



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

DANIEL H. JOHNSON
SECRETARY

October 21, 2026

MEMORANDUM TO: Division Environmental and Construction Units

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

SUBJECT: Environmental Permits for the Replacement of:
Mitchell Bridge 87 over Big Rock Creek on SR 1330 (Hughes Gap Road)
Division 13, WBS DF18313.2061363.PR.

Please find enclosed the following permits for this project:

Agency	Permit Type	Expiration
US Army Corps of Engineers Section 404 Clean Water Act Permit	Nationwide Permit 3 Action ID: SAW-2026-01501 Dated October 16, 2026	March 14, 2031
NC Division of Water Resources Section 401 Water Quality Certification	Water Quality Certification No. 8562 [3] Project ID: 20261109 Dated August 20, 2026	expires with above Permit

Work is authorized by the above-referenced documents and must be accomplished in strict accordance with the permitted plans.

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

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

404 Permit (USACE)



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT
151 Patton Avenue, Room 208
Asheville, NC 28801-5006

October 16, 2026

Regulatory Division
SAW-2026-01501

North Carolina Department of Transportation
Attn: Mr. Michael A. Turchy
Environmental Coordination and Permitting Group Leader
1598 Mail Service Center
Raleigh, North Carolina 27699-1598
Sent Via Email: recrowther@ncdot.gov

Dear Mr. Turchy,

This letter is in response to the application you submitted to the U.S. Army Corps of Engineers (USACE), Wilmington District, WRDA/Transportation Branch on August 19, 2026, for a Department of the Army general permit verification to replace a bridge that was damaged by **Hurricane Helene**. This project will replace **Bridge No. 87** over Big Rock Creek on SR 1330 in Mitchell County, North Carolina (36.1158, -82.1869) and has been assigned file number SAW-2026-01501. In order to perform this work, NCDOT proposes to conduct the following activities in waters of the U.S.:

Summary of Proposed Impacts

Impact ID #	NWP / GP #	Open Water (ac)		Wetland (ac)		Stream (lf)	
		Temporary	Permanent	Temporary	Permanent	Temporary	Permanent
Site 1 (Big Rock Creek)	<u>NPW 3</u>					177' (0.04 ac) / dewater	152' (0.02 ac) / bank stabilization
Impact Totals		0	0	0	0	177' (0.04 ac)	152' (0.02 ac)
Total Loss of waters of the U.S. (wetlands and/or open waters)			0	Total Loss of waters of the U.S.			0
Required wetland compensatory mitigation			0	Required stream compensatory mitigation			0

We have reviewed the proposed activities in waters of the U.S. and have determined that the activities are authorized by Nationwide Permit (NWP) 3 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 following:

- enclosed NWP general conditions and regional conditions for NWP 3
- special conditions of the verification letter for this project (see below)
- information in the PCN and attachments
- enclosed plans

If the extent of the project area and/or nature of the authorized impacts to waters are modified, a request detailing the proposed changes must be submitted to this office for written approval before work is initiated. Any deviation from the terms and conditions of the permit, the special conditions of this letter, the information contained in the PCN, or your submitted plans, may subject the permittee to enforcement action.

This verification is valid until **March 15, 2031**, unless the subject NWP is suspended, revoked, or is modified prior to that date such that the activity no longer complies with the terms and conditions of the NWP.

Project Specific Special Conditions:

1. This verification letter does not authorize you to take a federally listed species. In order to legally take a federally listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a Biological Opinion (BO) under ESA Section 7, with “incidental take” provisions with which you must comply). The U.S. Fish and Wildlife Service (USFWS) issued a document titled, “Biological and Conference Opinions and Informal Consultations – Batch Format, Replace Multiple Crossing Structures Destroyed by Tropical Storm Helene in Buncombe, McDowell, Mitchell, Rutherford, and Yancey Counties, North Carolina, Service Log #25-249 through 25-263” on July 21, 2025. This document contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with incidental take for this project. Your authorization under this verification letter and NWP 3 is conditional upon your compliance with the mandatory terms and conditions associated with incidental take listed in this document for this project. Failure to comply with the terms and conditions associated with incidental take detailed in this document, where a take of a federally listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your verification letter and NWP 3. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its Opinion and with the ESA.

