



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

ERIC BOYETTE
SECRETARY

October 25, 2021

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

ATTN: Mr. Andy Williams, NCDOT Regulatory Coordinator

Subject: Request for Modification of the Phased Section 404 Individual Permit and Section 401 Individual Water Quality Certification, Neuse River Riparian Buffer Authorization, Non-404 Jurisdictional Wetlands and Waters Permit 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. Debit \$570 from WBS 37673.1.TA1.

Reference: USACE Section 404 Authorization SAW-2009-02240, issued October 24, 2019, modified February 4, 2020 (with a correction revision issued February 7, 2020), modified April 29, 2020, January 7, 2021, March 19, 2021 and April 20, 2021.

NCDWR Water Quality Certification Number 4179 and Neuse River Riparian Buffer Authorization, issued February 15, 2019, modified January 21, 2020 (corrected January 30, 2020), April 20, 2020, June 1, 2020, December 29, 2020, March 9, 2021, and April 8, 2021.

Dear Sir:

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: R2721 (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. The North Carolina Division of Water Resources (NCDWR) 401 Certification/Buffer Authorization and the United States Army Corps of Engineers (USACE) 404 Authorization #SAW-2009-02240 were issued in February and October of 2019. Additionally, NCDOT received a modified 401 WQC for the Complete 540 Project on January 21, 2020 (corrected January 30, 2020), April 20, 2020, June 1, 2020, December 29, 2020, March 9, 2021 and April 8, 2021 from NCDWR and a revised USACE 404 Authorization #SAW-2009-02240 on February 4, 2020 with a revision issued February 7, 2020, and modifications on April 29, 2020, January 7, 2021, March 19, 2021 and April 20, 2021.

During the construction of the R-2721A project a portion of wetland stream complex Site 30 was identified previously as mechanized clearing. The area surrounding the portion of wetland is proposed fill and as

construction is ongoing the fill is currently being brought in. As grading has proceeded following the clearing and grubbing phase of construction the Design-Build Team is requesting that the area previously permitted as mechanized clearing be now proposed as permanent fill due to the grades changing slightly to accommodate the continuing work beyond the clearing and grubbing phase. The wetland impact for mechanized clearing was previously mitigated for during the original permitting and the entire wetland around this piece will be filled and is permitted as fill in wetlands. This change will not cause an increase in the area amount of the wetland being affected. Updated stream and wetland permit drawings that illustrate the changes are included.

The permanent wetland impact acreage in the Neuse River Basin (HUC 03020201) remains the same at 14.60 acres (which includes 0.02 acres of isolated wetlands) and the permanent wetland impact acreage in the Cape Fear River Basin (HUC 03030004) remains the same at 0.01 acres. The impacts to isolated wetlands remain the same at 0.02 acres. The impacts to ponds in the Neuse River Basin remain the same at 2.15 acres. The permanent stream impacts in the Cape Fear River Basin remain the same at 132 linear feet (including 53 linear feet of bank stabilization). The permanent stream impacts in the Neuse River Basin remain the same at 10,623 linear feet (including 1,063 linear feet of bank stabilization). The temporary stream impacts for the Cape Fear River basin remain the same at 35 linear feet. The temporary stream impacts for the Neuse River Basin remain the same at 1,346 linear feet. The 0.04 acres of permanent surface water impacts in the Cape Fear River Basin remained the same. The permanent surface water impacts in the Neuse River Basin remain the same at 3.21 acres. The Neuse River Basin riparian buffer impacts remain the same at 1,172,178 square feet. Revised Table 8 has been included to reflect changes in impacts to R-2721A and illustrate the jurisdictional resources impact. There are no changes to the mitigation requirements. Changes to impacts are shown in bold font.

We are requesting a modification to the Section 404 Authorization SAW-2019-02240 and the 401 Water Quality Certification, Number 4179.

Summary of Impacts

Revised Impacts Summary R-2721A

For R-2721A, proposed impacts to jurisdictional areas total 14.61 acres (which includes 0.02 acres of isolated wetlands) of permanent wetland (riparian and non-riparian) impacts, 10,755 linear feet of permanent stream impacts (including 1,116 linear feet of bank stabilization), 1,381 linear feet of temporary stream impacts, 1.93 acres of permanent surface water pond impacts, and 1,172,178 square feet of Neuse riparian buffer impacts. Additionally, R-2721A has 0.02 acres of isolated wetland impacts and 0.21 acres of non-404 pond impacts.

The R-2721A permanent wetland impacts remain the same at 14.60 acres in the Neuse River Basin (HUC 03020201) and remain the same in the Cape Fear River Basin (HUC 03030004) at 0.01 acres. However, the impacts for Site 30 when rounded to two decimal places went from 1.32 acres of fill in wetlands to 1.38 acres of fill in wetlands and the mechanized clearing impacts decreased from 0.12 acres to 0.05 acres. The discrepancy between the changes is due to rounding not due to any change in impacted area and as such the total area impacted did not change.

