



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

August 30, 2019

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

Attn: Eric Alsmeyer
NCDOT Project Coordinator

Subject: Revised Section 404 Individual Permit Application, Modification Request for Section 401 Water Quality Certification and Neuse Riparian Buffer Authorization for Interstate 40 Widening and Improvements from I-440/US 64 (Exit 301) to just north of SR 1525 (Cornwallis Road), including improvements to NC 42 and SR 1010 (Cleveland Road) in Wake and Johnston Counties, Federal Aid Project No. IMNHF-040-4(139)301; TIP Numbers I-5111 and I-4739, Division 5; Debit \$570 from WBS Element 42346.3.1.

Dear Mr. Alsmeyer:

The North Carolina Department of Transportation (NCDOT), applied for permits for the subject project on May 7, 2019. The North Carolina Division of Water Resources issued 401 Water Quality Certification for the project on July 10, 2019 (NCDWR Project No. 20190593).

It has come to our attention that several proposed impact areas were incorrectly reported in the application. This error occurs at Permit Site 51, shown on Permit Drawing sheets 101 & 102 in the southeast quadrant of the Cleveland Road interchange on the I-4739 project. The permit application showed wetland sites WNZ and WH, stream SLR and a pond as Site 51. The permit application also included riparian buffer impacts associated with SLR on Buffer Drawing sheets 37 & 39.

This site was visited by Rob Ridings (NC Division of Water Resources) and yourself in August 2017. It was determined that stream SLR was ephemeral and that wetland indicators for wetland WH were lacking. Wetland WNZ and the pond are jurisdictional Waters of the United States, but Stream SLR, its indicated buffers, and wetland WH should not have been included in the project's proposed impacts.

SUMMARY OF IMPACTS

This correction results in minor changes to the project impacts as follows:

- Permanent fill in wetlands is reduced from 0.72 acre to 0.69 acre. Combined with 0.11 acre of excavation, and 0.21 acre of mechanized clearing results in 1.01 acre of permanent wetland impact.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6000
FAX: 919-212-5785
WEBSITE: NCDOT.GOV

LOCATION:
CENTURY CENTER, BUILDING A
1000 BIRCH RIDGE DRIVE
RALEIGH NC, 27610-4328

- Stream impacts are reduced by 383 feet (associated fill in surface water is reduced by 0.03 acre), from 7,939 to 7,556 feet.
- Permanent surface water impacts reduced from 1.55 to 1.53 acre.
- Removal of unwarranted Buffer Site 51 impacts reduces buffer impacts by 41,065 sqft
 - Site 51 Zone 1 reduced: 24,177 sqft
 - Site 51 Zone 2 reduced: 16,887 sqft
 - Site 51 Total Buffers reduced: 41,065 sqft
 - Site 51 wetland in buffer zone 1 reduced: 862 sqft
 - Site 51 wetland in buffer zone 2 reduced: 535 sqft

These changes are detailed on the following modified permit and buffer drawings (attached):

Permit Drawing sheets: 1, 100, 101, 106, 124, & 125

Buffer Drawing sheets: 1, 37, 39, 51, & 52

Compensatory Mitigation

NCDOT requests that required compensatory mitigation be adjusted to reflect reduced impacts as presented above.

REGULATORY APPROVALS

Section 404: NCDOT hereby revises the previously submitted USACE Individual 404 Permit Application as required for the above described activities.

Section 401: We are also requesting modification of the Section 401 Individual Water Quality Certification and Neuse Riparian Buffer Authorization from NCDWR. We are providing this modification request to NCDWR, for their approval. Authorization to debit the \$570.00 Permit Modification Fee from WBS 42346.3.1 is hereby given.

A copy of this request and its distribution list will be posted at
<https://xfer.services.ncdot.gov/pdea/PermApps/>.

If you have any questions or need additional information, please contact Gordon Cashin at gcashin@ncdot.gov or 919-707-6107.

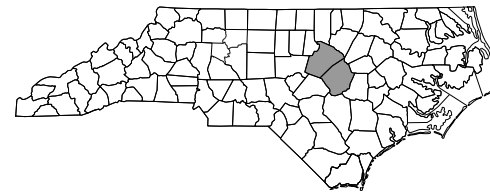
Sincerely,



for Philip S. Harris, III, P.E., C.P.M.
 Environment Analysis Unit Head

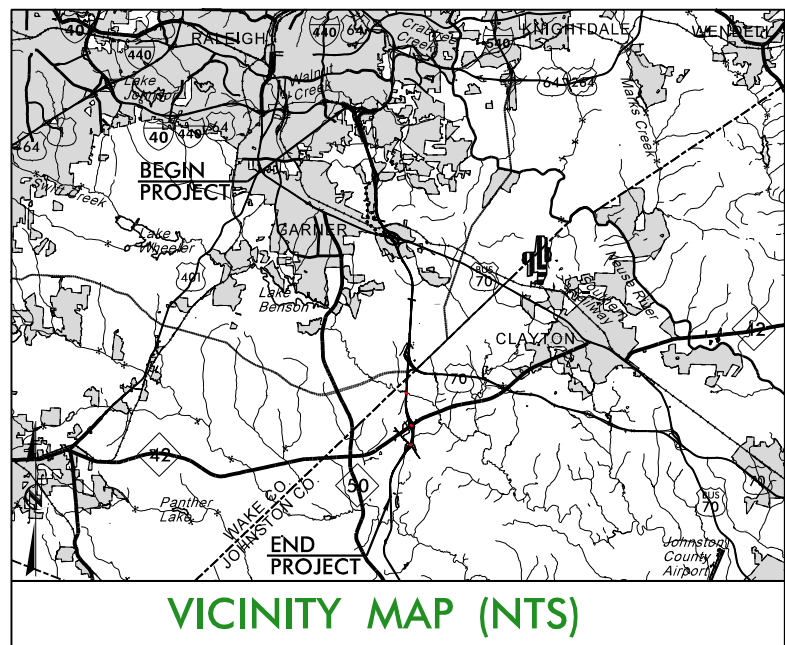
cc: NCDOT Permit Application Standard Distribution List

