



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

JOSH STEIN  
GOVERNOR  
June 8, 2026

DANIEL H. JOHNSON  
SECRETARY

**ADDENDUM # 1**

Contract Number: DN01155  
TIP Number: HN-0031  
Federal Aid Number: 5151301  
WBS Number: 51513.3.1  
County: Transylvania  
Description: Grading, Paving, Drainage & Culvert At Culvert #870003 US 276  
At SR 1536 (Cascade Lake Rd) in Transylvania County

Letting Date: June 23, 2026

Plan Holders

**Content Summary: Provision Changes, Additional of Permits**

The above contract has experienced the following revisions:

1. Addition of PROJECT SPECIAL PROVISIONS, MISCELLANEOUS ROADWAY pages MR-1 and MR-2 to incorporate CONSTRUCTION-READY MODEL REVIEW provision (see attached)
2. Addition of NOTES TO CONTRACTOR Provision on pages G-33 through G-38 of the Proposal (see attached)
3. Replace Z-1 PROJECT SPECIAL PROVISION PERMITS on page P-1, with the attached provision.
4. Addition of Permits: Dredge and Fill and/or Work in Navigable Waters (404) and Water Quality (401)

These revisions do not change bid items or the associated quantities.

There is no ebsx addenda file associated with this addendum.

Thank you for your attention to this matter.

*Mailing Address:*  
NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS - DIVISION 14  
253 WEBSTER ROAD  
SYLVA, NC 28779

*Telephone:* (828) 331-5200  
*Fax:* (828) 331-5201  
*Customer Service:* 1-877-368-4968

*Location:*  
253 WEBSTER ROAD  
SYLVA, NC 28779

*Website:* [www.ncdot.gov](http://www.ncdot.gov)

If you have any questions, please contact the Division Proposal Engineer at (828) 331-5200.

Sincerely,

DocuSigned by:  
  
02EE828795674A5...

Wes Jamison, P.E.

Division 14 Project Development Engineer

**PROJECT SPECIAL PROVISIONS****MISCELLANEOUS ROADWAY****CONSTRUCTION-READY MODEL REVIEW:**

(5-27-26)

SPI

**Description**

This work consists of providing the Department an opportunity to review and discuss a Contractor-developed construction model prepared for use during construction.

The Contractor may participate in this work at its option.

**Materials**

Provide all software, hardware, personnel, and resources necessary to develop the construction model.

No materials will be measured or paid for under this special provision.

**Construction Methods**

If the Contractor elects to participate, develop a construction model using the Contractor's personnel, equipment, and software for construction purposes. Prepare the construction model in accordance with Chapter 19 of the *NCDOT Manual for Construction Layout*.

The Department will provide construction-ready electronic files with the contract documents. These electronic files are provided for informational purposes only, are not signed or sealed, and are not contract documents. The signed and sealed plans govern in the event of a conflict. The Contractor may use these files at its discretion and assumes all risk associated with their use.

For additional background, context, and intended use of construction-ready electronic files and the model review process, refer to the *Construction-Ready Model Review – Programmatic Scope and Intent* document provided by the Department.

Submit the construction model in conformance with Chapter 19 of the *NCDOT Manual for Construction Layout* prior to the model review meeting.

Participate in one model review meeting with the Department after submission of the construction model. The Engineer will schedule the meeting and determine whether it is conducted in person or by electronic means.

The purpose of the model review meeting is to facilitate discussion of the Contractor's construction model in comparison to the Department's construction-ready electronic files.

Limit the model review meeting to discussion of model content, structure, constructability, model development practices, and coordination considerations.

During the model review meeting, present the construction model, including development workflows and any limitations, gaps, or inefficiencies encountered when using Department-provided electronic files.

The Department's participation in the model review is limited to evaluation and discussion. The Department will not revise, correct, or direct modifications to the Contractor's construction model.

The model review meeting is anticipated to be approximately 4 hours in duration and shall not exceed 1 calendar workday.

This review is informational and does not constitute evaluation of Contractor performance.

Submission of the construction model and participation in the model review does not constitute approval of the construction model for construction control and does not relieve the Contractor of responsibility for construction means, methods, layout, or accuracy.

### **Measurement and Payment**

If the Contractor elects to perform this work and the Engineer authorizes the work, compensation, if any, will be determined in accordance with Article 104-7 of the *Standard Specifications* and incorporated into a Supplemental Agreement.

Payment, when authorized, is full compensation for all work required by this Special Provision, including development and submission of the construction model, coordination with the Engineer, participation in the model review meeting, and all labor, equipment, software, and incidentals.

No additional compensation will be made for revisions, re-submittals, or additional meetings beyond those authorized in the Supplemental Agreement.



DocuSigned by:

A handwritten signature in black ink, appearing to read "Wesley A. Jamison", enclosed within a blue rectangular box.

02EE828795674A5...

06/08/2026

exhaust all Tier I Methods on a site exclusive of rare or unique resources or special environmental conditions, Tier II Methods may be required by regulators on a case by case basis per supplemental agreement.

The Contractor may use cation exchange capacity (CEC) values from proposed site borings to plan and develop the bid for the project. CEC values exceeding 15 milliequivalents per 100 grams of soil may indicate a high potential for turbidity and should be avoided when dewatering into surface water is proposed.

No additional compensation for monitoring borrow pit discharge will be paid.

### **NOTES TO CONTRACTOR:**

(8-19-25)

SP1 G999B

## **Construction-Ready Model Review – Programmatic Scope and Intent**

### **1. Purpose and Background**

As part of NCDOT's Digital Delivery Initiative, the Department is advancing the use of three-dimensional (3D) digital data to improve continuity between project design, construction, and long-term asset management. A key focus of this initiative is understanding how electronic design data developed during preconstruction can be more effectively delivered and utilized during construction.

Historically, while NCDOT has designed projects using three-dimensional design tools, construction documents have been delivered to contractors primarily in flattened two-dimensional formats, most commonly signed and sealed PDF plan sets. During this flattening process, significant digital information embedded in the design environment is lost or rendered unusable for construction modeling purposes.

As a result, Contractors and their specialized modeling firms ("modelers") routinely re-engineer three-dimensional construction models from two-dimensional plan sets in order to support automated machine guidance (AMG), intelligent compaction, automated stakeout, and other modern construction technologies. This reverse-engineering effort introduces additional cost, schedule impacts, and opportunities for inconsistency or misinterpretation of design intent.

To begin addressing this disconnect, NCDOT is piloting the development and delivery of construction-ready electronic design files during the preconstruction and design phase, with such files made available to contractors at advertisement. These files are intended to improve transparency and continuity between design intent and construction workflows while preserving established contractual risk allocation.

This programmatic effort establishes the framework for obtaining structured industry feedback on electronic design files provided at advertisement, in order to refine NCDOT's Digital Delivery practices prior to broader implementation.

## 2. Programmatic Intent

The Construction-Ready Model Review process is a learning and refinement effort. It is not an evaluation of contractor performance, designer performance, or compliance with contract requirements.

The intent of this effort is to:

- Understand how three-dimensional electronic design files provided at advertisement are interpreted and used within construction modeling workflows.
- Identify which elements of the electronic files are usable, partially usable, or unusable from a construction perspective.
- Understand where and why contractors and modelers must re-engineer, recreate, or supplement design information despite the availability of electronic files.
- Evaluate how effectively design intent developed during preconstruction translates into construction models.
- Inform future refinements to NCDOT's digital delivery guidance, design practices, and implementation strategy.

This effort is not intended to establish contractual reliance on electronic files, nor to mandate specific construction methods or technologies. It is intended to encourage candid industry participation without creating new contractual obligations, performance expectations, or liability for any party. Accordingly, this effort is structured to support learning and refinement rather than evaluation or enforcement.

## 3. Projects and Electronic Files Under Review

### 3.1 Electronic Design Files Provided at Advertisement

This programmatic scope applies to projects where NCDOT requires designers, during preconstruction, to develop three-dimensional electronic design files intended to better support construction modeling activities. These files are provided to prospective bidders at advertisement and remain available during construction.

