## Project Submittal Interim Form



Updated September 4, 2020

Please note: fields marke mandatory questions are	ed with a red asterisk * below are required. You will not be able to submit the form until all e answered.						
, ,,	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 Date	e Request was submitted on:						
1/10/2022							
Project Contact In	ıformation						
Name:	Erin Cheely Who is submitting the information?						
Email Address: *	ekcheely@ncdot.gov						
Project Information	on						
Existing ID #: * 20191337 20170001 (no dashes)	Existing Version: *  3 1						
Project Name: *	I-5507 - Interstate 485 improvements from I-77 to US 74 (Independence Blvd)						
Is this a public transpo  Yes  No	rtation project?*						
Is this a DOT project?*  Yes  No							
Is the project located w	vithin a NC DCM Area of Environmental Concern (AEC)?*						
○ Yes   No ○ Unknown	own						
Is this project connecte	ed with ARPA funding?*						
○ Yes   No							
<b>TIP#:</b> I-5507	<b>WBS#</b> : 43609.3.2						

(Applies to DOT projects only)

## County (ies) \*

Mecklenburg

#### Please upload all files that need to be submited.

Click the upload button or drag and drop files here to attach document

I-5507 Modification Mecklenburg August 24 2023.pdf 11.31MB

Only pdf or kmz files are accepted.

#### Describe the attachments or add comments:

See attached cover letter and revised permit drawings for details of this permit modification request. Revisions resulting in changes to permitted impacts are proposed at six impact sites.

As of August 24, 2023, IPaC identifies Carolina heelsplitter, Atlantic pigtoe, Michaux's sumac, Schweinitz's sunflower, and smooth coneflower within the project area, and tricolored bat is listed as Proposed.

The biological conclusions for all listed species remains No Effect. In-water work at the named stream crossings is complete. Any potential habitat for the listed plants has already been impacted. With regard to the proposed tricolored bat, there are no major structure removals and trees have already been cleared, so no further impacts to potential habitat are anticipated.

There have been no changes to Archaeology and Historic Properties since the previously issued permits. This project pre-dated current tribal coordination procedures, so tribal coordination documentation is also included in the attachment. No responses were received.

NCDOT is hereby requesting a modification of the RGP 50.

- \* 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: \*

Erin K. Cheely

**Submittal Date:** 



ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

August 24, 2023

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

ATTN: Mr. Monte Matthews NCDOT Coordinator

Subject: Request for Modification for Section 404 Regional General Permit No. 201902350 and

**Section 401 Water Quality Certification** for the Interstate 485 (I-485) improvements from I-77 to US 74 (Independence Boulevard), Mecklenburg County, Division 10, TIP I-

5507. Debit \$570.00 from WBS 43609.3.2.

**Reference:** 1) Section 404 Regional General Permit No. 201902350 (RGP 50), Action ID No. SAW-2013-02330, issued November 12, 2020, last modified September 7, 2021; 2) Section 401 General Water Quality Certification No. 4135, NCDWR Project No. 20191337v.2, issued September 21, 2020, last modified October 22, 2021.

Dear Sir:

The purpose of this letter is to request modification of the United States Army Corps of Engineers (USACE) Section 404 Regional General Permit 201902350 (RGP 50) and associated North Carolina Division of Water Resources (NCDWR) Section 401 Water Quality Certification for the above referenced project.

Revisions resulting in changes to permitted impacts are proposed at six impact sites (Sites 7, 8, 30, 31, 32, and 37). The changes to these sites are described below.

Previously authorized permanent stream impacts for the entire project totaled 2,507 linear feet, which included 1,131 linear of bank stabilization. Previously authorized temporary stream impacts totaled 1,318 linear feet. Previously authorized wetland impacts included 0.83 acre of permanent impacts (including 0.27 acre of mechanized clearing) and no temporary or hand clearing impacts.

The revised stream impacts for the project total 3,319 linear feet of permanent stream impacts (which includes 1,325 linear feet of stream bank stabilization impacts and 500 linear feet of maintenance stream

Website: www.ncdot.gov

bank stabilization) and 629 linear feet of temporary stream impacts. No changes are proposed to wetland impacts.

This modification will result in 118 linear feet of additional permanent stream channel impacts, an additional 194 linear feet of stream bank stabilization impacts, an addition of 500 linear feet of stream bank maintenance, and a reduction of 689 of temporary stream impacts. A summary of the changes is shown in Table 1 below.

Table 1 – Summary of changes to stream impacts\*

Impact Type	Previously	Proposed Permit	Difference
	Permitted Impacts	Modification	
Permanent Stream Impacts	2,507	3,319	+812
Stream Fill (culvert, riprap, etc.)	1,376	1,494	+118
Bank Stabilization Impacts	1,131	1,325	+194
Stream Bank Maintenance	0	500	+500
Temporary Stream Impacts	1318	629	-689

<sup>\*</sup>Stream impacts are in linear feet.

Please see the enclosed revised DMS acceptance letter and revised permit drawings where drainage revisions resulted in design and/or impact changes to permitted impact sites. A narrative describing the revisions made to each permit impact site are presented in the following section.

## Permit Impact Site Modifications (shown in revised permit drawings):

## Site 7

The original approved impacts at Site 7 included 680 linear feet (0.07 acre) of temporary surface water impacts in Stream S6 associated with the installation of rock plating between Stations 294+00 and 301+00. The original design did not propose extending the rock plating to below the ordinary high water mark. Through on-site coordination with and approval by Donna Hood of NCDWR during construction, permanent riprap stream bed stabilization was determined to be needed between Stations 294+00 and 295+00. In addition, through on-site coordination with NCDWR the rock plating was extended to the toe of slope between Stations 294+00 and 302+00 to prevent future scour that might jeopardize the slope and shoulder of the roadway. Following clearing of vegetation it was determined that the stream banks between Station 295+00 and Station 300+00 had been previously lined with riprap; therefore, the rock plating in these locations was determined to be a maintenance activity consisting of reconditioning the slopes. Based on these field changes, the proposed impacts at Site 7 include the following:

- Station 294+00 to Station 295+00: 100 feet of riprap fill impacts
- Station 295+00 to Station 300+00: 500 feet of stream bank maintenance
- Station 300+00 to Station 302+00: 200 feet of stream bank stabilization

## Site 8

The original design at Site 8, which included installation of a concrete energy dissipator at Station 298+00, has not changed. However, the stream bank stabilization identified in the prior permit approval is now accounted for in the length of stream bank maintenance for Site 7. Permanent impact for Site 8 now consists of 7 linear feet of stream bed impacts for the energy dissipator.

#### Site 30

The original approved impacts at Site 30 included 33 linear feet of temporary impact to Stream SAN associated with installation of a side tapered inlet and headwall at the end of an existing 36" reinforced concrete pipe (RCP) culvert. The original design at this location included a 4-foot extension of the existing

36" RCP, which was inadvertently omitted from the permit. The revised impacts at Site 30 include 13 linear feet of permanent stream impacts resulting from the culvert extension, side tapered inlet, and headwall. Temporary impacts would be 20 linear feet.

#### Site 31

The original approved impacts at Site 31 included 3 linear feet of permanent stream impacts associated with the extension of a 42" RCP, 20 linear feet of stream bank stabilization, 10 linear feet of temporary stream impacts, and < 0.01 acre of permanent wetland fill impacts associated with a lateral ditch tie-in. The drainage design has been revised at this site to widen and extend the lateral ditch, resulting in an additional 1 linear foot of permanent stream impact from the culvert extension and 1 linear foot less of stream bank stabilization. The revised impacts at Site 31 include 4 linear feet of permanent stream impacts associated with RCP extension, 19 linear feet of stream bank stabilization, 10 linear feet of temporary stream impacts, and < 0.01 acre of permanent wetland fill.

#### Site 32

The original approved impacts at Site 32 included 6 linear feet of stream bank stabilization, 20 linear feet of temporary stream impacts, and 0.02 acre of permanent wetland fill impacts associated with roadway fill and a storm water outfall tie-in. The drainage design has been revised at this site to add lateral ditches. The lateral ditch from the west will discharge prior to an existing riprap bank and will not result in impacts to the right bank. The lateral ditch from the east will drain to a proposed riprap bank, resulting in 15 linear feet of stream bank stabilization impact, 24 linear feet of temporary stream impacts, and 0.02 acre of permanent wetland fill impacts.

## Site 37

The original approved impacts at Site 37 included 35 linear feet of stream bank stabilization and 20 linear feet of temporary stream impacts associated with lateral ditch outfall tie-ins. The design has been revised near Station 749+80 to include a 4 ft extension to the existing 54" RCP at this site. The revised impacts at Site 37 include 4 linear feet of permanent stream impacts associated with the RCP extension, 31 linear feet of stream bank stabilization, and 20 linear feet of temporary stream impacts.

Revised stream impacts are summarized in Table 2 below.

**Table 2 - Summary of proposed stream impact revisions** 

	Previous A	pproved Strea	m Impacts	Revised Stream Impacts					
Site*	Bank Stabilization (If)	Permanent Fill (lf)	Temporary Fill (lf)	Bank Stabilization (If)	Stream Bank Mainten- ance (If)	Permanent Fill (lf)	Temporary Fill (lf)		
7	0	0	680	200	500	100	0		
8	10	7	0	0	0	7	0		
30	0	0	33	0	0	13	20		
31	20	3	10	19	0	4	10		
32	6	0	20	15	0	0	24		
37	35	0	20	31	0	4	20		
Total	71	10	763	265	500	128	74		

<sup>\*</sup> Sites 7, 8, 30, 31, and 37 are intermittent streams; Site 32 is a perennial stream

## **Revised Compensatory Mitigation**

The North Carolina Division of Mitigation Services (NCDMS) provided compensatory mitigation for 1,296 linear feet of permanent stream impacts and 0.83 acre of permanent riparian wetland impacts, per the November 12, 2020 RGP 50 issued permit from the USACE and the September 21, 2020 401 WQC from NCDWR. Subsequently, the NCDMS provided compensatory mitigation for an additional 80 linear feet of permanent stream impacts per the September 7, 2021 RGP 50 issued permit from the USACE and the October 22, 2021 401 WQC from NCDWR.

Of the revised permanent stream impacts totaling 3,319 linear feet for this modification, 1,325 linear feet are the result of bank stabilization and 500 linear feet are the result of maintenance activities and therefore do not require mitigation by the USACE. Therefore, a total of 1,494 linear feet of permanent stream impacts will require mitigation based on this modification, which is an increase of 118 linear feet as compared to the previously approved RGP 50 issued on September 7, 2021. NCDWR would require a total of 444 linear feet of mitigation, which is the same amount of mitigation required by NCDWR from the previous permit approvals. This amount is less than the mitigation required by USACE. There are no additional permanent wetland impacts, therefore no additional wetland mitigation is required.

NCDMS issued a Mitigation Acceptance Letter on July 27, 2023, stating their willingness to provide compensatory mitigation for the additional 118 linear feet of permanent stream impacts.

No changes have occurred to special commitments for this project.

NCDOT requests to modify the permit for this project. Application is hereby made for modification of the USACE 404 permit and the 401 WQC from NCDWR. We have provided a method of debiting \$570.00 to be submitted to the NCDWR for processing the WQC renewal for I-5507, as noted in the subject line of this application.

A copy of this permit application and its distribution list will be posted in the NCDOT website at <a href="http://connect.ncdot.gov/resources/Environmental">http://connect.ncdot.gov/resources/Environmental</a>. Thank you for your assistance with this project. If you have any questions or need additional information, please contact Erin Cheely at either ekcheely@ncdot.gov or (919) 323-5192.

Sincerely,

Michael A. Turchy

int Chuly

Environmental Coordination and Permitting Group Leader

cc:

NCDOT Permit Application Standard Distribution List

ROY COOPER Governor ELIZABETH S. BISER Secretary MARC RECKTENWALD Director



July 27, 2023

Mr. Jamie Lancaster, P.E. Environmental Analysis Unit North Carolina Department of Transportation 1598 Mail Service Center Raleigh, North Carolina 27699-1598

Dear Mr. Lancaster:

Subject: DMS Mitigation Acceptance Letter:

I-5507, I-485 Improvements from I-77 to US 74 (Independence Boulevard),

Mecklenburg County

References: USACE 404 General Permit 31 issued November 20, 2020, and Modification issued

September 7, 2021 (USACE Action ID 2013-02330)

NCDWR 401 Water Quality Certification issued September 21, 2020 (NCDWR ID

2019-1337)

The purpose of this letter is to notify you that the Division of Mitigation Services (DMS) will provide the additional stream mitigation for the subject project. Based on the information supplied by you on July 27, 2023, the impacts are located in CU 03050103 of the Catawba River basin in the Southern Piedmont (SP) Eco-Region, and are as follows:

**Table 1 – Additional Impacts (feet / acres)** 

Catawba	Stream			7	Wetlands	Buffer (Sq. Ft.)		
<b>03050103</b> SP	Cold	Cool	Warm	Riparian	Non- Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	118.000	0	0	0	0	0

<sup>\*</sup>NOTE: Some of the impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details.

