

North Carolina Department of Environment and Natural Resources

Pat McCrory Governor Donald R. van der Vaart Secretary

March 19, 2015 Robeson County NCDWR Project No. 15-0269 Bridge No. 446 on NC 41 TIP Project No. SF-770446

APPROVAL of 401 WATER QUALITY CERTIFICATION, with ADDITIONAL CONDITIONS

Mr. Greg Burns, P.E., Division Engineer NCDOT, Division 6 PO Box 1150 Fayetteville, NC 28302

Dear Mr. Burns:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge No. 446 with a 19' 10" x 7' 8" x 76 ft aluminum box culvert on NC 41 over Gum Branch Canal in Robeson County:

Stream Impacts in the Lumber River Basin

Site	Station	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
1	Sta. 12+96 - 13+58 -L-	0	0	76	0	76	0
1	Bank Stabilization	0	0	42	20	62	0
	TOTAL	0	0	118	20	138	0

Total Stream Impact for Project: 138 linear feet.

The project shall be constructed in accordance with your application dated received March 13, 2015. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3886. This certification corresponds to the Nationwide Permit 14 issued by the Corps of Engineers. In addition, you should acquire any other federal, state or local permits before you proceed with your project including (but not limited to) Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This approval will expire with the accompanying 404 permit.

This approval is valid solely for the purpose and design described in your application (unless modified below). Should your project change, you must notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If total wetland fills for this project (now or in the future) exceed one acre, or of total impacts to streams (now or in the future) exceed 150 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you must adhere to the conditions listed in the attached certification and any additional conditions listed below.

Condition(s) of Certification:

Project Specific Conditions

- As a condition of this 401 Water Quality Certification, the bridge demolition and construction must be accomplished in strict compliance with the most recent version of NCDOT's Best Management Practices for Construction and Maintenance Activities. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
- 2. The culvert shall be installed in a manner that mimics the natural stream cross section as closely as possible, utilizing the construction of floodplain benches and/or use of sills where appropriate. Widening of the stream channel shall be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage. [15A NCAC 02H.0506(b)(2)]
- 3. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed. [15A NCAC 02H.0506(b)(2)]
- 4. For the 42 linear feet of streams being impacted due to site dewatering activities, the site shall be graded to its preconstruction contours and revegetated with appropriate native species. [15A NCAC 02H.0506(b)(2)]
- 5. Erosion control matting placed in riparian areas shall not contain a nylon mesh grid, which can impinge and entrap small animals. Matting should be secured in place with staples, stakes, or wherever possible, live stakes of native trees. Riparian areas are defined as a distance 25 feet landward from top of stream bank. [15A NCAC 02H.0506(b)(3) and (c)(3)]
- 6. The project shall be constructed in accordance with the provisions of the NCDOT's National Pollutant Discharge Elimination (NPDES) Stormwater Permit NCS000250, including the applicable requirements of the NCG01000. [15A NCAC 02B.0211].

General Conditions

- 7. Unless otherwise approved in this certification, placement of culverts and other structures in open waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact NCDWR for guidance on how to proceed and to determine whether or not a permit modification will be required. [15A NCAC 02H.0506(b)(2)]
- 8. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.

 [15A NCAC 02B.0200]
- 9. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers. [15A NCAC 02H.0506(b)(2)]
- 10. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions. [15A NCAC 02H.0506(b)(2)]

- 11. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage. [15A NCAC 02H.0506(b)(2)]
- 12. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
- 13. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water. [15A NCAC 02H.0506(b)(3) and (c)(3)]
- 14. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream. [15A NCAC 02H.0506(b)(3)]
- 15. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials. [15A NCAC 02H.0506(b)(3)]
- 16. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification. [15A NCAC 02H.0506(b)(3)]
- 17. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
- 18. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If the NCDWR determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the NCDWR may reevaluate and modify this certification. [15A NCAC 02B.0200]
- 19. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification. [15A NCAC 02H.0506(b)(2)]
- 20. A copy of this Water Quality Certification shall be maintained 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 on-site project manager. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
- 21. 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. [15A NCAC 02H.0501 and .0502]
- 22. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.
- 23. The Permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02B.0506(b)(2)]
- 24. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502(f)]
- 25. Native riparian vegetation must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction. [15A NCAC 02H.0506(b)(2)]

