



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

JOSH STEIN  
GOVERNOR

J.R. "JOEY" HOPKINS  
SECRETARY

August 19, 2025

U.S. Army Corps of Engineers  
Regulatory Field Office  
3331 Heritage Trade Drive, Suite 105  
Wake Forest, NC 27587

N.C. Division of Water Resources  
Transportation Permitting Branch  
1617 Mail Service Center  
Raleigh, NC 27699-1617

ATTN: Mr. Eric Alsmeyer  
NCDOT Coordinator

Mr. Rob Ridings  
NCDOT Coordinator

Subject: Revised Request for Modification of the Phased Section 404 Individual Permit and Section 401 Individual Water Quality Certification for the construction of the Triangle Expressway Southeast Extension from NC-55 Bypass in Apex to I-40, Wake and Johnston Counties. TIP Nos. R-2721, R-2828, and R-2829. Federal Aid Project No. 0540047.

Reference: USACE Section 404 Authorization SAW-2009-02240, issued October 24, 2019, modified February 4, 2020 (corrected revision issued February 7, 2020), April 29, 2020, January 7, 2021, March 19, 2021, March 3, 2022, July 1, 2022, September 13, 2022, February 17, 2023, June 21, 2023, July 19, 2023, August 4, 2023, August 11, 2023, December 13, 2023, January 22, 2024, May 29, 2024, October 28, 2024, December 13, 2024, May 19, 2025, and June 6, 2025.

NCDWR Water Quality Certification Number 4179 and Neuse River Riparian Buffer Authorization, issued February 15, 2019, modified January 30, 2020, April 20, 2020 (corrected revision issued 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, July 19, 2023, August 4, 2023, August 11, 2023, June 19, 2023, December 12, 2023, January 22, 2024, May 29, 2024, October 7, 2024, December 10, 2024, May 16, 2025, and June 2, 2025.

Dear Sirs:

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 Program (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/I-42 to US 64/264). The permit and previous modification dates are listed in the reference section above.

We are requesting a modification to the Section 404 Authorization (SAW-2019-02240) and the associated 401 Water Quality Certification (Permit No. 20181249). This request arises from design

modifications to the bridge end bent over Bushy Branch. Adjustments to the bridge design have resulted in revisions to the approved plans, which in turn have altered the proposed impacts to jurisdictional resources.

Details of the revised impacts are outlined below and depicted on the updated permit drawing sheets corresponding to each revision. Only revised drawings for additional impacts to wetlands are included with this permit modification request for Roadway Permit Site 3. For ease of review, all modified impact areas are shown in bold font in this submittal. Unless otherwise indicated, all information submitted with the previous permit modifications remain unchanged.

### **Summary of Impacts**

Revised impacts for final design for R-2829A include: **7.123** ac (previously 7.112 ac) of permanent wetland (riparian and non-riparian) impacts, 9,326 linear feet of permanent stream impact, 3.49 acres of permanent surface water impacts (ponds), and 1,142,521 square feet of Neuse River Riparian Buffer impacts.

**Revised Table 5. R-2829A Jurisdictional Resources Impacts**

Riparian Wetlands Perm./Temp. (ac)	Non-Riparian Wetlands Perm./Temp. (ac)	Isolated Wetlands (ac)	Ponds (ac)	Isolated Ponds (ac)	Streams (lf)			Mitigable Riparian Buffer Impacts Z1/Z2 (sq ft)
					Perm.	Temp.	Structure Stab.*	
<b>6.713 / 1.665</b>	0.410 / 0.010	n/a	3.49	n/a	8,444	812	1,261	640,683/ 401,246

\*Structure stabilization includes pipe, culvert, and bank stabilization.

### **IMPACTS TO JURISDICTIONAL RESOURCES**

Revisions to proposed impacts are summarized below and reflected in the updated Table 20, which detail site specific impacts to wetlands. The revised permit drawings identify the station number, structure size and type, jurisdictional feature name, and associated impact type for each location. All impacts occur within the Neuse River Basin (HUC 03020201). Detailed revisions are provided below.

