



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

March 14, 2023

MEMORANDUM TO: Division Environmental and Construction Units

FROM: *mat* Michael A. Turchy, ECAP Group Leader
Environmental Analysis Unit

SUBJECT: Environmental Permits for the Replacement of Bridge 103 on NC 268 over Mitchell River in Surry County, Division 11, **TIP: BR-0048.**

Please find enclosed the following permits for this project:

Agency	Permit Type	Permit Expiration
US Army Corps of Engineers Section 404 Clean Water Act Permit	Nationwide Permit 14 <i>Modifies and renews 1/19/21 issuance</i>	March 14, 2026
NC Division of Water Resources Section 401 Water Quality Certification	Individual Certification No. 005554 <i>Modifies and renews 11/23/20 issuance</i>	March 14, 2026

Work is authorized by the above referenced permit provided it is accomplished in strict accordance with the permitted plans.

The Environmental Coordination and Permitting Group or the Division Environmental Office must be consulted if any deviation from the permit(s) is required.

The General Conditions and Certifications for Nationwide and Regional Permits can be referenced at:
https://xfer.services.ncdot.gov/pdea/PermIssued/_General_Conditions_and_Certifications/

PROJECT COMMITMENTS

T.I.P Project No. BR-0048
Replacement of Bridge No. 103 on NC 268
over Mitchell River
Surry County
WBS Element 67048.1.1

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

Mountains to Sea Trail

The design of the project will accommodate bicycles regarding paved shoulders and the approaches and regarding offset and bicycle safe rail on the bridge.

Mitchell River Greenway

The plans will contain a bench cut into the slope under the bridge on the east end to provide passage for a future greenway.

COMMITMENTS FROM PERMITTING

NCDOT Division 11 Construction

404 Special Condition #2: Prior to any bridge demolition or construction activities, the permittee will coordinate with Surry County Parks and Recreation and the North Carolina Wildlife Resources Commission to place signs at the Mountain Park Access (the only paddler access upstream on the Mitchell River) and the Burch Station Access. These signs will inform river users to make themselves seen and to watch for overhead construction when floating or fishing under the bridge

404 Special Condition #3: The permittee will ensure that (1) the contractor knows that the river is occasionally used by paddlers, (2) all onsite staff watch the area for river users, (3) work is halted if someone is seen approaching the bridge, and (4) all overhead work is paused until river users safely leave the area.

**U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT**

Action ID. **SAW-2020-01910 (BR-0048) Reverification #1** County: **Surry**

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Property Owner / Authorized Agent:

North Carolina Department of Transportation
Attn: Mr. Michael A. Turchy
Environmental Coordination and Permitting Group Leader

Address: **1598 Mail Service Center**
Raleigh, North Carolina 27699-1598
919-707-6157

Size and location of property (water body, road name/number, town, etc.): **The project is located at Bridge 103 (BR-0048) on NC 268 over the Mitchell River in Surry County, North Carolina.**

Description of project area and activity: **This project was originally verified on January 29, 2021, under NWP 14. Because this project cannot be completed during the valid period of the original NWP 14 verification, NCDOT requested reverification of project impacts on January 17, 2023. NCDOT also requested modification of the authorized impacts to include an additional 30' of bank stabilization at Site 1A along the Mitchell River. This 30' of additional impact for bank stabilization is the only change in project impacts. As such, in order to replace the bridge, the permittee is authorized to impact waters of the U.S. as follows:**

Summary of Authorized Impacts and Required Mitigation

Impact ID #	NWP / GP #	Open Water (ac)		Wetland (ac)		Stream (lf)	
		Temporary	Permanent	Temporary	Permanent	Temporary	Permanent
Site 1 (Mitchell River)	<u>NWP 14</u>					62' (0.02 acre)/ causeway work pad	
Site 1A (Mitchell River)	<u>NWP 14</u>						30' / bank stabilization
Site 2 (Mitchell River)	<u>NWP 14</u>					130' (0.10 acre)/ causeway work pad	
Site 3 (Mitchell River)	<u>NWP 14</u>						12' / bank stabilization
Impact Totals		0	0	0	0	192' / (0.12 acre)	42'
Total Loss of waters of the U.S. (wetlands and/or open waters in ac)		0		Total Loss of waters of the U.S. (streams in lf)		0	
Required Wetland Mitigation (ac)		0		Required Stream Mitigation (lf)		0	

