

Project Submittal Interim Form



Updated September 4, 2020

Please note: fields marked with a red asterisk * below are required. You will not be able to submit the form until all mandatory questions are answered.

- Project Type:** *
- For the Record Only (Courtesy Copy)
 - New Project
 - Modification/New Project with Existing ID
 - More Information Response
 - Other Agency Comments
 - Pre-Application Submittal
 - Re-Issuance/Renewal Request
 - Stream or Buffer Appeal

Pre-Filing Meeting Information

Before submitting this form please ensure you have submitted the Pre-Filing Meeting Request Form as we will not be able to accept your application without this important first step. The Pre-Filing Meeting Request Form is used in accordance with 40 C.F.R. Section 121.4(a) "At least 30 days prior to submitting a certification request, the project proponent shall request a pre-filing meeting with the certifying agency" and in accordance with 40 C.F.R. Section 121.5(b)(7), and (c)(5) all certification requests shall include documentation that a pre-filing meeting request was submitted to the certifying authority at least 30 days prior to submitting the certification request. Click [here](#) to read more information on when this form is needed prior to application submission or [here](#) to view the form.

Attach documentation of Pre-Filing Meeting Request here: * 2018-08-15_I-27.92..5700_4CM...

Date for Meeting Request * 8/15/2018

ID# 20191029 **Version** 2

Project Contact Information

Name: Deanna Riffey - NCDOT
Who is submitting the information?

Email Address: * driffey@ncdot.gov

Project Information

Existing ID #: *

20191029
20170001 (no dashes)

Existing Version: *

2
1

Project Name: * I-40 and SR3015 (Airport Blvd) Interchange and additional lane on I-40 WB from SR 3015 to I-540

Is this a public transportation project? *

- Yes
 No

Is this a DOT project? *

- Yes
 No

Is the project located within a NC DCM Area of Environmental Concern (AEC)? *

- Yes No Unknown

TIP#:

I-5700

WBS#:

50118.1.FS.1

(Applies to DOT projects only)

County (ies) *

Wake

Please upload all files that need to be submitted.

[Click the upload button or drag and drop files here to attach document](#)

I-5700 Construction Changes Email.pdf	3.64MB
I-5700_Permit Drawing Modification_(2021-09-23).pdf	5.87MB

Only pdf or kmz files are accepted.

Describe the attachments or add comments:

Attachments are I-5700 Permit Drawings Modifications and 9/24/21 Email discussion of project changes.

* By checking the box and signing box below, I certify that:

- I, the project proponent, hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief.
- I, the project proponent, hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.
- I agree that submission of this online form is a "transaction" subject to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I agree to conduct this transaction by electronic means pursuant to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I understand that an electronic signature has the same legal effect and can be enforced in the same way as a written signature; AND
- I intend to electronically sign and submit the online form.

Signature: *



Submittal Date:

10/04/2021

Is filled in automatically once submitted.



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON III
SECRETARY

MEMO TO: All Attendees

FROM: Dan Robinson, P.E.
Hydraulics Project Design Engineer
Kimley-Horn & Associates

DATE: August 15, 2018

SUBJECT: Project (I-5700) Wake County
F.A. Project: NHPP-040-1(259)286
Diverging Diamond Interchange along I-40 and Airport Blvd, Raleigh

MINUTES FOR INTERAGENCY CONCURRENCE 4B MERGER MEETING

Interagency Concurrence 4C Merger Meeting was held on August 15, 2018 at 1:00 PM in the Structures Design Conference Room for the above referenced project. The following items were addressed:

1. The following persons attended:

<u>Name</u>	<u>Representing</u>	<u>Email</u>
Craig Lee	NCDOT PMU/Hydraulics	cjlee@ncdot.gov
Rob Ridings	NCDOT DWR	robridings@ncdenr.gov
Robert Patterson	NCDOT DWR	robert.patterson@ncdenr.gov
Chris Murray	NCDOT Division 5	cmurray@ncdot.gov
Michael Steelman	NCDOT WZTC	msteelman@ncdot.gov
Allison White	NCDOT Project Management	awhite@ncdot.gov
R.L Chesson	NCDOT Structures	rlchesson@ncdot.gov
Deanna Riffey	NCDOT ECAP	driffey@ncdot.gov
Bill Elam	NCDOT PMU/Hydraulics	belam@ncdot.gov
Pam Williams	NCDOT PMU	prwilliams@ncdot.gov
James Lastinger	USACE	james.c.lastinger@usace
Dan Robinson	Kimley-Horn (KH)	dan.robinson@kimley-horn.com
Derrick Turner	Kimley-Horn (KH)	derrick.turner@kimley-horn.com
David Hursey	Kimley-Horn (KH)	david.hursey@kimley-horn.com

The following persons attended by phone:

<u>Name</u>	<u>Representing</u>	<u>Email</u>
Mark Staley	NCDOT REU	mstaley@ncdot.gov

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN UNIT
1582 MAIL SERVICE CENTER
RALEIGH NC 27699-1582

TELEPHONE: 919-707-6200
FAX: 919-250-4036
WEBSITE: WWW.NCDOT.GOV

LOCATION:
CENTURY CENTER COMPLEX
BUILDING A
1000 BIRCH RIDGE DRIVE
RALEIGH NC

2. Project Overview

- This project is in Division 5, and design will be managed by the Central Project Delivery Team.
- ROW date scheduled for September 2018. LET date scheduled for September 2019.