- 26. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities.[15A NCAC 02H.0506(b)(3) and (c)(3)]
- 27. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards [15A NCAC 02H.0506(b)(3) and (c)(3]):
 - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the North Carolina Sediment and Erosion Control Manual. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
- 28. Where placement of sediment and erosion control devices in wetlands and/or waters is unavoidable at site, they shall be removed and the natural grade restored upon completion of the project. [15A NCAC 02H.0506(b)(3) and (c)(3)]

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission. The mailing address for the Office of Administrative Hearings is:

Office of Administrative Hearings 6714 Mail Service Center Raleigh, NC 27699-6714

Telephone: (919)-431-3000, Facsimile: (919)-431-3100

A copy of the petition must also be served on DENR as follows:

Mr. Sam M. Hayes, General Counsel Department of Environment and Natural Resources 1601 Mail Service Center

This letter completes the review of the Division of Water Resources under Section 401 of the Clean Water Act. If you have any questions, please contact Mason Herndon at (910) 308-4021 or mason.herndon@ncdenr.gov.

Sincerely

S. Jay Zimmerman, Director

Division of Water Resources

Electronic copy only distribution:

Liz Haire, Wilmington US Army Corp Wilmington Field Office Jim Rerko, Division 6 Environmental Officer Gary Jordan, US Fish and Wildlife Service Travis Wilson, NC Wildlife Resources Commission NC Division of Water Resources Raleigh Central Office File Copy



North Carolina Department of Environment and Natural Resources

Pat McCrory Governor	Secretary
NCDWR Project No.:	County:
Applicant:	
Project Name:	
Date of Issuance of 401 Water Quality Ce	ertification:
any subsequent modifications, the applicant Unit, North Carolina Division of Water Research	in the 401 Water Quality Certification or applicable Buffer Rules, and is required to return this certificate to the 401 Transportation Permitting ources, 1617 Mail Service Center, Raleigh, NC, 27699-1617. This formut, the applicant's authorized agent, or the project engineer. It is not see.
Applicant's Certification	
was used in the observation of the construct	, hereby state that, to the best of my abilities, due care and diligence ion such that the construction was observed to be built within substantiality Certification and Buffer Rules, the approved plans and ls.
Signature:	Date:
Agent's Certification	
was used in the observation of the construct	, hereby state that, to the best of my abilities, due care and diligence ion such that the construction was observed to be built within substantiality Certification and Buffer Rules, the approved plans and lls.
Signature:	Date:
Engineer's Certification	
Partial Final	
Permittee hereby state that, to the best of my construction such that the construction was	, as a duly registered Professional Engineer in the State of North (periodically, weekly, full time) the construction of the project for the yabilities, due care and diligence was used in the observation of the observed to be built within substantial compliance and intent of the 401 es, the approved plans and specifications, and other supporting materials
Signature	Registration No.
Date	