Revised Table 8. R-2721A Wetland Impacts

Permit Drawing Site Number	NRTR Label	Impact Type	Wetland Type	Permanent Impacts (ac)
1 (Y3DET)	WS	Fill	Riparian	0**
1 (Y3DET)	WS	Mechanized Clearing	Riparian	0**
2 (Y3DET)	WR	Fill	Riparian	0**
2 (Y3DET)	WR	Mechanized Clearing	Riparian	0**
33 (Y3DET)	WAK	Fill	Riparian	0.06

Permit Drawing Site Number	NRTR Label	Impact Type	Wetland Type	Permanent Impacts (ac)
33 (Y3DET)	WAK	Mechanized Clearing	Riparian	0.05
3	WVZ*	Fill	Non-Riparian	< 0.01
3	WVZ*	Excavation	Non-Riparian	< 0.01
3	WVZ*	Mechanized Clearing	Non-Riparian	< 0.01
5	WF	Fill	Riparian	< 0.01
5	WF	Mechanized Clearing	Riparian	0.09
5	WF	Excavation	Riparian	< 0.01
5	WF	Hand Clearing	Riparian	0.03
6	WG	Fill	Riparian	1.57
6	WG	Excavation	Riparian	0.04
6	WG	Mechanized Clearing	Riparian	0.06
6	WG	Hand Clearing	Riparian	0.18
9	WI	Fill	Riparian	0.28
9	WI	Excavation	Riparian	0.00
11	WK	Fill	Riparian	0.08
11	WK	Excavation	Riparian	0.03
12	WL	Fill	Riparian	0.47
12	WL	Mechanized Clearing	Riparian	0.03
13	WL	Fill	Riparian	0.17
13	WL	Mechanized Clearing	Riparian	0.03
15	WR	Fill	Riparian	1.80
15	WR	Excavation	Riparian	< 0.01
15	WR	Mechanized Clearing	Riparian	0.16
16	WU	Excavation	Riparian	0.51
16	WU	Mechanized Clearing	Riparian	0.15
17	WV	Fill	Riparian	0.10
17	WV	Excavation	Riparian	< 0.01
17	WV	Mechanized Clearing	Riparian	0.02
18	WX	Fill	Riparian	0.88
18	WX	Excavation	Riparian	0.01
18	WX	Mechanized Clearing	Riparian	0.15
19	WY	Fill	Riparian	0.02
19	WY	Excavation	Riparian	0.05
19	WY	Mechanized Clearing	Riparian	0.09
20	WZ	Fill	Riparian	0.10
20	WZ	Excavation	Riparian	0.02
20	WZ	Mechanized Clearing	Riparian	0.08
21	WAB	Excavation	Riparian	< 0.01
21	WAB	Mechanized Clearing	Riparian	0.02
23	WAB	Excavation	Riparian	0.00
23	WAB	Mechanized Clearing	Riparian	0.01
24	WAC	Fill	Riparian	1.25
24	WAC	Excavation	Riparian	0.05
24	WAC	Mechanized Clearing	Riparian	0.08
26	WAE	Fill	Riparian	1.25
26	WAE	Mechanized Clearing	Riparian	0.15
27	WAE	Mechanized Clearing	Riparian	< 0.01

Permit Drawing Site Number	NRTR Label	Impact Type	Wetland Type	Permanent Impacts (ac)
28	WAF	Fill	Riparian	0.00
28	WAF	Mechanized Clearing	Riparian	< 0.01
30	WAF	Fill	Riparian	1.38 (1.32)
30	WAF	Mechanized Clearing	Riparian	0.05 (0.12)
31	WAL	Fill	Riparian	0.20
32	WAM	Fill	Riparian	0.03
32	WAM	Mechanized Clearing	Riparian	0.01
33	WAK	Fill	Riparian	0.25
33	WAK	Excavation	Riparian	0.05
33	WAK	Mechanized Clearing	Riparian	0.08
34	WAK	Fill	Riparian	0.11
34	WAK	Excavation	Riparian	0.01
34	WAK	Mechanized Clearing	Riparian	0.07
35	WAI	Fill	Riparian	< 0.01
35	WAI	Excavation	Riparian	< 0.01
35	WAI	Mechanized Clearing	Riparian	< 0.01
37	WAO (1)	Fill	Riparian	0.20
37	WAO (1)	Excavation	Riparian	0.03
37	WAO (1)	Mechanized Clearing	Riparian	0.09
38	WAO (2)	Fill	Riparian	0.30
38	WAO (2)	Excavation	Riparian	0.01
38	WAO (2)	Mechanized Clearing	Riparian	0.05
39	WAQ	Fill	Riparian	0.19
39	WAQ	Excavation	Riparian	< 0.01
39	WAQ	Mechanized Clearing	Riparian	0.09
40	WAQ	Fill	Riparian	0.24
40	WAQ	Excavation	Riparian	< 0.01
40	WAQ	Mechanized Clearing	Riparian	0.06
42	WS	Fill	Riparian	0.03
42	WS	Mechanized Clearing	Riparian	0.13
42	WS	Hand Clearing	Riparian	0.16
43	WS	Fill	Riparian	0.17
43	WS	Mechanized Clearing	Riparian	0.06
44	WS	Mechanized Clearing	Riparian	0.02
44	WT	Mechanized Clearing	Riparian	< 0.01
46	WAG	Fill	Riparian	0.07
46	WAG	Mechanized Clearing	Riparian	0.07
47	WAH	Fill	Riparian	0.06
47	WAH	Mechanized Clearing	Riparian	0.03
48	WAJ	Fill	Riparian	0.08
		Total Riparian Impacts HUC 03020201:		14.58
		Total Non-Riparian Impacts HUC 03030004:		0.01