The electronic files may include, but are not limited to:

- Horizontal and vertical alignment data provided in LandXML format to support interpretation of roadway geometry.
- Proposed finished-grade surface models provided in LandXML format.
- Proposed subgrade surface models provided in LandXML format.
- Proposed breaklines and related geometric elements provided in DXF or DWG format.
- Other electronic design elements reasonably necessary to support interpretation of the design intent.

These electronic files are intended to improve consistency and continuity between design and construction modeling efforts, while recognizing that they are developed primarily for engineering design purposes and not as contract documents.

### **3.2 Contractual Status of Electronic Files**

Notwithstanding their availability at advertisement, electronic design files provided under this effort are subject to the following conditions:

- The files are provided for informational purposes only.
- The files are not signed or sealed.
- The files are not contract documents.
- The signed and sealed two-dimensional plans govern in the event of any conflict.
- Contractors may use the files at their own discretion and risk.

The availability of electronic files at advertisement does not change contractual risk allocation, does not establish reliance, and does not imply that the files are suitable for bid preparation or construction without additional verification or modeling effort.

## **4. Scope of Industry Feedback**

Industry feedback is expected to be specific, technical, and experience-based, with an emphasis on actual construction modeling workflows rather than theoretical design practices.

Areas of interest include, but are not limited to:

### **4.1 Use of NCDOT-Provided Electronic Files**

- Identification of electronic file elements that were directly usable without modification.
- Identification of electronic file elements that required refinement, supplementation, or clarification.
- Identification of electronic file elements that were not usable, including reasons for non-usability.

### **4.2 Model Development Effort**

- Description of the steps required to convert provided electronic files into usable construction or AMG models.
- Identification of information that had to be recreated, assumed, or interpreted.
- Description of effort required to reconcile inconsistencies, gaps, or ambiguities.

### **4.3 Design-to-Construction Handoff**

- Evaluation of how clearly design intent translated into construction-usable digital data.
- Identification of areas where additional design-stage refinement would materially reduce downstream re-engineering.
- Identification of areas where construction needs differ from design modeling assumptions.

#### 4.4 Data Formats and Workflows

- Evaluation of file formats and data structures used to deliver electronic design information.
- Identification of limitations encountered during data conversion or export.
- Identification of opportunities to improve clarity, consistency, or usability of electronic design data.

#### 4.5 Digital Construction Feedback

- Evaluation of how data is used in the field for construction purposes
- Insight into any planning and documentation relating to model or AMG use

All feedback is intended to inform future process improvements and guidance. It is not intended to assign responsibility or liability.

### 5. Meeting Structure and Format

#### 5.1 Format

- A meeting of approximately four hours, in-person or conducted virtually via Microsoft Teams.
- The meeting will be recorded for internal documentation, training, and reference.

#### 5.2 Participants

- NCDOT staff representing Digital Delivery, Preconstruction, and Construction functions.
- Consultant design representatives, as appropriate.
- Contractor representatives.
- Industry modelers responsible for developing construction models.

#### 5.3 Roles

Industry modelers are expected to take a lead role in presenting:

- Construction and AMG models developed for contractor use.
- The workflows used to develop those models.
- Comparisons between contractor models and NCDOT-provided electronic design files.

NCDOT and consultant design staff will participate as listeners and facilitators, with the objective of understanding handoff effectiveness between design and construction.

### 6. Agenda Framework

#### 1. Purpose and Expectations

Overview of intent, scope, and boundary conditions.

**2. Review of Construction / AMG Models**

Demonstration of contractor models and how they are structured for field use.

**3. Review of Electronic Files Provided**

Comparison of Department-provided files to construction models, including identification of gaps and inefficiencies.

**4. Design Intent vs. Construction Use Discussion**

Focused discussion on where design-stage modeling aligns with or diverges from construction needs.

**5. Feedback on Electronic File Content and Delivery**

Open discussion regarding usability, clarity, and opportunities for improvement.

**6. Open Discussion and Lessons Learned****7. Boundary Conditions and Limitations**

This programmatic effort is subject to the following boundary conditions, which apply equally to NCDOT, the Contractor, and any industry modelers participating in the review:

- This effort does not modify contract requirements or alter the basis of payment, responsibility, or risk allocation under the contract.
- NCDOT-provided electronic files remain non-contractual and are not intended to replace signed and sealed contract documents.
- Participation in the review, and any feedback provided, shall not be construed as acceptance, certification, or validation of electronic design files or contractor-developed construction models.
- Feedback provided is informational and developmental in nature and shall not be used to assess contractor or designer performance, compliance, or responsibility.
- Early availability of electronic design files at advertisement does not expand contractor responsibility or imply suitability for bid preparation.
- Participation does not obligate the Contractor or modeler to adopt workflows, methods, or technologies beyond those already required by the contract.
- The effort is intended for mutual learning and process improvement and is not an audit, inspection, or enforcement activity.

These boundaries are necessary to support candid discussion while protecting the contractual and legal interests of all parties.

**8. Expected Outcomes**

This Construction Model Review effort is expected to support the development of:

- Improved alignment between design-stage modeling and construction-stage digital workflows.
- Refinement of internal guidance regarding electronic design deliverables intended for construction use.
- Development of clearer expectations for future digital delivery pilot efforts.

- Improved coordination between design, construction, and Digital Delivery functions.
- Scalable approaches for future industry engagement and feedback mechanisms.
- Training materials for NCDOT staff involved in design and construction.

This effort represents a deliberate, incremental step toward more effective Digital Delivery while recognizing the practical realities of procurement, construction risk, and industry capability.

**Closing Statement**

This document establishes the programmatic foundation for NCDOT's engagement with industry on construction-ready electronic design files provided at advertisement and is intended to evolve as lessons are learned and Digital Delivery practices mature.

**PROJECT SPECIAL PROVISION**

(10-18-95) (Rev. 10-15-24)

Z-1

**PERMITS**

The Contractor's attention is directed to the following permits, which have been issued to the Department of Transportation by the authority granting the permit.

<b><u>PERMIT</u></b>	<b><u>AUTHORITY GRANTING THE PERMIT</u></b>
Dredge and Fill and/or Work in Navigable Waters (404)	U. S. Army Corps of Engineers
Water Quality (401)	Division of Water Resources, DEQ State of North Carolina

The Contractor shall comply with all applicable permit conditions during construction of this project.

Agents of the permitting authority will periodically inspect the project for adherence to the permits.

The Contractor's attention is also directed to Articles 107-10 and 107-13 of the *Standard Specifications* and the following:

Should the Contractor propose to utilize construction methods (such as temporary structures or fill in waters and/or wetlands for haul roads, work platforms, cofferdams, etc.) not specifically identified in the permit (individual, general, or nationwide) authorizing the project it shall be the Contractor's responsibility to coordinate with the Engineer to determine what, if any, additional permit action is required. The Contractor shall also be responsible for initiating the request for the authorization of such construction method by the permitting agency. The request shall be submitted through the Engineer. The Contractor shall not utilize the construction method until it is approved by the permitting agency. The request normally takes approximately 60 days to process; however, no extensions of time or additional compensation will be granted for delays resulting from the Contractor's request for approval of construction methods not specifically identified in the permit.

**Where construction moratoriums are contained in a permit condition which restricts the Contractor's activities to certain times of the year, those moratoriums will apply only to the portions of the work taking place in the restricted waters, wetlands or buffer zones, provided that activities outside those areas is done in such a manner as to not affect the restricted waters, wetlands or buffer zones.**



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT**  
**WILMINGTON REGULATORY OFFICE**  
**69 DARLINGTON AVENUE**  
**WILMINGTON NORTH CAROLINA 28403**

June 5, 2026

Regulatory Division  
SAW-2026-00159

Sent Via email: [pjbreedlove@ncdot.gov](mailto:pjbreedlove@ncdot.gov)

NC Department of Transportation  
Natural Environment Section  
Mr. Patrick Breedlove  
345 Toot Hollow Road  
Bryson City, NC 28713

Dear Mr. Breedlove:

This letter is in response to the Pre-Construction Notification (PCN) you submitted to the Wilmington District, WRDA on January 23, 2026, for a Department of the Army Nationwide permit (NWP) verification. This project has been assigned the file number SAW-2026-00159 and is known as the Cedar Mountain Roundabout project. This file number should be referenced in all correspondence concerning this project.