2. The permittee shall comply with conditions #1-4 of the attached letter from the North Carolina Wildlife Resources Commission dated August 19, 2026.

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

This general permit verification and any associated authorizations do 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 Lori Beckwith, Regulatory Project Manager of the WRDA/Transportation Branch at 828-230-0483, by mail at the above address, or by email at loretta.a.beckwith@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,



Tyler A. Crumbley
Deputy Division Chief, Regulatory
USACE, Wilmington District

Enclosures

U.S. Army Corps of Engineers (USACE) CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT 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.		Form Approved - OMB No. 0710-0003 Expires 2027-10-31
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. 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 loretta.a.beckwith@usace.army.mil or by mail at the below address: U.S. Army Corps of Engineers, Wilmington District Asheville Field Office Street Address: 151 Patton Avenue, Room 208 Asheville, North Carolina 28801-5006		
Corps Action Number: SAW-2026-01501 Permit Type: General Permit General Permit Number and Name (if applicable): NWP 3 Name of Permittee: NCDOT, Division of Highways Project Name: NCDOT/Hurricane Helene/DF 18313.2061363.PR/Br 87/SR 1330/Mitchell/Div 13 Project Location (physical address): Bridge 87, Big Rock Creek, SR 1330, Mitchell Co, NC		
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

7.3 Reasonable and Prudent Measures

The Service believes the following reasonable and prudent measure(s) are necessary and appropriate to minimize take of gray bat, Indiana bat, northern long-eared bat, and tricolored bat. These non-discretionary measures reduce the level of take associated with project activities and include only actions that occur within the action area.

1. NCDOT shall ensure that the contractor(s) understands and follows the measures listed in the “Conservation Measures”, “Reasonable and Prudent Measures,” and “Terms and Conditions” sections of this Opinion.
2. NCDOT shall minimize the area of disturbance within the action areas to only the area necessary for the safe and successful implementation of the proposed actions.
3. NCDOT shall monitor and document any take numbers and the surrogate measures of take and report those to the Service in a batched format.

7.4 Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the Applicant must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline required reporting and/or monitoring requirements. When incidental take is anticipated, the terms and conditions must include provisions for monitoring project activities to determine the actual project effects on listed fish or wildlife species (50 CFR §402.14(i)(3)). These terms and conditions are nondiscretionary. If this conference opinion is adopted as a biological opinion following a listing or designation, these terms and conditions will be non-discretionary.

1. NCDOT shall adhere to all measures as listed in the Avoidance and Minimization and Conservation Measures section as summarized in this Opinion.
2. The NCDOT will immediately inform the Service if the amount or extent of incidental take in the incidental take statement is exceeded.
3. When incidental take is anticipated, the Terms and Conditions must include provisions for monitoring project activities to determine the actual project effects on listed fish or wildlife species (50 CFR §402.14(i)(3)). In order to monitor the impact of incidental take, the NDOT must report the action impacts on the species to the Service according to the following:
 - a. The NCDOT will submit a report each year not later than September 30 identifying, per individual project (via Service Log # and NCDOT identifiers), the following for the preceding calendar year ending December 31:
 - i. Acreage and dates of tree removal (if any), if LAA for bats (excepting gray bat).
 - ii. Dates of structure removal (if any), if LAA for bats.
 - iii. List of implemented AMMs and BMPs [as listed in Section 2.3].

