



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

September 18, 2015  
Alleghany County  
NCDWR Project No. 20150922  
Bridge 61 on SR 1143  
WBS Element No. 17BP.11.R.61

**APPROVAL of 401 WATER QUALITY CERTIFICATION, with ADDITIONAL CONDITIONS**

Mr. Heath Slaughter, Division Environmental Officer  
NCDOT, Division 11  
801 Statesville Road  
North Wilkesboro, NC 28659

Dear Mr. Slaughter:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge 61 over a UT to Meadow Fork (Stream Index 10-1-37-2) in Alleghany County with an aluminum box culvert (ABC):

**Stream Impacts in the New River Basin**

Site	Permanent Fill in Perennial Stream (linear ft)		Temporary Fill in Perennial Stream (linear ft) Dewatering	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
	Culvert	Riprap			
1	36	8	48	92	0
-	-	-	-	-	-
<b>Total</b>	<b>36</b>	<b>8</b>	<b>48</b>	<b>92</b>	<b>0</b>

**Total Stream Impact for Project: 92 linear feet.**

The project shall be constructed in accordance with your application dated September 8, 2015. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3886 which correspond to the Nationwide/General Permits 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(s) and any additional conditions listed below.

## Condition(s) of Certification:

### Project Specific Conditions

1. 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. NCDOT shall be in compliance with the NCS000250 issued to the NCDOT, including the applicable requirements of the NCG010000. Please note the extra protections for the sensitive watersheds as the UT to Meadow Fork is classified as Class B, Trout (Tr). [15A NCAC 4B.0124(a)-(e)]
3. This project has the potential to impact trout waters or other aquatic species of concern. No construction activities shall begin until the NCWRC makes a determination regarding moratoria. Should the NCWRC determine that a moratorium is applicable then the requirements of any moratorium(s) shall be a condition of this 401 Certification. If the NCDOT does not wish to honor the moratorium, then a written modification shall be submitted.
4. For the 48 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. The ABC shall be designed to mimic natural stream cross section as closely as possible including flood the plain elevation as described in the application with the use of baffles/sills where appropriate. Widening the stream channel should be avoided. [15A NCAC 02H.0506(b)(2)]
6. 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. 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)]
2. 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]
3. 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)]

4. 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)]
5. 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)]
6. 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)]
7. 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)]
8. 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)]
9. 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)]
10. 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)]
11. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
12. 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]
13. 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)]
14. 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)]
15. 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]
16. 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.
17. 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)]

18. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer or appointee 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)]
19. 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)]
20. 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)]
21. 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.
22. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. [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 Dave Wanucha at (336)776-9703 or [dave.wanucha@ncdenr.gov](mailto:dave.wanucha@ncdenr.gov).

Sincerely,

  
for S. Jay Zimmerman, P.G.

Director, Division of Water Resources

Electronic copy only distribution:

Steve Kichefski, US Army Corps of Engineers, Asheville Field Office  
Heath Slaughter, NCDOT Division 11  
Marella Buncick, US Fish and Wildlife Service  
Marla Chambers, NC Wildlife Resources Commission  
Dave Wanucha, NC Division of Water Resources Winston Salem Regional Office  
File Copy



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

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 \_\_\_\_\_



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Division of Mitigation Services

Donald R. van der Vaart  
Secretary

September 9, 2015

Mr. Heath Slaughter  
Division 11 Environmental Supervisor  
North Carolina Department of Transportation  
Post Office Box 250  
North Wilkesboro, North Carolina 28659

Dear Mr. Slaughter:

Subject: Mitigation Acceptance Letter:

Division 11 Project: Replace Bridge 61 on SR 1143 over UT to Meadow Fork, Alleghany County; WBS Number 17BP.11.R.61

The purpose of this letter is to notify you that the Division of Mitigation Services (DMS) will provide the compensatory stream mitigation for the subject project. Based on the information supplied by you on September 9, 2015, the impacts are located in CU 05050001 of the New River basin in the Northern Mountains (NM) Eco-Region, and are as follows:

New 05050001 NM	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	36.0	0	0	0	0	0	0	0

\*Some of the stream impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details.

This impact and associated mitigation need were under projected by the NCDOT in the 2015 impact data. DMS will commit to implement sufficient compensatory stream mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies using the delivery timeline listed in Section F.3.c.iii of the In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from DMS.

If you have any questions or need additional information, please contact Beth Harmon at 919-707-8420.

Sincerely,

James B. Stanfill  
DMS Asset Management Supervisor

cc: Mr. Steve Kichefski, USACE – Asheville Regulatory Field Office  
Ms. Linda Fitzpatrick, NCDOT – PDEA  
File: SR 1143 – Bridge 61 – Division 11



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## ☒ North Carolina Wildlife Resources Commission ☒

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Gordon Myers, Executive Director

TO: Steve Kichefski, NCDOT Regulatory Project Manager  
Asheville Regulatory Field Office, USACE

FROM: Marla Chambers, Western NCDOT Coordinator *Marla Chambers*  
Habitat Conservation Program, NCWRC

DATE: October 8, 2015

SUBJECT: Review of NCDOT's permit application for Section 404 and 401 permits to replace Bridge No. 61 over an unnamed tributary to Meadow Fork on SR 1143 (Elk Knob Road), Alleghany County, North Carolina.

The North Carolina Department of Transportation (NCDOT) has submitted an application to obtain a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a 401 Water Quality Certification from the NC Division of Water Resources (NCDWR). Staff biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the information provided. These comments are provided in accordance with the provisions of the state and federal Environmental Policy Acts (G.S. 113A-1 through 113-10; 1 NCAC 25 and 42 U.S.C. 4332(2)(c), respectively), the Clean Water Act of 1977 (33 U.S.C. 466 et seq.) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d), as applicable.

The NCDOT proposes to replace Bridge No. 61 over an unnamed tributary to Meadow Fork on SR 1143 (Elk Knob Road) with a 25' W x 6' H x 36' L aluminum box culvert on a 0.6 % slope. Three baffles will be used in the culvert to maintain channel width. Permanent stream impacts include 36 linear feet (lf) for the culvert and 8 lf for riprap stabilization. Temporary impacts total 48 lf for dewatering. This project is located on Blue Ridge Parkway property. Meadow Fork supports Brook, Brown and Rainbow Trout, therefore a moratorium prohibiting in-stream work and land disturbance within the 25-foot trout buffer should apply from October 15 to April 15 to protect the egg and fry stages of trout. Sediment and erosion control should adhere to the Design Standards in Sensitive Watersheds.

NCWRC does not object to the issuance of Section 404 and 401 permits provided that the following conditions are implemented:

1. In-stream work and land disturbance within the 25-foot wide buffer zone are prohibited during the trout spawning seasons of October 15 through April 15 to protect the egg and fry stages of trout.
2. Sediment and erosion control measures shall adhere to the Design Standards in Sensitive Watersheds and be strictly maintained until project completion.
3. Herbaceous vegetation shall be planted on all bare soil as soon as possible following the completion of permanent or temporary ground disturbing activities to provide appropriate long-term erosion control.
4. Tall fescue and straw mulch shall not be used in riparian areas. We encourage NCDOT to utilize onsite vegetation and materials for bank stabilization when practicable. Erosion control matting shall be used on steep slopes and for establishing permanent vegetation in riparian areas. The matting shall be well anchored with staples or wooden stakes and, whenever possible, include live stakes of native trees. Matting in riparian areas should not contain plastic mesh, which can entangle and trap small animals.
5. Stormwater should be directed to buffer areas or retention basins and should not be routed directly into the waterway.
6. The natural dimension, pattern, and profile of the waterway above and below the crossing should not be modified by widening the channel or changing the depth of the waterway.
7. Removal of vegetation in riparian areas should be minimized. Native trees and shrubs should be planted along the banks, as appropriate to the setting, to reestablish the riparian zone and to provide long-term erosion control.
8. Grading and backfilling should be minimized, and tree and shrub growth should be retained, if possible, to ensure long term availability of shoreline cover for fish and wildlife.
9. Where practicable, riprap placed for bank stabilization should be limited to the banks below the high water mark, and vegetation should be used for stabilization above the high water elevation.
10. If concrete will be used during construction, work must be accomplished so that wet (uncured) concrete does not contact surface waters. This will lessen the chance of altering the water chemistry and causing a fish kill.
11. Discharging hydroseeding mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
12. Heavy equipment should be operated from the bank rather than in the channel whenever possible in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the waterway. All mechanized equipment operated near surface

waters should be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids or other toxic materials.

Thank you for the opportunity to review and comment on this project. If you have any questions regarding these comments, please contact me at [marla.chambers@ncwildlife.org](mailto:marla.chambers@ncwildlife.org) or (704) 982-9181.

cc: Amy Chapman, NCDWR  
Dave Wanucha, NCDWR  
Heath Slaughter, NCDOT



**North Carolina Department of Transportation**  
**Highway Stormwater Program**  
**STORMWATER MANAGEMENT PLAN**  
 FOR LINEAR ROADWAY PROJECTS



(Version 1.2; Released July 2012)

Project/TIP No.: 17BP.11.R.61 (SF-020061) County(ies): Alleghany Project No.: 17BP.11.R.61 (SF-020061) Date: 11/20/2014 Page 1 of 1

**General Project Information**

<b>Project No.:</b>	17BP.11.R.61 (SF-020061)	<b>Project Type:</b>	Bridge Replacement	<b>Date:</b>	11/20/2014
<b>NCDOT Contact:</b>	Marc T. Shown 1590 Mail Service Center Raleigh, 27699-1590	<b>Contractor / Designer:</b>	TGS Engineers (David B. Petty, PE) 706 Hillsborough St. Suite 200 Raleigh, NC 27603		
	<b>Address:</b>				
	<b>Phone:</b>	919-707-6751			
	<b>Email:</b>	mshown@ncdot.gov			
<b>City/Town:</b>	Laurel Springs	<b>County(ies):</b>	Alleghany		
<b>River Basin(s):</b>	New	<b>CAMA County?</b>	No		
<b>Primary Receiving Water:</b>	Meadow Fork (first named stream downstream of unnamed)	<b>NCDWQ Stream Index No.:</b>	10-1-37-2		
<b>NCDWQ Surface Water Classification for Primary Receiving Water</b>	<b>Primary:</b> None	<b>Class B</b>			
	<b>Supplemental:</b> None	<b>Trout Waters (Tr):</b> +			
<b>Other Stream Classification:</b>	None				
<b>303(d) Impairments:</b>	None				
<b>Buffer Rules in Effect</b>	N/A				

**Project Description**

<b>Project Length (lin. Miles or feet):</b>	210 feet	<b>Surrounding Land Use:</b>	rural mountains, wooded, some pasture
<b>Project Built-Upon Area (ac.)</b>	0.09 ac.	<b>Existing Site</b>	0.09 ac.
<b>Typical Cross Section Description:</b>	Two 9' wide paved travel lanes w/ 7' grassed shoulders and side slopes ranging from 2(H):1(V) to 4(H):1(V).	Two 9' wide paved travel lanes w/ 0' to 5' grassed shoulders and approximate side slopes ranging from 2(H):1(V) to 4(H):1(V).	
<b>Average Daily Traffic (veh/hr/day):</b>	Design/Future: 210	<b>Existing:</b>	210

**General Project Narrative:**  
 Replacement of Bridge No. 020061 on SR 1143 (Elk Knob Rd.) over an unnamed tributary to Meadow Fork in Alleghany County east of Laurel Springs, NC. Proposed 25'-2" span x 6'-2" rise Aluminum Box Culvert to replace existing 30.5' long by 25' wide single-span bridge. The proposed grade is about 1.2' above existing grade in the vicinity of the bridge and roughly matching existing by about 70' left of stream and about 70' right of stream (looking downstream). Proposed culvert is to be located at the same location as the existing bridge. The project built upon area is actually decreasing by nearly 0.01 ac. Stormwater runoff on the existing bridge discharges directly into the water for the full length of the bridge. Grassed shoulders are to be widened from existing and will be substantially flat allowing for diffusion and infiltration of the roadway runoff. The proposed culvert crossing will have no direct discharge into the water. All stormwater runoff will be discharged at minimum practicable slopes, yielding minimum velocities. All proposed stormwater runoff is to be discharged as far away from the stream and at the lowest velocities as practicable.

**References**

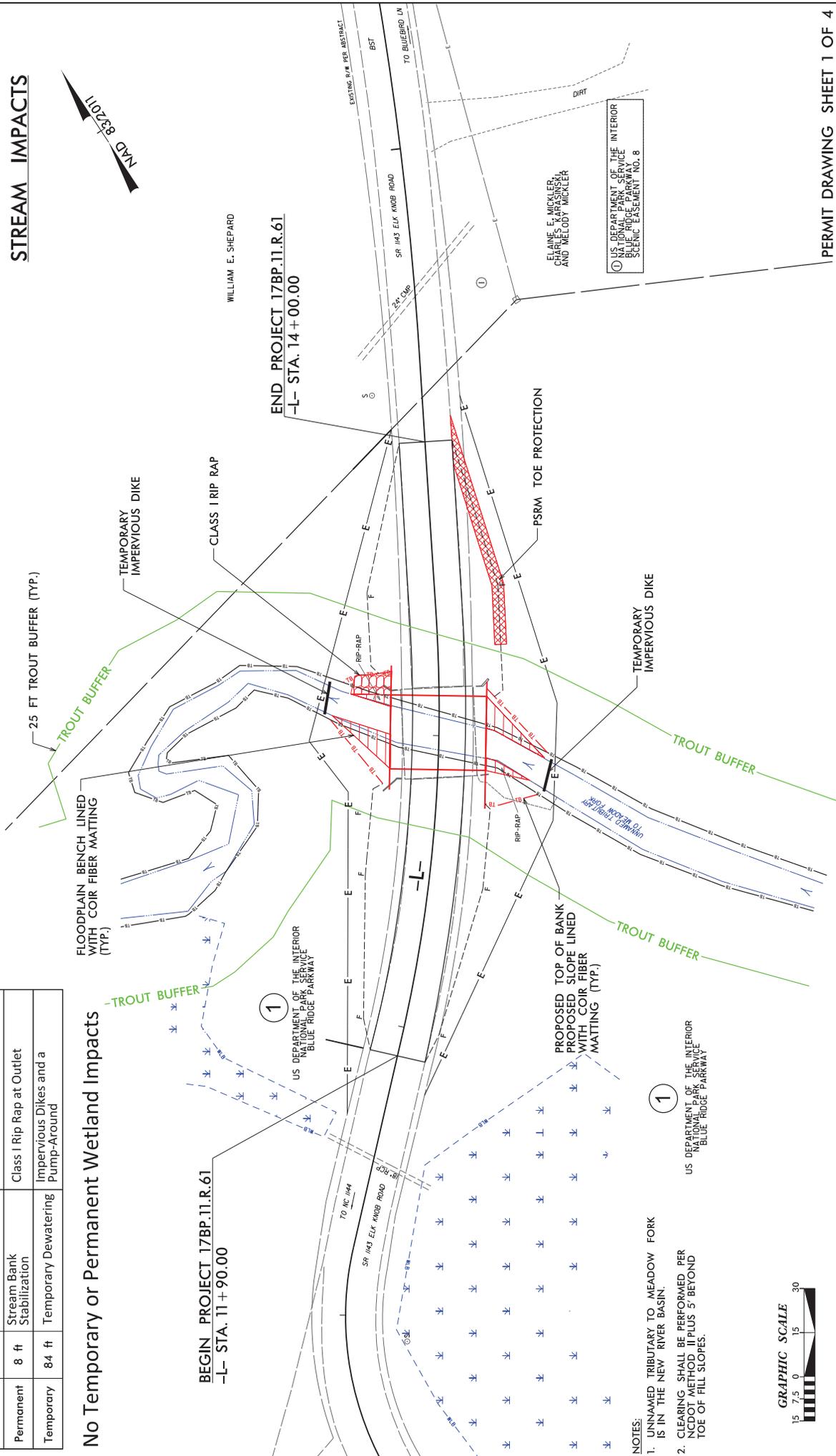
**PERMIT DRAWING  
 FOR BRIDGE #020061  
 ALLEGHANY COUNTY**

EXISTING BRIDGE DIMENSIONS - 30.5' X 25' (SINGLE-SPAN) 90 DEG. SKEW  
 PROPOSED CULVERT DIMENSIONS - 25'-2" SPAN X 6'-2" RISE ALUMINIUM  
 BOX CULVERT 90 DEG. SKEW  
 TOTAL PROJECT LENGTH - 210'

STREAM IMPACTS		Description
Length	Type	
Permanent	36 ft	Culvert in Stream
Permanent	8 ft	Stream Bank Stabilization
Temporary	84 ft	Temporary Dewatering Pump-Around

**STREAM IMPACTS**

**No Temporary or Permanent Wetland Impacts**



- NOTES:**
- UNNAMED TRIBUTARY TO MEADOW FORK IS IN THE NEW RIVER BASIN.
  - CLEARING SHALL BE PERFORMED PER LOCAL CITY-TOWN PLUS 5' BEYOND TOE OF FILL SLOPES.



# PERMIT DRAWING FOR BRIDGE #020061 ALLEGHANY COUNTY

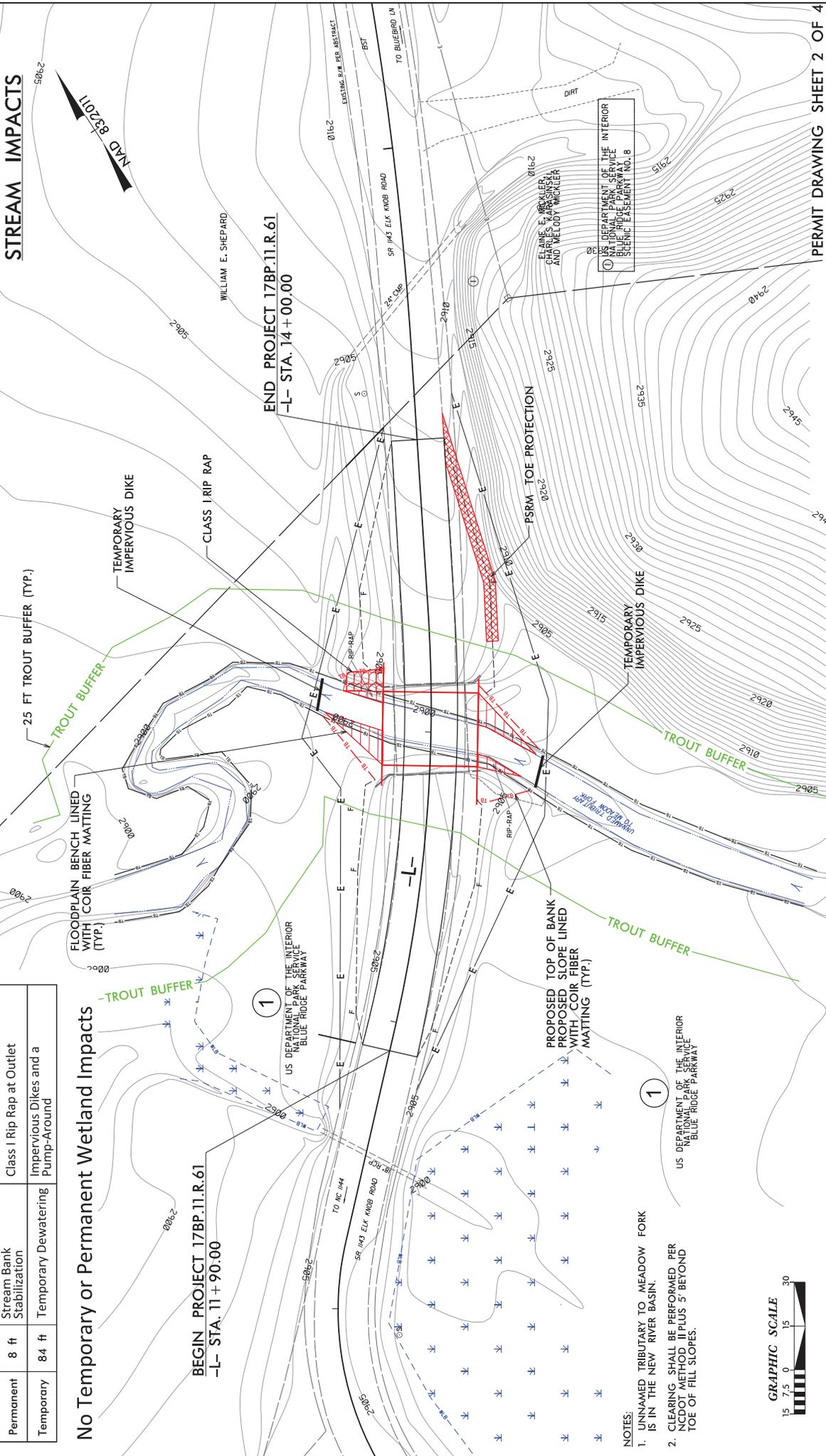
EXISTING BRIDGE DIMENSIONS - 30.5' X 25' (SINGLE-SPAN) 90 DEG. SKEW  
 PROPOSED CULVERT DIMENSIONS - 25'-2" SPAN X 6'-2" RISE ALUMINUM  
 BOX CULVERT 90 DEG. SKEW  
 TOTAL PROJECT LENGTH - 210'

STREAM IMPACTS		Description
Length	Type	
Permanent	36 ft	Culvert in Stream
Permanent	8 ft	Stream Bank Stabilization
Temporary	84 ft	Temporary Dewatering
		Proposed Aluminum Box Culvert
		Class I Rip Rap at Outlet
		Impervious Dikes and a Pump-Around

## STREAM IMPACTS

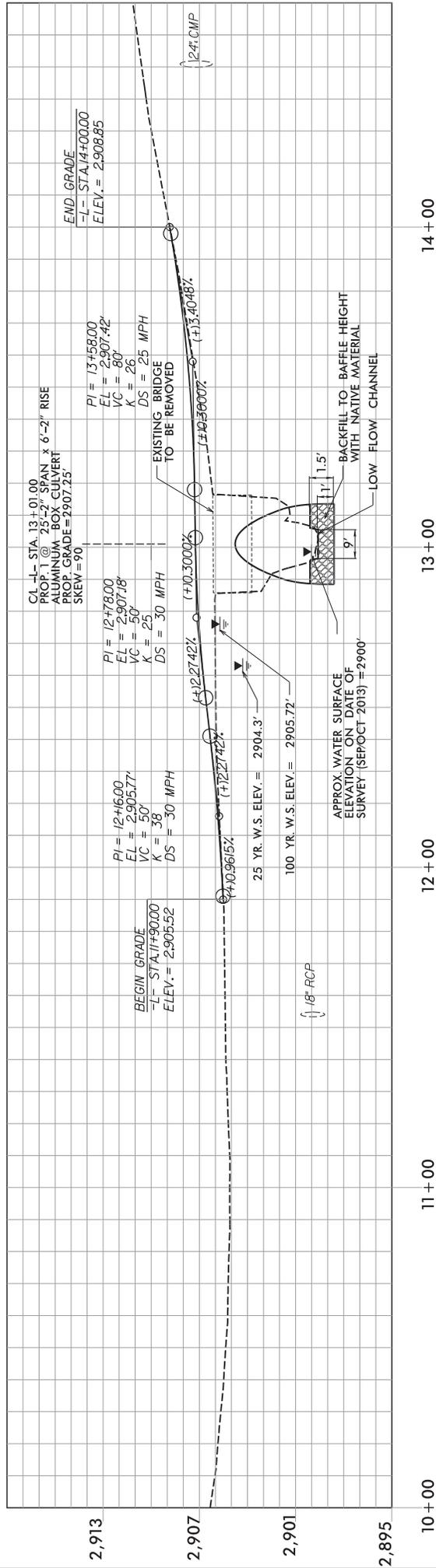
### No Temporary or Permanent Wetland Impacts

PROJECT REFERENCE NO.  
 17BP11R.61(SF-020061)  
 TGS ENGINEERS  
 1000 BROADWAY  
 SUITE 1200  
 RALEIGH, NC 27603  
 PH 919.773-8887



- NOTES:
- UNNAMED TRIBUTARY TO MEADOW FORK IS IN THE NEW RIVER BASIN.
  - CLEARING SHALL BE PERFORMED PER US DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE SPECIFICATIONS PLUS 5' BEYOND TOE OF FILL SLOPES.





# PROFILE ALONG ROADWAY

STRUCTURE HYDRAULIC DATA

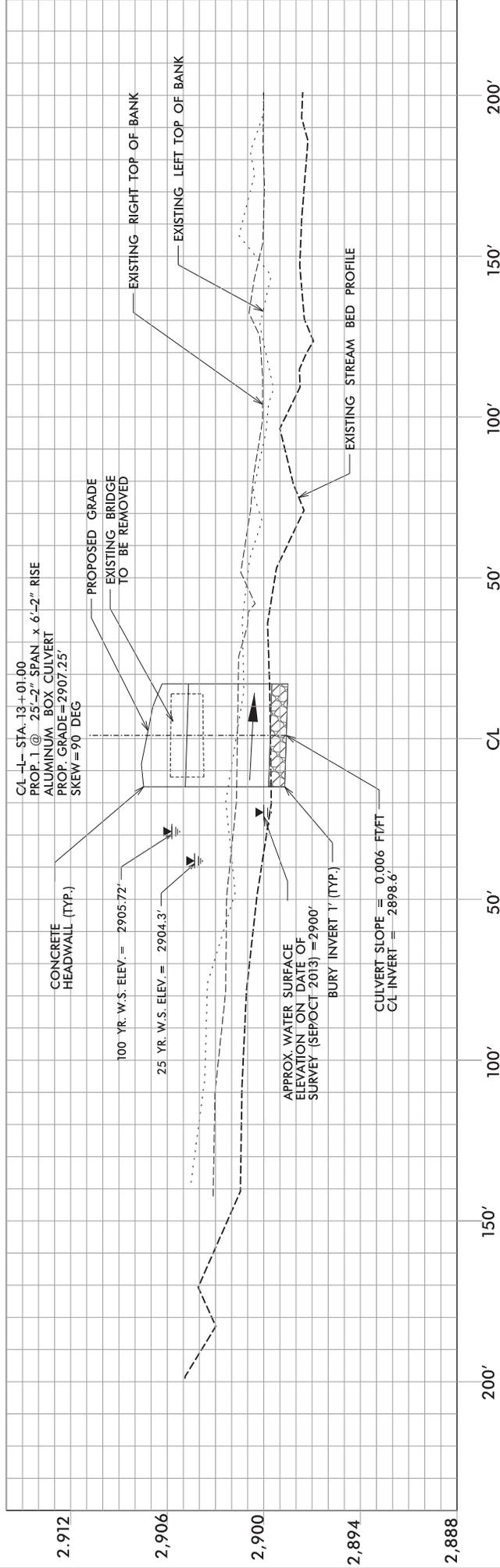
DESIGN DISCHARGE	= 470	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 2,904.3	FT
BASE DISCHARGE	= 700	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 2,905.72	FT
OVERTOPPING DISCHARGE	= 550	CFS
OVERTOPPING FREQUENCY	= 50 +/-	YRS
OVERTOPPING ELEVATION	= 2,905.28**	FT

\*\* OVERTOPPING ELEVATION REPRESENTS ELEVATION @ SAG AT -L- STA.11+25.91L

PERMIT DRAWING SHEET 3 OF 4

**NCDOT**  
 DIVISION OF HIGHWAYS  
 ALLEGHANY COUNTY  
 PROJECT: 17BP.11.R.61 (SF-020061)  
 REPLACEMENT OF BRIDGE NO. 020061  
 ON SR 1145 (ELK KNOB RD)  
 OVER UNNAMED TRIBUTARY TO  
 MEADOW FORK CREEK

PERMIT DRAWING  
 FOR BRIDGE #020061  
 ALLEGHANY COUNTY



# PROFILE ALONG STREAM

**NCDOT**

DIVISION OF HIGHWAYS  
 ALLEGHANY COUNTY

PROJECT: 17BP.11.R.61 (SF-020061)

REPLACEMENT OF BRIDGE NO. 020061  
 ON SR 1145 (ELK KNOB RD)  
 OVER UNNAMED TRIBUTARY TO  
 MEADOW FORK CREEK

**PERMIT DRAWING  
 FOR BRIDGE #020061  
 ALLEGHANY COUNTY**



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaert  
Secretary

August 20, 2015  
Ashe County  
NCDWR Project No. 20150765  
Bridge 17 on SR 1109  
WBS Element No. 17BP.11.R.68

**APPROVAL of 401 WATER QUALITY CERTIFICATION, with ADDITIONAL CONDITIONS**

Mr. Heath Slaughter, Division Environmental Officer  
NCDOT, Division 11  
801 Statesville Road  
North Wilkesboro, NC 28659

Dear Mr. Slaughter:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge 17 over Mill Creek (Stream Index 10-1-18) in Ashe County with an aluminum box culvert (ABC):

**Stream Impacts in the New River Basin**

Site	Permanent Fill in Perennial Stream (linear ft) Culvert	Temporary Fill in Perennial Stream (linear ft) Dewatering	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
1	81	146	227	0
	-	-	-	-
<b>Total</b>	<b>81</b>	<b>146</b>	<b>227</b>	<b>0</b>

**Total Stream Impact for Project: 227 linear feet.**

The project shall be constructed in accordance with your application dated July 30, 2015. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3886 which correspond to the Nationwide/General Permits 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(s) and any additional conditions listed below.