This additional impact and associated mitigation needs were not projected by the NCDOT in the 2023 impact data. DMS is currently providing stream and riparian wetland mitigation for the impacts associated with this project located in the Catawba 03 ESA as required by the 404 and 401 permits issued in 2020 and 2021 as shown in the below table (in mitigation credits):



Mr. Lancaster TIP I-5507 July 27, 2023 Page Two

Table 2 – Current Permitted Impacts and Associated Mitigation Requirements provided by DMS (based

on issued permits) and Revised Anticipated Impacts (based on mitigation request)

Impact Type	Total Permitted Impacts (feet / acre / sq ft)	Mitigation Provided by DMS per Issued Permits (Credits)	Additional Impact (for approval)	Revised Total Impacts*
Stream (warm)	1,376.000	2,752.000	118.000	1,494.000
Riparian Wetland	0.830	1.660	0.000	0.830

<sup>\*</sup>Some of the additional impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details. DMS will provide the amount of mitigation as determined by the regulatory agencies.

This mitigation acceptance letter replaces the mitigation acceptance letter issued on November 19, 2018, and September 27, 2019. DMS commits to implementing additional stream mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies using the delivery timeline listed in Section F.3.c.iii of the In-Lieu Fee Instrument dated July 28, 2010, and consistent with the Guidance for Expanded Service Area for Mitigating Impacts within the Lower Catawba River basin approved by the IRT. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from DMS.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-707-8420.

Sincerely,

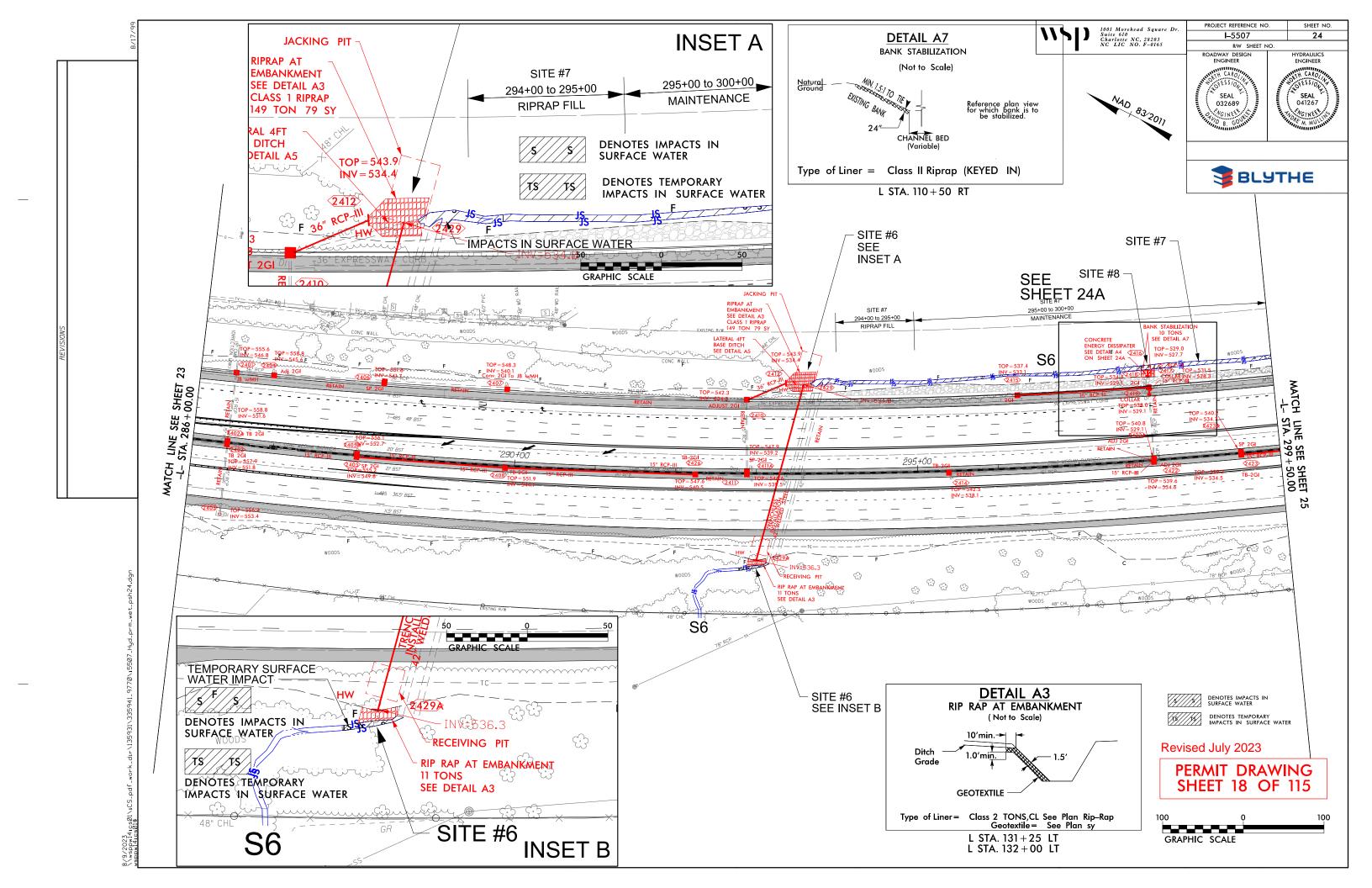
Clizabeth Harmon for James B. Stanfill DMS Deputy Director

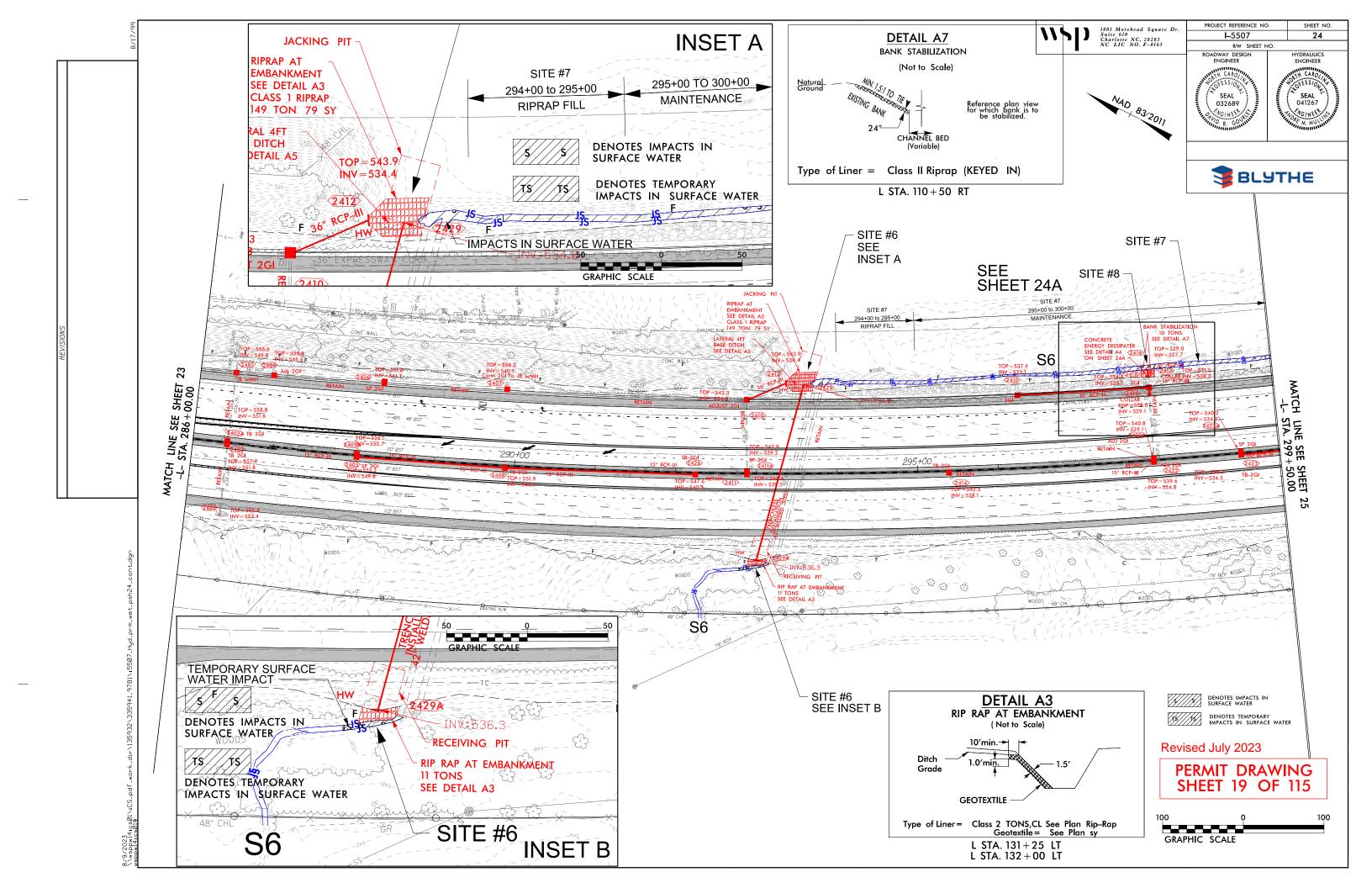
cc: Mr. Monte Matthews, USACE – Raleigh Regulatory Field Office

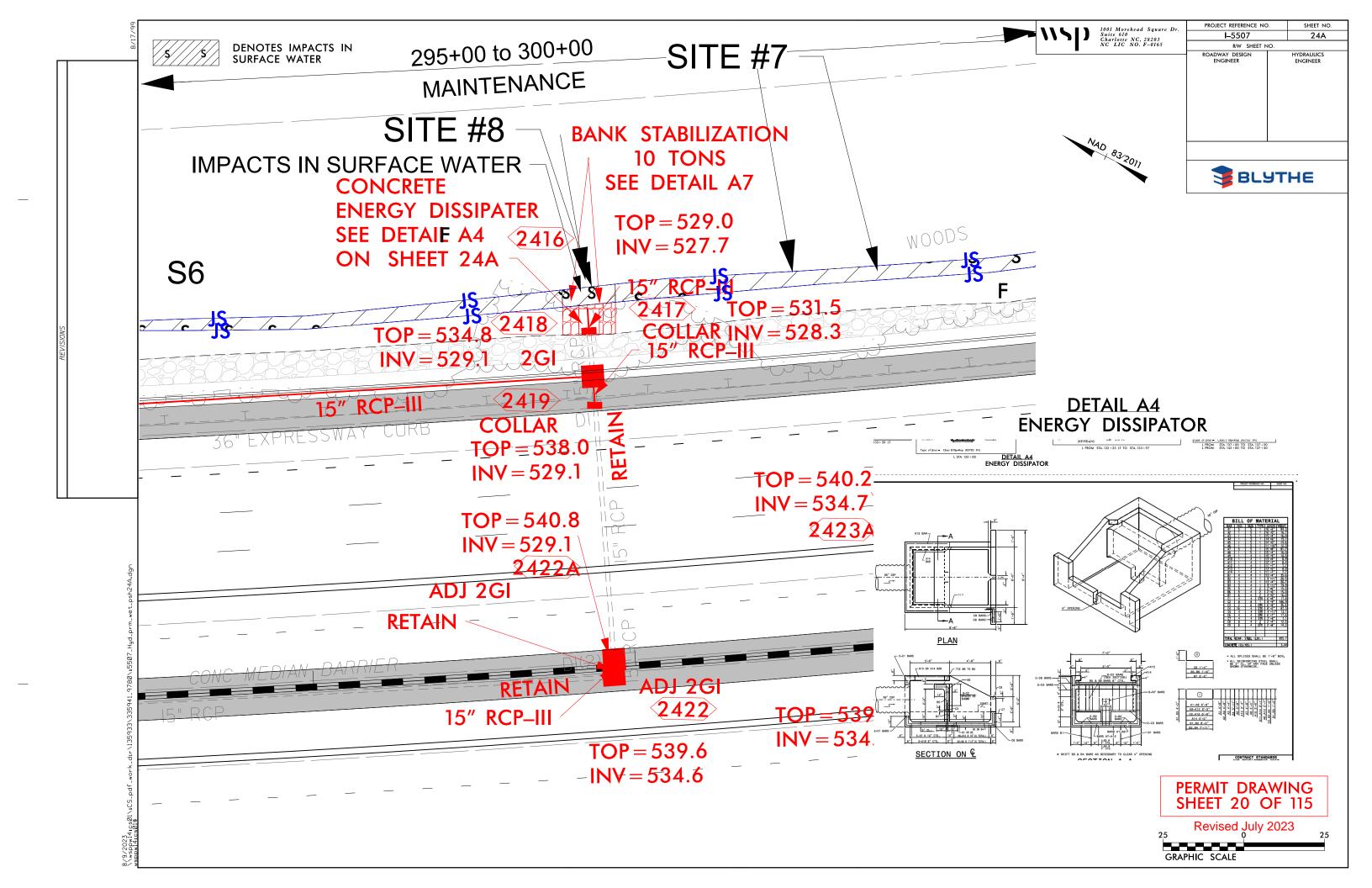
Ms. Amy Chapman, Division of Water Resources, Wetlands/401 Unit