8. Conservation Recommendations

Section 7(a)(1) of the Endangered Species Act directs Federal agencies to use their authorities to further the purposes of the Endangered Species Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

- **Eastern Hellbender:** Proximity to eastern hellbender occurrence records was noted for the following crossing structures: Buncombe County structures 25-249, 25-250, 25-251, 25-258, and 25-263, Mitchell County structures 25-254, 25-261, and 25-262, and Yancey County structures 25-256, and 25-257. Ahead of work at these locations, coordinate with the NCWRC and the Service to survey for/relocate any hellbender that may be within the action area and vulnerable to impacts from project work.
- **State Species of Concern:** Proximity to aquatic species with North Carolina designations was noted for Rutherford County crossing structure 572. While these species are not currently afforded legal protection under the ESA, we recommend the most protective sediment and erosion control measures possible be used in waters occupied by these species, and we encourage you to coordinate any relocation efforts of such species with the NCWRC.
- **Refueling and Materials Storage:** Refuel construction equipment outside the 100-year floodplain or at least 200 feet from all water bodies (whichever distance is greater) and protected with secondary containment. Store hazardous materials, fuel, lubricating oils, or other chemicals outside the 100-year floodplain or at least 200 feet from all water bodies (whichever distance is greater).
- **Provide Terrestrial Wildlife Passage:** Where riparian corridors suitable for wildlife movement occur adjacent to a project, a spanning structure that also spans a portion of the floodplain and provides or maintains a riprap-free level path underneath for wildlife passage would provide a safer roadway and facilitate wildlife passage. A 10-foot strip may be ideal, though smaller widths can also be beneficial. Alternatively, a “wildlife path” can be constructed with a top-dressing of finer stone (such as smaller aggregate or on-site alluvial material) to fill riprap voids if full bank plating is required. If a multi-barrel culvert is used, the low flow barrel(s) should accommodate the entire stream width and the other barrel should have sills to the floodplain level and be back-filled to provide dry, riprap-free wildlife passage and well as periodic floodwater passage.

For the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, we request notification of the implementation of any conservation recommendations.



▣ North Carolina Wildlife Resources Commission ▣

M. Kyle Briggs, Executive Director

August 19, 2026

Loretta Beckwith
U.S. Army Corps of Engineers, Asheville Regulatory Field Office
151 Patton Avenue, Room 208
Asheville, NC 28801

Amy Annino
401 and Buffer Transportation Permitting Branch
North Carolina Department of Environmental Quality
2090 U.S. 70 Highway, Swannanoa, NC 28778-8211

SUBJECT: Comments on Application for Replacement of Bridge 87 on Hughes Gap Road (SR 1330)
 over Big Rock Creek, Mitchell County (**DF18313.2061363**), DWR 20261109 ver.1

The North Carolina Department of Transportation (NCDOT) applied for a 404 Permit and 401 Certification for the subject project. The North Carolina Wildlife Resources Commission's (NCWRC) comments are offered to help conserve the wildlife resources affected by the project and to promote wildlife-based recreation in accordance with applicable provisions of 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).

The project will replace a bridge over Big Rock Creek (C Tr) that was damaged by flooding from Hurricane Helene. The new structure will be a 90' span bridge.

Big Rock Creek supports wild Rainbow Trout (*Oncorhynchus mykiss*) and Brown Trout (*Salmo trutta*). Therefore, the upcoming combined moratoria for these trout (October 15, 2026 to April 15, 2027, and subsequent moratorium periods), should be adhered to for instream disturbance from this bridge work.

Hellbender (*Cryptobranchus alleganiensis*) and other rare or sensitive species are found in Big Rock Creek. Therefore, the NCWRC would appreciate a notice once the construction schedule is known, or at

least an invitation to the preconstruction meeting, so that a survey and relocation of hellbenders from the construction zone can be evaluated and completed, as needed.

The NCWRC requests that the following conditions be included in authorizations to help conserve trout and other aquatic resources affected by the project:

1. The upcoming moratoria for Rainbow and Brown Trout (October 15, 2026 to April 15, 2027, and subsequent moratorium periods), should be adhered to for instream disturbance.
2. Applicable measures from the current *NCDOT Erosion and Sediment Control Design and Construction Manual* should be adhered to. *Design Standards in Sensitive Waters* should be incorporated into the project's erosion control to help ensure protection of aquatic habitat for sensitive species (see part (d) of 15A NCAC 04B .0124).
3. In accordance with standard GC conditions, matting used in riparian areas should not contain nylon mesh because it entangles and kills wildlife. Coir matting should be used on disturbed stream banks that are steep or susceptible to high water. Matting should be anchored with wooden stakes according to NCDOT specifications.
4. Sandbags, rock berms, cofferdams, or other diversion structures should be used whenever possible to isolate flowing water from in-channel construction.