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5111 /I-4739	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
42346.3.1	IMNHF-040-4(139)301	PE	



PERMIT DRAWING
SHEET 1 OF 125
REVISED 8/28/2019

See Sheet 1-B For Plan Sheet Symbols



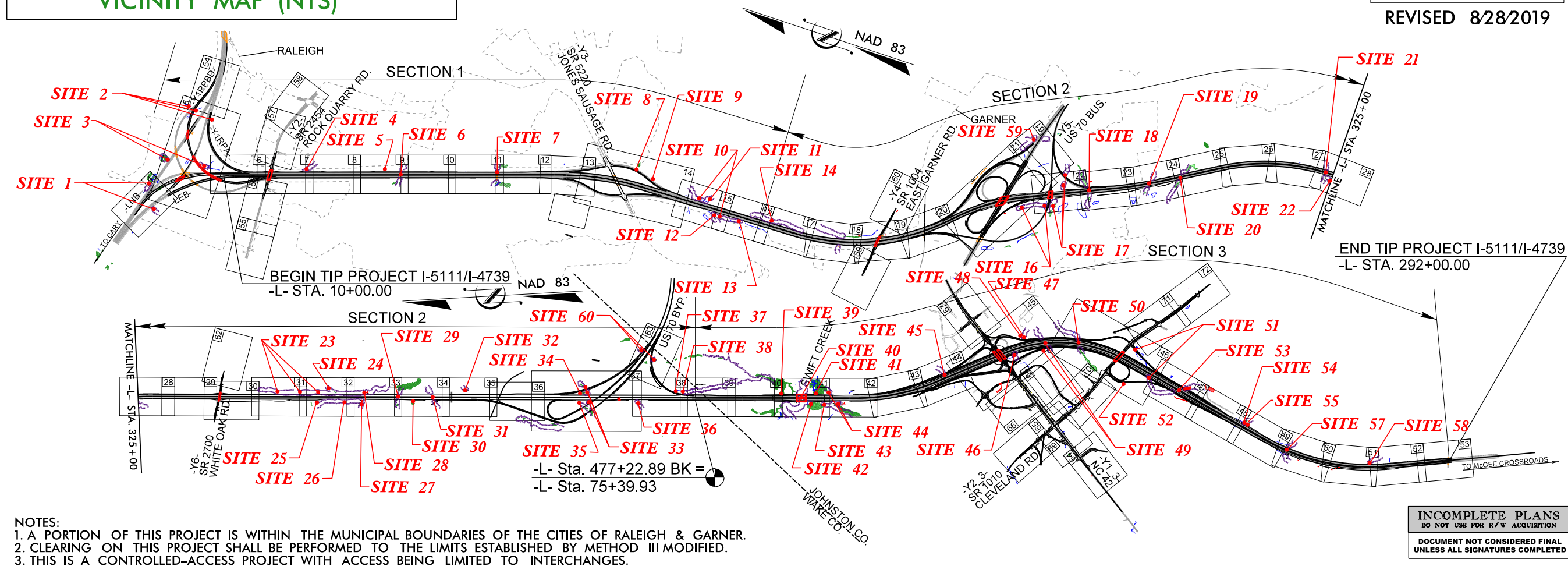
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAKE & JOHNSTON COUNTIES

LOCATION: I-40 FROM I-440 /US 64 (EXIT 301) TO JUST NORTH OF SR 1525 (CORNWALLIS ROAD), INCLUDING IMPROVEMENTS TO NC 42 AND SR 1010 (CLEVELAND ROAD).

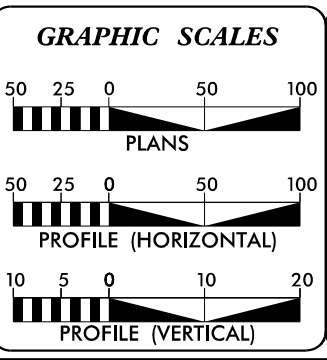
TYPE OF WORK: GRADING, DRAINAGE, PAVING, WIDENING, RESURFACING & STRUCTURES

WETLAND AND STREAM IMPACTS



- NOTES:
1. A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITIES OF RALEIGH & GARNER.
 2. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III MODIFIED.
 3. THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.

