



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

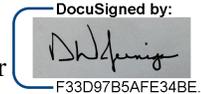
ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

July 25, 2023

MEMORANDUM TO: Mr. Brandon Jones, P.E.
Division 5 Engineer

FROM: Dennis Jernigan, P.E.
NCTA Interim Chief Engineer



SUBJECT: Triangle Expressway Southeast Extension (Complete 540) from NC 55 Bypass in Apex to US 64/264 (I-87) in Knightdale, Wake and Johnston Counties; Federal Aid No. STP-0540(19), STP-0540(20), and STP-0540(21); WBS Nos. 37673.1.TA1, 35516.1.TA1, and 35517.1.TA1; STIP Project Nos. R-2721, R-2828, and R-2829

Attached are the modified US Army Corps of Engineers (USACE) Phased Section 404 Individual Permit, NC Division of Water Resources (NCDWR) Section 401 Individual Water Quality Certification, Neuse Riparian Buffer Authorization, and Non-404 Jurisdictional Wetlands and Waters Permit for the construction of the Triangle Expressway Southeast Extension (Complete 540) from NC 55 Bypass in Apex to US 64/264 (I-87) in Knightdale, Wake and Johnston Counties. STIP Nos. R-2721, R-2828, and R-2829. ***This change is based on the July 18, 2023 email requesting modification of the permit regarding Permit Site 26 on the R-2721A section of the project. There are no changes to the mitigation requirements.*** Subject to any requisite permit modifications, all environmental permits have been received for the construction of the final design sections of this project.

A copy of this permit package is posted on the NCDOT website at:
<https://xfer.services.ncdot.gov/pdea/PermIssued>

cc: w/o attachment (see website for attachments)
Mr. Ron Davenport, P.E. Contracts Management
Mr. Clarence Coleman, P.E., FHWA
Mrs. Heather Montague, Division 5
Mr. Mark Craig, P.E., Division 5
Mr. Boyd Tharrington, P.E., Director of Field Support
Mr. Corey McLamb, P.E., Division 4
Dr. Majed Al-Ghandour, P.E., Programming and TIP
Mr. Mateen Alinaghian, Utilities Unit
Mr. Stephen Morgan, P.E., Hydraulics Unit
Mr. Brian Hanks, P.E., Structures Management Unit
Mr. Mark Staley, Roadside Environmental
Mr. John Jamison, Environmental Policy Unit
Ms. Beth Harmon, NCDMS
Ms. Deanna Riffey, Natural Environment Unit-Environmental Coordination & Permitting

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
TURNPIKE AUTHORITY
1578 MAIL SERVICE CENTER
RALEIGH, NC 27699-1578

Telephone: (919) 707-2700
Fax: (919) 715-5511
Customer Service: 1-877-368-4968

Website: ncdot.gov

Location:
1 SOUTH WILMINGTON STREET
RALEIGH, NC 27601

From: [Alsmeyer, Eric C CIV USARMY CESAW \(USA\)](#)
To: [Thomson, Nicole J](#)
Cc: [Abi Sheffey](#); [Riffey, Deanna](#); [Matthews, Monte K CIV USARMY CESAW \(USA\)](#); [Ridings, Rob](#)
Subject: [External] IP Mod11 RE: Complete 540, R2721A (540) Site 26; DA# SAW-2009-02240.
Date: Wednesday, July 19, 2023 1:51:16 PM
Attachments: [image001.png](#)
[230718_Mod11_drawing_I-540_R-2721A_Wake.pdf](#)

CAUTION: External email. Do not click links or open attachments unless verified. Report suspicious emails with the Report Message button located on your Outlook menu bar on the Home tab.

Nikki: Reference the Department of the Army (DA) permit issued to the North Carolina Department of Transportation (NCDOT) on October 24, 2019, and subsequently modified on February 4, 2020 (revision issued on February 7, 2022), April 29, 2020, January 7, 2021, March 19, 2021, March 3, 2022, July 1, 2022, September 13, 2022, February 17, 2023, and June 21, 2023. This permit authorized the discharge of fill material into waters of the United States for construction of the Triangle Expressway Southeast Extension (Complete 540) from NC 55 Bypass in Apex to US 64/264 (I-87) in Knightdale, Wake and Johnston Counties. Sections included within this permit are R-2721, R-2828, and R- 2829. Currently, only STIPs R-2721A&B and R-2828 are authorized for construction; STIP R-2829 has not yet been through final design, has not completely minimized impacts to waters and wetlands, nor has a final compensatory mitigation plan.