## Condition(s) of Certification:

### Project Specific Conditions

1. 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. NCDOT shall be in compliance with the NCS00250 issued to the NCDOT, including the applicable requirements of the NCG010000. Please note the extra protections for the sensitive watersheds as Mill Creek is Trout waters and drains to the South Fork New River which is classified as High Quality Waters (HQW). [15A NCAC 4B.0124(a)-(e)]
3. This project has the potential to impact trout waters or other aquatic species of concern. No construction activities shall begin until the NCWRC makes a determination regarding moratoria. Should the NCWRC determine that a moratorium is applicable then the requirements of any moratorium(s) shall be a condition of this 401 Certification. If the NCDOT does not wish to honor the moratorium, then a written modification shall be submitted.
4. For the 146 linear feet of streams being impacted due to site dewatering activities and temporary crossing, the site shall be graded to its preconstruction contours and revegetated with appropriate native species. [15A NCAC 02H.0506(b)(2)]
5. The ABC shall be designed to mimic natural stream cross section as closely as possible including flood the plain elevation as described in the application with the use of baffles/sills where appropriate. Widening the stream channel should be avoided. [15A NCAC 02H.0506(b)(2)]
6. 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. 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)]
2. 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]
3. 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)]

4. 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)]
5. 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)]
6. 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)]
7. 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)]
8. 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)]
9. 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)]
10. 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)]
11. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
12. 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]
13. 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)]
14. 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)]
15. 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]
16. 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.
17. 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)]

18. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer or appointee 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)]
19. 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)]
20. 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)]
21. 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.
22. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. [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:

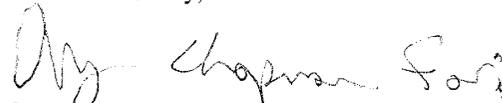
Office of Administrative Hearings  
6714 Mail Service Center  
Raleigh, NC 27699-6714  
Telephone: (919)-431-3000, Facsimile: (919)-431-3100

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 Dave Wanucha at (336)776-9703 or [dave.wanucha@ncdenr.gov](mailto:dave.wanucha@ncdenr.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "S. Jay Zimmerman". The signature is fluid and cursive, with a large initial "S" and "J".

S. Jay Zimmerman

Director, Division of Water Resources

Electronic copy only distribution:

Steve Kichefski, US Army Corps of Engineers, Asheville Field Office

Marella Buncick, US Fish and Wildlife Service

Marla Chambers, NC Wildlife Resources Commission

Dave Wanucha, NC Division of Water Resources Winston Salem Regional Office

File Copy



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

**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 \_\_\_\_\_



(Version 1.2; Released July 2012)

North Carolina Department of Transportation  
 Highway Stormwater Program  
**STORMWATER MANAGEMENT PLAN**  
 FOR LINEAR ROADWAY PROJECTS



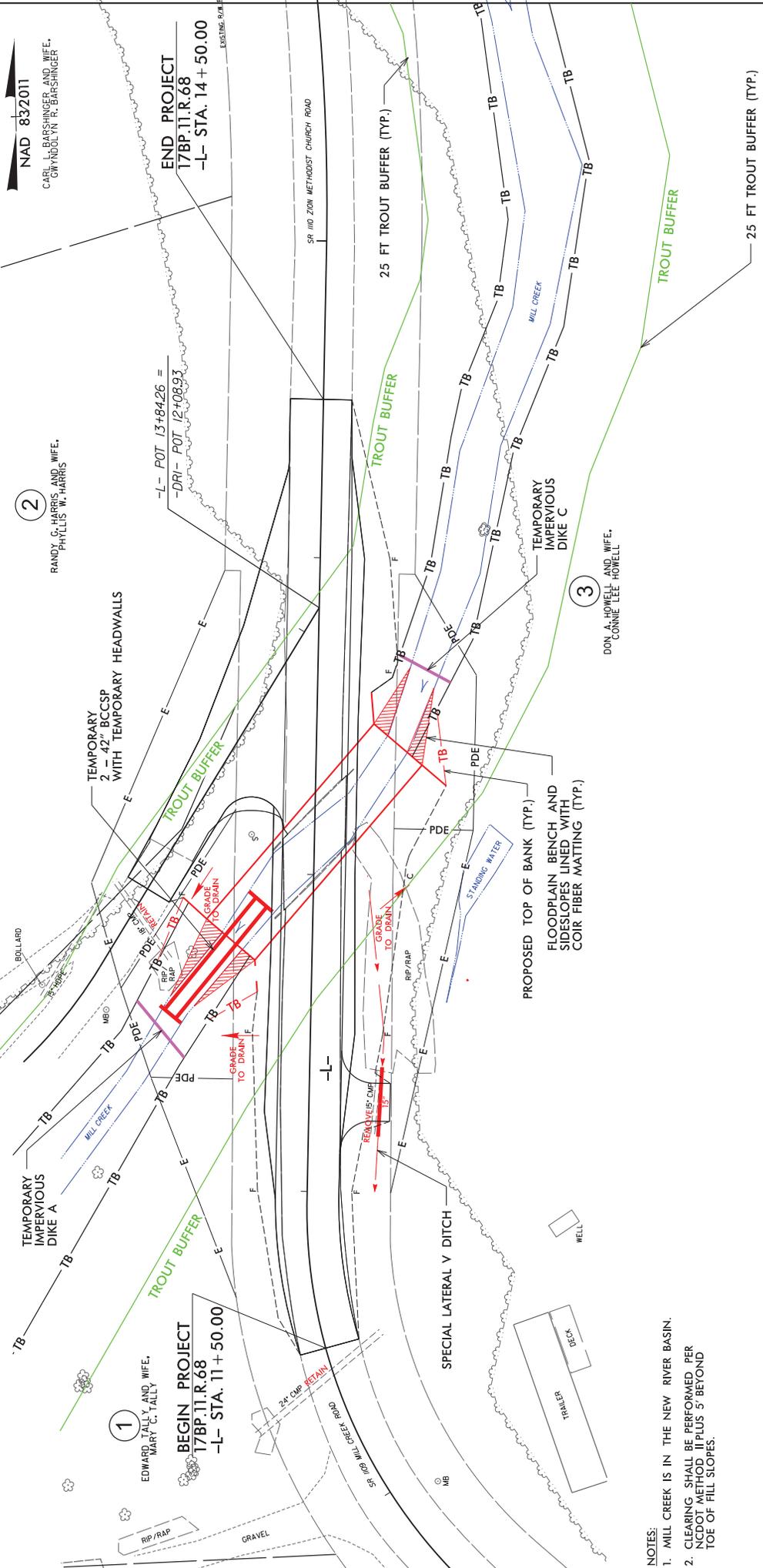
General Project Information	
<b>Project No.:</b>	17BP.11.R.68 (SF-040017)
<b>Project Type:</b>	Bridge Replacement
<b>Date:</b>	12/12/2014
<b>NCDOT Contact:</b>	Marc T. Shown, PE
<b>Contractor / Designer:</b>	TGS Engineers (Thomas L. Fletcher, PE)
<b>Address:</b>	804-C North Lafayette Street Shelby, NC 28150
<b>Phone:</b>	704-476-0003 Ext. 303
<b>Email:</b>	<a href="mailto:tfletcher@tgsengineers.com">tfletcher@tgsengineers.com</a>
<b>City/Town:</b>	Todd
<b>County(ies):</b>	Ashe
<b>River Basin(s):</b>	New
<b>CAMA County?</b>	No
<b>Primary Receiving Water:</b>	Mill Creek
<b>NCDWQ Surface Water Classification for Primary Receiving Water</b>	Class C
<b>Supplemental:</b>	Trout Waters (Tr): +
<b>Other Stream Classification:</b>	None
<b>303(d) Impairments:</b>	None
<b>Buffer Rules in Effect</b>	N/A
Project Description	
<b>Project Length (lin. Miles or feet):</b>	300 feet
<b>Surrounding Land Use:</b>	rural mountains, wooded, some pasture
<b>Project Built-Upon Area (ac.):</b>	0.21
<b>Proposed Project</b>	Existing Site
<b>Typical Cross Section Description:</b>	Two 10' wide paved travel lanes w/ pavement to face of guardrail, 3' grassed shoulders and side slopes ranging from 2(H):1(V) to 3(H):1(V).
<b>Design/Future:</b>	230
<b>Average Daily Traffic (veh/hr/day):</b>	Existing: 230
<b>General Project Narrative:</b>	Replacement of Bridge No. 040017 on SR 1110 (Zion Methodist Rd.) over Mill Creek in Ashe County east of Todd, NC. Proposed 19'-5" span x 4'-11" rise Aluminum Box Culvert skewed at 40 degrees to replace existing 23' long by 20' wide single-span bridge skewed at 43 degrees. The proposed grade is about 0.4' above existing grade in the vicinity of the bridge and roughly matching existing by about 100' left of stream and about 80' right of stream (looking downstream). Proposed culvert is to be located at same location as existing bridge. Stormwater runoff on the existing bridge discharges directly into the water for the full length of the bridge. Grassed shoulders are to be widened from existing and will be substantially flat allowing for diffusion and infiltration of the roadway runoff. The proposed culvert crossing will have no direct discharge into the water. All stormwater runoff will be discharged at minimum practicable slopes, yielding minimum velocities. All proposed stormwater runoff is to be discharged as far away from the stream and at the lowest velocities as practicable.

# PERMIT DRAWING #040017 FOR BRIDGE #040017 ASHE COUNTY

EXISTING BRIDGE DIMENSIONS - 23' X 20' (SINGLE-SPAN), 43 DEG. SKEW  
 PROPOSED CULVERT DIMENSIONS - 19'-5" SPAN X 4'-11" RISE ALUMINIUM  
 BOX CULVERT, 40 DEG. SKEW  
 TOTAL PROJECT LENGTH - 300'

STREAM IMPACTS	
Length	Description
Permanent	Culvert in Stream
Temporary	Proposed Aluminium Box Culvert
Temporary	Two 42" Bituminous Coated CSP for a Temporary Stream Crossing (On-Site Detour)
Temporary	Temporary Stream Crossing (On-Site Detour)
Temporary	Impervious Dikes and a Pump-Around

## STREAM IMPACTS



- NOTES:
- MILL CREEK IS IN THE NEW RIVER BASIN.
  - CLEARING SHALL BE PERFORMED PER NCDOT METHOD II PLUS 5' BEYOND TOE OF FILL SLOPES.



PROJECT REFERENCE NO.  
 17BP/LLR.68 (SF-040017)  
 TGS ENGINEERS  
 507 E. BROAD ST  
 SALEM, VA 27603  
 PH (919) 773-8887

# PERMIT DRAWING FOR BRIDGE #040017 ASHE COUNTY

EXISTING BRIDGE DIMENSIONS - 23' X 20' (SINGLE-SPAN), 43 DEG. SKEW  
 PROPOSED CULVERT DIMENSIONS - 19'-5" SPAN X 4'-11" RISE ALUMINIUM  
 BOX CULVERT, 40 DEG. SKEW  
 TOTAL PROJECT LENGTH - 300'

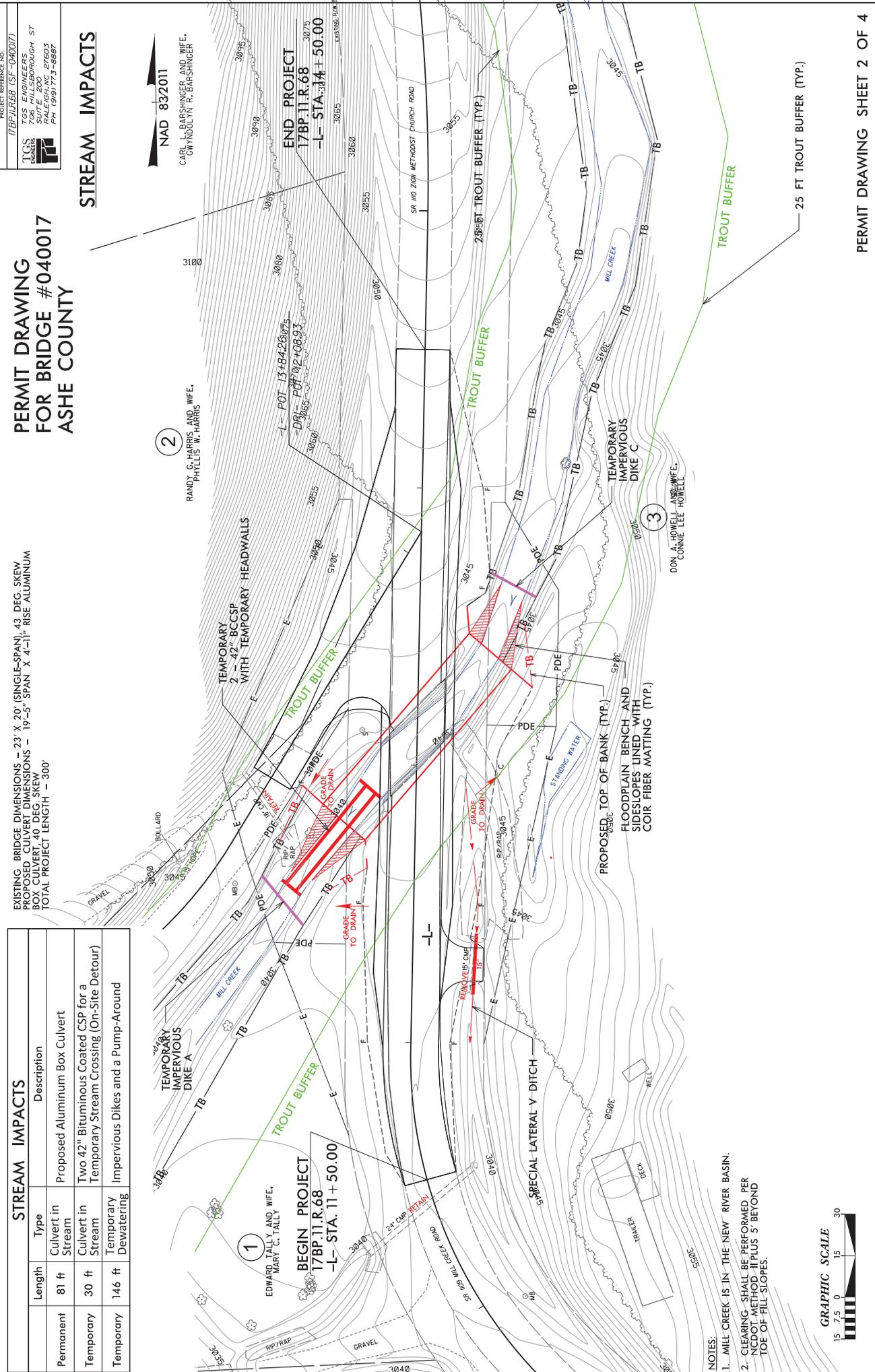
STREAM IMPACTS	
Length	Description
Permanent	Proposed Aluminium Box Culvert
Temporary	Two 42" Bituminous Coated CSP for a Temporary Stream Crossing (On-Site Detour)
Temporary	Impervious Dikes and a Pump-Around

## STREAM IMPACTS

NAD 832011  
 CARL L. BASSINGER AND WIFE,  
 GRAYLOG LN, P.O. SHANINGER

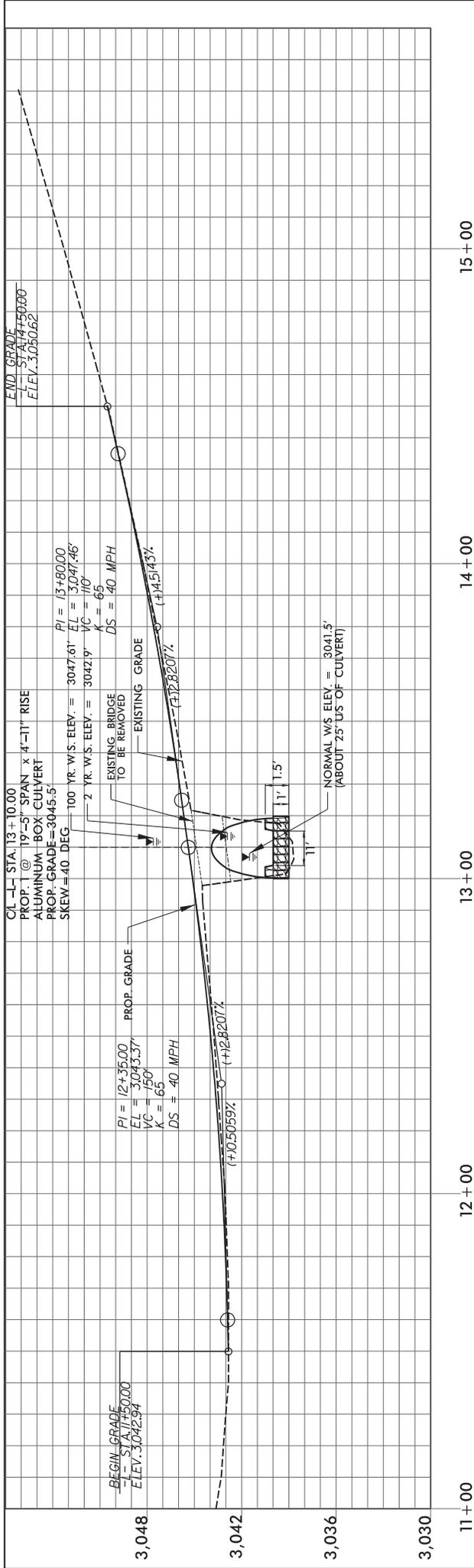
2  
 RANDY G. HARRIS AND WIFE,  
 PHYLLIS W. HARRIS

3  
 DON A. HOWELL AND WIFE,  
 CONNIE LEE HOWELL



- NOTES:
- MILL CREEK IS IN THE NEW RIVER BASIN.
  - CLEARING SHALL BE PERFORMED PER NCDOT METHOD #1 PLUS 5' BEYOND TOE OF FILL SLOPES.





# PROFILE ALONG ROADWAY

**STRUCTURE HYDRAULIC DATA**

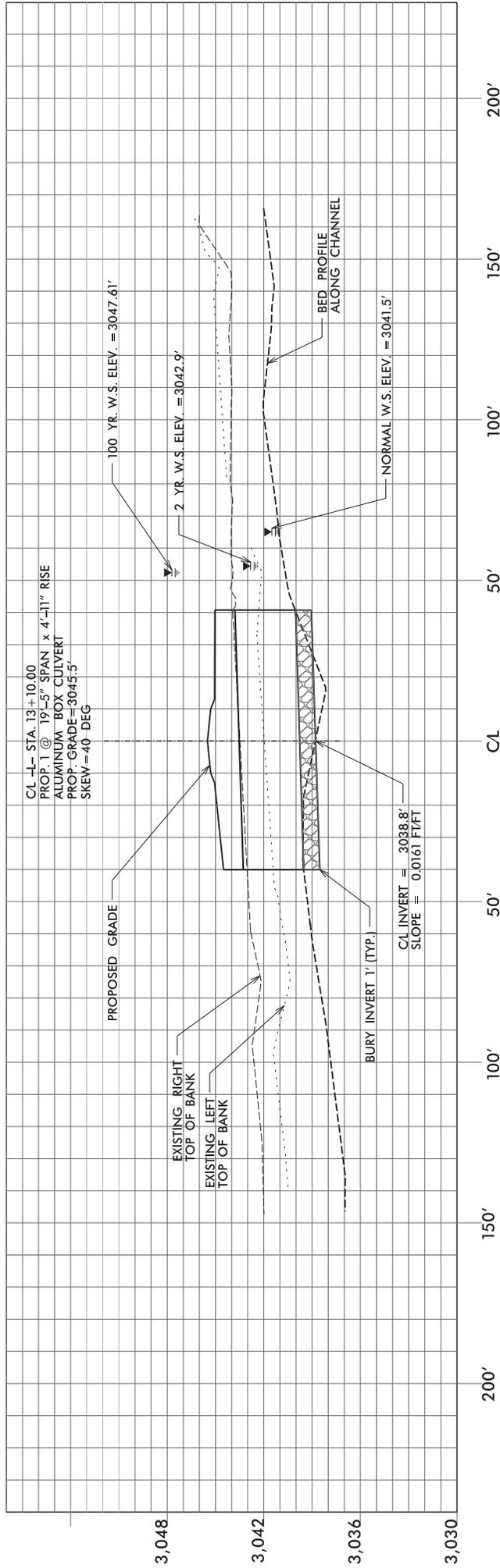
DESIGN DISCHARGE	= 150	CFS
DESIGN FREQUENCY	= 2	YRS
DESIGN HW ELEVATION	= 3042.9	FT
BASE DISCHARGE	= 95.4	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 3047.61	FT
OVERTOPPING DISCHARGE	= 280	CFS
OVERTOPPING FREQUENCY	= 5	YRS
OVERTOPPING ELEVATION	= 3043.4**	FT

\*\* OVERTOPPING ELEVATION REPRESENTS C/L SAG ELEVATION AT -L- STA. 12+35 EXISTING LEVEL OF SERVICE IS BEING MAINTAINED.

PERMIT DRAWING SHEET 3 OF 4

**NCDOT**  
 DIVISION OF HIGHWAYS  
 ASHE COUNTY  
 PROJECT: 17BP.11.R.68 (SF-040017)  
 REPLACEMENT OF BRIDGE NO. 040017  
 ON SR 1110 (ZION METHODIST  
 CHURCH RD) OVER MILL CREEK

**PERMIT DRAWING  
 FOR BRIDGE #040017  
 ASHE COUNTY**



## PROFILE ALONG STREAM

**NCDOT**

DIVISION OF HIGHWAYS  
 ASHE COUNTY

PROJECT: 17BP.11.R.68 (SF-040017)

REPLACEMENT OF BRIDGE NO. 040017  
 ON SR 1110 ZION METHODIST  
 CHURCH RD OVER MILL CREEK

**PERMIT DRAWING  
 FOR BRIDGE #040017  
 ASHE COUNTY**



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

August 26, 2015  
Ashe County  
NCDWR Project No. 20150770  
Bridge 116 on SR 1110  
WBS Element No. 17BP.11.R.85

**APPROVAL of 401 WATER QUALITY CERTIFICATION, with ADDITIONAL CONDITIONS**

Mr. Heath Slaughter, Division Environmental Officer  
NCDOT, Division 11  
801 Statesville Road  
North Wilkesboro, NC 28659

Dear Mr. Slaughter:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge 116 over Mill Creek (Stream Index 10-1-18) in Ashe County with a three-sided aluminum culvert:

**Stream Impacts in the New River Basin**

Site	Permanent Fill in Perennial Stream (linear ft) Riprap	Temporary Fill in Perennial Stream (linear ft) Dewatering	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
1	62	81	143	0
	-	-	-	-
<b>Total</b>	<b>62</b>	<b>81</b>	<b>143</b>	<b>0</b>

**Total Stream Impact for Project: 143 linear feet.**

The project shall be constructed in accordance with your application dated July 31, 2015. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3886 which correspond to the Nationwide/General Permits 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(s) and any additional conditions listed below.

## Condition(s) of Certification:

### Project Specific Conditions

1. As a condition of this 401 Water Quality Certification, the bridge demolition 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. NCDOT shall be in compliance with the NCS000250 issued to the NCDOT, including the applicable requirements of the NCG010000. Please note the extra protections for the sensitive watersheds as Mill Creek is Trout waters and drains to the South Fork New River which is classified as High Quality Waters (HQW). [15A NCAC 4B.0124(a)-(e)]
3. This project has the potential to impact trout waters or other aquatic species of concern. No construction activities shall begin until the NCWRC makes a determination regarding moratoria. Should the NCWRC determine that a moratorium is applicable then the requirements of any moratorium(s) shall be a condition of this 401 Certification. If the NCDOT does not wish to honor the moratorium, then a written modification shall be submitted.
4. For the 81 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. The culvert shall be designed to mimic natural stream cross section as closely as possible. Widening the stream channel should be avoided. [15A NCAC 02H.0506(b)(2)]
6. 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)]
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### General Conditions

1. 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)]
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9. 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)]
10. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
11. 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]
12. 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)]
13. 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)]
14. 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]
15. 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.
16. 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)]

17. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer or appointee 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)]
18. 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)]
19. 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)]
20. 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.
21. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. [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 Dave Wanucha at (336) 776-9703 or [dave.wanucha@ncdenr.gov](mailto:dave.wanucha@ncdenr.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "S. Jay Zimmerman". The signature is written in a cursive style with a large initial "S".

S. Jay Zimmerman,  
Director, Division of Water Resources

Electronic copy only distribution:

Steve Kichefski, US Army Corps of Engineers, Asheville Field Office

Marella Buncick, US Fish and Wildlife Service

Marla Chambers, NC Wildlife Resources Commission

Dave Wanucha, NC Division of Water Resources Winston Salem Regional Office

File Copy



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

**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 \_\_\_\_\_



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## ◻ North Carolina Wildlife Resources Commission ◻

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Gordon Myers, Executive Director

TO: Steve Kichefski, NCDOT Regulatory Project Manager  
Asheville Regulatory Field Office, USACE

FROM: Marla Chambers, Western NCDOT Coordinator *Marla Chambers*  
Habitat Conservation Program, NCWRC

DATE: August 31, 2015

SUBJECT: Review of NCDOT's application for Section 404 and 401 permits to replace Bridge No. 116 over Mill Creek on SR 1110 (Zion Methodist Church Road), Ashe County, North Carolina.

The North Carolina Department of Transportation (NCDOT) has submitted an application to obtain a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a 401 Water Quality Certification from the NC Division of Water Resources (NCDWR). Staff biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the information provided. These comments are provided in accordance with the provisions of the state and federal Environmental Policy Acts (G.S. 113A-1 through 113-10; 1 NCAC 25 and 42 U.S.C. 4332(2)(c), respectively), the Clean Water Act of 1977 (33 U.S.C. 466 et seq.) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d), as applicable.

The NCDOT proposes to replace Bridge No. 116 over Mill Creek on SR 1110 (Zion Methodist Church Road) with a bottomless, three-sided aluminum culvert, measuring 20'4" wide x 4.5' tall x 63' long at the existing location using phased construction. Class II riprap will be countersunk inside the structure to maintain channel width. Permanent stream impacts include 62 linear feet (lf) for the riprap channel through the culvert. Temporary impacts total 81 lf for dewatering. Mill Creek has low density Brown Trout resources not far downstream, however we are not requesting a trout moratorium for this project.

NCWRC does not object to the issuance of Section 404 and 401 permits provided that the following conditions are implemented:

1. Stringent sedimentation and erosion control measures must be implemented and maintained on the project site until project completion to avoid impacts to downstream aquatic resources.
2. Herbaceous vegetation shall be planted on all bare soil as soon as possible following the completion of permanent or temporary ground disturbing activities to provide appropriate long-term erosion control.
3. Tall fescue and straw mulch shall not be used in riparian areas. We encourage NCDOT to utilize onsite vegetation and materials for bank stabilization when practicable. Erosion control matting shall be used on steep slopes and for establishing permanent vegetation in riparian areas. The matting shall be well anchored with staples or wooden stakes and, whenever possible, include live stakes of native trees. Matting in riparian areas should not contain plastic mesh, which can entangle and trap small animals.
4. Stormwater should be directed to buffer areas or retention basins and should not be routed directly into the waterway.
5. The natural dimension, pattern, and profile of the waterway above and below the crossing should not be modified by widening the channel or changing the depth of the waterway.
6. Removal of vegetation in riparian areas should be minimized. Native trees and shrubs should be planted along the banks, as appropriate to the setting, to reestablish the riparian zone and to provide long-term erosion control.
7. Grading and backfilling should be minimized, and tree and shrub growth should be retained, if possible, to ensure long term availability of shoreline cover for fish and wildlife.
8. Where practicable, riprap placed for bank stabilization should be limited to the banks below the high water mark, and vegetation should be used for stabilization above the high water elevation.
9. If concrete will be used during construction, work must be accomplished so that wet (uncured) concrete does not contact surface waters. This will lessen the chance of altering the water chemistry and causing a fish kill.
10. Discharging hydroseeding mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
11. Heavy equipment should be operated from the bank rather than in the channel whenever possible in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the waterway. All mechanized equipment operated near surface waters should be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids or other toxic materials.