#### **Roadway Site 3 wetland impacts**

- Permanent wetland fill: 0.184 ac (previously 0.176 ac)
- Temporary wetland fill: 0.706 ac (previously 0.716 ac)
- Mechanized clearing in wetlands: 0.037 ac (previously 0.034 ac)

**Revised Table 20. R-2829A Wetland Impacts**

Permit Drawing Site Number	NRTR Label	Impact Type	Wetland Type	Temporary Wetland Impacts (ac)	Permanent Wetland Impacts (ac)
1	WFG	Fill	Non-Riparian		0.055
2	WFJ	Fill	Non-Riparian		0.098
2	WFJ	Excavation	Non-Riparian		0.023
<b>3</b>	<b>WFN(2)</b>	<b>Fill</b>	<b>Riparian</b>		<b>0.184</b>
<b>3</b>	<b>WFN(2)</b>	<b>Fill</b>	<b>Riparian</b>	<b>0.706</b>	
3	WFN(2)	Excavation	Riparian		0.018
<b>3</b>	<b>WFN(2)</b>	<b>Mechanized Clearing</b>	<b>Riparian</b>		<b>0.037</b>
3	WFN(2)	Hand Clearing	Riparian	0.660	

**Revised Table 20. R-2829A Wetland Impacts**

Permit Drawing Site Number	NRTR Label	Impact Type	Wetland Type	Temporary Wetland Impacts (ac)	Permanent Wetland Impacts (ac)
3	WFN(1)	Fill	Riparian		0.257
3	WFN(1)	Fill	Riparian	0.049	
3	WFN(1)	Excavation	Riparian		0.001
3	WFN(1)	Mechanized Clearing	Riparian		0.098
3	WFN(1)	Hand Clearing	Riparian	0.037	
4	WFY	Fill	Riparian		0.449
4	WFY	Mechanized Clearing	Riparian		0.034
7	WFZ	Fill	Riparian		0.113
7	WFZ	Excavation	Riparian		0.015
7	WFZ	Mechanized Clearing	Riparian		0.010
8	WGD	Fill	Riparian		0.021
8	WGD	Mechanized Clearing	Riparian		0.001
8	WGC	Fill	Riparian		0.013
8	WGB	Fill	Riparian		0.079
9	WGF	Fill	Riparian		0.016
9	WGG	Fill	Riparian		0.156
9	WAAE	Fill	Riparian		0.092
9	WAAF	Fill	Non-Riparian	0.010	
10	WGJ	Fill	Non-Riparian		0.013
10	WGJ	Mechanized Clearing	Non-Riparian		0.010
11	WGM	Fill	Riparian		0.023
12	WGN	Fill	Riparian		0.001
12	WGN	Mechanized Clearing	Riparian		0.005
13	WGO	Fill	Non-Riparian		0.028
13	WGO	Mechanized Clearing	Non-Riparian		0.004
15	WGR	Fill	Riparian		0.760
15	WGR	Excavation	Riparian		0.061
15	WGR	Mechanized Clearing	Riparian		0.112
16	WGR	Fill	Riparian		1.387
16	WGR	Mechanized Clearing	Riparian		0.088
16	WGT	Excavation	Riparian		0.008
16	WGT	Mechanized Clearing	Riparian		0.018
17	WGS	Fill	Riparian		0.237
17	WGS	Mechanized Clearing	Riparian		0.009
19	WGR	Fill	Riparian		0.202
19	WGR	Mechanized Clearing	Riparian		0.020
20A	WGU(2)	Mechanized Clearing	Riparian		0.001
21	WGY	Fill	Non-Riparian		0.099
22	WGZ	Fill	Non-Riparian		0.059
22	WGZ	Mechanized Clearing	Non-Riparian		0.016
23	WHB	Fill	Riparian		1.178
23	WHB	Excavation	Riparian		0.002
23	WHB	Mechanized Clearing	Riparian		0.061
24*	WHC	Hand Clearing	Riparian	0.020	
25	WHD(1)	Fill	Riparian		0.255
25	WHD(1)	Excavation	Riparian		0.015
25	WHD(1)	Mechanized Clearing	Riparian		0.027