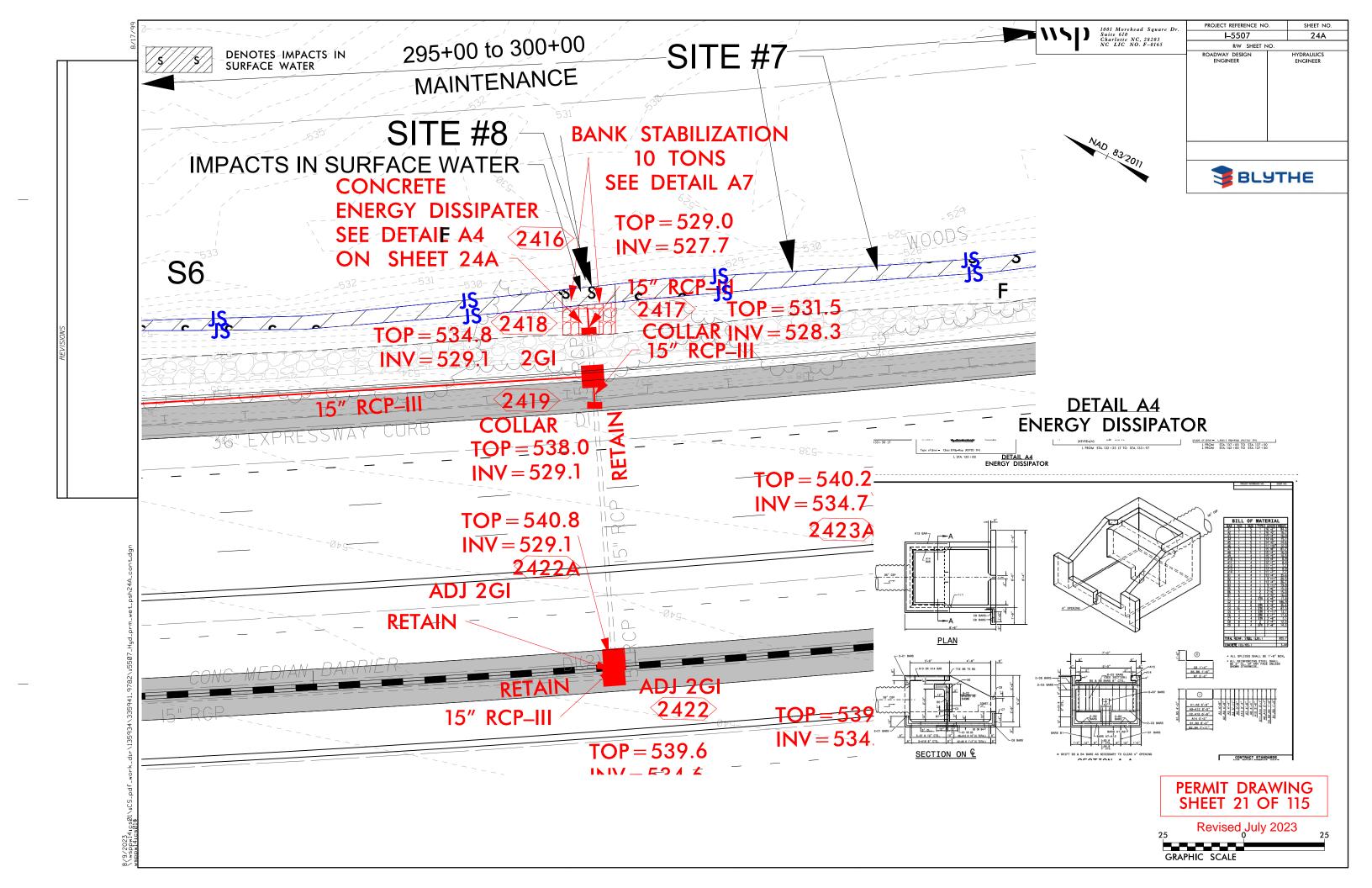
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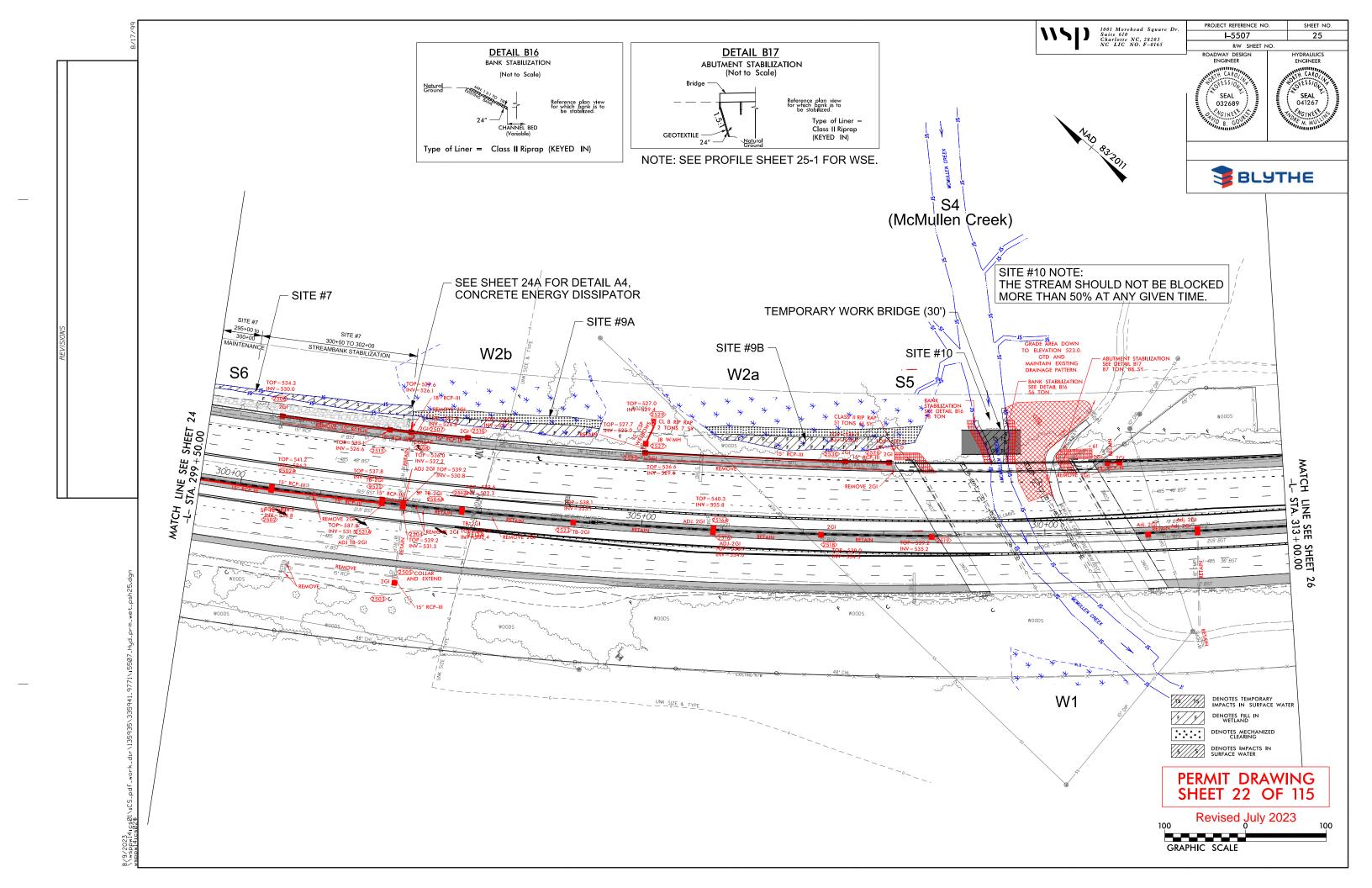


