




STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

September 26, 2025

MEMORANDUM TO: Division Environmental and Construction Units

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

SUBJECT: Environmental Permits for the Replacement of Pipe 716 over Garren Creek on
SR 2832 (Kirstein Road) in Buncombe County, Division 13, **WBS**
DF18313.2011190

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 and 33, Action ID: SAW-2003-30373 Dated September 26, 2025	March 14, 2026*
NC Division of Water Resources Section 401 Water Quality Certification	Individual Water Quality Certification, ID: 20251019 v1 Dated August 26, 2025	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.

*All 404 Nationwide Permits expire on March 14, 2026. Since new Nationwide Permits are not issued until the previous set expires, a one-year period exists between March 14, 2026, and March 14, 2027 to complete construction, or renew the permit under the new Nationwide Permit.

ECAP will coordinate with Division Environmental Staff to determine project completion timelines and initiate the renewal process, if necessary.

404 Permit (USACE)



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

September 26, 2025

Regulatory Division
SAW-2003-30373

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: maturchy@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 4, 2025, for a Department of the Army general permit verification to replace **Pipe 716** that which was damaged by Hurricane Helene with a bridge. This project is located on SR 2832 over Garren Creek in Buncombe County, North Carolina (35.5263, -82.3719) and has been assigned file number SAW-2003-30373. 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 (Garren Creek)	<u>NWP 3</u>					120' / dewater and construction access	80' / bank stabilization - 50' is ATF
Impact Totals		0	0	0	0	120'	80'
Total Loss of waters of the U.S. (wetlands and/or open waters)			0	Total Loss of waters of the U.S.			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 and regional conditions
- 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 14, 2026**, 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, Yancey Counties, North Carolina, Service Log #25-110 through 25-117” on February 11, 2025. This document contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with incidental take for the Gray bat and Northern long-eared bat for this project. Your authorization under this verification letter and NWP 3 is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take listed in this document for the aforementioned species. 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 not use nylon mesh on the stream banks or under the bridge.

3. NCDOT 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 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 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,

A handwritten signature in black ink that reads "M. Scott Jones". The signature is written in a cursive, flowing style.

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

Enclosures

Compliance Certification Form

File Number: SAW-2003-30373

County: Buncombe

Permittee: NCDOT, Mr. Michael Turchy

**Project Name: NCDOT / Hurricane Helene / DF18313.2011190.PR / Br 716 / SR 2832 /
Buncombe / Div 13**

Date Verification Issued: September 26, 2025

Project Manager: Lori Beckwith

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

**US ARMY CORPS OF ENGINEERS
Wilmington District
Attn: Lori Beckwith
151 Patton Avenue, Room 208
Asheville, NC 28801-5006
or
loretta.a.beckwith@usace.army.mil**

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

I hereby certify that the work authorized by the above referenced permit, and mitigation (if applicable), has been completed in accordance with the terms and conditions of the said permit and verification letter, including all applicable conditions.

Date Authorized Work Started: _____ Completed: _____

Describe any deviations from permit (attach drawing(s) depicting the deviations):

***Note: The description of any deviations on this form does not constitute approval by the USACE.**

Signature of Permittee

Date

401

Certification (NCDWR)

JOSH STEIN
Governor

D. REID WILSON
Secretary

RICHARD E. ROGERS, JR.
Director



NORTH CAROLINA
Environmental Quality

August 26, 2025

DWR # 20251019
Buncombe County

North Carolina Department of Transportation
Attn: Michael Turchy
1598 Mail Service Center
Raleigh, NC 27699

Delivered via email to: maturchy@ncdot.gov

Subject: Approval of Individual 401 Water Quality Certification
Replacement of Pipe 716 on SR 2832 (Kirstein Road) over Garren
Creek, WBS DF18313.2011190

Location: 35.52635, -82.371198

Dear Mr. Turchy:

Attached hereto is a copy of Certification No. WQC008112 issued to Michael Turchy and the North Carolina Department of Transportation, dated August 26, 2025. This approval is for the purpose and design described in your application.

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) 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].



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

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

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

Dan Hirschman, General Counsel
Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601

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

This letter completes the Division's review under Section 401 of the Clean Water Act and 15A NCAC 02H .0500. Please contact Kaylie Yankura at 919-707-3870 or kaylie.yankura@deq.nc.gov if you have any questions or concerns.

Sincerely,

Signed by:

Faith Hardin

3185423002EA45E...