**Revised Table 20. R-2829A Wetland Impacts**

Permit Drawing Site Number	NRTR Label	Impact Type	Wetland Type	Temporary Wetland Impacts (ac)	Permanent Wetland Impacts (ac)
25	WHD(2)	Fill	Riparian		0.195
25	WHD(2)	Excavation	Riparian		0.009
25	WHD(2)	Mechanized Clearing	Riparian		0.013
27	WHD(2)	Fill	Riparian		0.108
27	WHD(2)	Excavation	Riparian		0.037
27	WHD(2)	Mechanized Clearing	Riparian		0.023
29(A)	WNM	Fill	Riparian		0.021
29(A)	WNM	Mechanized Clearing	Riparian		0.044
29(A)*	WNM	Hand Clearing	Riparian	0.039	
31	WGW	Fill	Riparian		0.023
31	WGW	Excavation	Riparian		0.004
31	WGW	Mechanized Clearing	Riparian		0.019
31*	WGW	Hand Clearing	Riparian	0.034	
31*	WGV(1)	Hand Clearing	Riparian	0.120	
31	WGV(1)	Fill	Riparian		0.055
31	WGV(1)	Excavation	Riparian		0.010
31	WGV(1)	Mechanized Clearing	Riparian		0.021
33	WHD(2)	Excavation	Riparian		0.007
33	WHD(2)	Mechanized Clearing	Riparian		0.014
33	WAAK	Fill	Riparian		0.026
33	WAAK	Mechanized Clearing	Riparian		0.020
36	WFK	Mechanized Clearing	Non-Riparian		0.005
<b>Total Permanent Riparian Impacts HUC 03020201:</b>				<b>6.713</b>	
<b>Total Permanent Non-Riparian Impacts HUC 03020201:</b>				<b>0.410</b>	
<b>Total Riparian Temporary Impacts HUC 03020201:</b>				<b>1.665</b>	
<b>Total Non-Riparian Temporary Impacts HUC 03020201:</b>				<b>0.010</b>	

\*Impact due to utilities

### **Proposed Impacts**

Changes to proposed jurisdictional impacts necessary for bridge construction are summarized by permit below.

### **Roadway Site 3**

A low contour area was identified within wetland WFN(2), adjacent to the bridge end bents over Bushy Branch. To address this condition, the end bent slopes were regraded to a 1.5:1 slope, extending beyond the original mechanized clearing and permanent fill limits. This modification converts temporary wetland impacts to permanent wetland impacts. No additional impacts to streams or riparian buffers will occur at this location.

### **MITIGATION OPTIONS**

The avoidance and minimization efforts incorporated into the final design resulted in reduction of 1.55 acre of permanent wetland impact, 822 LF acre of permanent stream impact, 182,538 sq ft of riparian buffer impact, and 0.79 acre of pond impact as detailed in the table below.

### Jurisdictional Impacts from Preliminary Design to Current Proposed Design

Category	Preliminary Design*	Revised Design^	Change^^
Streams (lf)	10,148	9,326**	-822
Streams (number)	23	28	5
Buffer Zone 1 (sq ft)	714,081	640,683	-73,398
Buffer Zone 2 (sq ft)	510,386	401,246	-109,140
Wetlands (ac)	8.67	<b>7.123</b>	<b>-1.550</b>
Wetlands (number)	26	34	8
Ponds (ac)	4.28	3.49	-0.79
Ponds (number)	2	2	0

\*Preliminary impacts were calculated using proposed slope stakes plus 25 feet. \*\*Includes bank and structure stabilization. ^Current proposed design includes impacts associated with all utilities which were not accounted for in preliminary design. ^^Features added with study area expansion at East Garner Road.

### Compensatory Mitigation:

Compensatory mitigation for unavoidable additional wetland impacts associated with R-2829A will be provided by way of NCDOT credit purchases from Falling Creek Umbrella Mitigation Bank. An acceptance letter from the Falling Creek Umbrella Mitigation Bank is included with this permit modification request. A summary of the proposed impacts is provided below.

**Revised Table 28. R-2829A Proposed Compensatory Mitigation**

Mitigation Type	Riparian Wetland (ac)	Non-Riparian Wetland (ac)	Stream (lf)	Riparian Buffer (sq. ft.)		Riparian Buffer Total (sq. ft.)
				Zone 1	Zone 2	
Neuse River Basin (HUC 03020201)	<b>6.713</b>	0.410	8,444	524,809	356,152	880,961

The 260-acre site is adjacent to Falling Creek in the Upper Neuse Cataloging Unit (03020201) and is located northwest of the intersection of Brantham School Road and Corbett Hill Road in Wayne County, North Carolina. NCDOT has requested additional mitigation of **0.011** acre from Falling Creek Umbrella Mitigation Bank to cover the revised total of **6.713** acre (previously 6.702 ac) in Hydrological Unit 03020201 of riparian wetland impacts. Revised Table 28B below shows the impacts associated with R-2829A and the wetland mitigation credits from Falling Creek Umbrella Mitigation Bank.