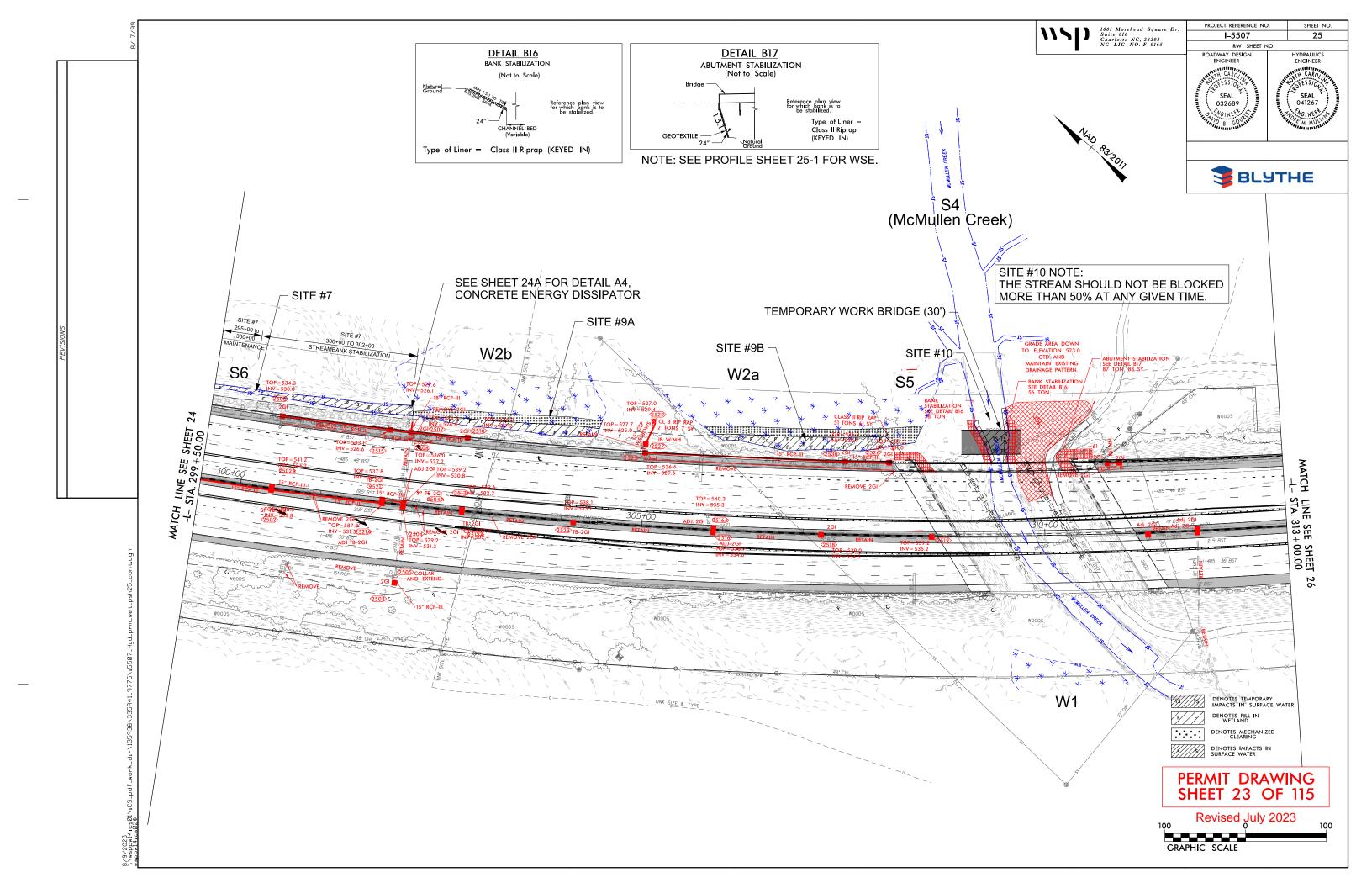


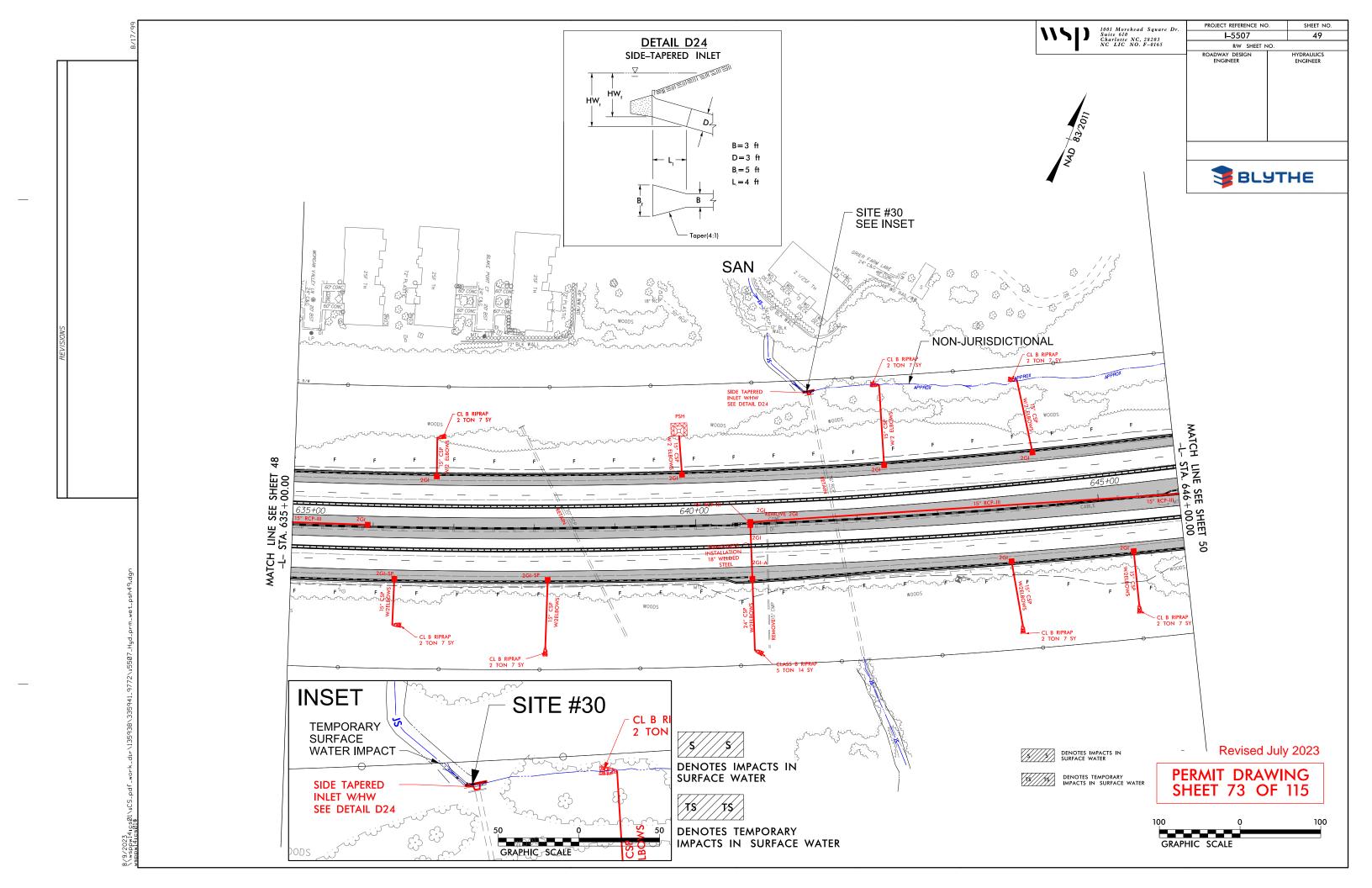


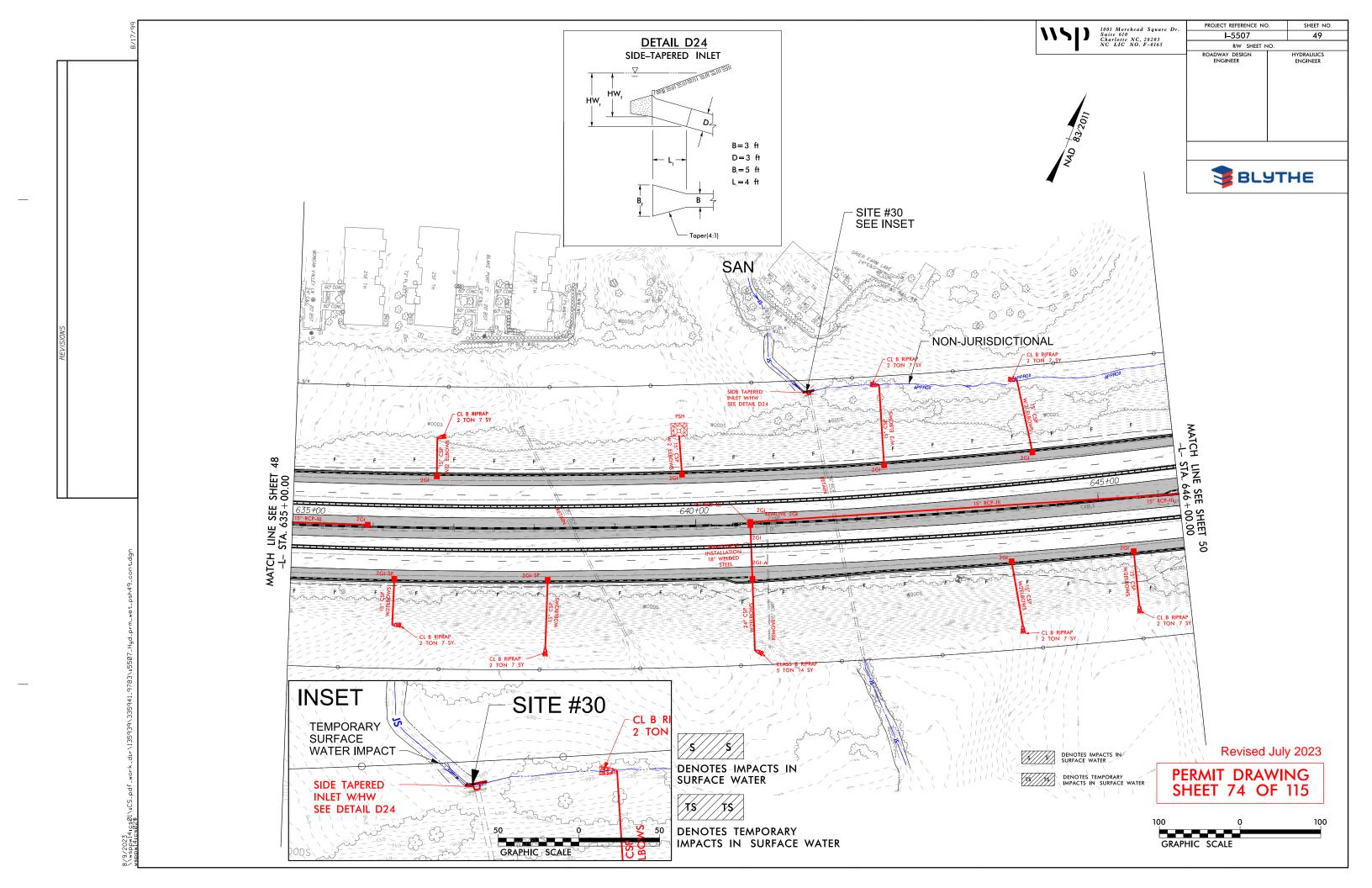


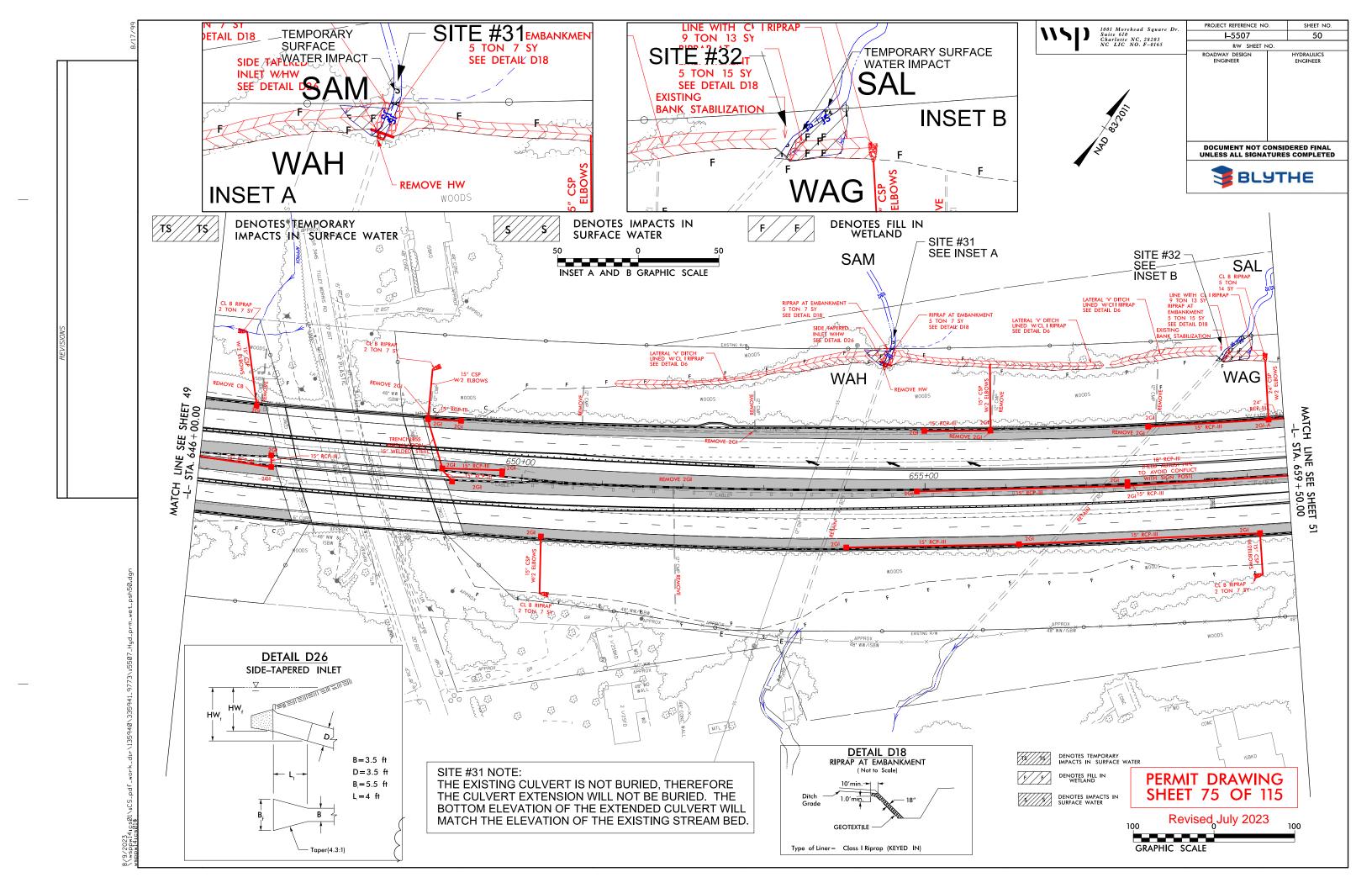


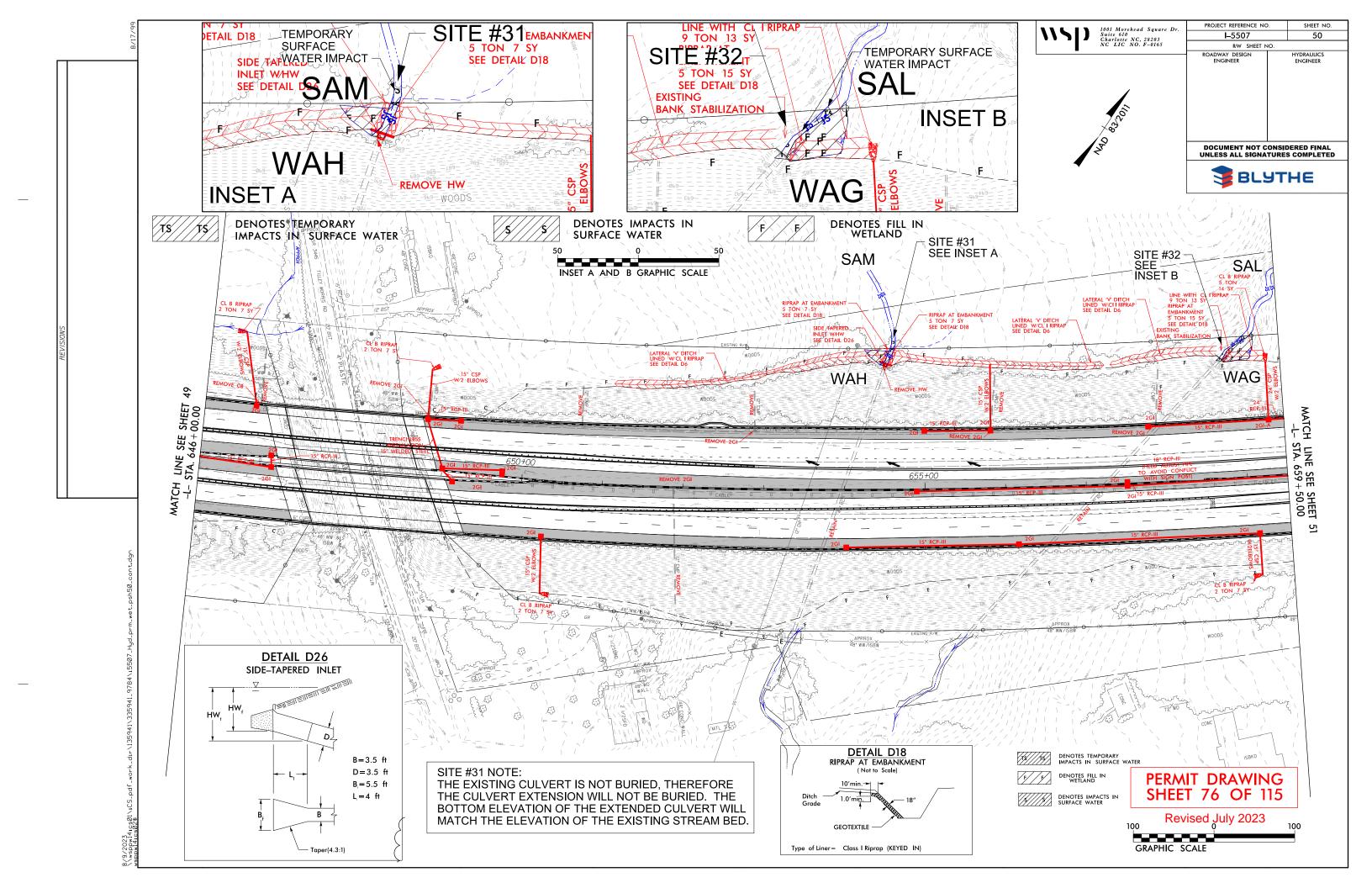


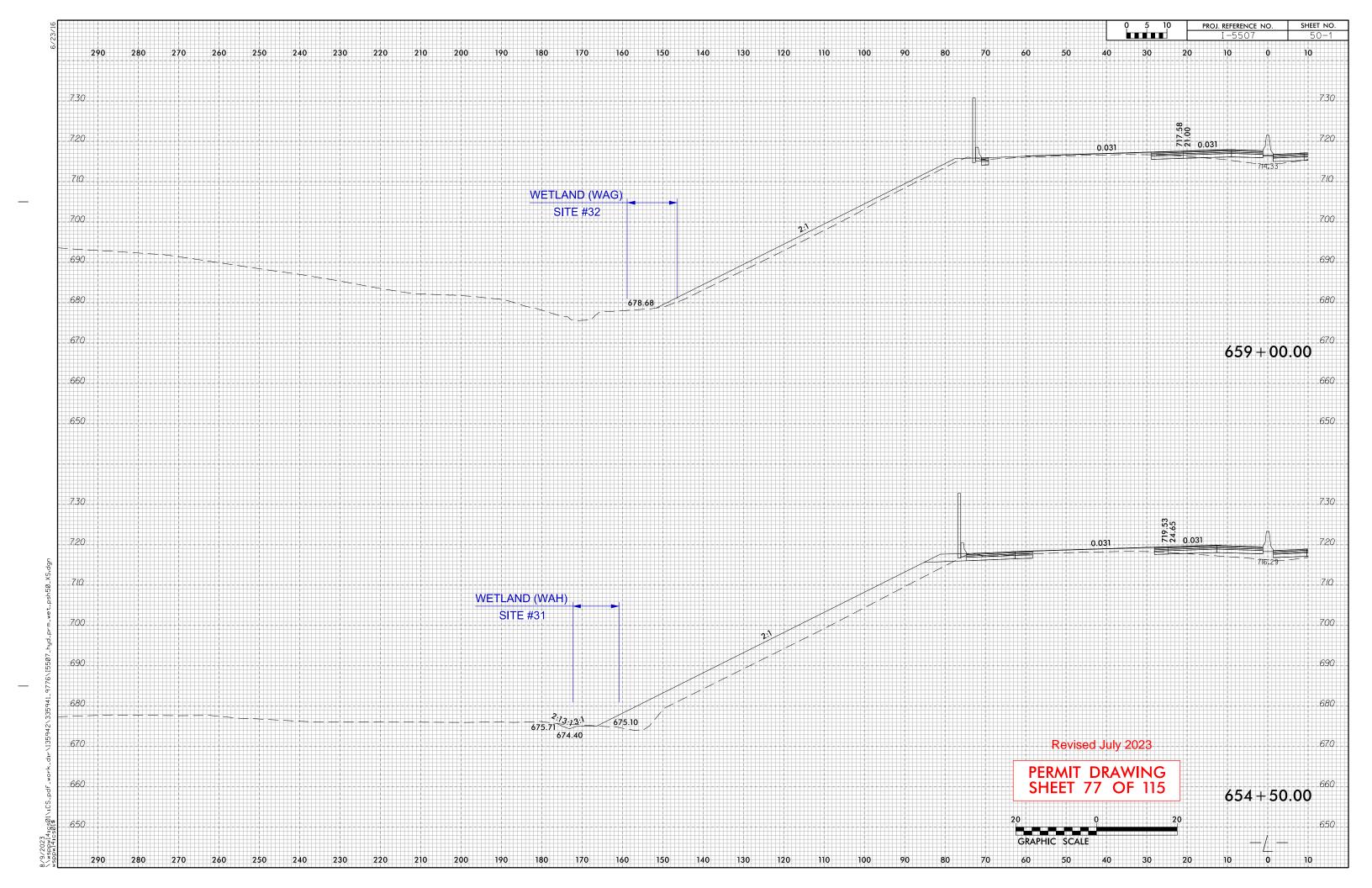


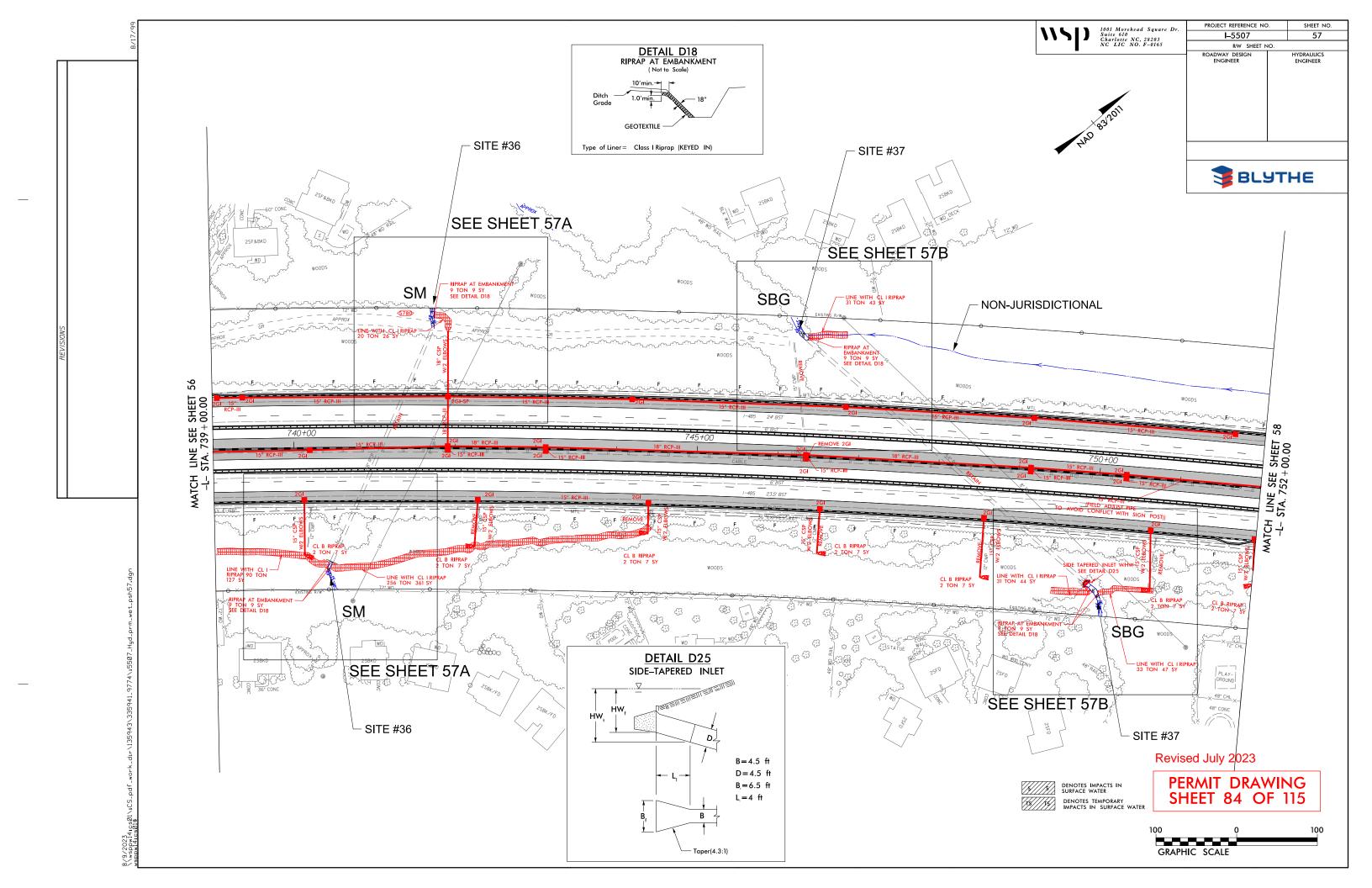


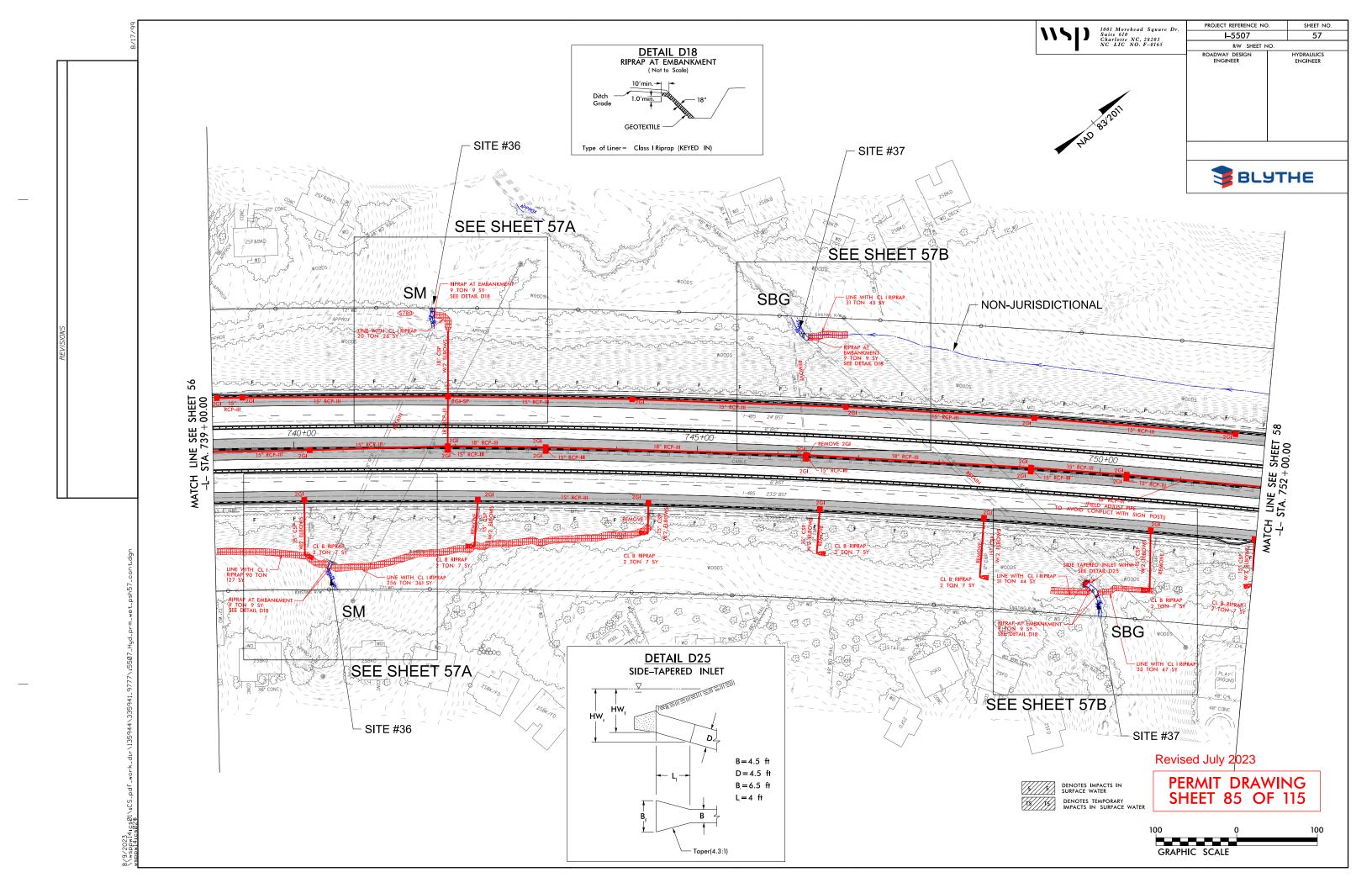


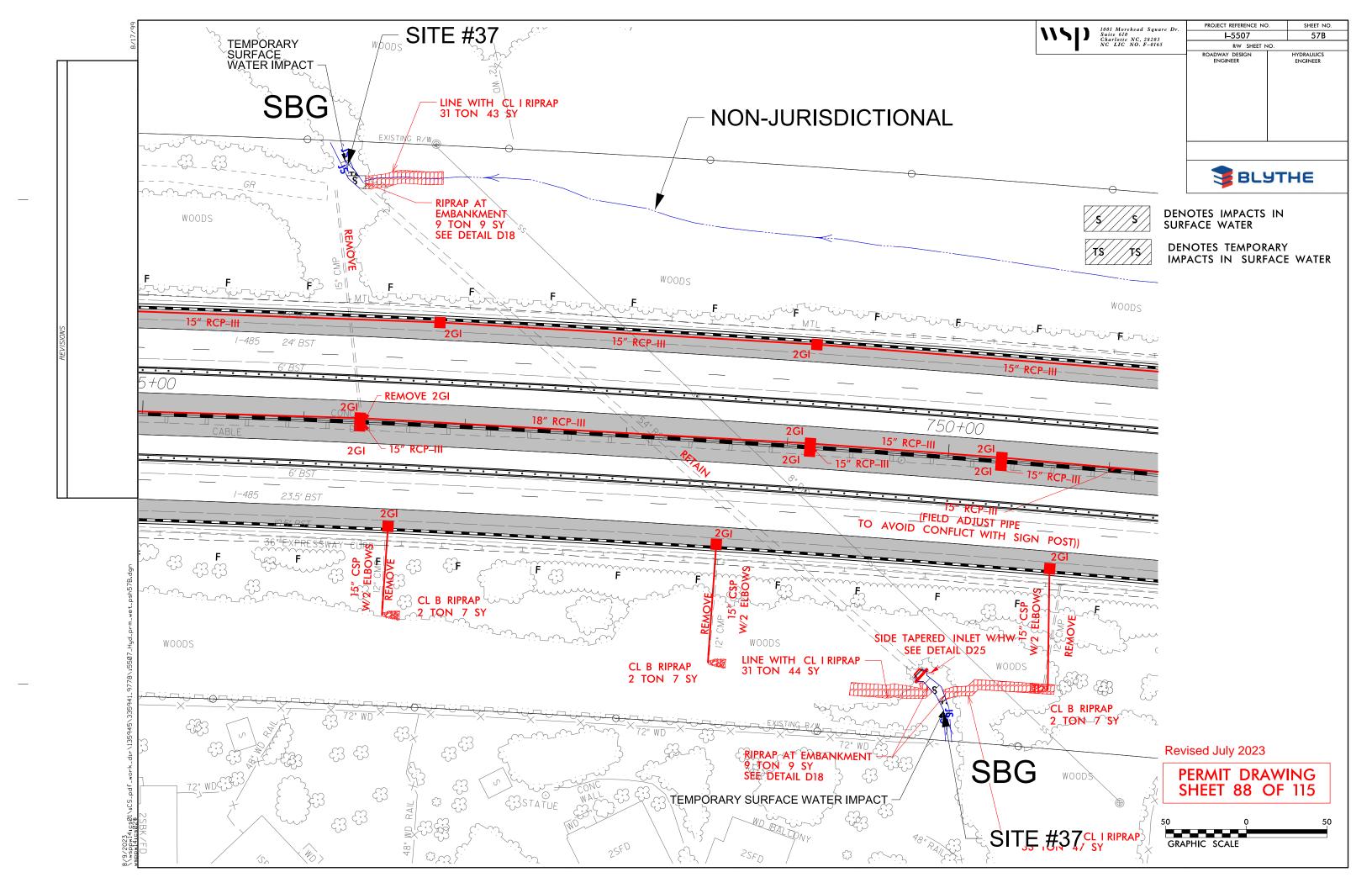


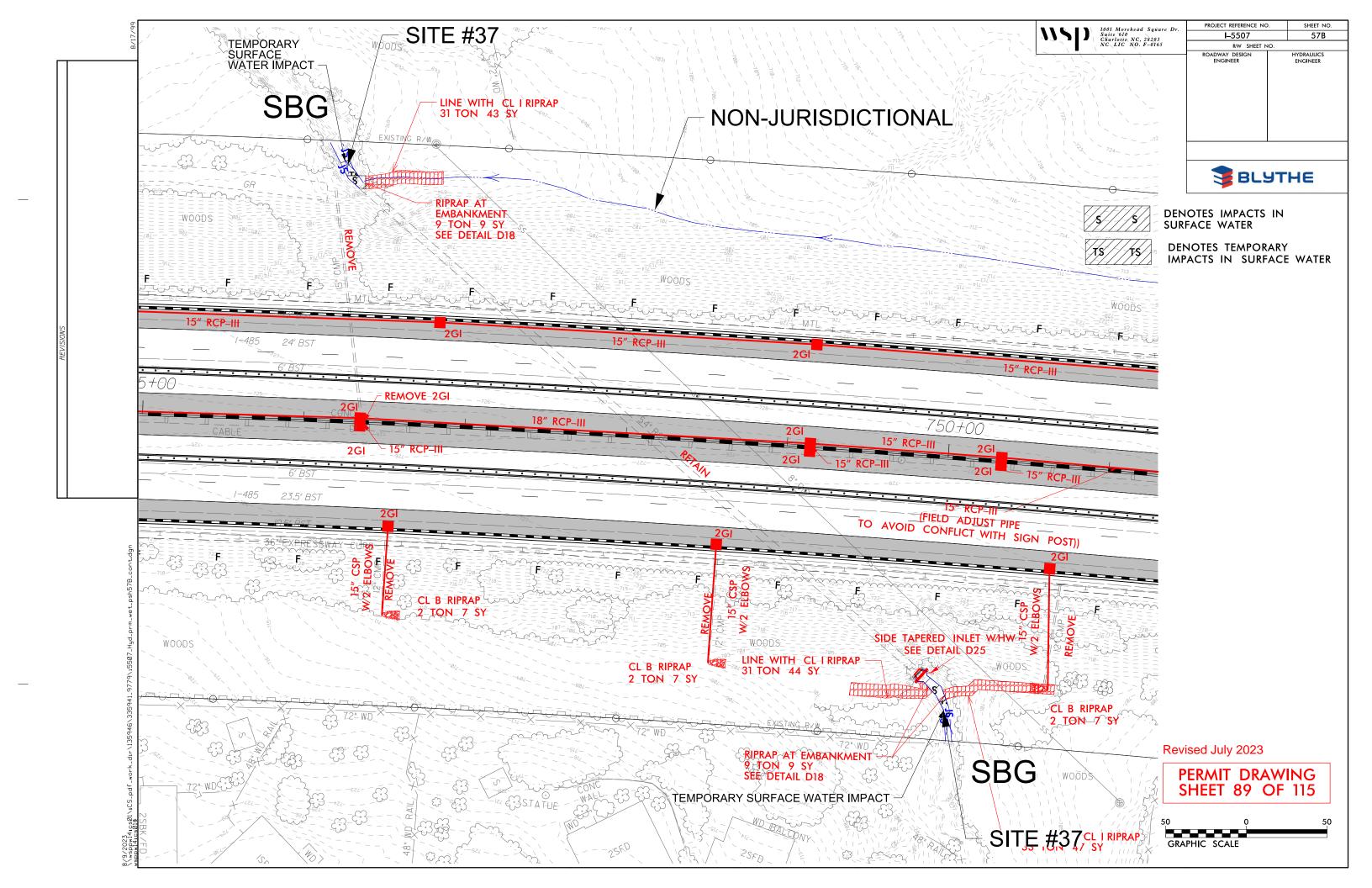












#### WETLAND AND SURACE WATER IMPACTS SUMMARY WETLAND IMPACTS SURFACE WATER IMPACTS Hand Existing Existing Channel Permanent Temp. Excavation | Mechanized Clearing Permanent Temp. Channel Natural Station Structure Fill In Fill In SW SW Stream Site in Clearing in Impacts **Impacts** Wetlands No. (From/To) Size / Type Wetlands Wetlands Wetlands in Wetlands impacts impacts Permanent Temp. Design (ac) (ac) (ac) (ac) (ac) (ac) (ac) (ft) (ft) (ft) 1 110+50 -L- RT < 0.01 28 Riprap Fill 110+50 -L- RT 1 Bank Stabilization < 0.01 < 0.01 18 13 2 129+00 - 130+00 -L- LT Roadway Fill 0.08 0.02 2A 128+50 -L- RT < 0.01 < 0.01 11 20 Bank Stabilization 3 132+00 -L- LT Extend 4 @ 10'x8' RCBC 0.03 52 70 3 132+00 LT Bank Stabilization 0.02 < 0.01 16 3 132+00 LT **Culvert Construction Activities** 0.03 4 132+00 - 134+00 -L- LT 0.02 < 0.01 159 Roadway Fill 4 134+00 - 135+00 -L- LT < 0.01 22 Channel Change < 0.01 5 137+40 - 142+25 -L- LT 0.05 10 Extend 48" RCP with Junction Box < 0.01 444 6 293+50 -L-< 0.01 < 0.01 48 10 Bank Stabilization 7 294+00 - 295+00 -L- LT Riprap Fill < 0.01 100 7 295+00 - 300+00 -L- LT 0.02 500 Maintenance Bank Stabilization 7 300+00 - 302+00 -L- LT Bank Stabilization 0.04 200 8 298+00 -L- LT 7 < 0.01 Concrete Energy Dissipator 9A 302+00 - 308+50 LT 0.05 0.05 Roadway Fill 9B 309+50 -L- LT Roadway Fill 0.07 0.07 10 309+50 -L- LT Bank Stabilization at Temp. Bridge 