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



DESIGN DATA

ADT 2018 = 106,200
ADT 2040 = 137,200
DHV = 65%
D = 9%
T = 9% *
V = 70 MPH & 75 MPH **
FUNC CLASS: URBAN INTERSTATE
* (TTST 5% + DUAL 4%)
** DESIGN SPEED CHANGES AT US 70 BUS

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT I-5111 /I-4739..... 12.950 miles
LENGTH STRUCTURE TIP PROJECT I-5111 /I-4739..... 0.094 miles
TOTAL LENGTH OF PROJECT I-5111 /I-4739..... 13.044 miles

NCDOT CONTACT

K. Zak Hamidi, P.E.
PROJECT ENGINEER - DESIGN-BUILD UNIT

PLANS PREPARED BY:

RK&K RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE, SUITE 350
RALEIGH, NORTH CAROLINA 27609
NC LICENSE NO. F-0112

FOR NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

2018 STANDARD SPECIFICATIONS

LETTING DATE:
JUNE 19, 2018

S.T. WOOTE

Brandon J. McInnis, P.E.
PROJECT ENGINEER

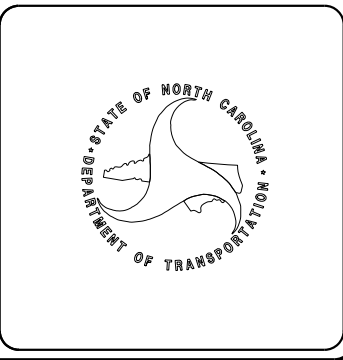
Mary E. Yahl, P.E.
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

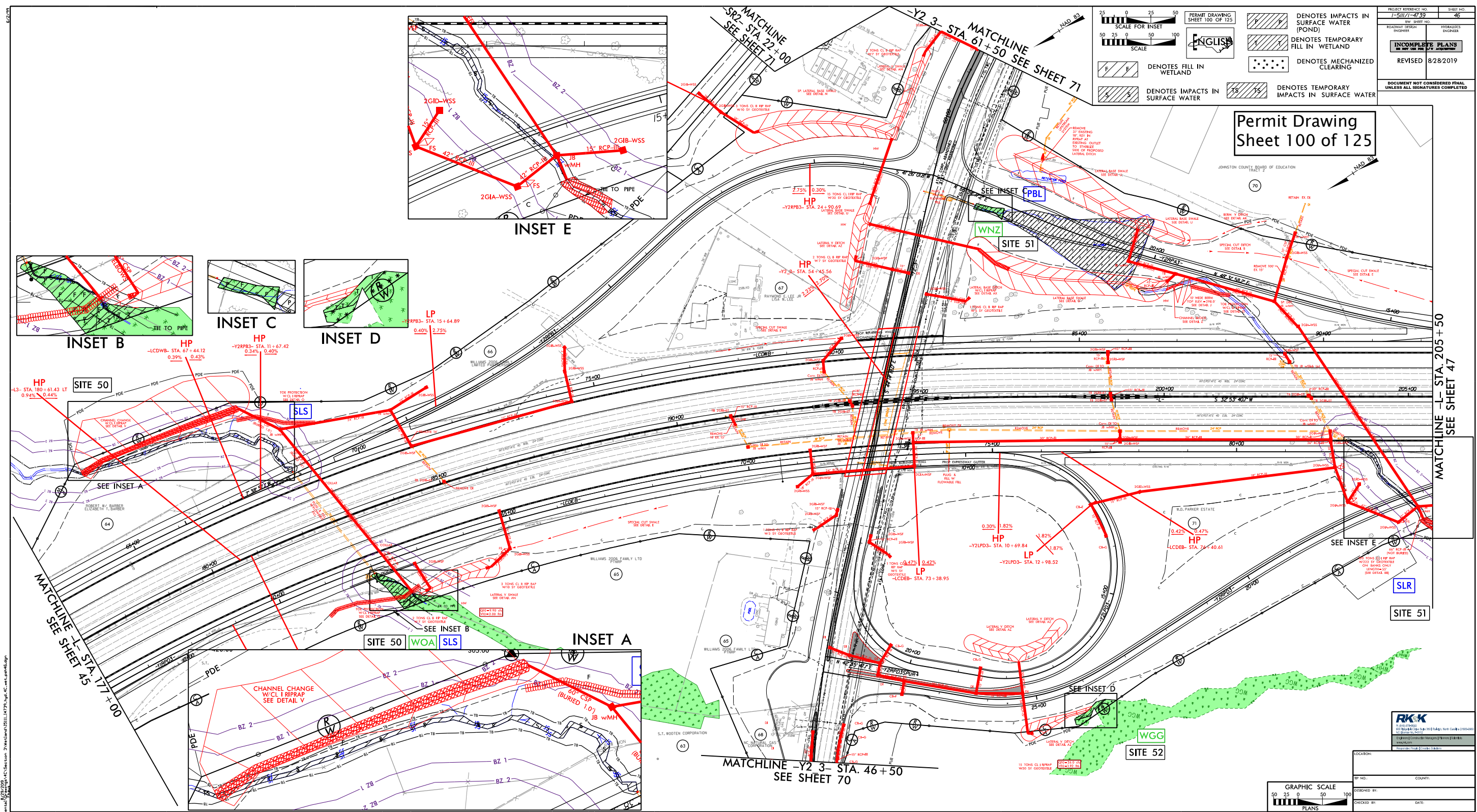
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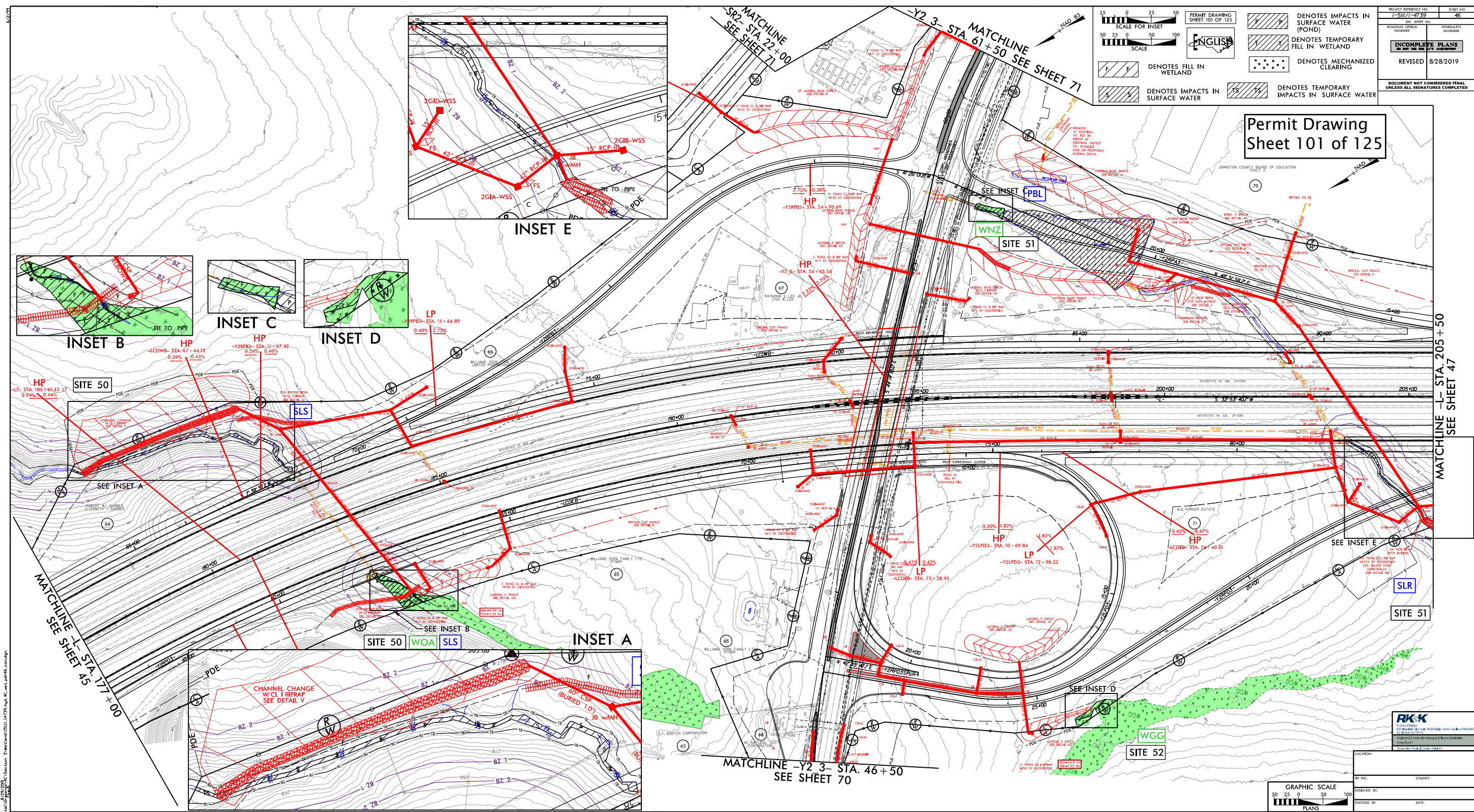