3. Review of Preliminary 4B Permit Drawings

- The permit drawings were produced for the 4C meeting to help generate discussion and give a better view of potential impact areas and modifications to the drainage design.
- Sheet 4 (Site 1) – Repairing scour hole and extending pipe systems to eliminate large scour hole.
 - Allowable impacts are needed at pipe outlets on left and right sides of existing culvert. Permanent and temporary impacts are needed for scour hole stabilization.
 - No comments were made regarding the permit drawings at Site 1.
- Sheet 5 (Site 2A) – Replacing and repairing existing rip rap outlet into jurisdictional stream SD.
 - Scour hole stabilization requires permanent and temporary stream impacts and buffer zone 1 impacts.
 - No comments were made regarding the permit impacts at Site 2A.
- Sheet 5 (Site 2B) – Channel improvements for stream SD where 3@10'x10' RCBC culvert extension work is proposed.
 - Comments during the meeting indicate to place additional rip rap on the west and east side of stream SD where it confluences with Stirrup Iron Creek. Site visit was done to determine need for riprap bank stabilization and west side was stable with riprap, but east will need additional riprap to armor the graded area of transition.
 - Additional permanent and temporary stream impacts on stream SD will be required due to bank stabilization on east bank. Additional buffer impacts for west bank construction access will not be needed as mentioned in the meeting since west bank is stable.
- Sheet 5 (Site 3A) – Extending existing 3 @ 10' x 10' RCBC conveying a FEMA stream (Stirrup Iron Creek)
 - No comments were made regarding the permit impacts at Site 3A and 3C.
 - Allowable and mitigable buffer impacts at culvert construction and along fill slope.
- Sheet 5 (Site 3B) – Cleaning out and adding rip rap to pipe outlet over wetland WI
 - Wetland will be total take.
 - No comments were made regarding the permit impacts for Site 3B.
 - Separate clarity comment across Stirrup Iron Creek on side tributary from existing 36" pipe was mentioned. Line style for converging ditch needs to be called out as "Non-JS" and top of banks removed.
- Sheet 6 (Site 4) – Cut slope impact for erosion control measures to construct headwall on existing pipe.
 - 10 feet of mechanized clearing in wetland from slope stakes.
 - No comments on this site
- Sheet 6 (Site 4B, old site 4A from 4B meeting) – Storm water systems to outlet in stream SF designated as a JS with no buffers.
 - Jurisdictional feature begins 47 feet from confluence with Brier Creek. Measurement taken from NRTR table.
 - Recommend extending JS line to temporary stream impacts and change line styles and top of bank to start of JS.
 - No comments provided on the permanent, temporary, and buffer impacts
- Sheet 6 (Site 5A) – Replacing existing 30" CMP
 - Stream impacts in Brier Creek from embankment protection.
 - Add additional 10 ft of allowable buffer impacts on the north side of the proposed 42" RCP.