0.01 0.01 65 11 343+00 -L-157 Bank Stabilization at Temp. Bridge 0.03 0.05 343+00 -L-11 **Drill Shaft Installation** 0.05 12 344+50 - 346+50 -L- RT 0.13 < 0.01 Roadway Fill 360+00 -I - I T 13 Bank Stabilization < 0.01 < 0.01 8 20 49 13 360+00 -L- RT 0.01 Extend 3@ 9'x9' RCBC 13 360+50 -L- RT Bank Stabilization < 0.01 < 0.01 38 20 13 360+50 -I - RT Culvert Construction Activities < 0.01 TOTALS\*: 0.35 0.15 0.25 0.17 1976 109

\*Rounded totals are sum of actual impacts

#### NOTES:

At Sites 3, 5, and 13, the existing culvert is not buried, therefore the culvert extension will not be buried. The bottom elevation of the extended culvert will match the elevation of the existing stream bed.

At Site 1, <0.01 ac (18 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

At Site 3, 0.02 ac (70 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

At Site 7, 0.07 ac (700 lf) of temporary impacts due to construction activities are included within the maintenance and bank stabilization impacts.

At Site 10, <0.01 ac (30 lf) of temporary impacts due to the temporary bridge are included within the bank stabilization impacts.

At Site 11, 0.03 ac (122 lf) of temporary impacts due to the temporary bridge and installation of the drilled shaft are included within the bank stabilization impacts.

At Site 13, <0.01 ac (38 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

NC DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS** 

Revised 7/10/2023

**MECKLENBURG** TIP NO. I-5507 WBS NO. 43609.3.2

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evised 2023 May

SHEET

OF