**Revised Table 28B R-2829A Compensatory Riparian Wetland Mitigation Bank**

Site Name	Wetland Type	Bank Developer	Purchased Wetland Mitigation Credits (ac)	Wetland Impacts (ac)	Wetland Mitigation Required (ac)
Falling Creek	Riparian	Falling Creek Umbrella Mitigation Bank	32.0	6.713	13.426

## REGULATORY APPROVALS

### Section 404

We are requesting a modification to the USACE Permit Number SAW-2009-02240 Section 404 Individual Permit for the above-described activities.

### Section 401

We are requesting a modification to the WQC Permit Number 4179 Section 401 Individual WQC.

The individual permit modification package for the Complete 540 project (STIP Projects R-2721, R-2828, and R-2829) is available at <https://xfer.services.ncdot.gov/pdea/PermApps/>

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Deanna Riffey at [driffey@ncdot.gov](mailto:driffey@ncdot.gov) or 919-707-6151.

Sincerely,

DocuSigned by:

*Alan Shapiro*

B149124683BD45D...

Alan Shapiro, P.E.

Chief Engineer

North Carolina Turnpike Authority

cc: NCDOT Permit Application Standard Distribution List



**Neuse Stream and Wetland Credits Statement of Availability**

August 18, 2025

Attn: Mr. Brad Chilton  
NCDOT  
1000 Birch Ridge Road  
Raleigh, NC 27610

**RE: Availability of Stream and Riparian Wetland Credits for the "R-2829A" project**  
**Bank Name: Falling Creek Umbrella Mitigation Bank**  
**Bank Sites: Falling Creek Mitigation Site**  
**Bank Sponsor: Wildlands Holdings III, LLC**  
**USACE Action ID No.: SAW-2015-00940**  
**Permittee: NCDOT**  
**Stream Credits Needed: 9,866 LF**  
**Stream Credits Available: 10,413 LF**  
**Riparian Wetland Credits Needed: 13.426 acres**  
**Riparian Wetland Credits Available: 32.365 acres**  
**Neuse 03020201 River Basin**

Dear Mr. Chilton,

Wildlands Holdings III, LLC, owned and operated by Wildlands Engineering, Inc., currently has sufficient stream and riparian wetland credits from the **Falling Creek Umbrella Mitigation Bank: Falling Creek Mitigation Site** to satisfy the stream and/or wetland mitigation requirements related to the above-mentioned project. The project is located within the Neuse River Basin of the service area (HUC 03020201) of the Bank.

This letter is simply a statement of availability of credits as of the date written. It is neither a guarantee of future credit availability, nor a guarantee of credit pricing. Credits are sold on a first come, first serve basis at the Bank's price at the time an invoice is requested. Please note that these credits have been reserved and paid for in advance by the NCDOT.

Final transfer of the credits will be made upon receipt of a copy of the US Army Corps of Engineers Compensatory Mitigation Responsibility Transfer Form approving the Stream and/or wetland mitigation purchase from the Bank and upon receipt of your payment to Wildlands Holdings III, LLC.

We appreciate the opportunity to assist you with your mitigation requirements. Please contact me at (704) 332-7754 x114 or [cbrunick@wildlandseng.com](mailto:cbrunick@wildlandseng.com) if you have any questions or need any additional information.