- Sheet 6 (Site 5B -Removed after 4B meeting) – Proposed tail ditch to run from proposed storm water system to stream bank
 - Removed due to design change. Piped to JB at Site 5A.
- Sheet 7 (Site 5C) – Culvert extension of 12'x12' RCBC
 - Extend outlet rip rap on west bank to bend and increase permanent and temporary impacts.
- Sheet 7 (Site 5D) – Existing scour hole at pipe outlet. Location is in the bend of Brier Creek just upstream of the 1 @ 12' x 6' RCBC entrance.
 - Extend ETF line from existing wingwall up to edge of fill slope.
 - Add buffer impacts around Site 5D to edge of stream impacts and new ETF line.
- Sheet 7 (Site 5E) – New 1 @ 12' x 10' RCBC buried 1ft
 - Extend proposed riprap to edge of ROW and eliminate temporary stream impacts on upstream side of new RCBC. No temporary stream impacts necessary outside of ROW on upstream side. Leave downstream riprap and temporary stream impacts as is since all within ROW.
 - Questionable ditch and wetland tie in location, east of proposed culvert. Tie in point will be addressed in the field
 - Since 5E stream impacts are greater than 150 LF, buffer impacts will change from allowable to mitigable.
- Sheet 7 (Site 6) – Stream SA impacted by fill slope and concentrated flow from pipe outlet
 - Site 6 initially left off permit drawings prior to 4C meeting since rip rap was far enough away from JS feature.
 - Site 6 to be added to permit drawings. Rip rap outlet protection to be extended 10' into the JS line generating permanent and temporary impacts.
- Sheet 7 (Site 7) – Stream SB impacted by adding Class 1 rip rap at stream confluence with Brier Creek.
 - Site 7 initially left off permit drawings prior to 4C meeting since 4B meeting called for Site 7 to be incorporated into Site 5C.
 - Site 7 to be reinstated with permanent impacts and temporary impacts to PDE line.
- Sheet 7 (Site 8A) – Proposed -Y3- covers existing stream SH
 - No comments on this site
- Sheet 7 & 14 (Site 8B) – Partial take of wetlands, and rerouting wetland outlet to Brier Creek
 - Ditch's elevation must not drain wetland. Tie in point will be addressed in the field.
 - Permit drawing impacts are fine in this location, no comments.
- Sheet 10 (Site 9) – Stream grading to tie into proposed and existing pipe entrance of JS SE.
 - Anticipate bore pit will tear up concrete swale. Extend existing rip rap to proposed headwall.
 - Add blind junction box 12 ft into slope from pipe inlet to allow contractor enough room to match inlet elevation.
- Sheet 11 (Site 10) – Separated sites into 10A, 10B, and 10C
 - Culvert extension and channel improvements impact stream SJ (Site 10A), wetland WK (Site 10B), and wetland WN (Site 10C).
 - Buffer impacts for construction access and construction of culvert extension.
 - Fill slope might add additional impacts (mechanized clearing)
 - to wetland WN.
 - Buffer impacts to be extended to extent of wetland WK impacts.
 - Make sure I-5506 drainage plans are gray and add additional drainage by other notes to clarify separate project.
- Sheet 12 (Site 11) – Tying 51" W x 57"H CMP to a proposed junction box and extending with 60" RCP
 - No comments on either stream impacts or buffer impacts.

- Sheet 12 (Site 11A) – Grade stream to tie into both the proposed and existing pipe entrance.
 - Add buffer impacts on left bank.
 - Add blind junction box 12 ft into slope from pipe inlet to allow contractor enough room to match inlet elevation.
 - Check old project and add note to summary sheet with allowable impacts from prior project. Mitigated previously under I-5506.
- Sheet 12 (Site 12) – Temporary stream impacts on I-5506 JS due to permanent impacts on upstream SG.
 - Coordinate with I-5506 staff and add note to summary sheet with allowable impacts from prior project. Mitigated previously under I-5506.

4. Action Items

See previous sections for action items.

Permit drawings and summary tables will be updated and submitted to NCDOT.

Meeting adjourned at 2:58 PM.

From: [Riffey, Deanna](#)
To: [Andrew E. Williams](#); [Ridings, Rob](#)
Subject: I-5700 Construction Changes
Date: Friday, September 24, 2021 3:37:00 PM
Attachments: [I-5700 Changes Comparison Sheet \(2021-09-24\).pdf](#)
[I-5700 Permit Drawing Modification \(2021-09-23\).pdf](#)

Good Morning,

I wanted to check with you both whether this email could suffice in lieu of a formal permit mod package submittal for minor changes for I-5700. Division 5 has notified us on some necessary changes that needs to be made prior to construction at Sites 5C, 6, and 7 (see attached plans). Site 5C is Brier Creek and Sites 6 and 7 are intermittent streams that connect to Brier Creek. Where stream SA (Site 6) comes into Brier Creek (Site 5C) severe erosion has naturally taken place and has changed elevations since plans were developed. Brier Creek will be have a 48" RCP and will provide a bit of water into this eroded area. Site 7 has had erosion issue as well and will need some additional temporary changes. We are having to change the protection in this area of the project where the three streams combine due to the future construction of the pipe system now being at different elevations than was on plans and to account for erosion.

Currently, the rip rap bank stabilization on the west side of the Brier Creek was not extended down to meet this tie in with SA leaving a gap in bank stabilization between the end of previously proposed bank stabilization at Brier Creek and the new proposed rip rap associated with the tie in of SA. We would like to extend the bank stabilization on the west side of Brier Creek to match the east side at Site 5C to prevent erosion of the bank for the entire distance between the culvert outlet and SA. No more permanent stream impacts will be added to what is there now due to the linear stream impacts already on the east side and not adding anymore linear stream impacts. For Site 6 (SA), due to the erosion of the channel along with elevation changes and the amount of water expected to be in this channel, we would like to rip rap the channel at the tie in with Brier Creek. The rip rap will be countersunk in the flow line and will be an additional 42 linear feet (52 linear feet total) of permanent fill impact for SA. We were not planning to propose mitigation due to the additional 42 ft being countersunk rip rap that will not impede the stream function. Site 5C will have temporary impacts reduced from 53 feet to 26 feet and Site 6 will have now have 0 temporary impacts from the proposed changes. No additional buffer impacts for either Site.

As for Site 7 (stream SB), due to limited access to the site to construct downstream channel improvements, a temporary stream crossing was added at Permit Site 7. This temporary stream crossing will be located within the footprint of the originally permitted 24 linear feet of temporary stream impact to SB. However, an additional 10 linear feet of temporary stream impacts to SB is proposed to allow for dewatering of the channel while the temporary stream crossing is constructed.

