



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

August 16, 2007

MEMORANDUM TO: Mr. Anthony W. Roper, PE
Division One Engineer

FROM: Philip S. Harris, III, P.E., Unit Head *PHS* *E. S. Furr*
Natural Environment Unit
Project Development and Environmental Analysis Branch

SUBJECT: Currituck County, Replace Bridge No.4 on SR 1222 over
Tull Creek; T.I.P. Number B-2950; Federal-Aid Project
No. BRZ-1222(2); State Project 8.2040301

Attached are the revised green sheets for the above referenced project.

PSH/gyb

Attachment

Cc:

Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Jay Bennett, P.E., Roadway Design
Dr. David Chang, P.E., Hydraulics
Mr. Randy Garris, P.E. State Contract Officer
Mr. Art McMillan, P.E., Highway Design
Mr. Greg Perfetti, P.E., Structure Design
Mr. Mark Staley, Roadside Environmental
Mr. John F. Sullivan, FHWA
Mr. Rob Hanson, P.E., PDEA Eastern Region Unit Head
Mr. Clay Willis, Division Environmental Officer

PROJECT COMMITMENTS

Currituck County
SR 1222
Bridge No. 4 Over Tull Creek
Federal-Aid Project No. BRZ-1222(2)
State Project No. 8.2040301
TIP PROJECT B-2950

In addition to the Regional General Permit 31 Conditions, Section 404 Only Conditions, Regional Conditions, NCDOT's Guidelines for Best Management Practices for Bridge Demolition and Removal, NCDOT's Design Standards in Sensitive Watersheds, General Certification Conditions, and Section 401 Conditions of Certification, the following special commitments have been agreed to by NCDOT:

Commitments Developed During Project Development

Project Development & Environmental Analysis Branch

Bridge Demolition will be addressed at the time of permit application.

ACTION: The bridge will be removed and piles will be pulled piece-by-piece, possibly utilizing a small barge if necessary, without dropping components into Waters of the United States during construction. Best Management Practices for Bridge Demolition and Removal will be followed to avoid any temporary fill from entering Waters of the United States.

If any trees will be removed, bald eagle nest surveys will be performed as requested by the North Carolina Wildlife Resources Commission (NCWRC) in a memorandum dated July 27, 1998.

ACTION: According to NCDOT memorandum dated May 28, 2003, bald eagle surveys via canoe and small aircraft found no nests within 1500 ft. of the project site, and no nests were known to exist within one mile of the project site.

Division Engineer and Roadway Design Unit

The Stream Crossing Guidelines for Anadromous Fish Passage will be implemented as applicable.

Construction activities will adhere to the guidelines outlined in the latest edition of Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters.

If the Loggerhead Sea Turtle is observed in the project during construction, activities will cease until the turtle leaves.

The bridge will be constructed using top-down construction.

The use of 1.5:1 rock fill in the southwest quadrant canal will be investigated during the final design phase of the project to minimize aquatic impacts.

ACTION: The rock plated fill slopes were removed and replaced with a retaining wall. This change reduced impacts to the canal.

PROJECT COMMITMENTS

Jetting will not be allowed as a construction method.

3:1 side slopes will be utilized due to the fact that they will be easier to maintain stability of the slope.

A retaining wall will be utilized in the northeast quadrant to protect the existing canal from impacts.

ACTION: The retaining wall in the northeast quadrant has been removed from the plans due to a design change prior to April 2007.

Hydraulics Unit

Bridge deck drains will not be allowed to discharge directly into the water.

Roadside Environmental Unit

All restored areas will be planted with endemic vegetation, including trees, if appropriate as requested in the Corps of Engineers letter dated October 12, 1999.

Commitments Developed During Permitting

PDEA

Compensatory mitigation for the unavoidable impacts to 0.06 acres of riparian wetlands and 0.18 acres of coastal marsh wetlands associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated March 14, 2007, from William D. Gilmore, EEP Director. Pursuant to the EEP Memorandum of Agreement (MOA) between the State of North Carolina and the US Army Corps of Engineers signed on July 22, 2003, the EEP will provide 0.12 acres of restoration equivalent riparian wetlands and 0.36 acres of restoration equivalent coastal marsh wetlands in the Pasquotank River Basin (Hydrologic Cataloging Unit 03010205) in accordance with Section X of the MOA. For wetlands, a minimum of 1:1 (impact to mitigation) must be in the form of wetland restoration. The NCDOT shall, within 30 days of the issue date of this permit, certify that sufficient funds have been provided to EEP to complete the required mitigation, pursuant to Paragraph V. of the MOA.