Thank you for the opportunity to review and comment on this project. If you have any questions regarding these comments, please contact me at [marla.chambers@ncwildlife.org](mailto:marla.chambers@ncwildlife.org) or (704) 982-9181.

cc: Dave Wanucha, NCDWR  
Heath Slaughter, NCDOT



(Version 1.2; Released July 2012)

North Carolina Department of Transportation  
 Highway Stormwater Program  
**STORMWATER MANAGEMENT PLAN**  
 FOR LINEAR ROADWAY PROJECTS



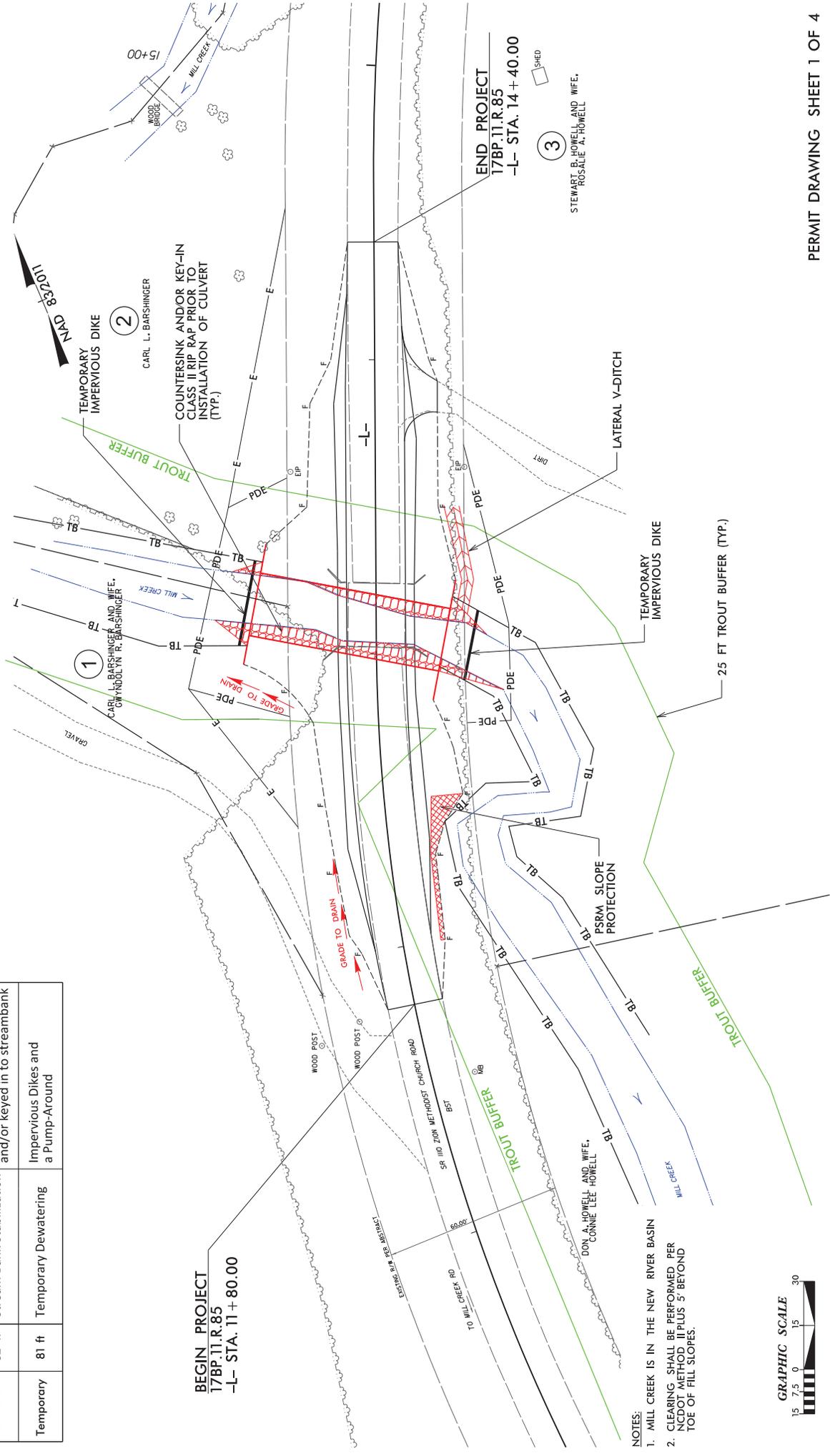
General Project Information	
<b>Project No.:</b>	17BP.11.R.85 (SF-040116)
<b>NC DOT Contact:</b>	Marc T. Shown, PE Address: 1590 Mail Service Center Raleigh, 27699-1590 Phone: 919-707-6751 Email: mshown@ncdot.gov
<b>City/Town:</b>	Todd
<b>River Basin(s):</b>	New
<b>Primary Receiving Water:</b>	Mill Creek
<b>NCDWQ Surface Water Classification for Primary Receiving Water</b>	Primary: Class C Supplemental: Trout Waters (Tr): +
<b>Other Stream Classification:</b>	None
<b>303(d) Impairments:</b>	None
<b>Buffer Rules in Effect</b>	N/A
Project Description	
<b>Project Length (lin. Miles or feet):</b>	260 feet
<b>Project Built-Upon Area (ac.)</b>	0.15 ac.
<b>Typical Cross Section Description:</b>	Two 10' wide paved travel lanes w/ pavement to face of guardrail, 3' grassed shoulders and grassed 2(H):1(V) side slopes.
<b>Average Daily Traffic (veh/hr/day):</b>	Design/Future: 300 Existing: 300
<b>General Project Narrative:</b>	Replacement of Bridge No. 040116 on SR 1110 (Zion Methodist Church Rd.) over Mill Creek in Ashe County east of Todd, NC. Proposed 20'-4" span x 4'-6" rise Bottomless Aluminum Box Culvert to replace existing 22' long by 20' wide single-span bridge. The proposed grade is about 1' above existing grade in the vicinity of the bridge and roughly matching existing by about 70' left of stream and about 80' right of stream (looking downstream). Proposed culvert is to be located at same location as existing bridge. Stormwater runoff on the existing bridge discharges directly into the water for the full length of the bridge. Grassed shoulders are to be widened from existing and will be substantially flat allowing for diffusion and infiltration of the roadway runoff. The proposed culvert crossing will have no direct discharge into the water. All stormwater runoff will be discharged at minimum practicable slopes, yielding minimum velocities. All proposed stormwater runoff is to be discharged as far away from the stream and at the lowest velocities as practicable.
<b>Project Type:</b>	Bridge Replacement
<b>Contractor / Designer:</b>	TGS Engineers (Thomas L. Fletcher, PE) Address: 804-C North Lafayette Street Shelby, NC 28150 Phone: 704-476-0003 Ext. 303 Email: <a href="mailto:fletcher@tgsengineers.com">fletcher@tgsengineers.com</a>
<b>County(ies):</b>	Ashe
<b>CAMA County?</b>	No
<b>NCDWQ Stream Index No.:</b>	10-1-18
<b>Surrounding Land Use:</b>	rural mountains, wooded, some pasture
<b>Proposed Project</b>	
<b>Existing Site</b>	

**PERMIT DRAWING  
 FOR BRIDGE #040116  
 ASHE COUNTY**

EXISTING BRIDGE DIMENSIONS - 22'x20' (SINGLE-SPAN) 90 DEG. SKEW  
 PROPOSED CULVERT DIMENSIONS - 20'-4" SPAN X 4'-6" RISE  
 BOTTOMLESS ALUMINUM BOX CULVERT, 100 DEG. SKEW  
 TOTAL PROJECT LENGTH - 260'

STREAM IMPACTS		
Length	Type	Description
62 ft	Permanent	Stream Bank Stabilization and/or keyed in to streambank
81 ft	Temporary	Impervious Dikes and a Pump-Around

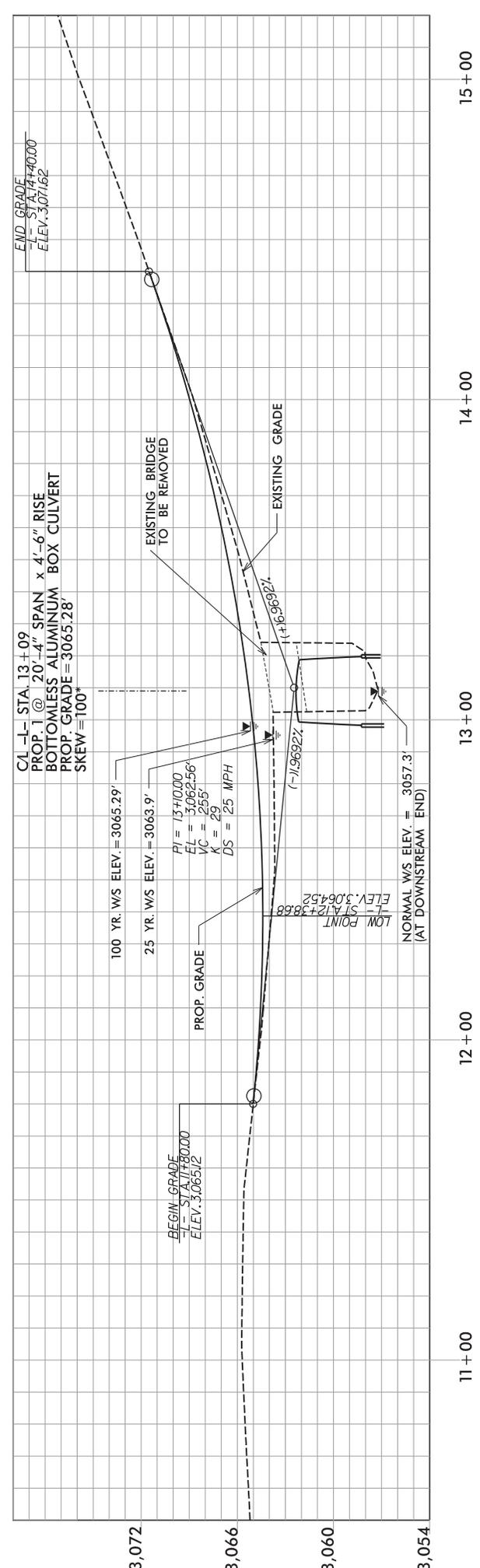
**STREAM IMPACTS**



- NOTES:**
- MILL CREEK IS IN THE NEW RIVER BASIN
  - CLEARING SHALL BE PERFORMED PER NCDOT METHOD II PLUS 5' BEYOND TOE OF FILL SLOPES.







# PROFILE ALONG ROADWAY

STRUCTURE HYDRAULIC DATA

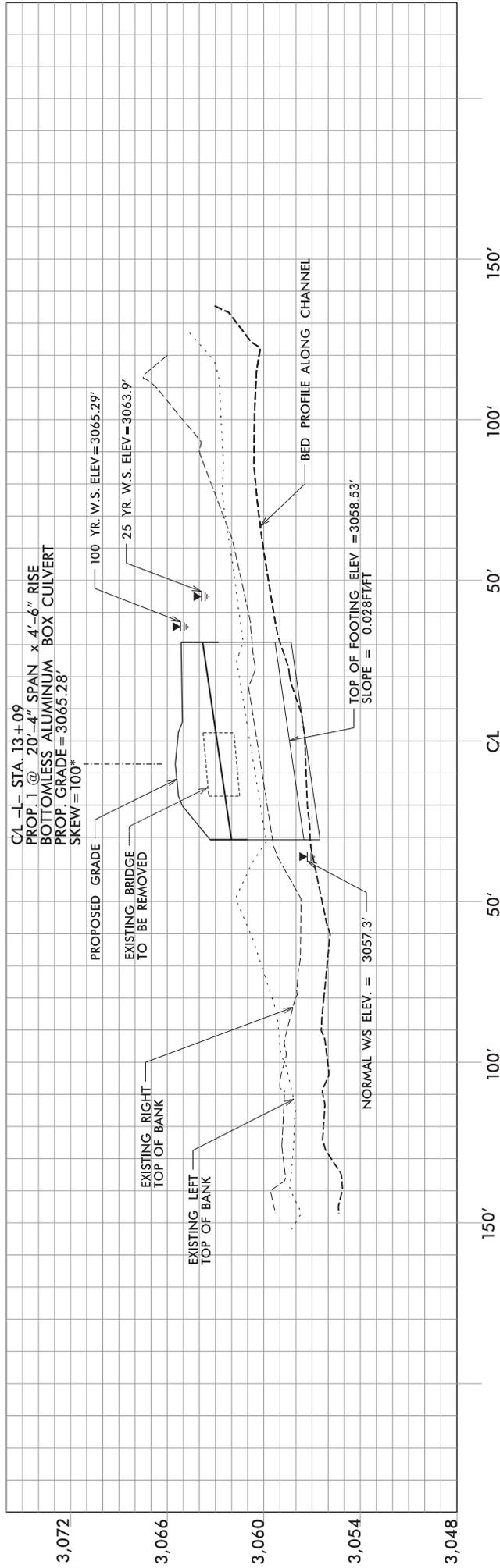
DESIGN DISCHARGE	= 500	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 3063.9	FT
BASE DISCHARGE	= 750	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 3065.29	FT
OVERTOPPING DISCHARGE	= 600	CFS
OVERTOPPING FREQUENCY	= 50	YRS
OVERTOPPING ELEVATION	= 3064.1**	FT

\*\* OVERTOPPING ELEVATION REPRESENTS C/L SAG ELEVATION AT -L- STA. 12+39

PERMIT DRAWING SHEET 3 OF 4

**NCDOT**  
 DIVISION OF HIGHWAYS  
 ASHE COUNTY  
 PROJECT: 17BP.11.R.85 (SF-040116)  
 REPLACEMENT OF BRIDGE NO. 040116  
 ON SR 1110 (ZION METHODIST CH RD)  
 OVER MILL CREEK

**PERMIT DRAWING #040116**  
**FOR BRIDGE #040116**  
**ASHE COUNTY**



## PROFILE ALONG STREAM

**NCDOT**

DIVISION OF HIGHWAYS  
 ASHE COUNTY

PROJECT: 17BP.11.R.85 (SF-040116)

REPLACEMENT OF BRIDGE NO. 040116  
 ON SR 1110 (ZION METHODIST CH RD)  
 OVER MILL CREEK

PERMIT DRAWING  
 FOR BRIDGE #040116  
 ASHE COUNTY



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

September 17, 2015  
Ashe County  
NCDWR Project No. 20150921  
Bridge 263 on SR 1317  
WBS Element No. 17BP.11.R.67

**APPROVAL of 401 WATER QUALITY CERTIFICATION, with ADDITIONAL CONDITIONS**

Mr. Heath Slaughter, Division Environmental Officer  
NCDOT, Division 11  
801 Statesville Road  
North Wilkesboro, NC 28659

Dear Mr. Slaughter:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge 263 over Rich Hill Creek (Stream Index 10-2-15) in Ashe County with an aluminum box culvert (ABC):

**Stream Impacts in the New River Basin**

Site	Permanent Fill in Perennial Stream (linear ft)		Temporary Fill in Perennial Stream (linear ft) Dewatering	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
	Culvert	Riprap			
1	88	35	49	172	0
-	-	-	-	-	-
<b>Total</b>	<b>88</b>	<b>35</b>	<b>49</b>	<b>172</b>	<b>0</b>

**Total Stream Impact for Project: 172 linear feet.**

The project shall be constructed in accordance with your application dated September 4, 2015. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3886 which correspond to the Nationwide/General Permits 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(s) and any additional conditions listed below.

## **Condition(s) of Certification:**

### **Project Specific Conditions**

1. 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. NCDOT shall be in compliance with the NCS000250 issued to the NCDOT, including the applicable requirements of the NCG010000. Please note the extra protections for the sensitive watersheds as Rich Hill Creek is classified as Trout and Outstanding Resource Waters (ORW). [15A NCAC 4B.0124(a)-(e)]
3. This project has the potential to impact trout waters or other aquatic species of concern. No construction activities shall begin until the NCWRC makes a determination regarding moratoria. Should the NCWRC determine that a moratorium is applicable then the requirements of any moratorium(s) shall be a condition of this 401 Certification. If the NCDOT does not wish to honor the moratorium, then a written modification shall be submitted.
4. For the 49 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. The ABC shall be designed to mimic natural stream cross section as closely as possible including flood the plain elevation as described in the application with the use of baffles/sills where appropriate. Widening the stream channel should be avoided. [15A NCAC 02H.0506(b)(2)]
6. 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. 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)]
2. 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]
3. 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)]

4. 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)]
5. 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)]
6. 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)]
7. 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)]
8. 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)]
9. 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)]
10. 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)]
11. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
12. 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]
13. 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)]
14. 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)]
15. 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]
16. 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.
17. 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)]

18. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer or appointee 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)]
19. 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)]
20. 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)]
21. 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.
22. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. [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.

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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 Dave Wanucha at (336)776-9703 or [dave.wanucha@ncdenr.gov](mailto:dave.wanucha@ncdenr.gov).

Sincerely,

A handwritten signature in black ink that reads "S. Schwarzer". The signature is written in a cursive style with a large, prominent "S" at the beginning.

*fw* S. Jay Zimmerman, P.G.  
Director, Division of Water Resources

Electronic copy only distribution:

Steve Kichefski, US Army Corps of Engineers, Asheville Field Office  
Heath Slaughter, NCDOT Division 11  
Marella Buncick, US Fish and Wildlife Service  
Marla Chambers, NC Wildlife Resources Commission  
Dave Wanucha, NC Division of Water Resources Winston Salem Regional Office  
File Copy



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

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 \_\_\_\_\_



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Division of Mitigation Services

Donald R. van der Vaart  
Secretary

September 9, 2015

Mr. Heath Slaughter  
Division 11 Environmental Supervisor  
North Carolina Department of Transportation  
Post Office Box 250  
North Wilkesboro, North Carolina 28659

Dear Mr. Slaughter:

Subject: Mitigation Acceptance Letter:

Division 11 Project: Replace Bridge 263 on SR 1317 over Rich Hill Creek, Ashe County;  
WBS Number 17BP.11.R.67

The purpose of this letter is to notify you that the Division of Mitigation Services (DMS) will provide the compensatory stream mitigation for the subject project. Based on the information supplied by you on September 4, 2015, the impacts are located in CU 05050001 of the New River basin in the Northern Mountains (NM) Eco-Region, and are as follows:

New 05050001 NM	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	88.0	0	0	0	0	0	0	0

\*Some of the stream impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details.

This impact and associated mitigation need were under projected by the NCDOT in the 2015 impact data. DMS will commit to implement sufficient compensatory stream mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies using the delivery timeline listed in Section F.3.c.iii of the In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from DMS.

If you have any questions or need additional information, please contact Beth Harmon at 919-707-8420.

Sincerely,

James B. Stanfill  
DMS Asset Management Supervisor

cc: Mr. Steve Kichefski, USACE – Asheville Regulatory Field Office  
Ms. Linda Fitzpatrick, NCDOT – PDEA  
File: SR 1317 – Bridge 263 – Division 11



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## ☒ North Carolina Wildlife Resources Commission ☒

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Gordon Myers, Executive Director

TO: Steve Kichefski, NCDOT Regulatory Project Manager  
Asheville Regulatory Field Office, USACE

FROM: Marla Chambers, Western NCDOT Coordinator *Marla Chambers*  
Habitat Conservation Program, NCWRC

DATE: September 28, 2015

SUBJECT: Review of NCDOT's permit application for Section 404 and 401 permits to replace Bridge No. 263 over Rich Hill Creek on SR 1317 (Rich Hill Road), Ashe County, North Carolina.

The North Carolina Department of Transportation (NCDOT) has submitted an application to obtain a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a 401 Water Quality Certification from the NC Division of Water Resources (NCDWR). Staff biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the information provided. These comments are provided in accordance with the provisions of the state and federal Environmental Policy Acts (G.S. 113A-1 through 113-10; 1 NCAC 25 and 42 U.S.C. 4332(2)(c), respectively), the Clean Water Act of 1977 (33 U.S.C. 466 et seq.) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d), as applicable.

The NCDOT proposes to replace Bridge No. 263 over Rich Hill Creek on SR 1317 (Rich Hill Road) with a 21' W x 6' H x 88' L aluminum box culvert on a 1.2 % slope. Three baffles will be used in the culvert to maintain channel width. Permanent stream impacts include 88 linear feet (lf) for the culvert and 35 lf for riprap stabilization. Temporary impacts total 49 lf for dewatering. Rich Hill Creek supports Brown Trout, therefore a moratorium prohibiting in-stream work and land disturbance within the 25-foot trout buffer should apply from October 15 to April 15 to protect the egg and fry stages of trout. Sediment and erosion control should adhere to the Design Standards in Sensitive Watersheds.

NCWRC does not object to the issuance of Section 404 and 401 permits provided that the following conditions are implemented:

1. In-stream work and land disturbance within the 25-foot wide buffer zone are prohibited during the trout spawning seasons of October 15 through April 15 to protect the egg and fry stages of trout.
2. Sediment and erosion control measures shall adhere to the Design Standards in Sensitive Watersheds and be strictly maintained until project completion.
3. Herbaceous vegetation shall be planted on all bare soil as soon as possible following the completion of permanent or temporary ground disturbing activities to provide appropriate long-term erosion control.
4. Tall fescue and straw mulch shall not be used in riparian areas. We encourage NCDOT to utilize onsite vegetation and materials for bank stabilization when practicable. Erosion control matting shall be used on steep slopes and for establishing permanent vegetation in riparian areas. The matting shall be well anchored with staples or wooden stakes and, whenever possible, include live stakes of native trees. Matting in riparian areas should not contain plastic mesh, which can entangle and trap small animals.
5. Stormwater should be directed to buffer areas or retention basins and should not be routed directly into the waterway.
6. The natural dimension, pattern, and profile of the waterway above and below the crossing should not be modified by widening the channel or changing the depth of the waterway.
7. Removal of vegetation in riparian areas should be minimized. Native trees and shrubs should be planted along the banks, as appropriate to the setting, to reestablish the riparian zone and to provide long-term erosion control.
8. Grading and backfilling should be minimized, and tree and shrub growth should be retained, if possible, to ensure long term availability of shoreline cover for fish and wildlife.
9. Where practicable, riprap placed for bank stabilization should be limited to the banks below the high water mark, and vegetation should be used for stabilization above the high water elevation.
10. If concrete will be used during construction, work must be accomplished so that wet (uncured) concrete does not contact surface waters. This will lessen the chance of altering the water chemistry and causing a fish kill.
11. Discharging hydroseeding mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
12. Heavy equipment should be operated from the bank rather than in the channel whenever possible in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the waterway. All mechanized equipment operated near surface

waters should be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids or other toxic materials.

Thank you for the opportunity to review and comment on this project. If you have any questions regarding these comments, please contact me at [marla.chambers@ncwildlife.org](mailto:marla.chambers@ncwildlife.org) or (704) 982-9181.

cc: Amy Chapman, NCDWR  
Dave Wanucha, NCDWR  
Heath Slaughter, NCDOT



**North Carolina Department of Transportation**  
**Highway Stormwater Program**  
**STORMWATER MANAGEMENT PLAN**  
 FOR LINEAR ROADWAY PROJECTS



(Version 1.2; Released July 2012)

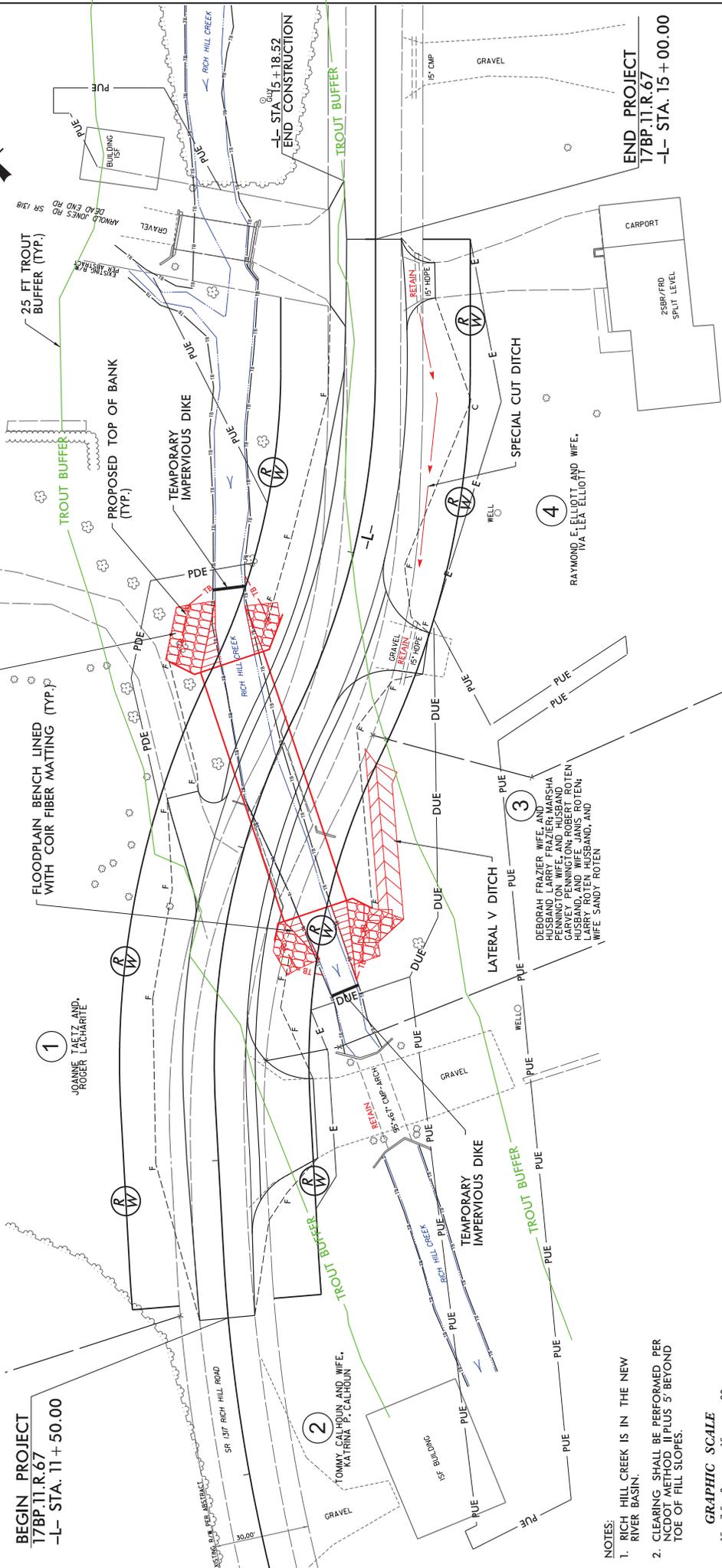
General Project Information	
<b>Project No.:</b>	17BP.11.R.67 (SF-040263)
<b>NC DOT Contact:</b>	Marc T. Shown, PE Address: 1590 Mail Service Center Raleigh, 27699-1590 Phone: 919-707-6751 Email: mshown@ncdot.gov
<b>City/Town:</b>	Creston
<b>River Basin(s):</b>	New
<b>Primary Receiving Water:</b>	Rich Hill Creek
<b>NCDWQ Surface Water Classification for Primary Receiving Water</b>	Primary: Class C Supplemental: Trout Waters (Tr)
<b>Other Stream Classification:</b>	None
<b>303(d) Impairments:</b>	None
<b>Buffer Rules in Effect</b>	N/A
Project Description	
<b>Project Length (lin. Miles or feet):</b>	350 feet
<b>Project Built-Upon Area (ac.):</b>	0.22 ac.
<b>Typical Cross Section Description:</b>	Two 10' wide paved travel lanes w/ shoulders paved to face of guardrails, 3' grassed shoulders behind guardrail and 2(H):1(V) grassed side slopes.
<b>Average Daily Traffic (veh/hr/day):</b>	Design/Future: 290
<b>General Project Narrative:</b>	Replacement of Bridge No. 040263 on SR 1317 (Rich Hill Rd.) over Rich Hill Creek in Ashe County north of Creston, NC. Proposed 20'-11" span x 6'-1" rise Aluminum Box Culvert skewed at 140 degrees to replace existing 26' long by 20'-6" wide single-span bridge skewed at about 140 degrees. The proposed grade is about 1' above existing grade in the vicinity of the bridge and roughly matching existing by about 30' left of stream and about 90' right of stream (looking downstream). Proposed culvert is to be located at same location as existing bridge (roadway centerline shifting about 9' upstream). Stormwater runoff on the existing bridge discharges directly into the water for the full length of the bridge. Grassed shoulders are to be widened from existing and will be substantially flat allowing for diffusion and infiltration of the roadway runoff. The proposed culvert crossing will have no direct discharge into the water. All stormwater runoff will be discharged at minimum practicable stops, yielding minimum velocities. All proposed stormwater runoff is discharged as far away from the stream and at the lowest velocities as practicable.
<b>Project Type:</b>	Bridge Replacement
<b>Contractor / Designer:</b>	TGS Engineers (David B. Petty, PE) Address: 706 Hillsborough St. Suite 200 Raleigh, NC 27603 Phone: 919-773-8887 Ext. 104 Email: dpetty@tgsengineers.com
<b>County(ies):</b>	Ashe
<b>CAMA County?</b>	No
<b>NCDWQ Stream Index No.:</b>	10-2-15
<b>Surrounding Land Use:</b>	forest; some rural residential and cropland
<b>Proposed Project</b>	0.18 ac.
<b>Existing Site</b>	290 ac.