Faith Hardin, Supervisor
401 & Buffer Transportation Permitting Branch

Electronic cc: Lori Beckwith, USACE Asheville Regulatory Field Office
Mike Sanderson, Division 13 Environmental Officer
Holland Youngman, USFWS
Dave McHenry, NCWRC
DWR 401 & Buffer Permitting Branch Electronic file



NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

CERTIFICATION #WQC008112 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. Michael Turchy and the North Carolina Department of Transportation, who have authorization for the impacts listed below, as described within your application received by the N.C. Division of Water Resources (Division) on August 4, 2025, and by Public Notice issued by the Division on August 4, 2025, 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)]

Stream Impacts in the French Broad River Basin

Site	Permanent Fill in Perennial Stream (linear feet)	Temporary Fill in Perennial Stream (linear feet)	Total Stream Impact (linear feet)	Stream Impacts Requiring Mitigation (linear feet)
Site 1	-	120 linear feet	120 linear feet	0 linear feet
Site 1	*80 linear feet	-	80 linear feet	0 linear feet
Totals:	*80 linear feet	120 linear feet	200 linear feet	0 linear feet

*Permanent impact for bank stabilization, not permanent loss. Mitigation not required.

Total Stream Impact for Project: 200 linear feet

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

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

Project Specific Conditions

1. 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. [15A NCAC 02H.0506(b)(2) and (b)(3)]
2. The post-construction removal of any temporary bridge structures must return the project site to its preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species. [15A NCAC 02H .0506(b)(2)]



3. As a condition of this 401 Water Quality Certification, bridge construction must be accomplished in strict compliance with the most recent version of NCDOT's Best Management Practices for Construction and Maintenance Activities. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
4. All bridge construction shall be performed from the existing bridge, temporary work bridges, temporary causeways, or floating or sunken barges. If work conditions require barges, they shall be floated into position and then sunk. The barges shall not be sunk and then dragged into position. Under no circumstances should barges be dragged along the bottom of the surface water. [15A NCAC 02H .0506(b)(3)]
5. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. To meet the requirements of NCDOT's NPDES permit NCS0000250, please refer to the most recent version of the North Carolina Department of Transportation Stormwater Best Management Practices Toolbox manual for approved measures. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
6. No drill slurry or water that has been in contact with uncured concrete shall be allowed to enter surface waters. This water shall be captured, treated, and disposed of properly. [15A NCAC 02H .0506(b)(3)]
7. A turbidity curtain will be installed in the stream if driving or drilling activities occur within the stream channel, on the stream bank, or within 5 feet of the top of bank, or during the removal of bents from an old bridge. This condition can be waived with prior approval from the NCDWR. [15A NCAC 02H .0506(b)(3)]

General Conditions

1. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills. [15A NCAC 02B.0200]
2. For all streams being impacted due to site dewatering activities, the site shall be graded to its preconstruction contours and revegetated with appropriate native species. [15A NCAC 02H.0506(b)(2)]
3. During the construction of the project, no staging of equipment of any kind is permitted in waters of the state or protected riparian buffers. [15A NCAC 02H.0506(b)(2)]
4. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions. [15A NCAC 02H.0506(b)(2)]



5. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage. [15A NCAC 02H.0506(b)(2)]
6. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507 (c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
7. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water. [15A NCAC 02H.0506(b)(3) and (c)(3)]
8. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream. [15A NCAC 02H.0506(b)(3)]
9. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials. [15A NCAC 02H.0506(b)(3)]
10. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification. [15A NCAC 02H.0506(b)(3)]
11. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
12. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If the NCDWR determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the NCDWR may reevaluate and modify this certification. [15A NCAC 02B.0200]
13. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification. [15A NCAC 02H.0506(b)(2)]
14. A copy of this Water Quality Certification shall be maintained on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall



be maintained with the Division Engineer and the on-site project manager. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]

15. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization, including all non-commercial borrow and waste sites associated with the project, shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification. [15A NCAC 02H.0501 and .0502]
16. The Permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02B.0506(b)(2)]
17. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer (or whomever is the authorized agent if a non-NCDOT project) shall complete and return the "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0507]
18. Native riparian vegetation (i.e., herbaceous, trees, and shrubs native to your geographic region) must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction. [15A NCAC 02B.0506(b)(2)]
19. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities. [15A NCAC 02H.0506(b)(3) and (c)(3)]
20. Erosion control matting that incorporates plastic mesh and/or plastic twine shall not be used along streambanks or within jurisdictional wetlands. [15A NCAC 2H.0506; 15A NCAC 2H.0507]
21. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards [15A NCAC 02H.0506(b)(3)]:
 - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the North Carolina Sediment and Erosion Control Planning and Design Manual.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the North Carolina Sediment and Erosion Control Manual.



The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.