Thank you for the opportunity to review and provide recommendations on this project. Please contact me at david.mchenry@ncwildlife.gov or (828) 476-1966 if you have any questions about these comments.

Sincerely,



Dave McHenry, NCWRC Western DOT Coordinator

cc: Yates Allen, NCDOT Division 14 Environmental Specialist II
Mike Sanderson, NCDOT Division 14 Environmental Supervisor
Rob Crowther, PWS, NCDOT ECAP

401

Certification (NCDWR)

JOSH STEIN
Governor

D. REID WILSON
Secretary

RICHARD E. ROGERS, JR.
Director



NORTH CAROLINA
Environmental Quality

August 20, 2026

DWR # 20261109
Mitchell County

Mr. Michael A. Turchy, ECAP Group Leader
NC DOT Environmental Analysis Unit
1598 Mail Service Center
Raleigh NC 27699
maturchy@ncdot.gov

Subject: Certificate of Coverage Approval under Water Quality General Certification No. 8562
NCDOT Project DR18313.2061363.PR: Bridge 87 on SR 1330
Location: Lat 36.115806, Long -82.186944

Dear Mr. Turchy:

This Certificate of Coverage approval is issued to the North Carolina Department of Transportation, dated August 20, 2026. This Certificate of Coverage authorizes work under General Certification No. 8562 for the impacts listed below and described in your application which was received by the N.C. Division of Water Resources (Division or DWR) with fee August 19, 2026. This certificate is for the purpose and design described in your application. This approval requires you to follow all the conditions listed in the enclosed General Certification No. 8562.

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>.

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



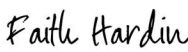
North Carolina Department of Environmental Quality | Division of Water Resources
512 North Salisbury Street | 1617 Mail Service Center | Raleigh, North Carolina 27699-1617
919.707.9000

Type of Impact	Amount Approved Permanent	Amount Approved Temporary
Perennial Streams		
Bank Stabilization	152 linear feet	0 linear feet
Dewatering	0 linear feet	177 linear feet
Totals:	152 linear feet	177 linear feet

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

This letter completes the Division's review under Section 401 of the Clean Water Act and 15A NCAC 02H .0500. Please contact Rob Ridings at rob.ridings@deq.nc.gov or 919-707-8786 if you have any questions or concerns.

Sincerely,

Signed by:

3185423002EA45E...

Faith Hardin, Supervisor
401 & Buffer Transportation Permitting Branch
Division of Water Resources, NCDEQ

Enclosures: Notice Regarding The Right To Contest A DWR 401 Water Quality Certification Decision
GC 8562

Electronic cc:

Lori Beckwith, USACE Asheville Regulatory Field Office (loretta.a.beckwith@usace.army.mil)

Robert Crowther, NCDOT ECAP (recrowther@ncdot.gov)

Mike Sanderson, NCDOT Division 13 Environmental Supervisor (jmsanderson@ncdot.gov)

Dave McHenry, NCWRC (david.mchenry@ncwildlife.gov)

Amy Annino, NCDWR Transportation Permitting (amy.annino@deq.nc.gov)

DWR 401 & Buffer Permitting Branch Electronic file



**NOTICE REGARDING THE RIGHT TO CONTEST A DWR DECISION ON A 401 WATER QUALITY
CERTIFICATION AND/OR BUFFER AUTHORIZATION**

Right of Persons Aggrieved to File a Contested Case for the Decision on a 401 Water Quality Certification and/or Buffer Authorization:

The Division's decision 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 an 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 recipient of the certificate (the "Permittee"), 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.