**PERMIT DRAWING  
 FOR BRIDGE #040263  
 ASHE COUNTY**

**STREAM IMPACTS**

EXISTING BRIDGE DIMENSIONS - 26'x20.5' (SINGLE-SPAN); 140 DEG. SKEW  
 PROPOSED CULVERT DIMENSIONS - 20'-11" SPAN X 6'-3" RISE ALUMINUM  
 BOX CULVERT, 140 DEG. SKEW  
 TOTAL PROJECT LENGTH - 350'

STREAM IMPACTS	
Length	Description
Permanent	88 ft Culvert in Stream Proposed Aluminum Box Culvert
Permanent	35 ft Stream Bank Stabilization Class I Rip Rap at Inlet and Outlet
Temporary	137 ft Temporary Dewatering Impervious Dikes and a Pump-Around



- NOTES:**
- RICH HILL CREEK IS IN THE NEW RIVER BASIN.
  - CLEARING SHALL BE PERFORMED PER NCDOT METHOD II PLUS 5' BEYOND TOE OF FILL SLOPES.

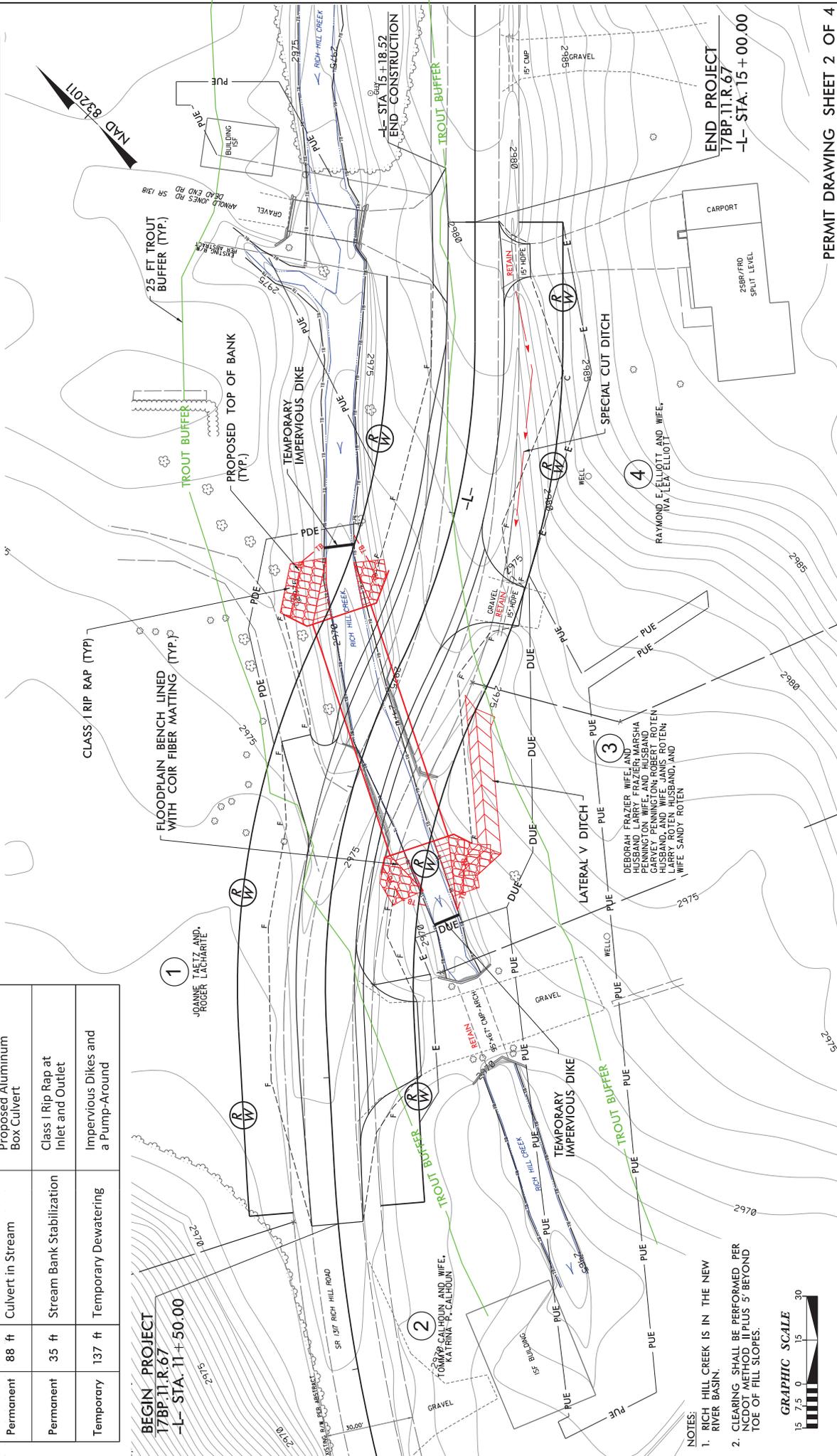


# PERMIT DRAWING FOR BRIDGE #040263 ASHE COUNTY

EXISTING BRIDGE DIMENSIONS - 26'X20.5' (SINGLE-SPAN); 140 DEG. SKEW  
 PROPOSED CULVERT DIMENSIONS - 20'-11" SPAN X 6'-3" RISE ALUMINUM  
 BOX CULVERT, 140 DEG. SKEW  
 TOTAL PROJECT LENGTH - 350'

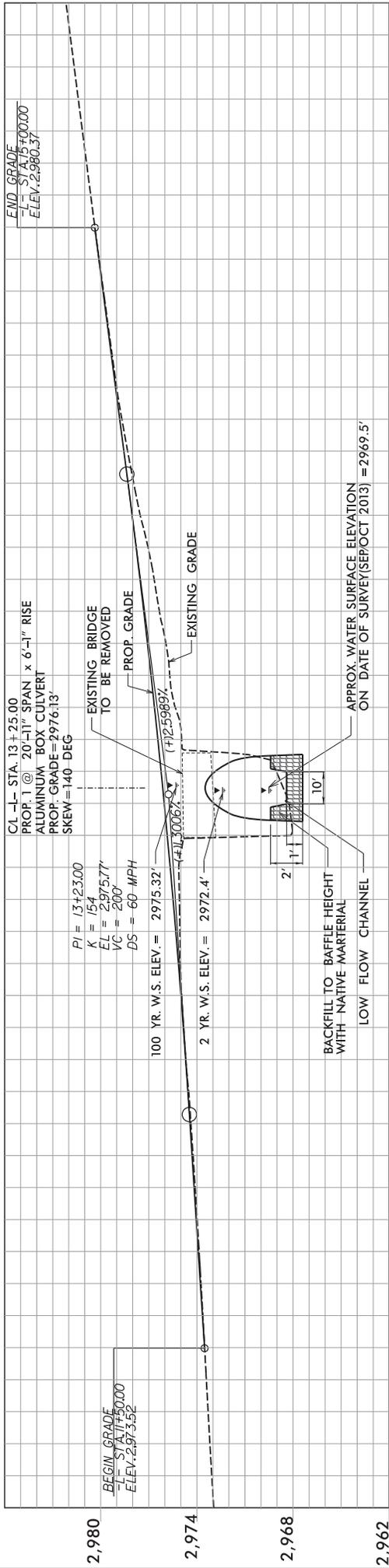
STREAM IMPACTS	
Length	Description
88 ft	Proposed Aluminum Box Culvert
35 ft	Class I Rip Rap at Inlet and Outlet
137 ft	Temporary Dewatering and a Pump-Around

## STREAM IMPACTS



- NOTES:
- RICH HILL CREEK IS IN THE NEW RIVER BASIN.
  - CLEARING SHALL BE PERFORMED PER NCDOT METHOD II PLUS 5' BEYOND TOE OF FILL SLOPES.





15+00

14+00

13+00

12+00

11+00

# PROFILE ALONG ROADWAY

## STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE	= 320	CFS
DESIGN FREQUENCY	= 2	YRS
DESIGN HW ELEVATION	= 2,972.4	FT
BASE DISCHARGE	= 1,500	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 2,975.32	FT
OVERTOPPING DISCHARGE	= 340	CFS
OVERTOPPING FREQUENCY	= 2+	YRS
OVERTOPPING ELEVATION	= 2,973.2**	FT

\*\* OVERTOPPING ELEVATION REPRESENTS LOWEST HIGHPOINT AT -L- STA. 12+37.165' LT

PERMIT DRAWING SHEET 3 OF 4

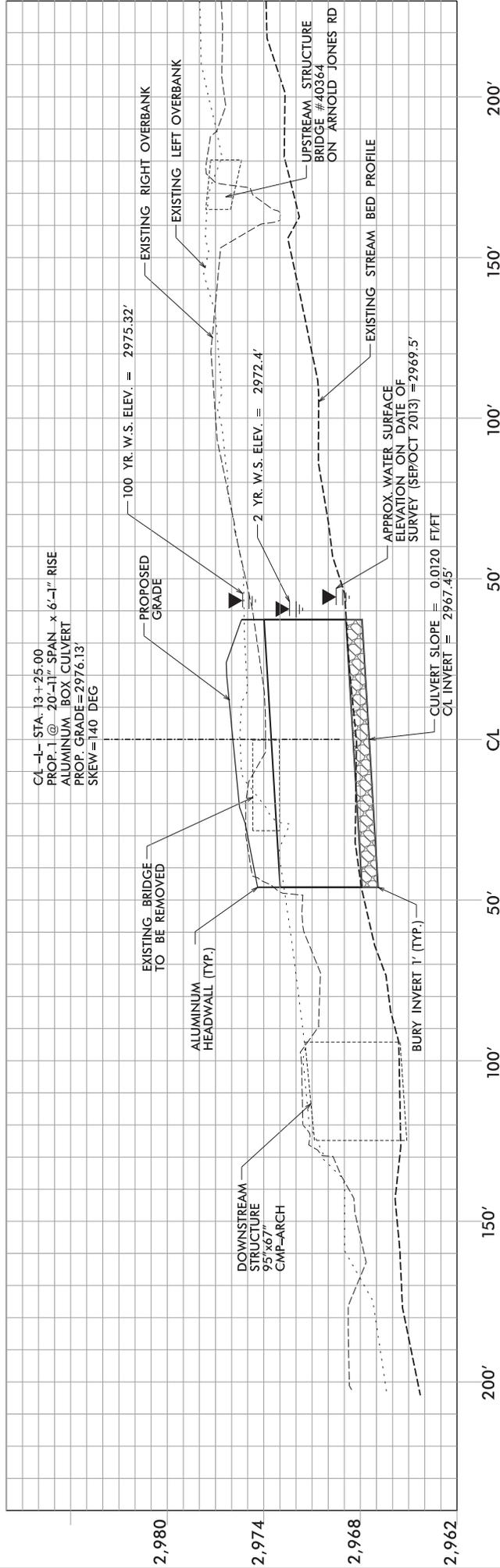
**NC DOT**

DIVISION OF HIGHWAYS  
 ASHE COUNTY

PROJECT: 17BP.11.R.67 (SF-040263)

REPLACEMENT OF BRIDGE NO. 040263  
 ON SR 1317 (RICH HILL RD)  
 OVER RICH HILL CREEK

PERMIT DRAWING #040263  
 FOR BRIDGE #040263  
 ASHE COUNTY



# PROFILE ALONG STREAM

**NCDOT**

DIVISION OF HIGHWAYS  
 ASHE COUNTY

PROJECT: 17BP.11.R.67 (SF-040263)

REPLACEMENT OF BRIDGE NO. 040263  
 ON SR 1317 (RICH HILL RD)  
 OVER RICH HILL CREEK

**PERMIT DRAWING  
 FOR BRIDGE #040263  
 ASHE COUNTY**



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

September 17, 2015  
Ashe County  
NCDWR Project No. 20150919  
Bridge 264 on SR 1317  
WBS Element No. 17BP.11.R.63

**APPROVAL of 401 WATER QUALITY CERTIFICATION, with ADDITIONAL CONDITIONS**

Mr. Heath Slaughter, Division Environmental Officer  
NCDOT, Division 11  
801 Statesville Road  
North Wilkesboro, NC 28659

Dear Mr. Slaughter:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge 264 over Rich Hill Creek (Stream Index 10-2-15) in Ashe County with an aluminum box culvert (ABC):

**Stream Impacts in the New River Basin**

Site	Permanent Fill in Perennial Stream (linear ft) Culvert	Temporary Fill in Perennial Stream (linear ft) Dewatering	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
1	60	38	98	0
	-	-	-	-
<b>Total</b>	<b>60</b>	<b>38</b>	<b>98</b>	<b>0</b>

**Total Stream Impact for Project: 98 linear feet.**

The project shall be constructed in accordance with your application dated September 4, 2015. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3886 which correspond to the Nationwide/General Permits 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(s) and any additional conditions listed below.

## Condition(s) of Certification:

### Project Specific Conditions

1. 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. NCDOT shall be in compliance with the NCS000250 issued to the NCDOT, including the applicable requirements of the NCG010000. Please note the extra protections for the sensitive watersheds as Rich Hill Creek is classified as Trout and Outstanding Resource Waters (ORW). [15A NCAC 4B.0124(a)-(e)]
3. This project has the potential to impact trout waters or other aquatic species of concern. No construction activities shall begin until the NCWRC makes a determination regarding moratoria. Should the NCWRC determine that a moratorium is applicable then the requirements of any moratorium(s) shall be a condition of this 401 Certification. If the NCDOT does not wish to honor the moratorium, then a written modification shall be submitted.
4. For the 38 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. The ABC shall be designed to mimic natural stream cross section as closely as possible including flood the plain elevation as described in the application with the use of baffles/sills where appropriate. Widening the stream channel should be avoided. [15A NCAC 02H.0506(b)(2)]
6. 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. 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)]
2. 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]
3. 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)]

4. 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)]
5. 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)]
6. 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)]
7. 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)]
8. 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)]
9. 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)]
10. 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)]
11. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
12. 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]
13. 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)]
14. 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)]
15. 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]
16. 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.
17. 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)]

18. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer or appointee 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)]
19. 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)]
20. 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)]
21. 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.
22. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. [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 Dave Wanucha at (336)776-9703 or [dave.wanucha@ncdenr.gov](mailto:dave.wanucha@ncdenr.gov).

Sincerely,

A handwritten signature in black ink that reads "S. Jay Zimmerman". The signature is written in a cursive style with a large, stylized "S" at the beginning.

*S. Jay Zimmerman*  
S. Jay Zimmerman, P.G.  
Director, Division of Water Resources

Electronic copy only distribution:

Steve Kichefski, US Army Corps of Engineers, Asheville Field Office  
Heath Slaughter, NCDOT Division 11  
Marella Buncick, US Fish and Wildlife Service  
Marla Chambers, NC Wildlife Resources Commission  
Dave Wanucha, NC Division of Water Resources Winston Salem Regional Office  
File Copy



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

**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 \_\_\_\_\_



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Division of Mitigation Services

Donald R. van der Vaart  
Secretary

September 9, 2015

Mr. Heath Slaughter  
Division 11 Environmental Supervisor  
North Carolina Department of Transportation  
Post Office Box 250  
North Wilkesboro, North Carolina 28659

Dear Mr. Slaughter:

Subject: Mitigation Acceptance Letter:

Division 11 Project: Replace Bridge 264 on SR 1317 over Rich Hill Creek, Ashe County;  
WBS Number 17BP.11.R.63

The purpose of this letter is to notify you that the Division of Mitigation Services (DMS) will provide the compensatory stream mitigation for the subject project. Based on the information supplied by you on September 4, 2015, the impacts are located in CU 05050001 of the New River basin in the Northern Mountains (NM) Eco-Region, and are as follows:

New 05050001 NM	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	60.0	0	0	0	0	0	0	0

\*Some of the stream impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details.

This impact and associated mitigation need were under projected by the NCDOT in the 2015 impact data. DMS will commit to implement sufficient compensatory stream mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies using the delivery timeline listed in Section F.3.c.iii of the In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from DMS.

If you have any questions or need additional information, please contact Beth Harmon at 919-707-8420.

Sincerely,

James B. Stanfill  
DMS Asset Management Supervisor

cc: Mr. Steve Kichefski, USACE – Asheville Regulatory Field Office  
Ms. Linda Fitzpatrick, NCDOT – PDEA  
File: SR 1317 – Bridge 264 – Division 11



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## ☒ North Carolina Wildlife Resources Commission ☒

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Gordon Myers, Executive Director

TO: Steve Kichefski, NCDOT Regulatory Project Manager  
Asheville Regulatory Field Office, USACE

FROM: Marla Chambers, Western NCDOT Coordinator *Marla Chambers*  
Habitat Conservation Program, NCWRC

DATE: September 28, 2015

SUBJECT: Review of NCDOT's permit application for Section 404 and 401 permits to replace Bridge No. 264 over Rich Hill Creek on SR 1317 (Rich Hill Road), Ashe County, North Carolina.

The North Carolina Department of Transportation (NCDOT) has submitted an application to obtain a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a 401 Water Quality Certification from the NC Division of Water Resources (NCDWR). Staff biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the information provided. These comments are provided in accordance with the provisions of the state and federal Environmental Policy Acts (G.S. 113A-1 through 113-10; 1 NCAC 25 and 42 U.S.C. 4332(2)(c), respectively), the Clean Water Act of 1977 (33 U.S.C. 466 et seq.) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d), as applicable.

The NCDOT proposes to replace Bridge No. 264 over Rich Hill Creek on SR 1317 (Rich Hill Road) with an 18' W x 4' H x 60' L aluminum box culvert on a 1.8 % slope. Three baffles will be used in the culvert to maintain channel width. Permanent stream impacts total 60 linear feet (lf) for the culvert and temporary impacts total 38 lf for dewatering. Rich Hill Creek supports Brown Trout, therefore a moratorium prohibiting in-stream work and land disturbance within the 25-foot trout buffer should apply from October 15 to April 15 to protect the egg and fry stages of trout. Sediment and erosion control should adhere to the Design Standards in Sensitive Watersheds. Measures should be taken to avoid potential impacts to the federally listed Northern Long-eared Bat, in consultation with the USFWS.

NCWRC does not object to the issuance of Section 404 and 401 permits provided that the following conditions are implemented:

1. In-stream work and land disturbance within the 25-foot wide buffer zone are prohibited during the trout spawning seasons of October 15 through April 15 to protect the egg and fry stages of trout.
2. Sediment and erosion control measures shall adhere to the Design Standards in Sensitive Watersheds and be strictly maintained until project completion.
3. Herbaceous vegetation shall be planted on all bare soil as soon as possible following the completion of permanent or temporary ground disturbing activities to provide appropriate long-term erosion control.
4. Tall fescue and straw mulch shall not be used in riparian areas. We encourage NCDOT to utilize onsite vegetation and materials for bank stabilization when practicable. Erosion control matting shall be used on steep slopes and for establishing permanent vegetation in riparian areas. The matting shall be well anchored with staples or wooden stakes and, whenever possible, include live stakes of native trees. Matting in riparian areas should not contain plastic mesh, which can entangle and trap small animals.
5. Stormwater should be directed to buffer areas or retention basins and should not be routed directly into the waterway.
6. The natural dimension, pattern, and profile of the waterway above and below the crossing should not be modified by widening the channel or changing the depth of the waterway.
7. Removal of vegetation in riparian areas should be minimized. Native trees and shrubs should be planted along the banks, as appropriate to the setting, to reestablish the riparian zone and to provide long-term erosion control.
8. Grading and backfilling should be minimized, and tree and shrub growth should be retained, if possible, to ensure long term availability of shoreline cover for fish and wildlife.
9. Where practicable, riprap placed for bank stabilization should be limited to the banks below the high water mark, and vegetation should be used for stabilization above the high water elevation.
10. If concrete will be used during construction, work must be accomplished so that wet (uncured) concrete does not contact surface waters. This will lessen the chance of altering the water chemistry and causing a fish kill.
11. Discharging hydroseeding mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
12. Heavy equipment should be operated from the bank rather than in the channel whenever possible in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the waterway. All mechanized equipment operated near surface

waters should be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids or other toxic materials.

Thank you for the opportunity to review and comment on this project. If you have any questions regarding these comments, please contact me at [marla.chambers@ncwildlife.org](mailto:marla.chambers@ncwildlife.org) or (704) 982-9181.

cc: Amy Chapman, NCDWR  
Dave Wanucha, NCDWR  
Heath Slaughter, NCDOT



**North Carolina Department of Transportation**  
**Highway Stormwater Program**  
**STORMWATER MANAGEMENT PLAN**  
 FOR LINEAR ROADWAY PROJECTS



(Version 1.2; Released July 2012)

**Project/TIP No.:** 17BP-11.R.63 (SF-040264) **County(ies):** Ashe

Page 1 of 1

**General Project Information**

<b>Project No.:</b>	17BP-11.R.63 (SF-040264)	<b>Project Type:</b>	Bridge Replacement	<b>Date:</b>	9/15/2014
<b>NCDOT Contact:</b>	Marc. T. Shown 1590 Mail Service Center Raleigh, 27699-1590	<b>Contractor / Designer:</b>	TGS Engineers (David B. Petty, PE) 706 Hillsborough St. Suite 200 Raleigh, NC 27603		
<b>Address:</b>		<b>Phone:</b>	919-773-8887 Ext. 104		
<b>Phone:</b>	919-707-6751	<b>Email:</b>	<a href="mailto:dbpetty@tgsengineers.com">dbpetty@tgsengineers.com</a>		
<b>Email:</b>	mshown@ncdot.gov	<b>County(ies):</b>	Ashe		
<b>City/Town:</b>	Creston	<b>CAMA County?</b>	No		
<b>River Basin(s):</b>	New	<b>NCDWQ Stream Index No.:</b>	10-2-15		
<b>Primary Receiving Water:</b>	Rich Hill Creek	<b>Primary:</b>	Class C		
<b>NCDWQ Surface Water Classification for Primary Receiving Water</b>		<b>Supplemental:</b>	Trout Waters (Tr)		
<b>Other Stream Classification:</b>	None		Outstanding Resource Waters (ORW)		
<b>303(d) Impairments:</b>	None				
<b>Buffer Rules in Effect</b>	N/A				

**Project Description**

Project Length (lin. Miles or feet):	Surrounding Land Use:	Proposed Project	Existing Site
250 feet	Forest; Cropland	0.12 ac.	0.10 ac.
<b>Project Built-Upon Area (ac.)</b>			
<b>Typical Cross Section Description:</b>	Two 9' wide paved travel lanes w/ shoulders paved to face of guardrails, 3' grassed shoulders behind guardrail and 2(H):1(V) grassed side slopes.	Two 9' wide paved travel lanes w/ 0' to 5' wide grassed shoulders and grassed side slopes ranging from about 2(H):1(V) to 4(H):1(V).	
<b>Average Daily Traffic (veh/hr/day):</b>	Design/Future: 290	Existing: 290	

**General Project Narrative:**  
 Replacement of Bridge No. 040264 on SR 1317 (Rich Hill Rd.) over Rich Hill Creek in Ashe County north of Creston, NC. Proposed 17'-9" span x 3'-10" rise Aluminum Box Culvert skewed at 50 degrees to replace existing 21'-9" long by 20'-6" wide single-span bridge skewed at about 50 degrees. The proposed grade is roughly matching the existing grade for the length of the project. Proposed culvert is to be located at same location as existing bridge. Stormwater runoff on the existing bridge discharges directly into the water for the full length of the bridge. Grassed shoulders are to be widened from existing and will be substantially flat allowing for diffusion and infiltration of the roadway runoff. The proposed culvert crossing will have no direct discharge into the water. All stormwater runoff will be discharged at minimum practicable slopes, yielding minimum velocities. All proposed stormwater runoff is to be discharged as far away from the stream and at the lowest velocities as practicable.

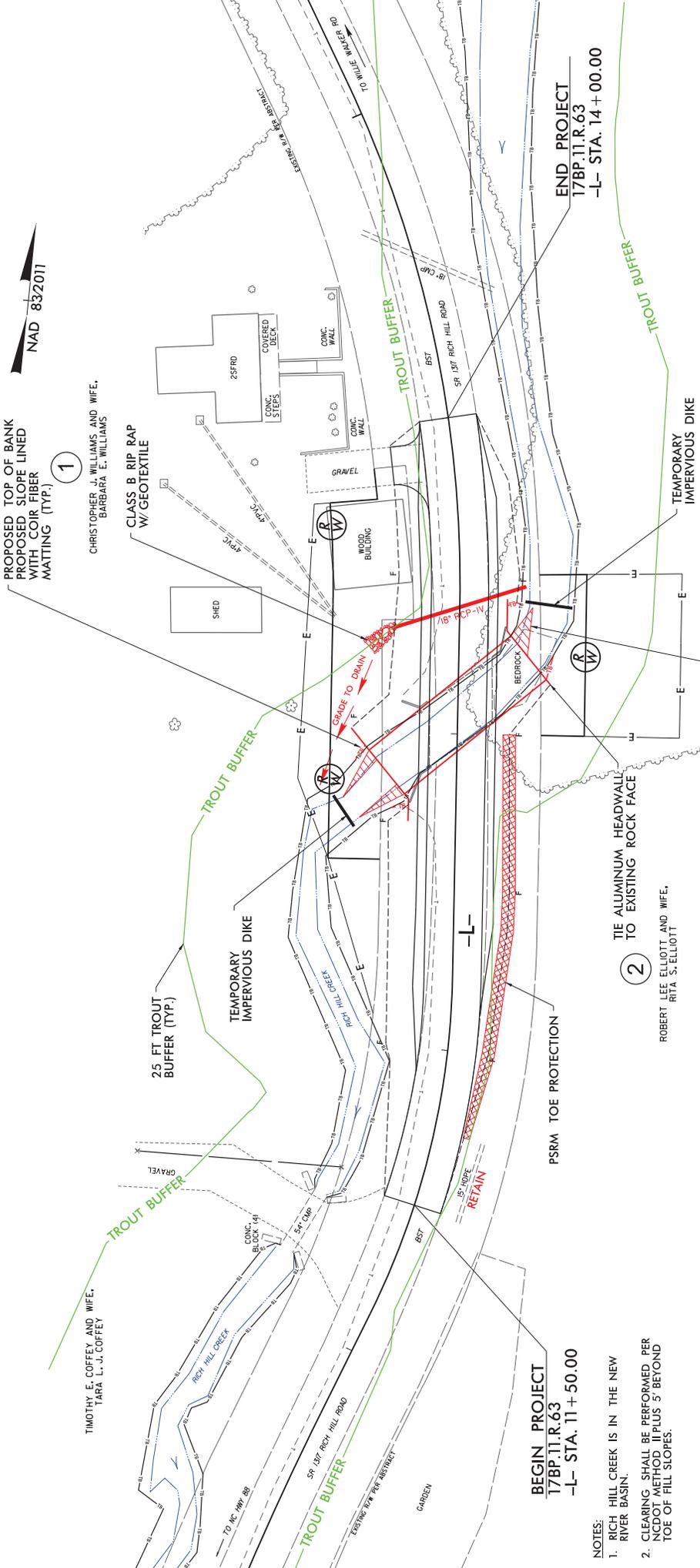
**References**

**PERMIT DRAWING  
FOR BRIDGE #040264  
ASHE COUNTY**

EXISTING BRIDGE DIMENSIONS - 21.75'X20.5' (SINGLE-SPAN), 50 DEG. SKEW  
PROPOSED CULVERT DIMENSIONS - 17'-9" SPAN X 3'-10" RISE ALUMINUM  
BOX CULVERT, 50 DEG. SKEW  
TOTAL PROJECT LENGTH - 250'

STREAM IMPACTS		Description
Length	Type	
60 ft	Culvert in Stream	Proposed Aluminum Box Culvert.
98 ft	Temporary Dewatering	Impervious Dikes and a Pump-Around

**STREAM IMPACTS**



PROPOSED TOP OF BANK  
PROPOSED SLOPE LINED  
WITH COIR FIBER  
MATTING (TYP.)