- c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the North Carolina Surface Mining Manual.
 - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
22. Sediment and erosion control measures shall not be placed in wetlands or surface waters without prior approval from DWR. [15A NCAC 02H.0506(b)(3)]
23. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and 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. [15A NCAC 02H .0506(b)(3) and (c)(3) and 15A NCAC 02B .0200]
24. 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 Sediment and Erosion Control Manual, or for linear transportation projects, the NCDOT Sediment and Erosion Control Manual. 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.
25. DWR approves the stormwater drainage design as shown in the 401 application, under the assumption that it meets the requirements of the NCDOT NPDES permit #NCS000250. These plans are enforceable by DWR. Changes to the approved plans are prohibited without prior approval from DWR. If sediment or other pollutants are found to be discharged from the stormwater outfalls, DWR may take enforcement action. NCDOT and DWR shall assess the damage to water quality standards and implement an appropriate action plan to address the impacts. The action plan shall provide an appropriate timeline for implementation as agreed upon by both DWR and NCDOT. This may require NCDOT to obtain a modification to its current



401 and 404 permits.

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.

This, the 26th day of August 2025

Signed by:

Faith Hardin

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Faith Hardin, Supervisor

401 & Buffer Transportation Permitting Branch

Filename: 20251019_Ver 1_Approval Letter_20250826.docx



JOSH STEIN

Governor

D. REID WILSON

Secretary

RICHARD E. ROGERS, JR.

Director



NORTH CAROLINA
Environmental Quality

NCDWR Project No.: _____

County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

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

Applicant's Certification

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

Signature: _____ Date: _____

Agent's Certification

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

Signature: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

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

Signature _____ Registration No. _____

Date _____

Completed hard copies can be emailed to kristilynn.carpenter@ncdenr.gov or mailed to:

NCDEQ Transportation Permitting
1617 Mail Service Center
Raleigh NC 27699-1617



Permitted Drawings



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS



(Version 3.02; Released April 23, 2024)

WBS Element: DF18313.2011190.PR TIP/Proj No: 100716 County(ies): Buncombe Page 1 of 2

General Project Information

WBS Element:		DF18313.2011190.PR	TIP Number:	100716		Project Type:	Bridge Replacement		Date:	7/2/2025
NCDOT Contact:		Marc Shown, PE			Contractor / Designer:		Justin Davenport, PE			
	Address:	Hydraulics Unit				Address:	Moffatt & Nichol			
		1000 Birch Ridge Drive					4700 Falls of Neuse Rd, Suite 300			
	Raleigh, NC 27610			Raleigh, NC 27609						
	Phone:	(919)707-6751				Phone:	(919)334-7979			
	Email:	mtshown@ncdot.gov				Email:	jdavenport@moffattnichol.com			
City/Town:		Fairview			County(ies):		Buncombe			
River Basin(s):		French Broad			CAMA County?		No			
Wetlands within Project Limits?		Yes								

Project Description

Project Length (lin. miles or feet):	0.01	Surrounding Land Use:	RURAL, WOODS, AGRICULTURE				
	Proposed Project			Existing Site			
Project Built-Up Area (ac.)	0.2	ac.		0.1	ac.		
Typical Cross Section Description:	THE PROPOSED ROADWAY WILL BE A TWO-WAY ALIGNMENT WITH 10' TRAVEL LANES, NO PAVED SHOULDERS, AND VARYING SLOPES. THE PROPOSED BRIDGE HAS AN OUT TO OUT OF 27' AND CLEAR ROADWAY OF 24'-10". THE BRIDGE WILL HAVE 10' TRAVEL LANES AND 2'-5" PAVED SHOULDERS.			THE EXISTING ROADWAY IS A TWO-WAY ALIGNMENT WITH 9' TRAVEL LANES, NO PAVED SHOULDER, AND 4:1 SLOPES. THE EXISTING BRIDGE HAS AN OUT TO OUT OF 18'-6".			
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	N/A	Year:	N/A	Existing:	700	Year: 2025

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

The project consists of the replacement of bridge # 100716 in Buncombe County. The existing bridge carries SR 2832 (Kirstein Road) Over Garren Creek to Garren Creek Road. The Creek is called Garren Creek on the vicinity map, the final survey file, and at the NCDEQ Surface Waters Classification website and is referring to the same stream. The proposed structure for bridge # 100716 is 55' length x 27' width (9 -21" prestressed concrete cored slab units). The proposed alignment is at the same location as the existing alignment. The proposed detour alignment is located to the west and on the upstream side of the project. The detour bridge typical is one 14' travel lane with 2' paved shoulders on both side.

STORMWATER CONTROLS:

The proposed bridge does not utilize deck drains. Runoff from the bridge roadway and paved shoulders at the bridge approaches drains into concrete flume. The stormwater is then diffused at slope prior to discharging into Garren Creek. Shoulders will be paved. Bank Stabilization is planned to prevent erosion of the steambanks.

NOTE:

This is an emergency design bulid caused by Hurricane Helene.



