



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

October 17, 2019

Asheville Regulatory Field Office  
US Army Corps of Engineers  
151 Patton Avenue, Room 208  
Asheville, North Carolina 28801-5006

ATTN: Ms. Nicholle Braspenickx  
NCDOT Coordinator

Subject: **Request for Modification to Individual Section 404 and Section 401 Water Quality Certification** for the Winston-Salem Northern Beltway from US 52 to US 311 (New Walkertown Road), Forsyth County. Federal Aid Project No. NHP-0074(213), TIP Nos. U-2579D, E& F. Division 9.

References: Section 404 and 401 Individual Permit Application requested October 2, 2017 for Winston Salem Northern Beltway from I-40 to US 52 (R-2247B Phase 2, CA, CB, CD, D, EA, EB, and EC), from US 52 to US 311 north (U-2579C Phase 2, D, E, and F) and from I-40 Business to US 311 South (U-2579AA and AB)

- Modification Application for U-2579D, E, F / U-2579C Phase 2, dated January 7, 2019.
- Modification Application for R-2247EB, dated June 26, 2019.

Section 404 Individual Permit issued for Winston Salem Northern Beltway from I-40 to US 52 (R-2247B Phase 2, CA, CB, CD, D, EA, EB, and EC), from US 52 to US 311 north (U-2579C Phase 2, D, E, and F) and from I-40 Business to US 311 South (U-2579AA and AB) January 22, 2018 (SAW-2017-02112)

- Permit Modification for U-2579D, E, F / U-2579C Phase 2, dated March 4, 2019.
- Permit Modification for R-2247EB, dated August 13, 2019.

Section 401 Water Quality Certification issued November 14, 2017 (WQC004131); for Winston Salem Northern Beltway from I-40 to US 52 (R-2247B Phase 2, CA, CB, CD, D, EA, EB, and EC), from US 52 to US 311 north (U-2579C Phase 2, D, E, and F) and from I-40 Business to US 311 South (U-2579AA and AB); Revision 1 dated November 27, 2017, Revision 2 dated December 21, 2017, Revision 3 dated February 7, 2019, Revision 4 dated August 13, 2019.

*Mailing Address:*  
NC DEPARTMENT OF TRANSPORTATION  
DIVISION 9  
375 SILAS CREEK PARKWAY  
WINSTON SALEM, NC 27127

*Telephone:* (336) 896-2330  
*Fax:* (336) 703-6693  
*Customer Service:* 1-877-368-4968

*Location:*  
375 SILAS CREEK PARKWAY  
WINSTON SALEM, NC 27127

*Website:* [www.ncdot.gov](http://www.ncdot.gov)

Dear Madam:

The North Carolina Department of Transportation (NCDOT) requests modification to the existing Section 404 Individual Permit and Section 401 Water Quality Certification for the proposed Winston Salem Northern Beltway from US 52 to US 311 (TIP U-2759 D, E, and F) in Forsyth County. This project is currently under construction.

This modification will result in no changes to wetland impacts previous documented. It will result in 19 linear feet of additional permanent stream fill impacts, 13 linear feet of reduction in temporary stream impacts, and 7 linear feet of additional bank stabilization impacts. The total project impacts for U-2579D, E, and F include 12,080 linear feet of permanent stream impacts of which 405 linear feet is bank stabilization, 595 linear feet of temporary stream impacts, 1.66 acres of permanent wetland impacts, no temporary wetland impacts, and no hand clearing in wetlands.

Please see the enclosed revised permit drawings and updated impact summary sheets which reflect the changes in impacts.

### **Permit Impact Site Modifications**

Site 23 (Sheet 23): Site 23 impacts changed as a result of the final design of the 6x6 RCBC in which the culvert length was increased from preliminary plans. When reviewed with the previous modification the new culvert length resulted an increase in permanent impacts by 15 linear feet for the RCBC and by 2 linear feet for bank stabilization. The temporary impact at this site was reduced by 11 linear feet. There will be a total of 363 linear feet of impact due to the RCBC, 28 linear feet of bank stabilization, and 10 linear feet of temporary stream impact at Site 23.

Site 26 (Sheets 24 and 25): Site 26 impacts changed as a result of the final design of the 6x6 RCBC in which the culvert length was increased from preliminary plans. When reviewed with the previous modification the new culvert length resulted an increase in permanent impacts by 4 linear feet for the RCBC and by 5 linear feet for bank stabilization. The temporary impact at this site was reduced by 2 linear feet. There will be a total of 523 linear feet of impact due to the RCBC, 29 linear feet of bank stabilization, and 18 linear feet of temporary stream impact at Site 26.

This permit modification package also includes revised drawings for Permit Impact Sites 5, 7, 13, 15, 17, 19, and 27. These sites have changed slightly due to the final culvert design as illustrated on the attached plan sheets; however, the impacts at these sites did not change from the previous modification referenced above. The culvert length increased by no more than 5 feet and decreased in length by no more than 20 feet at an individual site. The slight changes in length were captured in the previous plans as permanent impacts due to the inlet or outlet channel protection. The attached plans sheets have been provided to replace the previous plan sheets.

**Compensatory Mitigation**

The increase in permanent stream impacts requires compensatory mitigation. The mitigable impact increase is 19 linear feet at Sites 23 and 26 which are located within the Section D of the project. Table 1 below updates the Summary of Stream Impacts by TIP to reflect the 19 linear feet of additional mitigable impact within Section D.

**Table 1. Summary of Stream Impacts by Project TIP Requiring Mitigation**

Section	Design Stage	Stream Impacts Requiring Mitigation from Phased IP Application (lf)	Final Stream Impacts Requiring Mitigation (lf) <sup>1</sup>	Difference in Impacts Requiring Mitigation (lf)
R-2247EC	Permitted	814	814	0
R-2247CD	Permitted	611	611	0
U-2579C Phase 2 (U-2579D, E & F Sites 29 & 30)	Permitted	3,409	3,178	- 231
U-2579AA	Preliminary	3,019	3,019	0
U-2579AB	Preliminary	10,351	10,351	0
U-2579D	Permitted	5,043	4,321 *	- 722
U-2579E	Permitted	4,864	4,817	- 47
U-2579F	Permitted	2,544	2,502	- 42
R-2247EA	Preliminary	0	774 <sup>+</sup>	774 <sup>+</sup>
R-2247EB	Final	5,819 <sup>+</sup>	5,323 <sup>+</sup>	- 496
<b>Totals</b>		36,474 <sup>+</sup>	35,710 <sup>2</sup>	- 764

<sup>1</sup> Final impacts for each section in the preliminary design stage will be updated with future modifications.

<sup>2</sup> Assumes the preliminary impacts for future sections.

<sup>+</sup> Revised, per Permit Modification for R-2247EB [NCDOT's R-2247EB Modification application, dated June 26, 2019; USACE's R-2247EB Phased Modification (Action ID SAW-2017-02112), dated August 13, 2019].

\*Totals for U-2579D have increased by 19 linear feet due to final culvert design.

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Amy Euliss at either aeuliss@ncdot.gov or (336) 747-7800.

Sincerely,  
DocuSigned by:

*Brett Abernathy*

Brett Abernathy, P.E., P.L.S.

NCDOT Division 9 Project Development Engineer

cc:

- Amy Euliss, Division Environmental Officer
- Marcus Kiser, PE, Resident Engineer
- Phil Suggs, Roadside Environmental
- Beth Harmon, Division of Mitigation Services
- Amy Chapman, NCDENR-DWR
- Dave Wanucha, NCDENR-DWR

**USACE Wilmington District  
Compensatory Mitigation Responsibility Transfer Form, Page 2**

**Compensatory Mitigation Responsibility Transfer Form**

**Permittee:** North Carolina Department of Transportation  
**Project Name:** U 2579D, E, F Winston-Salem Northern Beltway

**Action ID:** SAW No. 2017-02112  
**County:** Forsyth

**Instructions to Permittee:** The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Division of Mitigation Services (NCDMS), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that to the U.S. Army Corps of Engineers (USACE) Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate mitigation Sponsors.

**Instructions to Sponsor:** The Sponsor must verify that the mitigation requirements (credits) shown below are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether or not they have received payment from the Permittee. Once the form is signed, the Sponsor must update the bank ledger and provide a copy of the signed form and the updated bank ledger to the Permittee, the USACE Project Manager, and the Wilmington District Mitigation Office (see contact information on page 2). The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

**Permitted Impacts and Compensatory Mitigation Requirements**

**Permitted Impacts Requiring Mitigation\*:** 8-digit HUC and Basin: 03040101, Yadkin River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
4302 l.f.				0.04 acres		

\*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

**Compensatory Mitigation Requirements:** 8-digit HUC and Basin: 03040101, Yadkin River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
6607 l.f.				0.08 acres		

**Permitted Impacts Requiring Mitigation\*:** 8-digit HUC and Basin: 03010103, Roanoke River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
7319 l.f.				1.05 acres		

\*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

**Compensatory Mitigation Requirements:** 8-digit HUC and Basin: 03010103, Roanoke River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
12492 l.f.				2.10 acres		

**U.S. ARMY CORPS OF ENGINEERS  
Wilmington District**

Mitigation Site Debited: NCDMS

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCDMS, list NCDMS. If the NCDMS acceptance letter identifies a specific site, also list the specific site to be debited).

Permittee: **North Carolina Department of Transportation**

Action ID: SAW No. 2017-02112

Project Name: **U 2579D, E, F Winston-Salem Northern Beltway**

County: Forsyth

*Section to be completed by the Mitigation Sponsor*

**Statement of Mitigation Liability Acceptance:** I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see the table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for NCDMS), as approved by the USACE, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

Mitigation Sponsor Name: \_\_\_\_\_

*NCDOT DMS*

Name of Sponsor's Authorized Representative: \_\_\_\_\_

*Beth Harmon*

*Beth Harmon*

*02/28/2019*

Signature of Sponsor's Authorized Representative

Date of Signature

**Conditions for Transfer of Compensatory Mitigation Credit:**

- Once this document has been signed by the Mitigation Sponsor and the USACE is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the USACE is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. For authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by the Sponsor must be provided to the USACE within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the USACE has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to ensure that the USACE Project Manager (address below) is provided with a signed copy of this form.
- If changes are proposed to the type, amount, or location of mitigation after this form has been signed and returned to the USACE, the Sponsor must obtain case-by-case approval from the USACE Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the USACE administrative records for both the permit and the Bank/ILF Instrument.

**Comments/Additional Conditions:** This is for U 2579 D, E & F Winston-Salem Northern Beltway only.

This form is not valid unless signed below by the USACE Project Manager and by the Mitigation Sponsor on Page 1. **Once signed, the Sponsor should provide copies of this form along with an updated bank ledger to: 1) the Permittee, 2) the USACE Project Manager at the address below, and 3) the Wilmington District Mitigation Office, Attn: Todd Tugwell, 3331 Heritage**

**U.S. ARMY CORPS OF ENGINEERS  
Wilmington District**

*Trade Drive, Suite 105, Wake Forest, NC 27587 (email: [todd.tugwell@usace.army.mil](mailto:todd.tugwell@usace.army.mil)).* Questions regarding this form or any of the permit conditions may be directed to the USACE Project Manager below.

**USACE Project Manager:** Nicholle Braspennickx  
**USACE Field Office:** US Army Corps of Engineers  
c/o Asheville Regulatory Office  
151 Patton Avenue, Room 208  
Asheville, NC 28801-5006

**Email:** [Nicholle.M.Braspennickx@usace.army.mil](mailto:Nicholle.M.Braspennickx@usace.army.mil)

BRASPENICKX.NICHOLLE.M.1229304590  
9304590

Digitally signed by BRASPENICKX.NICHOLLE.M.1229304590  
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA,  
cn=BRASPENICKX.NICHOLLE.M.1229304590  
Date: 2019.02.27 11:55:54 -0500

**USACE Project Manager Signature**

**February 27, 2019**

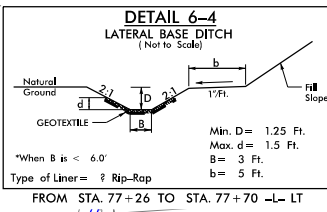
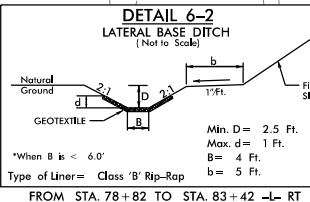
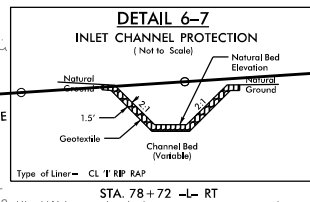
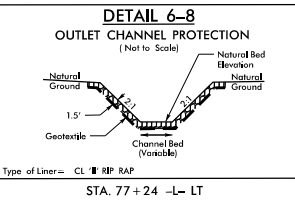
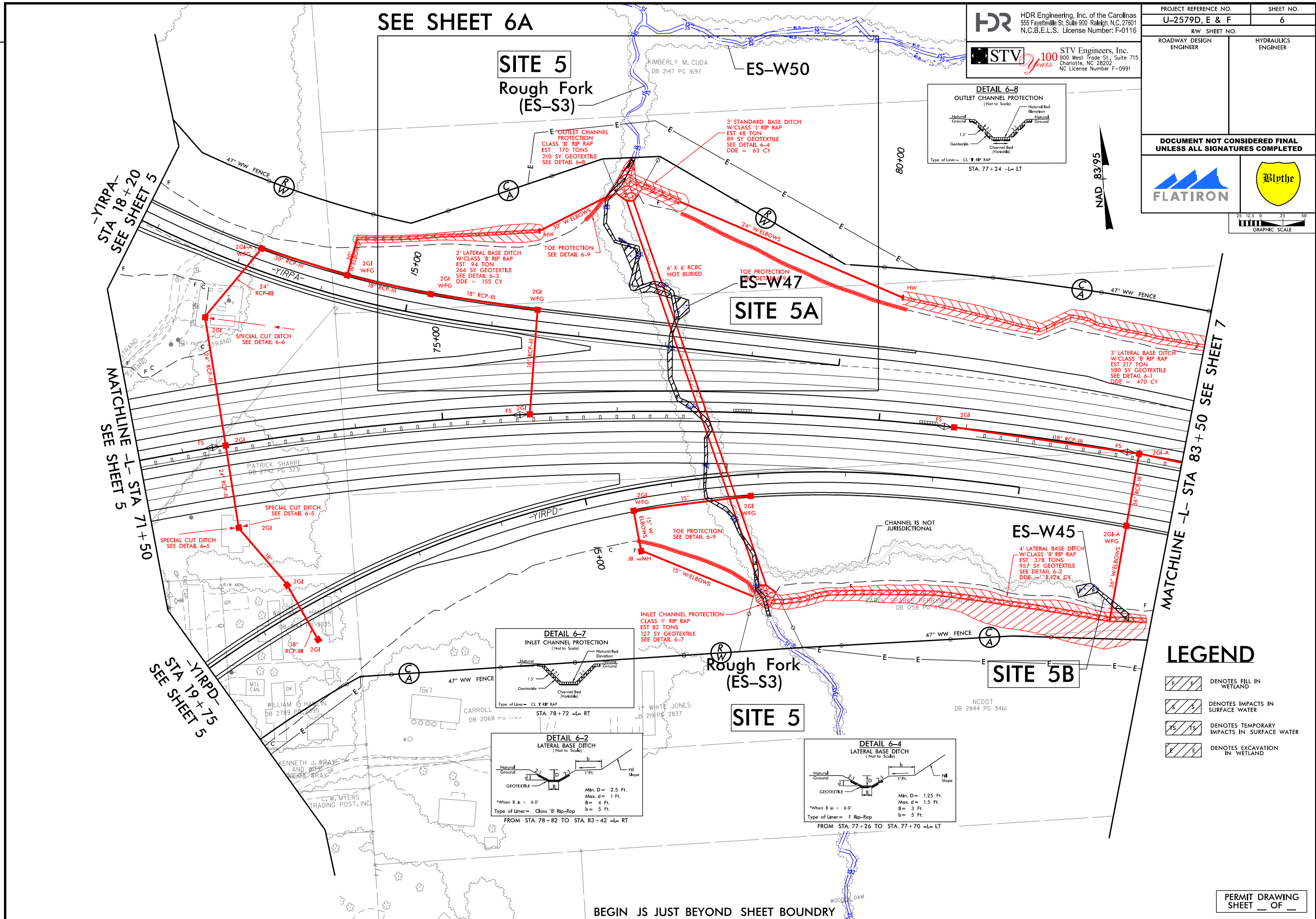
**Date of Signature**

Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at <http://ribits.usace.army.mil>.