Applicable Law: Section 404 (Clean Water Act, 33 USC 1344)
 Section 10 (Rivers and Harbors Act, 33 USC 403)

Authorization: Regional General Permit Number:
Nationwide Permit Number: **NWP 14**

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions, your submitted application, and the following special conditions:

Special Conditions

1. All work must be performed in strict compliance with (a) the description of work in the PCN and (b) the Wetland and Surface Water Impacts Permit Drawing(s) (Permit Plans) in the application dated January 17, 2023. Any modification to the description of work and/or the permit plans must be approved by the USACE prior to implementation.
2. Prior to any bridge demolition or construction activities, the permittee will coordinate with Surry County Parks and Recreation and the North Carolina Wildlife Resources Commission to place signs at the Mountain Park Access (the only paddler access upstream on the Mitchell River) and the Burch Station Access. These signs will inform river users to make themselves seen and to watch for overhead construction when floating or fishing under the bridge.
3. The permittee will ensure that (1) the contractor knows that the river is occasionally used by paddlers, (2) all onsite staff watch the area for river users, (3) work is halted if someone is seen approaching the bridge, and (4) all overhead work is paused until river users safely leave the area.
4. As noted in the application, the permittee will ensure that only one causeway/work pad is located in the river at a time to ensure that no more than 50% of river flow is constricted at any time.
5. The permittee shall implement all reasonable and practicable measures to ensure that equipment, structures, fill pads, work, and operations associated with this project do not adversely affect upstream and/or downstream reaches. Adverse effects include, but are not limited to, channel instability, flooding, and/or stream bank erosion. The Permittee shall routinely monitor for these effects, cease all work when detected, take initial corrective measures to correct actively eroding areas, and notify this office immediately. Permanent corrective measures may require additional authorization by the U.S. Army Corps of Engineers.
6. The permittee shall ensure that any equipment that is placed on the causeway(s) is removed when either of the following situations is forecasted or anticipated: (1) the water level will rise to a point where the equipment could be flooded (even during work days), and (2) the water level is expected to rise overnight, or over a non-work period of time, to a point where the equipment could be flooded.

7. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this authorization letter in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this authorization letter, all conditions, and any authorized modifications. A copy of this authorization letter, all conditions, and any authorized modifications, shall be available at the project site during construction and maintenance of this project.

Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order, a Class I administrative penalty, and/or appropriate legal action.

This verification will remain valid until the expiration date identified below unless the nationwide and/or regional general permit authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide and/or regional general permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all requirements of the modified nationwide and/or regional general permit. If the nationwide and/or regional general permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide and/or regional general permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide and/or regional general permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide and/or regional general permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Resources (telephone 828-296-4500) to determine Section 401 requirements.

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits.

If there are any questions regarding this verification, any of the conditions of the Permit, or the U.S. Army Corps of Engineers regulatory program, please contact Lori Beckwith at loretta.a.beckwith@usace.army.mil.

USACE Regulatory Official: Monte Matthews

Monte Matthews 2023.03.13
13:37:59 -04'00'

Date: **March 13, 2023**

Expiration Date of Verification: **March 14, 2026**

Copy furnished:

NCDOT, Ms. Erin Cheely

Action ID Number: SAW-2020-01910 (Reverification #1)

County: Surry

Permittee: NCDOT, Mr. Michael A. Turchy
Environmental Coordination and Permitting Group Leader

Project Name: NCDOT / Bridge 103 / BR-0048 / Div 11

Nationwide Permit: 14

Date Verification Issued: March 13, 2023

Project Manager: Lori Beckwith

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

US ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT
Attn: Lori Beckwith
151 Patton Avenue
Room 208
Asheville, NC 28801-5006

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. Failure to comply with any terms or conditions of this authorization may result in the U.S. Army Corps of Engineers suspending, modifying or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

RICHARD E. ROGERS, JR.
Director

February 21, 2023

Mr. Kevin Hining
NCDOT, Division 11 Environmental Officer
801 Statesville Road
North Wilkesboro, NC 28659

Subject: Reissuance of 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS for Proposed Bridge 103 on NC 268 (TIP No. BR-0048) replacement over the Mitchell River in Surry County; NCDWR Project No. 20201518v2; WQC No. WQ005554.

This Individual Certification replaces the previous issued General Certification (GC) 4135 corresponding to US Army Corps of Engineers Nationwide Permit 14, on November 23, 2020 (includes modifications as described in application received January 17, 2023).