A review of the information provided indicates that the proposed work The project involves construction of a roundabout at the intersection of U.S. 276 (Greenville Highway) and SR 1536 (Cascade Lake Road) and the extension of culvert number 870003 on U.S. 276 over the Little River. Impacts to waters of the US include the permanent impact to 82 lf of stream channel (of which 27 lf is stream loss) and the temporary impact to 149 lf of stream channel. The project is located at the intersection of U.S. 276 (Greenville Highway) and SR 1536 (Cascade Lake Road) in Cedar Mountain, Transylvania County, NC at Latitude 35.148204 and Longitude -82.647046.

We have determined that the proposed work is authorized by NWP 14 pursuant to authorities under Section 404 of the Clean Water Act (33 U.S.C § 1344). The proposed work must be accomplished in strict accordance with the general permit conditions, any regional conditions, the special conditions listed in this letter, the application materials, and the enclosed plans. If the extent of the project area and/or nature of the authorized impacts to waters are modified, a revised PCN must be submitted to this office for written approval before work is initiated. Any violation of permit conditions or deviation from your submitted plans may subject the permittee to enforcement action.

This verification is valid until March 15, 2031, unless prior to this date the subject NWP(s) is suspended, revoked, or is modified such that the activity no longer complies with the terms and conditions of this NWP. If you commence or are under contract to

commence this activity before the date that the relevant NWP is modified or revoked, you will have 12 months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP.

Project Specific Special Conditions:

1. The U.S. Fish and Wildlife Service's (USFWS's) Programmatic Biological (PBO) and Conference Opinion (PCO) and Programmatic Conference Report titled "Five Imperiled Bat Species in Western North Carolina" dated April 1, 2025, contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that are specified in the PBO/PCO. The USFWS adopted the PBO/PCO as the Programmatic Biological Opinion (PBO) for the effects of this action on July 7, 2025. Your authorization under this Corps permit is conditional upon your compliance with all the mandatory terms and conditions associated with incidental take of the PBO, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the PBO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Corps permit. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its PBO, and with the ESA.
2. Per the NC Wildlife Resources Commission's letter dated January 27, 2026, in-stream disturbance should be avoided during the October 15 to April 15 trout moratorium periods to protect trout spawning from sedimentation. This should also apply to the use of piped flow diversions, if used. Additionally, design Standards in Sensitive Watersheds shall be implemented with this project.

This NWP verification does not preclude the necessity to obtain any other Federal, State, or local permits, licenses, and/or certifications, which may be required.

If you have any questions related to this verification or have issues accessing documents referenced in this letter, please contact Crystal Amschler, WRDA Project Manager of the WRDA at 828-526-6013, by mail at the above address, or by email at [crystal.c.amschler@usace.army.mil](mailto:crystal.c.amschler@usace.army.mil). Please take a moment to complete our customer satisfaction survey located at <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

Sincerely,



For M. Scott Jones, PWS  
WRDA / Transportation Branch Chief  
USACE - Wilmington District

<p>U.S. Army Corps of Engineers (USACE)</p> <p><b>CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT</b></p> <p>For use of this form, see Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, and Section 103 of the Marine Protection, Research, and Sanctuaries Act; the proponent agency is CECW-COR.</p>	<p><i>Form Approved -</i></p> <p><b>OMB No. 0710-0003</b></p> <p><b>Expires 2027-10-31</b></p>
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**The Agency Disclosure Notice (ADN)**

The Public reporting burden for this collection of information, 0710-0003, is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at [whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil](mailto:whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

**PURPOSE:** This form is used by recipients of U.S. Army Corps of Engineer Regulatory permits to certify compliance with the permit terms and conditions.

Your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the U.S. Army Corps of Engineers, Wilmington District, Regulatory Office.

The certification can be submitted by email at [crystal.c.amschler@usace.army.mil](mailto:crystal.c.amschler@usace.army.mil) or by mail at the below address:

U.S. Army Corps of Engineers  
 Wilmington District Office  
 Street Address: 151 Patton Ave Rm 208  
 City: Asheville                      State: NC    Zip Code: 28801

**COMPLETED BY THE CORPS**

Corps Action Number:	SAW-2026-00159
Permit Type: <u>General Permit</u>	
General Permit Number and Name <i>(if applicable)</i> :	
Name of Permittee:	Patrick Breedlove
Project Name:	the Cedar Mountain Roundabout project
Project Location <i>(physical address)</i> :	Cedar Mountain, North Carolina

**PERMITTEE'S CERTIFICATION**

Date Work Started: \_\_\_\_\_

Date Work Completed: \_\_\_\_\_

Enclose photographs showing the completed project *(if available)*.

I \_\_\_\_\_ hereby certify that the work authorized by the above referenced permit has been completed in accordance with all of the permit terms and conditions, and that any required compensatory mitigation has been completed in accordance with the permit conditions.

Name	Date	Signature
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North Carolina Department of Transportation

Highway Stormwater Program  
STORMWATER MANAGEMENT PLAN  
FOR NCDOT PROJECTS



(Version 3.02; Released April 23, 2024)

WBS Element: 51513.1.1      TIP/Proj No: HN-0031      County(ies): Transylvania      Page 1 of 2

General Project Information

WBS Element:	51513.1.1	TIP Number:	HN-0031	Project Type:	Other	Date:	10/31/2025
NCDOT Contact:	Barry Mosteller			Contractor / Designer:	TGS Engineers (David B. Petty, PE)		
	Address: NCDOT Highway Division 14 253 Webster Road Sylva, NC 28779				Address: 706 Hillsborough Street Suite 200 Raleigh NC, 27603		
	Phone: 828-331-5200				Phone: 919-773-8887 ext. 104		
	Email: bdmsteller@ncdot.gov				Email: dpetty@tgsengineers.com		
City/Town:	Cedar Mountain			County(ies):	Transylvania		
River Basin(s):	French Broad			CAMA County?	No		
Wetlands within Project Limits?	No						

Project Description

Project Length (lin. miles or feet):	0.087 miles	Surrounding Land Use:	Unincorporated Community commercial district, rural beyond (wooded, low density residential)					
	Proposed Project			Existing Site				
Project Built-Up Area (ac.)	0.77	ac.	0.74	ac.				
Typical Cross Section Description:	Two 11 ft lanes w/ 4 ft paved & 4 ft turf shoulders.			Two 11 ft lanes w/ 2 ft turf shoulders.				
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	3140	Year:	2050	Existing:	2480	Year:	2026

**General Project Narrative:**  
**(Description of Minimization of Water Quality Impacts)**

NCDOT Project HN-0031 involves construction of a roundabout at the intersection of US-276 (Greenville Highway) and SR-1536 (Cascade Lake Road) in Transylvania County, NC. The project also involves the extension of culvert #870003 on US-276 over Little River. The existing structure is 3 @ 10' x 8' Reinforced Concrete Box Culvert (RCBC) that is to be extended upstream and downstream in kind.

The culvert is to be extended approximately 12 ft upstream and 15 ft downstream to provide clear recovery area for the safety of the traveling public on this US route. The proposed grade will match the existing grade within the vicinity of the culvert.

The existing grassed shoulders are to be widened and will be substantially flat allowing for diffusion and infiltration of the roadway runoff. All proposed stormwater runoff is discharged as far away from the stream and at the lowest velocities as practicable.

All impacts on the project have been minimized to the maximum extent practicable.