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REVISIONS

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ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<p><b>HDR</b> HDR Engineering, Inc. of the Carolinas          555 Fayetteville St, Suite 900 Raleigh, N.C. 27601          N.C.B.E.L.S. License Number: F-0116</p> <p><b>STV</b> 100 Years STV Engineers, Inc.          900 West Trade St., Suite 715          Charlotte, NC 28202          NC License Number F-0991</p>			
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<b>FLATIRON</b>		<b>Blythe</b>	
<p>GRAPHIC SCALE</p>			



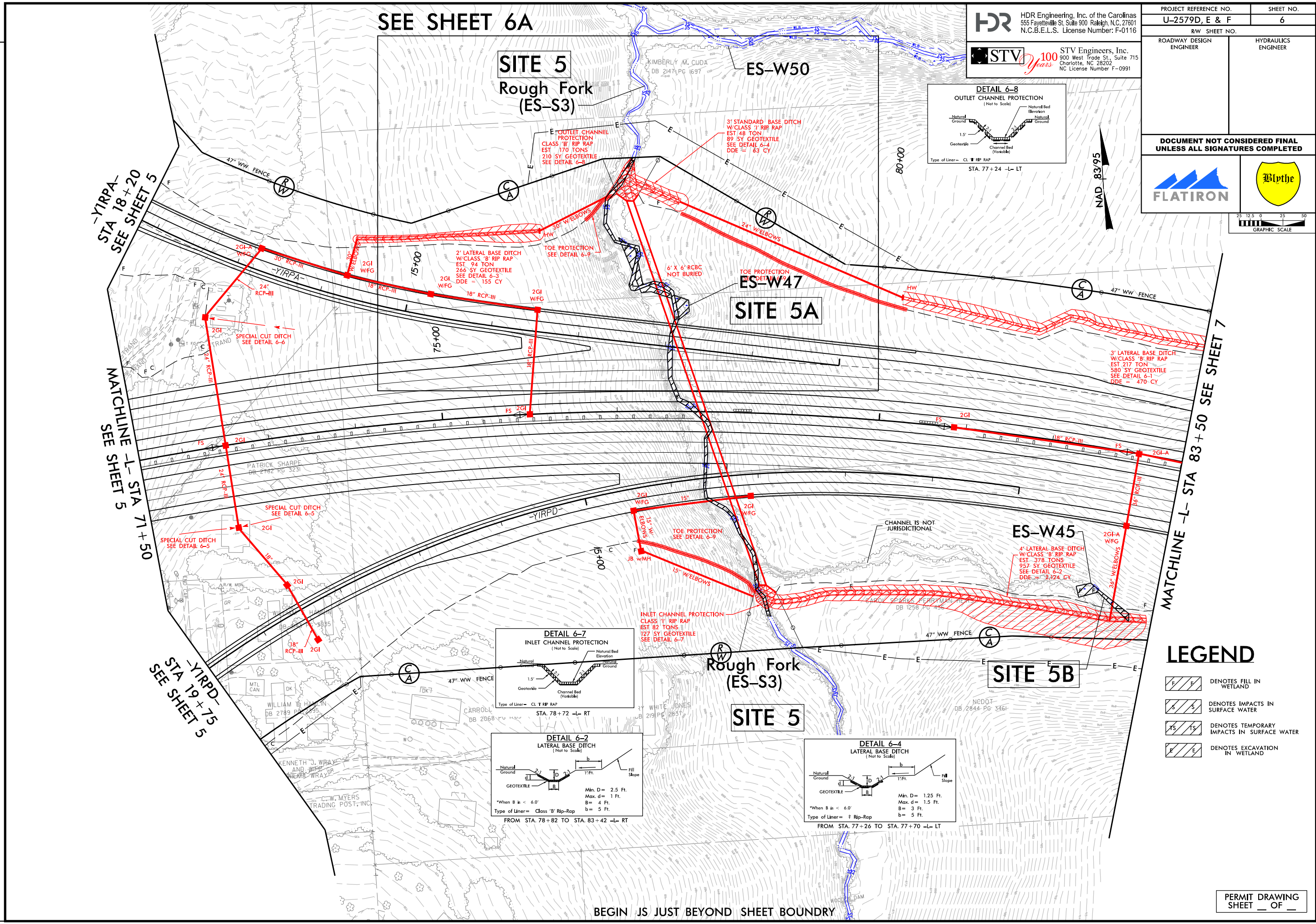
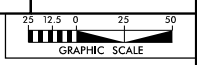
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- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES EXCAVATION IN WETLAND

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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
STV Engineers, Inc. 900 West Trade St., Suite 715 Charlotte, NC 28202 NC License Number F-0991	

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**LEGEND**

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	DENOTES EXCAVATION IN WETLAND

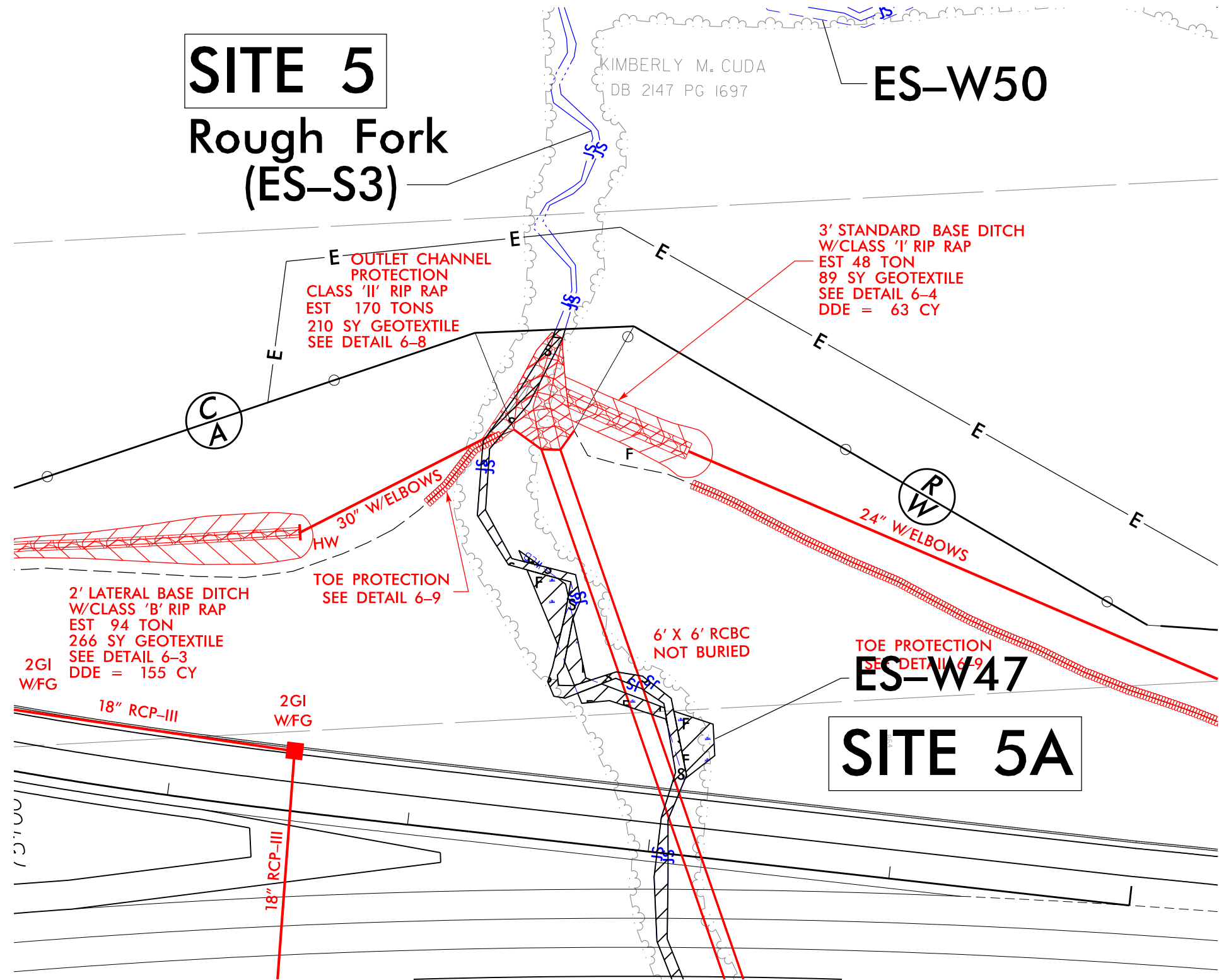
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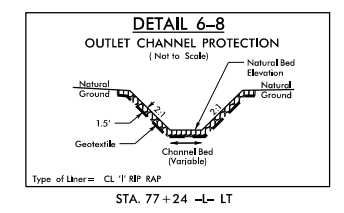
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**ES-W50**



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**PERMIT DRAWING**  
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REVISIONS

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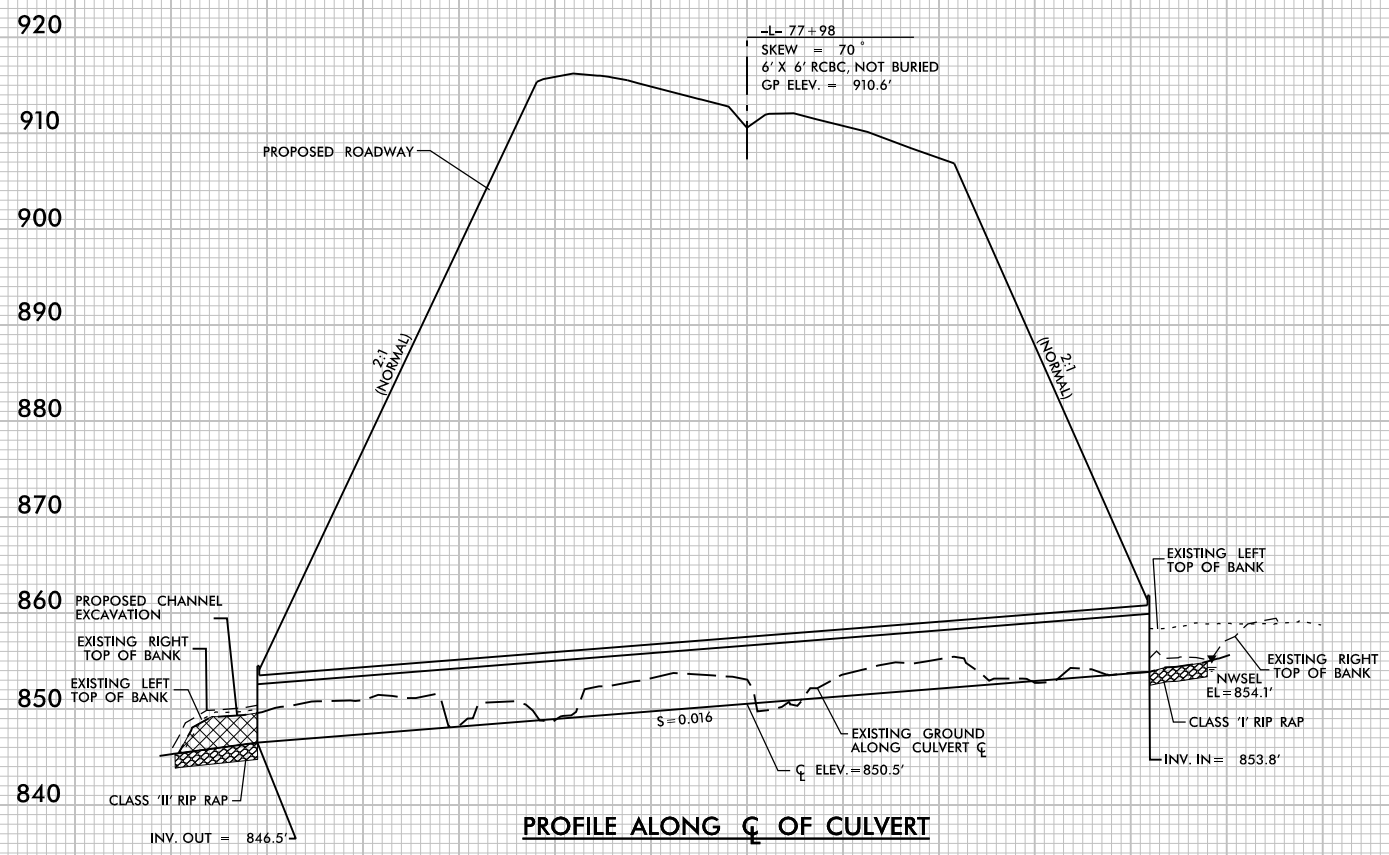
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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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 1" = 100' HORIZONTAL  
 1" = 20' VERTICAL


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### SITE 5



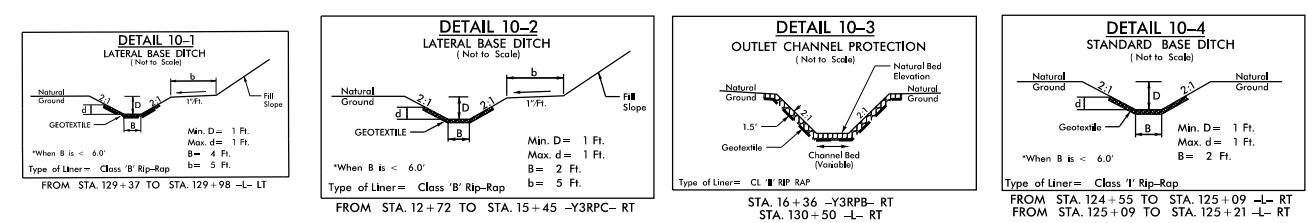
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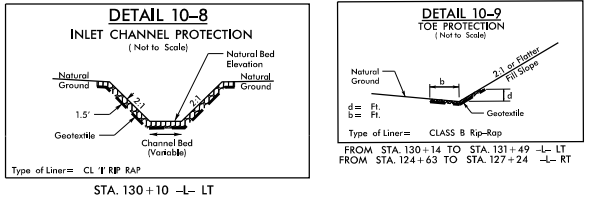
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N.C.B.E.L.S. License Number: F-0116