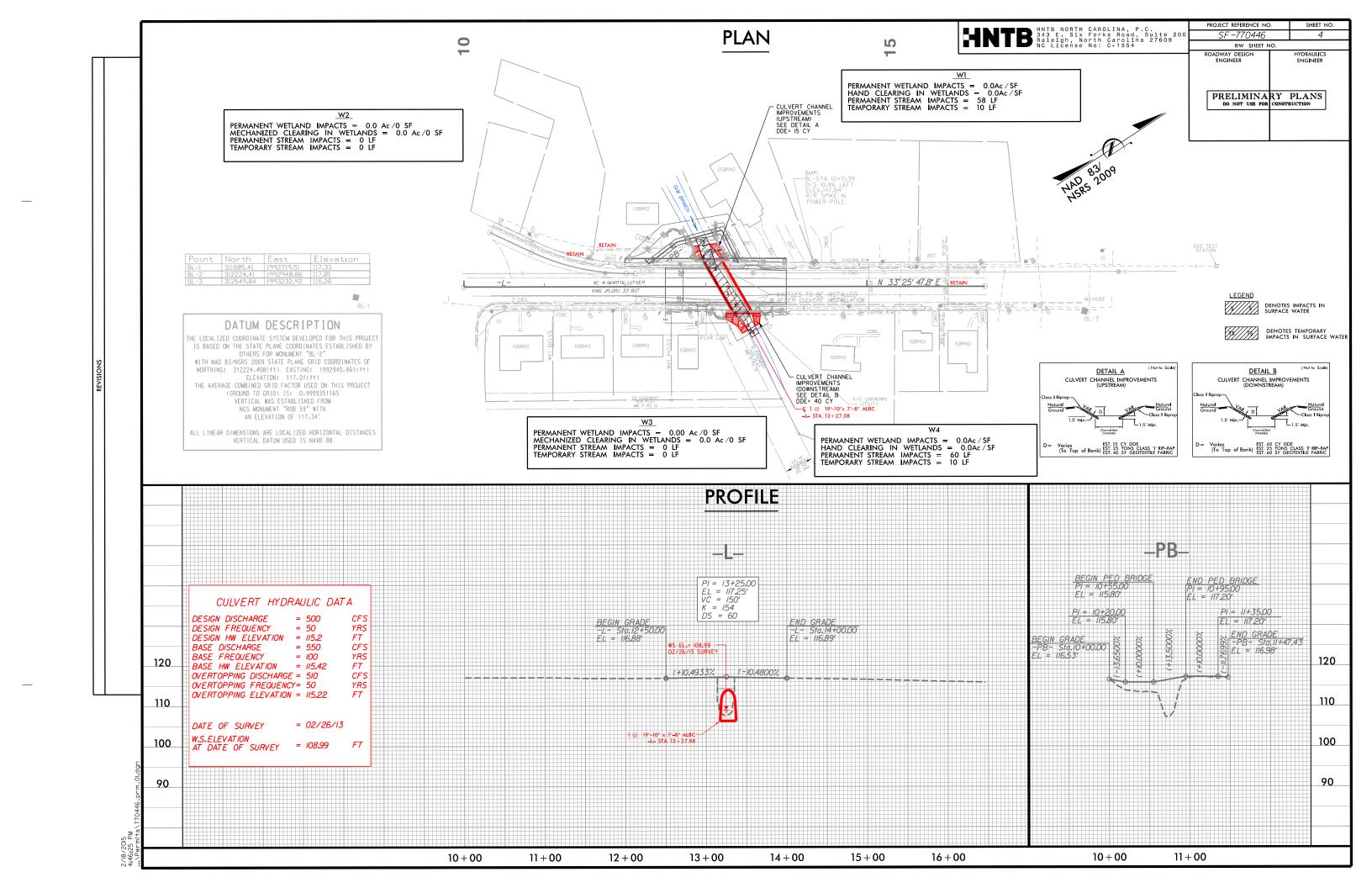


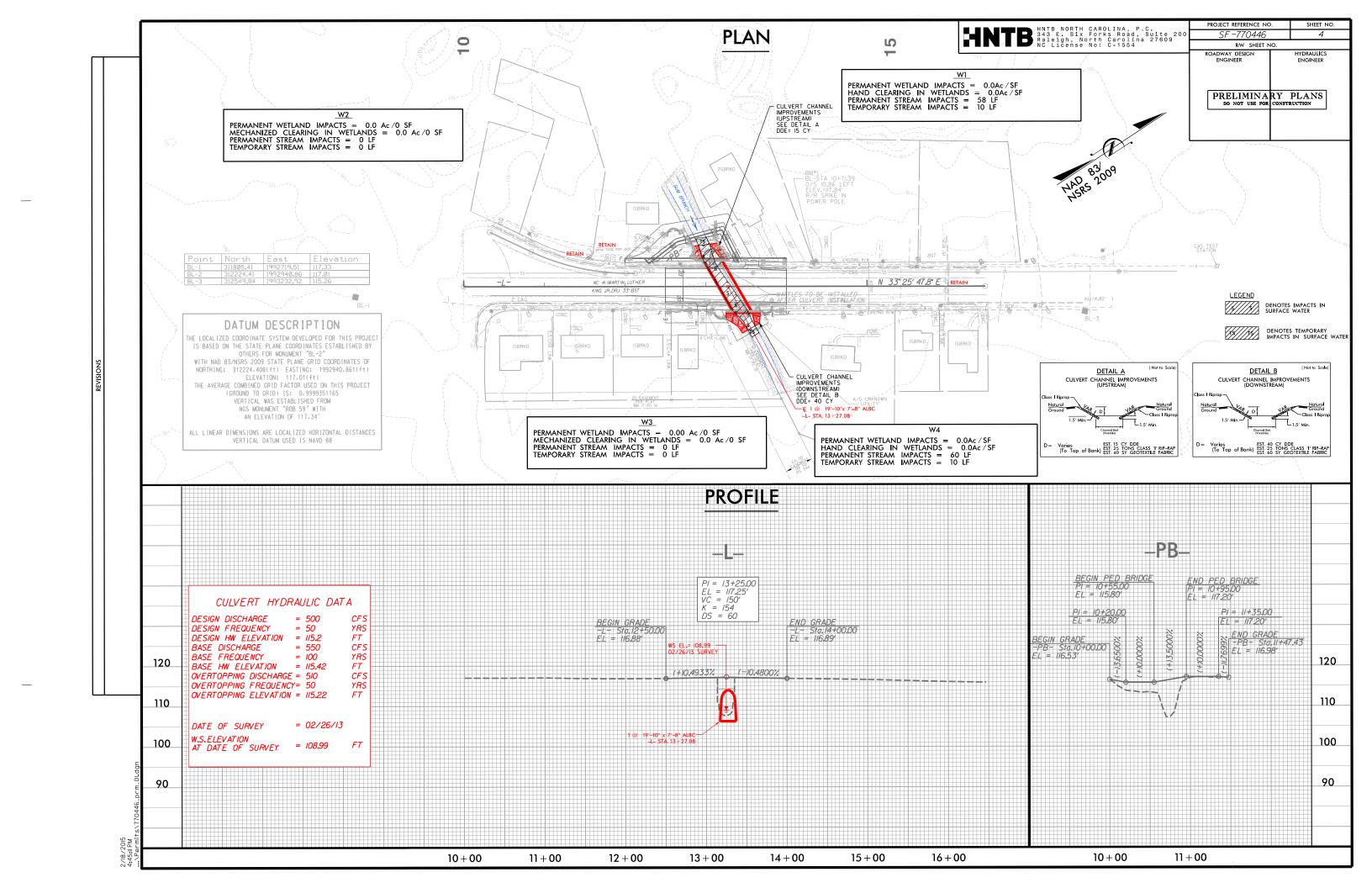
North Carolina Department of Transportation