I have provided the permit plans for these changes with this email along with a Summary Sheet of Changes Comparison for reference. Please let me know if you require a more formal letter for the revisions for the three Sites.

GP 50 info: USACE – SAW-2019-02350 DWR: Project No. 20191029v2 12/22/20

Thank you,

Deanna Riffey
Environmental Program Consultant
Environmental Coordination and Permitting
Environmental Analysis Unit
North Carolina Department of Transportation

919 707 6151 office
driffey@ncdot.gov

1598 Mail Service Center
Raleigh, NC 27699-1598

1020 Birch Ridge Drive
Raleigh, NC 27610

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Plan Sheet Symbols
See Sheet 1C-1 For Survey Control Sheet

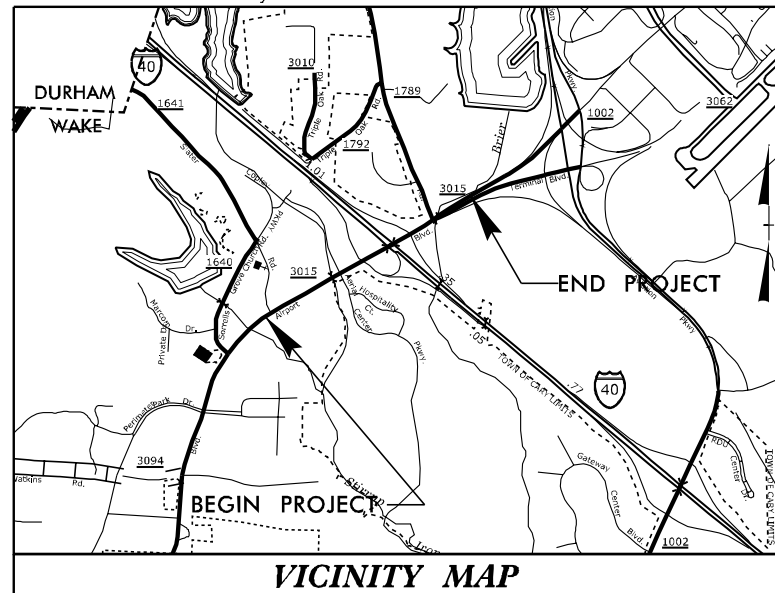
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAKE COUNTY

LOCATION: I-40 AND SR 3015 (AIRPORT BLVD.), REVISE INTERCHANGE AND CONSTRUCT AUXILIARY LANE ON I-40 WESTBOUND FROM SR 3015 (AIRPORT BLVD. TO I-540.

**TYPE OF WORK: ITS, DRAINAGE, GRADING, PAVING, SIGNALS
CULVERTS AND STRUCTURES**

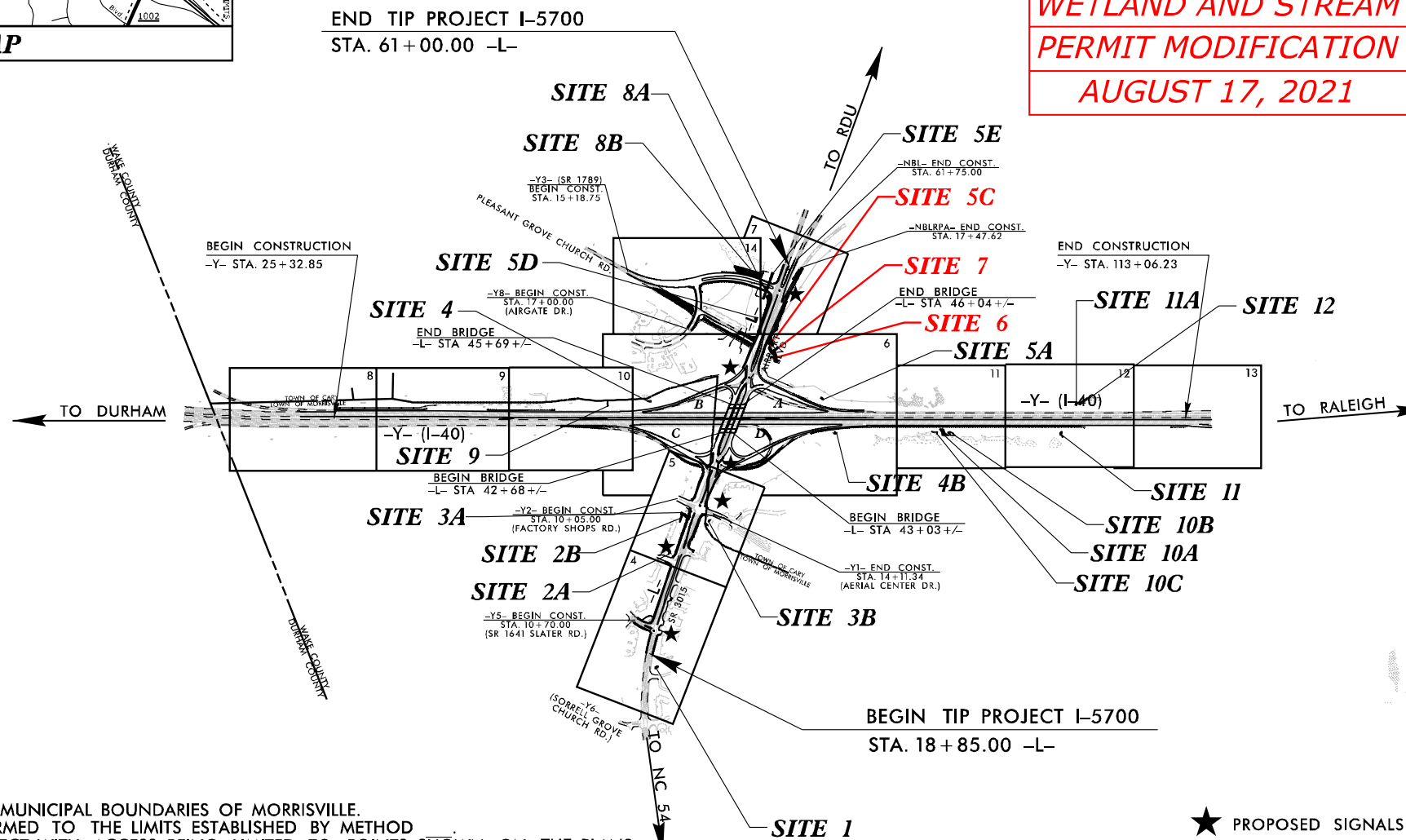
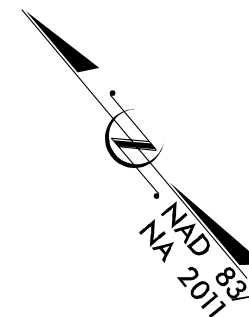
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5700	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
50118.1.FS1	NHPP-040-1(259)286	PE	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