Dear Mr. Hining:

Attached hereto is a copy of Certification No. 005554 issued to The North Carolina Department of Transportation (NCDOT) dated February 21, 2023.

This approval is for the purpose and design described in your application received on January 17, 2023. The plans and specifications for this project are incorporated by reference as part of this Water Quality Certification. If you change your project, you must notify the Division and you may be required to submit a new application package with the appropriate fee. If the property is sold, the new owner must be given a copy of this Certification and is responsible for complying with all conditions. [15A NCAC 02H .0507(d)(2)]. This Certification does not relieve the permittee of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.

This letter completes the review of the Division under section 401 of the Clean Water Act and 15A NCAC 02H .0500. Please contact Dave Wanucha at 336-403-5655 or dave.wanucha@ncdenr.gov if you have any questions or concerns.

Sincerely,
DocuSigned by:

Amy Chapman

Richard E. Rogers Jr., Director
Division of Water Resources

Electronic copy only distribution:

Loretta Beckwith, US Army Corps of Engineers, Asheville Field Office
Rebekah Reid, US Fish and Wildlife Service
David McHenry, NC Wildlife Resources Commission

File Copy



**Individual 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act
with ADDITIONAL CONDITIONS**

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500. This certification authorizes the NC Department of Transportation to impact 234 linear feet of jurisdictional streams in Surry County. The project shall be constructed pursuant to the reissuance application dated received January 17, 2023. The authorized impacts are as described below:

Stream Impacts in the Yadkin Pee Dee River Basin.

Site	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
	Bank Stabilization	Causeway	
1	-	62	-
1a	30	-	-
2	-	130	-
3	12	-	-
Totals	42	192	-

Total Stream Impacts for Project: 234 linear feet.

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 300 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(s) and any additional conditions listed below.

Condition(s) of Certification:

Project Specific Conditions

1. 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 post-construction removal of any temporary bridge structures must return the project site to its preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species where applicable. [15A NCAC 02H .0506(b)(2)]
3. All work in or adjacent to stream waters shall be conducted per approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual. [15A NCAC 02H.0506(b)(3) and (c)(3)]
4. Stormwater shall be directed to vegetated buffer areas, grass-lined ditches or other means appropriate to the site for the purpose of pre-treating storm water runoff prior to discharging directly into streams. (15A NCAC 02B.0224 and .0225)



5. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, rip-rap deck drain pads, vegetated buffers, etc.) before entering the stream. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5).
6. 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 professionally designed, sized and installed. [15A NCAC 02H.0506(b)(2)]
7. The stream channel shall be excavated no deeper than the natural bed material of the stream, to the maximum extent practicable. Efforts must be made to minimize impacts to the stream banks, as well as to vegetation responsible for maintaining the stream bank stability. Any applicable riparian buffer impact for access to stream channel shall be temporary and be revegetated with native riparian species. [15A NCAC 02H.0506(b)(2)]

General Conditions

1. 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]
2. 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)]
3. 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 the NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the NCDWR for guidance on how to proceed and to determine whether a permit modification will be required. [15A NCAC 02H.0506(b)(2)]
4. 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)]
5. 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)]
6. 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)]
7. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
8. 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]



9. 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)]
10. 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 NCDOT and the on-site project manager. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
11. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing or flagging 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]
12. 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.
13. 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)]
14. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT 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)]
15. 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)(3) and (c)(3)]
16. 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)]
17. 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.
18. Where placement of sediment and erosion control devices in wetlands and/or waters is unavoidable, they shall be removed, and the natural grade restored upon completion of the project. [15A NCAC 02H.0506(b)(3) and (c)(3)]



This approval and its conditions are final and binding unless contested [G.S. 143-215.5]. Please be aware that impacting waters without first applying for and securing the issuance of a 401 Water Quality Certification violates Title 15A of the North Carolina Administrative Code (NCAC) 2H .0500. Title 15A NCAC 2H .0500 requires certifications pursuant to Section 401 of the Clean Water Act whenever construction or operation of facilities will result in a discharge into navigable waters, including wetlands, as described in 33 Code of Federal Regulations (CFR) Part 323. It also states any person desiring issuance of the State certification or coverage under a general certification required by Section 401 of the Federal Water Pollution Control Act shall file with the Director of the North Carolina Division of Water Quality. Pursuant to G.S. 143-215.6A, these violations and any future violations are subject to a civil penalty assessment of up to a maximum of \$25,000.00 per day for each violation.