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#### WETLAND AND SURACE WATER IMPACTS SUMMARY WETLAND IMPACTS SURFACE WATER IMPACTS Existing Hand Existing Permanent Excavation | Mechanized Channel Natural Temp. Clearing Permanent Temp. Channel Structure Fill In Fill In SW SW **Impacts** Stream Site Station in Clearing in Impacts No. (From/To) Size / Type Wetlands Wetlands Wetlands in Wetlands Wetlands Permanent impacts impacts Temp. Design (ac) (ac) (ac) (ac) (ac) (ac) (ac) (ft) (ft) (ft) 363+50 -L- RT 0.10 14 Roadway Fill 15 363+00 -L- LT < 0.01 Bank Stabilization < 0.01 18 20 15 365+00 -L- RT Extend 4@ 8'x9' RCBC 0.08 165 15 365+00 -L- RT Bank Stabilization 0.01 < 0.01 65 10 15 365+00 -L- RT < 0.01 **Culvert Constuction Activities** 15A 395+80 -L- RT < 0.01 < 0.01 8 20 Bank Stabilization 16 404+50 -L- RT Bank Stabilization < 0.01 < 0.01 36 20 408+50 -L- RT 17 Bank Stabilization < 0.01 < 0.01 10 10 18 454+50 -L- LT 0.04 Roadway Fill < 0.01 18 454+50 -L- LT Riprap Outfall < 0.01 18 454+50 -L- LT < 0.01 13 Bank Stabilization 19 15+00 -Y23RPD- RT Bank Stabilization < 0.01 < 0.01 15 10 20 13 488+30 -L- RT < 0.01 Extend 6' x 5' RCBC 20 488+30 -L- RT Bank Stabilization < 0.01 < 0.01 < 0.01 17 10 20 488+80 -L- LT < 0.01 35 **Energy Dissipator Basin** 488+80 -L- LT 20 Extend 6' x 5' RCBC 0.01 21 17 20 488+80 -L- LT Bank Stabilization < 0.01 < 0.01 12 21 491+50 -L- LT < 0.01 < 0.01 13 10 Bank Stabilization 22 492+50 - 493+70 -L- LT 0.01 158 10 < 0.01 Channel Change 22 494+00 -L- LT < 0.01 11 Extend 48" RCP 22 494+00 -L- LT **Bank Stabilization** < 0.01 15 22 496+00 RT 9 Bank Stabilization < 0.01 < 0.01 10 24 545+30 -L- LT < 0.01 6 JB and 36" RCP 24 545+30 -L- LT Bank Stabilization < 0.01 < 0.01 22 10 TOTALS\*: 0.11 0.04 0.15 0.04 667 152

#### \*Rounded totals are sum of actual impacts

#### NOTES:

At Sites 15, 20, and 22, the existing culvert is not buried, therefore the culvert extension will not be buried. The bottom elevation of the extended culvert will match the elevation of the existing stream bed.