**STV** STV Engineers, Inc.  
900 West Trade St, Suite 715  
Charlotte, NC 28202  
NC License Number F-0991



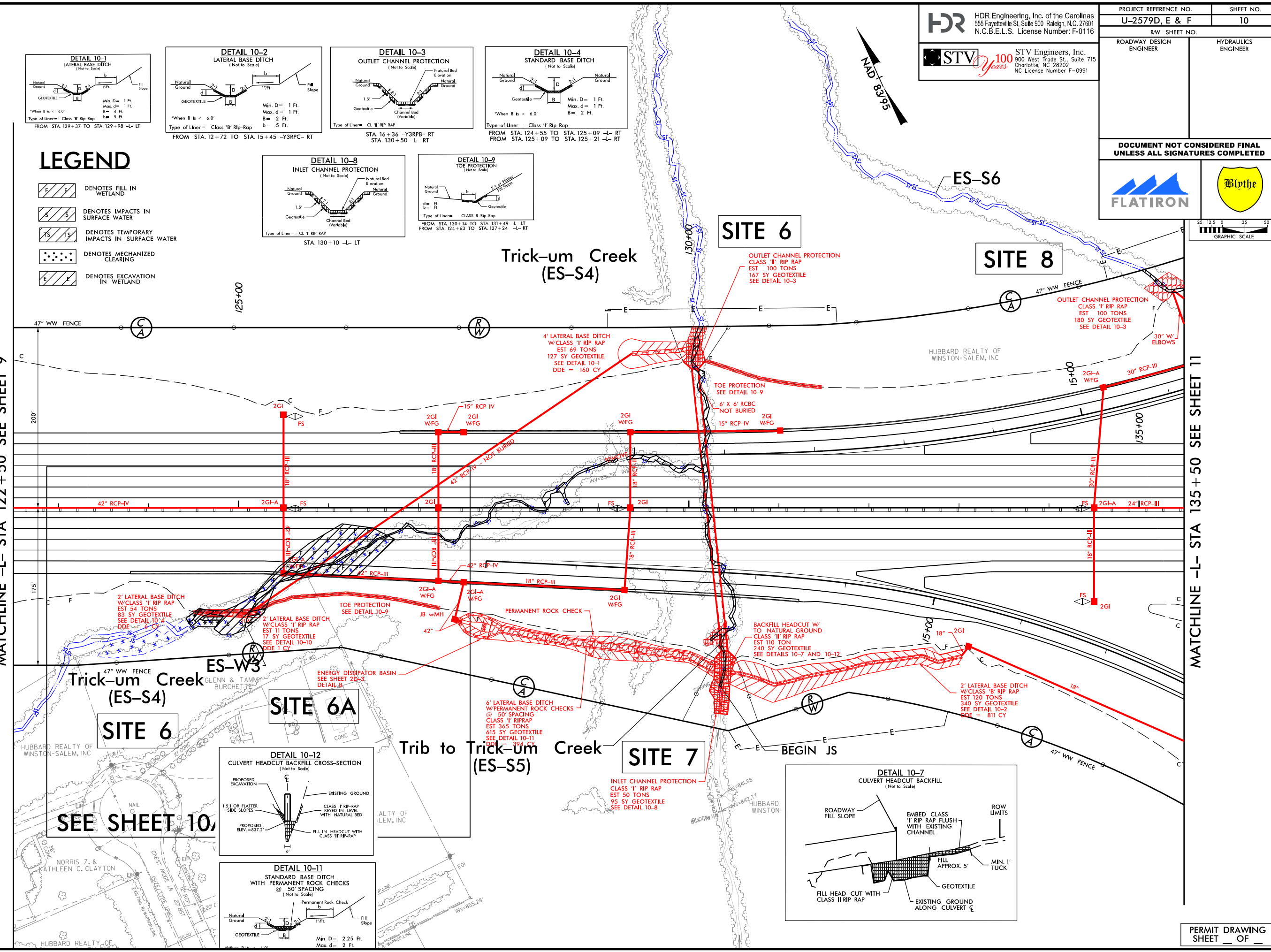
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- ☐ DENOTES IMPACTS IN SURFACE WATER
- ☐ DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- ☐ DENOTES MECHANIZED CLEARING
- ☐ DENOTES EXCAVATION IN WETLAND



MATCHLINE -L- STA 122 + 50 SEE SHEET 9

MATCHLINE -L- STA 135 + 50 SEE SHEET 11

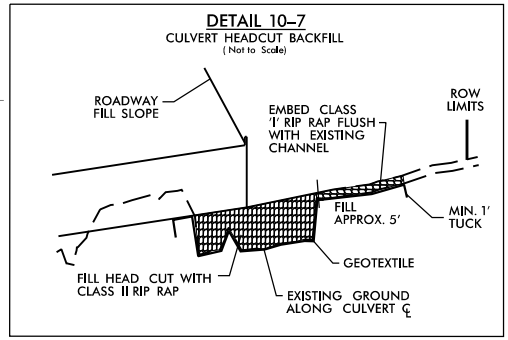
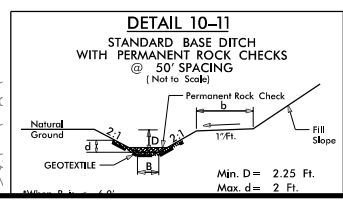
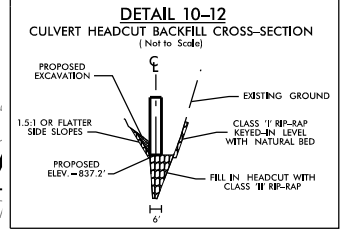


**SITE 6**

**SITE 6A**

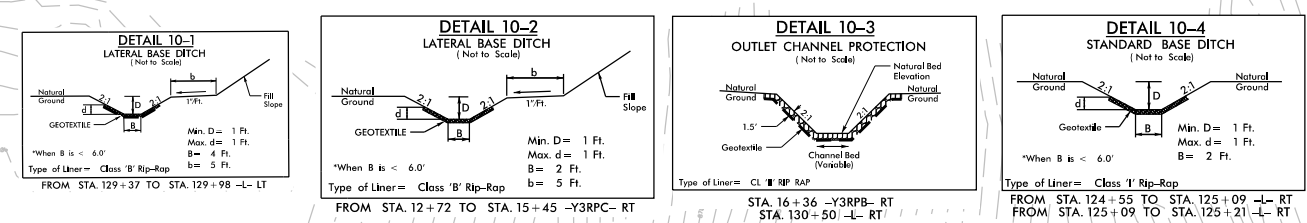
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**SITE 8**



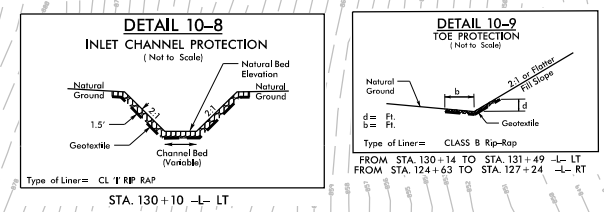
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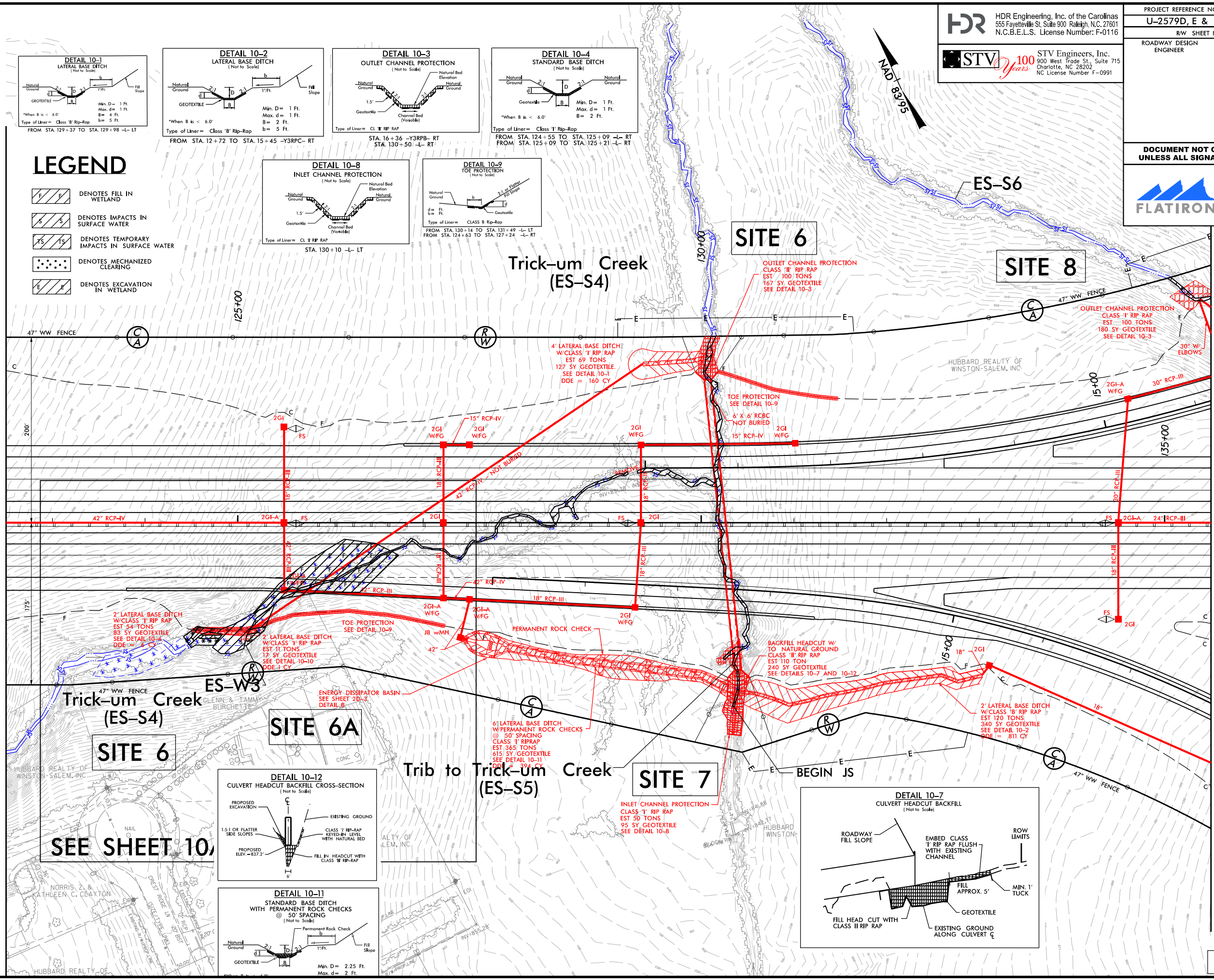
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- DENOTES FILL IN WETLAND
- DENOTES IMPACTS IN SURFACE WATER
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- DENOTES MECHANIZED CLEARING
- DENOTES EXCAVATION IN WETLAND



MATCHLINE -L- STA 122 + 50 SEE SHEET 9

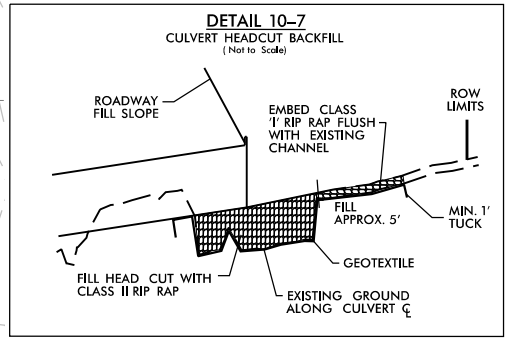
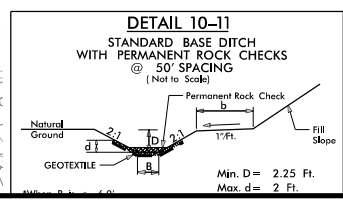
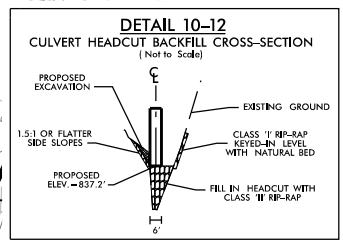
MATCHLINE -L- STA 135 + 50 SEE SHEET 11



**SITE 6**  
 SEE SHEET 10

**SITE 6A**

**SITE 7**



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 USER: CMYERS  
 DATE: 9/16/2019  
 TIME: 10:49:48 AM  
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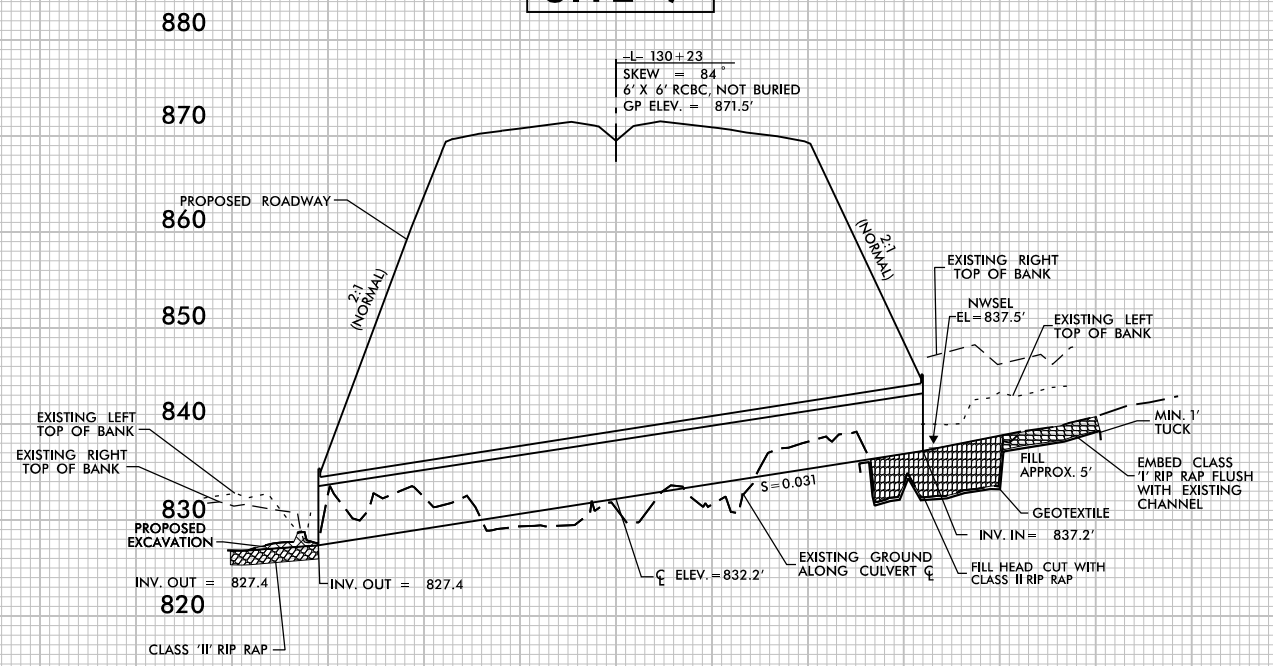
PROJECT REFERENCE NO. <i>U-2579D,E &amp; F</i>	SHEET NO.
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