TIP PROJECT: I-5111 /I-4739

CONTRACT: C204134

8/28/2019 R:\Hydraulics\PERMITS_Environmental\Drawings\4C\I5111\I4739_Hyd_wet_tsh.dgn FKeys





SEE SHEET 47

PERMIT DRAWING
SHEET 106 OF 125

SITE 51

REVISED 8/28/2019

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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. 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)
39A	-L- 98+30-99+62 LT	ROADWAY FILL - WEM	0.07			0.02						
39B	-L- 101+93-102+66 LT	ROADWAY FILL - WEM	0.01			0.01						
40	-L- 103+59-104+95 LT & RT	BANK STABILIZATION - SDG						0.12	0.03	254	90	
41	-L- 107+69-109+35 LT	ROADWAY FILL - WEP(1)				0.02						
42	-L- 104+95-108+09 RT	ROADWAY FILL - SDN, WEN	0.23	0.01		0.10		0.02		200		
43	-L- 110+24-110+66 RT	ROADWAY FILL - SEO							< 0.01		40	
44	-L- 111+78-114+64 LT & RT	60" RCP, ROADWAY FILL, DITCH - SEQ, WEO(1)			0.04			0.02		269		
	-L- 111+58-111+85 LT	BANK STABILIZATION - SEQ						< 0.01	< 0.01	16	11	
45	-L- 144+01-144+56 LT	48" CSP - SEU						0.01		154		
	-L- 143+75-144+08 LT	BANK STABILIZATION - SEU						< 0.01	< 0.01	40	11	
46	-L- 164+25-164+78 RT	30" CSP / 36" RCP - SEA, WOE	0.02					0.01		168		
47	-Y1RPA- 16+63-17+14 RT	54" CSP - SLV						< 0.01		62		
	-Y1RPA- 16+58-16+65 RT	BANK STABILIZATION - SLV						< 0.01	< 0.01	45	11	
48	-Y1RPA- 16+66-17+11 RT	ROADWAY FILL, RIPRAP - SLW						< 0.01	< 0.01	14	51	
49	-L- 171+49-174+67 LT & RT	66" WSP / 66" RCP - SLU, WC, WOB	0.06					0.03		284		
	-L- 171+40-174+63 LT & RT	BANK STABILIZATION - SLU						< 0.01	< 0.01	64	30	
50	-LCDWB- 64+67-68+61 LT & RT	60" CSP, CHANNEL CHANGE - SLS,WOA	0.05	0.02				0.06	< 0.01	588	57	
51	-Y2RPA3- 23+20-23+82 LT	ROADWAY FILL - WNZ	0.02									
	-Y2RPA3- 20+23-23+20	ROADWAY FILL - PBL						0.58				
	-L- 199+51-205+31	ROADWAY FILL, 66" RCP - SLR						0.02		230		
	-Y2RPD3- 15+76-16+19 LT	BANK STABILIZATION- SLR						< 0.01	< 0.01	55	15	
52	-Y2RPD3- 23+65-24+43 LT	DITCH, ROADWAY FILL - WGG		0.01		0.02						
53	-L- 210+53-215+65 LT	54" RCP / 66" RCP - MILL BRANCH						0.06	< 0.01	401	7	
	-L- 210+21-210+61 RT	BANK STABILIZATION - MILL BRANCH						< 0.01	< 0.01	29	17	
TOTALS*:			0.46	0.05	0.04	0.18		0.96	0.05	2873	340	0

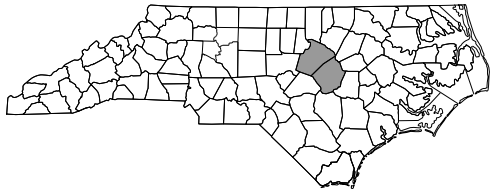
*Rounded totals are sum of actual impacts

NOTES:

REVISED 08/28/2019

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
APRIL 2019
WAKE AND JOHNSTON
I-5111_I-4739

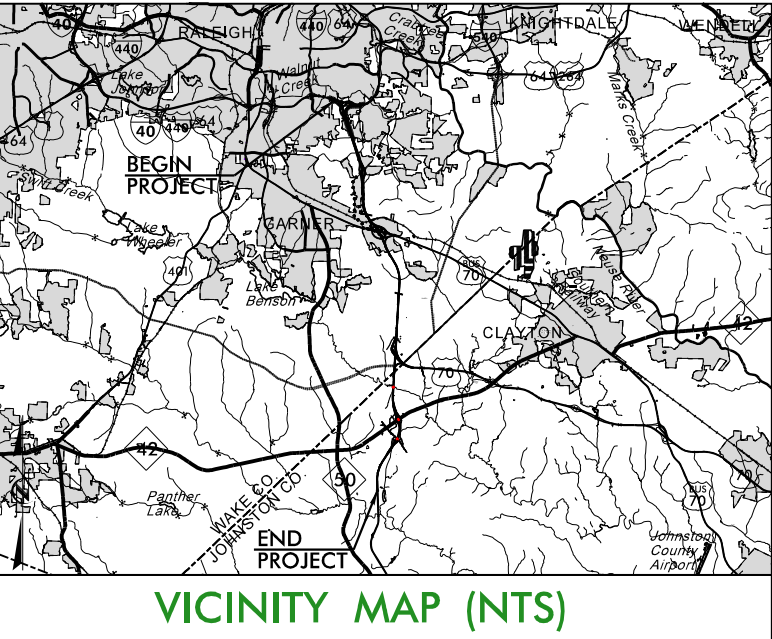
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42346.3.1	IMNHF-040-4(139)301	PE	



BUFFER DRAWING
SHEET 1 OF 52

REVISED 8/28/2019

See Sheet 1-B For Plan Sheet Symbols



VICINITY MAP (NTS)