At Site 15, 0.02 ac (65 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

At Site 20, <0.01 ac (34 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

At Site 22, <0.01 ac (24 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

At Site 24, <0.01 ac (22 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

Revised 2018 Feb

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
Revised 7/10/2023

MECKLENBURG

TIP NO. I-5507

WBS NO. 43609.3.2

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	WETLAND AND SURACE WATER IMPACTS SUMMARY											
		WETLAND IMPACTS SURFACE WATER IMPACTS							PACTS			
Site	Station	Structure	Permanent Fill In	Temp. Fill In	Excavation in	Mechanized Clearing	Hand Clearing in	Permanent SW	Temp. SW	Existing Channel Impacts	Existing Channel Impacts	Natural Stream
No.	(From/To)	Size / Type	Wetlands (ac)	Wetlands (ac)	Wetlands (ac)	in Wetlands (ac)	Wetlands (ac)	impacts (ac)	impacts (ac)	Permanent (ft)	-	Design (ft)
25	561+80 - 565+00 -L- LT	Roadway Fill	0.02			0.04						
26	564+00 - 566+20 -L- RT	Roadway Fill				0.01						
27	578+50/579+30 -L-	Bank Stabilization	< 0.01					< 0.01	< 0.01	33	20	
28	586+70/588+00 -L-	Bank Stabilization						< 0.01	< 0.01	37	20	
29	612+00/615+00 -L-	Bank Stabilization						< 0.01	< 0.01	25	30	
30	641+50 -L- LT	Extend 36" RCP with Headwall		*****	*****			< 0.01	< 0.01	13	20	
31	654+50 -L- LT	Extend 42" RCP with Headwall						< 0.01		4		
31	654+50 -L- LT	Lateral Ditch/Stabilization	< 0.01					< 0.01	< 0.01	19	10	
32	658+70 -L- LT	Roadway Fill	0.02									
32	658+70 -L- LT	Bank Stabilization						< 0.01	< 0.01	15	24	
33	680+20 -L- LT	Bank Stabilization		~~~~	~~~~		*****	< 0.01	< 0.01	7	10	~~~~
33	683+40 -L- LT	Bank Stabilization	< 0.01			< 0.01		< 0.01		33		
35	729+90 -L-	Bank Stabilization						< 0.01	< 0.01	50	42	
35	729+90 -L- LT	Class I Riprap	< 0.01			< 0.01						
36	740+50/741+50 -L-	Bank Stabilization		~~~~	·····		m	~~P.P1~~	~~001~	<del>~~17~~</del>	<del>~~25~</del> ~	····
37	746+30/750+00 -L-	Extend 54" RCP with Headwall								4		
37	746+30/750+00 -L-	Bank Stabilization						< 0.01	< 0.01	31	20	
37A	765+00 -L- LT	Bank Stabilization			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~	< 0.01		13	~~~~	~~~~
38	806+50 -L- RT	Bank Stabilization						< 0.01	< 0.01	26	10	
38	808+50 -L- LT	Bank Stabilization						< 0.01	< 0.01	6	20	
39	814+50/816+00 -L- LT	Bank Stabilization						< 0.01	< 0.01	13	10	
40	818+00 -L-	Bank Stabilization						< 0.01	< 0.01	16	24	
TOTAL	S*:		0.05			0.07		0.04	0.03	362	285	

## \*Rounded totals are sum of actual impacts

#### NOTES:

At Sites 31 and 41, the existing culvert is not buried, therefore the culvert extension will not be buried. The bottom elevation of the extended culvert will match the elevation of the existing stream bed.

At Site 31, <0.01 ac (20 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

At Site 41, <0.01 ac (33 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
Revised 7/10/2023
MECKLENBURG
TIP NO. I-5507
WBS NO. 43609.3.2

Revised 2023 May

WBS NO. 43609.3.2 SHEET 114 OF 115

						SURACE W	AIER IMP			VALUE IN	DAOTO	
	1			WE	TLAND IMF	PACTS		,	SURFACE	WATER IM		
Site	Station	Structure	Permanent Fill In	Temp. Fill In	Excavation in	Mechanized Clearing	Hand Clearing in	Permanent SW	Temp. SW	Existing Channel Impacts	Existing Channel Impacts	Natural Stream
No.	(From/To)	Size / Type	Wetlands (ac)	Wetlands (ac)	Wetlands (ac)	in Wetlands (ac)	Wetlands (ac)	impacts (ac)	impacts (ac)	Permanent (ft)	Temp. (ft)	Design (ft)
41	890+50 -L-	Roadway Fill	0.02									
41	890+50 -L-	Extend 36" RCP						< 0.01		52		
41	890+50 -L-	Bank Stabilization						< 0.01	< 0.01	33	42	
42	894+00/895+70 -L-	Roadway Fill	0.03									
42	894+00/895+70 -L- RT	Extend 42" RCP						0.02		105		
42	894+00/895+70 -L- RT	Channel Change						< 0.01	< 0.01	20	12	
42	894+00/895+70 -L- LT	Bank Stabilization						< 0.01		20		
43	18+60 -Y19RPC- RT	Bank Stabilization						< 0.01	< 0.01	30	10	
44	28+50 -Y2-	Extend 3 @ 8'x9' RCBC						< 0.01		26		
44	28+50 -Y2-	Bank Stabilization						< 0.01	< 0.01	28	19	
44	28+50 -Y2-	Culvert Construction Activities							< 0.01			
~~		·····		~~~~	·····	~~~~	·····	~~~~		· · · · · · · · · · · · · · · · · · ·	~~~	· · · · · ·
<del>}</del>	SHEET 1 SUBTOTALS*:		0.35			0.15		0.25	0.17	1976	109	3
}	SHEET 2 SUBTOTALS*:		0.11			0.04		0.15	0.04	667	152	3
<del>\</del>	SHEET 3 SUBTOTALS*:		0.05			0.07		0.04	0.03	362	285	3
سل			<del>min</del>	·····	······	······	·····	min	······	···········	ستشد	<del>uui</del>
-			·····	·····	····	~~~~	~~~	~~~	~~~	~~~	~~~	~~~
TOTAL	_S*:		0.56			0.27		0.50	0.26	3319	629	

## \*Rounded totals are sum of actual impacts

#### NOTES:

At Sites 42 and 44, the existing culvert is not buried, therefore the culvert extension will not be buried. The bottom elevation of the extended culvert will match the elevation of the existing stream bed.

 $At Site 42, < 0.01 \ ac \ (20 \ If) \ of \ temporary \ impacts \ due \ to \ construction \ activities \ are \ included \ within \ the \ bank \ stabilization \ impacts.$ 

 $At Site 44, < 0.01 \ ac \ (28 \ If) \ of \ temporary \ impacts \ due \ to \ construction \ activities \ are \ included \ within \ the \ bank \ stabilization \ impacts.$ 

NC DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

Revised 7/10/2023

MECKLENBURG TIP NO. I-5507

WBS NO. 43609.3.2

SHEET

115

OF

115

Revised 2023 May



ROY COOPER J. ERIC BOYETTE GOVERNOR SECRETARY

December 21, 2022

Ms. Elizabeth Toombs Tribal Historic Preservation Officer **PO Box 948** Talequah, OK 74465

Dear Ms. Toombs,

The North Carolina Department of Transportation is seeking a permit renewal/reissuance from the U.S. Army Corps of Engineers for the subject project, which is currently under construction and the permit will expire prior to the end of construction.

Original project permitting pre-dated our current Tribal Coordination Process. However, these projects were reviewed for Archaeological and Historic Architecture and Landscapes. Those screening results are included with this letter.

The project involves improvements to Interstate 485 (I-485) from I-77 to US 74 (Independence Boulevard), including addition of interstate access to I-485 at Weddington Road (SR 3468), and improvements to the I-485 and East John Street - Old Monroe Road (SR 1009) interchange in Mecklenburg County as projects I-5507, R-0211EC, and U-4714AB. The Federal Highway Administration (FHWA) is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA). Project vicinity maps are attached. The coordinates of this project are approximately 35.125341, -80.917904 to 35.110189, -80.688744 from west to east.

We would appreciate any information you might have that would be helpful in evaluating potential environmental impacts. In accordance with Section 106 of the NHPA, we also request that you inform us of any historic properties of traditional religious or cultural importance that you are aware of that may be affected by the proposed project. Be assured that, in accordance with confidentiality and disclosure stipulations in Section 304 of the NHPA, we will maintain strict confidentiality about certain types of information regarding historic properties. In addition, current and future NCDOT projects will adhere to the current Tribal Coordination Process with the intent of requesting the above information at the pre-determination stage of the project.

Please respond by January 21, 2023 so that your comments can be used in the permitting evaluation of this project.

If you have any questions concerning this project, or would like any additional information, please contact me at ekcheely@ncdot.gov or (919) 707-6108.

Telephone: (919) 707-6000

Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Thank you.

Erin K. Cheely

**Environmental Coordination and Permitting** 

**Enclosures:** 

Project Vicinity Maps Archaeology Screening Letters

Matt Wilkerson, NCDOT Archaeology Team Leader Crystal Amschler, USACE Project Manager



ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

December 21, 2022

Dr. Wenonah Haire Catawba Indian Nation Tribal Historic Preservation Office 1536 Ton Steven Road Rock Hill, SC 29730

Dear Dr. Haire,

The North Carolina Department of Transportation is seeking a permit renewal/ reissuance from the U.S. Army Corps of Engineers for the subject project, which is currently under construction and the permit will expire prior to the end of construction.

Original project permitting pre-dated our current Tribal Coordination Process. However, these projects were reviewed for Archaeological and Historic Architecture and Landscapes. Those screening results are included with this letter.

The project involves improvements to Interstate 485 (I-485) from I-77 to US 74 (Independence Boulevard), including addition of interstate access to I-485 at Weddington Road (SR 3468), and improvements to the I-485 and East John Street – Old Monroe Road (SR 1009) interchange in Mecklenburg County as projects I-5507, R-0211EC, and U-4714AB. The Federal Highway Administration (FHWA) is the lead federal agency for compliance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA). Project vicinity maps are attached. The coordinates of this project are approximately 35.125341, -80.917904 to 35.110189, -80.688744 from west to east.

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Telephone: (919) 707-6000

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Thank you,

Erin K. Cheely

**Environmental Coordination and Permitting** 

Enclosures: Project Vicinity Maps Archaeology Screening Letters

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Matt Wilkerson, NCDOT Archaeology Team Leader Crystal Amschler, USACE Project Manager

## 15-10-0041

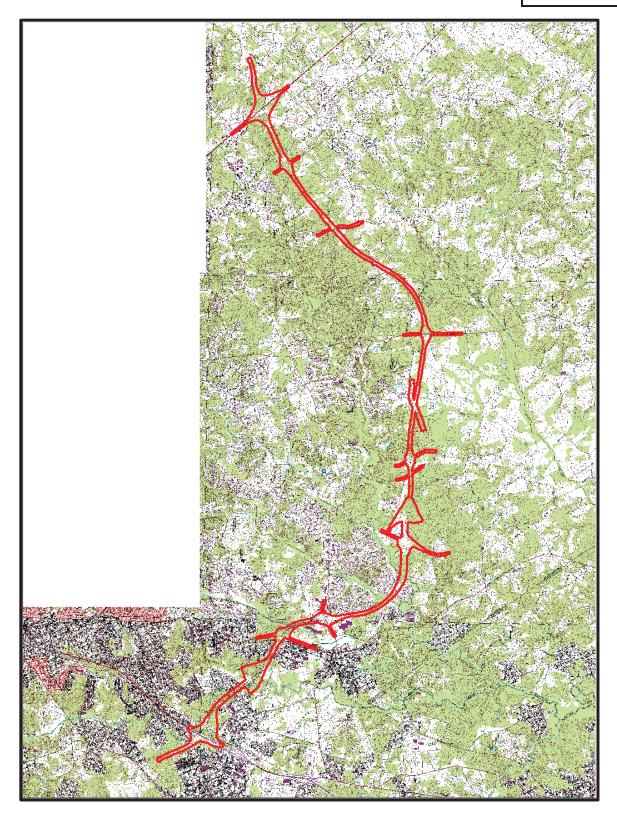


Figure 1: Charlotte West, NC (USGS 1968 [PR80]), Fort Mill, NC (USGS 1968 [PR80]), Weddington, NC (USGS 1968 [PR88]), and Matthews, NC (USGS 1971 [PR80]). [North is to the left]

15-10-0041



## NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.



### PROJECT INFORMATION

Project No:	I-5507		County	v:	Meck	denburg	5
WBS No:	43609.1.1		Docum	nent:	CE		
F.A. No:	NHS-0485(30)		Fundin	ng:	⊠ St	ate	
Federal Permit Requ	iired?	Yes	☐ No	Permit Ty	уре:	Not Lis	ted

**Project Description:** The NCDOT proposes improvements to add one express lane in each direction along I-485 from I-77 to US 74 (Independence Boulevard) in Mecklenburg County. The project length is 17 miles. The purpose of the project is to provide travel time reliability along I-485. This segment of I-485 carries between 65,000 and 112,000 vehicles per day and experiences congestion on a regular basis. The proposed express lanes will, in combination with improvements proposed on Independence Boulevard, give motorists the option of paying a fee for a reliable trip time on I-485 between I-77 and US 74.