100 50 0 50 100

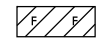
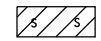
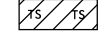
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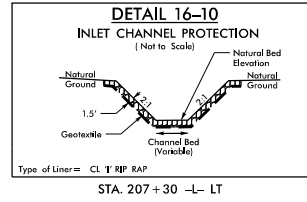
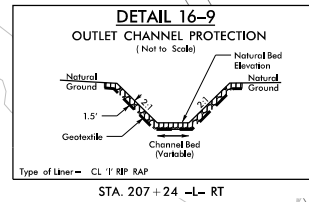
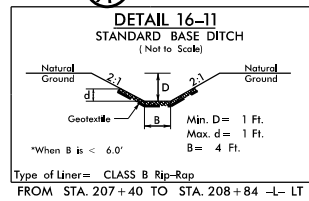
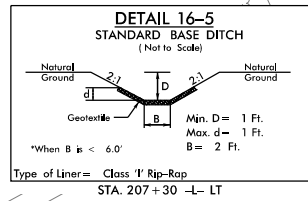
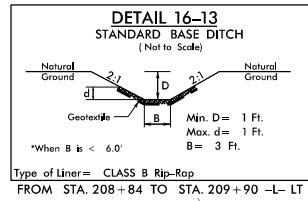
### SITE 7



PROFILE ALONG C OF CULVERT

# LEGEND

-  DENOTES FILL IN WETLAND
-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER

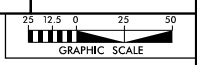


**HDR** HDR Engineering, Inc. of the Carolinas  
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601  
N.C.B.E.L.S. License Number: F-0116

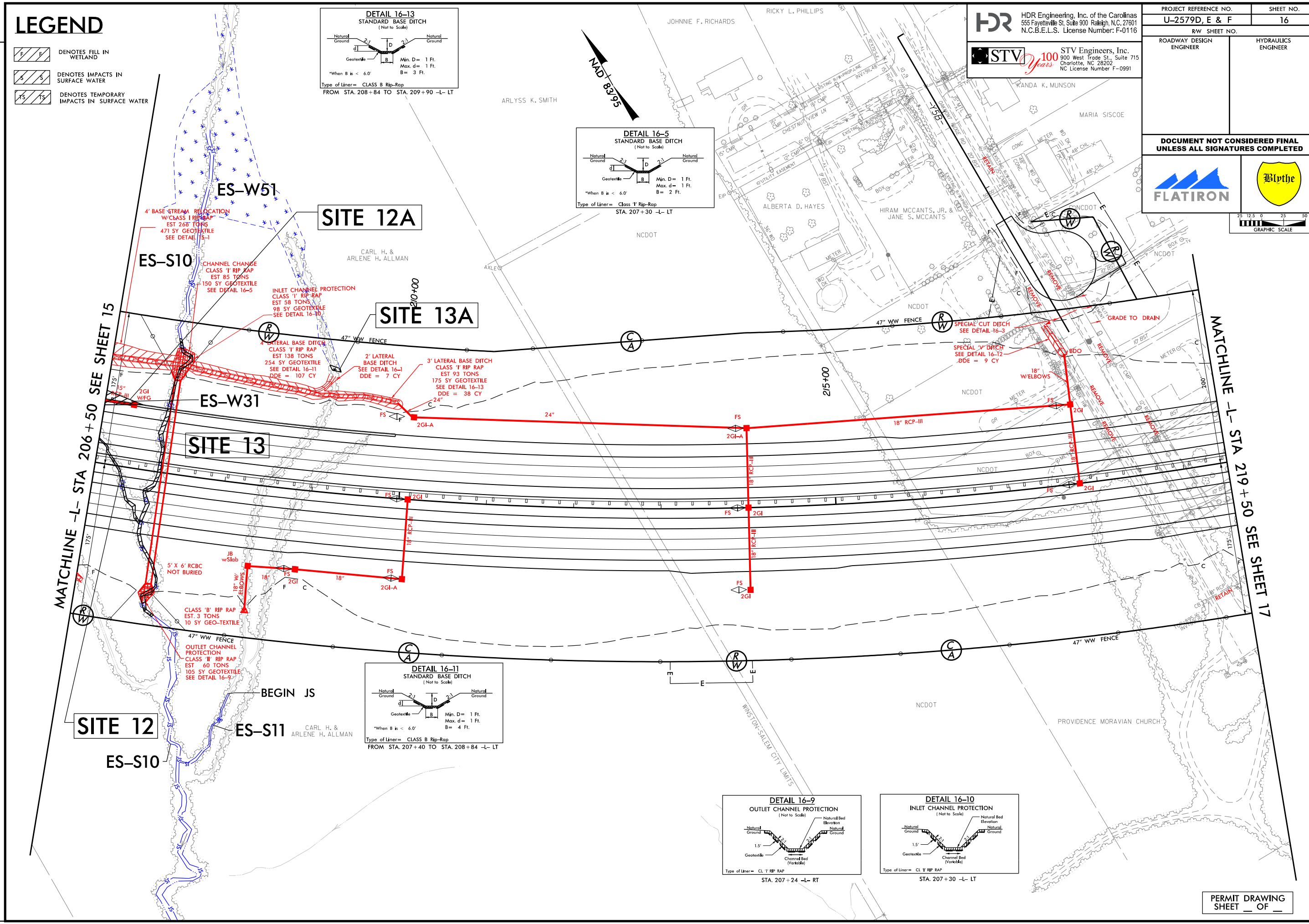
**STV** 100 Years STV Engineers, Inc.  
800 West Trade St., Suite 715  
Charlotte, NC 28202  
NC License Number F-0991

PROJECT REFERENCE NO. <b>U-2579D, E &amp; F</b>	SHEET NO. <b>16</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

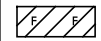
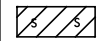
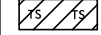


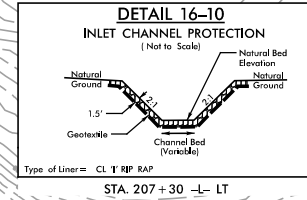
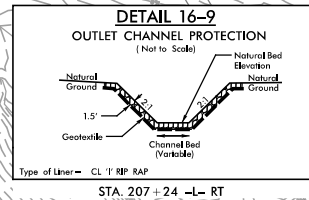
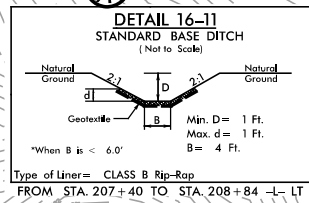
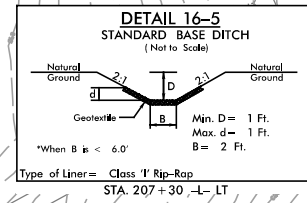
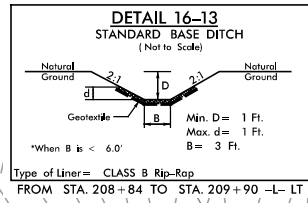
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PERMIT DRAWING  
SHEET \_\_\_ OF \_\_\_

# LEGEND

-  DENOTES FILL IN WETLAND
-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER

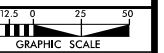


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NC License Number F-0991

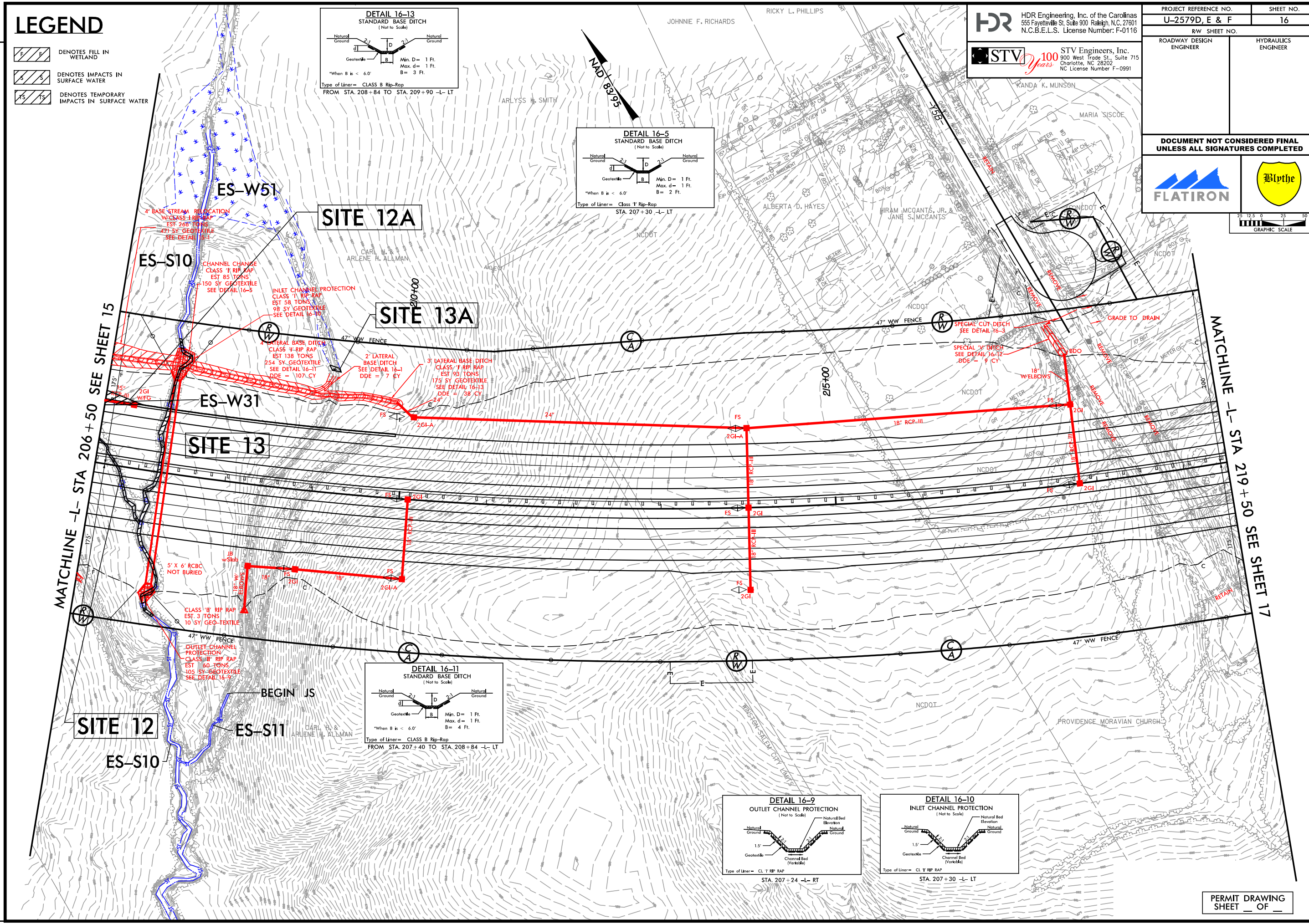
PROJECT REFERENCE NO. <b>U-2579D, E &amp; F</b>	SHEET NO. <b>16</b>
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

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



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 USER: CMYERS  
 DATE: 9/18/2019  
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REVISIONS



PERMIT DRAWING SHEET \_\_\_ OF \_\_\_

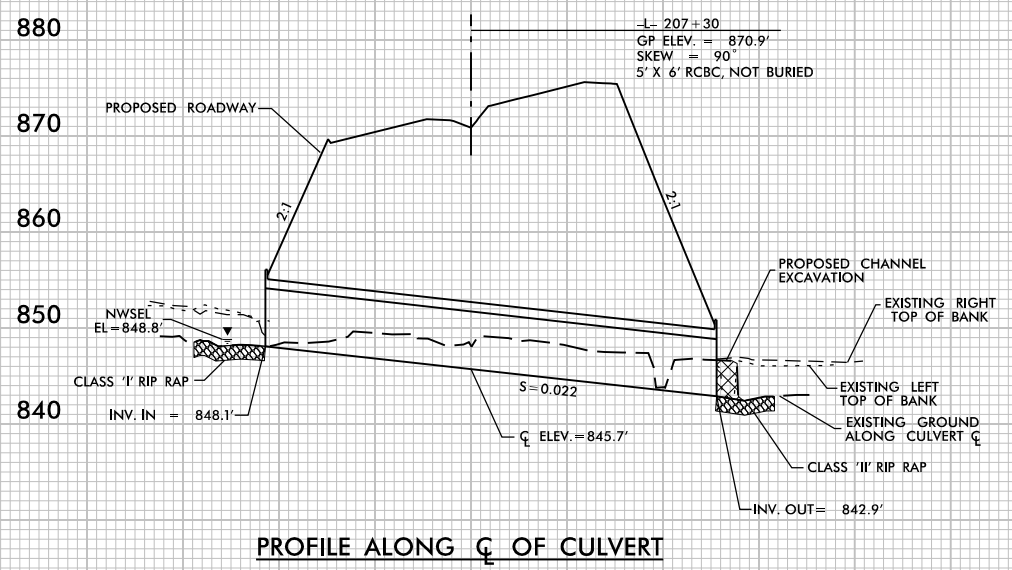
PROJECT REFERENCE NO. <i>U-2579D,E &amp; F</i>	SHEET NO.
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

SCALE:  
1" = 50' HORIZONTAL  
1" = 10' VERTICAL

100 50 0 50 100

### SITE 13



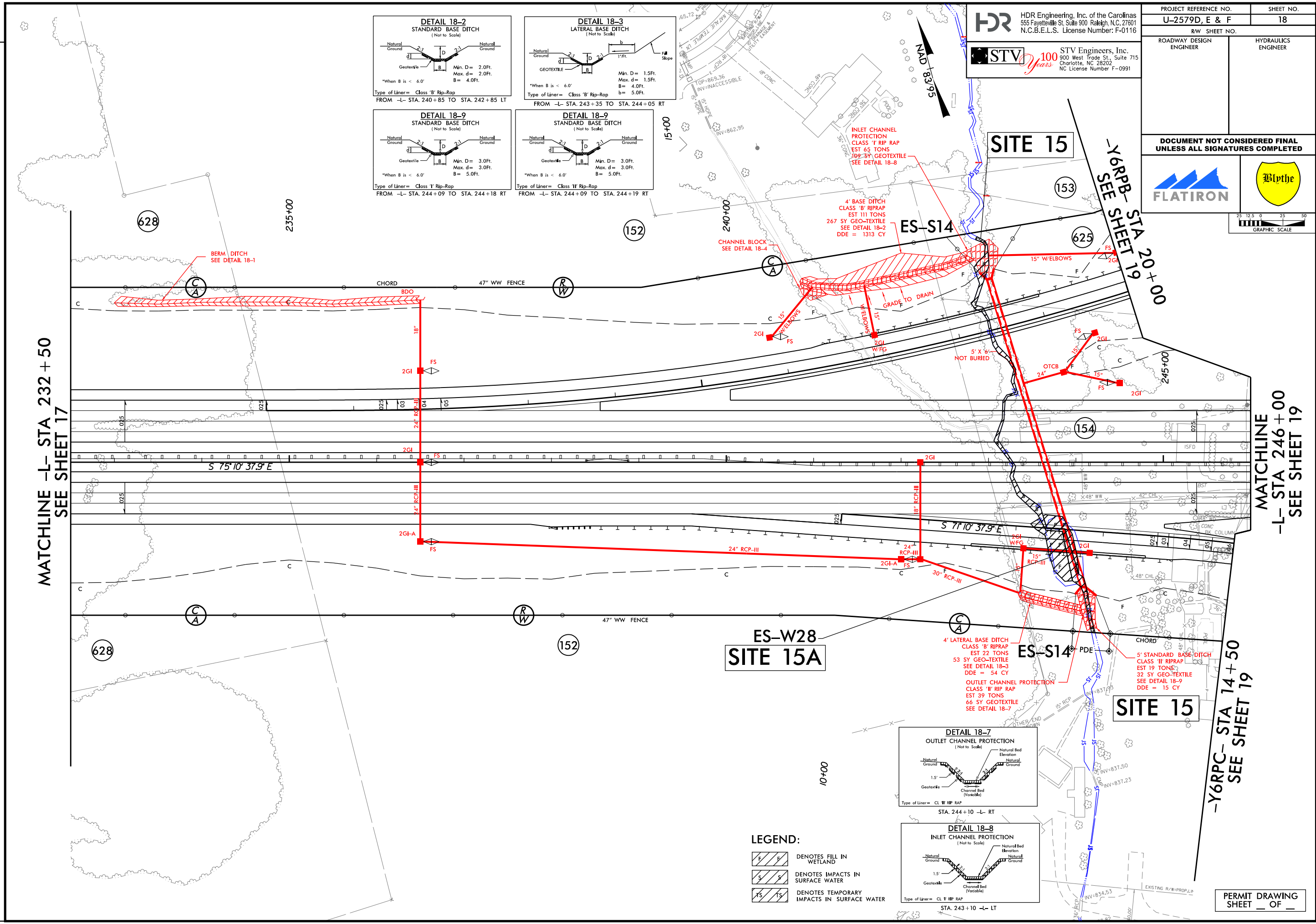


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PROJECT REFERENCE NO. <b>U-2579D, E &amp; F</b>	SHEET NO. <b>18</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
GRAPHIC SCALE 0 12.5 25 50	