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR NCDOT PROJECTS

(Version 3.02; Released April 23, 2024)

WBS Element: DF18313.2011190.PR TIP/Proj No.: 100716 County(ies): Buncombe Page 2 of 2

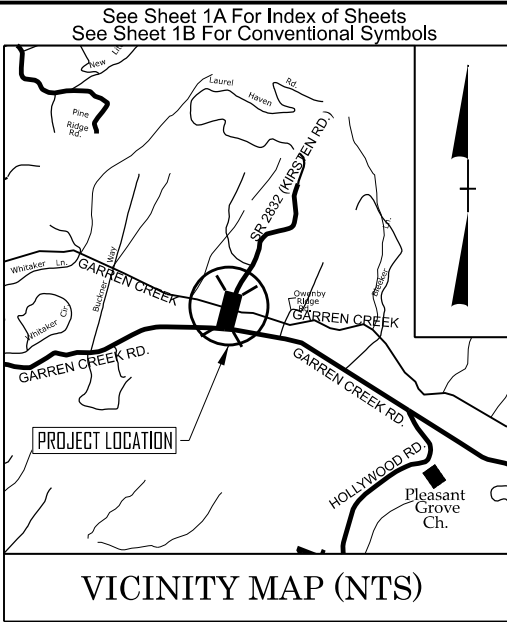
General Project Information

Waterbody Information

Surface Water Body (1):	Garren Creek		NCDWR Stream Index No.:	6-57-6	
NCDWR Surface Water Classification for Water Body	Primary Classification:		Class C		
	Supplemental Classification:		Trout Waters (Tr)		
Other Stream Classification:					
Impairments:	None				
Aquatic T&E Species?	No	Comments:			
NRTR Stream ID:	Garren Creek		Buffer Rules in Effect:	N/A	
Project Includes Bridge Spanning Water Body?	Yes	Deck Drains Discharge Over Buffer?	No	Dissipator Pads Provided in 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?		Dissipator Pads Provided in 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?		Dissipator Pads Provided in 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)					