This Certification can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) within sixty (60) calendar days. Requirements for filing a Petition are set forth in Chapter 150B of the North Carolina General Statutes and Title 26 of the North Carolina Administrative Code. Additional information regarding requirements for filing a Petition and Petition forms may be accessed at <http://www.ncoah.com/> or by calling the OAH Clerk's Office at (919) 431-3000.

A party filing a Petition must serve a copy of the Petition on:

William F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601

If the party filing the Petition is not the permittee, then the party must also serve the recipient of the Certification in accordance with N.C.G.S 150B-23(a).

This 21st of February 2023

DIVISION OF WATER RESOURCES

DocuSigned by:
Amy Chapman
9C9886312DCD474...

Richard E. Rogers Jr., Director

WQC No. 005554





NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

RICHARD E. ROGERS, JR.
Director

NCDWR Project No.: _____ County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Transportation Permitting Unit, North Carolina Division of Water Resources, 1617 Mail Service Center, Raleigh, NC, 27699-1617. This form may be returned to NCDWR by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Agent's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

I, _____, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature _____ Registration No. _____

Date _____

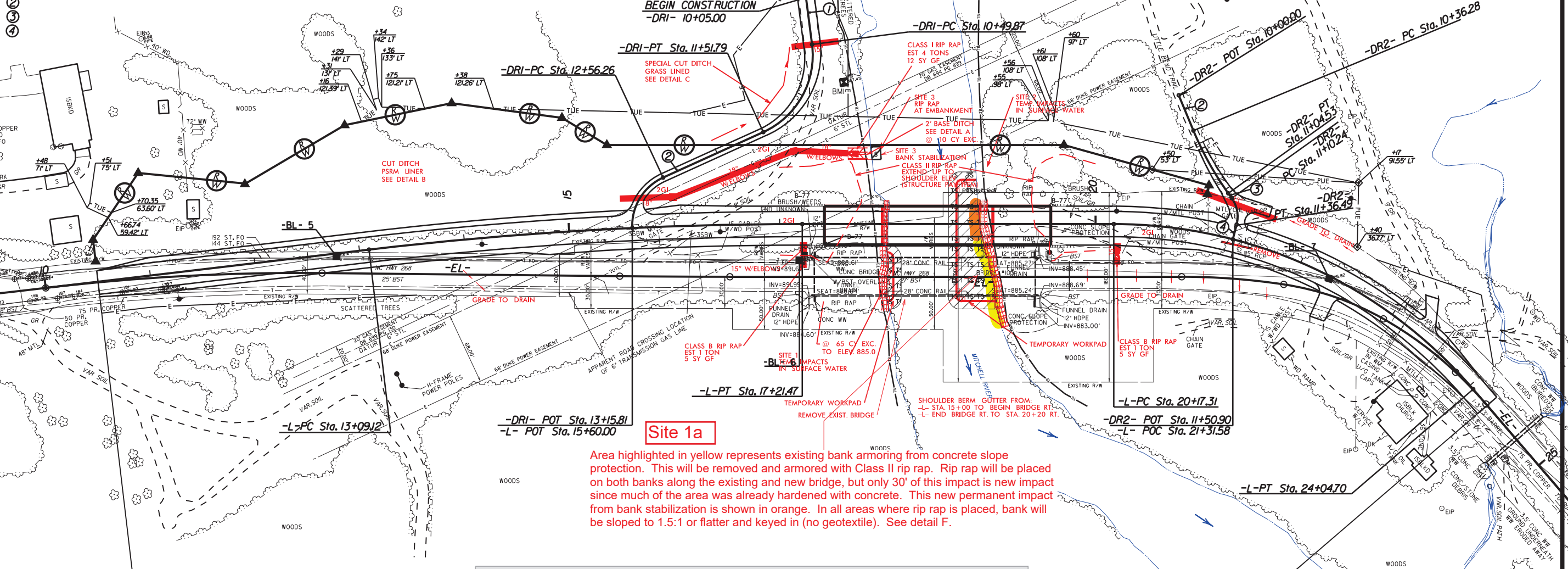
Completed hard copies can be emailed to kristilynn.carpenter@ncdenr.gov or mailed to:
NCDEQ Transportation Permitting
1617 Mail Service Center
Raleigh NC 27699-1617



PROJECT REFERENCE NO.		SHEET NO.	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