*Impacts in HUC 03030004, **Impacts were removed in previous permit modification packages. Bolded impact amounts represent a change with the original amount in parenthesis from the modified 404 (SAW-2009-02240) issued on February 7, 2020 and the modified 401 WQC (4179) issued January 30, 2020.

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 Water Quality Certification, Neuse Riparian Buffer Authorization, and Non-404 Jurisdictional Wetlands and Waters Permit (IWGP10000) from NCDWR. We are providing this application to NCDEQ, for their approval. Authorization to debit the \$570.00 Permit Modification Fee from TIP No. R-2721/WBS 37673.1.TA1 is hereby given.

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 or 919-707-6151.

Sincerely,

DocuSigned by:

Rodger Rochelle

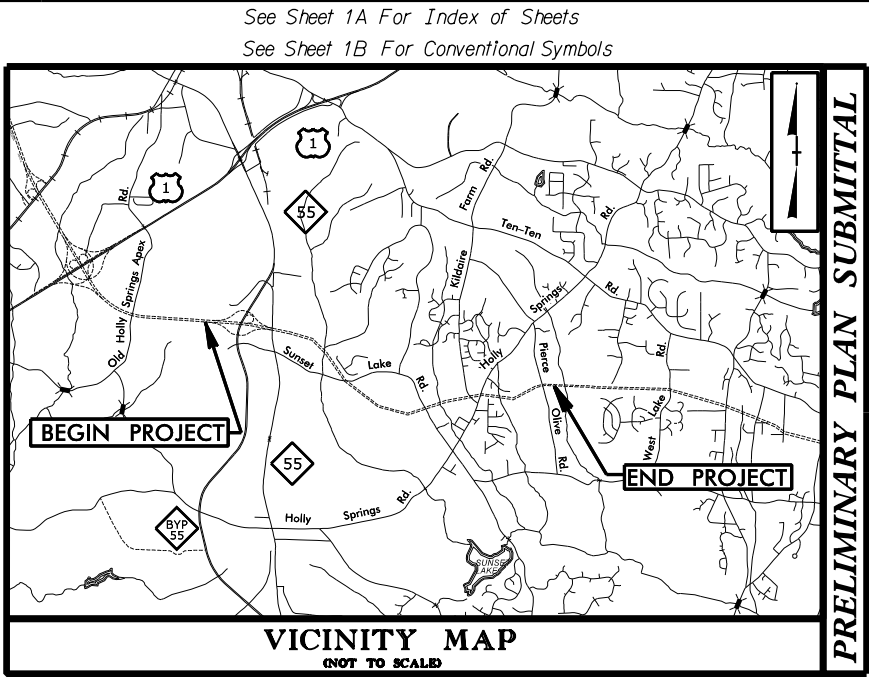
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Rodger Rochelle, P.E.
North Carolina Turnpike Authority
Chief Engineer

cc: NCDOT Permit Application Standard Distribution List

TIP PROJECT: R-2721A

CONTRACT: C204196



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

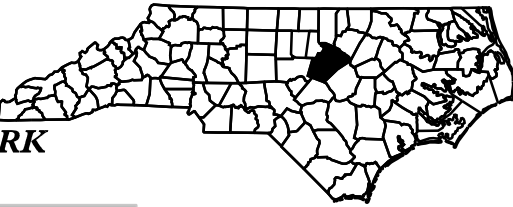
WAKE COUNTY

LOCATION: COMPLETE 540 - FROM WEST OF NC55 BYPASS TO EAST OF PIERCE OLIVE ROAD (SR 1389)