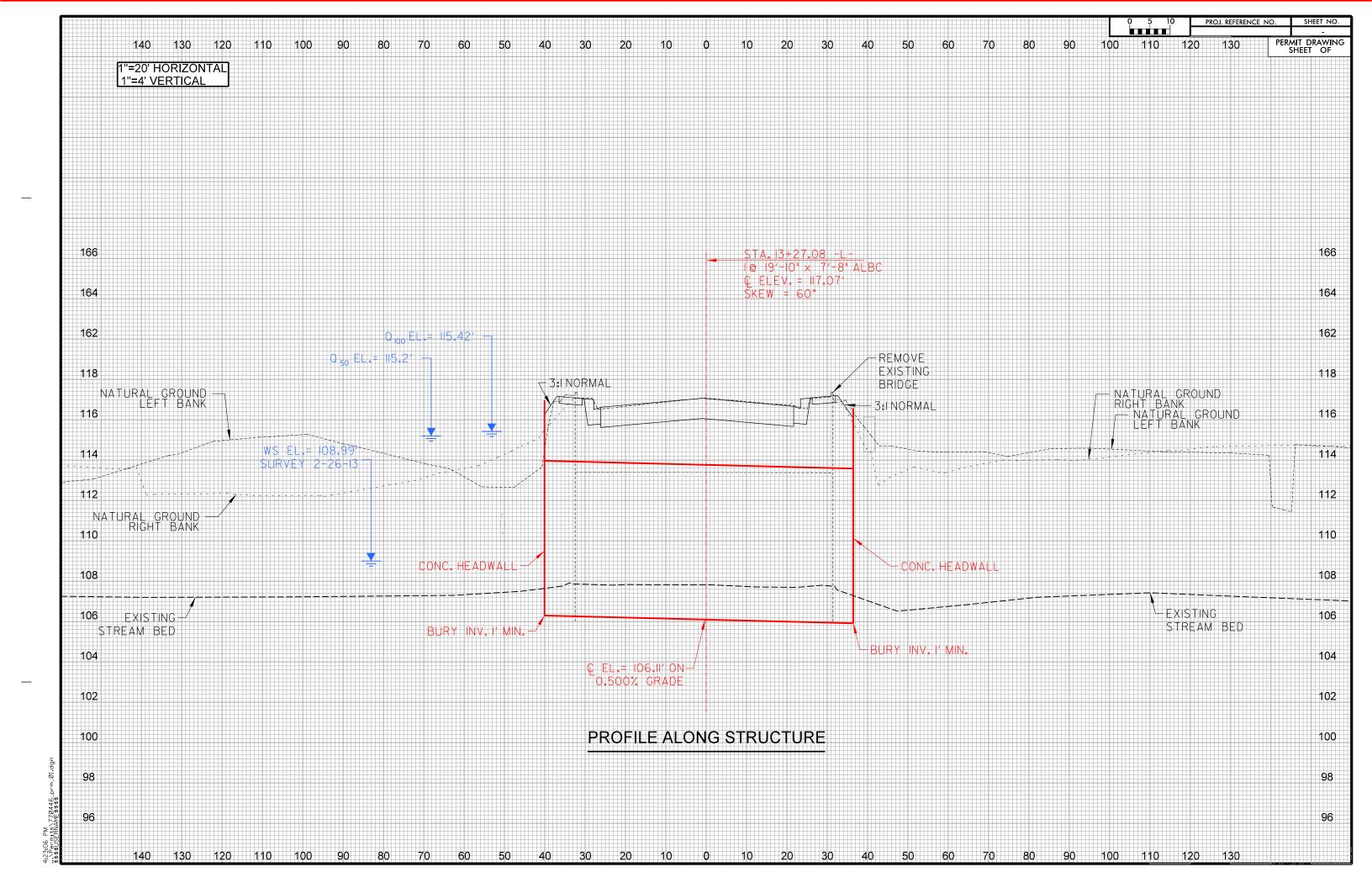


Highway Stormwater Program STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS Version 2.01; Released December 2014) WBS Element: 41665.1B TIP No.: SF-770446 County(ies): Robeson Page **General Project Information** WBS Element: 41665.1B TIP Number: SF-770446 **Project Type: Bridge Replacement** Date: 1/6/2015 NCDOT Contact: HNTB North Carolina, P.C. / John F. Watson, PE Robert T. Turnbull Contractor / Designer: Address: 524 South New Hope Rd Address: 343 E. Six Forks Road, Suite 200 Raleigh, NC 27610 Raleigh, NC 27609 Phone: (919) 212-1760 Phone: (919) 424-0444 Email: rturnbull@esinc.cc Email: ifwatson@hntb.com City/Town: Lumberton County(ies): Robeson River Basin(s): CAMA County? Nο Lumber No Wetlands within Project Limits? **Project Description** Urban Residential Project Length (lin. miles or feet): 177 ft. Surrounding Land Use: **Existing Site Proposed Project** Project Built-Upon Area (ac.) 0.20 0.19 ac. 3 - 11' Lanes trasitioning to 4 -11' lanes, with 2'-6" curb and gutter with 4' side walks on Typical Cross Section Description: 4 - 11' Lanes, with 2'-6" curb and gutter with 5' side walks on each side. Annual Avg Daily Traffic (veh/hr/day): Year: Design/Future: 24000 Year: 2035 Existing: 12000 2010 General Project Narrative: The project involves the replace of Robeson County Bridge #0466, an existing 1 @ 21' - 0" reinforced concrete deck on Steel I-Beams, with a 1 @ 19' - 10" x 7' - 8" aluminum (Description of Minimization of Water box culvert at the same location. There are no modifications to existing storm drainage systems within the project limits of SF-770446. Quality Impacts) **Waterbody Information** Surface Water Body (1): Gum Branch NCDWR Stream Index No.: 14-14-1 Primary Classification: Class C NCDWR Surface Water Classification for Water Body Supplemental Classification: Swamp Waters (Sw) Other Stream Classification: None Impairments: None Threatened/Endangered Species? Comments: NRTR Stream ID: **Buffer Rules in Effect:** N/A N/A Project Includes Bridge Spanning Water Body? Deck Drains Discharge Over Buffer? N/A Dissipator Pads Provided in Buffer? No (If yes, describe in the General Project Narrative; if no, justify in the (If yes, provide justification in the General Project Narrative) Deck Drains Discharge Over Water Body? No General Project Narrative) (If yes, provide justification in the General Project Narrative)







