

March 6, 2015  
Date

15-02-0007



## NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

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



### PROJECT INFORMATION

Project No: B-4786 County: Pitt  
 WBS No: 38222.1.FR2 Document: MCS  
 F.A. No: BRSTP-0013(41) Funding:  State  Federal

Federal Permit Required?  Yes  No Permit Type: Nationwide

**Project Description:** This project proposes to replace Bridge No. 38, which carries US13 over the Tar River in Pitt County, North Carolina. According to the environmental input request, the undertaking involves the in-place replacement of the structure along the existing alignment, thereby minimizing potential surface and subsurface disturbances at this location. An off-site detour route is anticipated. The archaeological Area of Potential Effects (APE) is centered upon Bridge 38 and measures 1200ft in length (600ft from each bridge end-point) and 150ft in width (75ft from each side of the NC13 center-line).

### SUMMARY OF CULTURAL RESOURCES REVIEW

#### **Brief description of review activities, results of review, and conclusions:**

First, permitting and funding information was reviewed for determining the level of archaeological input required by state and federal laws. Because the effort is federal funded, FHWA will serve as the lead federal agency and Section 106 of the National Historic Preservation Act will apply. Next, construction design and other data was examined to define the character and extent of potential impacts to the ground surfaces embracing the improvement work. Based on the submitted project specs, the APE was designed to capture the proposed right-of-way (ROW) and any temporary construction easement locations.

Once an APE was outlined, a map review and site file search was conducted (02/06/2015) at the Office of State Archaeology (OSA). No previously documented archaeological sites are located within the APE or directly adjacent to the project study area. An inspection of National Register of Historic Places (NRHP), State Study Listed (SL), Locally Designated (LD), Determined Eligible (DE), and Surveyed Site (SS) properties employing the NCSHPO website revealed an absence of meaningful historic structural resources within the project area. Historic maps of Pitt County were appraised for former/past structure locations, land use patterns, or other confirmation of historic occupation in the project vicinity and archaeological/historical reference materials were inspected as well. In general, the cultural portion of the review confirmed that no cemeteries, significant historic properties, or documented archaeological sites will be impacted.

Further, topographic, geologic, and NRCS soil survey maps (Sw, Bb, LnA) were referenced to evaluate pedological, geomorphological, hydrological, and other environmental determinants that may have resulted in past occupation at this location. Aerial and on-ground photographs (NCDOT Spatial Data Viewer) and the Google Street View map application (when amenable) were also examined/utilized for the assessment of land surfaces and the presence of disturbances, both natural and human induced, which compromise the integrity of archaeological sites.

#### **Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:**

The general project area and APE contain no documented cultural resources. Practically the entire APE is characterized by swamp with the remaining portions poorly drained and somewhat poorly drained. Environmental parameters suggest a remote potential for the recordation of archaeological resources, significant or otherwise, in the B-4786 project area. As such, no cultural resources survey nor any other additional input is recommended for the effort.





## United States Department of the Interior

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

February 10, 2015

Tamara Makhlof  
North Carolina Department of Transportation  
Project Development and Environmental Analysis  
1548 Mail Service Center  
Raleigh, North Carolina 27699-1548

Dear Ms. Makhlof:

This letter is in response to your request for comments from the U.S. Fish and Wildlife Service (Service) on the potential environmental effects of the following proposed bridge replacements in Division 2.

TIP No.	County	Bridge No.	Road	Stream
B-4414	Beaufort	43	US 264	Pungo Creek
B-4433	Beaufort	40	SR 1932	Durham Creek Tributary
B-4709	Beaufort	14	SR 1932	Branch of Durham Creek
B-4603	Pitt	29	SR 1715	Fork Swamp
B-4605	Pitt	5	SR 1777	Chicod Creek
B-4606	Pitt	17	SR 1780	Chicod Creek
B-4607	Pitt	43	SR 1923	Swift Creek
B-4786	Pitt	38	US 13	Tar River
B-4788	Pitt	171	SR 1418	Johnson Mill Run

These comments provide information in accordance with provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543). The Service will not be attending the scheduled field scoping meetings.