TYPE OF WORK: DESIGN-BUILD AS SPECIFIED IN THE SCOPE OF WORK CONTAINED IN THE REQUEST FOR PROPOSALS

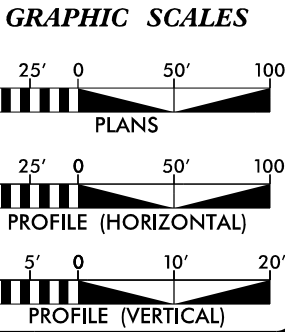
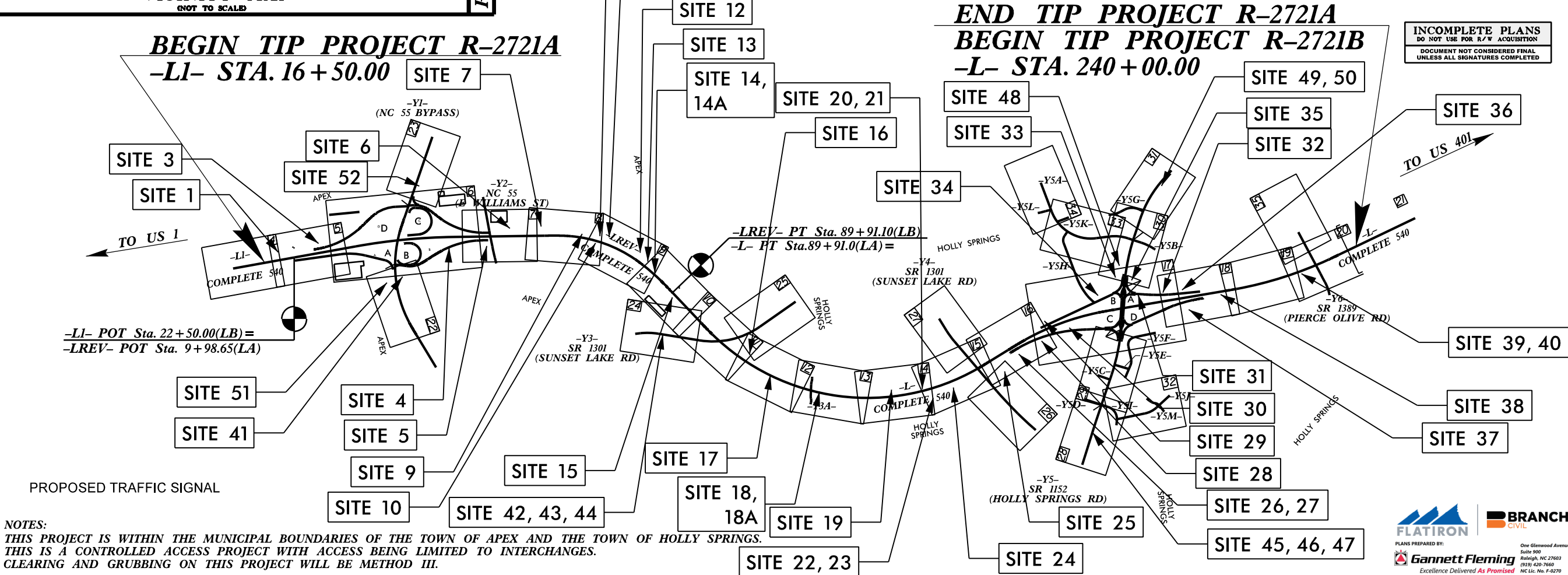
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2721A	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
37673.3.GV3	(A) NHP-0540(041)	PE, R/W	

PERMIT DRAWING
PACKAGE LAST REVISED
ON 09/15/2021



WETLAND AND SURFACE WATER IMPACTS PERMIT
SECTION A

PERMIT DRAWING
SHEET 1 OF 119



DESIGN DATA

ADT 2020 =	22,800
ADT 2040 =	49,200
K =	12 %
D =	65 %
T =	11 % *
V =	75 MPH
* TTST =	4% DUAL 7%
FUNC CLASS =	FREEWAY
STATEWIDE TIER	

PROJECT LENGTH

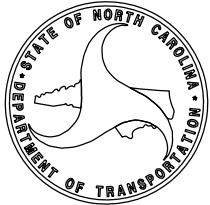
LENGTH ROADWAY TIP PROJECT R-2721A	= 4.311 Miles
LENGTH STRUCTURES	= 0.159 Miles*
TOTAL LENGTH TIP PROJECT R-2721A	= 4.470 Miles
*LENGTH BASED ON EB BRIDGES	
NCDOT CONTACT:	RODGER ROCHELLE, PE TURNPIKE AUTHORITY CHIEF ENGINEER, INNOVATIVE DELIVERY