Permitted Drawings

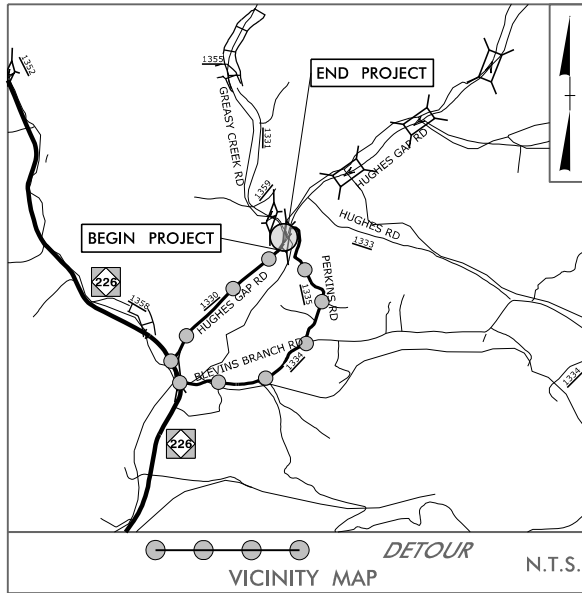
09/08/99

7/13/2026

TIP PROJECT: DF18313.2061363.PR

CONTRACT: C205133

See Sheet 1A For Index of Sheets
See Sheet 1B For Standard Symbology Sheet



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

MITCHELL COUNTY

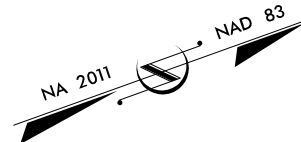
LOCATION: REPLACE BRIDGE 087 ON SR 1330 (HUGHES GAP ROAD)
OVER BIG ROCK CREEK FROM SR 1335 (PERKINS ROAD)
TO WEST OF SR 1330 (HUGHES GAP ROAD)
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE

WETLAND AND SURFACE WATER IMPACTS PERMIT

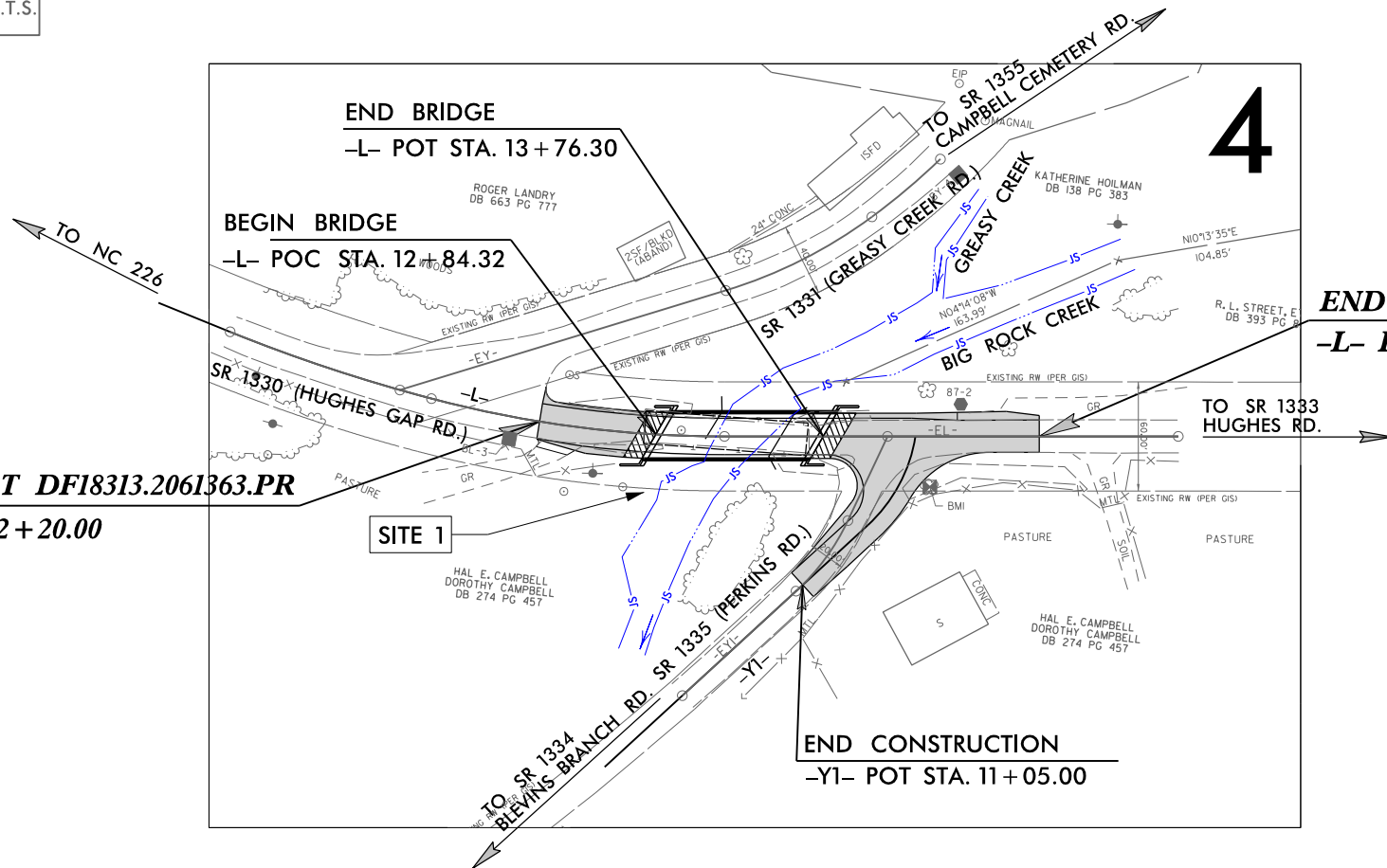
PERMIT DRAWING
SHEET 1 OF 5

DATE: 7/13/2026

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	DF18313.2061363.PR	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
DF18313.2061363.PR		PE, ROW, UTL, CONST.	



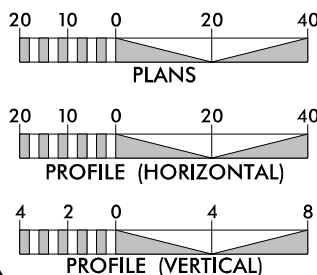
BEGIN PROJECT DF18313.2061363.PR
-L- POC STA. 12 + 20.00



END PROJECT DF18313.2061363.PR
-L- POT STA. 14 + 95.00

THIS IS NOT A CONTROLLED-ACCESS PROJECT.
THIS PROJECT IS NOT WITHIN MUNICIPAL BOUNDARIES.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

GRAPHIC SCALES



DESIGN DATA

ADT 2026 = 700
ADT 2046 = 1,100
K = %
D = %
T = 6%*
V = 55 MPH
* TTST=6% DUAL 0%
FUNC CLASS =
MINOR RURAL
COLLECTOR
SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT DF18313.2061363.PR = 0.035 MILES
LENGTH STRUCTURE TIP PROJECT DF18313.2061363.PR = 0.017 MILES
TOTAL LENGTH OF TIP PROJECT DF18313.2061363.PR = 0.052 MILES

NCDOT CONTACT: ANDY HUSSEY, PE
ALTERNATIVE DELIVERY UNIT

PLANS PREPARED FOR THE NCDOT BY:



SMITH-ROWE, LLC
2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JUNE 11, 2026

LETTING DATE:
JUNE 11, 2026



STV Engineers, Inc.
2151 Hopkirk St., Suite 1400
Charlotte, NC 28203
NC License Number F-0991

CURTIS HALL, PE
PROJECT ENGINEER

WILLIAM FELTS, PE
PROJECT DESIGNER

HYDRAULICS
ENGINEER

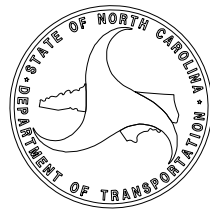
SIGNATURE: P.E.

ROADWAY
DESIGN
ENGINEER

SIGNATURE: P.E.