The EEP shall coordinate closely with DCM to ensure that compensatory mitigation for permanent impacts to 0.18 acres of CAMA Coastal Wetlands as defined by 15A NCAC 07H .0205 includes a minimum of 1:1 restoration of CAMA Coastal Wetlands as defined by 15A NCAC 07H .0205. The mitigation shall be in-kind, i.e. the targeted species composition of the restored wetlands shall approximate the species composition of the impacted wetlands. The mitigation shall be implemented and in place within 3 years of the issuance of this permit.

Roadside Environmental Unit, Division 1 Construction

Due to the classification of Tulls Creek as a Primary Nursery Area, no work shall be conducted within Tulls Creek of the adjacent CAMA coastal wetlands between February 15th to September

PROJECT COMMITMENTS

30th of any year without prior approval of the N.C. Division of Coastal Management (DCM), in consultation with the N.C. Wildlife Resources Commission.

ACTION: Per the 8/16/2007 memo from Doug Hugget, Major Permits and Consistency Coordinator with NCDOT, the following moratorium language will apply to this project:

“The NCDOT will adhere to an instream moratorium of February 15 to September 30 within the waters of Tulls Creek and its adjacent wetlands during periods of inundation with an active connection to Tulls Creek.”

To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. The permittee shall provide the USACE with appropriate maps indicating the locations of proposed borrow or waste sites as soon as the permittee has that information. The permittee will coordinate with the USACE before approving any borrow or waste sites that are within 400 feet of any streams or wetlands. The permittee shall ensure that all such areas comply with condition (i) of this permit, and shall require and maintain documentation of the location and characteristics of all borrow and disposal sites associated with this project. This information will include data regarding soils, vegetation and hydrology sufficient to clearly demonstrate compliance with condition (i). All information will be available to the USACE upon request. NCDOT shall require its contractors to complete and execute reclamation plans for each waste and borrow site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the Corps of Engineers within 30 days of the completion of the reclamation work.

The pile installation practice for the bridge shall be accomplished using a pile driving and/or vibratory hammer. Should the permittee determine that another type of pile installation, such as jetting or drilled shaft construction, is preferred, additional authorization from DCM shall be required.

Bridge piles will be driven in place and no jetting of piles are permitted for this project.

Upon completion of the project, the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify DWQ when all work included in the 401 Certification has been completed.

The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.

A copy of the Water Quality Certification shall be posted on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the onsite project manager.

The authorized project is located within a primary nursery area (PNA). Therefore, in accordance with T15A:07H.0208 of the rules of the Coastal Resources Commission, no new dredging or

PROJECT COMMITMENTS

excavation within the PNA shall be permitted. Dredging in any manner, including “kicking” with boat propellers, is not authorized. This prohibition shall be applied and enforced throughout the entire existence of the permitted structure.

Pilings from the existing bridge, as well as any remnant pilings from previous bridges, shall be removed in their entirety, except that in the event that a piling breaks during removal and cannot be removed in its entirety, the piling may be cut off flush with the bed of the water body, and DCM shall be notified of each occurrence within one working day.

All construction access shall be through the use of the existing road, existing bridge and a barge. Construction access across wetlands, including the use of mats, shall require additional authorization from DCM.

In accordance with the CAMA major permit application, the existing bulkheads shall be retained.

The retaining walls shall be installed using a pile driving and/or vibratory hammer. Should the permittee determine that another type of installation is preferred, additional authorization from DCM shall be required.

The retaining walls and bulkheads shall be structurally tight so as to prevent seepage of fill materials through the structure.

The retaining walls and bulkheads shall be solid and constructed of treated wood, concrete slabs, metal sheet piles or other suitable materials approved by DCM.

The permit does not authorize any impacts to adjacent properties during construction. If unexpected impacts do occur to adjacent properties during construction, then the permittee shall notify DCM and the impacts shall be rectified prior to project completion.