PROPOSED TOP OF BANK  
PROPOSED SLOPE LINED  
WITH COIR FIBER  
MATTING (TYP.)

CHRISTOPHER J. WILLIAMS AND WIFE,  
BARBARA E. WILLIAMS

TIMOTHY E. COFFEY AND WIFE,  
TARA L. J. COFFEY

CLASS B RIP RAP  
W/ GEOTEXTILE

**BEGIN PROJECT**  
17BP 11 R 63  
-L- STA. 11 + 50.00

**END PROJECT**  
17BP 11 R 63  
-L- STA. 14 + 00.00

- NOTES:
- RICH HILL CREEK IS IN THE NEW RIVER BASIN.
  - CLEARING SHALL BE PERFORMED PER LOCAL CITY ORDINANCES PLUS 5' BEYOND TOE OF FILL SLOPES.

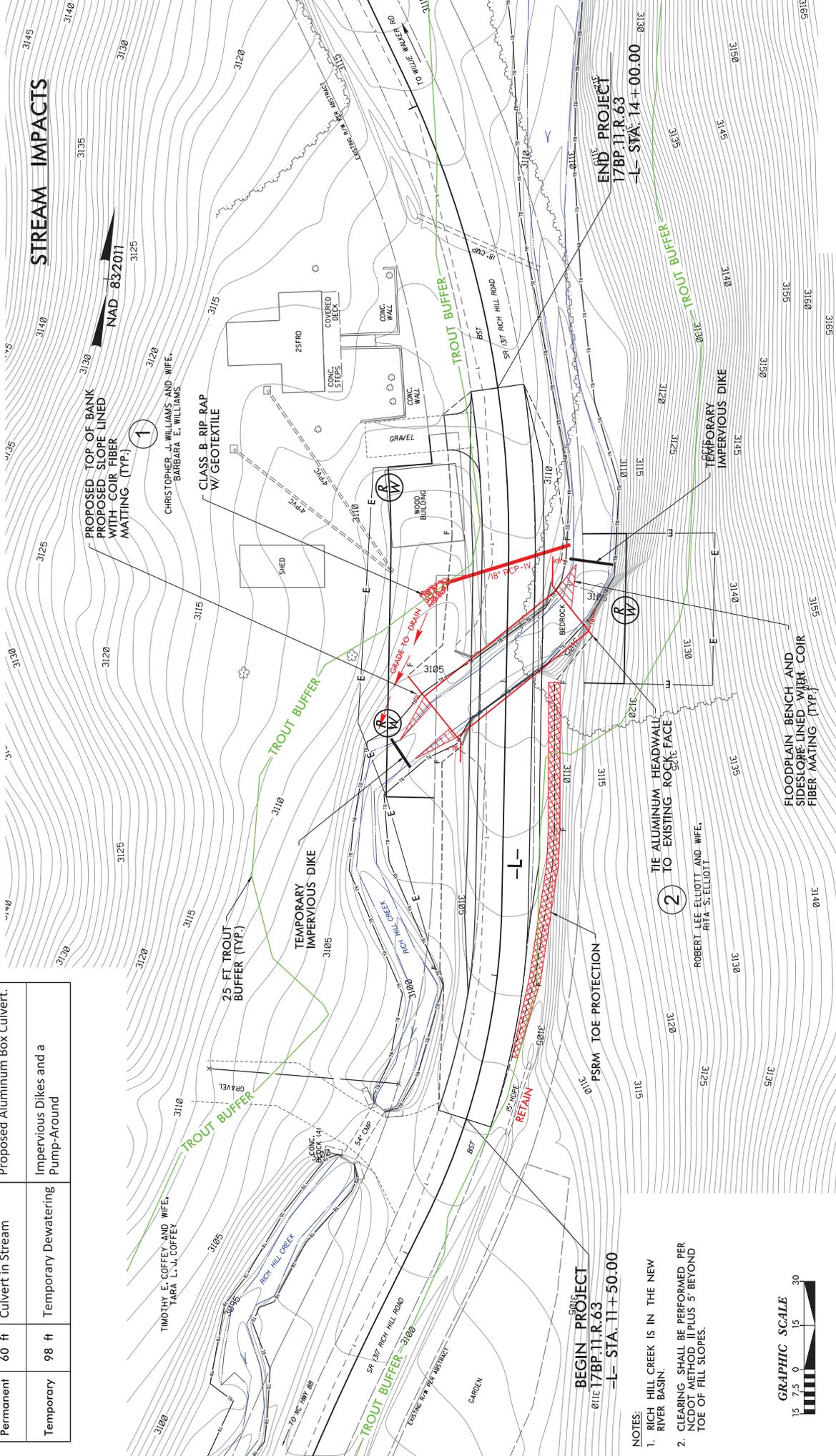
(2) TIE ALUMINUM HEADWALL TO EXISTING ROCK FACE.  
ROBERT LEE ELLIOTT AND WIFE,  
RITA S. ELLIOTT



**PERMIT DRAWING  
 FOR BRIDGE #040264  
 ASHE COUNTY**

EXISTING BRIDGE DIMENSIONS - 21.75'X20.5' (SINGLE-SPAN), 50 DEG. SKEW  
 PROPOSED CULVERT DIMENSIONS - 17'-9" SPAN X 3'-10" RISE ALUMINUM  
 BOX CULVERT, 50 DEG. SKEW  
 TOTAL PROJECT LENGTH - 250'

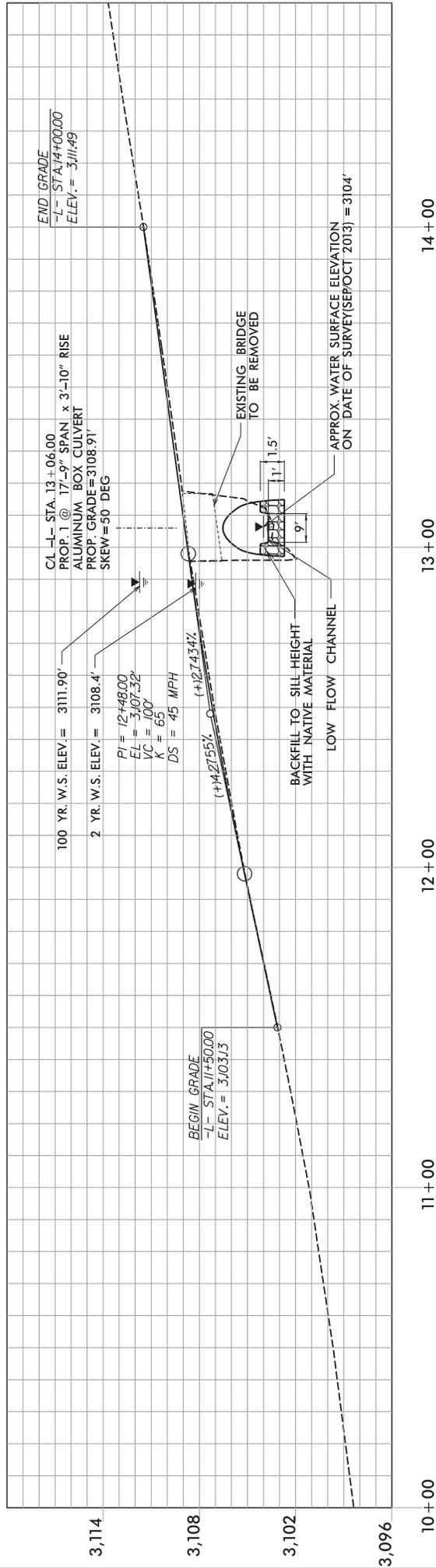
STREAM IMPACTS		Description
Length	Type	
60 ft	Culvert in Stream	Proposed Aluminum Box Culvert.
98 ft	Temporary Dewatering	Impervious Dikes and a Pump-Around



**BEGIN PROJECT**  
 0+11.17BP 11 R 63  
 -L- STA. 11+50.00

- NOTES:
- RICH HILL CREEK IS IN THE NEW RIVER BASIN.
  - CLEARING SHALL BE PERFORMED PER LOCAL CITY PLUS 5' BEYOND TOE OF HILL SLOPES.





# PROFILE ALONG ROADWAY

STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE	= 230	CFS
DESIGN FREQUENCY	= 2	YRS
DESIGN HW ELEVATION	= 3,108.4	FT
BASE DISCHARGE	= 1,100	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 3,111.90	FT
OVERTOPPING DISCHARGE	= 250	CFS
OVERTOPPING FREQUENCY	= 2+	YRS
OVERTOPPING ELEVATION	= 3,109.10**	FT

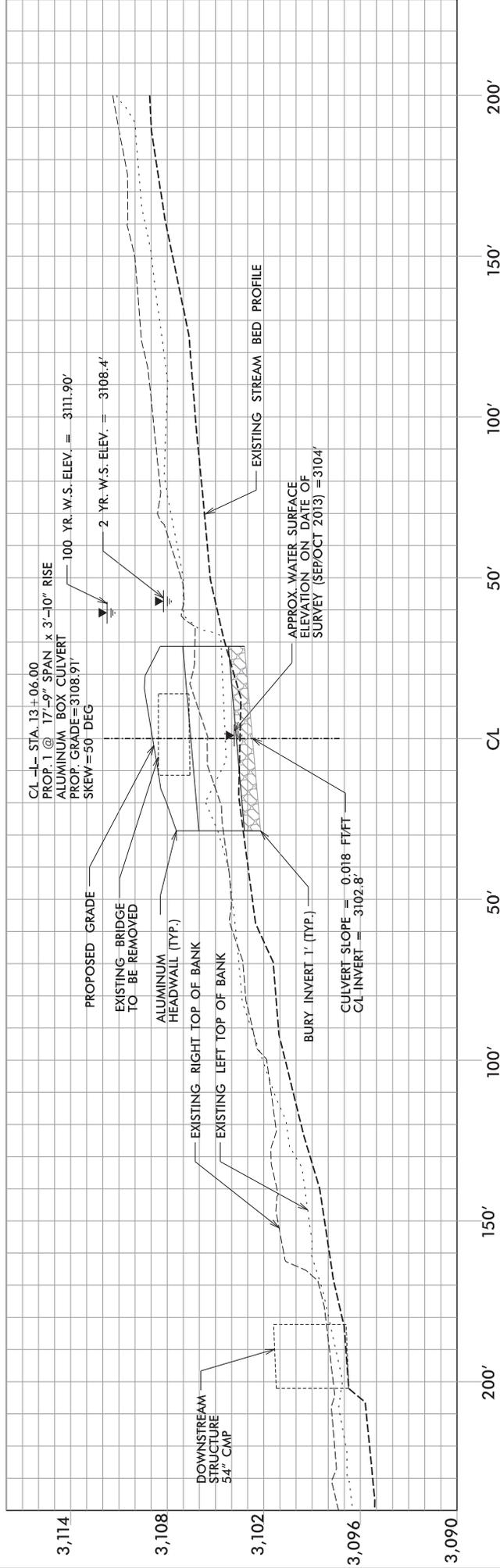
\*\* OVERTOPPING ELEVATION REPRESENTS LOWEST HIGHPPOINT AT -L- STA.13+04 LT

PERMIT DRAWING SHEET 3 OF 4

**NC DOT**  
 DIVISION OF HIGHWAYS  
 ASHE COUNTY

PROJECT: 17BP.11.R.63 (SF-040264)  
 REPLACEMENT OF BRIDGE NO. 040264  
 ON SR 1317 (RICH HILL RD)  
 OVER RICH HILL CREEK

**PERMIT DRAWING  
 FOR BRIDGE #040264  
 ASHE COUNTY**



# PROFILE ALONG STREAM

PERMIT DRAWING SHEET 4 OF 4

**NC DOT**

DIVISION OF HIGHWAYS  
 ASHE COUNTY

PROJECT: 17BP.11.R.63 (SF-040264)

REPLACEMENT OF BRIDGE NO. 040264  
 ON SR 1317 (RICH HILL RD)  
 OVER RICH HILL CREEK

PERMIT DRAWING  
 FOR BRIDGE #040264  
 ASHE COUNTY



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

September 18, 2015  
Surry County  
NCDWR Project No. 20150928  
Bridge 298 on SR 1600  
WBS Element No. 17BP.11.R.82

**APPROVAL of 401 WATER QUALITY CERTIFICATION, with ADDITIONAL CONDITIONS**

Mr. Heath Slaughter, Division Environmental Officer  
NCDOT, Division 11  
801 Statesville Road  
North Wilkesboro, NC 28659

Dear Mr. Slaughter:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge 298 over a UT to Fisher River [Stream Index 12-63-(1)] in Surry County with an aluminum box culvert (ABC):

**Stream Impacts in the Yadkin River Basin**

Site	Permanent Fill in Perennial Stream (linear ft)		Temporary Fill in Perennial Stream (linear ft) Dewatering	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
	Culvert	Riprap			
1	36	29	31	96	0
-	-	-	-	-	-
<b>Total</b>	<b>36</b>	<b>29</b>	<b>31</b>	<b>96</b>	<b>0</b>

**Total Stream Impact for Project: 96 linear feet.**

The project shall be constructed in accordance with your application dated September 9, 2015. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3886 which correspond to the Nationwide/General Permits 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(s) and any additional conditions listed below.

## Condition(s) of Certification:

### Project Specific Conditions

1. 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. NCDOT shall be in compliance with the NCS000250 issued to the NCDOT, including the applicable requirements of the NCG010000. Please note the extra protections for the sensitive watersheds as the UT to Fisher River is classified as WS-II, Trout (Tr) and High Quality Waters (HQW). [15A NCAC 4B.0124(a)-(e)]
3. This project has the potential to impact trout waters or other aquatic species of concern. No construction activities shall begin until the NCWRC makes a determination regarding moratoria. Should the NCWRC determine that a moratorium is applicable then the requirements of any moratorium(s) shall be a condition of this 401 Certification. If the NCDOT does not wish to honor the moratorium, then a written modification shall be submitted.
4. For the 31 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. The ABC shall be designed to mimic natural stream cross section as closely as possible including flood the plain elevation as described in the application with the use of baffles/sills where appropriate. Widening the stream channel should be avoided. [15A NCAC 02H.0506(b)(2)]
6. 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. 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)]
2. 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]
3. 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)]

4. 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)]
5. 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)]
6. 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)]
7. 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)]
8. 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)]
9. 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)]
10. 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)]
11. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
12. 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]
13. 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)]
14. 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)]
15. 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]
16. 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.
17. 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)]

18. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer or appointee 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)]
19. 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)]
20. 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)]
21. 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.
22. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. [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 Dave Wanucha at (336)776-9703 or [dave.wanucha@ncdenr.gov](mailto:dave.wanucha@ncdenr.gov).

Sincerely,



*for* S. Jay Zimmerman, P.G.  
Director, Division of Water Resources

Electronic copy only distribution:

Steve Kichefski, US Army Corps of Engineers, Asheville Field Office  
Heath Slaughter, NCDOT Division 11  
Marella Buncick, US Fish and Wildlife Service  
Marla Chambers, NC Wildlife Resources Commission  
Dave Wanucha, NC Division of Water Resources Winston Salem Regional Office  
File Copy



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

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 \_\_\_\_\_



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Division of Mitigation Services

Donald R. van der Vaart  
Secretary

September 10, 2015

Mr. Heath Slaughter  
Division 11 Environmental Supervisor  
North Carolina Department of Transportation  
Post Office Box 250  
North Wilkesboro, North Carolina 28659

Dear Mr. Slaughter:

Subject: Mitigation Acceptance Letter:

Division 11 Project: Replace Bridge 298 on SR 1600 over a UT to the Fisher River, Surry County; WBS Number 17BP.11.R.82

The purpose of this letter is to notify you that the Division of Mitigation Services (DMS) will provide the compensatory stream mitigation for the subject project. Based on the information supplied by you on September 9, 2015, the impacts are located in CU 03040101 of the Yadkin River basin in the Northern Mountains (NM) Eco-Region, and are as follows:

Yadkin 03040101 NM	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	36.0	0	0	0	0	0	0	0

\*Some of the stream impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details.

This impact and associated mitigation need were under projected by the NCDOT in the 2015 impact data. DMS will commit to implement sufficient compensatory stream mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies using the delivery timeline listed in Section F.3.c.iii of the In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from DMS.

If you have any questions or need additional information, please contact Beth Harmon at 919-707-8420.

Sincerely,

James B. Stanfill  
DMS Asset Management Supervisor

cc: Mr. Steve Kichefski, USACE – Asheville Regulatory Field Office  
Ms. Linda Fitzpatrick, NCDOT – PDEA  
File: SR 1600 – Bridge 298 – Division 11



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## ◻ North Carolina Wildlife Resources Commission ◻

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Gordon Myers, Executive Director

TO: Steve Kichefski, NCDOT Regulatory Project Manager  
Asheville Regulatory Field Office, USACE

FROM: Marla Chambers, Western NCDOT Coordinator *Marla Chambers*  
Habitat Conservation Program, NCWRC

DATE: October 8, 2015

SUBJECT: Review of NCDOT's application for Section 404 and 401 permits to replace Bridge No. 298 over an unnamed tributary to Fisher River on SR 1600 (Lumber Plant Road), Surry County, North Carolina.

The North Carolina Department of Transportation (NCDOT) has submitted an application to obtain a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a 401 Water Quality Certification from the NC Division of Water Resources (NCDWR). Staff biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the information provided. These comments are provided in accordance with the provisions of the state and federal Environmental Policy Acts (G.S. 113A-1 through 113-10; 1 NCAC 25 and 42 U.S.C. 4332(2)(c), respectively), the Clean Water Act of 1977 (33 U.S.C. 466 et seq.) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d), as applicable.

The NCDOT proposes to replace Bridge No. 298 over an unnamed tributary (UT) to Fisher River on SR 1600 (Lumber Plant Road) with an aluminum box culvert, measuring 20.5' wide x 5' high x 36' long on a 4.1% slope. Four baffles will be installed to maintain channel width (inlet, outlet and two interior). Permanent stream impacts include 36 linear feet (lf) for the culvert and 29 lf for riprap stabilization. Temporary impacts total 31 lf for dewatering. Significant trout resources are not expected, therefore, we are not requesting a trout moratorium for this project. Fisher River and the project UT are classified WS-II, Trout, HQW. Strong sedimentation and erosion control measures are recommended to protect these high quality waters.

NCWRC does not object to the issuance of Section 404 and 401 permits provided that the following conditions are implemented:

1. Stringent sedimentation and erosion control measures must be implemented and maintained on the project site until project completion to avoid impacts to downstream aquatic resources.
2. Herbaceous vegetation shall be planted on all bare soil as soon as possible following the completion of permanent or temporary ground disturbing activities to provide appropriate long-term erosion control.
3. Tall fescue and straw mulch shall not be used in riparian areas. We encourage NCDOT to utilize onsite vegetation and materials for bank stabilization when practicable. Erosion control matting shall be used on steep slopes and for establishing permanent vegetation in riparian areas. The matting shall be well anchored with staples or wooden stakes and, whenever possible, include live stakes of native trees. Matting in riparian areas should not contain plastic mesh, which can entangle and trap small animals.
4. Stormwater should be directed to buffer areas or retention basins and should not be routed directly into the waterway.
5. The natural dimension, pattern, and profile of the waterway above and below the crossing should not be modified by widening the channel or changing the depth of the waterway.
6. Removal of vegetation in riparian areas should be minimized. Native trees and shrubs should be planted along the banks, as appropriate to the setting, to reestablish the riparian zone and to provide long-term erosion control.
7. Grading and backfilling should be minimized, and tree and shrub growth should be retained, if possible, to ensure long term availability of shoreline cover for fish and wildlife.
8. Where practicable, riprap placed for bank stabilization should be limited to the banks below the high water mark, and vegetation should be used for stabilization above the high water elevation.
9. If concrete will be used during construction, work must be accomplished so that wet (uncured) concrete does not contact surface waters. This will lessen the chance of altering the water chemistry and causing a fish kill.
10. Discharging hydroseeding mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
11. Heavy equipment should be operated from the bank rather than in the channel whenever possible in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the waterway. All mechanized equipment operated near surface waters should be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids or other toxic materials.

Thank you for the opportunity to review and comment on this project. If you have any questions regarding these comments, please contact me at [marla.chambers@ncwildlife.org](mailto:marla.chambers@ncwildlife.org) or (704) 982-9181.

cc: Dave Wanucha, NCDWR  
Heath Slaughter, NCDOT



(Version 1.2; Released July 2012)

North Carolina Department of Transportation  
 Highway Stormwater Program  
**STORMWATER MANAGEMENT PLAN**  
 FOR LINEAR ROADWAY PROJECTS

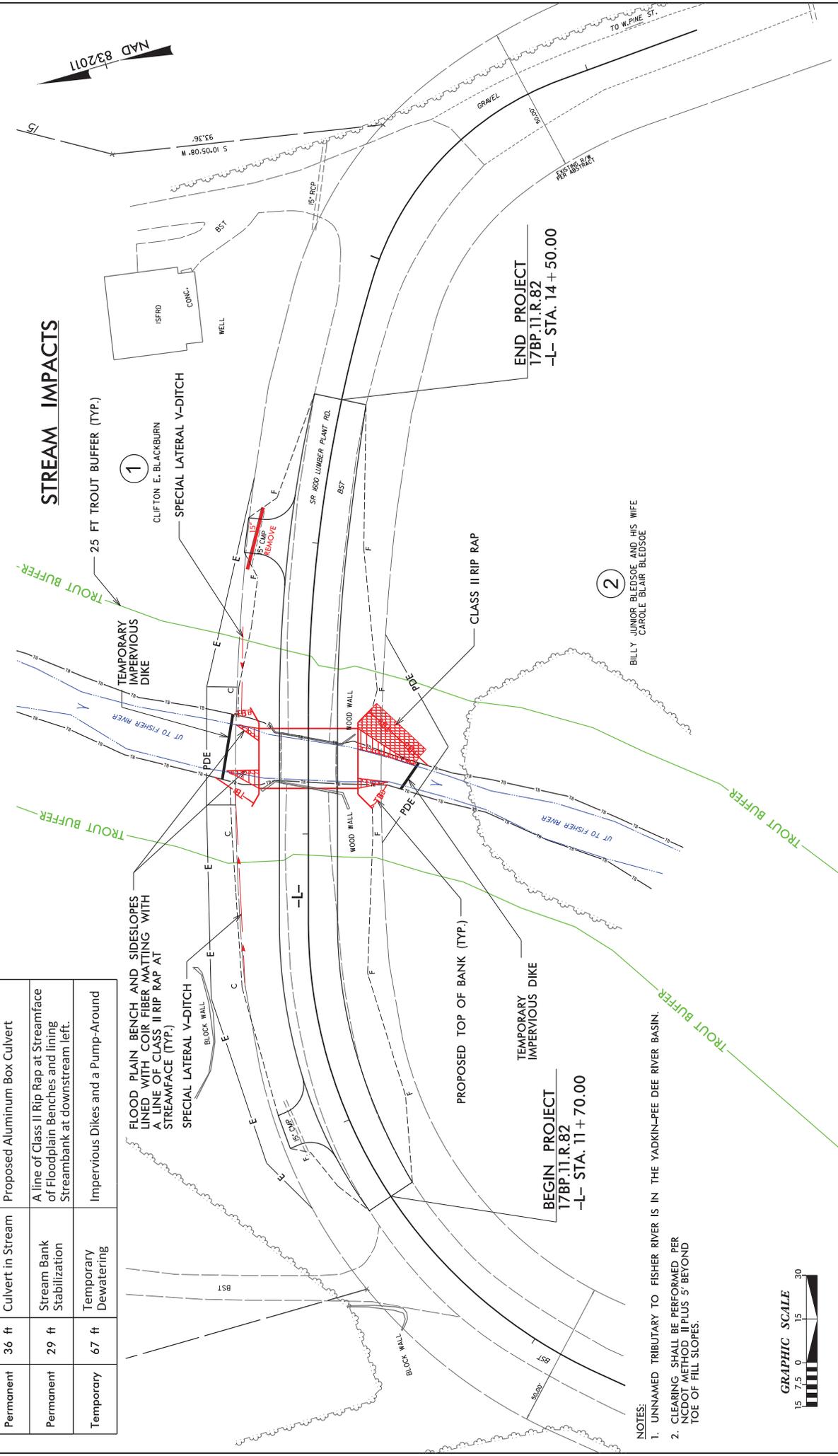


General Project Information	
<b>Project No.:</b>	17BP.11.R.82 (SF-850298)
<b>Project Type:</b>	Bridge Replacement
<b>Date:</b>	12/8/2014
<b>NC DOT Contact:</b>	Marc T. Shown, PE
<b>Contractor / Designer:</b>	TGS Engineers (David B. Petty, PE)
<b>Address:</b>	706 Hillsborough St. Suite 200 Raleigh, NC 27603
<b>Phone:</b>	919-773-8887 Ext. 104
<b>Email:</b>	<a href="mailto:dpetty@tgsengineers.com">dpetty@tgsengineers.com</a>
<b>City/Town:</b>	Surry
<b>River Basin(s):</b>	Yadkin-Pee Dee
<b>County(ies):</b>	Surry
<b>Primary Receiving Water:</b>	Fisher River (first named stream downstream of unnamed tributary)
<b>CAMA County?</b>	No
<b>NCDWQ Stream Index No.:</b>	12-63-(1)
<b>Primary:</b>	Water Supply II (WS-II)
<b>Supplemental:</b>	Trout Waters (Tr)
<b>NCDWQ Surface Water Classification for Primary Receiving Water</b>	High Quality Waters (HQW)
<b>Other Stream Classification:</b>	None
<b>303(d) Impairments:</b>	None
<b>Buffer Rules in Effect</b>	N/A
Project Description	
<b>Project Length (lin. Miles or feet):</b>	280 ft. <b>Surrounding Land Use:</b> forest; some rural residential
<b>Project Built-Upon Area (ac.):</b>	0.13 <b>Proposed Project</b>
<b>Typical Cross Section Description:</b>	Two 10' wide paved travel lanes w/ 7' grass shoulders and 2(H):1(V) grassed side slopes. <b>Existing Site</b>
<b>Average Daily Traffic (veh/hr/day):</b>	Design/Future: 410 <b>Existing:</b> 410
<b>General Project Narrative:</b>	Replacement of Bridge No. 850298 on SR 1600 (Lumber Plant Rd.) over an Unnamed Tributary to Fisher River in Surry County north of Lowgap, NC. Proposed 20'-7" span x 5'-3" rise Aluminum Box Culvert to replace existing 17'-6" long by 20' wide single-span bridge. The proposed grade is about 6 inches above existing grade in the vicinity of the bridge and roughly matching existing by about 75' left of stream and about 75' right of stream (looking downstream). Proposed culvert is to be located at same location as existing bridge. Stormwater runoff on the existing bridge discharges directly into the water for the full length of the bridge. Graded shoulders are to be widened from existing and will be substantially flat allowing for diffusion and infiltration of the roadway runoff. The proposed culvert crossing will have no direct discharge into the water. All stormwater runoff will be discharged at minimum practicable slopes, yielding minimum velocities. All proposed stormwater runoff is discharged as far away from the stream and at the lowest velocities as practicable.