Sincerely,

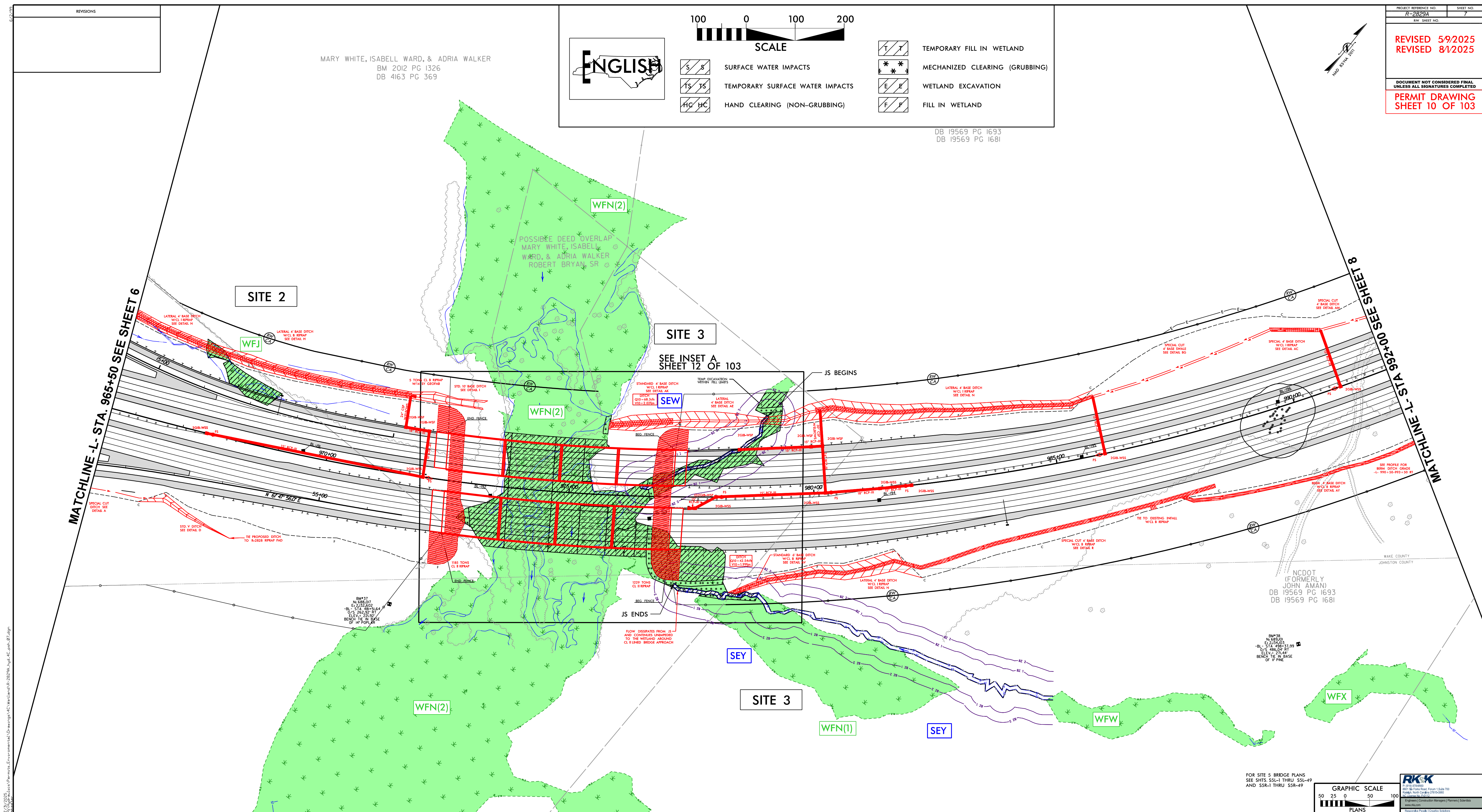
A handwritten signature in cursive script that reads "Camden Brunick".



Camden M. Brunick  
Wildlands Engineering, Inc.  
*Mitigation Credit Sales*  
[cbrunick@wildlandseng.com](mailto:cbrunick@wildlandseng.com)  
O: (704) 332-7754 ext. 114  
M: (919) 219-6162