No temporary impacts to wetlands or waters of the State are authorized by this permit without prior approval from DCM.

After the three existing structures have been removed from the new Right-of-Way as authorized by this permit, the property where the structures once stood shall be restored to its natural state to the maximum extent practicable. The permittee shall consult with DCM prior to initiating restoration of the affected areas to finalize requirements, which may include soil remediation, excavation, grading and/or planting of native wetland vegetation similar to the immediately surrounding wetlands if appropriate.

Turbidity curtains and silt fences shall be used to isolate all work areas from Tulls Creek, including pile installation, placement of riprap, excavation or filling. The turbidity curtains shall be installed parallel to the banks on each side of the creek. The turbidity curtains shall extend past the construction limits and be attached to the silt fences containing the work site. The turbidity curtains shall be of sufficient length to extend to the substrate. The turbidity curtains shall not fully encircle the work area or extend across Tulls Creek. The turbidity curtains shall be properly maintained and retained in the water until construction is complete and all of the

PROJECT COMMITMENTS

work area contained by the turbidity curtains has been stabilized by vegetation or other means. The turbidity curtains shall be removed when turbidity within the curtains reaches ambient levels.

No attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work.

During bridge construction, the permittee shall make every attempt to allow the same navigation that is currently possible in Tulls Creek, north and south of the existing bridge. If this is not possible, then adequate notice shall be provided to the public that navigation will be limited during construction. The notice shall include an estimate of the amount of time that the limited navigation will occur.

The permittee shall exercise all available precautions in the day-to-day operation of the facility to prevent waste from entering the adjacent waters.

Division 1 Construction, Utilities Coordination Unit

Subaqueous lines shall be placed at a minimum depth of six feet below the project depth of federal projects. In other areas they shall be installed a minimum depth of two feet below the bottom contour.

The water pipes shall be installed using a horizontal directional bore drilling method. Entry and exit points of this activity, including disposal of material from the drilling activity, shall be outside of all wetlands and waters of the State.

Any relocation of utility lines that is not specifically depicted on the attached workplan drawing(s), or described within the attached permit application, shall require approval from DCM, either under the authority of this permit, or by the utility company obtaining separate authorization. The applicant should contact the Currituck County Water Department to arrange a site visit to confirm water line locations, prior to construction.



North Carolina Department of Environment and Natural Resources
Division of Coastal Management

Michael F. Easley, Governor

James H. Gregson, Director

William G. Ross Jr., Secretary

August 16, 2007

MEMO TO: Chris Rivenbark

FROM: Doug Huggett
Major Permits and Consistency Coordinator

SUBJECT: Moratorium Relief for CAMA Permit No. 102-07, Tulls Creek Bridge (B-2950)

As you are aware, Condition No. 1 of CAMA Permit 102-07 currently reads as follows:

“Due to the classification of Tulls Creek as a Primary Nursery Area, no work shall be conducted within Tulls Creek or the adjacent CAMA coastal wetlands between February 15th to September 30th of any year without prior approval of the N.C. Division of Coastal Management (DCM), in consultation with the N.C. Wildlife Resources Commission.”

In keeping with the requirements of this condition, NCDOT entered into coordination with the Wildlife Resources Commission (WRC). Specifically, NCDOT proposed the following moratorium language to WRC staff:

The NCDOT will adhere an instream moratorium of February 15 to September 30 within the waters of Tulls Creek and its adjacent wetlands during periods of inundation with an active connection to Tulls Creek.

WRC staff have indicated that this language will satisfy their concerns at this project site. Therefore, DCM has determined that the proposed moratorium commitment language is in keeping with the spirit, purpose and intent of Condition No. 1 of Permit 102-07, and NCDOT may proceed with the project utilizing the referenced moratorium commitment that was endorsed by WRC staff.

This letter of approval should be attached to the original of Permit No. 102-07, as well as any subsequent permit refinements, and copies of all documents shall be readily available on site when a Division representative inspects the project for permit compliance. Please feel free to contact me at (252) 808-2808 should you have any questions concerning this matter.