				WE	TLAND IMPA	CTS		MARY SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natura Strean Desigr (ft)
	-L- 12+96 - 13+58	19'-10" x 7'-8" ALBC								76		
	-L- 12+86 - 13+10 (LT)	Bank Stabilization								20	10	
	-L- 13+35 - 13+66 (RT)	Bank Stabilization								22	10	1
												-
												-
												1
												+
												+
OTALS*										118	20	0

^{*}Rounded totals are sum of actual impacts

NOTES:

 $\label{temp:temp:temp:temp} \mbox{Temp. Stream Impacts for dewatering / construction.}$

ALBC = Aluminium Box Culvert

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
02/18/2015
Robeson

SF-770446

SHEET 1 OF 1

Revised 2013 10 24

U.S. ARMY CORPS OF ENGINEERS

Wilmington District

Compensatory Mitigation Responsibility Transfer Form

Permittee: NC DOT, Mr. Greg Burns, Division 6 Engineer
Project Name: NC 41/SR 2415/ bridge 446 over Gum Swamp

Action ID: SAW-2015-00507

County: Robeson

Instructions to Permittee: The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Ecosystem Enhancement Program (NCEEP), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that to the U.S. Army Corps of Engineers (USACE) Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate mitigation Sponsors.

Instructions to Sponsor: The Sponsor must verify that the mitigation requirements (credits) shown below are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether or not they have received payment from the Permittee. Once the form is signed, the Sponsor must update the bank ledger and provide a copy of the signed form and the updated bank ledger to the Permittee, the USACE Project Manager, and the Wilmington District Mitigation Office (see contact information on page 2). The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

Permitted Impacts and Compensatory Mitigation Requirements:

Permitted Impacts Requiring Mitigation*	8-digit HUC and Basin: 03040203, Lumber River Basin

	Stream Impacts (linear feet)			Wetland Impacts (acres)						
V	/arm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal			
	76									

^{*}If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

Compensatory Mitigation Requirements:

8-digit HUC and Basin: 03040203, Lumber River Basin

	Stream	Mitigation (credi	ts)	Wetland Mitigation (credits)					
ĺ	Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal		
ĺ	76								

Mitigation Site Debited: NC DMS

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCEEP, list NCEEP. If the NCEEP acceptance letter identifies a specific site, also list the specific site to be debited).

Section to be completed by the Mitigation Sponsor

Statement of Mitigation Liability Acceptance: I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see the table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for NCEEP), as approved by the USACE, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

Mitigation Sponsor Name:					
Name of Sponsor's Authorized Representative:					
Signature of Sponsor's Authorized Representative	Date of Signature				

USACE Wilmington District Compensatory Mitigation Responsibility Transfer Form, Page 2

Conditions for Transfer of Compensatory Mitigation Credit:

- Once this document has been signed by the Mitigation Sponsor and the USACE is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the USACE is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. For authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by the Sponsor must be provided to the USACE within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the USACE has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to ensure that the USACE Project Manager (address below) is provided with a signed copy of this form.
- If changes are proposed to the type, amount, or location of mitigation after this form has been signed and returned to the USACE, the Sponsor must obtain case-by-case approval from the USACE Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the USACE administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions:

This form is not valid unless signed below by the USACE Project Manager and by the Mitigation Sponsor on Page 1. Once signed, the Sponsor should provide copies of this form along with an updated bank ledger to: 1) the Permittee, 2) the USACE Project Manager at the address below, and 3) the Wilmington District Mitigation Office, Attn: Todd Tugwell, 11405 Falls of Neuse Road, Wake Forest, NC 27587 (email: todd.tugwell@usace.army.mil). Questions regarding this form or any of the permit conditions may be directed to the USACE Project Manager below.

USACE Project Manager:

Liz Hair

USACE Field Office:

Wilmington Regulatory Field Office

US Army Corps of Engineers 69 Darlington Avenue Wilmington, NC 28403

Email:

HAIR.SARAH.E HAIR.SARAH.EA.1054693512 A.1054693512 ou=DOD, ou=PKI, ou=USA, cn=HAIR.SARAH.EA.1054693512

Digitally signed by DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, Date: 2015.04.08 17:30:09 -04'00'

April 8, 2015

USACE Project Manager Signature

Date of Signature

Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at http://ribits.usace.army.mil.

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The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at our website at http://regulatory.usacesurvey.com/ to complete the survey online.