MATCHLINE -L- STA 232 + 50  
SEE SHEET 17

MATCHLINE  
-L- STA 246 + 00  
SEE SHEET 19

-Y6RPC- STA 14 + 50  
SEE SHEET 19

**LEGEND:**

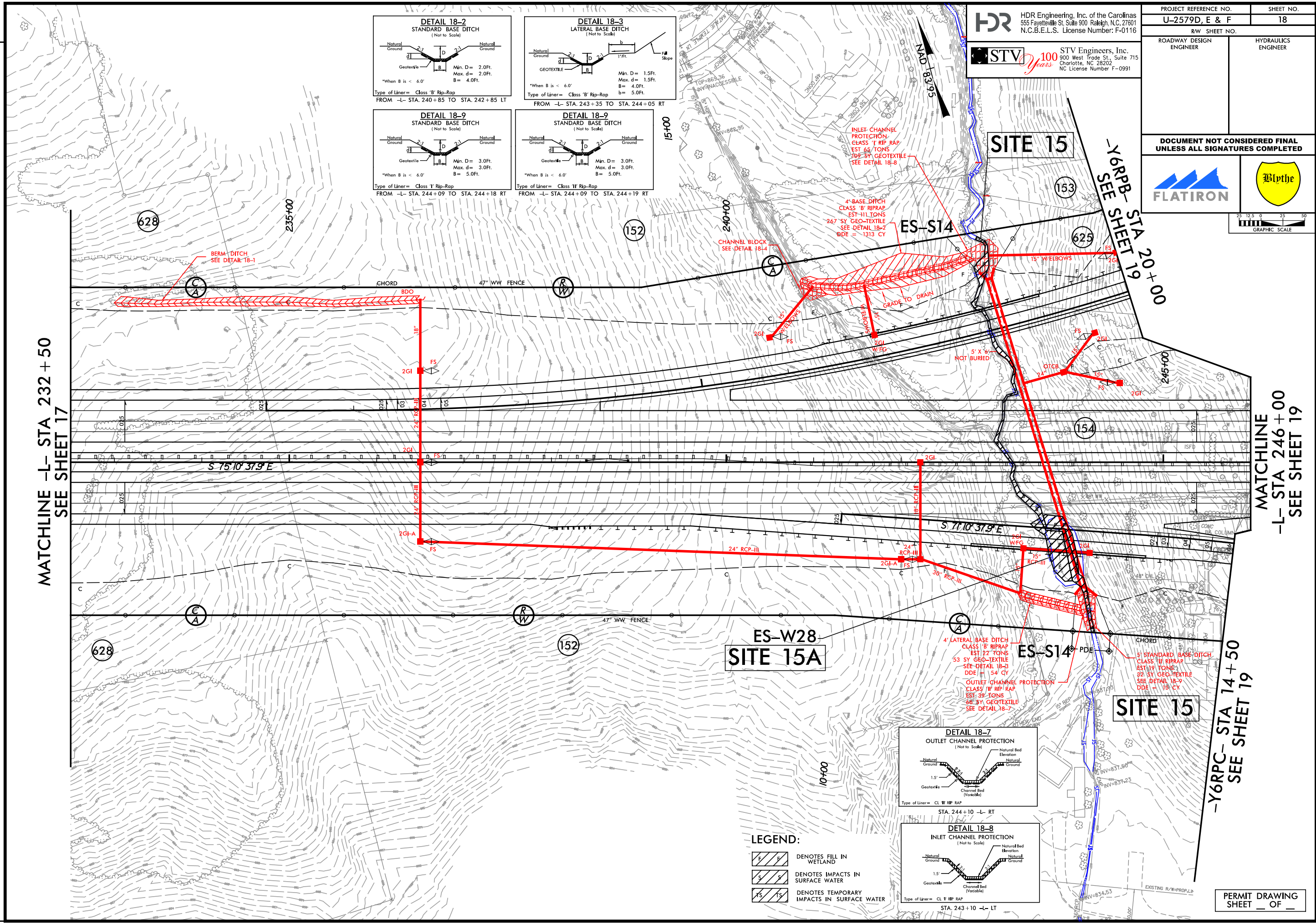
	DENOTES FILL IN WETLAND
	DENOTES IMPACTS IN SURFACE WATER
	DENOTES TEMPORARY IMPACTS IN SURFACE WATER

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 Charlotte, NC 28202  
 NC License Number F-0991

PROJECT REFERENCE NO. <b>U-2579D, E &amp; F</b>	SHEET NO. <b>18</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
GRAPHIC SCALE 0 12.5 25 50	



MATCHLINE -L- STA 232 + 50  
SEE SHEET 17

MATCHLINE  
-L- STA 246 + 00  
SEE SHEET 19

-Y6RPC- STA 14 + 50  
SEE SHEET 19

-Y6RBP- STA 19  
20 + 00  
SEE SHEET 19

628

235+00

152

240+00

153

625

154

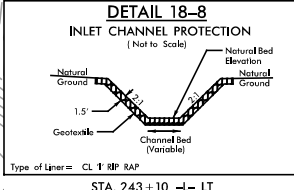
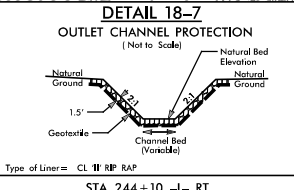
628

152

ES-W28  
SITE 15A

ES-S14

SITE 15



5/14/99

PROJECT REFERENCE NO. SHEET NO.

U-2579D,E & F

ROADWAY DESIGN ENGINEER

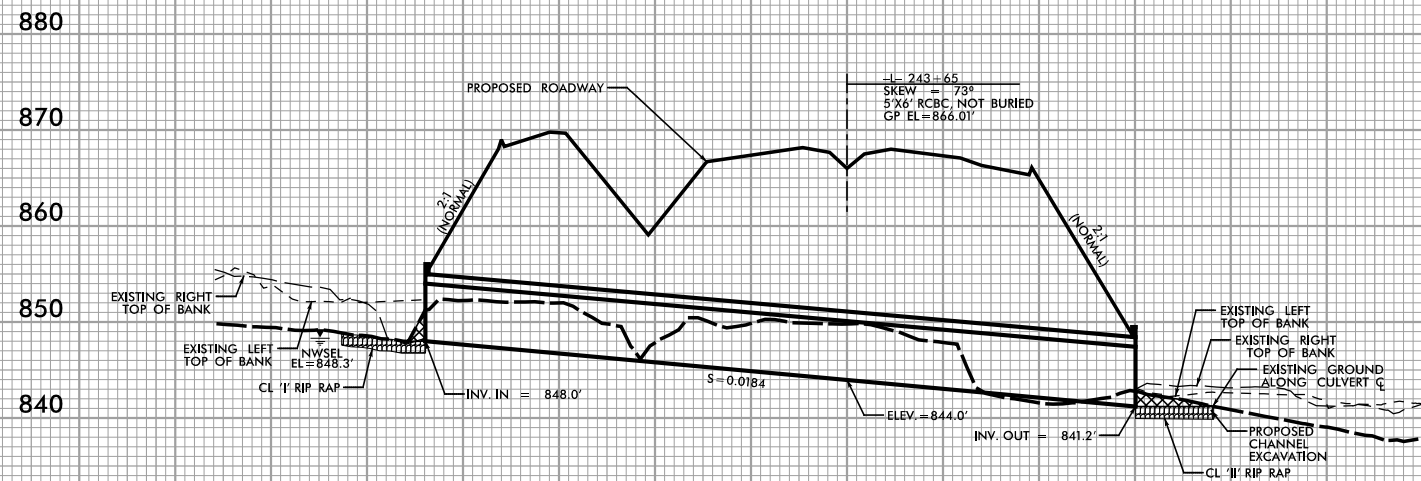
HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SCALE: 1" = 50' HORIZONTAL 1" = 10' VERTICAL

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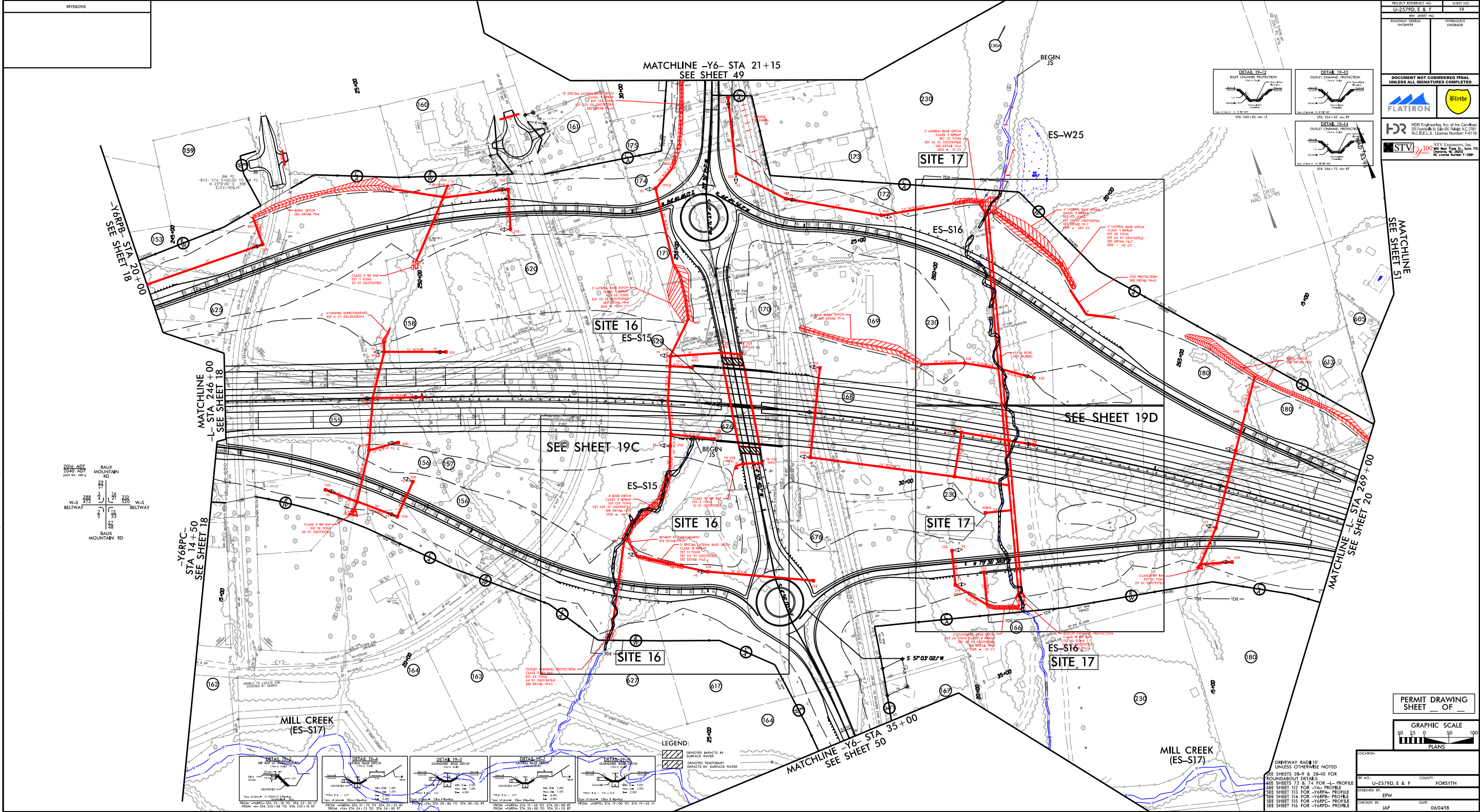
### SITE 15