VICINITY MAP

**AUGUST 17, 2021
REVISED PERMIT DRAWING
SHEET 1 OF 5**

**WETLAND AND STREAM
PERMIT MODIFICATION
AUGUST 17, 2021**

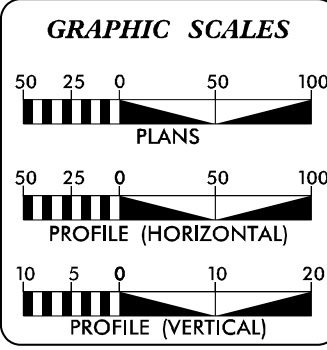


**PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION**

A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF MORRISVILLE. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD. THIS IS A PARTIAL CONTROLLED- ACCESS PROJECT WITH ACCESS BEING LIMITED TO POINTS SHOWN ON THE PLANS.

CONTRACT: TIP PROJECT: I-5700

CONTRACT: TIP PROJECT: I-5700



DESIGN DATA

ADT 2019 =	33,660
ADT 2040 =	46,500
K =	9 %
D =	65 %
T =	6 % *
V =	50 MPH
* TTST =	2% DUAL = 4%
FUNC CLASS =	ARTERIAL
STATEWIDE TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT I-5700	=	0.741 MILES
LENGTH STRUCTURE TIP PROJECT I-5700	=	0.057 MILES
TOTAL LENGTH OF TIP PROJECT I-5700	=	0.798 MILES

WETHERILL ENGINEERING
1223 JONES FRANKLIN ROAD
Raleigh, N.C. 27606
Phone: 919.551.8077
Fax: 919.851.8107

Prepared for the North Carolina Department of Transportation in the Office of:

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: EDWARD G. WETHERILL, PE
PROJECT ENGINEER
SEPTEMBER 21, 2018

LETTING DATE: BOB A. MAY, PE
PROJECT DESIGN ENGINEER
SEPTEMBER 17, 2019

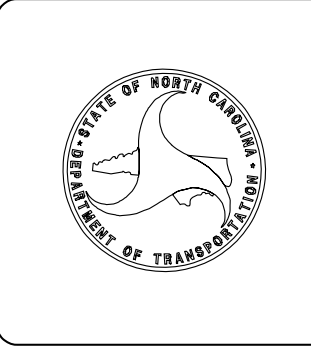
NCDOT CONTACT: TATIA WHITE, PE, PLS
ROADWAY DESIGN PROJECT ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