**PERMIT DRAWING  
 FOR BRIDGE #850298  
 SURRY COUNTY**

EXISTING BRIDGE DIMENSIONS - 17.5'x20' (SINGLE-SPAN), 100 DEG. SKEW  
 PROPOSED CULVERT DIMENSIONS - 20'-7" SPAN X 5'-3" RISE ALUMINUM  
 BOX CULVERT, 90 DEG. SKEW  
 TOTAL PROJECT LENGTH - 280'

STREAM IMPACTS	
Length	Description
Permanent	36 ft Culvert in Stream Proposed Aluminum Box Culvert
Permanent	29 ft Stream Bank Stabilization A line of Class II Rip Rap at Streamface of Floodplain Benches and lining Streambank at downstream left.
Temporary	67 ft Temporary Dewatering Impervious Dikes and a Pump-Around



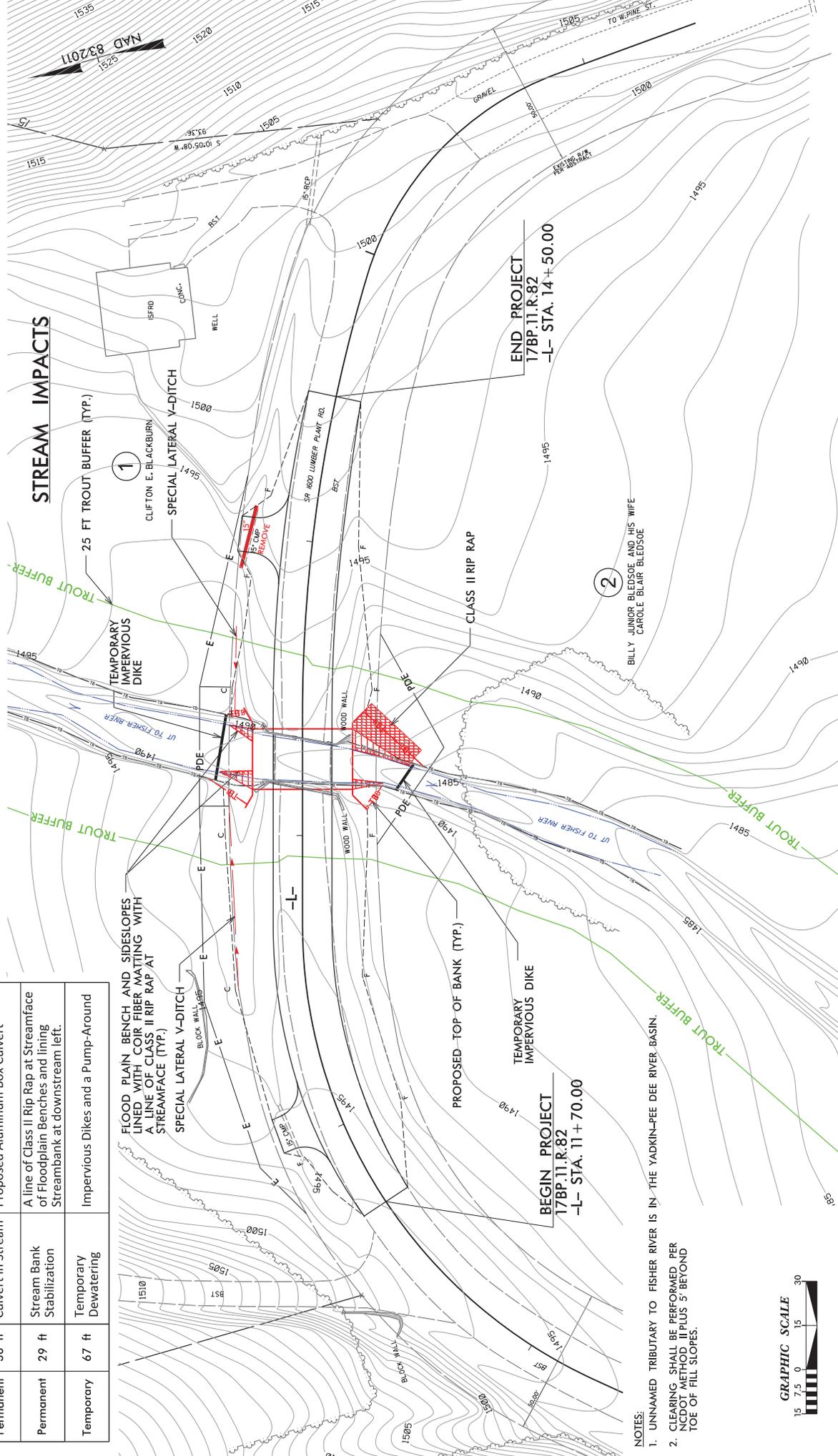
- NOTES:**
- UNNAMED TRIBUTARY TO FISHER RIVER IS IN THE YADKIN-PEE DEE RIVER BASIN.
  - CLEARING SHALL BE PERFORMED PER NCDOT METHOD #1 PLUS 5' BEYOND TOE OF FILL SLOPES.



**PERMIT DRAWING  
 FOR BRIDGE #850298  
 SURRY COUNTY**

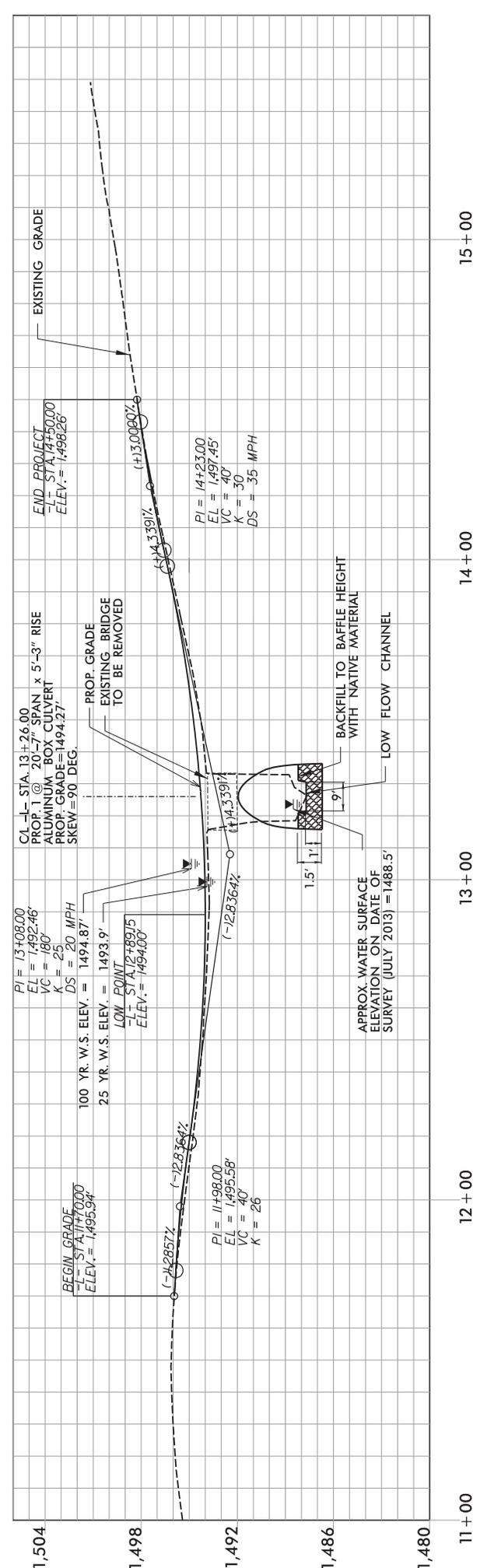
EXISTING BRIDGE DIMENSIONS - 17.5'x20' (SINGLE-SPAN), 100 DEG. SKEW  
 PROPOSED CULVERT DIMENSIONS - 20'-7" SPAN X 5'-3" RISE ALUMINUM  
 BOX CULVERT, 90 DEG. SKEW  
 TOTAL PROJECT LENGTH - 280'

STREAM IMPACTS		Description
Length	Type	
36 ft	Culvert in Stream	Proposed Aluminum Box Culvert
29 ft	Stream Bank Stabilization	A line of Class II Rip Rap at Streamface of Floodplain Benches and limiting Streambank at downstream left.
67 ft	Temporary Dewatering	Impervious Dikes and a Pump-Around



- NOTES:**
- UNNAMED TRIBUTARY TO FISHER RIVER IS IN THE YADKIN-PEE DEE RIVER BASIN.
  - CLEARING SHALL BE PERFORMED PER NCDOT METHOD #1 PLUS 5' BEYOND TOE OF FILL SLOPES.





# PROFILE ALONG ROADWAY

STRUCTURE HYDRAULIC DATA

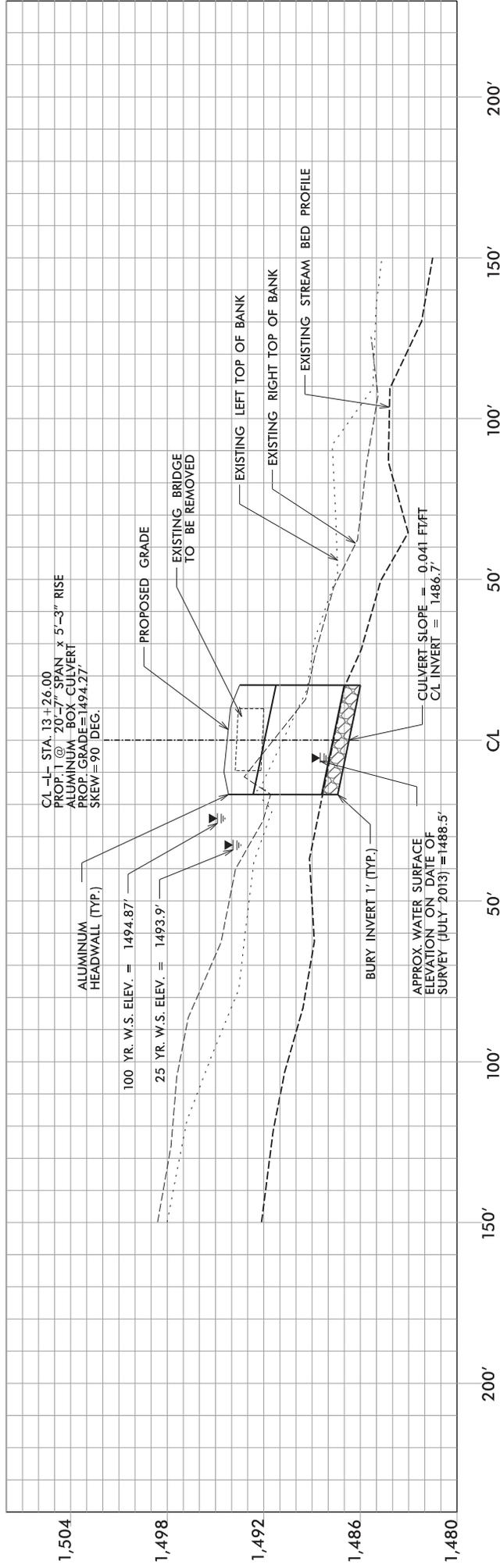
DESIGN DISCHARGE	= 500	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 1,493.9	FT
BASE DISCHARGE	= 750	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 1,494.87	FT
OVERTOPPING DISCHARGE	= 550	CFS
OVERTOPPING FREQUENCY	= 25±	YRS
OVERTOPPING ELEVATION	= 1,494.20**	FT

\*\* OVERTOPPING ELEVATION REPRESENTS ELEVATION AT SAG (-L- STA. 12+89.15, 10.0' LT)

PERMIT DRAWING SHEET 3 OF 4

**NC DOT**  
 DIVISION OF HIGHWAYS  
 SURRY COUNTY  
 PROJECT: 17BP.11.R.82 (SF-850298)  
 REPLACEMENT OF BRIDGE NO. 850298  
 ON SR 1600 (LUMBER PLANT RD)  
 OVER UNNAMED TRIBUTARY  
 TO FISHER RIVER

**PERMIT DRAWING  
 FOR BRIDGE #850298  
 SURRY COUNTY**



## PROFILE ALONG STREAM

PERMIT DRAWING SHEET 4 OF 4

**NCDOT**

DIVISION OF HIGHWAYS  
SURRY COUNTY

PROJECT: 17BP.11.R.82 (SF-850298)

REPLACEMENT OF BRIDGE NO. 850298  
ON SR 1600 (LUMBER PLANT RD)  
OVER UNNAMED TRIBUTARY  
TO FISHER RIVER

PERMIT DRAWING #850298  
FOR BRIDGE #850298  
SURRY COUNTY



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

August 31, 2015  
Watauga County  
NCDWR Project No. 20150795  
Bridge 20 on SR 1222  
WBS Element No. 17BP.11.R.76

**APPROVAL of 401 WATER QUALITY CERTIFICATION, with ADDITIONAL CONDITIONS**

Mr. Heath Slaughter, Division Environmental Officer  
NCDOT, Division 11  
801 Statesville Road  
North Wilkesboro, NC 28659

Dear Mr. Slaughter:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge 20 over Rube Creek (Stream Index 8-19-3) on SR 1222 in Watauga County with an aluminum box culvert:

**Stream Impacts in the Watauga River Basin**

Site	Permanent Fill in Perennial Stream (linear ft)		Temporary Fill in Perennial Stream (linear ft) Dewatering	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
	Riprap	Culvert			
1	38	60	106	204	0
	-	-	-	-	-
<b>Total</b>	<b>38</b>	<b>60</b>	<b>106</b>	<b>204</b>	<b>0</b>

**Total Stream Impact for Project: 204 linear feet**

**Wetland Impacts in the Watauga River Basin (riverine)**

Site	Fill (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)
1	0.01	-	0.01	0.02
<b>Total</b>	<b>0.01</b>	<b>-</b>	<b>0.01</b>	<b>0.02</b>

**Total Wetland Impact for Project: 0.02 acres.**

The project shall be constructed in accordance with your application dated August 5, 2015. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3886 which correspond to the Nationwide/General Permits 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(s) and any additional conditions listed below.

### **Condition(s) of Certification:**

#### **Project Specific Conditions**

1. As a condition of this 401 Water Quality Certification, the bridge demolition 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. NCDOT shall be in compliance with the NCS000250 issued to the NCDOT, including the applicable requirements of the NCG010000. Please note the extra protections for the sensitive watersheds as Rube Creek drains to the Watauga River which is classified as Trout Waters (Tr). [15A NCAC 4B.0124(a)-(e)]
3. This project has the potential to impact trout waters or other aquatic species of concern. No construction activities shall begin until the NCWRC makes a determination regarding moratoria. Should the NCWRC determine that a moratorium is applicable then the requirements of any moratorium(s) shall be a condition of this 401 Certification. If the NCDOT does not wish to honor the moratorium, then a written modification shall be submitted.
4. For the 106 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. The culvert shall be designed to mimic natural stream cross section as closely as possible. Widening the stream channel should be avoided. [15A NCAC 02H.0506(b)(2)]
6. 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)]
7. 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)]

#### **General Conditions**

1. 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)]
2. 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]
  3. 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)]
  4. 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)]
  5. 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)]
  6. 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)]
  7. 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)]
  8. 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)]
  9. 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)]
  10. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
  11. 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]
  12. 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)]
  13. 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)]
  14. 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]

15. 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.
16. 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)]
17. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer or appointee 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)]
18. 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)]
19. 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)]
20. 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.
21. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. [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 Dave Wanucha at (336)776-9703 or [dave.wanucha@ncdenr.gov](mailto:dave.wanucha@ncdenr.gov).

Sincerely,

A handwritten signature in black ink that reads "S. Jay Zimmerman for:".

S. Jay Zimmerman,  
Director, Division of Water Resources

Electronic copy only distribution:

Steve Kichefski, US Army Corps of Engineers, Asheville Field Office  
Marella Buncick, US Fish and Wildlife Service  
Marla Chambers, NC Wildlife Resources Commission  
Dave Wanucha, NC Division of Water Resources Winston Salem Regional Office  
File Copy



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. Van der Vaart  
Secretary

**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 \_\_\_\_\_

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

Action ID: SAW-2015-02248

County: Watauga

U.S.G.S. Quad: Sherwood

**GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION**

Permittee: NCDOT/ Attn: Heath Slaughter  
Address: 801 Statesville Road  
North Wilkesboro, NC 28659  
Telephone Number: 336-903-9202

Size (acres): \_\_\_\_\_ Nearest Town: Bethel  
Nearest Waterway: Rube Creek Coordinates: 36.3117 N, 81.8515 W  
River Basin/ HUC: Watuaga Watershed; French Broad-Holston Basin; HUC: 06010103

Location description: The proposed project site is located where Mountindale Road crosses Rube Creek, immediately south of the intersection of Mountindale Road and Stone Mountain Road, near Bethel, Watauga County North Carolina.

Description of projects area and activity: This permit verification authorizes 98 LF of permanent stream impacts (60 for culvert and 38 for riprap), 0.02 acre of permanent wetland impact and 106 LF of temporary stream impact for bridge removal and dewatering associated with the replacement of a bridge with a 22'9" W x 60' L x 5'4" H aluminum box culvert.

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

Authorization: Regional General Permit Number or Nationwide Permit Number: 14  
**SEE ATTACHED RGP or NWP GENERAL, REGIONAL AND SPECIAL CONDITIONS**

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted application and attached information dated August 5, 2015. 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/regional authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide/regional 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/regional permit. If the nationwide/regional 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/regional permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide/regional permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide/regional 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 919-807-6300) to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management.

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 Corps of Engineers regulatory program, please contact Steve Kichefski at 828-271-7980, ext. 234 or [steven.i.kichefski@usace.army.mil](mailto:steven.i.kichefski@usace.army.mil).

Corps Regulatory Official:  Date: October 16, 2015\*  
Steve Kichefski

\*Date represents 45 days from which a complete application was received.

Expiration Date of Verification: March 18, 2017

**Determination of Jurisdiction:**

- A.  Based on preliminary information, there appear to be waters of the US including wetlands within the above described project area. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331).
- B.  There are Navigable Waters of the United States within the above described project area subject to the permit requirements of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- C.  There are waters of the US and/or wetlands within the above described project area subject to the permit requirements of Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- D.  The jurisdictional areas within the above described project area have been identified under a previous action. Please reference jurisdictional determination issued . Action ID: SAW-

**Basis for Determination:**

The stream channel in the project area is an unnamed tributary (UT) to Rube Creek which flows into the Watuaga Watershed; French Broad-Holston Basin; HUC: 06010103. Rube Creek flows to the Gulf of Mexico via Beaverdam Creek, the Watuaga River, Holston River, Tennessee River, Ohio River and Mississippi River. The Watuaga River is a TNW.

**Remarks:****E. Attention USDA Program Participants**

This delineation/determination has been conducted to identify the limits of Corps' Clean Water Act jurisdiction for the particular site identified in this request. The delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA Program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

**F. Appeals Information (This information applies only to approved jurisdictional determinations as indicated in B and C above).**

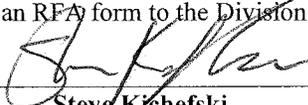
This correspondence constitutes an approved jurisdictional determination for the above described site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

US Army Corps of Engineers  
South Atlantic Division  
Attn: Jason Steele, Review Officer  
60 Forsyth Street SW, Room 10M15  
Atlanta, Georgia 30303-8801  
Phone: (404) 562-5137

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address within 60 days of the date of issue below.

\*\*It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this correspondence.\*\*

Corps Regulatory Official: \_\_\_\_\_

  
Steve Kichefski

Issue Date of JD: **October 16, 2015**

Expiration Date of JD: **October 16, 2015**

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 our Customer Satisfaction Survey, located online at <http://regulatory.usacesurvey.com/>.

Copy furnished:

### SPECIAL CONDITIONS

- 1) In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization.
- 2) Recommendations in the attached North Carolina Wildlife Resources Commission dated September 1, 2015 are hereby incorporated as special conditions of this permit verification.
- 3) Please be advised that if additional impacts to waters of the U.S., either on this property or on/adjacent to this property and associated with this project/activity, are proposed at a later date, those impacts will be combined with the current impacts to waters of the U.S. and will be reviewed cumulatively. Generally, compensatory mitigation will be required if individual or cumulative (i.e., past and present) losses or degradation of waters of the U.S. are greater than 150 linear feet of perennial or intermittent stream channel and/or 0.1 acre of wetland. Additionally, cumulative impacts that result in the loss or degradation of greater than 300 linear feet of perennial or intermittent\* stream channel, and/or 0.5 acre of wetland, will be processed under an Individual Permit. This verification of the use of the Nationwide Permit Program for this project does not imply that this office will necessarily approve any future proposal to impact waters of the U.S. on this property and/or associated with this project/activity.

\* The District Commander has the ability to waive the 300 linear foot limit for intermittent streams on a case-by-case basis. All requests for waiver must be in writing and shall include rationale for the request.

Action ID Number: SAW-2015-02248  
Permit Type: NWP 14  
County: Watauga  
Permittee: NCDOT/ Attn: Heath Slaughter  
Project Name: NCDOT/Bridge20/SR1222/Div11  
Date Verification Issued: October 16, 2015  
Project Manager: Steve Kichefski

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.: CESA W-RG-A  
151 Patton Avenue, Room 208  
Asheville, North Carolina 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 Corps 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.

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Signature of Permittee

---

Date

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND  
REQUEST FOR APPEAL**

Applicant: <b>NCDOT/ Attn: Heath Slaughter</b>		File Number: <b>SAW-SAW-2015-02248</b>	Date: <b>October 16, 2015</b>
Attached is:		See Section below	
<input type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
<input type="checkbox"/>	PERMIT DENIAL	C	
<input checked="" type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION	D	
<input type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E	

**SECTION I -** The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx> or Corps regulations at 33 CFR Part 331.

**A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.**

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT: You may accept or appeal the permit**

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the district engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:  
**District Engineer, Wilmington Regulatory Division, Attn.: Steve Kichefski**  
**828-271-7980**

If you only have questions regarding the appeal process you may also contact:  
Mr. Jason Steele, Administrative Appeal Review Officer  
CESAD-PDO  
U.S. Army Corps of Engineers, South Atlantic Division  
60 Forsyth Street, Room 10M15  
Atlanta, Georgia 30303-8801  
Phone: (404) 562-5137

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.	Date:	Telephone number:
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*For appeals on Initial Proffered Permits send this form to:*

**District Engineer, Wilmington Regulatory Division, Attn.: Steve Kichefski, 69 Darlington Avenue, Wilmington, North Carolina 28403**

*For Permit denials, Proffered Permits and approved Jurisdictional Determinations send this form to:*

**Division Engineer, Commander, U.S. Army Engineer Division, South Atlantic, Attn: Mr. Jason Steele, Administrative Appeal Officer, CESAD-PDO, 60 Forsyth Street, Room 10M15, Atlanta, Georgia 30303-8801**  
**Phone: (404) 562-5137**

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

Wilmington District

**Compensatory Mitigation Responsibility Transfer Form**

Permittee: NCDOT/Attn: Heath Slaughter  
 Project Name: NCDOT/Bridge20/SR1222/Div

Action ID: SAW-2015-02248  
 County: Watauga

**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:** 06010103, Watauga River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
		60				

\*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:** 06010103, Watauga River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
		120				

**Mitigation Site Debited:** NCDMS

(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:** Steve Kichefski  
**USACE Field Office:** Asheville Regulatory Field Office  
US Army Corps of Engineers  
151 Patton Avenue, Room 208  
Asheville, North Carolina 28801-5006  
**Email:** steven.l.kichefski@usace.army.mil

Steve Kichefski   
USACE Project Manager Signature

October 16, 2015  
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>.

**NATIONWIDE PERMIT 14  
DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS  
FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS  
FEDERAL REGISTER  
AUTHORIZED MARCH 19, 2012**

**Linear Transportation Projects.** Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

**Notification:** The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

**Note:** Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

## NATIONWIDE PERMIT CONDITIONS

The following General Conditions must be followed in order for any authorization by a NWP to be valid:

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have “no effect” on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any “take” permits required under the U.S. Fish and Wildlife Service’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such “take” permits are required for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA

section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) – (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of

the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

\_\_\_\_\_  
(Transferee)

\_\_\_\_\_  
(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(1)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the work and mitigation.

31. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

#### D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the

vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific

conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

### **FURTHER INFORMATION**

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.

### **DEFINITIONS**

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term “discharge” means any discharge of dredged or fill material.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water’s surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence

of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or

flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through

which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete project” is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of “independent utility”). Single and complete non-linear projects may not be “piecemealed” to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream’s course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent

mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line, which is defined at 33 CFR 328.3(d).

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWP, a waterbody is a jurisdictional water of the United States. If a jurisdictional wetland is adjacent – meaning bordering, contiguous, or neighboring – to a waterbody determined to be a water of the United States under 33 CFR 328.3(a)(1)-(6), that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of “waterbodies” include streams, rivers, lakes, ponds, and wetlands.

## **Final Regional Conditions 2012**

### *NOTICE ABOUT WEB LINKS IN THIS DOCUMENT:*

*The web links (both internal to our District and any external links to collaborating agencies) in this document are valid at the time of publication. However, the Wilmington District Regulatory Program web page addresses, as with other agency web sites, may change over the timeframe of the five-year Nationwide Permit renewal cycle, in response to policy mandates or technology advances. While we will make every effort to check on the integrity of our web links and provide re-direct pages whenever possible, we ask that you report any broken links to us so we can keep the page information current and usable. We apologize in advanced for any broken links that you may encounter, and we ask that you navigate from the regulatory home page (wetlands and stream permits) of the Wilmington District Corps of Engineers, to the “Permits” section of our web site to find links for pages that cannot be found by clicking directly on the listed web link in this document.*

## **Final 2012 Regional Conditions for Nationwide Permits (NWP) in the Wilmington District**

### **1.0 Excluded Waters**

The Corps has identified waters that will be excluded from the use of all NWP’s during certain timeframes. These waters are:

#### **1.1 Anadromous Fish Spawning Areas**

Waters of the United States identified by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas are excluded during the period between February 15 and June 30, without prior written approval from NCDMF or NCWRC and the Corps.

#### **1.2 Trout Waters Moratorium**

Waters of the United States in the twenty-five designated trout counties of North Carolina are excluded during the period between October 15 and April 15 without prior written approval from the NCWRC. (See Section 2.7 for a list of the twenty-five trout counties).

#### **1.3 Sturgeon Spawning Areas as Designated by the National Marine Fisheries Service (NMFS)**

Waters of the United States designated as sturgeon spawning areas are excluded during the period between February 1 and June 30, without prior written approval from the NMFS.

## **2.0 Waters Requiring Additional Notification**

The Corps has identified waters that will be subject to additional notification requirements for activities authorized by all NWP's. These waters are:

### **2.1 Western NC Counties that Drain to Designated Critical Habitat**

For proposed activities within Waters of the U.S. that require a Pre-Construction Notification pursuant to General Condition 31 (PCN) and are located in the sixteen counties listed below, applicants must provide a copy of the PCN to the US Fish and Wildlife Service, 160 Zillicoa Street, Asheville, North Carolina 28801. This PCN must be sent concurrently to the US Fish and Wildlife Service and the Corps Asheville Regulatory Field Office. Please see General Condition 18 for specific notification requirements related to Federally Endangered Species and the following website for information on the location of designated critical habitat.

Counties with tributaries that drain to designated critical habitat that require notification to the Asheville US Fish and Wildlife Service: Avery, Cherokee, Forsyth, Graham, Haywood, Henderson, Jackson, Macon Mecklenburg, Mitchell, Stokes, Surry, Swain, Transylvania, Union and Yancey.

Website and office addresses for Endangered Species Act Information:

The Wilmington District has developed the following website for applicants which provides guidelines on how to review linked websites and maps in order to fulfill NWP general condition 18 requirements: <http://www.saw.usace.army.mil/wetlands/ESA>

Applicants who do not have internet access may contact the appropriate US Fish and Wildlife Service offices listed below or the US Army Corps of Engineers at (910) 251- 4633:

US Fish and Wildlife Service  
Asheville Field Office  
160 Zillicoa Street  
Asheville, NC 28801  
Telephone: (828) 258-3939

Asheville US Fish and Wildlife Service Office counties: All counties west of and including Anson, Stanly, Davidson, Forsyth and Stokes Counties

US Fish and Wildlife Service  
Raleigh Field Office  
Post Office Box 33726  
Raleigh, NC 27636-3726  
Telephone: (919) 856-4520

Raleigh US Fish and Wildlife Service Office counties: all counties east of and including Richmond, Montgomery, Randolph, Guilford, and Rockingham Counties.

## **2.2 Special Designation Waters**

Prior to the use of any NWP in any of the following identified waters and contiguous wetlands in North Carolina, applicants must comply with Nationwide Permit General Condition 31 (PCN). The North Carolina waters and contiguous wetlands that require additional notification requirements are:

“Outstanding Resource Waters” (ORW) or “High Quality Waters” (HQW) as designated by the North Carolina Environmental Management Commission; “Inland Primary Nursery Areas” (IPNA) as designated by the NCWRC; “Contiguous Wetlands” as defined by the North Carolina Environmental Management Commission; or “Primary Nursery Areas” (PNA) as designated by the North Carolina Marine Fisheries Commission.

## **2.3 Coastal Area Management Act (CAMA) Areas of Environmental Concern**

Non-federal applicants for any NWP in a designated “Area of Environmental Concern” (AEC) in the twenty (20) counties of Eastern North Carolina covered by the North Carolina Coastal Area Management Act (CAMA) must also obtain the required CAMA permit. Development activities for non-federal projects may not commence until a copy of the approved CAMA permit is furnished to the appropriate Wilmington District Regulatory Field Office (Wilmington Field Office – 69 Darlington Avenue, Wilmington, NC 28403 or Washington Field Office – 2407 West 5th Street, Washington, NC 27889).

## **2.4 Barrier Islands**

Prior to the use of any NWP on a barrier island of North Carolina, applicants must comply with Nationwide Permit General Condition 31 (PCN).