### Specific Comments

#### B-4414

Although there are no records in the vicinity of this location, it is possible the federally endangered West Indian manatee (*Trichechus manatus*) could be present in Pungo Creek from June to October. The Service's **GUIDELINES FOR AVOIDING IMPACTS TO THE WEST INDIAN MANATEE: Precautionary Measures for Construction Activities in North Carolina Waters** should be implemented during this timeframe.

B-4786

The West Indian manatee has been observed in the Tar River immediately downstream of the City of Greenville. The aforementioned **GUIDELINES** should be implemented from June to October.

**General Comments**

For bridge replacement projects, the Service recommends the following general conservation measures to avoid or minimize impacts to fish and wildlife resources:

1. Wetland, forest and designated riparian buffer impacts should be avoided and minimized to the maximum extent practical;
2. If unavoidable wetland or stream impacts are proposed, a plan for compensatory mitigation to offset unavoidable impacts should be provided early in the planning process;
3. Off-site detours should be used rather than construction of temporary, on-site bridges. For projects requiring an on-site detour in wetlands or open water, such detours should be aligned along the side of the existing structure which has the least and/or least quality of fish and wildlife habitat. At the completion of construction, the detour area should be entirely removed and the impacted areas be replanted with appropriate tree species;
4. In streams utilized by anadromous fish, the NCDOT policy entitled "Stream Crossing Guidelines for Anadromous Fish Passage" should be implemented;
5. New bridges should be long enough to allow for sufficient wildlife passage along stream corridors;
6. Where possible, avoid the use of riprap on the top of the bank under bridges to allow for wildlife passage under the bridge;
7. "Best Management Practices (BMP) for Construction and Maintenance Activities" should be implemented;
8. Bridge designs should include provisions for roadbed and deck drainage to flow through a vegetated buffer prior to reaching the affected stream. This buffer should be large enough to alleviate any potential effects from run-off of storm water and pollutants;
9. Bridge designs should not alter the natural stream and stream-bank morphology or impede fish passage. To the extent possible, piers and bents should be placed outside the bank-full width of the stream; and
10. Bridges and approaches should be designed to avoid any fill that will result in damming or constriction of the channel or flood plain. If spanning the flood plain is not feasible, culverts should be installed in the flood plain portion of the approach to restore some of

the hydrological functions of the flood plain and reduce high velocities of flood waters within the affected area.

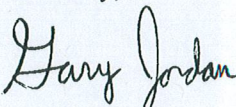
Section 7(a)(2) of the Endangered Species Act requires that all federal action agencies (or their designated non-federal representatives), in consultation with the Service, insure that any action federally authorized, funded, or carried out by such agencies is not likely to jeopardize the continued existence of any federally threatened or endangered species. To assist you, a county-by-county list of federally protected species known to occur in North Carolina and information on their life histories and habitats can be found on our web page at [http://www.fws.gov/raleigh/species/cntylist/nc\\_counties.html](http://www.fws.gov/raleigh/species/cntylist/nc_counties.html) .

Although the North Carolina Natural Heritage Program (NCNHP) database does not indicate any known occurrences of listed species near the project vicinities, use of the NCNHP data should not be substituted for actual field surveys if suitable habitat occurs near the project sites. The NCNHP database only indicates the presence of known occurrences of listed species and does not necessarily mean that such species are not present. It may simply mean that the area has not been surveyed. If suitable habitat occurs within the project vicinities for any listed species, surveys should be conducted to determine presence or absence of the species.

If you determine that the proposed actions may affect (i.e. likely to adversely affect or not likely to adversely affect) a listed species, you should notify this office with your determination, the results of your surveys, survey methodologies and an analysis of the effects of the actions on listed species, including consideration of direct, indirect and cumulative effects, before conducting any activities that might affect the species. If you determine that the proposed actions will have no effect (i.e. no beneficial or adverse, direct or indirect effect) on listed species, then you are not required to contact our office for concurrence.