TIP PROJECT: 100716

CONTRACT: C205025



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BUNCOMBE COUNTY

LOCATION: *REPLACE BRIDGE #100716 ON
SR 2832 (KIRSTEIN RD) OVER
GARREN CREEK*

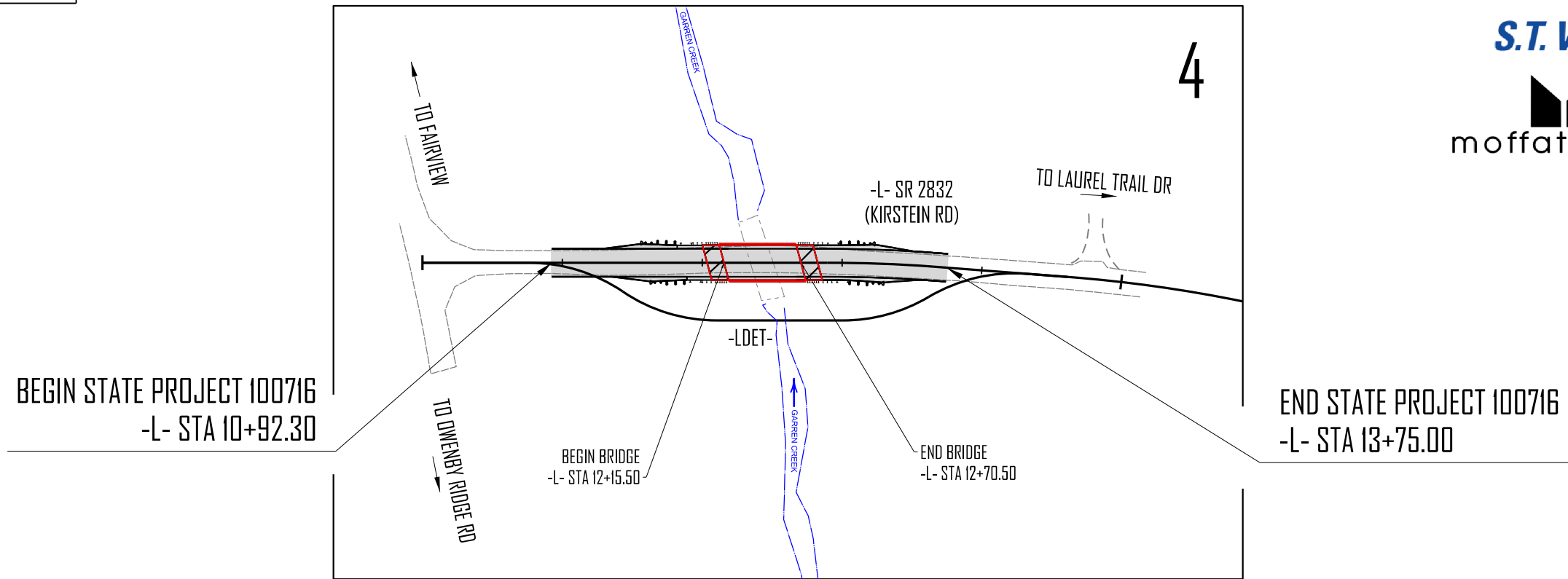
TYPE OF WORK: *PAVING, GRADING, DRAINAGE
AND STRUCTURES*

WETLAND AND SURFACE WATER IMPACTS PERMIT



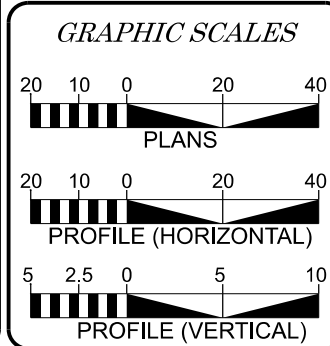
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	100716	11	
STATE PROJ. NO.		F. A. PROJ. NO.	DESCRIPTION
DF18313.2011190.PR		N/A	PE
DF18313.2011190.PR		N/A	R/W
DF18313.2011190.PR		N/A	UTIL
DF18313.2011190.PR		N/A	CONST

PERMIT DRAWING
SHEET 1 OF 7



THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II

INCOMPLETE PLANS
DO NOT USE FOR R./W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



DESIGN DATA

ADT 2025 = 200

T = 6 % *

V = 25 MPH

* TTST = 3% DUAL 3%

FUNC CLASS =

LOCAL

SUBREGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT 100716 = 0.044 MILES

LENGTH OF STRUCTURE TIP PROJECT 100716 = 0.010 MILES

TOTAL LENGTH OF TIP PROJECT 100716 = 0.054 MILES

Prepared in the Office of:
moffatt & nichol

4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27609
(919) 781-4626 VOICE (919) 781-4889 FAX
NC LICENSE NO.: F-0105

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JANUARY 21, 2025

LETTING DATE:
JANUARY 21, 2025

TRENT E. HUFFMAN, P.E.
PROJECT ENGINEER

ZITONG LIU, P.E.
PROJECT DESIGN ENGINEER

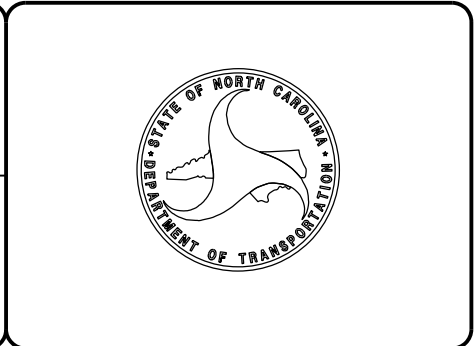
BYRON KYLE, PE
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



NO PROPOSED DRAINAGE STRUCTURES
ON THIS SHEET. GRADE TO DRAIN AS NEEDED



PERMIT DRAWING
SHEET 2 OF 7

100716

28-1

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WAKE COUNTY



ROADWAY DESIGN UNIT

ROADWAY DESIGN
ENGINEER

HYDRAULICS
ENGINEER

INCOMPLETE PLANS


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UNLESS ALL SIGNATURES COMPLETED