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



(Version 3.02; Released April 23, 2024)

WBS Element: 51513.1.1 TIP/Proj No.: HN-0031 County(ies): Transylvania Page 2 of 2

General Project Information

Waterbody Information

Surface Water Body (1):		Little River (Cascade Lake)		NCDWR Stream Index No.:		6-38-(1)	
NCDWR Surface Water Classification for Water Body		Primary Classification:		Class C			
		Supplemental Classification:		Trout Waters (Tr)			
Other Stream Classification:		None					
Impairments:		None					
Aquatic T&E Species?		Yes		Comments:		Long solid (no known occurrences within 1 mile of the study area).	
NRTR Stream ID:		Little River		Buffer Rules in Effect:		N/A	
Project Includes Bridge Spanning Water Body?		No		Deck Drains Discharge Over Buffer?		No	
Deck Drains Discharge Over Water Body?		No		(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
		(If yes, provide justification in the General Project Narrative)					
Surface Water Body (2):				NCDWR Stream Index No.:			
NCDWR Surface Water Classification for Water Body		Primary Classification:					
		Supplemental Classification:					
Other Stream Classification:							
Impairments:							
Aquatic T&E Species?				Comments:			
NRTR Stream ID:				Buffer Rules in Effect:			
Project Includes Bridge Spanning Water Body?				Deck Drains Discharge Over Buffer?			
Deck Drains Discharge Over Water Body?				(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
		(If yes, provide justification in the General Project Narrative)					
Surface Water Body (3):				NCDWR Stream Index No.:			
NCDWR Surface Water Classification for Water Body		Primary Classification:					
		Supplemental Classification:					
Other Stream Classification:							
Impairments:							
Aquatic T&E Species?				Comments:			
NRTR Stream ID:				Buffer Rules in Effect:			
Project Includes Bridge Spanning Water Body?				Deck Drains Discharge Over Buffer?			
Deck Drains Discharge Over Water Body?				(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
		(If yes, provide justification in the General Project Narrative)					









PERMIT DRAWING SHEET 4 OF 6

HN-0031  
3R01 005

NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
TRANSYLVANIA COUNTY

ROADWAY DESIGN UNIT  
ROADWAY DESIGN ENGINEER

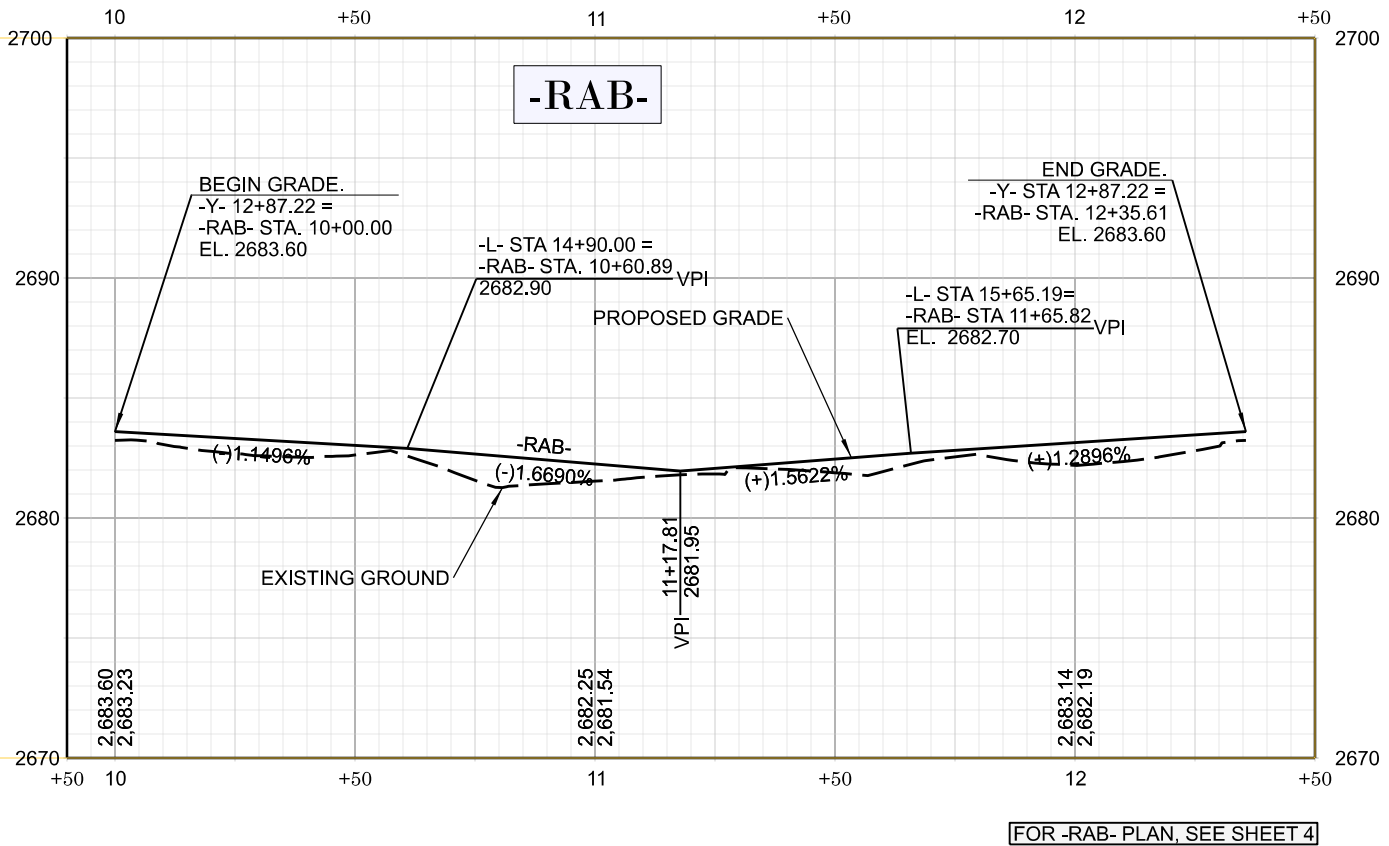
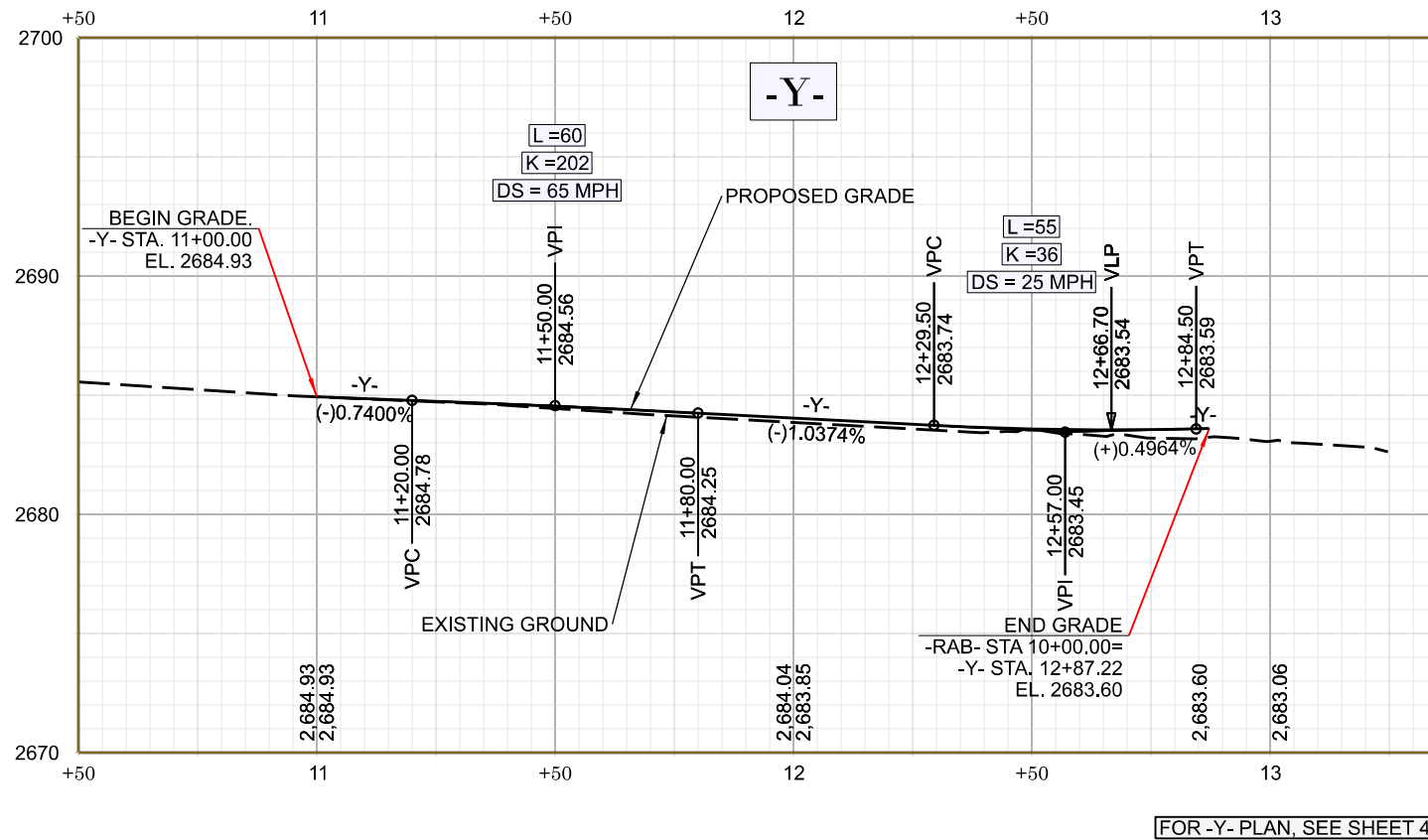
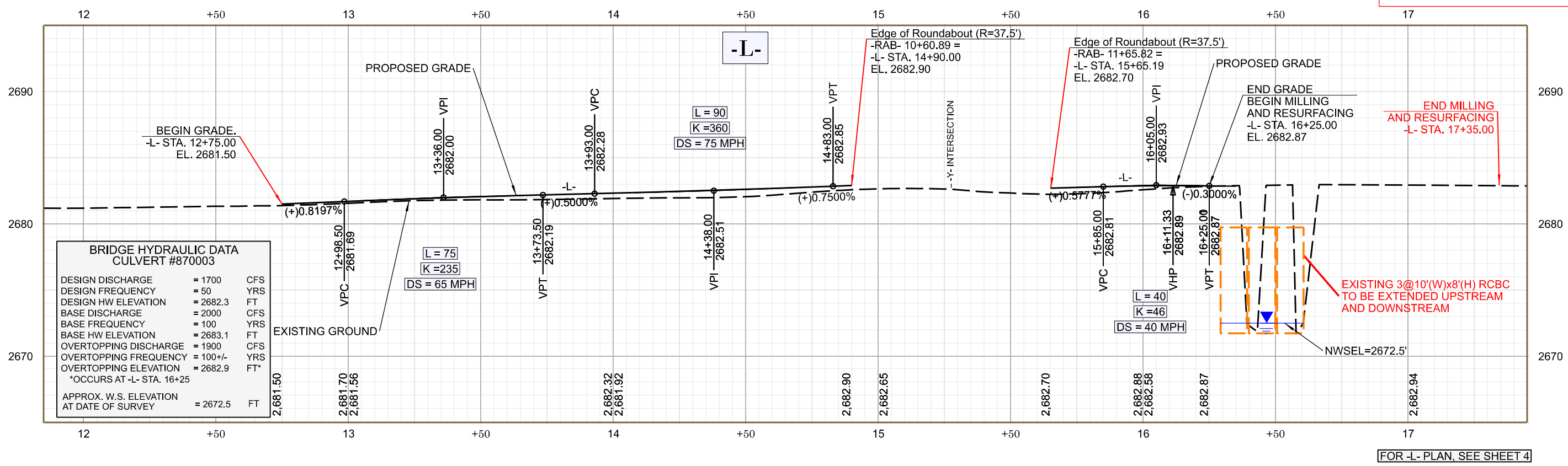
DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