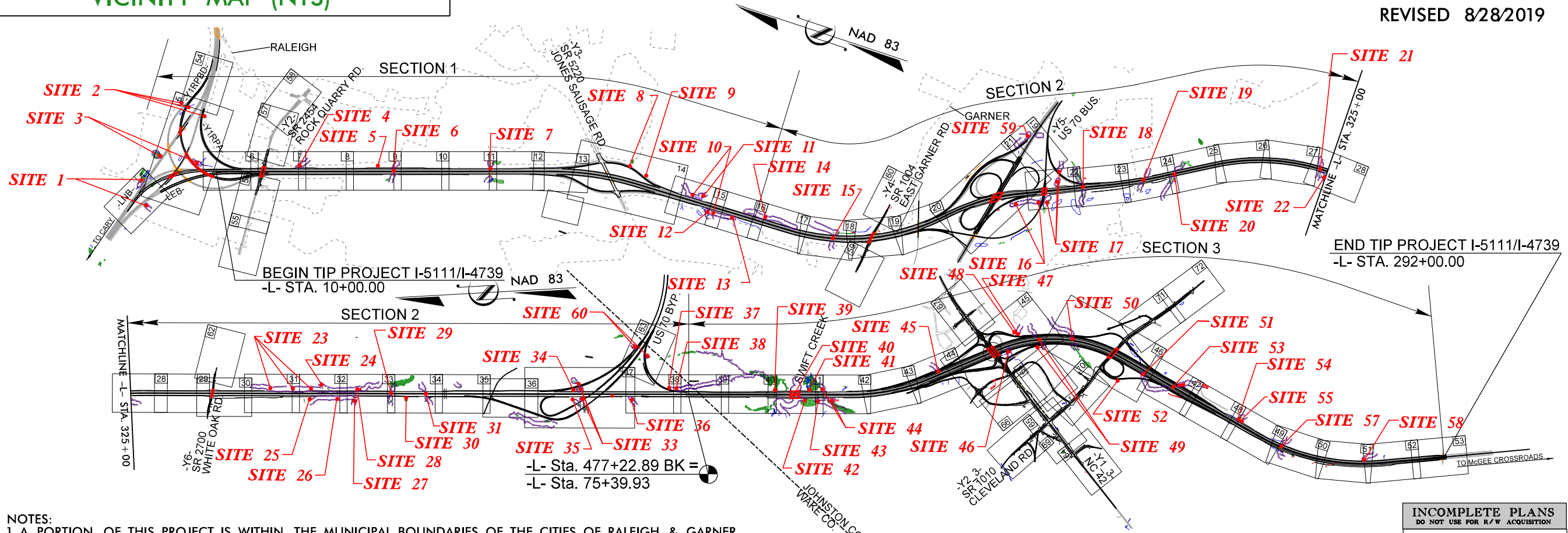
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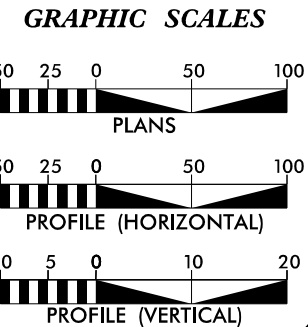
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BUFFER IMPACTS



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ADT 2040 = 137,200
DHV = 65%
D = 9%
T = 9% *
V = 70 MPH & 75 MPH **
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* (TTST 5% + DUAL 4%)
** DESIGN SPEED CHANGES AT US 70 BUS

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LENGTH ROADWAY TIP PROJECT I-5111 /I-4739..... 12.950 miles
LENGTH STRUCTURE TIP PROJECT I-5111 /I-4739..... 0.094 miles
TOTAL LENGTH OF PROJECT I-5111 /I-4739..... 13.044 miles

NCDOT CONTACT

K. Zak Hamidi, P.E.
PROJECT ENGINEER - DESIGN-BUILD UNIT

PLANS PREPARED BY:

RK&K RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE, SUITE 350
RALEIGH, NORTH CAROLINA 27609
NC LICENSE NO. F-0112

FOR NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

2018 STANDARD SPECIFICATIONS

LETTING DATE:
JUNE 19, 2018

S.T. WOOTE

Brandon J. McInnis, P.E.
PROJECT ENGINEER

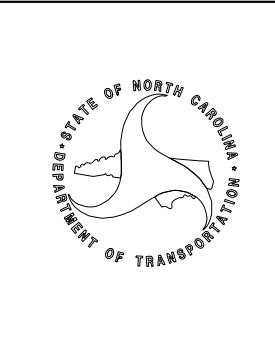
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SIGNATURE: _____ P.E.