ETHERILL ENGINEERING
1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

Kimley Horn
P.O. BOX 33068 • RALEIGH, N.C. 27636-3068

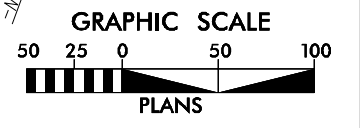
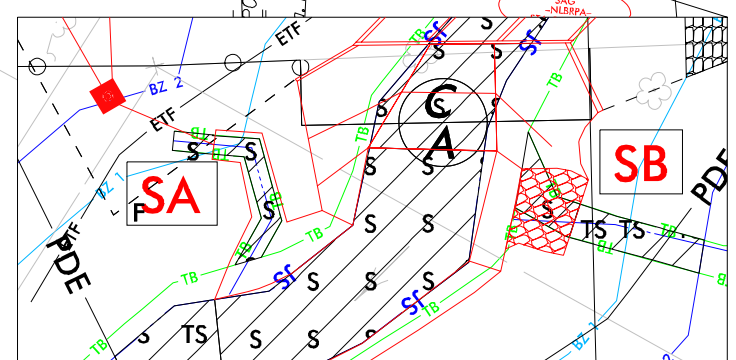
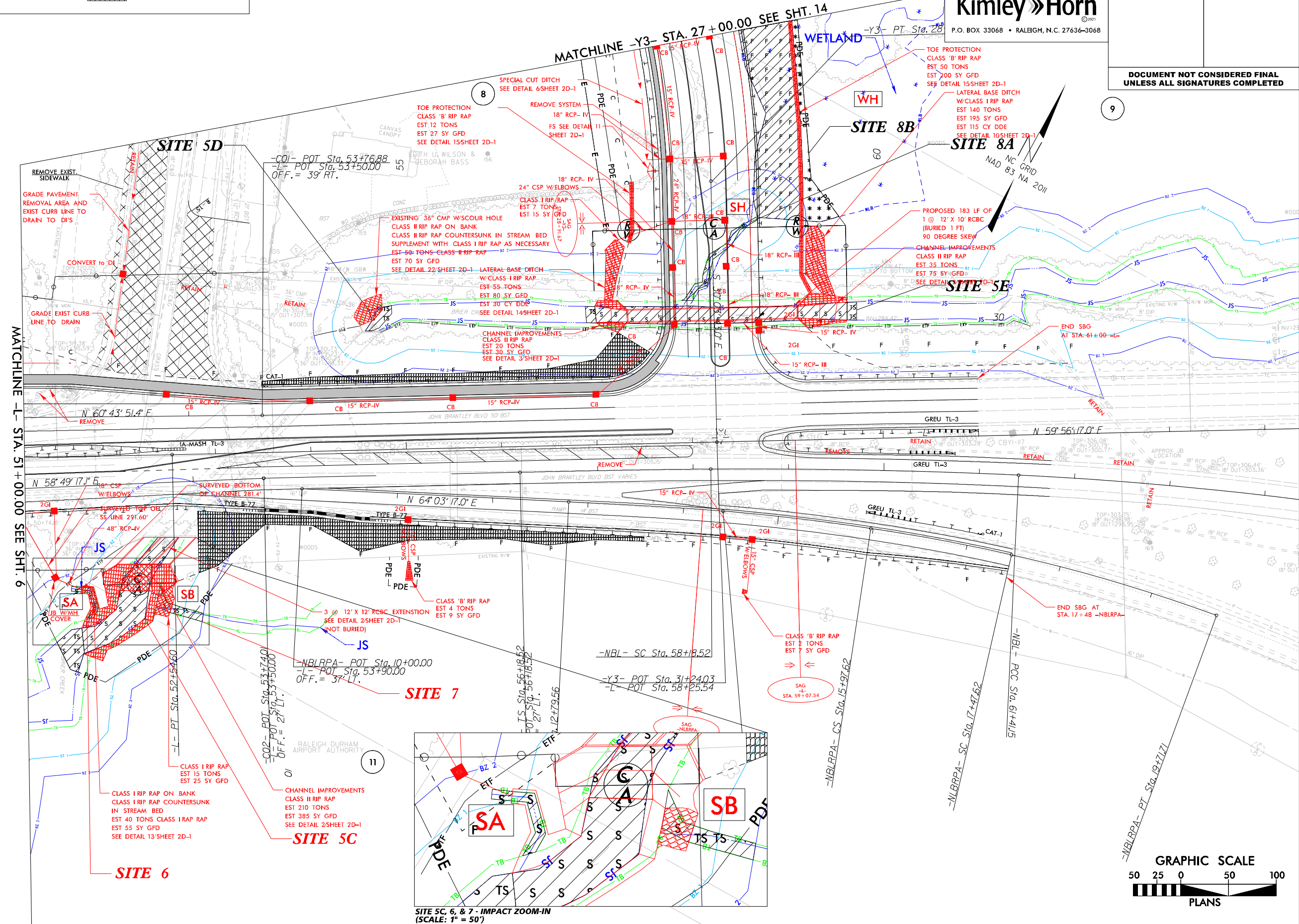
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

PROJECT REFERENCE NO. 1-5700	SHEET NO. 7
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