On July 18, 2023, the U.S. Army Corps of Engineers (Corps) received a request from NCDOT to modify the standard permit for the R-2721A project (Mod11), at Permit Site 26, to change approximately 0.034-acre of mechanized clearing wetland impact to rip rap fill. NCDOT has concerns at that site (STA 166+00 to 168+00 -L- Rt) regarding positive drainage being achieved at the outlet of the 30-inch CSP. Currently, stormwater from this system doesn't flow into the wetland area offsite, but instead collects along the toe of fill and has caused erosion issues. The long-term stability of this location was in question and the Design-Build Team/Joint Venture redesigned the outlet to conversion of a portion of the mechanized clearing impact to rip rap fill. The team has minimized the area of conversion to about 10-feet beyond the low point of the existing channel to ensure adequate containment and grading. The remaining area will continue as mechanized clearing.

The Corps has completed the evaluation of your request and has determined that it is appropriate and reasonable, and that no public notice is required for this modification. Therefore, the permit is modified as requested and as shown on the enclosed drawings. No additional compensatory mitigation is required.

All conditions of the permit, including the permit expiration date of December 31, 2024, remain in effect as written.

This electronic copy is your official Department of the Army authorization; no paper copy will be mailed.

Please reply or call if you have any questions or if I may serve you in any other way.

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

Eric

Eric Alsmeyer
Project Manager

Regulatory Division Office
US Army Corps of Engineers, Wilmington District
3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587
Office Tel: (919) 554-4884, x23 (I am working out of the office most days of the week, but I try to check my voicemails daily)
Regulatory Homepage:
<http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram.aspx>

From: Ridings, Rob <rob.ridings@deq.nc.gov>
Sent: Wednesday, July 19, 2023 11:37 AM
To: Thomson, Nicole J <njthomson2@ncdot.gov>; Alsmeyer, Eric C CIV USARMY CESAW (USA) <Eric.C.Alsmeier@usace.army.mil>
Cc: Abi Sheffey <asheffey@SAGEECOLOGICAL.COM>; Riffey, Deanna <driffey@ncdot.gov>
Subject: [Non-DoD Source] RE: R2721A (540) Site 26 permit modification

All,

Here is the In-Field Mod for the 401. Feel free to forward to anyone in NCTA & DOT that needs a copy.

Thanks,

Rob Ridings

Environmental Specialist

401/Buffer Transportation Permitting (DOT Divisions 4-5)

Division of Water Resources, NC Department of Environmental Quality

NEW EMAIL: rob.ridings@deq.nc.gov

919-707-8786

From: Thomson, Nicole J <njthomson2@ncdot.gov>
Sent: Tuesday, July 18, 2023 5:41 PM
To: Alsmeyer, Eric C SAW <Eric.C.Alsmeier@usace.army.mil>; Ridings, Rob <rob.ridings@deq.nc.gov>

Cc: Abi Sheffey <asheffey@SAGEECOLOGICAL.COM>; Riffey, Deanna <driffey@ncdot.gov>

Subject: R2721A (540) Site 26 permit modification

Eric & Rob –

As you are aware, the North Carolina Department of Transportation (NCDOT) applied for a phased Section 404 Individual Permit, Section 401 Individual Water Quality Certification (WQC), Neuse River Riparian Buffer Authorization, Non-404 Jurisdictional Wetlands and Waters Permit for the subject project in September 2018. The project, also known as Complete 540, encompasses three NCDOT Transportation Improvement Plan (TIP) projects: R-2721 (NC-55 Bypass to US-401), R-2828 (east of US-401 to I-40 Interchange) and R-2829 (east of I-40 to US 64/264). Revised permit applications were submitted in February 2019 and the NCDWR 401 and USACE 404 Permits were issued in February and October of 2019. Additionally, NCDOT received a modified 401 WQC for the Complete 540 Project on January 30, 2020, April 23, 2020, June 1, 2020, December 29, 2020, March 9, 2021, April 8, 2021, November 1, 2021, May 18, 2022, July 22, 2022, February 15, 2023 and June 19, 2023 from the NC Division of Water Resources (NCDWR) and a modified Department of the Army authorization #SAW-2009-02240 on February 4, 2020 (revision issued on February 7, 2020), April 29, 2020, January 7, 2021, March 19, 2021, March 3, 2022, July 1, 2022, and September 13, 2022, February 17, 2023 and June 21, 2023.