The Service appreciates the opportunity to comment on these projects. 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

Electronic copy: Tom Steffens, USACE, Washington, NC



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

MEMORANDUM:

TO: Tamara Makhlof, Project Development Engineer NCDOT

FROM: Shane Staples, DCM Fisheries Resource Specialist

SUBJECT: Project development analysis for bridge replacement project to be let in 2019-2020

DATE: 2/26/15

A North Carolina Division of Coastal Management (DCM) Fisheries Resource Specialist has reviewed the list of bridges to be replaced for possible impacts fish and fish habitats. Possible environmental concerns are listed below by TIP number for each bridge project.

- B-4414 – Pungo Creek is not a listed PNA (Primary Nursery Area) water body but is a highly productive coastal creek and provides winter refuge for speckled trout. In-water and on shore work for this project should take precautions to prevent excessive turbidity caused by construction. Turbidity curtains may be requested for in-water work depending on its extent.
- B-4433 – Avoidance and minimization of impacts to adjacent wetlands and sediment prevention measures.
- B-4709 – Avoidance and minimization of impacts to adjacent wetlands and sediment prevention measures.
- B-4603 – Avoidance and minimization of impacts to adjacent wetlands and sediment prevention measures.
- B-4605 – Avoidance and minimization of impacts to adjacent wetlands and sediment prevention measures.
- B-4606 – Avoidance and minimization of impacts to adjacent wetlands and sediment prevention measures.
- B-4607 – Avoidance and minimization of impacts to adjacent wetlands and sediment prevention measures.

- B-4786 – The Tar River is designated as an AFSA (Anadromous Fish Spawning Area) by the North Carolina Division of Marine Fisheries. A moratorium on in-water work from February 15 – June 30 to protect anadromous fish (striped bass, river herring, alewife, hickory and American Shad) during their annual spawning migration would be applied to this project.
- B-4788 – Avoidance and minimization of impacts to adjacent wetlands and sediment prevention measures.

Contact Shane Staples at (252) 948-3950 or [shane.staples@ncdenr.gov](mailto:shane.staples@ncdenr.gov) with further questions or concerns.





## ☒ North Carolina Wildlife Resources Commission ☒

Gordon Myers, Executive Director

### MEMORANDUM

**TO:** Chris Rivenbark  
NCDOT, Nature Environment Section

**FROM:** Travis Wilson, Highway Project Coordinator  
Habitat Conservation Program

**DATE:** January 30, 2015

**SUBJECT:** 2015 Bridge Replacements

Biologists with the N. C. Wildlife Resources Commission (NCWRC) have reviewed the information provided and have the following preliminary comments on the subject project. Our comments are provided in accordance with provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d).

Our standard recommendations for bridge replacement projects of this scope are as follows:

1. We generally prefer spanning structures. Spanning structures usually do not require work within the stream and do not require stream channel realignment. The horizontal and vertical clearances provided by bridges allows for human and wildlife passage beneath the structure, does not block fish passage, and does not block navigation by canoeists and boaters.
2. Bridge deck drains should not discharge directly into the stream.
3. Live concrete should not be allowed to contact the water in or entering into the stream.
4. If possible, bridge supports (bents) should not be placed in the stream.
5. If temporary access roads or detours are constructed, they should be removed back to original ground elevations immediately upon the completion of the project. Disturbed areas should be seeded or mulched to stabilize the soil and native tree species should be planted with a spacing of not more than 10'x10'. If possible, when using temporary

reconnected to floodplain benches as appropriate. This may be accomplished by utilizing sills on the upstream and downstream ends to restrict or divert flow to the base flow barrel(s). Silled barrels should be filled with sediment so as not to cause noxious or mosquito breeding conditions. Sufficient water depth should be provided in the base flow barrel(s) during low flows to accommodate fish movement. If culverts are longer than 40-50 linear feet, alternating or notched baffles should be installed in a manner that mimics existing stream pattern. This should enhance aquatic life passage: 1) by depositing sediments in the barrel, 2) by maintaining channel depth and flow regimes, and 3) by providing resting places for fish and other aquatic organisms. In essence, base flow barrel(s) should provide a continuum of water depth and channel width without substantial modifications of velocity.