LEGEND

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



5/14/99

9/13/2021 hyd_wet_psh07.dgn

AUGUST 17, 2021
REVISED PERMIT DRAWING
SHEET 3 OF 5

PERMIT DRAWING
MODIFICATION FOR
PERMIT SITE 5C, 6, & 7

ETHERILL ENGINEERING
1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING / DESIGN - BRIDGE / STRUCTURE DESIGN
CIVIL / SITE DESIGN - GIS / GPS - CONSTRUCTION OBSERVATION

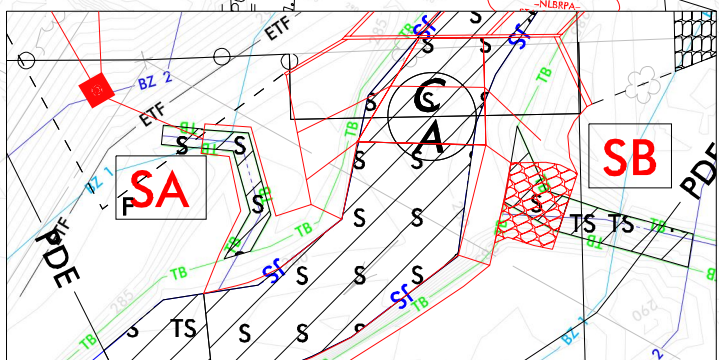
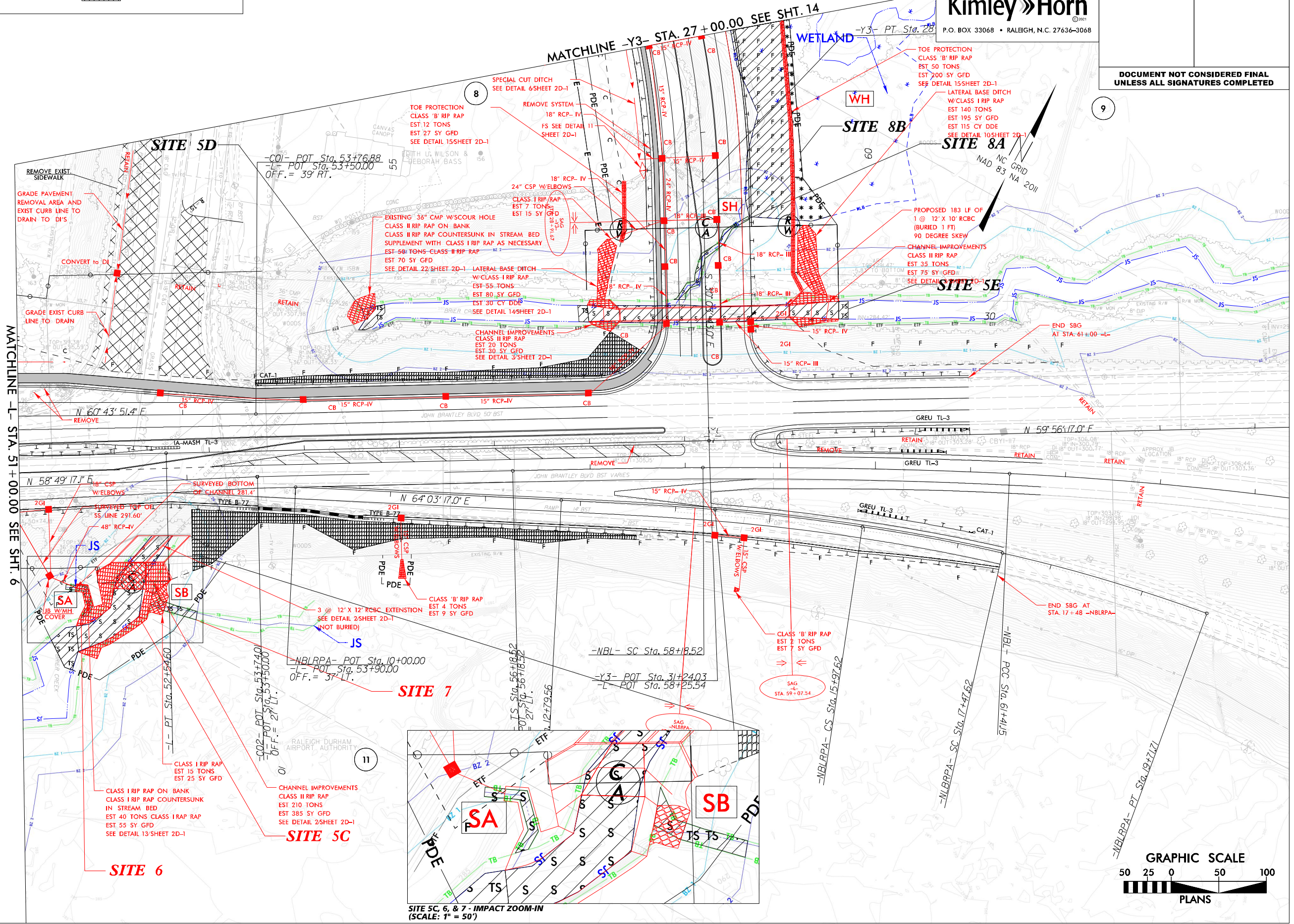
Kimley Horn
P.O. BOX 33068 • RALEIGH, N.C. 27636-3068