Cc: Cathy Brittingham
Jim Hoadley

400 Commerce Avenue, Morehead City, North Carolina 28557
Phone: 252-808-2808 \ FAX: 252-247-3330 \ Internet: www.nccoastalmanagement.net

Subject: RE: B-2950 bridge demolition clarification
From: "Biddlecome, William J SAW" <William.J.Biddlecome@saw02.usace.army.mil>
Date: Mon, 6 Aug 2007 14:12:18 -0400
To: "David E. Bailey" <debailey@dot.state.nc.us>, "David Wainwright" <David.Wainwright@ncmail.net>, "Cathy Brittingham" <Cathy.Brittingham@ncmail.net>
CC: "Chris Rivenbark" <crivenbark@dot.state.nc.us>

This is acceptable.

-----Original Message-----

From: David E. Bailey [mailto:debailey@dot.state.nc.us]
Sent: Wednesday, August 01, 2007 11:22 AM
To: Biddlecome, William J SAW; David Wainwright; Cathy Brittingham
Cc: Chris Rivenbark
Subject: B-2950 bridge demolition clarification

Interested parties,

I need to make a small clarification regarding the bridge demolition information found in the original B-2950 permit application.

The Bridge Demolition section states:

"The existing bridge consists of a steel plank deck and timber and steel abutments and interior bent caps. The bridge will be removed and piles will be pulled piece-by-piece /utilizing a small barge/ without dropping components into Waters of the United States during construction. Best Management Practices for Bridge Demolition and Removal will be followed to avoid any temporary fill from entering Waters of the United States."

Although bridge demolition may require a small barge, it is also possible that the commitments to remove the bridge and piles via pulling "piece-by-piece...without dropping components into Waters of the United States during construction" can be accomplished without the use of a small barge. Thus, we would like to amend the section above with the following:

"The existing bridge consists of a steel plank deck and timber and steel abutments and interior bent caps. The bridge will be removed and piles will be pulled piece-by-piece, utilizing a small barge if necessary, without dropping components into Waters of the United States during construction. Best Management Practices for Bridge Demolition and Removal will be followed to avoid any temporary fill from entering Waters of the United States."

Though none of the permit conditions required the use of a barge, we provide this information to each of you. Please indicate via email if this clarification is acceptable. Thank you for your time. Please call me if you have any questions (919-715-7257).

-Dave Bailey

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David E. Bailey, Environmental Specialist North Carolina Department of Transportation PDEA | Natural Environment Unit

1598 Mail Service Center
Raleigh, NC 27699-1598
voice: 919.715.7257 fax: 919.715.5501
<http://www.ncdot.org/doh/preconstruct/pe/>

Subject: Re: B-2950 bridge demolition clarification

From: David Wainwright <David.Wainwright@ncmail.net>

Date: Thu, 02 Aug 2007 08:18:57 -0400

To: "David E. Bailey" <debailey@dot.state.nc.us>

CC: Bill Biddlecome <william.j.biddlecome@usace.army.mil>, Cathy Brittingham <Cathy.Brittingham@ncmail.net>, Chris Rivenbark <crivenbark@dot.state.nc.us>

As long as construction still involves disassembling the bridge piece by piece, and all measures are taken to not drop pieces in the waters as indicated in the permit application and in the e-mail, the DWQ does not object to using a barge */if necessary/*. Thank you.

David Wainwright

NCDENR, Div. of Water Qual.
Transportation Permitting Unit
David.wainwright@ncmail.net
919-715-3415

David E. Bailey wrote:

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-Dave Bailey

Subject: Re: B-2950 bridge demolition clarification

From: Cathy Brittingham <Cathy.Brittingham@ncmail.net>

Date: Fri, 10 Aug 2007 13:14:12 -0400

To: "David E. Bailey" <debailey@dot.state.nc.us>

CC: Bill Biddlecome <william.j.biddlecome@usace.army.mil>, David Wainwright <David.Wainwright@ncmail.net>, Chris Rivenbark <crivenbark@dot.state.nc.us>, Jim Hoadley <Jim.Hoadley@ncmail.net>, Lynn Mathis <Lynn.Mathis@ncmail.net>

This is acceptable.

David E. Bailey wrote:

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-Dave Bailey

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Cathy Brittingham
Transportation Project Coordinator
N.C. Division of Coastal Management
1638 Mail Service Center
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