PREPARED BY

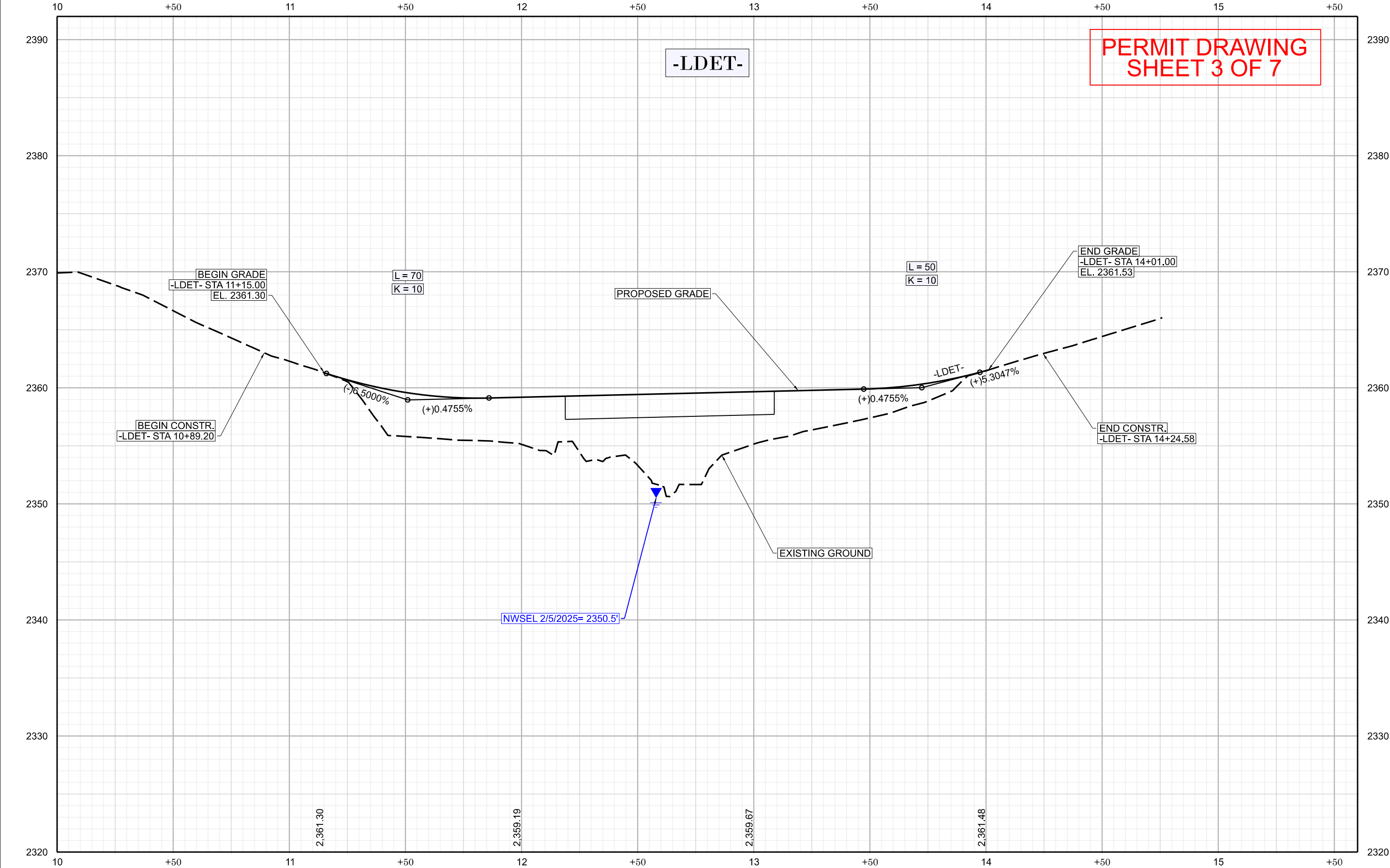


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REVISIONS

 TEMPORARY SURFACE WATER IMPACTS

FOR I-PLAN, SEE SHEET 004
FOR I-DET-PROFILE, SEE SHEET 28-2



100716

2B-2

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WAKE COUNTY

ROADWAY DESIGN UNIT
ROADWAY DESIGN
ENGINEER

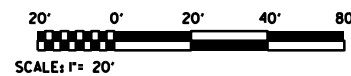
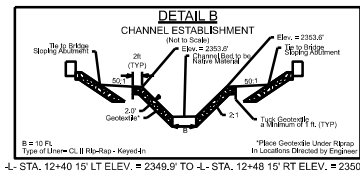
HYDRAULICS
ENGINEER

INCOMPLETE PLANS
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

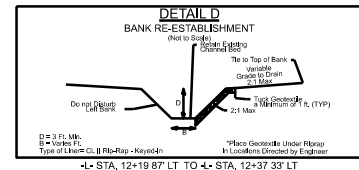
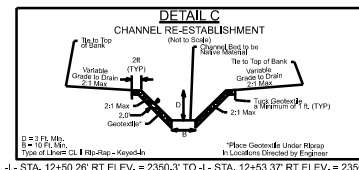
PREPARED BY

4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27609
(919) 781-4000 FAX (919) 781-4000
NC LICENSE NO. J-P-0100