Previously, you both were made aware of concerns at Permit Site 26 (STA 166+00 to 168+00 - L- Rt) regarding positive drainage being achieved at the outlet of the 30-inch CSP. Currently, stormwater from this system doesn't flow into the wetland area offsite, but instead collects along the toe of fill and has caused erosion issues. The long-term stability of this location was in question and the DBT/JV looked at and redesigned the outlet which has resulted in the conversion of approximately 0.034-acre of mechanized clearing to rip rap fill (see attached revised drawing). The team has minimized the area of conversion to about 10-feet beyond the low point of the existing channel to ensure adequate containment and grading. The remaining area will continue as mechanized clearing.

Per the discussions had in the field from earlier compliance visits, it was determined that you both would be willing to address the modification request via email.

Please let me know if there is any additional information you need from me/us to process this field change.

Thank you so much for your time and attention!

Nikki

Nicole Thomson, PWS

North Carolina Turnpike Authority
North Carolina Department of Transportation

919-754-7806

1 South Wilmington Street
Raleigh, NC 27601
1578 Mail Service Center
Raleigh, NC 27699-1578



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NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

RICHARD E. ROGERS, JR.
Director

North Carolina Division of Water Resources Transportation Permitting Unit In-Field Minor 401 Water Quality Certification Modification

Project Name/ TIP Project No.:R-2721A; NC Hwy 540_ Date: July 19, 2023

DOT Division: 5 County: Wake DWR Project No. **20181249 ver 13** Permit Type: **WQC#4179**
DOT Field Staff: Nicole Thomson DWR Field Staff: Rob Ridings