2. If multiple pipes or cells are used, at least one pipe or box should be designed to remain dry during normal flows to allow for wildlife passage.
3. Culverts or pipes should be situated along the existing channel alignment whenever possible to avoid channel realignment. Widening the stream channel must 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.
4. Riprap should 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 should be professionally designed, sized, and installed.

In most cases, we prefer the replacement of the existing structure at the same location with road closure. If road closure is not feasible, a temporary detour should be designed and located to avoid wetland impacts, minimize the need for clearing and to avoid destabilizing stream banks. If the structure will be on a new alignment, the old structure should be removed and the approach fills removed from the 100-year floodplain. Approach fills should be removed down to the natural ground elevation. The area should be stabilized with grass and planted with native tree species. If the area reclaimed was previously wetlands, NCDOT should restore the area to wetlands. If successful, the site may be utilized as mitigation for the subject project or other projects in the watershed.

#### Project specific comments:

B-4453 Camden County bridge number 19 on SR 1235 over UT: Anadromous species are found in this tributary. NCDOT should follow all stream crossing guidelines for anadromous fish passage, including an in-water work moratorium from February 15 to June 30. We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-4648 Tyrrell County bridge number 17 on SR 1105 over Riders Creek: Anadromous species are found in this portion of Riders Creek. NCDOT should follow all stream crossing guidelines for anadromous fish passage, including an in-water work moratorium from February 15 to June 30. We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-5416 Perquimans County bridge number 29 on SR 1200 over a branch of Perquimans River: We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-4527 Greene County bridge number 26 on SR 1705 over Bear Creek: We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-4569 Lenoir County bridge number 68 on SR 1515 over Groundnut Creek: We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-4593 Pamlico County bridge number 38 on NC 55 over Trent Creek: Anadromous species are found in this portion of Trent Creek. NCDOT should follow all stream crossing guidelines for anadromous fish passage, including an in-water work moratorium from February 15 to June 30. We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-4414 Beaufort County bridge number 43 on US 264 over Pungo Creek: We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-4433 Beaufort County bridge number 40 on SR 1932 over Horse Pen Swamp: Anadromous species are found in this portion of Horse Pen Swamp. NCDOT should follow all stream crossing guidelines for anadromous fish passage, including an in-water work moratorium from February 15 to June 30. We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-4605 Pitt County bridge number 5 on SR 1777 over Chicod Creek: We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-4606 Pitt County bridge number 17 on SR 1780 over Chicod Creek: We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-4607 Pitt County bridge number 43 on SR 1923 over Swift Creek: We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-4709 Beaufort County bridge number 14 on SR 1932 over Branch Durham Creek: We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-4786 Pitt County bridge number 38 on US 13 over Tar River: Tar River at this location is designated as a Primary Nursery Area. NCDOT should follow all stream crossing guidelines for anadromous fish passage, including an in-water work moratorium from February 15 to September 30. We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-4438 Brunswick County bridge number 47 on NC 211 over Branch of Juniper Creek: Juniper Creek Game Land is located within the project study area, DOT should coordinate closely with NCWRC during the design and construction of this project to avoid and minimize impacts to this area. We recommend replacing this bridge with a bridge. Standard recommendations apply.

B-4590 New Hanover County bridge number 29 on NC 133 over Smith Creek: Anadromous species are found in this portion of Smith Creek. NCDOT should follow all stream crossing guidelines for anadromous fish passage, including an in-water work moratorium from February