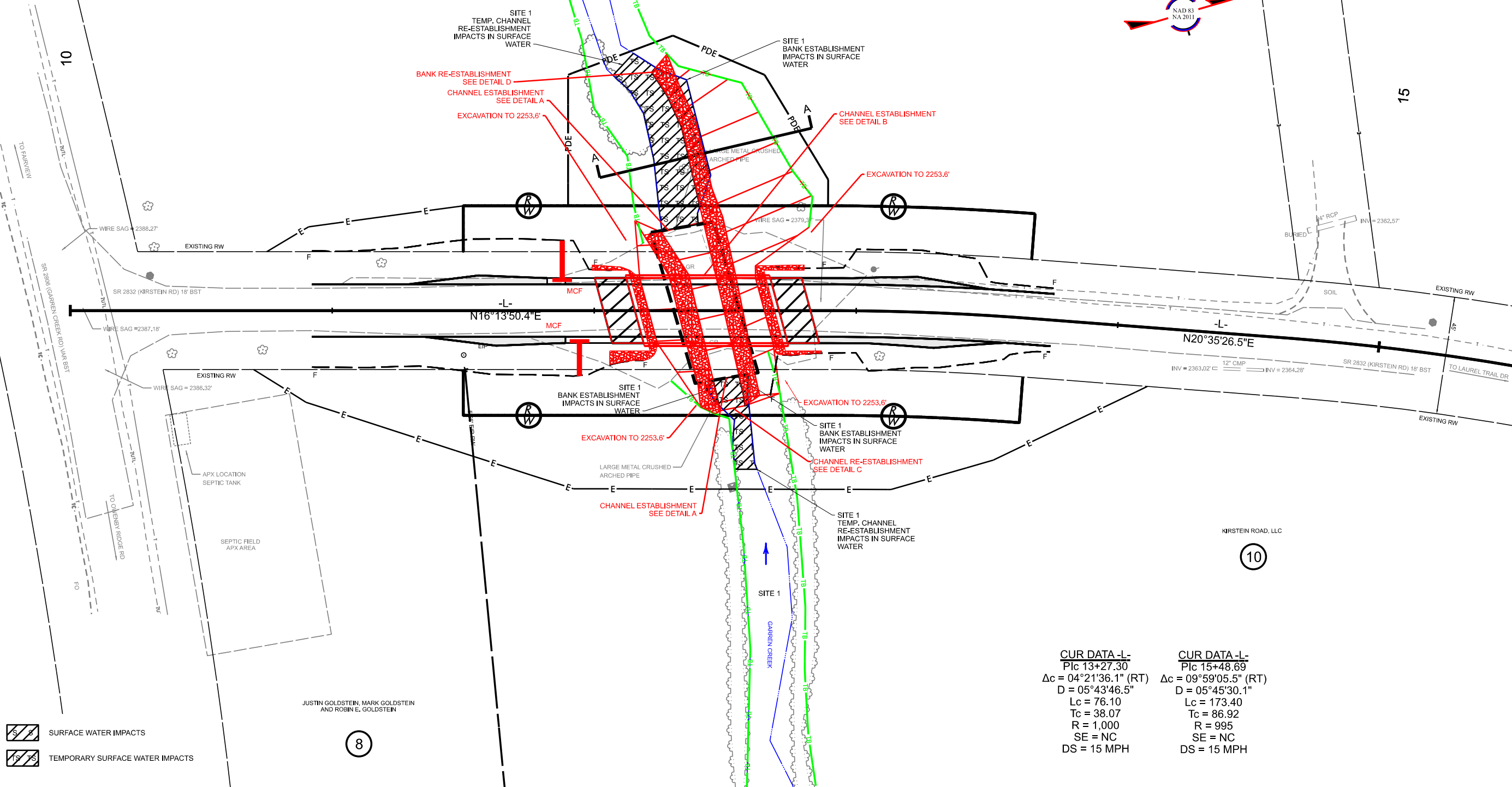
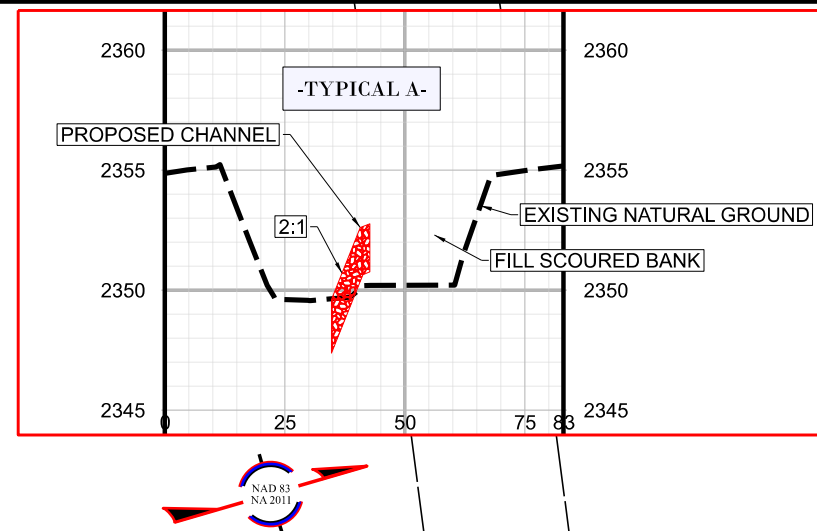
REVISIONS