## **2.5 Mountain or Piedmont Bogs**

Prior to the use of any NWP in a Bog classified by the North Carolina Wetland Assessment Methodology (NCWAM), applicants shall comply with Nationwide Permit General Condition 31 (PCN). The latest version of NCWAM is located on the NC DWQ web site at: <http://portal.ncdenr.org/web/wq/swp/ws/pdu/ncwam> .

## **2.6 Animal Waste Facilities**

Prior to use of any NWP for construction of animal waste facilities in waters of the US, including wetlands, applicants shall comply with Nationwide Permit General Condition 31 (PCN).

## **2.7 Trout Waters**

Prior to any discharge of dredge or fill material into streams or waterbodies within the twenty-five (25) designated trout counties of North Carolina, the applicant shall comply with Nationwide Permit General Condition 31 (PCN). The applicant shall also provide a copy of the notification to the appropriate NCWRC office to facilitate the determination of any potential

impacts to designated Trout Waters. Notification to the Corps of Engineers will include a statement with the name of the NCWRC biologist contacted, the date of the notification, the location of work, a delineation of wetlands, a discussion of alternatives to working in the mountain trout waters, why alternatives were not selected, and a plan to provide compensatory mitigation for all unavoidable adverse impacts to mountain trout waters.

#### NCWRC and NC Trout Counties

Western Piedmont Region Coordinator	Alleghany	Caldwell	Watauga
20830 Great Smoky Mtn. Expressway	Ashe	Mitchell	Wilkes
Waynesville, NC 28786	Avery	Stokes	
Telephone: (828) 452-2546	Burke	Surry	

Mountain Region Coordinator	Buncombe	Henderson	Polk
20830 Great Smoky Mtn. Expressway	Cherokee	Jackson	Rutherford
Waynesville, NC 28786	Clay	Macon	Swain
Telephone: (828) 452-2546	Graham	Madison	Transylvania
Fax: (828) 452-7772	Haywood	McDowell	Yancey

### 3.0 List of Corps Regional Conditions for All Nationwide Permits

The following conditions apply to all Nationwide Permits in the Wilmington District:

#### 3.1 Limitation of Loss of Perennial Stream Bed

NWPs may not be used for activities that may result in the loss or degradation of greater than 300 total linear feet of perennial, intermittent or ephemeral stream, unless the District Commander has waived the 300 linear foot limit for ephemeral and intermittent streams on a case-by-case basis and he determines that the proposed activity will result in minimal individual and cumulative adverse impacts to the aquatic environment. Loss of stream includes the linear feet of stream bed that is filled, excavated, or flooded by the proposed activity. Waivers for the loss of ephemeral and intermittent streams must be in writing and documented by appropriate/accepted stream quality assessments\*. This waiver only applies to the 300 linear feet threshold for NWPs.

\*NOTE: Applicants should utilize the most current methodology prescribed by Wilmington District to assess stream function and quality. Information can be found at:

<http://www.saw.usace.army.mil/wetlands/permits/nwp/nwp2012> (see “Quick Links”)

### **3.2 Mitigation for Loss of Stream Bed**

For any NWP that results in a loss of more than 150 linear feet of perennial and/or ephemeral/intermittent stream, the applicant shall provide a mitigation proposal to compensate for more than minimal individual and cumulative adverse impacts to the aquatic environment. For stream losses less than 150 linear feet, that require a PCN, the District Commander may determine, on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effect on the aquatic environment.

### **3.3 Pre-construction Notification for Loss of Streambed Exceeding 150 Feet.**

Prior to use of any NWP for any activity which impacts more than 150 total linear feet of perennial stream or ephemeral/ intermittent stream, the applicant must comply with Nationwide Permit General Condition 31 (PCN). This applies to NWPs that do not have specific notification requirements. If a NWP has specific notification requirements, the requirements of the NWP should be followed.

### **3.4 Restriction on Use of Live Concrete**

For all NWPs which allow the use of concrete as a building material, live or fresh concrete, including bags of uncured concrete, may not come into contact with the water in or entering into waters of the US. Water inside coffer dams or casings that has been in contact with wet concrete shall only be returned to waters of the US when it is no longer poses a threat to aquatic organisms.

### **3.5 Requirements for Using Riprap for Bank Stabilization**

For all NWPs that allow for the use of riprap material for bank stabilization, the following measures shall be applied:

**3.5.1.** Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters.

**3.5.2.** The placement of riprap shall be limited to the areas depicted on submitted work plan drawings.

**3.5.3.** The riprap material shall be clean and free from loose dirt or any pollutant except in trace quantities that would not have an adverse environmental effect.

**3.5.4.** It shall be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal conditions.

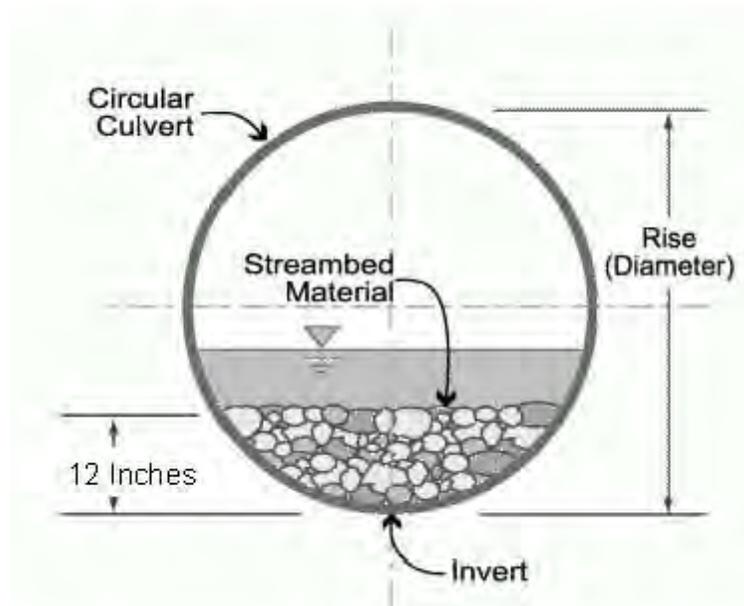
**3.5.5.** The riprap material shall consist of clean rock or masonry material such as, but not limited to, granite, marl, or broken concrete.

**3.5.6.** A waiver from the specifications in this Regional Condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this Regional condition would result in greater adverse impacts to the aquatic environment.

### **3.6 Safe Passage Requirements for Culvert Placement**

For all NWP's that involve the construction/installation of culverts, measures will be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a pipe or culvert should not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed culvert should be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow should be determined from gage data, if available. In the absence of such data, bankfull flow can be used as a comparable level.

In the twenty (20) counties of North Carolina designated as coastal counties by the Coastal Area Management Act (CAMA): All pipes/culverts must be sufficiently sized to allow for the burial of the bottom of the pipe/culvert at least one foot below normal bed elevation when they are placed within the Public Trust Area of Environmental Concern (AEC) and/or the Estuarine Waters AEC as designated by CAMA, and/or all streams appearing as blue lines on United States Geological Survey (USGS) 7.5-minute quadrangle maps.



In all other counties: Culverts greater than 48 inches in diameter will be buried at least one foot below the bed of the stream. Culverts 48 inches in diameter or less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, and every effort shall be made to maintain the existing channel slope. The bottom of the culvert must be placed at a

depth below the natural stream bottom to provide for passage during drought or low flow conditions.

Culverts are to be designed and constructed in a manner that minimizes destabilization and head cutting. Destabilizing the channel and head cutting upstream should be considered and appropriate actions incorporated in the design and placement of the culvert.

A waiver from the depth specifications in this condition may be requested in writing. The waiver will be issued if it can be demonstrated that the proposal would result in the least impacts to the aquatic environment.

All counties: Culverts placed within riparian and/or riverine wetlands must be installed in a manner that does not restrict the flow and circulation patterns of waters of the United States. Culverts placed across wetland fills purely for the purposes of equalizing surface water do not have to be buried.

### **3.7 Notification to NCDENR Shellfish Sanitation Section**

Applicants shall notify the NCDENR Shellfish Sanitation Section prior to dredging in or removing sediment from an area closed to shell fishing where the effluent may be released to an area open for shell fishing or swimming in order to avoid contamination from the disposal area and cause a temporary shellfish closure to be made. Such notification shall also be provided to the appropriate Corps of Engineers Regulatory Field Office. Any disposal of sand to the ocean beach should occur between November 1 and April 30 when recreational usage is low. Only clean sand should be used and no dredged sand from closed shell fishing areas may be used. If beach disposal were to occur at times other than stated above or if sand from a closed shell fishing area is to be used, a swimming advisory shall be posted, and a press release shall be issued by the permittee.

### **3.8 Preservation of Submerged Aquatic Vegetation**

Adverse impacts to Submerged Aquatic Vegetation (SAV) are not authorized by any NWP within any of the twenty coastal counties defined by North Carolina's Coastal Area Management Act of 1974 (CAMA).

### **3.9 Sedimentation and Erosion Control Structures and Measures**

**3.9.1.** All PCNs will identify and describe sedimentation and erosion control structures and measures proposed for placement in waters of the US. The structures and measures should be depicted on maps, surveys or drawings showing location and impacts to jurisdictional wetlands and streams.

## 4.0 Additional Regional Conditions for Specific Nationwide Permits

### 4.1 NWP #14 - Linear Transportation Crossings

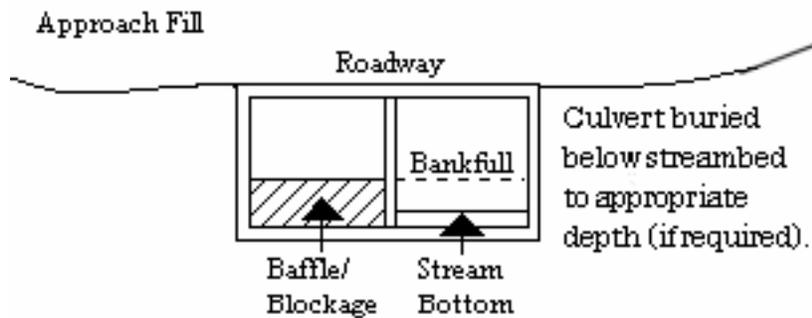
**4.1.1.** If appropriate, applicants shall employ natural channel design (see definition below and NOTE below) to the maximum extent practicable for stream relocations. In the event it is not appropriate to employ natural channel design, any stream relocation shall be considered a permanent impact and the applicant shall provide a mitigation plan to compensate for the loss of aquatic function associated with the proposed activity.

Natural Channel Design: A geomorphologic approach to stream restoration based on an understanding of valley type, general watershed conditions, dimension, pattern, profile, hydrology and sediment transport of natural, stable channels (reference condition) and applying this understanding to the reconstruction of a stable channel.

NOTE: For projects located within the Coastal Plain ecoregion of North Carolina and within headwater areas across the state, applicants should reference the following links for more information regarding appropriate stream design:

<http://www.saw.usace.army.mil/wetlands/permits/nwp>

**4.1.2.** Bank-full flows (or less) shall be accommodated through maintenance of the existing bank-full channel cross sectional area. Additional culverts at such crossings shall be allowed only to receive flows exceeding bank-full.



**4.1.3.** Where adjacent floodplain is available, flows exceeding bank-full should be accommodated by installing culverts at the floodplain elevation.

**4.1.4.** This NWP authorizes only upland to upland crossings and cannot be used in combination with Nationwide Permit 18 to create an upland within waters of the United States, including wetlands.

**4.1.5.** This NWP cannot be used for private projects located in tidal waters or tidal wetlands.

**4.1.6.** Excavation of existing stream channels shall be limited to the minimum necessary to construct or install the proposed culvert. The final width of the impacted streams at the culvert inlet and outlet should be no greater than the original stream width. A waiver from this condition may be requested in writing. The waiver will be issued if it can be demonstrated that it is not

practicable to limit the final width of the culvert to that of the impacted stream at the culvert inlet and outlet and the proposed design would result in less impacts to the aquatic environment.



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## ☒ North Carolina Wildlife Resources Commission ☒

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Gordon Myers, Executive Director

TO: Steve Kichefski, NCDOT Regulatory Project Manager  
Asheville Regulatory Field Office, USACE

FROM: Marla Chambers, Western NCDOT Coordinator *Marla Chambers*  
Habitat Conservation Program, NCWRC

DATE: September 1, 2015

SUBJECT: Review of NCDOT's permit application for Section 404 and 401 permits to replace Bridge No. 20 over Rube Creek on SR 1222 (Mountain Dale Road), Watauga County, North Carolina.

The North Carolina Department of Transportation (NCDOT) has submitted an application to obtain a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a 401 Water Quality Certification from the NC Division of Water Resources (NCDWR). Staff biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the information provided. These comments are provided in accordance with the provisions of the state and federal Environmental Policy Acts (G.S. 113A-1 through 113-10; 1 NCAC 25 and 42 U.S.C. 4332(2)(c), respectively), the Clean Water Act of 1977 (33 U.S.C. 466 et seq.) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d), as applicable.

The NCDOT proposes to replace Bridge No. 20 over Rube Creek on SR 1222 (Mountain Dale Road) with a 22'9" W x 5'4" H x 60' L aluminum box culvert on a 1.7% slope. Three baffles will be used in the culvert to maintain channel width. Permanent stream impacts include 60 linear feet (lf) for the culvert and 38 lf for riprap stabilization. Temporary impacts total 106 lf for dewatering. Wetland impacts include 0.01 acres of fill and 0.01 acres of hand clearing. Rube Creek supports Brook and Rainbow Trout, therefore a moratorium prohibiting in-stream work and land disturbance within the 25-foot trout buffer should apply from October 15 to April 15 to protect the egg and fry stages of trout. Sediment and erosion control should adhere to the Design Standards in Sensitive Watersheds.

NCWRC does not object to the issuance of Section 404 and 401 permits provided that the following conditions are implemented:

1. In-stream work and land disturbance within the 25-foot wide buffer zone are prohibited during the trout spawning seasons of October 15 through April 15 to protect the egg and fry stages of trout.
2. Sediment and erosion control measures shall adhere to the Design Standards in Sensitive Watersheds and be strictly maintained until project completion.
3. Herbaceous vegetation shall be planted on all bare soil as soon as possible following the completion of permanent or temporary ground disturbing activities to provide appropriate long-term erosion control.
4. Tall fescue and straw mulch shall not be used in riparian areas. We encourage NCDOT to utilize onsite vegetation and materials for bank stabilization when practicable. Erosion control matting shall be used on steep slopes and for establishing permanent vegetation in riparian areas. The matting shall be well anchored with staples or wooden stakes and, whenever possible, include live stakes of native trees. Matting in riparian areas should not contain plastic mesh, which can entangle and trap small animals.
5. Stormwater should be directed to buffer areas or retention basins and should not be routed directly into the waterway.
6. The natural dimension, pattern, and profile of the waterway above and below the crossing should not be modified by widening the channel or changing the depth of the waterway.
7. Removal of vegetation in riparian areas should be minimized. Native trees and shrubs should be planted along the banks, as appropriate to the setting, to reestablish the riparian zone and to provide long-term erosion control.
8. Grading and backfilling should be minimized, and tree and shrub growth should be retained, if possible, to ensure long term availability of shoreline cover for fish and wildlife.
9. Where practicable, riprap placed for bank stabilization should be limited to the banks below the high water mark, and vegetation should be used for stabilization above the high water elevation.
10. If concrete will be used during construction, work must be accomplished so that wet (uncured) concrete does not contact surface waters. This will lessen the chance of altering the water chemistry and causing a fish kill.
11. Discharging hydroseeding mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
12. Heavy equipment should be operated from the bank rather than in the channel whenever possible in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the waterway. All mechanized equipment operated near surface

waters should be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids or other toxic materials.

Thank you for the opportunity to review and comment on this project. If you have any questions regarding these comments, please contact me at [marla.chambers@ncwildlife.org](mailto:marla.chambers@ncwildlife.org) or (704) 982-9181.

cc: Dave Wanucha, NCDWR  
Heath Slaughter, NCDOT



Tennessee Valley Authority  
Section 26a Approval

<b>Permit #</b> 273633	<b>Reservoir</b> Gray-Morristown - Off	<b>Category</b> 3
<b>DOT Project #</b> 17BP.11.R.76		

Name	Company	Address	Phone/Email
	North Carolina Department of Transportation	1581 Mail Service Center Raleigh NC 27699-1581	- - tkoch@ncdot.gov

**Tract(s)**

Subdivision/Lot(s)	Stream	Mile	Bank	Map Sheet(s)
Subdivision: n/a	Rube Cr			214 Quad Sheet SE

The facilities and/or activities listed below are APPROVED subject to the plans and general and special conditions attached.

1. Riprap

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2. Bridge - Vehicular Length (ft., in.): 60'; Width (ft., in.): 22'9"

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3. Culvert - Roadway Length (ft., in.): 60'

This permit SUPERSEDES all previous TVA approvals at this location including permits approved under land record numbers:

**TVA Representative:** Rasharon M King **Date:** 12-15-2015

May require review by U.S. Army Corps of Engineers (USACE). Plans have been forwarded to the USACE.  
**No construction shall commence until you have written approval or verification that no permit is required.**  
 Applicant is also responsible for all local and state approvals that may be required relating to water quality.  
**No construction shall commence until you have written approval or verification that no permit is required.**

# GENERAL AND STANDARD CONDITIONS

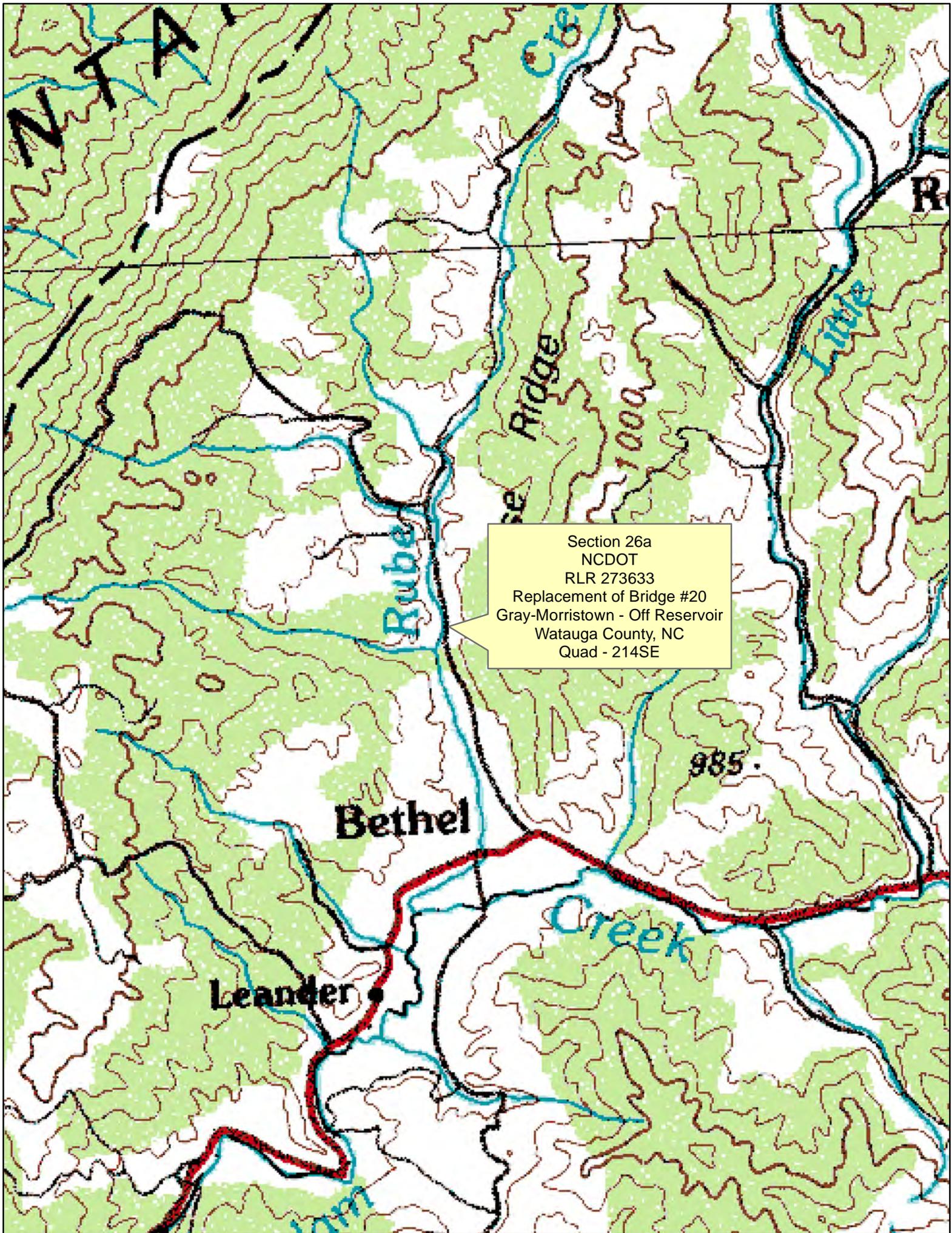
## Section 26a

### **General Conditions**

- 1 ) You agree to make every reasonable effort to construct and operate the facility authorized herein in a manner so as to minimize any adverse impact on water quality, aquatic life, wildlife, vegetation, and natural environmental values.
- 2 ) This permit may be revoked by TVA by written notice if:
  - a) the structure is not completed in accordance with approved plans;
  - b) if in TVA's judgment the structure is not maintained in a good state of repair and in good, safe, and substantial condition;
  - c) the structure is abandoned;
  - d) the structure or work must be altered or removed to meet the requirements of future reservoir or land management operations of the United States or TVA;
  - e) TVA finds that the structure has an adverse effect upon navigation, flood control, or public lands or reservations;
  - f) all invoices related to this permit are not timely paid;
  - g) you no longer have sufficient property rights to maintain a structure at this location; or
  - h) a land use agreement (e.g., license, easement, lease) for use of TVA land at this location related to this permit expires, is terminated or cancelled, or otherwise ceases to be effective.
- 3 ) If this permit for this structure is revoked, you agree to remove the structure, at your expense, upon written notice from TVA. In the event you do not remove the structure within 30 days of written notice to do so, TVA shall have the right to remove or cause to have removed, the structure or any part thereof. You agree to reimburse TVA for all costs incurred in connection with removal.
- 4 ) In issuing this Approval of Plans, TVA makes no representations that the structures or work authorized or property used temporarily or permanently in connection therewith will not be subject to damage due to future operations undertaken by the United States and/or TVA for the conservation or improvement of navigation, for the control of floods, or for other purposes, or due to fluctuations in elevations of the water surface of the river or reservoir, and no claim or right to compensation shall accrue from any such damage. By the acceptance of this approval, applicant covenants and agrees to make no claim against TVA or the United States by reason of any such damage, and to indemnify and save harmless TVA and the United States from any and all claims by other persons arising out of any such damage.
- 5 ) In issuing this Approval of Plans, TVA assumes no liability and undertakes no obligation or duty (in tort, contract, strict liability or otherwise) to the applicant or to any third party for any damages to property (real or personal) or personal injuries (including death) arising out of or in any way connected with applicant's construction, operation, or maintenance of the facility which is the subject of this Approval of Plans.
- 6 ) This approval shall not be construed to be a substitute for the requirements of any federal, state, or local statute, regulation, ordinance, or code, including, but not limited to, applicable building codes, now in effect or hereafter enacted. State 401 water quality certification may apply.
- 7 ) The facility will not be altered, or modified, unless TVA's written approval has been obtained prior to commencing work.
- 8 ) You understand that covered second stories are prohibited by Section 1304.204 of the Section 26a Regulations.
- 9 ) You agree to notify TVA of any transfer of ownership of the approved structure to a third party. Third party is required to make application to TVA for permitting of the structure in their name (1304.10). Any permit which is not transferred within 60 days is subject to revocation.
- 10 ) You agree to stabilize all disturbed areas within 30 days of completion of the work authorized. All land-disturbing activities shall be conducted in accordance with Best Management Practices as defined by Section 208 of the Clean Water Act to control erosion and sedimentation to prevent adverse water quality and related aquatic impacts. Such practices shall be consistent with sound engineering and construction principles; applicable federal, state, and local statutes, regulations, or ordinances; and proven techniques for controlling erosion and sedimentation, including any required conditions under Section 6 of the Standard Conditions.
- 11 ) You agree not to use or permit the use of the premises, facilities, or structures for any purposes that will result in draining or dumping into the reservoir of any refuse, sewage, or other material in violation of applicable standards or requirements relating to pollution control of any kind now in effect or hereinafter established.

- 12 ) The Native American Graves Protection and Repatriation Act and the Archaeological Resources Protection Act apply to archaeological resources located on the premises of land connected to any application made unto TVA. If LESSEE {or licensee or grantee (for easement) or applicant (for 26a permit)} discovers human remains, funerary objects, sacred objects, objects of cultural patrimony, or any other archaeological resources on or under the premises, LESSEE {or licensee, grantee, or applicant} shall immediately stop activity in the area of the discovery, make a reasonable effort to protect the items, and notify TVA by telephone (865-228-1374). Work may not be resumed in the area of the discovery until approved by TVA.
- 13 ) You should contact your local government official(s) to ensure that this facility complies with all applicable local floodplain regulations.
- 14 ) You agree to abide by the conditions of the vegetation management plan. Unless otherwise stated on this permit, vegetation removal is prohibited on TVA land.
- 15 ) You agree to securely anchor all floating facilities to prevent them from floating free during major floods.
- 16 ) You are responsible for accurately locating your facility, and this authorization is valid and effective only if your facility is located as shown on your application or as otherwise approved by TVA in this permit. The facility must be located on land owned or leased by you, or on TVA land at a location approved by TVA.
- 17 ) You agree to allow TVA employees access to your water use facilities to ensure compliance with any TVA issued approvals.
- 18 ) It is understood that you own adequate property rights at this location. If at any time it is determined that you do not own sufficient property rights, or that you have only partial ownership rights in the land at this location, this permit may be revoked. TVA may require the applicant to provide appropriate verification of ownership.
- 19 ) In accordance with 18 CFR Part 1304.9, Approval for construction covered by this permit expires 18 months after the date of issuance unless construction has been initiated.

**Standard Conditions** (Only items that pertain to this request have been listed.)



Section 26a  
NCDOT  
RLR 273633  
Replacement of Bridge #20  
Gray-Morristown - Off Reservoir  
Watauga County, NC  
Quad - 214SE

TVA RESTRICTED INFORMATION

**JOINT APPLICATION FORM**  
**Department of the Army/TVA**

OMB No. 3316-0060  
 Exp. Date 08/31/2016

The Department of the Army (DA) permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (P.L. 95-217). These laws require permits authorizing structures and work in or affecting navigable waters of the United States and the discharge of dredged or fill material into waters of the United States. Section 26a of the Tennessee Valley Authority Act, as amended, prohibits the construction, operation, or maintenance of any structure affecting navigation, flood control, or public lands or reservations across, along, or in the Tennessee River or any of its tributaries until plans for such construction, operation, and maintenance have been submitted to and approved by the Tennessee Valley Authority (TVA).

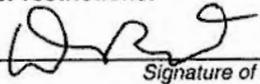
Name and Mailing Address of Applicant: North Carolina Department of Transportation Tom Koch, PE 1581 Mail Service Center Raleigh, NC 27699-1581 Email Address: <u>tkoch@ncdot.gov</u> Telephone Number: Home _____ Office <u>919-707-6400</u> Mobile _____	Name, Mailing Address, and Title of Authorized Agent: TGS Engineers David B. Petty, PE 706 Hillsborough St - Suite 200 Raleigh, NC 27603 Email Address: <u>dpetty@tgsengineers.com</u> Telephone Number: Home _____ Office <u>919-773-8887, Ext. 104</u> Mobile <u>770-310-1052</u>
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Facility/Activity Location (include all known information):  
 Address: Mountain Dale Rd (SR1222)  
 Subdivision, Lot No., and/or Tax Parcel No.: \_\_\_\_\_  
 Stream Name and Mile: Rube Creek Longitude/Latitude: 81 51 5.6 W/ 36 18 42.1 N

Application submitted to  DA  TVA  
 Date activity is proposed to commence: 9/10/2015 Date activity is proposed to be completed: 12/10/2015

Describe in detail the proposed activity, its purpose and intended use (*private, public, commercial, or other*). Describe structures to be erected including those placed on fills, piles, or floating platforms. Also describe the type, composition, and quantity of materials to be discharged or placed in the water; the means of conveyance; and the source of discharge or fill material. Please attach additional sheets if needed.  
 Replace existing single-span 26' bridge with 22'-9" span x 5'-4" rise x 60' aluminum box culvert in approximately the same location. Class I rip rap on filter fabric proposed to stabilize streambanks at ends of culvert for a total of 38'. Temporary dewatering length of 106' due to proposed pump-around.