-L-		-DRI-	
PI Sta 15+15.53 Δ = 6' 45" 00.7" (RT) D = 1' 38" 13.3" L = 412.35' T = 206.41' R = 3,500.00' SE = 0.04 RO = 108'	PI Sta 22+23.93 Δ = 49' 19" 28.2" (RT) D = 12' 43" 56.6" L = 387.39' T = 206.62' R = 450.00' SE = 0.06 RO = 162' DS = 35 MPH	PI Sta 12+90.14 Δ = 68' 14" 50.7" (LT) D = 114' 35" 29.6" L = 59.56' T = 33.88' R = 50.00'	PI Sta 11+09.06 Δ = 72' 59" 19.4" (RT) D = 71' 37" 11.0" L = 101.91' T = 59.18' R = 80.00'

-DR2-	
PI Sta 10+70.55 Δ = 13' 01" 59.6" (LT) D = 19' 05" 54.9" L = 68.24' T = 34.27' R = 300.00'	PI Sta 11+24.27 Δ = 50' 08" 19.0" (RT) D = 190' 59" 09.4" L = 26.25' T = 14.03' R = 30.00'



Site 1a

Area highlighted in yellow represents existing bank armoring from concrete slope protection. This will be removed and armored with Class II rip rap. Rip rap will be placed on both banks along the existing and new bridge, but only 30' of this impact is new impact since much of the area was already hardened with concrete. This new permanent impact from bank stabilization is shown in orange. In all areas where rip rap is placed, bank will be sloped to 1.5:1 or flatter and keyed in (no geotextile). See detail F.

WETLAND AND SURFACE WATER IMPACTS PERMIT

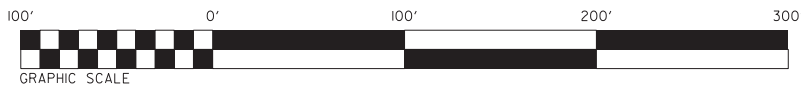
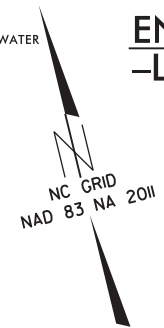
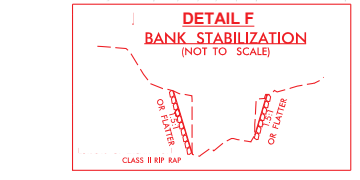
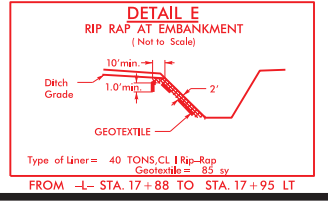
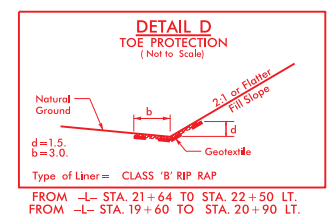
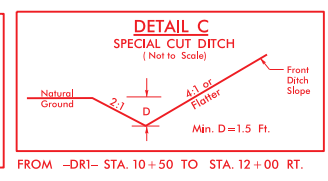
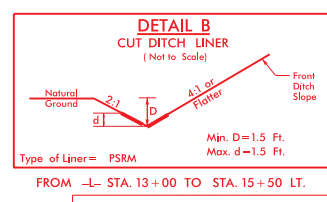
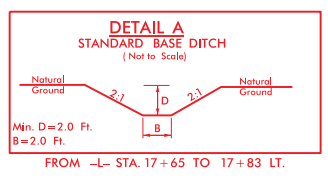
BEGIN TIP PROJECT BR-0048
-L- STA. 10 + 50.00

END TIP PROJECT BR-0048
-L- STA. 24 + 25.00

PERMIT DRAWING
SHEET 2 OF 7

- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES IMPACTS IN SURFACE WATER

ONLY ONE WORKPAD CAN BE PLACED AT A TIME TO MAINTAIN 50% OF THE RIVER WIDTH



REVISIONS

8/17/99

SYTIME DESIGN

WETLAND AND SURFACE WATER IMPACTS SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			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)	Natural Stream Design (ft)
1	-L- 18+00.7 to 18+15.5	Causeway						0.02			62	
1a		Bank Stabilization						< 0.01		30		
2	-L- 18+60.4 to 19+07.3	Causeway						0.10			130	
3	-L- 17+65 to 17+95	Rip Rap at Embankment						< 0.01		12		
		Bank Stabilization										
TOTALS*:								< 0.01	0.12	42	192	0

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 01/06/2020
 Surry
 BR-0048
 67048.1.1
 SHEET 7 OF 7