A-008R1
RIGHT OF WAY PLANS
SUBMITTED: 07-09-26

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



8/17/99

160089-Hyd-prm-wet-psh_04.dgn

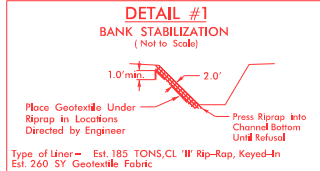
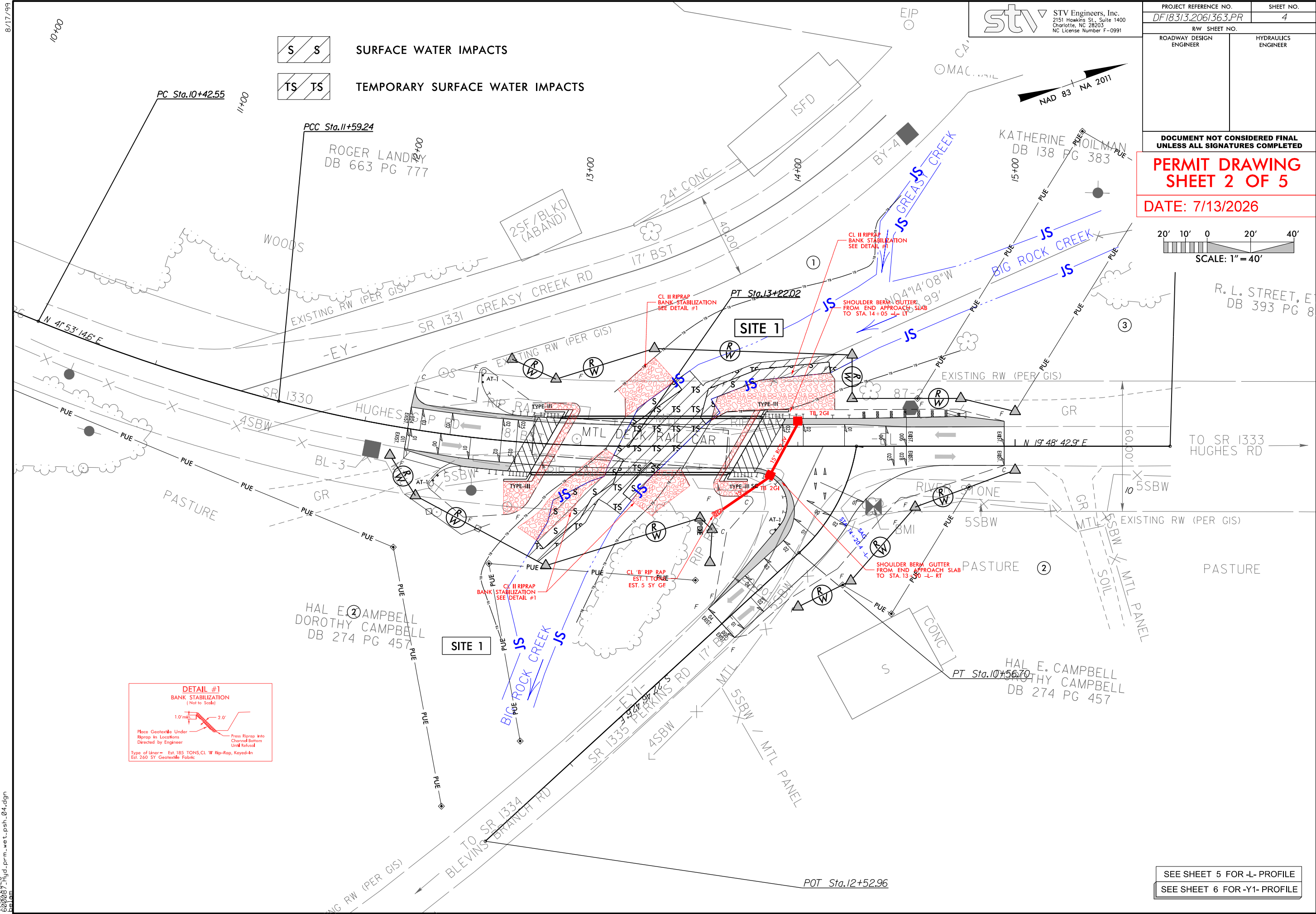
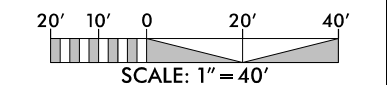
STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
NC License Number T-0991

PROJECT REFERENCE NO.		SHEET NO.
DF18313.2061363.PR		4
RW SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 2 OF 5