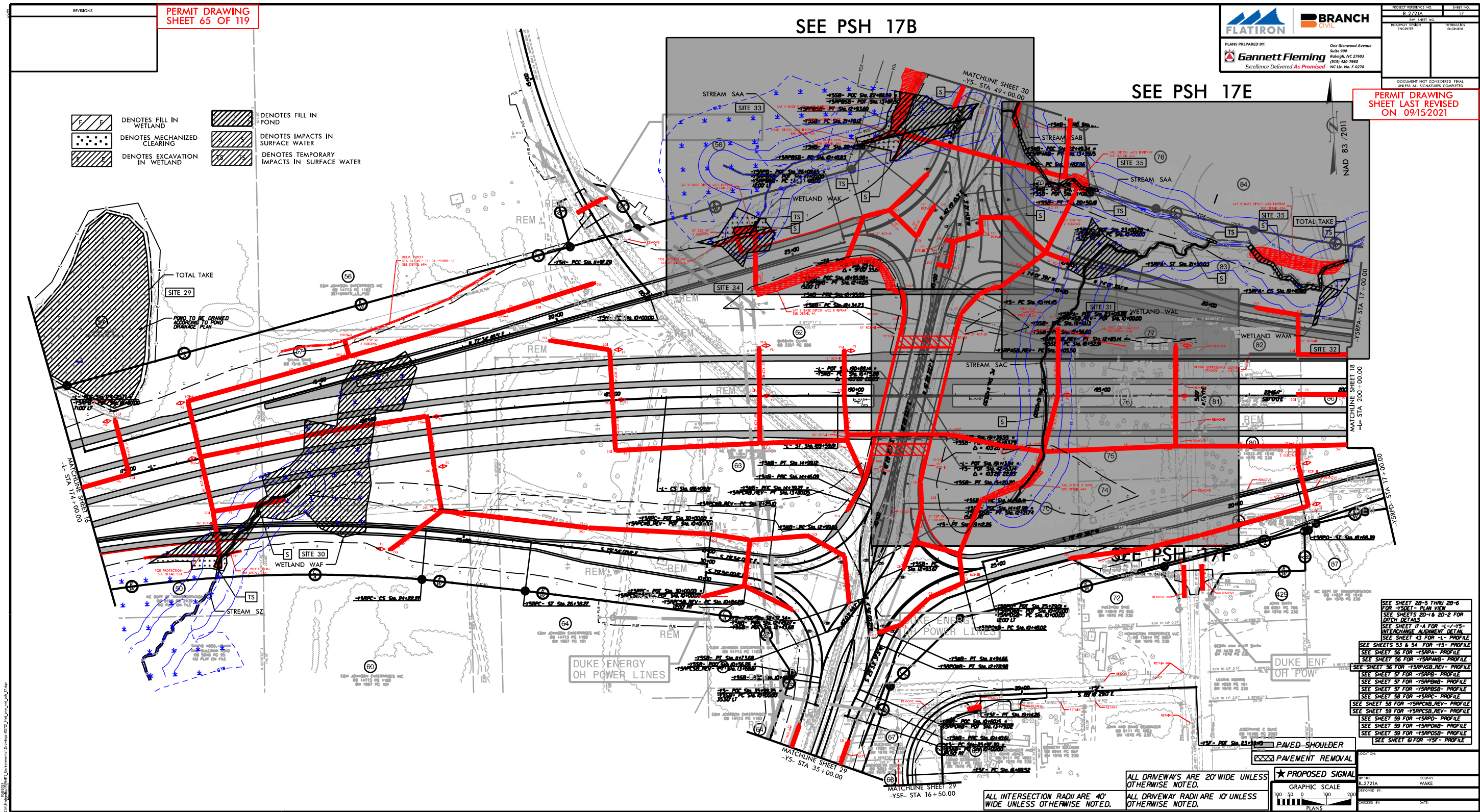
Prepared for the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