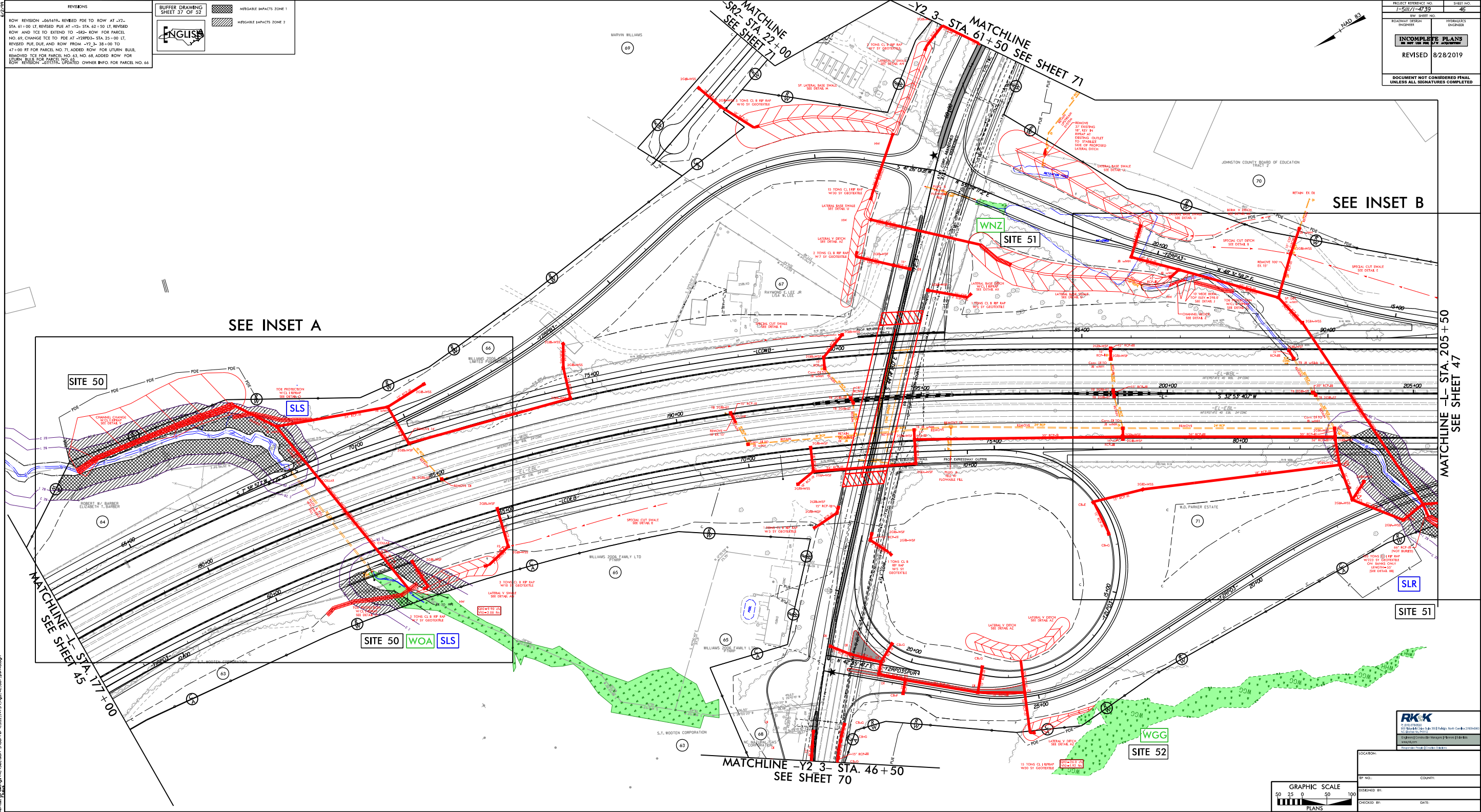
ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