HYDRAULICS ENGINEER

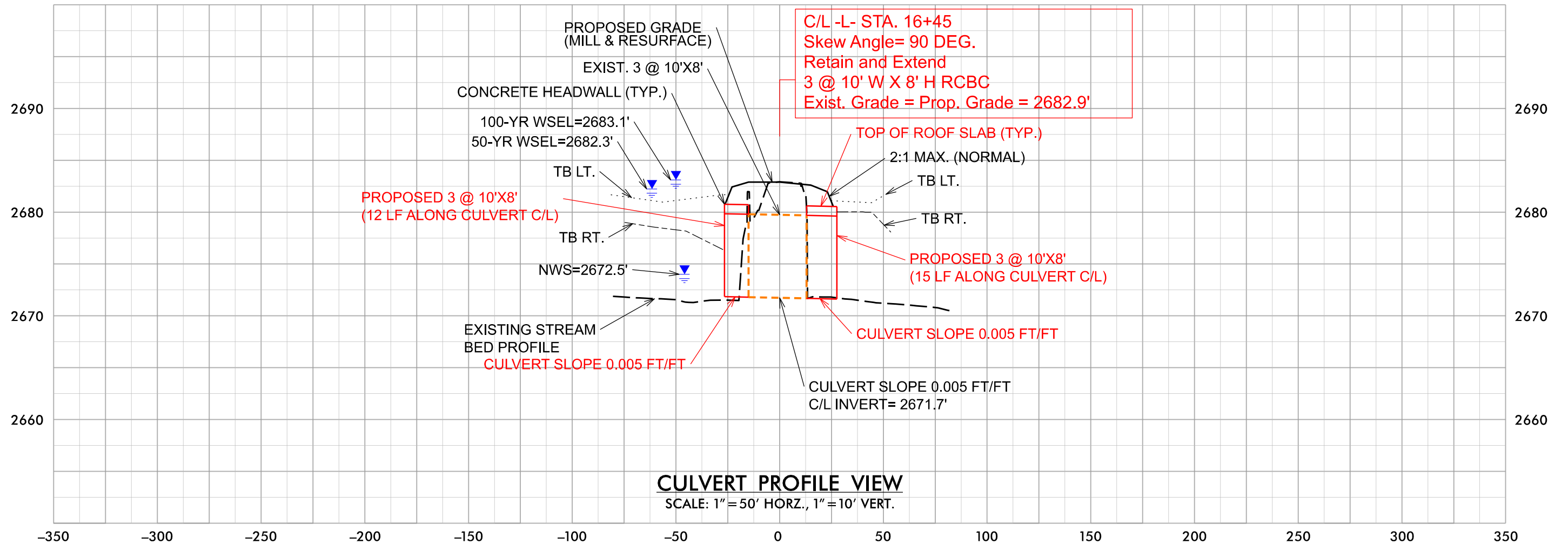
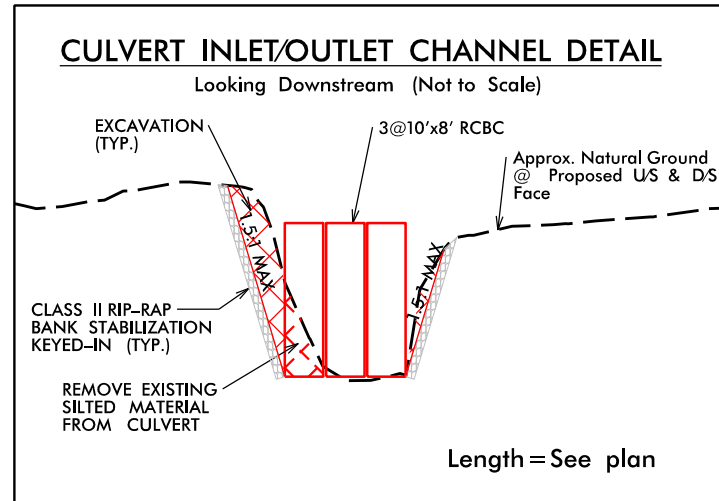
DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