PROFILE ALONG C OF CULVERT

PERMIT DRAWING SHEET \_\_\_ OF \_\_\_

6:52:06 AM PRM\_CSR\_PSH.dgn



PROJECT REFERENCE NO. UJ-2579D, E & F SHEET NO. 19

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

**FLATIRON**

**STV** STV Engineers, Inc. 200 West Gate St., Suite 110 Durham, NC 27601 N.C. License Number: E-1099

2016 ADT BALD MOUNTAIN RD 230

2016 ADT BALD MOUNTAIN RD 310

2016 ADT BELTWAY 273

2016 ADT BELTWAY 183

2016 ADT BALD MOUNTAIN RD 27

2016 ADT BALD MOUNTAIN RD 13

DATE: 11/20/2018

PROJECT: UJ-2579D, E & F

DESIGNER: JAF

CHECKER: JAF

DATE: 06/04/18

**PERMIT DRAWING SHEET OF**

**GRAPHIC SCALE**

0 25 50 75 100

PLANS

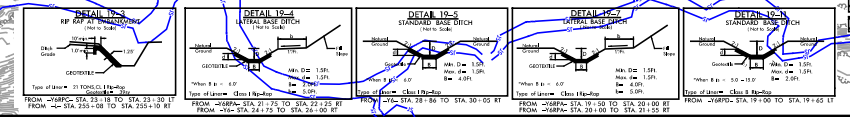
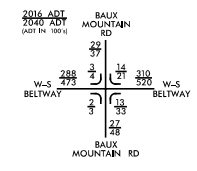
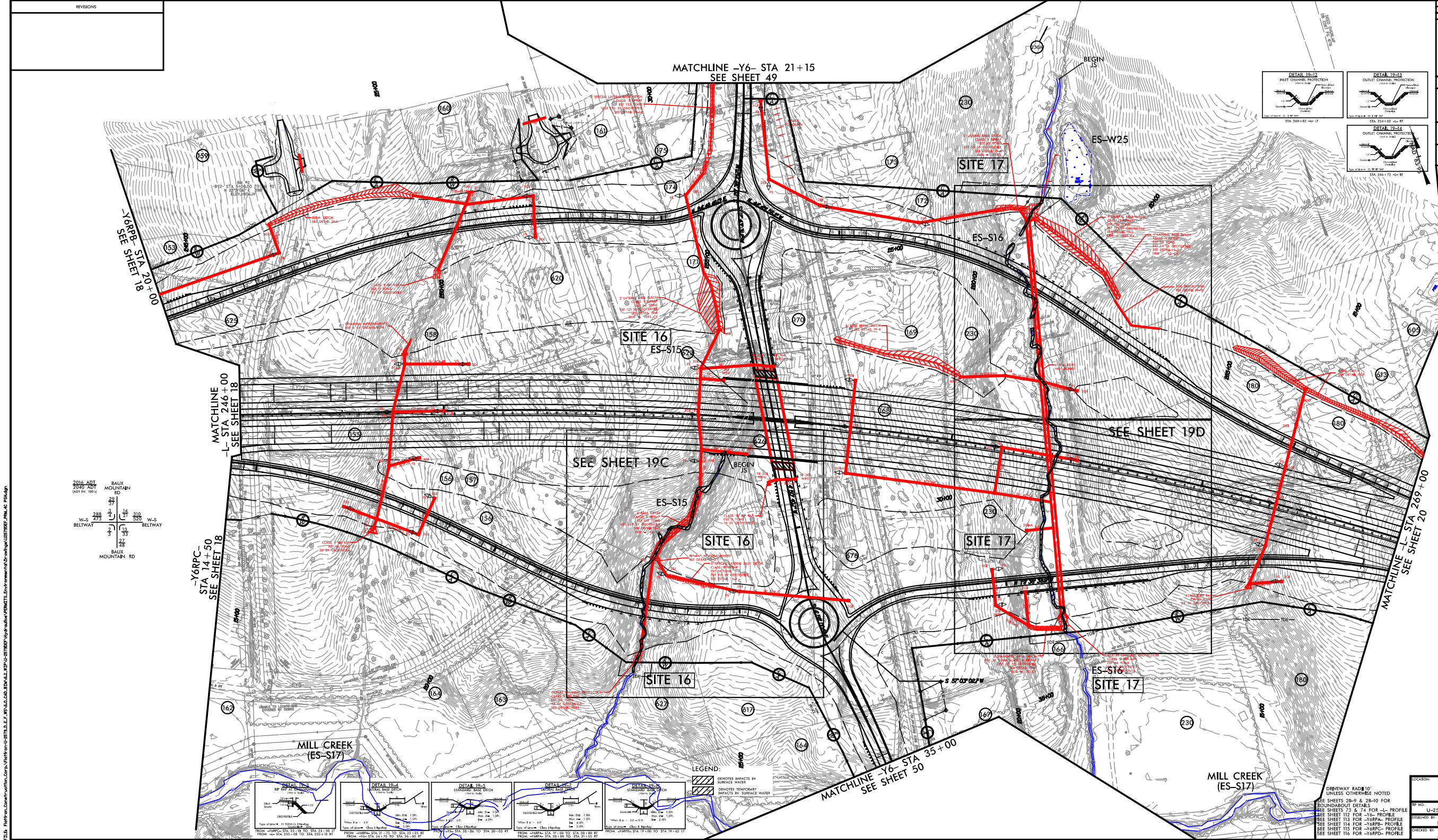
LOCATION:

PROJECT NO. UJ-2579D, E & F COUNTY FORSYTH

DESIGNED BY: EPW

CHECKED BY: JAF DATE: 06/04/18

NO.	REVISIONS



PROJECT REFERENCE NO. U-2579D, E & F SHEET NO. 19

ROADWAY DESIGN ENGINEER

HYDROLOGIC ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

FLATIRON

STV ENGINEERS, INC.

STV ENGINEERS, INC. 200 West Gate St., Suite 100  
Durham, NC 27601  
N.C. License Number: F-0116  
N.C. License Number: F-0991

PERMIT DRAWING SHEET OF

GRAPHIC SCALE  
0 25 50 75 100  
PLANS

DRIVEWAY RADII 10' UNLESS OTHERWISE NOTED

SEE SHEETS 28-9 & 28-10 FOR ROUNDABOUT DETAILS

SEE SHEETS 73 & 74 FOR -L- PROFILE

SEE SHEET 112 FOR -Y6- PROFILE

SEE SHEET 113 FOR -Y6RPC- PROFILE

SEE SHEET 114 FOR -Y6RPC- PROFILE

SEE SHEET 115 FOR -Y6RPC- PROFILE

SEE SHEET 116 FOR -Y6RPC- PROFILE

CHECKED BY: JAF DATE: 06/04/18

PROJECT NO. U-2579D, E & F COUNTY: FORSYTH

DRAWN BY: EPW

PLOT: D:\PLOT\18000\18000.dwg  
 DATE: 6/18/18  
 USER: JAF  
 PLOTTER: HP DesignJet T1100PS


8/17/99

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 Charlotte, NC 28202  
 NC License Number F-0991

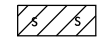
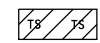
**FLATIRON**

**Wlythe**

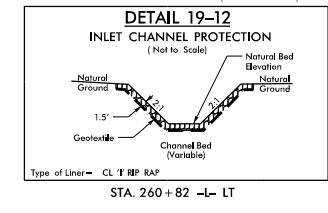
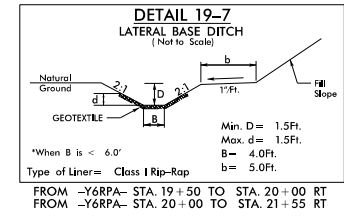
25 12.5 0 25 50  
 GRAPHIC SCALE

PROJECT REFERENCE NO. <b>U-2759D, E &amp; F</b>	SHEET NO. <b>19A</b>
ROADWAY DESIGN ENGINEER	
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION	
<b>DOCUMENT NOT CONSIDERED FINAL</b> UNLESS ALL SIGNATURES COMPLETED	
 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	

### LEGEND

-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER

NAD 83 95

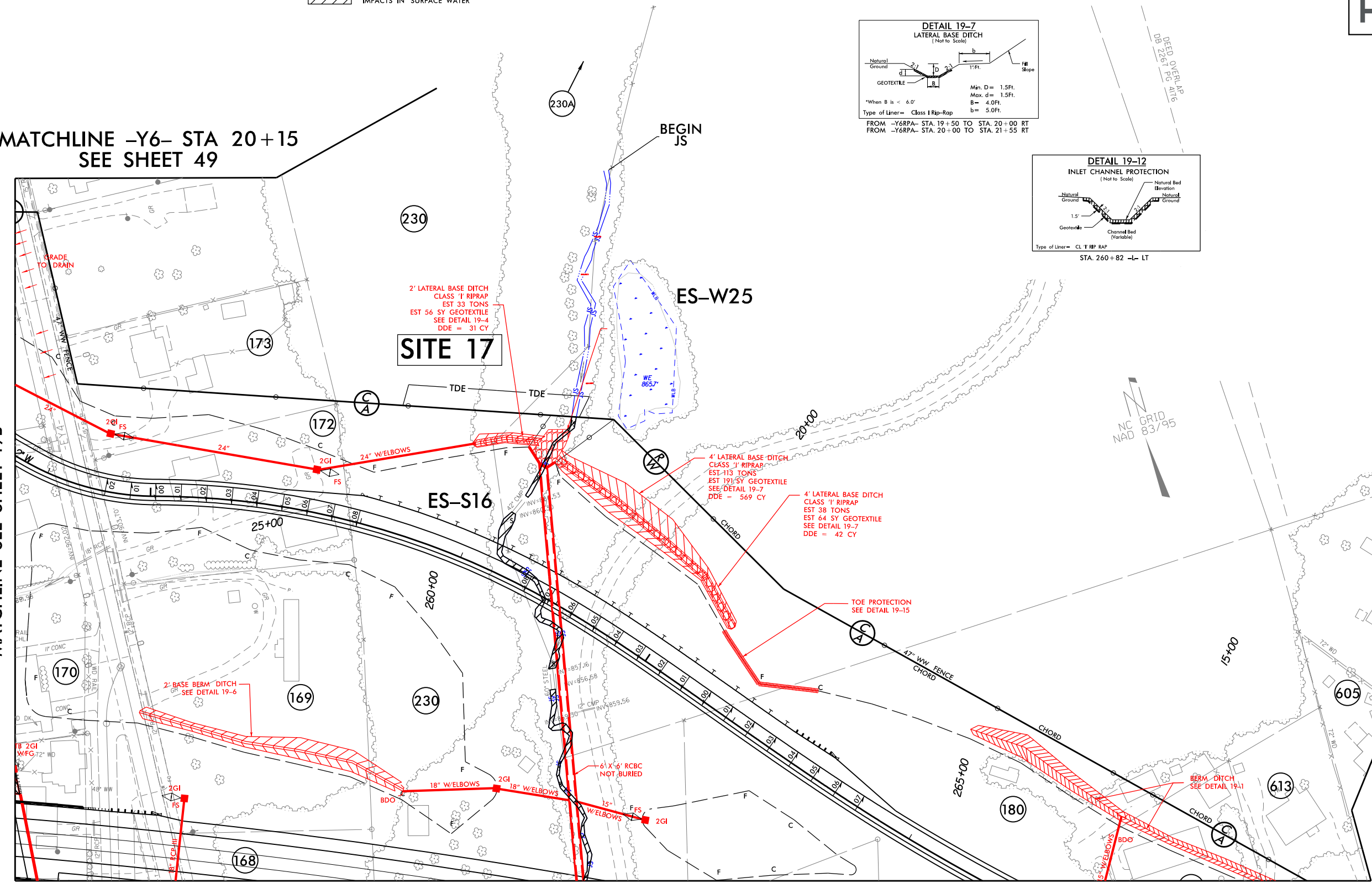


MATCHLINE -Y6- STA 20+15  
SEE SHEET 49

MATCHLINE SEE SHEET 19B

MATCHLINE  
SEE SHEET 51

MATCHLINE SEE SHEET 19D



**SITE 17**

**ES-S16**

**ES-W25**

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 TIME: 11:24:34 AM  
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REVISIONS

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SHEET \_\_\_ OF \_\_\_


8/17/99

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 NC License Number F-0991

**FLATIRON**

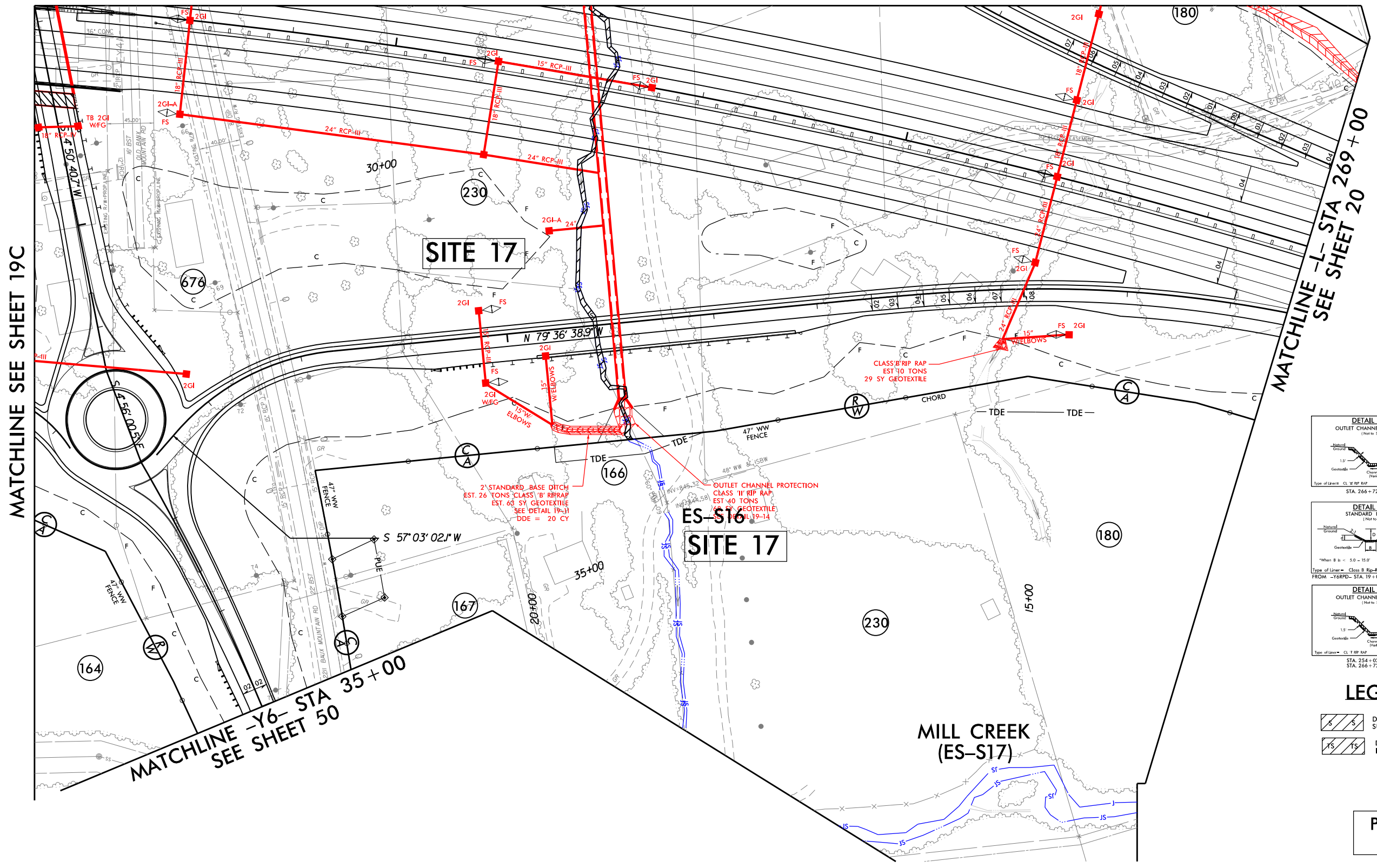
**Wlythe**

25 12.5 0 25 50  
 GRAPHIC SCALE

PROJECT REFERENCE NO. <b>U-2759D, E &amp; F</b>	SHEET NO. <b>19D</b>
ROADWAY DESIGN ENGINEER	
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION	
<b>DOCUMENT NOT CONSIDERED FINAL</b> UNLESS ALL SIGNATURES COMPLETED	
 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	



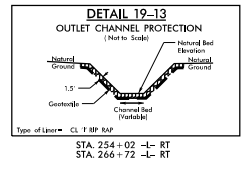
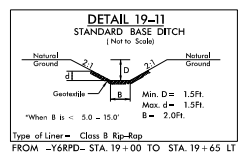
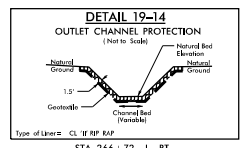
MATCHLINE SEE SHEET 19A