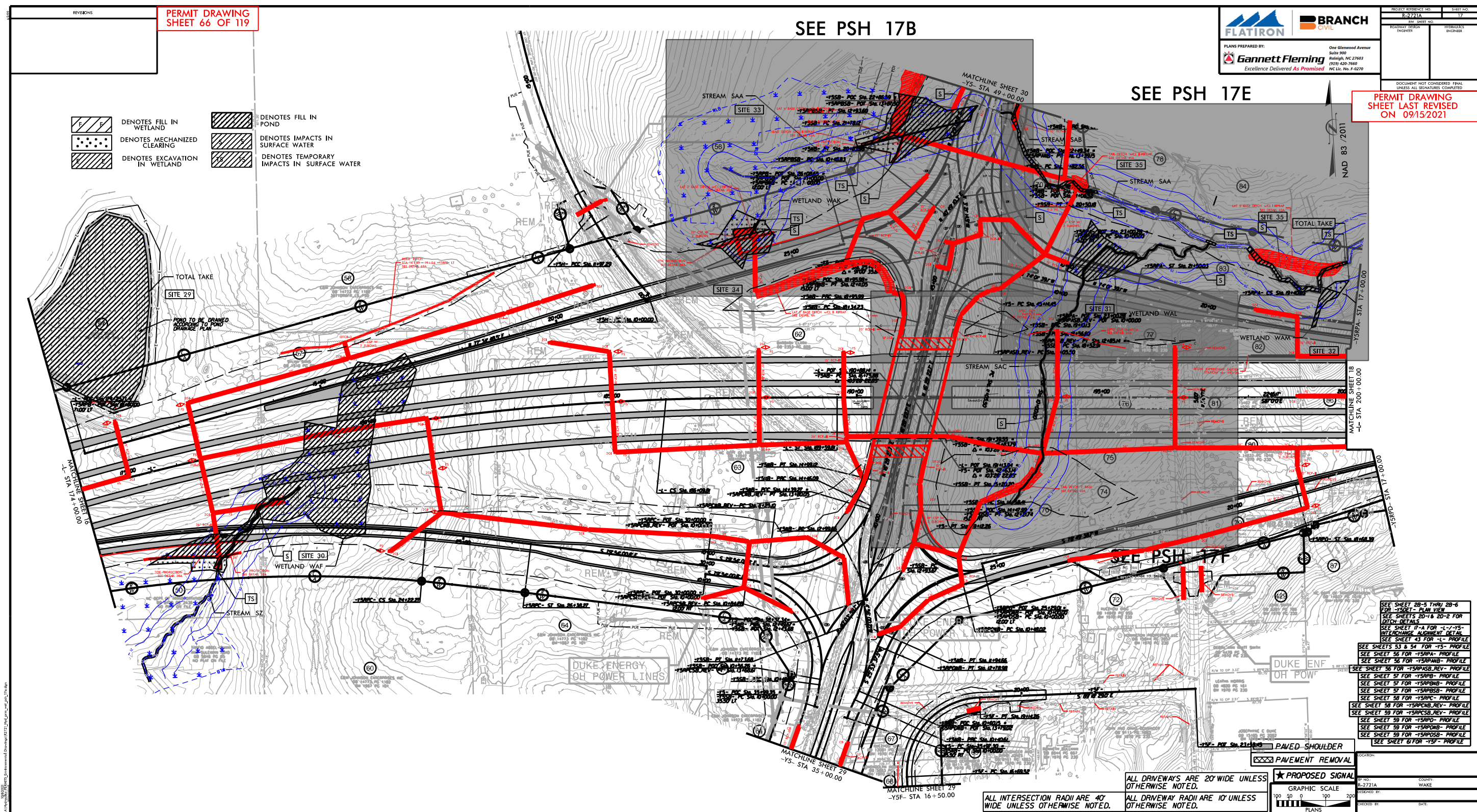
2018 STANDARD SPECIFICATIONS	
RIGHT OF WAY DATE: April 16, 2019	THOMAS K. GOODWIN, PE PROJECT ENGINEER
LETTING DATE: April 16, 2019	JERRY P. PAGE, PE PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____	P.E.
ROADWAY DESIGN ENGINEER	
SIGNATURE: _____	P.E.