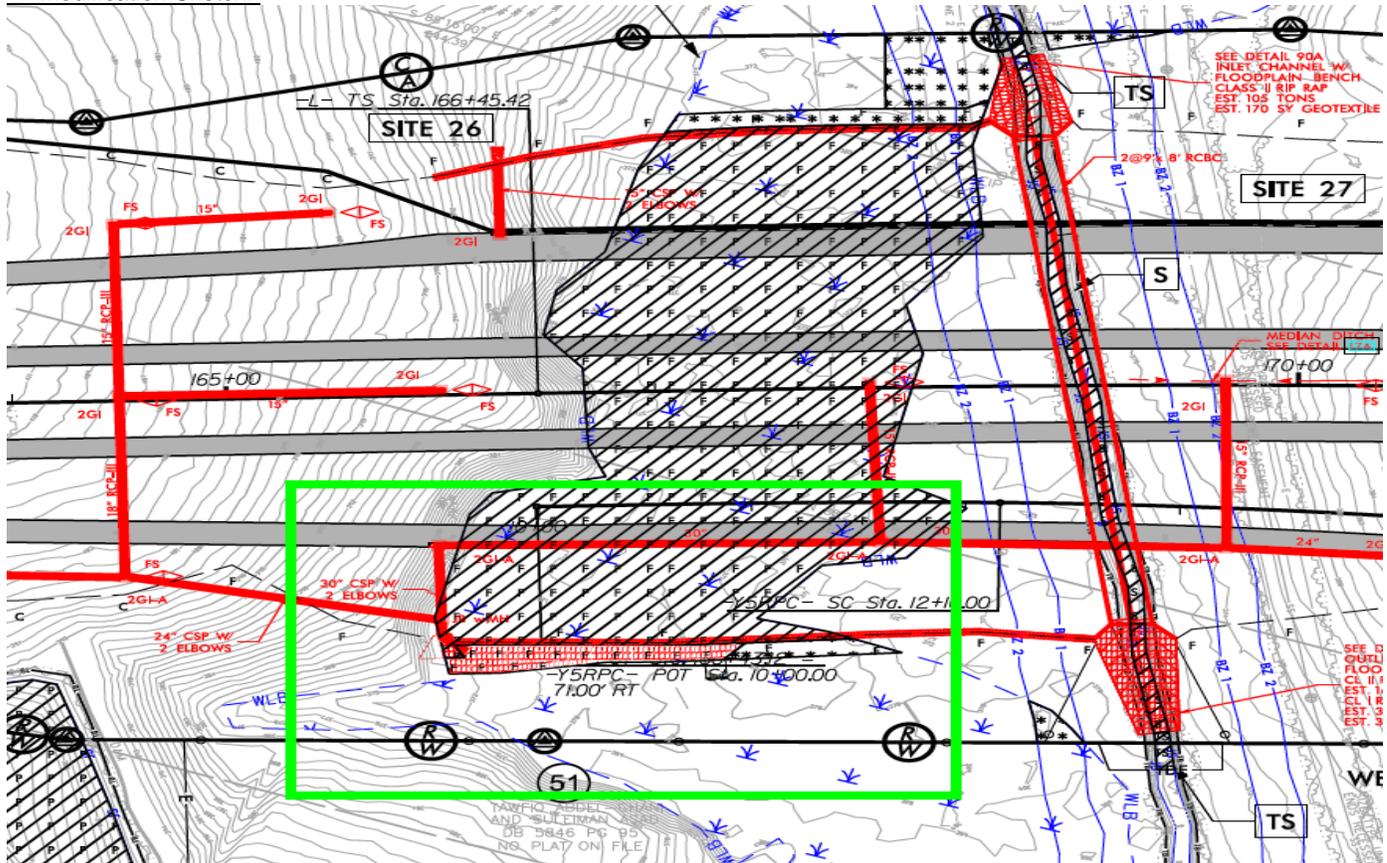
Modification Description

Site 26: Change of Impact. 0.034 acres of previously-impacted and permitted Wetland Mechanized Clearing modified into Permanent Riprap Fill for purpose of long-term stability in area receiving large amounts of drainage.

No new additional wetland impact---change of Type of impact only. Impact already mitigated for. This change was discussed agency field reviews May 9, June 13, & July 11, 2023.

NCDOT (Turnpike Authority) formally requested in-field mod via email dated July 18, 2023.

Modification Sketch:



This in-field modification is required for the following reason(s):

- The information contained in the application or presented in support thereof is incorrect in the following manner:

- **Conditions under which the original certification was issued have changed in the following manner:**

NCTA and Agencies have concerns at Permit Site 26 (STA 166+00 to 168+00 -L- Rt) regarding positive drainage being achieved at the outlet of the 30-inch CSP. Currently, stormwater from this system doesn't flow into the wetland area offsite, but instead collects along the toe of fill and has caused erosion issues. The long-term stability of this location was in question and the DBT/JV looked at and redesigned the outlet which has resulted in the conversion of approximately 0.034-acre of mechanized clearing to rip rap fill. The team has minimized the area of conversion to about 10-feet beyond the low point of the existing channel to ensure adequate containment and grading. The remaining area will continue as mechanized clearing.

This in-field modification is valid only if issued by an authorized agent of the Division of Water Resources, Transportation Permitting Unit ¹.

This in-field modification authorizes the NCDOT to

Change 0.034 acres of Mechanized Clearing of wetland impact to Permanent Fill (with riprap). Impact is already mitigated for and no change to amount of impacts is proposed. This is for Site 26 on section R-2721A of the Complete 540 Project.

In **WAKE** County. The project shall be constructed as described in the Modification Description and Sketch on Page 1 of this document dated **07/19/2023** to improve/construct the section of **NC 540** that extends from **NC 55** to **I-40**. The approved design is that described in the Modification Description and Modification Sketch on Page 1 of this document dated **06/19/2023**. Any further changes to the original Water Quality Certification dated **February 15, 2019, modified January 30, 2020, April 20, 2020, June 1, 2020, December 29, 2020, March 9, 2021, April 8, 2021, November 1, 2021, May 18, 2022, July 22, 2022, February 15, 2023 and June 21, 2023**, may require a formal written modification request.

The description of the proposed action provides adequate assurance that the proposed action in the **Neuse** River Basin in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Section 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth. Should your project change, you are required to notify the DWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all conditions. For this approval to remain valid, you



are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state, or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Modification Approval shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit. .