MATCHLINE SEE SHEET 19C

MATCHLINE -L- STA 269 + 00  
 SEE SHEET 20

MATCHLINE -Y6- STA 35 + 00  
 SEE SHEET 50



**LEGEND**

-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER

PERMIT DRAWING  
 SHEET \_\_\_ OF \_\_\_

PLOT DRIVER: NCDOT\_pdf\_color\_eng-100.plt  
 USER: CMYERS  
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 TIME: 11:41:5 AM  
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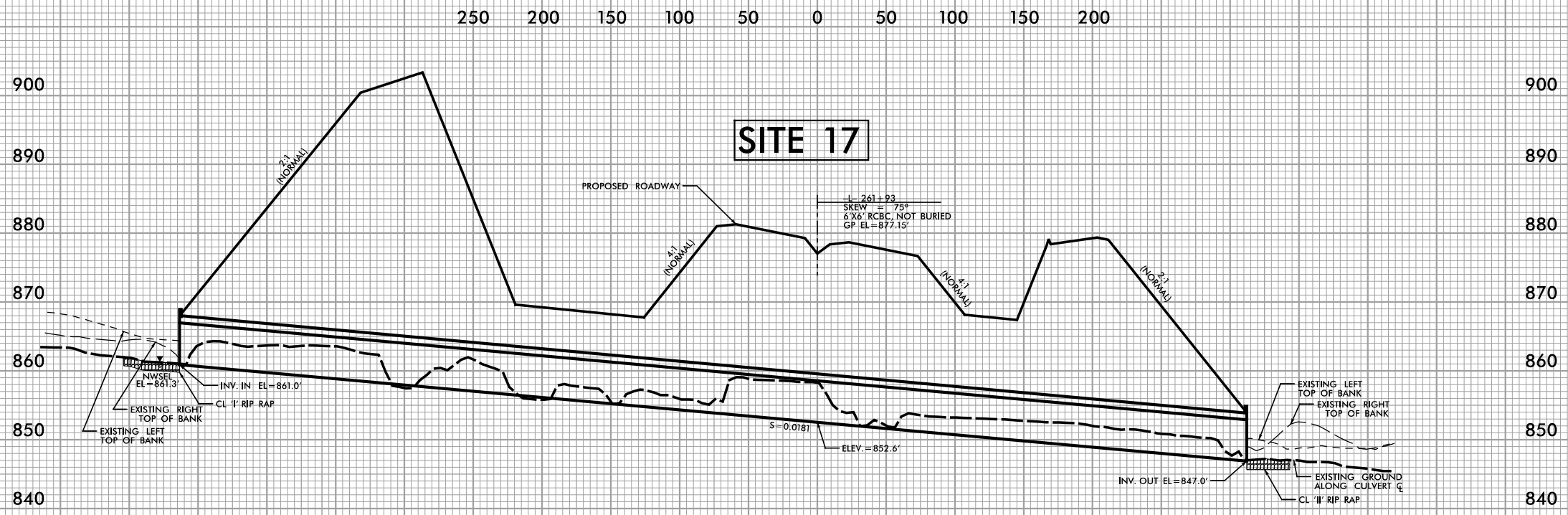
**REVISIONS**

5/14/99

PROJECT REFERENCE NO. <b>U-2579D,E &amp; F</b>	SHEET NO.
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

SCALE:  
1" = 50' HORIZONTAL  
1" = 10' VERTICAL



PROFILE ALONG CL OF CULVERT



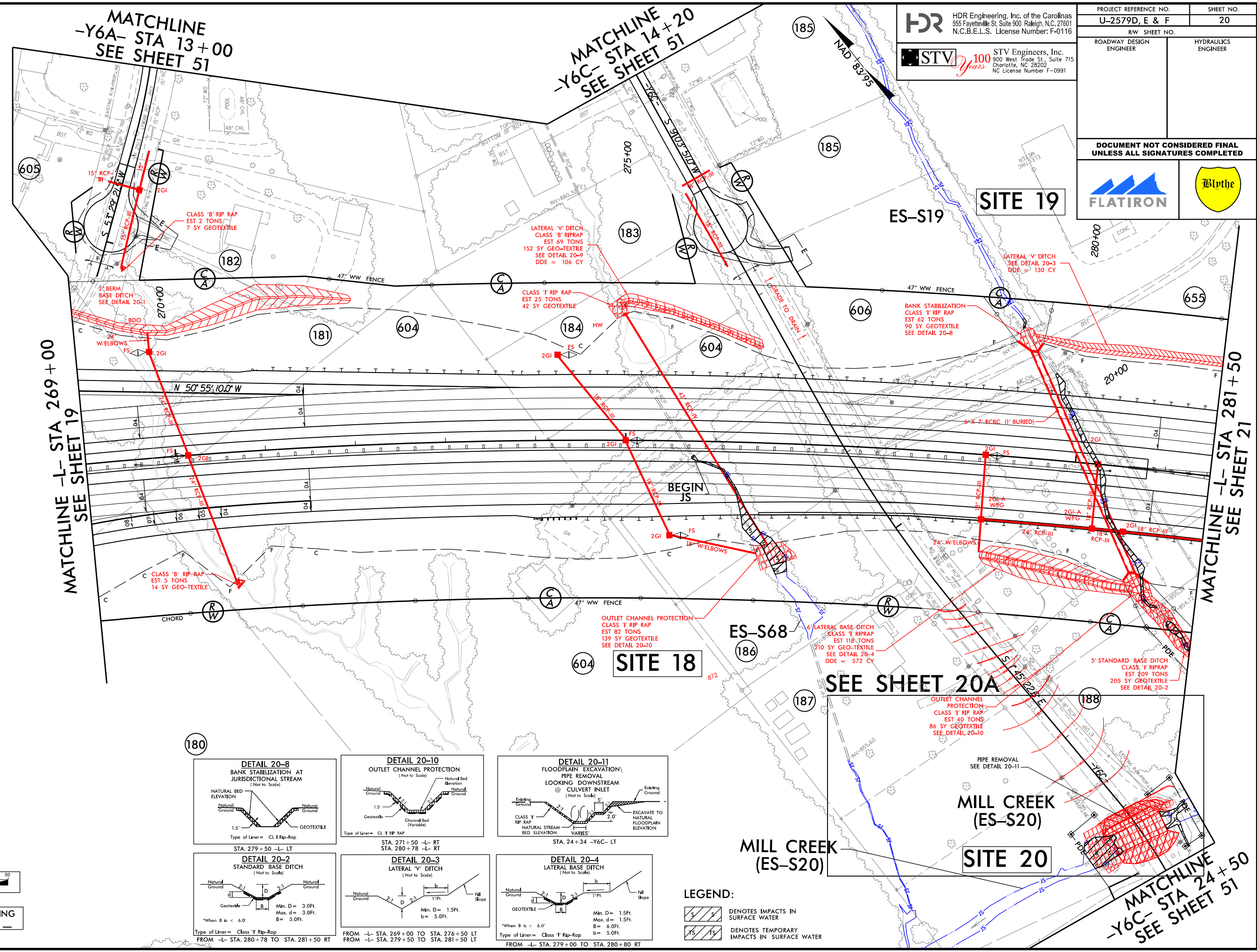
PERMIT DRAWING  
SHEET \_\_\_ OF \_\_\_

6:08:27 AM PRM\_CSR\_PSH.dgn  
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PROJECT REFERENCE NO. <b>U-2579D, E &amp; F</b>	SHEET NO. <b>20</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



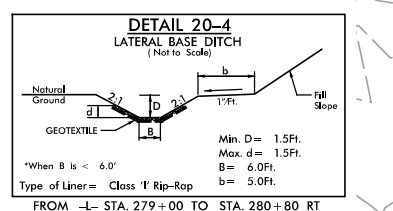
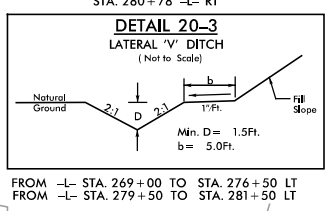
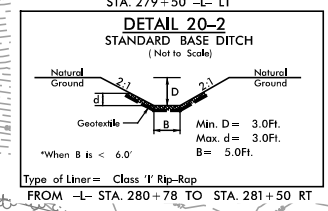
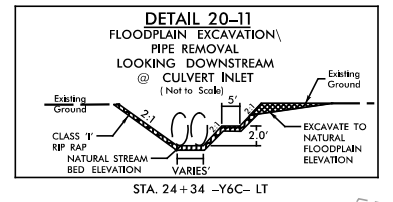
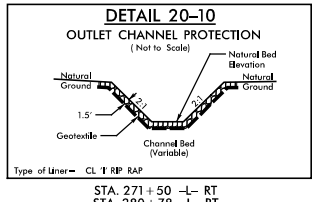
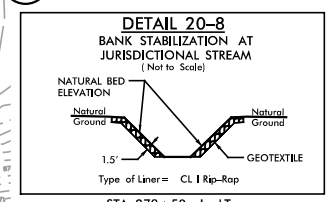
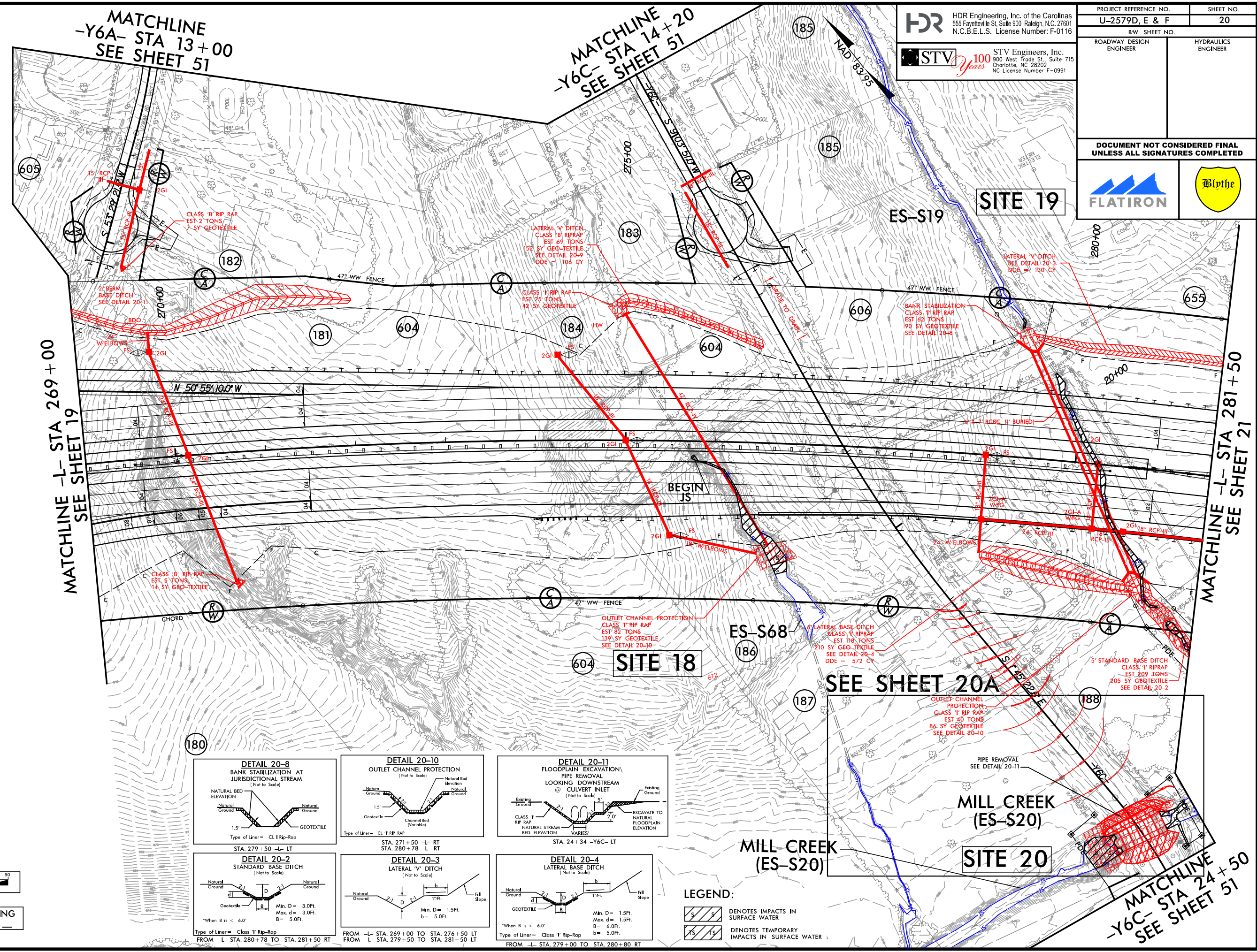
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USER: NMONACK  
PENTABLE: NCDOT\_permits.NCON.tbl  
DATE: 9/18/2019  
TIME: 11:26:30 AM  
FILE: Flatiron-Construction-Corp.\Flatiron-U-2579D.E.F.WS\6.0.CAD.BTM\6.2.WTP-U-2579DEF-Hydraulics\PERMITS-Environmental\Drawings\U2579DEF-PRM-4C-PSH.dgn

25 12.5 0 25 50  
GRAPHIC SCALE



PERMIT DRAWING  
SHEET \_\_\_ OF \_\_\_

PROJECT REFERENCE NO.	SHEET NO.
U-2579D, E & F	20
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

**LEGEND:**

-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER

25 12.5 0 25 50  
GRAPHIC SCALE

PERMIT DRAWING  
SHEET \_\_\_ OF \_\_\_

PLOT DRIVER: Hydro\_color\_pdf.plt  
USER: CMYERS  
DATE: 9/18/2019  
TIME: 10:59:37 AM  
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REVISIONS

5/14/99

PROJECT REFERENCE NO. SHEET NO.

U-2579D,E & F

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SCALE: 1" = 50' HORIZONTAL 1" = 10' VERTICAL

250 200 150 100 50 0 50 100 150 200

900

890

880

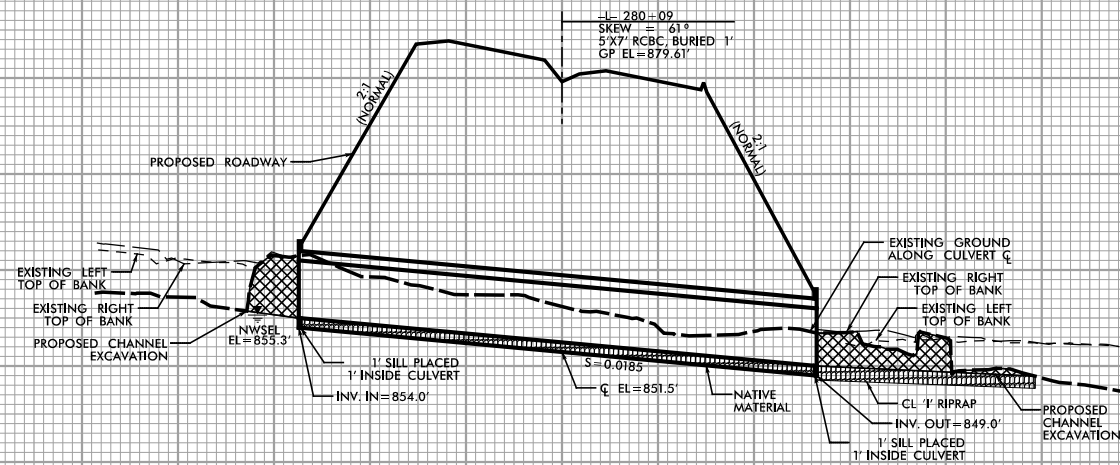
870

860

850

840

### SITE 19



PROFILE ALONG C<sub>L</sub> OF CULVERT

6/21/99 M:\PRM\_CSR\_PSH.dgn

REVISIONS

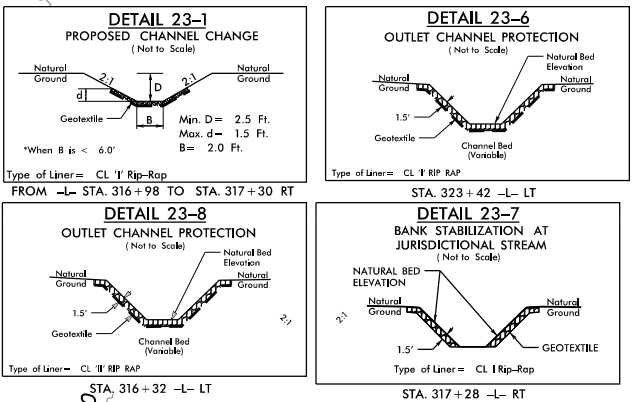
**HDR** HDR Engineering, Inc. of the Carolinas  
 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601  
 N.C.B.E.L.S. License Number: F-0116