#### SUMMARY OF CULTURAL RESOURCES REVIEW

## Brief description of review activities, results of review, and conclusions:

The State Historic Preservation Office/Office of State Archaeology has previously reviewed the proposed project (ER 13-2793), and are aware of no historic resources that would be affected by the project. Therefore, their office had no comment and recommended no further identification work be conducted. However, if the project were to be revised to include new ROW or additional noise wall, further review would be required. Thus, a additional map review and site file search was conducted at the Office of State Archaeology (OSA) on Monday, November 9, 2015. Various archaeological surveys have been conducted as part of the Charlotte Outer Loop (e.g. TIPs# R-211, U-2510A, and R-2123), and as a result of those surveys, numerous archaeological sites have been recorded along the interstate corridor and within one-half (1/2) mile of the proposed project. Digital copies of HPO's maps (Charlotte West, Fort Mill, Weddington, and Matthews Quadrangles) as well as the HPOWEB GIS Service (http://gis.ncdcr.gov/hpoweb/) were last reviewed on Thursday, November 19, 2015. Although various known historic architectural resources are located along the project corridor, intact archaeological deposits associated with such resources are not anticipated within the footprint of the proposed project. In addition, topographic maps, historic maps (NCMaps website), USDA soil survey maps, and aerial photographs were utilized and inspected to gauge environmental factors that may have contributed to historic or prehistoric settlement within the project limits, and to assess the level of modern, slope, agricultural, hydrological, and other erosive-type disturbances within and surrounding the archaeological APE.

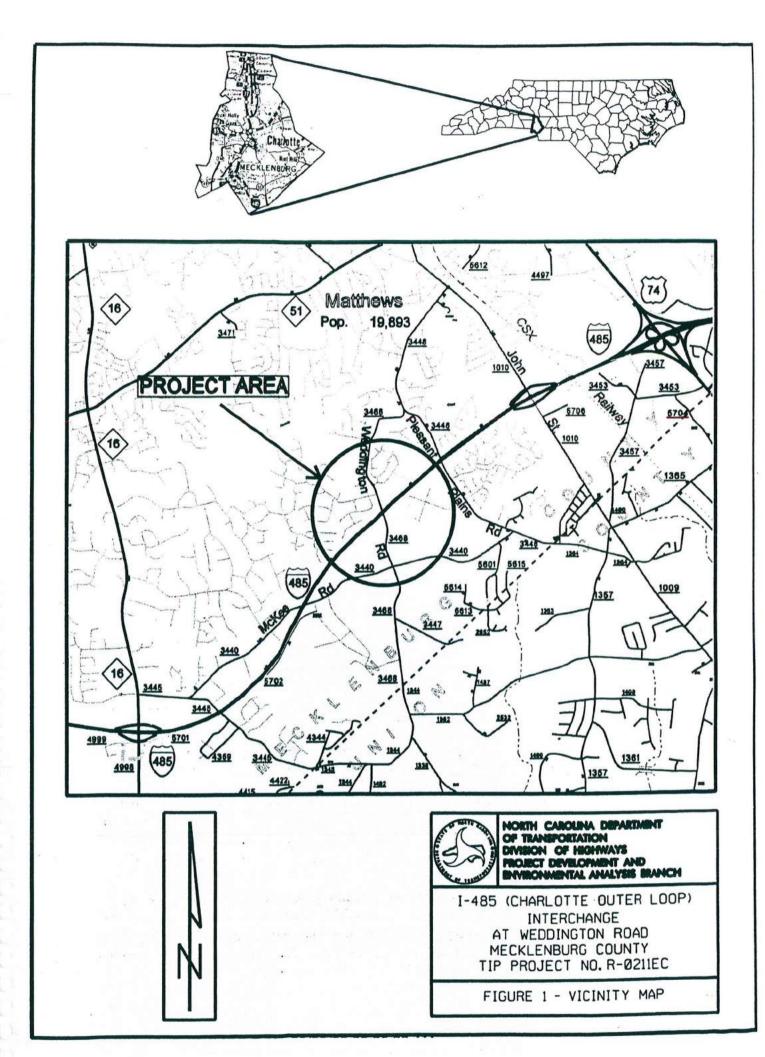
15-10-0041

Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:

Both Federal and State funds will be used as part of this project. The need for a Federal permit was not known at the time of submittal; however, temporary easements will be necessary. At this time, we are in compliance with NC GS 121-12a since there are no eligible (i.e. National Register-listed) archaeological resources located within the project's Study Area that would require our attention. Based on the size of the Study Area, proposed activities may take place outside the NCDOT's existing ROW in certain locations along the highway corridor. From an environmental perspective, the Study Area falls within a highly urbanized area and consists of the gently rolling terrain typical of North Carolina's Southern Piedmont physiographic region. Numerous soil types are present throughout the Study Area, with most soil conditions (urban/disturbed, eroded, slopes, and somewhat poorly drained) not favorable for preserving intact archaeological sites/resources. Preservation of archaeological materials within these soil type areas is likely to be poor. Many of the sections of the Study Area that fall in areas of favorable conditions, however, have already been subjected to archaeological investigations either as part of the original survey for what was then I-77 (TIP# R-211) or for later studies along the interstate (TIP# R-2123) or adjacent roads (TIP# U-2510A). Any remaining areas that could have been potentially surveyed were ruled out after reviewing aerials from 1993, 1998, and 2015, which revealed a significant amount of erosion and development. Other areas may have been previously ruled out by OSA as part of their environmental review for cell towers and wetland locations. Based on the presence of urban/disturbed/ eroded/sloped/poorly drained soils and the fact that a large portion of the Study Area was previously surveyed, it is believed that the current Study Area, as depicted, is unlikely to contain intact and significant archaeological resources. No archaeological survey is required for this project; the No Survey recommendation stated by NC-HPO in their memo of December 5, 2013 remains valid. If design plans change or are made available prior to construction, then additional consultation regarding archaeology will be required. At this time, no further archaeological work is recommended. If archaeological materials are uncovered during project activities, then such resources will be dealt with according to the procedures set forth for "unanticipated discoveries," to include notification of NCDOT's Archaeology Group. Please take note that the Study Area outline bisects the Dinkins Family Cemetery (Site 31MK273\*\*), which has been deemed to possess special significance in terms of Charlotte and Mecklenburg County history. Thus, the Dinkins Family Cemetery should be avoided; all project activities should not take place within the vicinity of the cemetery (to include, but not be limited to, the storage of materials and/or equipment and vehicles).

See attached:	☐ Map(s) ☐ Previous Survey Info ☐ Photocopy of County Survey Notes	Photos Other:	Correspondence
FINDING BY	NCDOT ARCHAEOLOGIST		
NO ARCHAEC	DLOGY SURVEY REQUIRED		
Ta	ul 1 Mohler		November 19, 2015
NCDOT ARCI	HAEOLOGIST II		Date

SUPPORT DOCUMENTATION



001





## North Carolina Department of Cultural Resources State Historic Preservation Office

David L. S. Brook, Administrator

Michael F. Easley, Governor Lisbeth C. Evans, Secretary

Division of Archives and History Jeffrey J. Crow, Director

December 28, 2001

MEMORANDUM

10:

William D. Gilmore, Manager

Project Development and Environmental Analysis Branch

NCDOT, Division of Highways

FROM:

David Brook PSECHE RAINE BROOK

SUBJECT:

Review of Scoping Sheets for I-485 (Charlotte Outer Loop) at SR 3468 (Weddington

Road), Federal-Aid Project NHF-117-1(54), TIP No. R-211EC, State Project 8.U670124,

Mecklenburg County, ER 02-7632

We regret that a member of our staff was unable to attend the scoping meeting for the above project on September 25, 2001. Based on the information provided, we recommend an architectural survey of the undertaking's area of potential effect.

Because of the location and topography of the project area, it is unlikely that any archaeological sites which may be eligible for listing in the National Register of Historic Places will be affected by the proposed construction. We, therefore, recommend that no archaeological investigation be conducted in connection with this project.

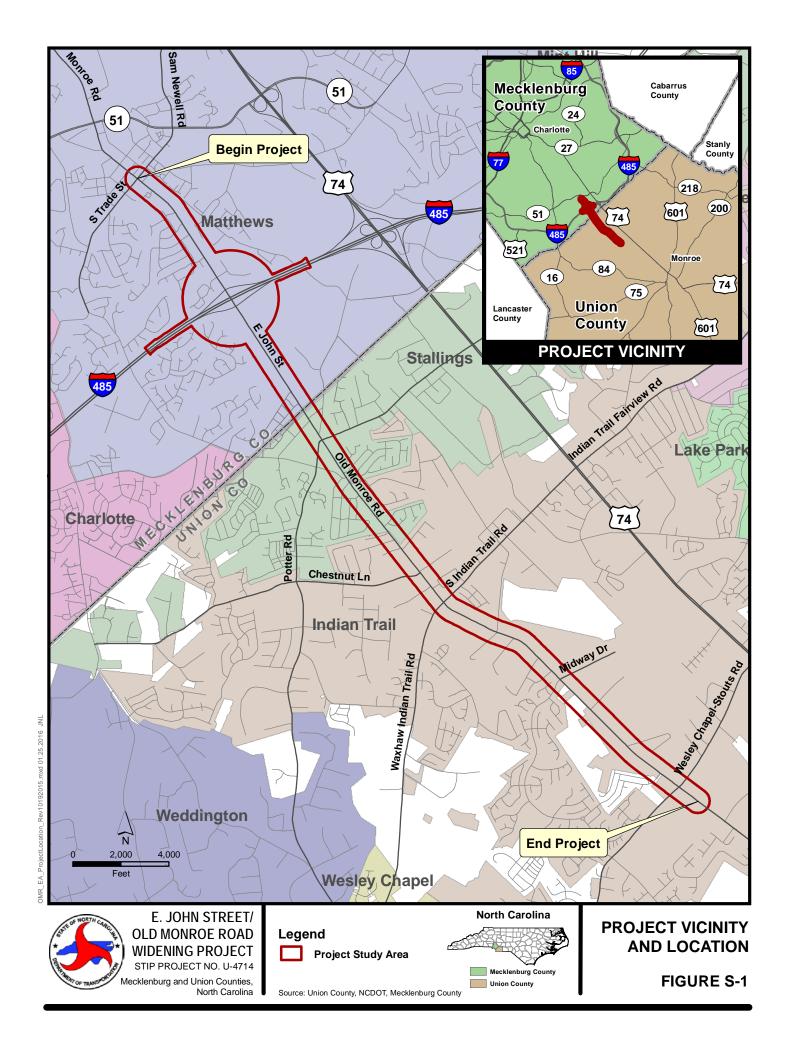
The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Harley, environmental review coordinator, at 919/733-4763. In all future communication concerning this project, please cute the above referenced tracking number.

DEskge

c: Mary Pope Furr, NCDOT

715-150/ \*mary Pope \*733-9794 \*Undré Major





PAT MCCRORY GOVERNOR ANTHONY J. TATA
SECRETARY

August 5, 2014

Ramona Bartos, Administrator State Historic Preservation Office Deputy State Historic Preservation Officer 4617 Mail Service Center Raleigh, NC 27699-4617

RE:

John Street/Old Monroe Road Widening, Mecklenburg and Union Counties, TIP# U-4714, ER 13-

0879

Ms. Bartos,

Thank you for your correspondence of May 17, 2013 regarding the above-mentioned project. In response to comments provided by the Office of State Archaeology (OSA), consultation was held on Tuesday, August 5, 2014, between Paul J. Mohler (NCDOT Archaeologist) and John Mintz (OSA) to review and discuss preliminary design plans for the widening of SR 1009 (John Street/Old Monroe Road) from its intersection with Freemont Street in the Town of Matthews, Mecklenburg County, to its intersection with SR 1377 (Wesley Chapel/Stouts Road) in Union County.

Based on the mapping provided at this meeting as well as a thorough review of soil/landscape conditions, current commercial and residential development, previous archaeological survey results, and the nature and extent of the proposed project, it was determined that the project corridor, as depicted, is unlikely to contain intact and significant archaeological resources. Therefore, OSA does not recommend an archaeological survey be conducted for this project. However, if design plans change, then additional consultation regarding archaeology will be required.

Thank you for your assistance in this matter. If you have any questions concerning this project, please contact me at (919) 707-6089 or Mr. Paul J. Mohler, NCDOT Archaeologist, at (919) 707-6080.

Sincerely,

Matt Wilkerson

Archaeology Supervisor Human Environment Section

MTW/pjm

cc:

MAILING ADDRESS:

Elmo Vance, PDEA

Paul J. Mohler, Archaeology