PROJECT REFERENCE NO. 1-5700	SHEET NO. 7
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

LEGEND

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



5/14/99

P:\5700\1\hyd_wet_psh07_con.dgn

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	17+44/17+62 -L- (RT)	Scour Hole Stabilization						< 0.01	< 0.01	20	15	
2A	29+10/29+46 -L- (LT)	Channel Improvements						< 0.01	< 0.01	26	12	
2B	33+00/33+30 -L- (LT)	Bank Stabilization						< 0.01	< 0.01	40	10	
3A	33+30/33+51 -L- (LT)	3 @ 10'X10' RCBC Extension						0.03		53		
	33+30/33+51 -L- (LT)	Bank Stabilization						0.02	< 0.01	45	15	
3B	33+61/33+85 -L- (RT)	Excavation			< 0.01							
	33+24/33+38 -L- (RT)	Bank Stabilization						< 0.01	< 0.01	15	33	
4	14+02/14+36 -RPB- (RT)	Fill Slope					< 0.01					
4A	REMOVED AFTER 4B MEETING											
4B	14+52/14+80 -RPD- (LT)	Bank Stabilization						< 0.01	< 0.01	23	20	
5A	75+05/75+30 -Y- (LT)	Bank Stabilization						< 0.01	< 0.01	10	20	
5B	REMOVED DUE TO DESIGN CHANGE											
5C	51+50/52+59 -L- (RT)	3 @ 12'X12' RCBC Extension						0.02		37		
	51+50/52+59 -L- (RT)	Channel Improvements						0.02		32		
	51+50/52+59 -L- (RT)	Bank Stabilization						0.05	0.02	86	26	
5D	54+50/54+75 -Y- (LT)	Scour Hole Stabilization						< 0.01	< 0.01	14	38	

*Rounded totals are sum of actual impacts

NOTES:

I-5506 Permit Sites have already been permitted and do not contribute to the total wetland and stream impacts for I-5700.

I-5506 Permit Site 5A (48" CMP)

Permanent SW Impacts: <0.01 ac.

Channel Impacts Permanent: 25 FT

I-5506 Permit Site 5B (Bank Stabilization)

Temporary SW Impacts: <0.01 ac.

Channel Impacts Temporary: 26 FT

NC DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

8/17/2021

WAKE

I-5700

AUGUST 17, 2021

REVISED PERMIT DRAWING

SHEET

4

OF

5

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)	
5E	29+90 -Y3- (CL)	Proposed 12'X10' RCBC							0.07		176		
	29+90 -Y3- (CL)	Bank Stabilization							0.03	< 0.01	73	20	
6	51+47/51+74 -L- (RT)	Channel Improvements							< 0.01		52		
7	52+38/52+76 -L- (RT)	Channel Improvements							0.005	0.007	20	34	
8A	29+75/28+90 -Y3- (CL)	Channel Fill							0.01		121		
8B	26+22/28+96 -Y3- (LT)	Fill Slope	0.30					0.07					
	26+25 -Y3- (CL)	Rip Rap Pad	< 0.01										
9	53+20/53+34 -Y- (LT)	Bank Stabilization							< 0.01	< 0.01	45	17	
10A	87+20/88+15 -Y- (RT)	3 @ 9'X8' RCBC Extension							< 0.01		7		
	87+20/88+15 -Y- (RT)	Channel Improvements							0.03	0.01	50	17	
10B	88+00/88+74 -Y- (RT)	3 @ 9'X8' RCBC Extension						0.03					
10C	86+82/87+00 -Y- (RT)	3 @ 9'X8' RCBC Extension						< 0.01					
11	95+48/99+77 -Y- (RT)	60" RCP Extension							< 0.01		17		
	95+48/99+77 -Y- (RT)	Scour Hole Stabilization							< 0.01	< 0.01	28	23	
11A	101+00/101+15 -Y- (LT)	Bank Stabilization							< 0.01	< 0.01	28	10	
12	101+15/101+57 -Y- (LT)	Diversion Channel								< 0.01		40	
TOTALS*:			0.30	0.00	0.01	0.11	0.00	0.34	0.09	1018	350	0	

*Rounded totals are sum of actual impacts

NOTES:

I-5506 Permit Sites have already been permitted and do not contribute to the total wetland and stream impacts for I-5700.

I-5506 Permit Site 5A (48" CMP)

Permanent SW Impacts: <0.01 ac.

Channel Impacts Permanent: 25 FT

I-5506 Permit Site 5B (Bank Stabilization)

Temporary SW Impacts: <0.01 ac.

Channel Impacts Temporary: 26 FT

NC DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

8/17/2021

WAKE

I-5700

AUGUST 17, 2021

REVISED PERMIT DRAWING

SHEET

5

OF

5