DATE: 7/13/2026



SEE SHEET 5 FOR -L- PROFILE
SEE SHEET 6 FOR -Y1- PROFILE

8/17/99

1600897-Hyd-prm-wet-psh_04-1.dgn

10+00

11+00

PCC Sta.11+59.24

ROGER LANDRY
DB 663 PG 777

13+00

24" CONC
40'00"

17' BST

14+00

EIP

STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
NC License Number T-0991

NAD 83 NA 2011

KATHERINE POILMAN
DB 138 PG 383

15+00

PROJECT REFERENCE NO.		SHEET NO.
DF18313.2061363.PR		4
RW SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 3 OF 5

DATE: 7/13/2026

20' 10' 0 20' 40'
SCALE: 1" = 40'

R. L. STREET, E
DB 393 PG 8

TO SR 1333
HUGHES RD

EXISTING RW (PER GIS)

PASTURE

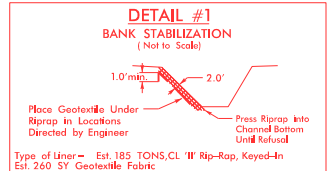
HAL E. CAMPBELL
DOROTHY CAMPBELL
DB 274 PG 457

PT Sta.10+56.70

POT Sta.12+52.96

S S SURFACE WATER IMPACTS

TS TS TEMPORARY SURFACE WATER IMPACTS



5/14/99

143/2926
600697_Hyd-prm-wet_psh_05.dgn

STV
STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
NC License Number T-0991

PERMIT DRAWING
SHEET 4 OF 5

DATE: 7/13/2026

PROJECT REFERENCE NO.
DF18313.2061363.PR

SHEET NO.
5

ROADWAY DESIGN
ENGINEER

HYDRAULICS
ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

2,906

2,902

2,898

2,894

2,890

2,886

2,882

2,878

2,874

2,870

2,866

2,862

2,858

2,854

2,850

2,846

2,842

2,838

2,834

2,830

2,894

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2,886

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2,874

2,870

2,866

2,862

2,858

2,854

2,850

2,846

2,842

2,838

2,834

2,830

-L-

CENTERLINE -L- STA 13+30.00
CENTERLINE GP EL = 2869.12'
1091.98' (21") CORED SLAB
W/ VERTICAL ABUTMENTS
SKEW = 60 DEGREES

BEGIN PROJECT
-L- STA 12+20.00
EL = 2,869.04'

PI = 12+90.00
EL = 2,869.60'
VC = 105'
K = 54
DS = 40 MPH

PI = 14+05.00
EL = 2,868.27'
VC = 83'
K = 49
DS = 35 MPH

LOW POINT
-L- 14+20.36
EL = 2,868.42'

END GRADE
BEGIN MILL/OVERLAY
-L- STA 14+50.00
EL = 2,868.51'

HIGH POINT
-L- 12+80.33
EL = 2,869.35'

PROPOSED GRADE

EXISTING GROUND

END PROJECT
END MILL/OVERLAY
-L- STA 14+95.00
EL = 2,869.02'

BM-1
STA = 14+34.90
OFFSET = 27.78' RT
ELEV = 2,865.82'
RR SPIKE IN 18" CHERRY

BRIDGE HYDRAULIC DATA		
DESIGN DISCHARGE	= 1600	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 2863.1	FT
BASE DISCHARGE	= 2400	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 2864.6	FT
OVERTOPPING DISCHARGE	= 3400+	CFS
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING ELEVATION	= 2868.4	FT
	=	FT
DATE OF SURVEY	= 1-5-26	
W.S. ELEVATION AT DATE OF SURVEY	= 2856.2	FT

CUT OFF EXTG. ABUT. AND
EXCAVATE TO EL 2862.0

SITE 1

CUT OFF EXTG. ABUT. AND
EXCAVATE TO EL. 2862.0

NWSE & WSE
ON 1-5-26 = 2856.2

SEE SHEET 4 FOR -L- PLAN

11 + 00

12 + 00

13 + 00

14 + 00

15 + 00