PREPARED BY

TGS ENGINEERS  
201 W. MAIN ST., SUITE 200  
SHELBY, NC 28150  
PH: 704.472.2800  
CORP. LICENSE NO.: C-02725



REVISIONS





NORTH CAROLINA  
Environmental Quality

May 5, 2026

DWR # 20260077  
Transylvania County

North Carolina Department of Transportation  
ATTN: Mr. Patrick Breedlove, PE  
Division 14 PDEA Engineer  
345 Toot Hollow Road  
Bryson City, North Carolina, 28713

Delivered via email to: [pjbreedlove@ncdot.gov](mailto:pjbreedlove@ncdot.gov)

**Subject: Correction of Individual 401 Water Quality Certification**

Roundabout Construction – Intersection of U.S. 276 (Greenville highway) and Cascade Lake Road (SR 1536), Transylvania County, NC. STIP HN-0031, WBS Element Number: 51513.1.1, Federal Aid Project Number: 515301

**Location:** 35.148204, -82.647046

Dear Mr. Patrick Breedlove:

Attached hereto is a copy of Certification No. WQC008683 issued to Mr. Patrick Breedlove and North Carolina Department of Transportation (NCDOT), dated May 5, 2026. This Certification replaces the Certification issued April 24, 2026. Three errors were discovered in the impact table of the Individual 401 Water Quality Certification issued April 24, 2026. The permanent and temporary stream impacts were reversed for Sites 1, 1A, and 1B in the impact table. The Perennial Stream impact table has been updated to reflect the correct permanent and temporary impacts for Sites 1, 1A, and 1B. We apologize for any inconvenience this may have caused.

This Water Quality Certification does not relieve the Permittee of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.

Upon the presentation of proper credentials, the Division of Water Resources (Division or DWR) may inspect the property.

This Water Quality Certification shall expire on the same day as the expiration date of the corresponding Section 404 Permit that is current at the time this Certification is issued. The conditions shall remain in effect for the life of the project, regardless of the expiration date of this Water Quality Certification.



Non-compliance with or violation of the conditions herein set forth may result in revocation of this Water Quality Certification for the project and may also result in criminal and/or civil penalties.

This approval and its conditions are final and binding unless contested [G.S. 143-215.5].

Notice regarding the right to contest this 401 Water Quality Certification decision is attached to this letter.

This letter completes the DWR's review under Section 401 of the Clean Water Act and 15A NCAC 02H .0500. Please contact Amy Annino at 828-296-4668 or amy.annino@deq.nc.gov if you have any questions or concerns.

Sincerely,

Signed by:



3185423002EA45E...

Faith Hardin, Supervisor

401 & Buffer Transportation Permitting Branch

Electronic cc: Crystal Amschler, US Army Corps of Engineers, Asheville Field Office  
Chad Plemmons, NCDOT Division 14 Environmental Officer  
Kevin Mitchell, NCDOT Division 14 Environmental Specialist  
Holland Youngman, US Fish and Wildlife Service  
Dave McHenry, NC Wildlife Resources Commission  
DWR 401 & Buffer Permitting Branch Electronic file



## **NOTICE REGARDING THE RIGHT TO CONTEST A DWR 401 WATER QUALITY CERTIFICATION DECISION**

**Right of Persons Aggrieved to File a Contested Case for the issuance of a 401 water quality certification:** Pursuant to 15A NCAC 02H .0507(f), the Division's decision on a 401 water quality certification application is subject to review under NCGS 150B-23.

**Rights of Persons Aggrieved to File a Contested Case:** Pursuant to NCGS 150B, Article 3, a party or person aggrieved may commence a contested case by filing a petition under NCGS 150B-23 in the Office of Administrative Hearings within 60 days after the Division provides notice of its decision on a permit application, as provided in NCGS 150B-23(f). If no contested case is commenced within the required time, the Division's decision is final and is not subject to review.

**General Filing Instructions:** A petition for contested case hearing must be in the form of a written petition, conforming to NCGS 150B-23, and filed with the Office of Administrative Hearings, 1711 New Hope Church Road, Raleigh NC, 27609, along with a fee in an amount provided in NCGS 150B-23.2. A petition for contested case hearing form may be obtained upon request from the Office of Administrative Hearings or on its website at <https://www.oah.nc.gov/hearings-division/filing/hearing-forms>. Additional specific instructions for filing a petition are set forth at 26 NCAC Chapter 03.

**Service Instructions:** A party filing a contested case is required to serve a copy of the petition, by any means authorized under 26 NCAC 03 .0102, on the process agent for the Department of Environmental Quality:

Daniel Hirschman, General Counsel  
North Carolina Department of Environmental Quality  
1601 Mail Service Center  
Raleigh, North Carolina 27699-1601

If the party filing the petition is a person aggrieved other than the permittee or permit applicant, the party **must also** serve the permittee in accordance with NCGS 150B-23(a).

Be aware that other rules or laws may apply to the filing of a petition for a contested case. Additional information is available at <https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case>. Please contact the Office of Administrative Hearings at (984) 236-1850 with all questions regarding the filing fee and/or the details of the filing process.



**NORTH CAROLINA 401 WATER QUALITY CERTIFICATION**

**CERTIFICATION #WQC008683** is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to North Carolina’s Regulations in 15 NCAC 02H .0500 and 15A NCAC 02B .0200, to Mr. Patrick Breedlove and North Carolina Department of Transportation (NCDOT), who have authorization for the impacts listed below, as described within your application received by the N.C. Division of Water Resources (DWR) on January 23, 2026, with fee received on January 23, 2026, and subsequent information on March 16, 2026, and by Public Notice issued by the DWR on January 23, 2026, and within the *Reasonable Period of Time* pursuant to 40 CFR Part 121.6.

The State of North Carolina certifies that this activity will comply with water quality requirements and the applicable portions of Sections 301, 302, 303, 306, 307 of the Public Laws 92-500 and PL 95-217 if conducted in accordance with the application, the supporting documentation, and conditions hereinafter set forth.

The following impacts are hereby approved. No other impacts are approved, including incidental impacts. [15A NCAC 02H .0506(b)]

Type of Impact	Amount Approved Permanent	Amount Approved Temporary	Mitigation Amount Required
<b>Perennial Streams</b>			
Site 1 / Little River / Culvert Extension	27 linear feet	0 linear feet	0 credits
Site 1A / Little River/ Bank Stabilization	55 linear feet	0 linear feet	0 credits
Site 1B / Little River/ Dewatering	0 linear feet	149 linear feet	0 credits
<i>Totals:</i>	<i>82 linear feet</i>	<i>149 linear feet</i>	<i>0 credits</i>

This approval requires you to follow the conditions listed in the Certification below.

**CONDITIONS OF CERTIFICATION [15A NCAC 02H .0507(c)]:**

1. The plans and specifications for this project are incorporated by reference as part of this Water Quality Certification. Any final construction plans for a project must include or reference the application and plans submitted to the DWR. The Permittee must evaluate all other acquired permits to ensure that they are consistent with the plans submitted to the DWR, and all relative impacts are accounted for and shown on the final construction plans. Any modifications or additional impacts to streams and/or wetlands and/or waters within the project require the permittee to notify the DWR and may require submission of a new application package with the appropriate fee.