Conditions(s) of Modification Approval:

- 1. As-built drawings of the proposed action shall be submitted to the NC DWR Transportation Permitting Unit within 30 days of completion of the action.**
- 2. All the authorized action activities and conditions of the certification associated with the original Water Quality Certification dated 02/15/2019 and all other corresponding modification still apply except where superseded by this certification.**
- 3. Modified Site (#26, section R-2721A) shall be constructed in manner requested by NCTA in accordance with the request dated July 18, 2023 and in manner with the referenced Agency field reviews. Any variation will require an additional modification.**

Failure to construct the proposed action as described in the Modification Description and Sketch on Page 1 of this document and/or violations of any condition herein set forth may result in revocation of this modification approval and may result in criminal and/or civil penalties. This modification approval shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. If the Corps of Engineers requires a formal written modification to the 404 permit for the proposed action, the NC DWR must require a formal written modification to the 401 WQC, and therefore, this in-field modification is invalid. If additional (wetland, stream, buffer) impacts for this project (now or in the future) exceed (one acre, 150 linear feet, or one-third of an acre/150 linear feet, respectively), or if mitigation is required above and beyond the current mitigation requirement for this project, this in-field modification is invalid and a formal written modification is required.

This in-field modification is effective upon the date the last party signs this document. This in-field modification is made upon mutual agreement between DOT and DWR as indicated by the signatures below and is, therefore, not subject to appeal by either party. Appeals by third parties must be made within sixty (60) days of notification pursuant to the contested case provisions of the Administrative Procedure Act, NC Gen. Stat. §150B-23 et seq.

DWR Field Staff Signature: Robert Ridings
DocuSigned by: 80ECA32C7C38490...

Date: 7/19/2023

DOT Field Staff Signature: Nicole Thomson
DocuSigned by: 768FCFF5084D43B...

Date: 7/19/2023

¹ – An authorized agent of the Transportation Permitting Unit is defined as DWR staff that are DOT-funded and review and issue 401 Water Quality Certification for DOT projects. These staff include Central Office and Regional Office personnel.



From: Thomson, Nicole J [njthomson2@ncdot.gov]
To: Harris, Jennifer H [jhharris1@ncdot.gov], Jernigan, Dennis W [dwjernigan@ncdot.gov], Shapiro, Alan W [awshapiro@ncdot.gov], Gosselin (Mott MacDonald), Adam S [asgosselin@ncdot.gov]
Subject: FW: R2721A (540) Site 26 permit modification
Sent: Tue 7/18/2023 2:43 PM GMT-07:00
Importance: Normal

Please see the below that I just sent to Eric & Rob. I started adding folks to the "cc" list, got sidetracked and then just wrote the email rather than finishing the "to" part. I am so sorry.

I'll keep you posted if Eric or Rob have any questions, or if they just issue the field mods.

Thanks and again, I'm sorry for not including you on the original.

Nik

From: Thomson, Nicole J
Sent: Tuesday, July 18, 2023 5:41 PM
To: Alsmeyer, Eric C SAW <Eric.C.Alsmeier@usace.army.mil>; Ridings, Rob
Cc: Abi Sheffey <asheffey@SAGEECOLOGICAL.COM>; Riffey, Deanna
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Nicole Thomson, PWS

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1 South Wilmington Street

Raleigh, NC 27601

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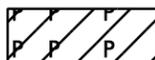
Raleigh, NC 27699-1578

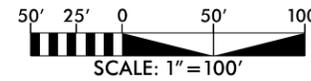
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PERMIT DRAWING SHEET 61 OF 119

PERMIT DRAWING PACKAGE LAST REVISED ON

	DENOTES FILL IN WETLAND		DENOTES TEMPORARY IMPACTS IN SURFACE WATER
	DENOTES MECHANIZED CLEARING		DENOTES IMPACTS IN SURFACE WATER
	DENOTES FILL IN POND		