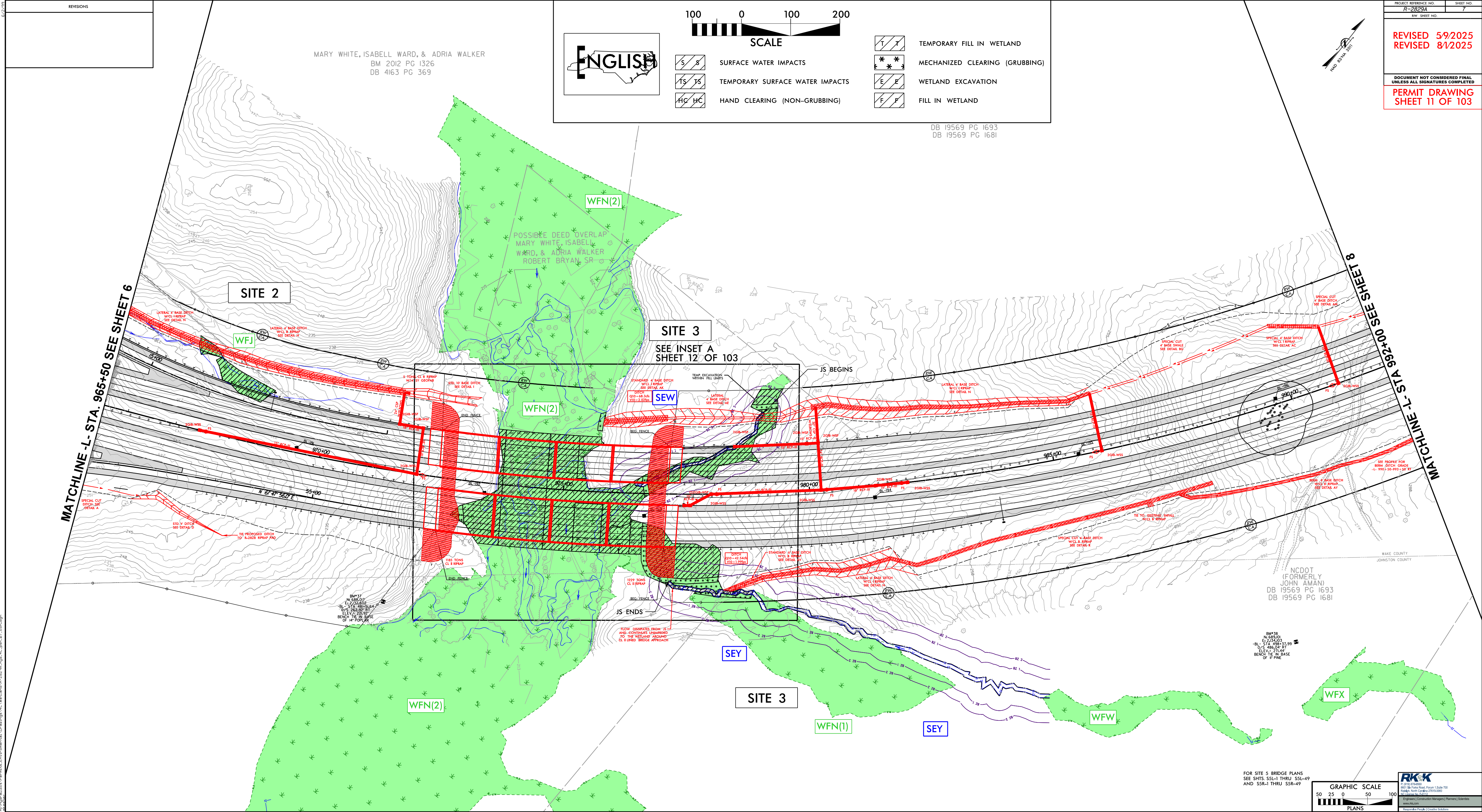
Submittal August 19, 2025





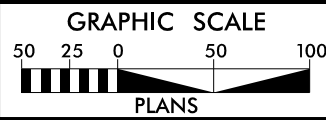
Submittal August 19, 2025

PROJECT REFERENCE NO.	SHEET NO.
7-28224	7
RW SHEET NO.	
REVISED 5/9/2025 REVISED 8/1/2025	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
PERMIT DRAWING SHEET 11 OF 103	

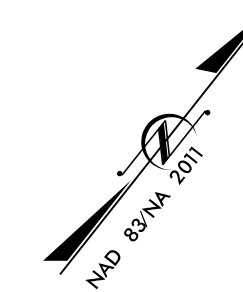


7/2/2025  
11:25 AM  
C:\Users\j\Documents\Environmental Drawings\7-28224\7-28224.dwg  
AC, path: 87, console:

FOR SITE 5 BRIDGE PLANS  
SEE SHTS 55-1 THRU 55-49  
AND 55-8-1 THRU 55-8-49









WETLAND AND SURFACE WATER IMPACTS SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			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	-Y22RPAFLY_REV- 28+00 - 29+58 LT	Roadway Fill: WFG	0.055									
2	-L- 967+04 - 968+83 LT	Roadway Fill: WFJ	0.098		0.023							
3	-L- 972+77 - 979+44 LT	Bridge: SEW						0.031		319		
		WFN(2)	<b>0.184</b>	<b>0.706</b>	0.018	<b>0.037</b>	0.660					
	-L- 976+61 - 978+80 RT	Roadway Fill: SEY						0.002	0.023	15	174	
		WFN(1)	0.257	0.049	0.001	0.098	0.037					
4	-L- 1001+92 - 1004+65 RT	48" RCP: WFY	0.449			0.034						
5	-L1- 1008+79	9'x8' RCBC, SFH						0.042	0.010	384	96	
		Structure Stabilization						0.007		63		
6	-L1- 1013+72	12'x8' RCBC, SFF						0.070	0.009	533	60	
		Structure Stabilization						0.012		86		
7	-L1- 1012+26 LT - 1018+49 RT	Roadway Fill: SFE						0.060	0.002	759	21	
		WFZ	0.113		0.015	0.010						
8	-L1- 1022+67 LT - 1025+03 RT	42" RCP: SFB						0.017		222		
		Structure Stabilization						0.001	0.001	24	10	
		WGD	0.021			0.001						
		WGC	0.013									
		WGB	0.079									
SHEET TOTALS*:			<b>1.269</b>	<b>0.755</b>	<b>0.057</b>	<b>0.180</b>	<b>0.697</b>	<b>0.242</b>	<b>0.045</b>	<b>2405</b>	<b>361</b>	<b>0</b>

\*Rounded totals are sum of actual impacts

NOTES:

Site 3: 4 interior bents with 4 @ 3.5' diameter columns per bent= total 154.4sq ft (0.004ac) permanent wetland impact (included above)

Site 3: WFN(1) piece above SEW is a total take in summary above; hatching outside construction impacts is not shown.

Temporary Excavation (~0.01ac) within the permanently impacted wetland footprint limits due to an erosion control clean water diversion channel

Site 7: WFZ is a total take in summary above; hatching outside construction impacts is not shown

Revised 5/9/2025, **8/1/2025**

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
9/4/2024  
Wake County  
R-2829A

WETLAND AND SURFACE WATER IMPACTS SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			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)
30	-Y23DR- 23+90 LT - 25+00 RT	42" RCP: SHT						0.011		225		
	-Y23DR- 23+59 - 25+53 LT	PAO						0.792				
31	-Y24R- 19+06 LT - 21+74 RT	5'x6' RCBC Ext / 72" WSP: SFY						0.001		6		
		Structure Stabilization						0.005	0.002	34	10	
		WGW	0.023		0.004	0.019						
		WGV(1)	0.055		0.010	0.021						
32	-Y24R- 34+65 CT	6'x8'9" RCBC Ext / 72" WSP: SGA						0.064	0.001	270	7	
		Structure Stabilization						0.007	0.003	30	12	
33	-Y26R- 18+73 CT	10'x9' RCBC: SGA						0.016	0.001	137	11	
		Structure Stabilization						0.007	0.006	40	37	
		WHD(2)			0.007	0.014						
		WAAK	0.026			0.020						
34	-Y26R- 18+50 LT	10'x9' RCBC: SAAK						0.002	0.001	31	11	
35	-Y26R- 18+35 LT	10'x9' RCBC: SAAL							0.001		10	
36	-Y22RPE_REV- 45+95 - 46+14 RT	Ditch: WFK				0.005						
SHEET TOTALS*:			0.104	0.000	0.021	0.079	0.000	0.905	0.015	773	98	0
PROJECT TOTALS*:			6.203	0.755	0.210	0.720	0.697	4.422	0.176	9326	951	0

\*Rounded totals are sum of actual impacts

NOTES:

Site 33: Temporary Excavation (~0.001ac) shown within the mechanized clearing limits due to an erosion control temporary construction channel

Revised 5/9/2025, 8/1/2025

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
9/4/2024  
Wake County  
R-2829A