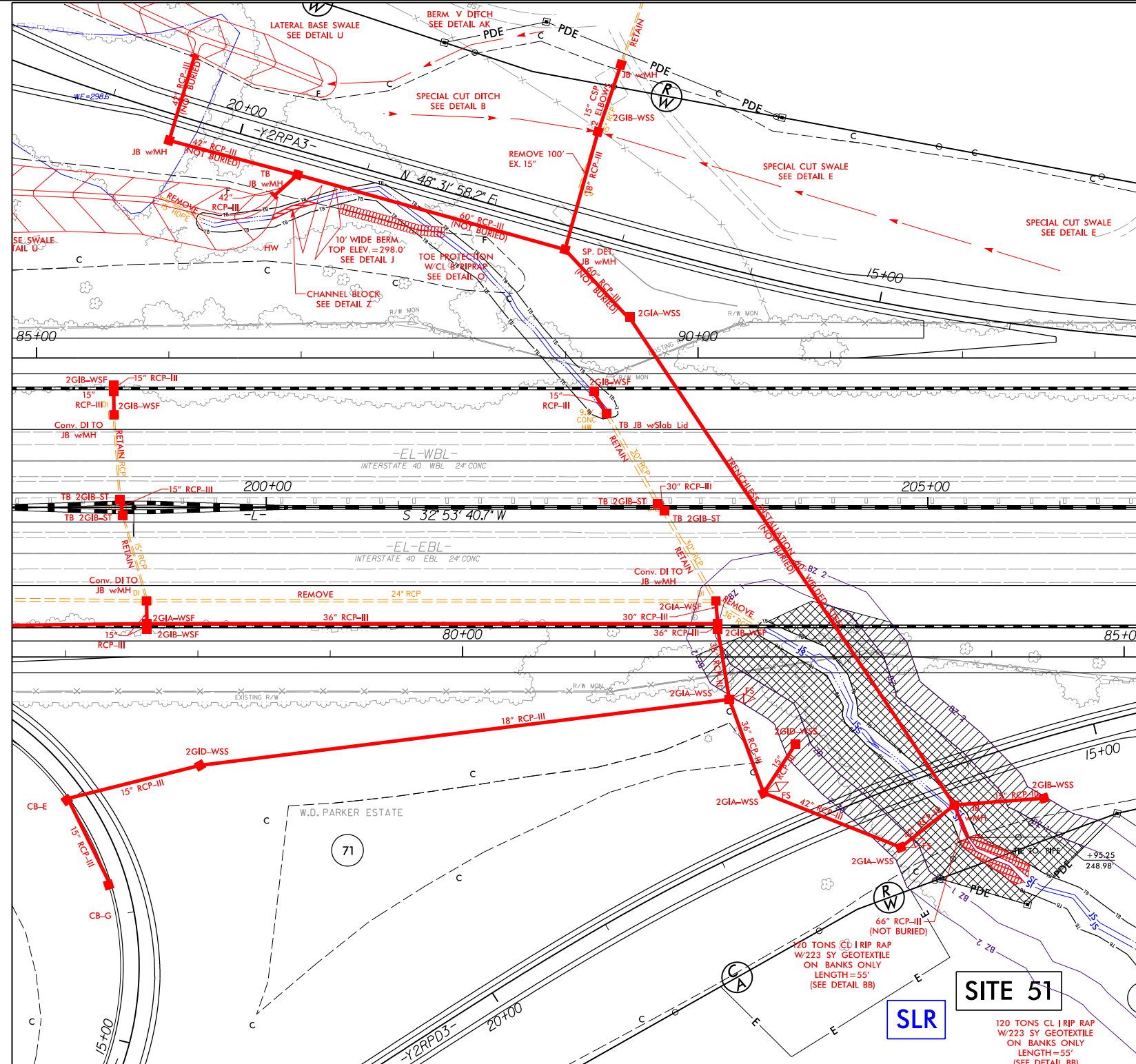


BUFFER DRAWING SHEET 37 OF 52		METGABLE IMPACTS ZONE 1
		METGABLE IMPACTS ZONE 2

PROJECT REFERENCE NO. 1-5111/1-4739		SHEET NO. 46	
S/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR BIDDING OR CONSTRUCTION			
REVISED		8/28/2019	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



LOCATION:	
TIP NO.:	COUNTY:
DESIGNED BY:	
CHECKED BY:	DATE:



GRAPHIC SCALE

50 25 0 50 100

PLANS

PROJECT REFERENCE NO. 1-5111/1-4739		SHEET NO. 46B	
BSW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR A/C ACQUISITION			
REVISED		8/28/2019	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

PLANS PREPARED BY :

RK&K

RUMMEL KLEPPER & KAHN, LLP
 900 RIDGEFIELD DRIVE SUITE 350
 RALEIGH, NORTH CAROLINA 27609-3940
 NC LICENSE NO. P-0172 • (919) 878-9560

LOCATION:

TIP NO.: **COUNTY:**

DESIGNED BY:

CHECKED BY: **DATE:**

RIPARIAN BUFFER IMPACTS SUMMARY													
Site No.	Station (From/To)	Structure Size / Type	IMPACTS									BUFFER REPLACEMENT	
			TYPE			ALLOWABLE			MITIGABLE				
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)	ZONE 1 (ft ²)	ZONE 2 (ft ²)
39	ONLY IN PERMIT SET												
40	-L- 99+00-107+44 LT & RT	BRIDGE		X		14449	7030	21479	1104	2993	4097		
41	ONLY IN PERMIT SET												
42	-L- 106+42-107+44 RT	ROADWAY FILL - SDN, WEN			X				7169	5126	12295		
43	-L- 109+63-114+04 RT	ROADWAY FILL - SEO			X				7471	4557	12028		
44	-L- 110+99-115+29 LT & RT	60" RCP, DITCH - SEQ, WEO(1)	X						12849	6061	18910		
45	-L- 143+25-145+12 LT	48" CSP - SEU	X						11384	6539	17923		
46	-L- 164+25-164+78 RT	30" CSP / 36" RCP - SEA, WOE	X						10987	7345	18332		
47	-Y1RPA- 16+15-17+72 RT	54" CSP - SLV	X			5350	2012	7362					
48	ONLY IN PERMIT SET												
49	-L- 170+95-175+40 LT & RT	66" WSP / 66" RCP - SLU, WC, WOB	X						20163	9924	30087		
50	-L- 178+00-184+97 LT&RT	60" CSP, CHANNEL CHANGE - SLS,WOA	X						38684	25634	64318		
51	-L- 199+51-205+31	ROADWAY FILL, 66" RCP - SLR, WNZ	X						17316	9930	27247		
52	ONLY IN PERMIT SET												
53	-L- 209+51-217+29 LT & RT	54" RCP / 66" RCP - MILL BRANCH	X						27804	17778	45582		
54	-L- 232+37-234+37 LT	54" WSP - SJ, WI, WJ	X			8694	5213	13907					
55	ONLY IN PERMIT SET												
56	ONLY IN PERMIT SET												
57	-L- 246+11-248+25 LT & RT	60" WSP - SDD, WFF	X						15680	9394	25074		
58	-L- 269+75-270+63 LT	36" WSP - SQ	X						10972	7749	18721		
TOTALS*:						28492	14255	42747	181583	113030	294613	0	0

PROJECT TOTALS*:	116816	55819	172635	299329	166946	466275	0	0
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NOTES:

REVISED 8/28/2019

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
APRIL 2019
WAKE / JOHNSTON
I-5111 / I-4739
42346.3.1
SHEET 51 OF 52

WETLANDS IN BUFFER IMPACTS SUMMARY

			WETLANDS IN BUFFERS	
SITE NO.	STATION (FROM/TO)		ZONE 1 (ft²)	ZONE 2 (ft²)
42	-L- 106+08-107+45 RT		2367	3001
43	-L- 109+63-111+26 RT		1618	736
44	-L- 113+34-114+92 RT		3043	871
49	-L- 174+33 RT		1439	
50	-L- 183+49 RT		680	
54	-L- 232+68-234+16 LT		1926	902
57	-L- 246+36-246+93 LT		379	204
TOTAL:			11452	5714

PROJECT TOTALS:	20436	7986
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