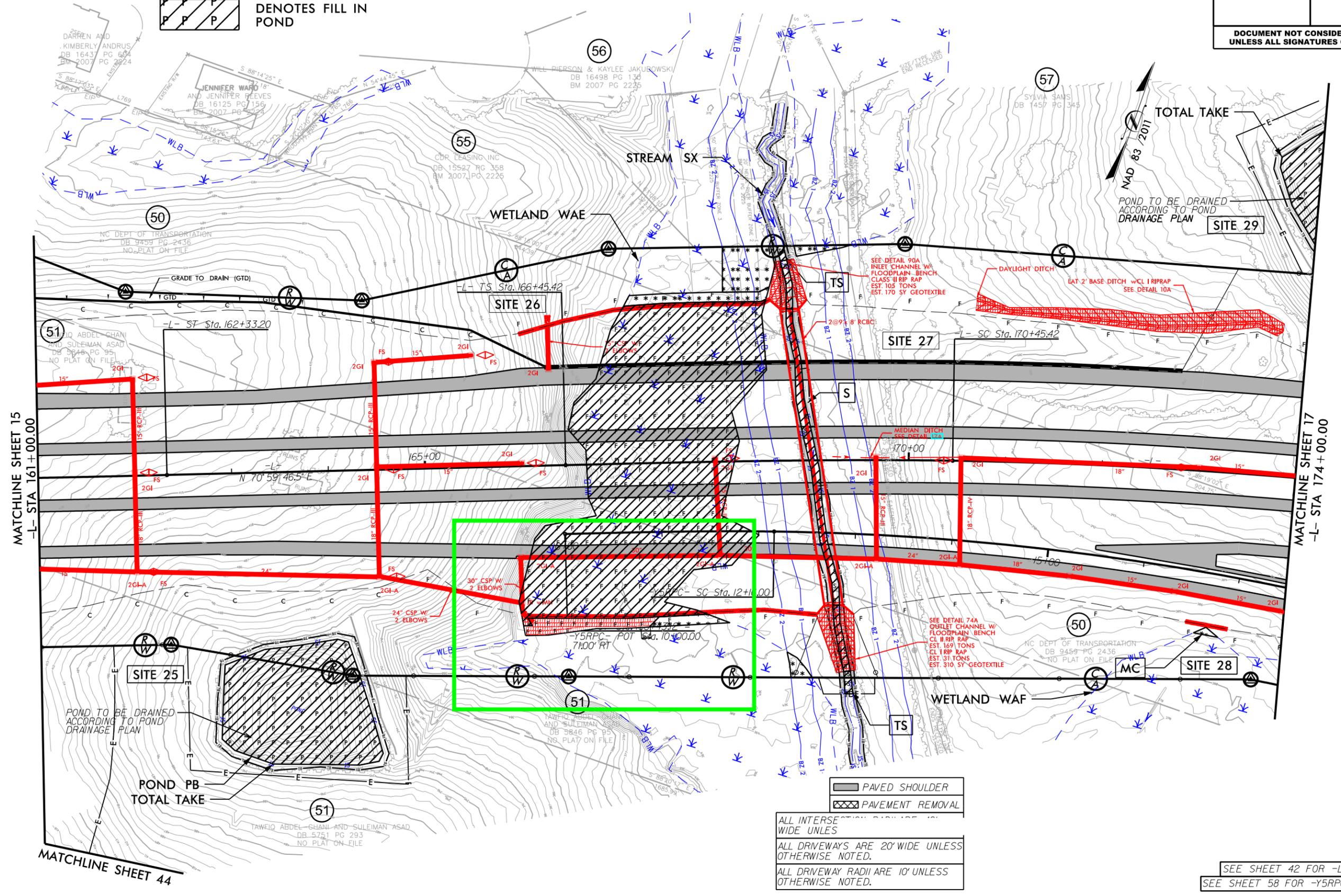


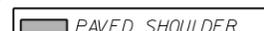
FLATIRON **BRANCH CIVIL**

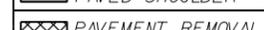
PLANS PREPARED BY:
Gannett Fleming
 Excellence Delivered As Promised

One Glenwood Avenue
 Suite 500
 Raleigh, NC 27603
 (919) 420-7660
 NC Lic. No. F-0270

PROJECT REFERENCE NO. R-2721A	SHEET NO. 16
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



 PAVED SHOULDER

 PAVEMENT REMOVAL

ALL INTERSECTION RADIUS ARE 10' WIDE UNLESS OTHERWISE NOTED.

ALL DRIVEWAYS ARE 20' WIDE UNLESS OTHERWISE NOTED.

ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.

SEE SHEET 42 FOR -L- PROFILE
 SEE SHEET 58 FOR -Y5RPC- PROFILE

2/21/2025 2:28 PM R-2721A-Hydro-Environmental Drawings R2721_Hyd_perm_wet_psh_16a.dgn
 5/14/2019 10:51 AM R-2721A-Hydro-Environmental Drawings R2721_Hyd_perm_wet_psh_16a.dgn