*Citation: 15A NCAC 02H .0506(b)(2) and (3); 15A NCAC 02H .0507(c)*



2. The Permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Director), upon the presentation of credentials and other documents as may be required by law, to:
  - a. Enter, at reasonable times, upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this certificate;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this certificate;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this certificate; and
  - d. Sample or monitor at reasonable times, for the purposes of assuring certificate compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location

*Citation: 15A NCAC 02H .0502(e); 15A NCAC 02H .0507(c)*

3. The NCDOT Division Environmental Officer or Environmental Assistant will conduct a pre-construction meeting with all appropriate staff to ensure that the project supervisor and essential staff understand the potential issues with stream and pipe alignment at the permitted site. NCDWR staff shall be invited to the pre-construction meeting.

*Citation: 15A NCAC 02H.0506(b)(2) and (b)(3)*

4. The permittee will need to adhere to all appropriate in-water work moratoria (including the use of pile driving or vibration techniques) prescribed by the NC Wildlife Resources Commission. No in-water work is permitted between October 15 and April 15 of any year, without prior approval from the NC Division of Water Resources and the NC Wildlife Resources Commission. In addition, the permittee shall conform to the NCDOT policy entitled "Stream Crossing Guidelines for Anadromous Fish Passage (May 12, 1997) at all times.

In-stream work and land disturbance within the 25-foot buffer zone are prohibited during the trout-spawning season of October 15 through April 15 to protect the egg and fry stages of trout.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200*

5. Disturbed streambanks shall be stabilized at the end of each working day to ensure downstream water quality standards are maintained throughout construction. Streambanks shall be permanently stabilized with native riparian vegetation when practical. Temporary vegetation utilized for immediate stabilization and erosion control shall consist of native vegetation or annual vegetation such that it will not compete with permanent vegetation.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*



6. The permittee shall use *Design Standards in Sensitive Watersheds* in areas draining to Trout (Tr) waters. However, due to the size of the project, the NCDOT shall not be required to meet 15A NCAC 4B .0124(a) regarding the maximum amount of uncovered acres.

*Citation: 15A NCAC 4B.0124[a]-[e]*

7. All wetlands, streams, and surface waters located within the limits of disturbance and within 50 feet of the limits of disturbance/construction area on the project site shall be clearly marked (example- orange fabric fencing) prior to any land disturbing activities. The marking/fencing shall be maintained until the project or project phase is completed. Impacts to areas within the marked area/fencing are prohibited unless otherwise authorized by this certification.

*Citation: 15A NCAC 02H .0506(b)(2); 15A NCAC 02H .0507(c)*

8. When requested by DWR, the Permittee and/or authorized agent shall schedule a pre-construction meeting with DWR, shall contact the appropriate DWR Regional Office upon project commencement of construction, shall submit a Certificate of Completion and/or shall provide as-built documentation.

*Citation: 15A NCAC 02H .0502(e); 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

9. The permittee shall report to the appropriate DWR Regional Office any noncompliance with, and/or any violation of, stream or wetland standards [15A NCAC 02B .0200], including but not limited to sediment impacts to streams or wetlands. Information shall be provided orally within 24 hours (or the next business day if a weekend or holiday) from the time the permittee became aware of the non-compliance circumstances.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

10. No additional temporary or permanent impacts from waste, spoil, solids, fill, excavation, or staging of equipment, shall occur in wetlands or waters beyond the footprint of the impacts (including temporary impacts) identified in this Certification.

*Citation: 15A NCAC 02H .0506; 15A NCAC 02H .0507(c)*

11. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sedimentation Pollution Control Act of 1973). Regardless of applicability of the Sedimentation Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur.

Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Erosion and Sediment Control Planning and Design Manual*, or the *North Carolina Department of Transportation Erosion and Sediment Control Design and Construction Manual*.



Appropriate measures should be installed prior to any land clearing activities to protect wetlands, streams, and/or buffers from turbidity and/or sedimentation. These measures should be routinely inspected and properly maintained, and excavated materials should be contained outside wetland, stream, and/or buffer boundaries.

For installation of bridges that involve driving or drilling activities within stream channels, open waters, or along streambanks turbidity curtains shall be installed within the surface water.

All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.

For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.

*Citation: 15A NCAC 02H .0506(b)(2); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231*

12. Sediment and Erosion Control Measures (S&EC) in wetlands or waters should be avoided to the maximum extent possible and any S&EC occurring in wetlands or waters shall be restored to pre-existing conditions upon completion of the project. The Permittee shall utilize sediment and erosion control measures that avoid and minimize the need for the placement of silt fence along streams at the normal water level. Where measures are placed within authorized impact areas then placement of such measures shall not be conducted in a manner that results in a loss of function of any wetlands, streambeds, or streambanks. Any erosion control measures, including silt fence, installed within wetlands shall be removed from wetlands and the natural grade restored and revegetated within two (2) months of the date the appropriate sediment and erosion control program has released the specific area within the project to ensure wetland standards are maintained upon completion of the project.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231*

13. Erosion control matting shall not be placed within a stream bed. Erosion control matting that incorporates plastic mesh and/or plastic twine shall not be used along streambanks or within wetlands.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

14. If the project is covered by NPDES Construction Stormwater Permit Number NCG010000 or NPDES Construction Stormwater Permit Number NCG250000, full compliance with permit conditions including the erosion and sedimentation control plan, inspections and maintenance, self-monitoring, record keeping and reporting requirements is required.



*Citation: 15A NCAC 02H .0506(b) and (c); 15A NCAC 02H .0507(c)*

15. The North Carolina Department of Transportation (NCDOT) shall maintain full compliance with the conditions related to construction activities and post construction stormwater design, construction and maintenance, within the most recent version of their Individual NPDES Stormwater Permit Number NCS000250.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231*

16. For projects impacting waters classified by the NC Environmental Management Commission as High Quality Waters (HQW), including Water Supply I or II (WSI, WSII) and/or as Outstanding Resources Waters (ORW) post construction stormwater shall be managed in accordance with 15A NCAC 02B .0224(d) or .0225 as applicable.
17. All work in or adjacent to streams, ponds, lakes, and reservoirs shall be conducted so that the work area is isolated from surface waters. Approved best management practices from the most current version of the DEMLR [NC Erosion and Sediment Control Planning and Design Manual](#), or the *NC Department of Transportation Best Management Practices For Construction and Maintenance Activities Manual*, such as sandbags, rock berms, cofferdams, pump-arounds, and other diversion structures shall be used to minimize excavation in flowing water. Water that comes in contact with the work area shall be treated through an appropriate sediment/erosion control measure (sediment basin, filter bag, etc) prior to discharging to a surface water. All temporarily disturbed areas for the purpose of isolation/dewatering shall be restored to original grade, including each stream's original cross-sectional dimensions, planform pattern, and longitudinal bed profile. All temporarily impacted sites shall be restored and stabilized with native vegetation as practicable. *Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200*
18. Work within a designated trout watershed as identified by the Wilmington District of the US Army Corps of Engineers or work within identified state or federal endangered or threatened species habitat shall be coordinated with NCWRC and/or DMF prior to initiating of project activities.

The Permittee shall adhere to NCWRC and/or DMF recommended moratoria. Exceptions to this condition require written approval by the resource agency responsible for the given moratorium. If activities must occur during periods of high biological activity of aquatic species (e.g. sea turtle nesting, fish spawning, or bird nesting) all biological surveys, relocations, and/or monitoring requested by the state agency must be conducted.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 04B .0125*



19. Unless already approved by an NPDES permit, bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means to the maximum extent practicable (e.g. grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. This condition may be waived with prior written approval from the NCDWR.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

20. Demolition of existing structures, such as culvert or bridge removal, shall be conducted to ensure water quality standards are maintained. NCDOT activities shall adhere to NCDOT's *Best Management Practices for Construction and Maintenance Activities*.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200*

21. Culverts shall be designed and installed in such a manner that the original stream profiles are not altered and allows for aquatic life movement during low flows. The dimension, pattern, and profile of the stream above and below a pipe or culvert shall 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 shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. If the width of the culvert is wider than the stream channel, the culvert shall include multiple boxes/pipes, baffles, benches and/or sills to maintain the natural width of the stream channel. If multiple culverts/pipes/barrels are used, low flows shall be accommodated in one culvert/pipe and additional culverts/pipes shall be installed such that they receive only flows above bankfull.