PERMIT DRAWING
SHEET 4 OF 7





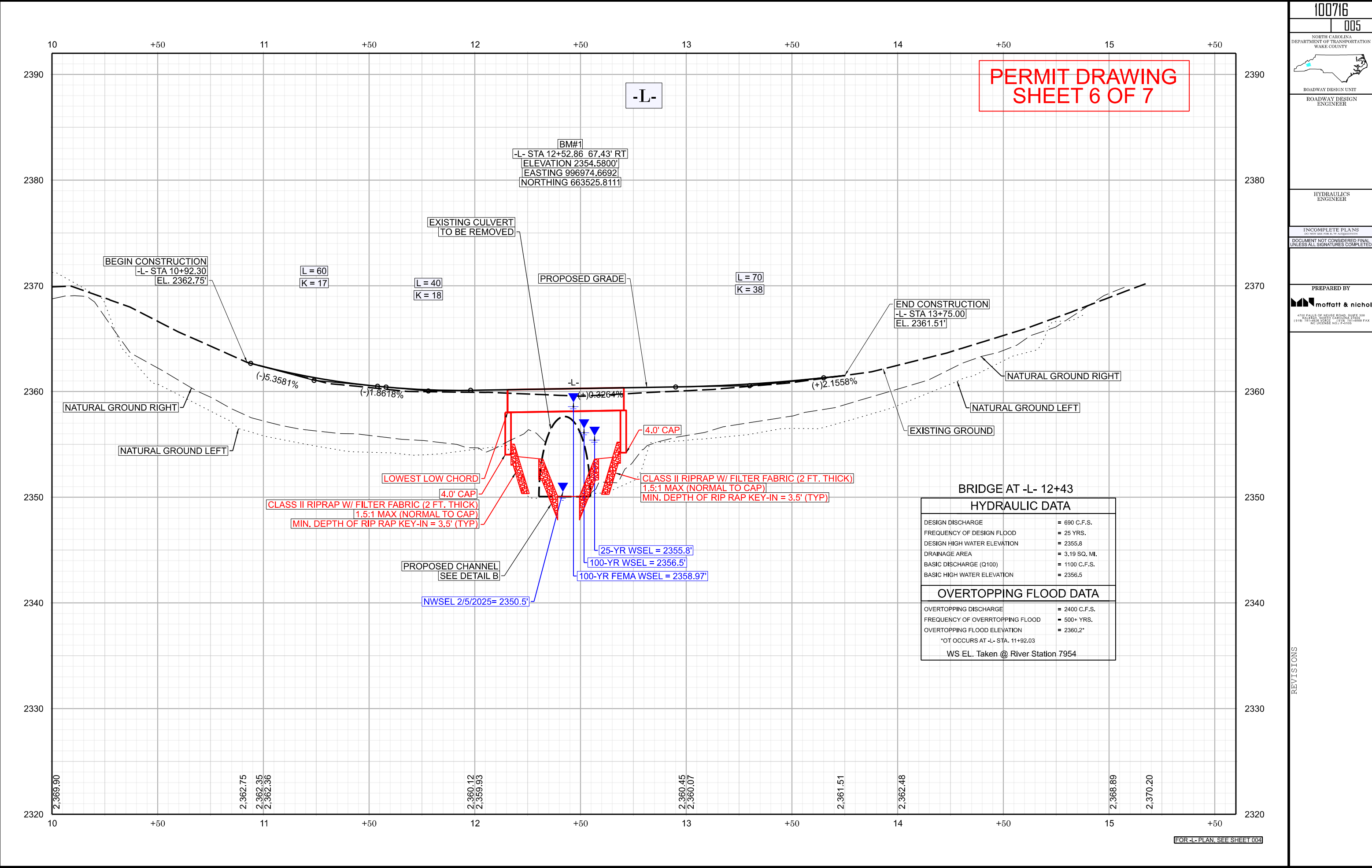
**NOTE: NATURAL ROCK OR RIPRAP ON SITE
THAT MEETS OR EXCEEDS THE D50 FOR
CLASS II RIPRAP CAN BE USED IN LIEU
OF THE SPECIFIED CLASS II RIPRAP**



<u>CUR DATA -L-</u>	<u>CUR DATA -L-</u>
Plc 13+27.30	Plc 15+48.69
$\Delta c = 04^{\circ}21'36.1''$ (RT)	$\Delta c = 09^{\circ}59'05.5''$ (RT)
D = $05^{\circ}43'46.5''$	D = $05^{\circ}45'30.1''$
Lc = 76.10	Lc = 173.40
Tc = 38.07	Tc = 86.92
R = 1,000	R = 995
SE = NC	SE = NC
DS = 15 MPH	DS = 15 MPH

FOR -L- PROFILE, SEE SHEET 005

100716	
	004
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WARE COUNTY	
	
ROADWAY DESIGN UNIT	
ROADWAY DESIGN ENGINEER	
HYDRAULICS ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETE	
PREPARED BY	
 moffatt & nichol	
4750 FAIRL OF WOODS ROAD, SUITE 200 FARMERSVILLE, NORTH CAROLINA 27525 (919) 781-5000 FAX (919) 781-5005 FAX NC LICENSE NO. 2-F-40105	
REVISIONS	



100716

005

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WAKE COUNTY

ROADWAY DESIGN UNIT
ROADWAY DESIGN
ENGINEER

HYDRAULICS
ENGINEER

INCOMPLETE PLANS
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PREPARED BY

4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27609
(919) 781-4000 FAX (919) 781-4000
NC LICENSE NO. J-P-0103

REVISIONS

WETLAND AND SURFACE WATER IMPACTS SUMMARY												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-L- 12+07 LT to 12+62 LT & RT	Temporary Bridge							< 0.01			
1	-L- 12+07 LT to 12+62 LT & RT	Rip Rap Embankment						< 0.01	0.02	80		
TOTALS*:								< 0.01	0.03	80	0	0

NOTES:

Revised 2018 Feb