6/23/16

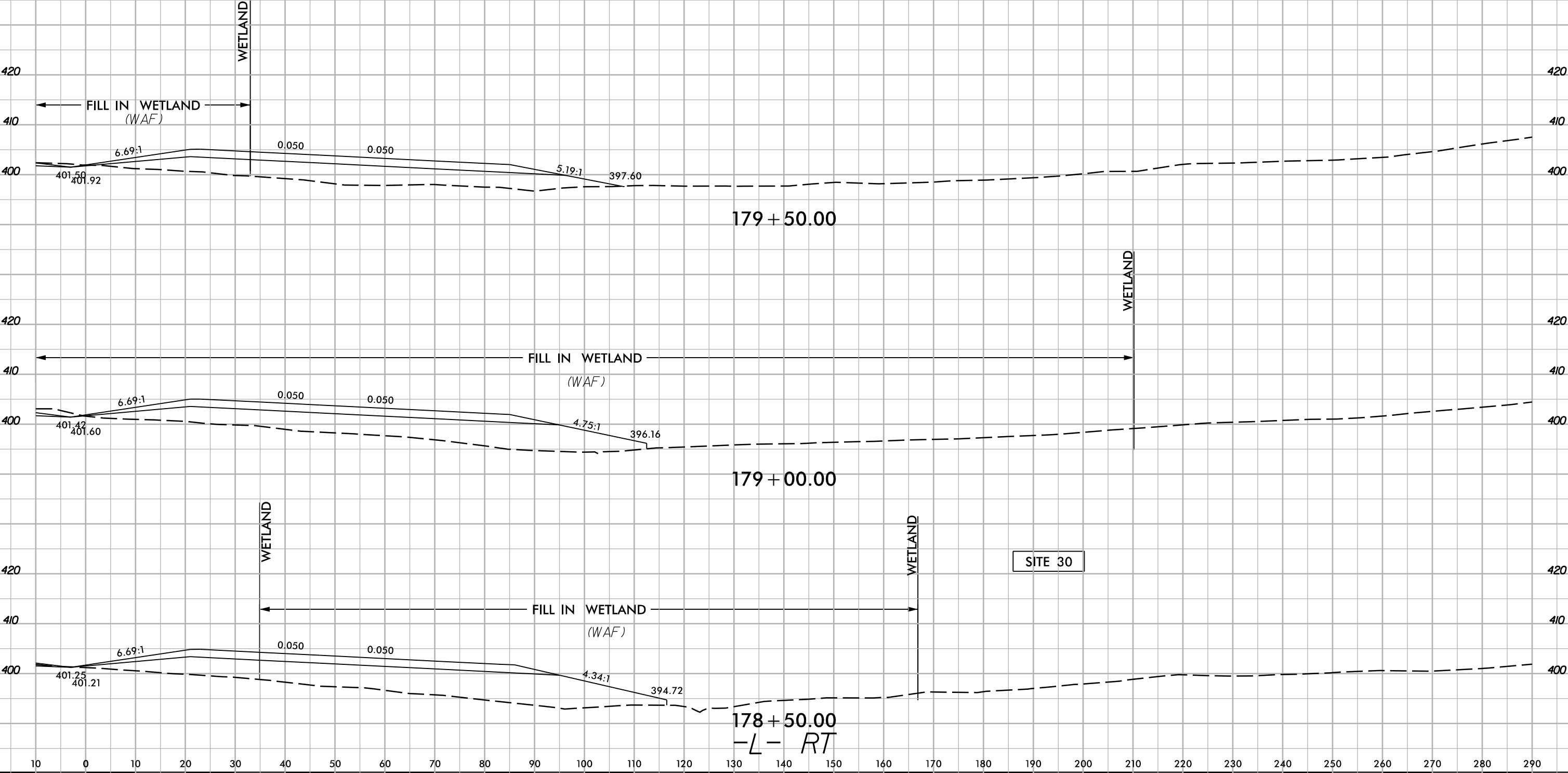


PROJ. REFERENCE NO.
R-2721A

SHEET NO.
X-269

PERMIT DRAWING
SHEET 73 OF 119

PERMIT DRAWING
SHEET LAST REVISED
ON 09/15/2021



Permit Drawing Package Last Revised on 9/15/2021

WETLAND AND SURACE WATER IMPACTS SUMMARY												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Excavation 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	19+20 to 19+73 -L1-LT	CULVERT						< 0.01		10	13	
		BANK STABILIZATION						< 0.01	< 0.01	33		
3	15+18 to 15+46-LREV-LT	15" PIPE/ 24"CSP	< 0.01		< 0.01	< 0.01						
4	40+78 to 41+92-LREV-RT	ROADWAY FILL	0.02									
		POND						0.21				
5	48+91 to 49+79-LREV-RT	ROADWAY FILL	< 0.01		< 0.01	0.09	0.03					
6	51+87 to 57+80 -LREV-	48" RCP	1.57		0.04	0.06	0.18	0.02	< 0.01	463	45	
7	59+46 to 60+07-LREV-	30" RCP						< 0.01	< 0.01	372	16	
8	66+34 to 79+65-LREV-	ROADWAY FILL						0.20	0.05	1945	551	
		STABILIZATION						< 0.01		64		
9	67+37 to 70+18-LREV-LT	ROADWAY FILL	0.28									
10	70+17 to 71+41-LREV-	30" RCP						< 0.01	< 0.01	250	10	
		STABILIZATION						< 0.01		9		
11	72+71 to 73+27-LREV-LT	ROADWAY FILL	0.08		0.03							
12	78+80 to 81+30-LREV-	ROADWAY FILL	0.47			0.03						
13	81+19 to 82+63-L-LT	ROADWAY FILL	0.17			0.03						
14	83+13 to 83+46-LREV-	BANK STABILIZATION						< 0.01	< 0.01	57	10	
14A	84+63 to 85+49-LREV-LT	ROADWAY FILL						0.01	< 0.01	237	29	
15	85+31 to 90+05-L-	ROADWAY FILL	1.80		< 0.01	0.16						
16	108+15 to 110+35-L-	ROADWAY FILL			0.51	0.15						
17	115+52 to 116+14 -L-RT	ROADWAY FILL	0.10		< 0.01	0.02						
18	125+08 to 127+71L-L	1@6'x8' RCBC	0.88		0.01	0.15		0.01	< 0.01	271	82	
		STABILIZATION						< 0.01		81		
TOTALS*:			5.39		0.60	0.69	0.21	0.50	0.07	3792	756	0

*Rounded totals are sum of actual impacts

NOTES:

Site 2: Removed

Site 4: Wetland considered Isolated

Site 5: Wetland Total Take

Site 9: Wetland Total Take

Site 16: Wetland Total Take

NC DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

9/15/2021

WAKE COUNTY

R-2721

6.401078

SHEET 115 OF 119

Permit Drawing Package Last Revised on 9/15/2021

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. Excavation 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)
18a	125+31 to 125+85-L-	ROADWAY FILL						< 0.01		91		
19	140+59 to 142+46 -L-	1@6'x8' RCBC	0.02		0.05	0.09		0.04	< 0.01	331	93	
		STABILIZATION						0.01		121		
20	146+70 to 147+85-L-	1@6'x8' RCBC	0.10		0.02	0.08		0.01	< 0.01	249	76	
		STABILIZATION						< 0.01		92		
21	146+88 to 147+06-L-LT	ROADWAY FILL			< 0.01	0.02						
22	148+36 to 149+02-L-RT	30" RCP						< 0.01	< 0.01	70	15	
23	148+41 to 149+02-L-RT	ROADWAY FILL				0.01						
24	149+09 to 155+85-L-	ROADWAY FILL	1.25		0.05	0.08						
25	162+84 to 164+50-L-RT	POND						0.40				
26	165+94 to 168+54 -L-	ROADWAY FILL	1.25			0.09						
		STABILIZATION				0.06						
27	168+51 to 169+40-L-	2@9'x8' RCBC				< 0.01		0.05	< 0.01	311	39	
		STABILIZATION						0.02		120		
28	172+97 to 173+41-L-RT	ROADWAY FILL				< 0.01						
29	173+60 to 176+39-L-LT	POND						1.53				
30	174+63 to 181+12-L-	ROADWAY FILL	1.38			0.05		0.01	< 0.01	257	4	
31	193+15 to 197+24-L-	ROADWAY FILL	0.20					0.04		871		
32	199+29 to 199+93-L-LT	ROADWAY FILL	0.03			0.01						
33	47+12 to 48+74 -Y5-LT(SAA)	66" RCP	0.25		0.05	0.08		< 0.01	< 0.01	251	18	
34	23+30 to 24+76-Y5RPB-LT	24" RCP	0.11		0.01	0.07		< 0.01	< 0.01	28	10	
35	47+58 to 49+64-Y5-RT(SAA,SAB)	ROADWAY FILL						0.04	< 0.01	332	24	
		STABILIZATION						< 0.01		34		
35	197+97 to 200+02-L-LT(SAA)	ROADWAY FILL						0.04	< 0.01	260	40	
TOTALS*:			4.58		0.18	0.65		2.22	0.03	3418	319	0

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
9/15/2021
WAKE COUNTY
R-2721
6.401078

SHEET 116 OF 119

Permit Drawing Package Last Revised on 9/15/2021

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. Excavation 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)
35	201+82 to 202+45-L-LT(SAA)	ROADWAY FILL						< 0.01	< 0.01	62	12	
35	50+01-Y5- to 15+32-Y5A-(SAB)	ROADWAY FILL/48" RCP	< 0.01		< 0.01	< 0.01		0.04	< 0.01	941	20	
		STABILIZATION						< 0.01		44		
36	202+26 to 206+22-L-	3@9'x8' RCBC						0.22	0.02	954	104	
		STABILIZATION						0.03		94		
37	202+42 to 205+59-L-RT	ROADWAY FILL	0.20		0.03	0.09						
38	209+59 to 211+77-L-	42" RCP	0.30		0.01	0.05		0.01	< 0.01	239	10	
		STABILIZATION						< 0.01		25		
39	225+15 to 226+55-L-	42" RCP	0.19		< 0.01	0.09		< 0.01	< 0.01	358	11	
		STABILIZATION						< 0.01		18		
40	225+72 to 227+98-L-	ROADWAY FILL	0.24		< 0.01	0.06						
41	29+93 to 30+17-Y1-RT	48" RCP						< 0.01	< 0.01	56	10	
42	12+90 to 15+00-Y3-LT	ROADWAY FILL	0.03			0.13	0.16					
43	11+86 to 15+02-Y3-RT	ROADWAY FILL	0.17			0.06						
44	15+05 to 16+36-Y3-	4@12'x8' RCBC						0.03	0.03	58	61	
	15+05 to 15+36-Y3- (WS)	STABILIZATION				0.02		0.07		123		
	16+27 to 16+36-Y3- (WT)	STABILIZATION				< 0.01						
45	15+60 to 16+27-Y5-	2@9'x8' RCBC						0.04	< 0.01	211	34	
		STABILIZATION						0.03		100		
46	16+20 to 18+23-Y5-LT	ROADWAY FILL	0.07			0.07						
47	17+25 to 18+39-Y5-RT	ROADWAY FILL	0.06			0.03						
48	50+12 to 51+25-Y5-LT	ROADWAY FILL	0.08									
49	68+06 to 68+58-Y5-	2@7'x8' RCBC						< 0.01	< 0.01	20	26	
		STABILIZATION						0.02		81		
TOTALS*:			1.36		0.06	0.63	0.16	0.51	0.08	3384	288	0

*Rounded totals are sum of actual impacts

NOTES:

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Permit Drawing Package Last Revised on 9/15/2021

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. Excavation 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. Design (ft)	Natural Stream (ft)
50	68+54 to 69+62-Y5-LT	ROADWAY FILL						< 0.01	< 0.01	128	6	
51	29+06 to 29+15-Y1-LT	RIP RAP						< 0.01		13		
52	47+74 to 47+85-Y1-RT	STABILIZATION						< 0.01	< 0.01	20	12	
	TOTAL PAGE 118							0.01	< 0.01	161	18	
	TOTAL PAGE 115		5.39		0.60	0.69	0.21	0.50	0.07	3792	756	
	TOTAL PAGE 116		4.58		0.18	0.65		2.22	0.03	3418	319	
	TOTAL PAGE 117		1.36		0.06	0.63	0.16	0.51	0.08	3384	288	
TOTALS*:			11.33		0.84	1.97	0.36	3.25	0.18	10755	1381	0

*Rounded totals are sum of actual impacts

NOTES:

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