Placement of culverts and other structures in streams shall also meet one of the following requirements:

- a. For structures less than 72" in diameter/width and in area where topographic constraints dictate culvert slopes will be greater than 2.5%, culverts shall be installed "at grade" such that low flow conditions in the stream are maintained provided that all alternative options for flattening the slope have been investigated and aquatic life movement/connectivity has been provided when possible (e.g. rock ladders, cross-vanes, sills, baffles etc.); or
- b. When bedrock is present in culvert locations, culvert burial is not required, provided that there is documentation of the presence of bedrock.
- c. For all other culverts:
  - i. Culverts with a diameter greater than 48 inches shall be below the elevation of the streambed by one foot
  - ii. Culverts with diameter less than or equal to 48 inches shall be below the streambed by 20% of the culvert diameter

If a culvert outlet is submerged within a pool or scour hole and designed to provide for aquatic passage, then culvert burial into the streambed is not required.



Documentation such as a location map of the culvert, culvert profile drawings, slope calculations, geotechnical reports, photographs, etc. shall be provided to DWR upon written request.

For culvert replacements within the same location/footprint, and of similar length, culverts shall be designed and installed to meet the above requirements of this Condition unless prohibited by existing conditions on site, such as existing infrastructure or topographic constraints.

Installation of culverts in wetlands shall ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. When roadways, causeways, or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges shall be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in destabilization of streams or wetlands.

The establishment of native woody vegetation and other soft stream bank stabilization techniques shall be used where practicable instead of rip-rap or other bank hardening methods.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

22. Application of fertilizer to establish planted/seeded vegetation within disturbed riparian areas and/or wetlands shall be conducted at agronomic rates and shall comply with all other Federal, State and Local regulations. Fertilizer application shall be accomplished in a manner that minimizes the risk of contact between the fertilizer and surface waters.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0231*

23. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in, or adjacent to, surface waters is prohibited.

*Citation: 15A NCAC 02H.0506(b)*

24. If concrete is used during construction (including bulkhead components, such as deadman anchors, tie-back systems and concrete caps), then all necessary measures shall be taken to isolate the concrete from waters of the state by maintaining a dry work area to prevent direct contact between curing concrete and surface waters. Drill slurry and water that inadvertently contacts uncured concrete shall not be discharged to waters of the state. 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. Any water that contacts uncured concrete shall be captured, treated, and disposed of properly.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231*



25. All temporary pipes, culverts, rip-rap pads etc. in streams shall be installed so as not to restrict stream flow or installed in such a manner that restricts aquatic life movement during low flow conditions. All temporary pipes and/or culverts shall be installed as outlined in the most recent edition of the *North Carolina Erosion and Sediment Control Planning and Design Manual* or the *North Carolina Surface Mining Manual* or the *North Carolina Department of Transportation Best Management Practices for Construction and Maintenance Activities*.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

26. All temporary fill and temporary culverts shall be removed, and the impacted area shall be returned to natural conditions, within 60 calendar days after the temporary impact is no longer necessary. The impacted areas shall be restored to original grade, including each stream's original cross-sectional dimensions, planform pattern, and longitudinal bed profile. All temporarily impacted sites shall be restored and stabilized with native vegetation when practicable. For all areas where wetlands are impacted by temporary roads constructed by temporary fill material, the Permittee shall remove the fill material and conduct activities necessary to restore preconstruction hydrology by addressing soil compaction. When temporary fill has been added to wetlands, or heavy equipment has been placed within a wetland, the Permittee shall ensure restoration of preconstruction soil conditions when restoring wetland areas. Upon restoration of the wetland, the Permittee shall inspect the area quarterly for a minimum of two years to document successful restoration. The Permittee shall provide documentation of inspections to DWR when requested. The monitoring requirement can be relieved with review and written approval by DWR. If the area is not restored to preconstruction conditions the impacts shall be considered permanent, and the Permittee shall request a modified Certification from DWR. With prior written approval from DWR, removal of temporary fill and temporary culverts and restoration of the impacted area may be postponed to accommodate moratorium periods.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

27. Any rip-rap or other armoring materials required for proper culvert placement, stream stabilization, or restoration of temporarily disturbed areas shall be restricted to the area directly impacted by the construction activity covered by this Certification. All rip-rap or other non-natural armoring material placed in streams shall be placed such that the original streambed elevation and streambank contours are restored, and that the finished elevation of the rip rap shall not exceed that of the original stream bed. All rip-rap or other armoring materials shall consist of clean rock or masonry material free of debris or toxic pollutants. Placement of rip-rap or other armoring materials shall not result in de-stabilization of the stream bed or banks upstream or downstream of the area or be installed in a manner that precludes aquatic life passage.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*



28. Any rip-rap or other non-natural armoring material (i.e. gabion baskets, revetments, bulkheads, seawalls, retaining walls) used for stream or shoreline stabilization shall be of a size and density to prevent movement by wave, current action, or stream flows, and shall consist of clean rock or masonry material free of debris or toxic pollutants. Rip-rap or other armoring materials shall not be installed in the streambed except in specific areas required for velocity control and to ensure structural integrity of bank stabilization measures. Any rip-rap or other armoring materials placed in the streambed shall be such that the finished elevation of the rip rap or other armoring materials shall not exceed that of the original stream bed.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0201*

29. All mechanized equipment operated near surface waters shall be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids, or other toxic materials. Construction shall be staged in order to minimize the exposure of equipment to surface waters to the maximum extent practicable. Fueling, lubrication, and general equipment maintenance shall be performed in a manner to prevent, to the maximum extent practicable, contamination of surface waters by fuels and oils.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231*

30. Heavy equipment working in wetlands shall be placed on mats or non-impact equipment shall be used to ensure no disturbance and/or compaction of soil from equipment except within the footprint of the impacts covered by this Certification. Heavy equipment necessary for in stream activities shall be operated from the banks to the maximum extent practical and in no cases shall cause unstable stream banks or a violation of water quality standards.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0231*

31. In accordance with G.S. 143-215.85(b), the Permittee shall report any petroleum spill of 25 gallons or more; any spill regardless of amount that causes a sheen on surface waters; any petroleum spill regardless of amount occurring within 100 feet of surface waters; and any petroleum spill less than 25 gallons that cannot be cleaned up within 24 hours.

*Citation: 15A NCAC 02H .0507(c); N.C.G.S 143-215.85(b)*

32. The Permittee and their authorized agents shall conduct all 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.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*



33. A copy of this Certification shall be retained on site during the construction and maintenance of this project, or with the project manager, and be available for inspection at all times. The Permittee shall require its contractors and/or agents to comply with the terms and conditions of this Certification in the construction and maintenance of this project and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this Certification. If the Permittee becomes aware of any inability to comply with any of the conditions of this Certification, they must notify the appropriate Regional Office within 24 hours (or the next business day if a weekend or holiday) from the time the Permittee becomes aware of the circumstances.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

34. This Water Quality Certification neither grants nor affirms any property right, license, or privilege in any lands or waters, or any right of use in any waters. This Water Quality Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and does not create any prescriptive right or any right of priority regarding any usage of water. This Water Quality Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Water Quality Certification to possess any prescriptive or other right of priority with respect to any other consumptive user.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

This Water Quality Certification shall expire on the same day as the expiration date of the corresponding Section 404 Permit that is current at the time this Certification is issued. The conditions shall remain in effect for the life of the project, regardless of the expiration date of this Water Quality Certification.

Upon completion of the proposed project, the applicant shall submit a Certificate of Completion and/or shall provide as-built documentation. Certificates of Completion and/or as-built documentation can be submitted via the DWR website: <https://edocs.deq.nc.gov/Forms/Certificate-of-Completion>.

This, the 5th day of May 2026

Signed by:

*Faith Hardin*

3185423002EA45E...

Faith Hardin, Supervisor

401 & Buffer Transportation Permitting Branch