Application is hereby made for approval of the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I understand that TVA and the U.S. Army Corps of Engineers may contact an Authorized Agent listed above and such Agent may act on my behalf on all aspects of this application. **I agree that, if this application is approved by TVA, I will comply with the terms and conditions and any special conditions that may be imposed by TVA. Please note the U.S. Army Corps of Engineers may impose additional conditions or restrictions.**

8/13/2015 David B. Petty, PE (for NCDOT)   
 Date Name of Applicant (Printed) Signature of Applicant

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of The United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both. The appropriate DA fee will be assessed when a permit is issued.

Names, addresses, and telephone numbers of adjoining property owners, lessees, etc., whose properties also join the waterway:

**TVA, Chattanooga, TN**  
 Date Received 8-14-15 wn - off  
 Reservoir Gray-Morris 3  
 Date Paid N/A  
 Amount -0- Check No. Waived  
 RLR 273633 Invoice N/A  
 Shortcode 0307530





**Section 26a Permit and Land Use Application  
Applicant Disclosure Form**

By signing the Joint Application Form (Department of Army/TVA) or TVA's Land Use Application and again below, you agree to disclose any business, political, or financial interest that may present an actual or potential conflict of interest with TVA. If a new significant business, political, or financial interest is obtained during the period of the time that the application is under review, you agree to file an additional disclosure.

Disclose if any of the following apply to you (check all that apply  ). I am:

- An elected government official
- A policy making level employee of an entity that regulates TVA or its activities
- A management level employee of a power customer of TVA
- A TVA Director
- A TVA employee
- An immediate family member of one of the above
- A representative of a corporation or entity submitting an application and one of the above applies to me. Print entity or corporation name, and identify which of the above applies to you.

\_\_\_\_\_

- A representative of a corporation or entity submitting an application and the corporation or entity has partners, investors, or senior management that are one of the above. Print entity or corporation name, and identify the partner(s), investor(s), or senior manager(s) and which of the above applies.

\_\_\_\_\_

- None of the above

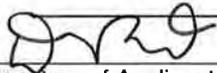
Do you have any other business or personal relationships not covered in your answers above that could appear to be a conflict of interest? (check one) Yes  No  If yes, provide more detail here.

\_\_\_\_\_

By signing this form, you consent to this Applicant Disclosure Form being made available to the public in response to an appropriate request, including, without limitation, a request made under the Freedom of Information Act.

**Please sign and return this form with your application package. Your application cannot be processed without receipt of this signed form.**

David B. Petty, PE (TGS Engineers for NCDOT)  
Name of applicant (Printed)

  
Signature of Applicant

8/13/2015  
Date

All applications and communications that occur as part of the application process may be made public to the extent permitted by applicable law, including the Freedom of Information Act and the Privacy Act, and could be reviewed formally by the Office of Inspector General (OIG). All written correspondence regarding your request may be forwarded to the TVA Chief Ethics and Compliance Officer (CECO) and the OIG, and all oral communication between TVA and the applicant regarding this request may be documented and maintained by TVA. Inquiries concerning your application from any person who falls into one of the categories described above will be disclosed to the CECO and OIG.

**Privacy Act Statement**

This information is being requested in accordance with Sections 4(k), 15d, 26a, and/or 31 of the TVA Act; 40 U.S.C. § 1314; 30 U.S.C. § 185; 16 U.S.C. § 667b; and/or 40 U.S.C. § 483. Disclosure of the information requested is voluntary; however, failure to provide any required information or documents may result in a delay in processing your application or in your application being denied. An application that is not complete will be returned for additional information. TVA uses this information to assess the impact of the proposed project on TVA programs and the environment and to determine if the project can be approved. Information in the application is made a matter of public record through issuance of a public notice if warranted. Routine uses of this information include providing to federal, state, or local agencies, and to consultants, contractors, etc., for use in program evaluations, studies, or other matters involving support services to the program; to respond to a congressional inquiry concerning the application or the applicable program; and for oversight or similar purposes, corrective action, litigation, or law enforcement.



(Version 1.2; Released July 2012)

North Carolina Department of Transportation  
 Highway Stormwater Program  
 STORMWATER MANAGEMENT PLAN  
 FOR LINEAR ROADWAY PROJECTS



General Project Information	
<b>Project No.:</b>	17BP.11.R.76 (SF-940020)
<b>NC DOT Contact:</b>	Marc T. Shown Address: 1590 Mail Service Center Raleigh, 27699-1590 Phone: 919-707-6751 Email: mshown@ncdot.gov
<b>City/Town:</b>	Vilas
<b>River Basin(s):</b>	Watauga
<b>Primary Receiving Water:</b>	Rube Creek
<b>NCDWQ Surface Water Classification for Primary Receiving Water</b>	Primary: Class C Supplemental: None
<b>Other Stream Classification:</b>	None
<b>303(d) Impairments:</b>	None
<b>Buffer Rules in Effect</b>	N/A
Project Description	
<b>Project Length (lin. Miles or feet):</b>	421 feet
<b>Project Built-Upon Area (ac.)</b>	0.30 ac.
<b>Typical Cross Section Description:</b>	Two 10' wide paved travel lanes w/ shoulders paved to face of guardrails, 3' grassed shoulders behind guardrail and 2(H):1(V) grassed side slopes.
<b>Average Daily Traffic (veh/hr/day):</b>	Design/Future: 490
<b>General Project Narrative:</b>	Replacement of Bridge No. 940020 on SR 1222 (Mountain Dale Rd.) over Rube Creek in Watauga County northwest of Vilas, NC. Proposed 22'-9" span x 5'-4" rise Aluminum Box Culvert skewed at 55 degrees to replace existing 26' long by 21' wide double-span bridge skewed at about 55 degrees. The proposed grade is roughly matching the existing grade for the length of the project. Proposed culvert is to be located at same location as existing bridge. Stormwater runoff on the existing bridge discharges directly into the water for the full length of the bridge. Grassed shoulders are to be widened from existing and will be substantially flat allowing for diffusion and infiltration of the roadway runoff. The proposed culvert crossing will have no direct discharge into the water. A 24" RCP crosspipe is replacing an existing 18" CMP under SR 1207 in the vicinity of the intersection with SR 1222. The crosspipe was slightly realigned to satisfy current roadway design standards and maintain safe passage of the traveling public. The discharge from the pipe will outlet on a dissipator pad to diffuse flow to a non-erosive velocity (1.1 fps) in the wetland. This is an improvement over existing conditions as determined not practical or recommended. The pipe would have to outlet in the Rube Creek streambed at the very bottom of the steep existing streambank to achieve cover. All stormwater runoff will be discharged at minimum practicable slopes, yielding minimum velocities. All proposed stormwater runoff is discharged as far away from the stream and at the lowest velocities as practicable.
<b>Project Type:</b>	Bridge Replacement
<b>Contractor / Designer:</b>	TGS Engineers (David B. Petty, PE) Address: 706 Hillsborough St. Suite 200 Raleigh, NC 27603 Phone: 919-773-8887 Ext. 104 Email: dbetty@tgsengineers.com
<b>County(ies):</b>	Watauga
<b>CAMA County?</b>	No
<b>NCDWQ Stream Index No.:</b>	8-19-3
<b>Surrounding Land Use:</b>	Forest; some rural residential & cropland
<b>Proposed Project</b>	0.24 ac.
<b>Existing Site</b>	Two 9' paved travel lanes w/ 0' to 5' wide grassed shoulders w/ grassed side slopes ranging from about 1(H):1(V) to 5(H):1(V). Existing: 490

**PERMIT DRAWING  
 FOR BRIDGE #940020  
 WATAUGA COUNTY**

EXISTING BRIDGE DIMENSIONS - 26' X 21' (DOUBLE-SPAN), 55 DEG. SKEW  
 PROPOSED CULVERT DIMENSIONS - 22'-0" SPAN X 5'-4" RISE ALUMINIUM  
 BOX CULVERT, 55 DEG. SKEW  
 TOTAL PROJECT LENGTH - 421'

STREAM IMPACTS	
Type	Description
Permanent	Proposed Aluminium Box Culvert
Permanent	Class I Rip Rap on Geotextile at Inlet and Outlet
Temporary	Impervious Dikes and a Pump-Around

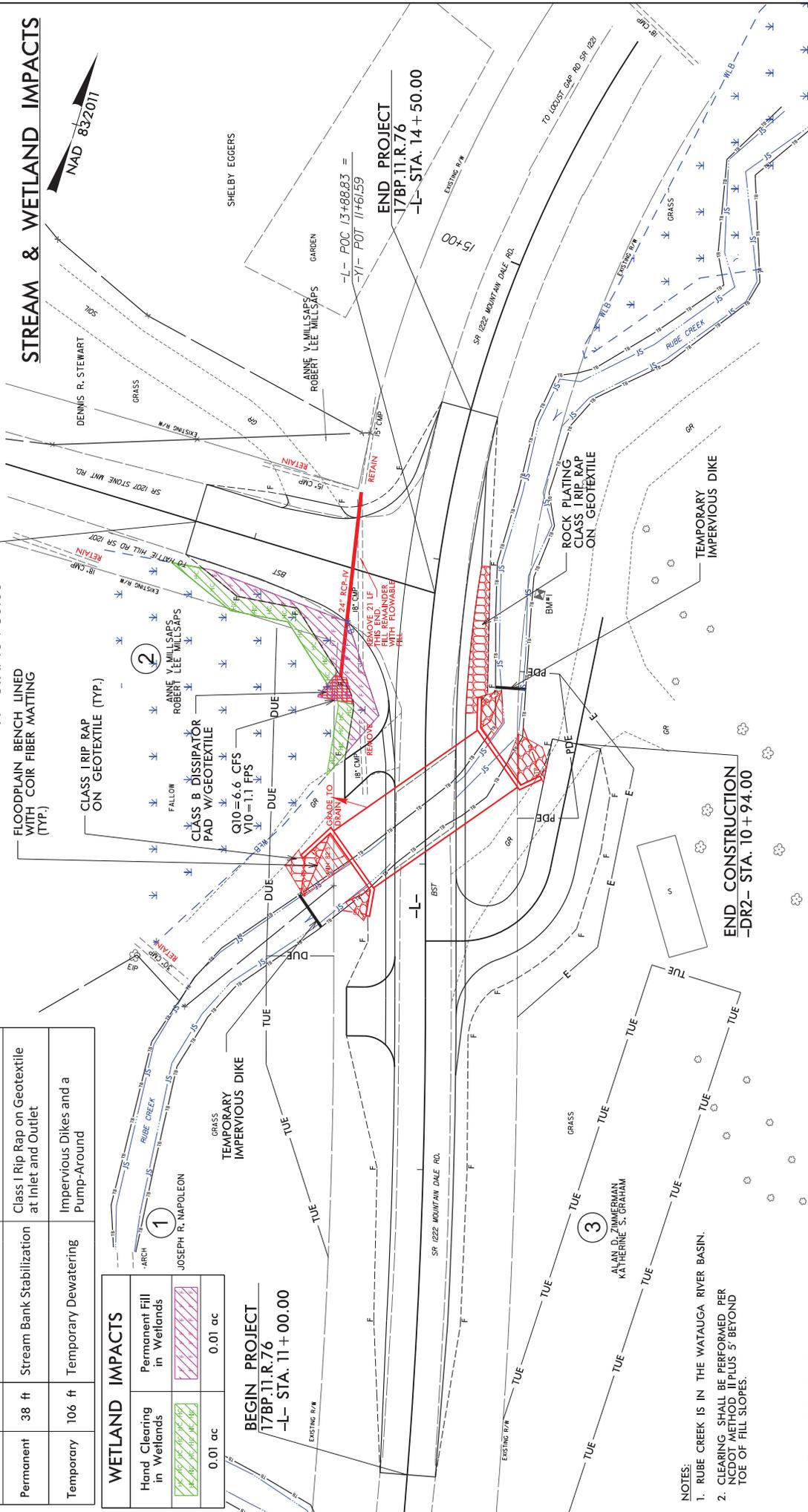
WETLAND IMPACTS	
Hand Clearing in Wetlands	Permanent Fill in Wetlands
0.01 ac	0.01 ac

**BEGIN PROJECT**  
 17BP.11.R.76  
 -L- STA. 11 + 00.00

**END CONSTRUCTION**  
 -DR2- STA. 10 + 94.00

**BEGIN CONSTRUCTION**  
 -Y1- STA. 10 + 80.00

**END PROJECT**  
 17BP.11.R.76  
 -L- STA. 14 + 50.00



- NOTES:**
- RUBIE CREEK IS IN THE WATAUGA RIVER BASIN.
  - CLEARING SHALL BE PERFORMED PER NCDOT METHOD #2 PLUS 5' BEYOND TOE OF FILL SLOPES.

**PERMIT DRAWING  
 FOR BRIDGE #940020  
 WATAUGA COUNTY**

EXISTING BRIDGE DIMENSIONS - 26' X 21' (DOUBLE-SPAN), 55 DEG. SKEW  
 PROPOSED CULVERT DIMENSIONS - 22'-0" SPAN X 5'-4" RISE ALUMINIUM  
 BOX CULVERT, 55 DEG. SKEW  
 TOTAL PROJECT LENGTH - 421'

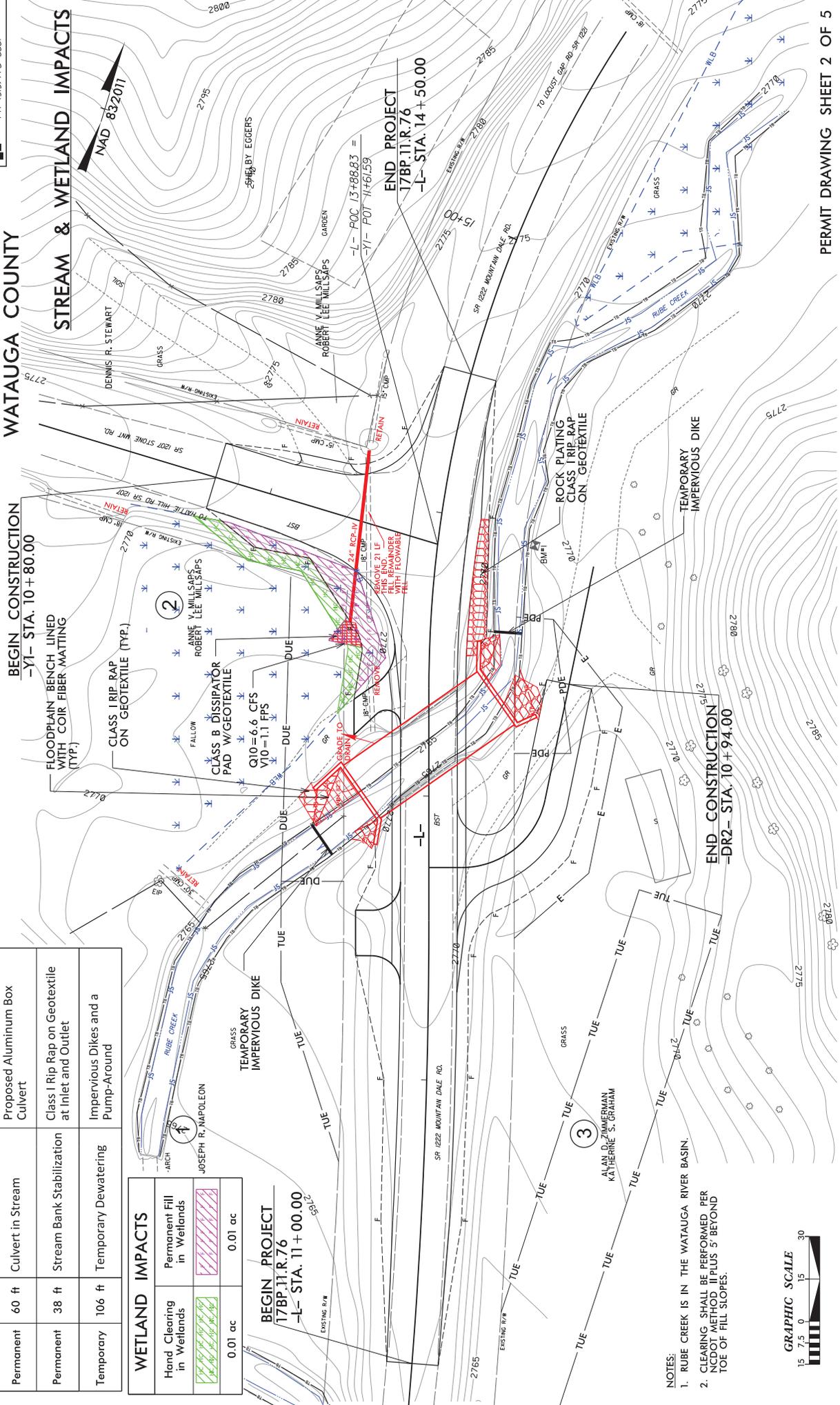
STREAM IMPACTS	
Type	Description
Permanent	Proposed Aluminium Box Culvert
Permanent	Class I Rip Rap on Geotextile at Inlet and Outlet
Temporary	Impervious Dikes and a Pump-Around

WETLAND IMPACTS	
Hand Clearing in Wetlands	Permanent Fill in Wetlands
0.01 ac	0.01 ac

**BEGIN PROJECT**  
 17BP.11.R.76  
 -L- STA. 11 + 00.00

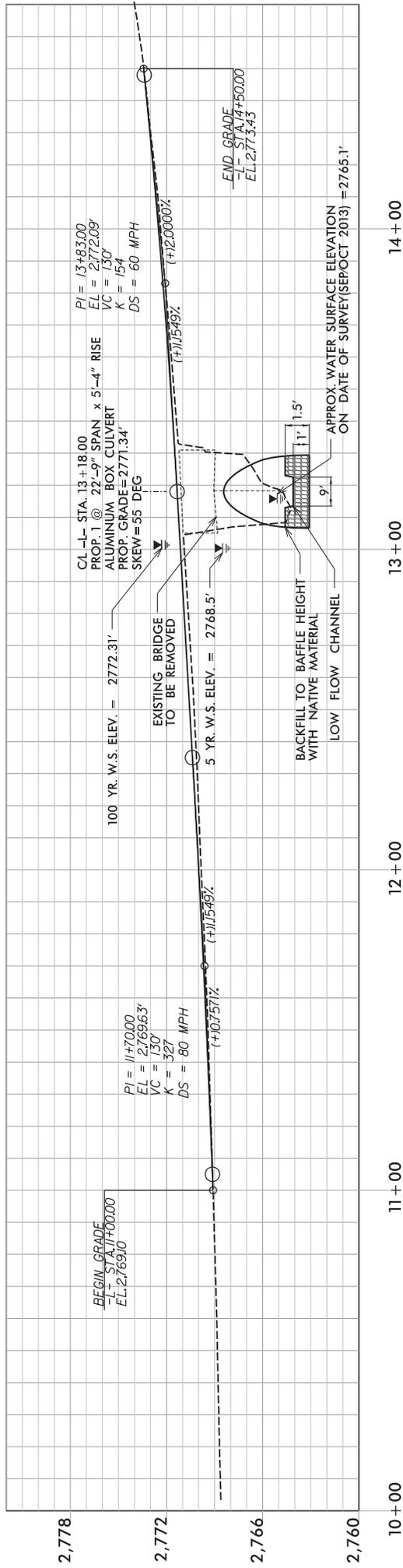
**END PROJECT**  
 17BP.11.R.76  
 -L- STA. 14 + 50.00

**END CONSTRUCTION**  
 -DR2- STA. 10 + 94.00



- NOTES:
- RUBE CREEK IS IN THE WATAUGA RIVER BASIN.
  - CLEARING SHALL BE PERFORMED PER NCDOT METHOD II PLUS 5" BEYOND TOE OF FILL SLOPES.





# PROFILE ALONG ROADWAY

## STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE	= 420	CFS
DESIGN FREQUENCY	= 5	YRS
DESIGN HW ELEVATION	= 2,768.5	FT
BASE DISCHARGE	= 1,100	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 2,772.31	FT
OVERTOPPING DISCHARGE	= 550	CFS
OVERTOPPING FREQUENCY	= 10	YRS
OVERTOPPING ELEVATION	= 2,769.65**	FT

\*\* OVERTOPPING ELEVATION REPRESENTS LOWEST HIGHPOINT AT -L- STA. 13+46.74' RT

PERMIT DRAWING SHEET 3 OF 5

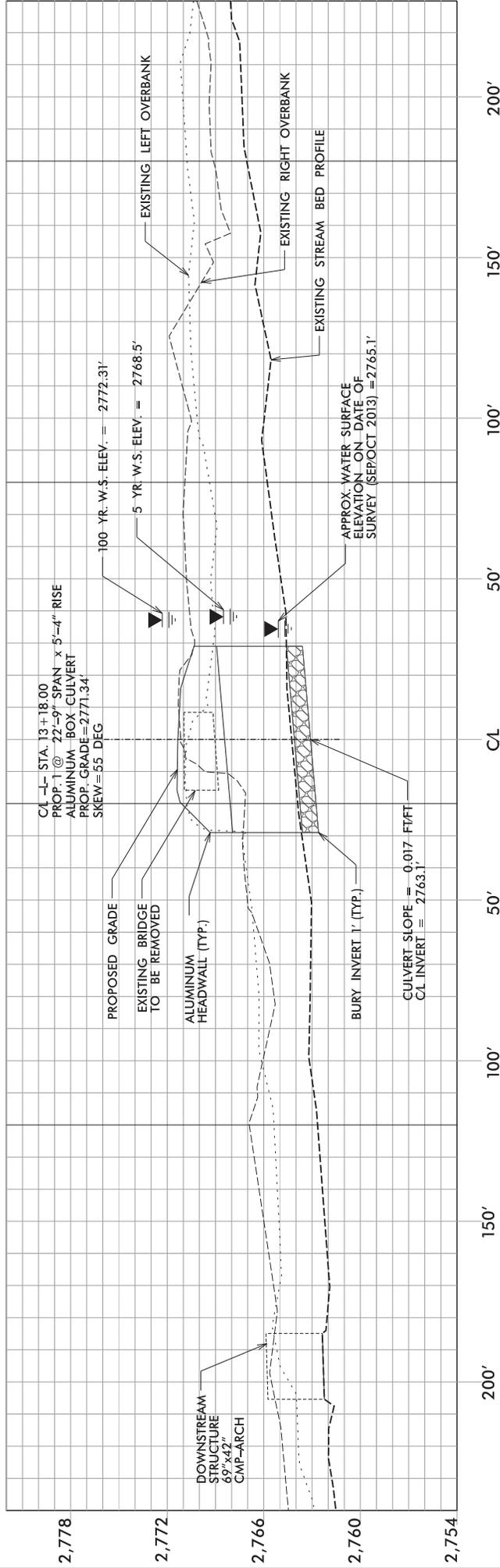
**NCDOT**

DIVISION OF HIGHWAYS  
WATAUGA COUNTY

PROJECT: 17BP.11.R.76 (SF-940020)

REPLACEMENT OF BRIDGE NO. 940020  
ON SR 1222 MOUNTAIN DALE RD  
OVER RUBE CREEK

**PERMIT DRAWING  
FOR BRIDGE #940020  
WATAUGA COUNTY**



# PROFILE ALONG STREAM

PERMIT DRAWING SHEET 4 OF 5

**NCDOT**

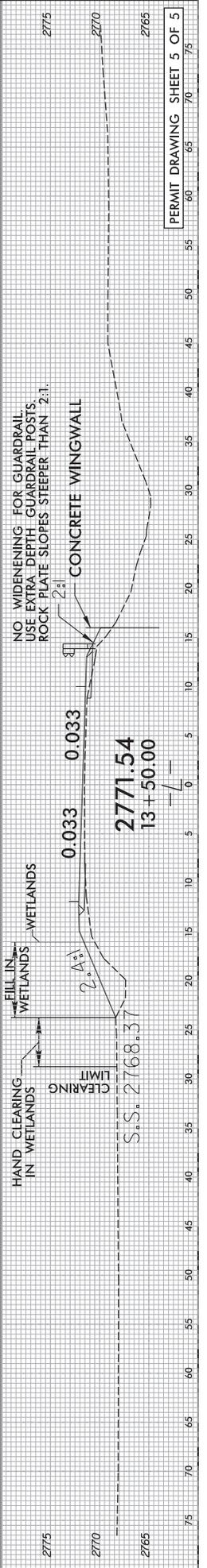
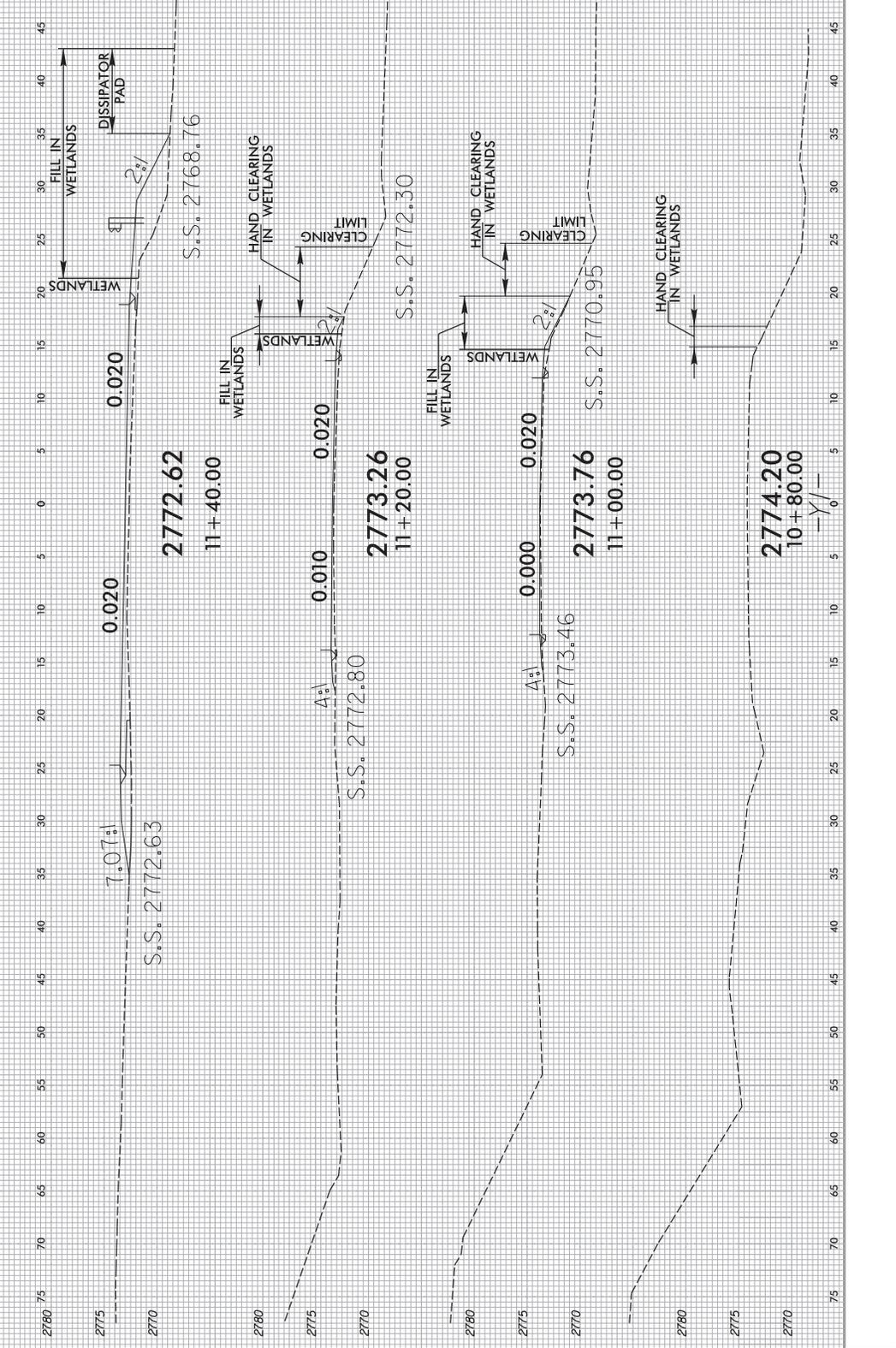
DIVISION OF HIGHWAYS  
WATAUGA COUNTY

PROJECT: 17BP.1LR.76 (SF-9-0020)

REPLACEMENT OF BRIDGE NO. 940020  
ON SR 1222 (MOUNTAIN DALE RD)  
OVER RUBE CREEK

PERMIT DRAWING  
FOR BRIDGE #940020  
WATAUGA COUNTY

**PERMIT DRAWING  
 FOR BRIDGE #940020  
 WATAUGA COUNTY**



NO WIDENING FOR GUARDRAIL.  
 USE EXTRA DEPTH GUARDRAIL POSTS.  
 ROCK PLATE SLOPES STEEPER THAN 2:1.