**STV** 100 Years  
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 800 West Trade St., Suite 715  
 Charlotte, NC 28202  
 NC License Number F-0991

25 12.5 0 25 50  
 GRAPHIC SCALE

NAD '83/95

PROJECT REFERENCE NO. <b>U-2579D, E &amp; F</b>	SHEET NO. <b>23</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



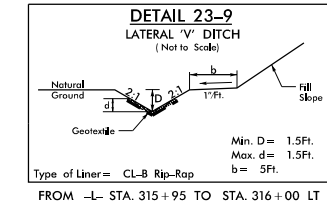
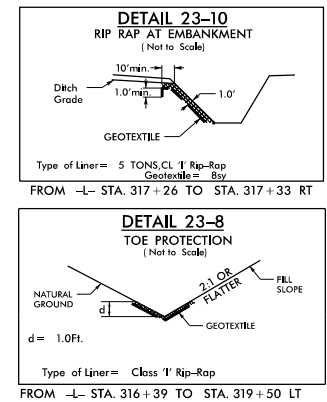
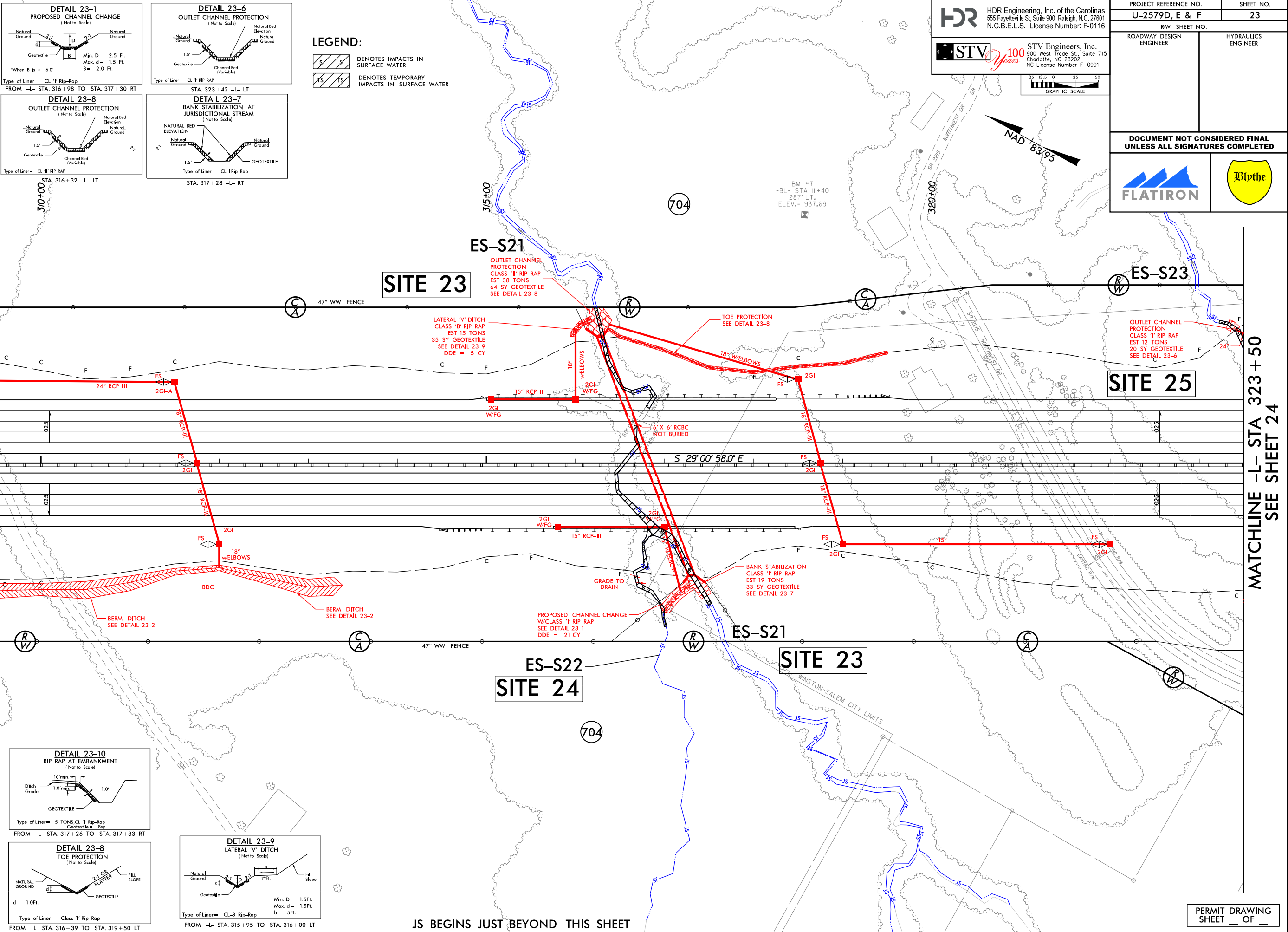
**LEGEND:**

DENOTES IMPACTS IN SURFACE WATER

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

MATCHLINE -L- STA 309+50  
 SEE SHEET 22

MATCHLINE -L- STA 323+50  
 SEE SHEET 24



JS BEGINS JUST BEYOND THIS SHEET

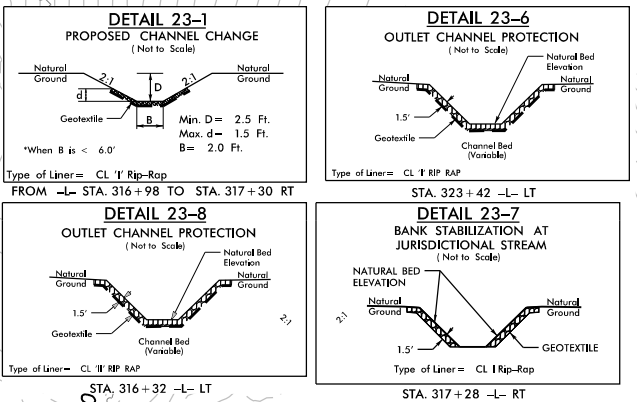
PERMIT DRAWING  
 SHEET \_\_\_ OF \_\_\_

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 N.C.B.E.L.S. License Number: F-0116

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 Charlotte, NC 28202  
 NC License Number F-0991

25 12.5 0 25 50  
 GRAPHIC SCALE

PROJECT REFERENCE NO. <b>U-2579D, E &amp; F</b>	SHEET NO. <b>23</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



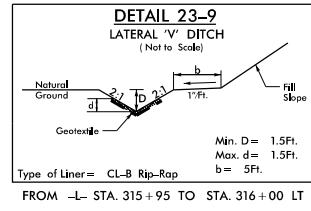
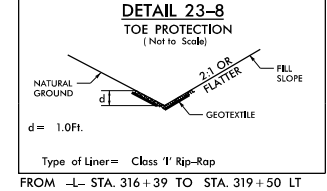
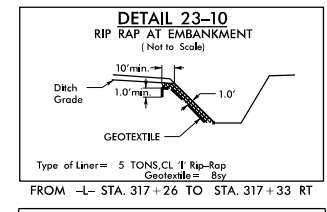
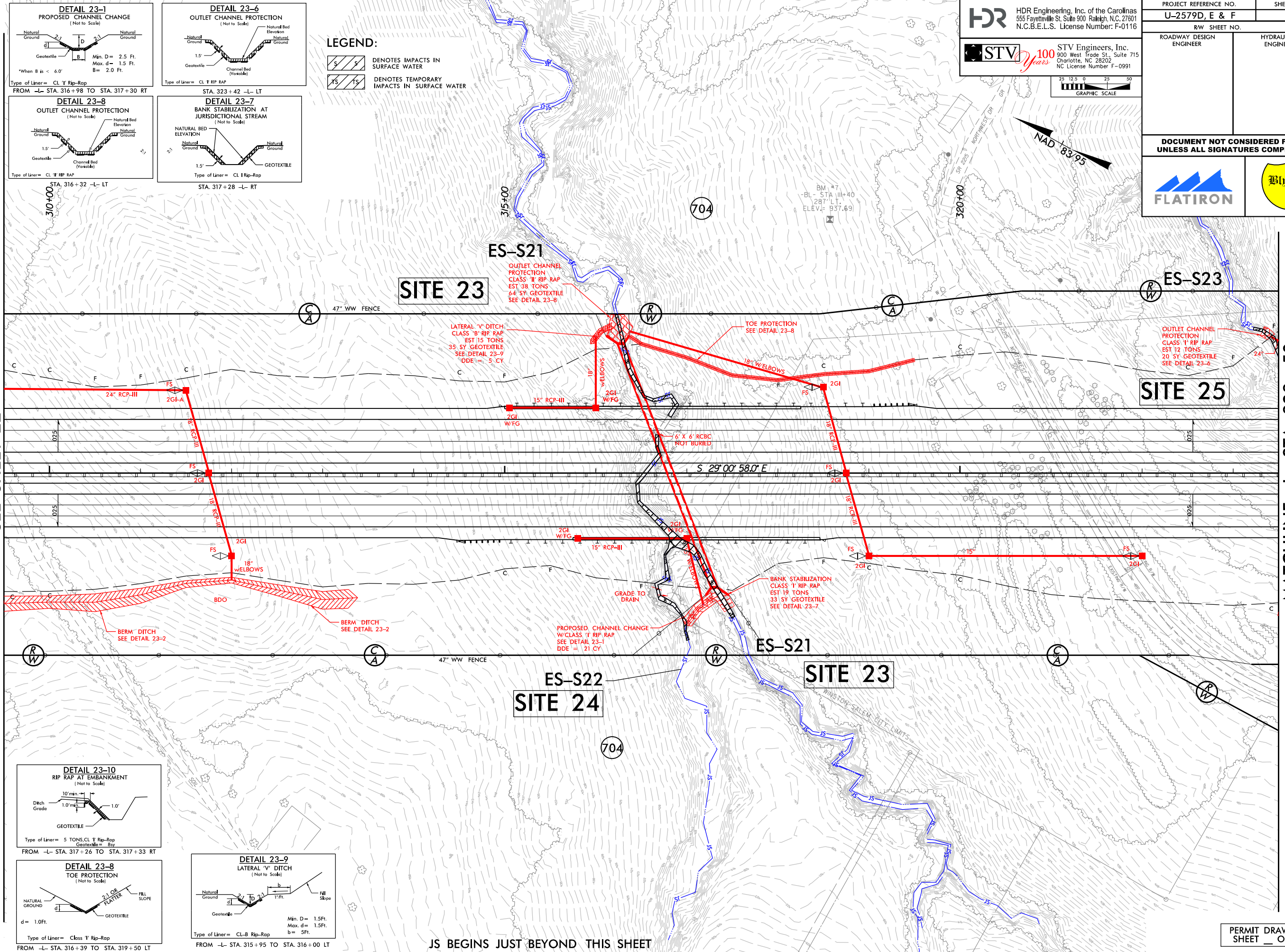
**LEGEND:**

DENOTES IMPACTS IN SURFACE WATER

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

MATCHLINE -L- STA 309 + 50  
SEE SHEET 22

MATCHLINE -L- STA 323 + 50  
SEE SHEET 24



JS BEGINS JUST BEYOND THIS SHEET

PERMIT DRAWING  
SHEET \_\_\_ OF \_\_\_

PLOT DRIVER: NCDOT\_color\_eng\_100.plt  
 USER: CMYERS  
 DATE: 9/13/2019  
 TIME: 10:21:28 AM  
 FILE: Flatiron-Construction-Corp.\Flatiron-U-2579D.E.F.WS\6.0.CAD.BTM\6.2.WTP-U-2579DEF-Hydraulics\PERMITS-Enviro\mtr\Drawings\U2579DEF-PRM\_4C\_PSH.dgn

REVISIONS

5/14/99

PROJECT REFERENCE NO. SHEET NO.

U-2579D,E & F

ROADWAY DESIGN ENGINEER

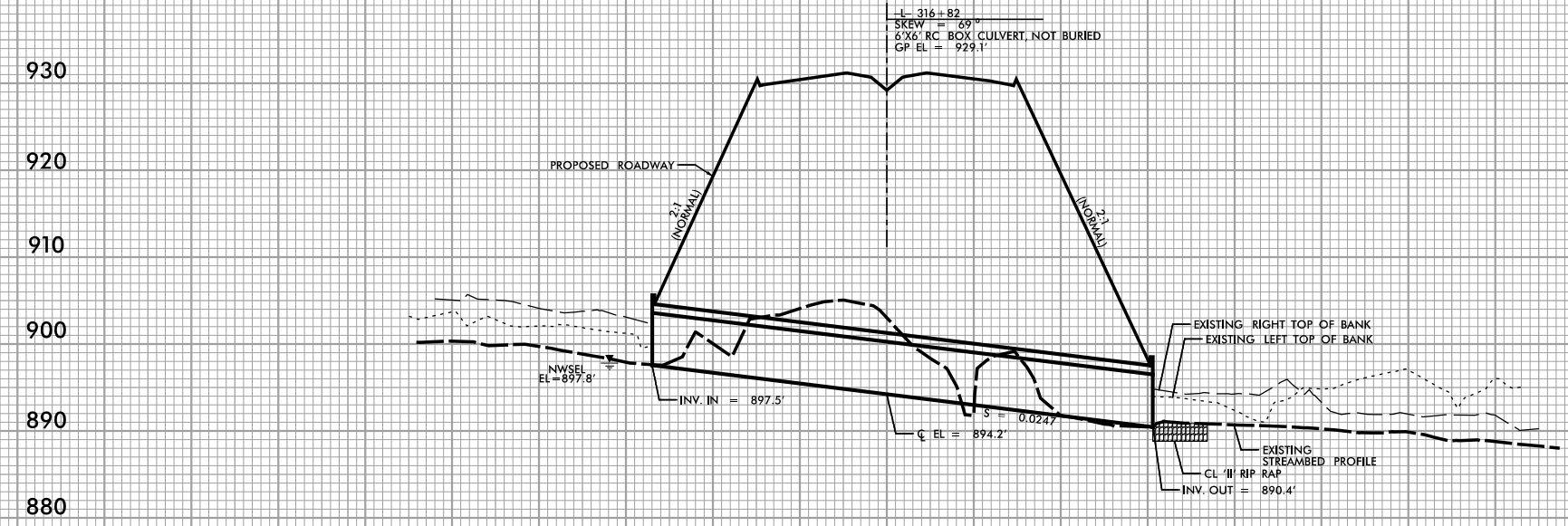
HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SCALE:  
1" = 50' HORIZONTAL  
1" = 10' VERTICAL

250 200 150 100 50 0 50 100 150 200

### SITE 23



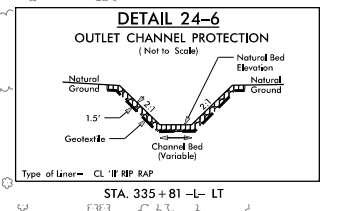
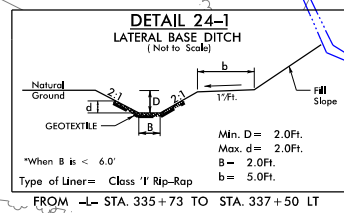
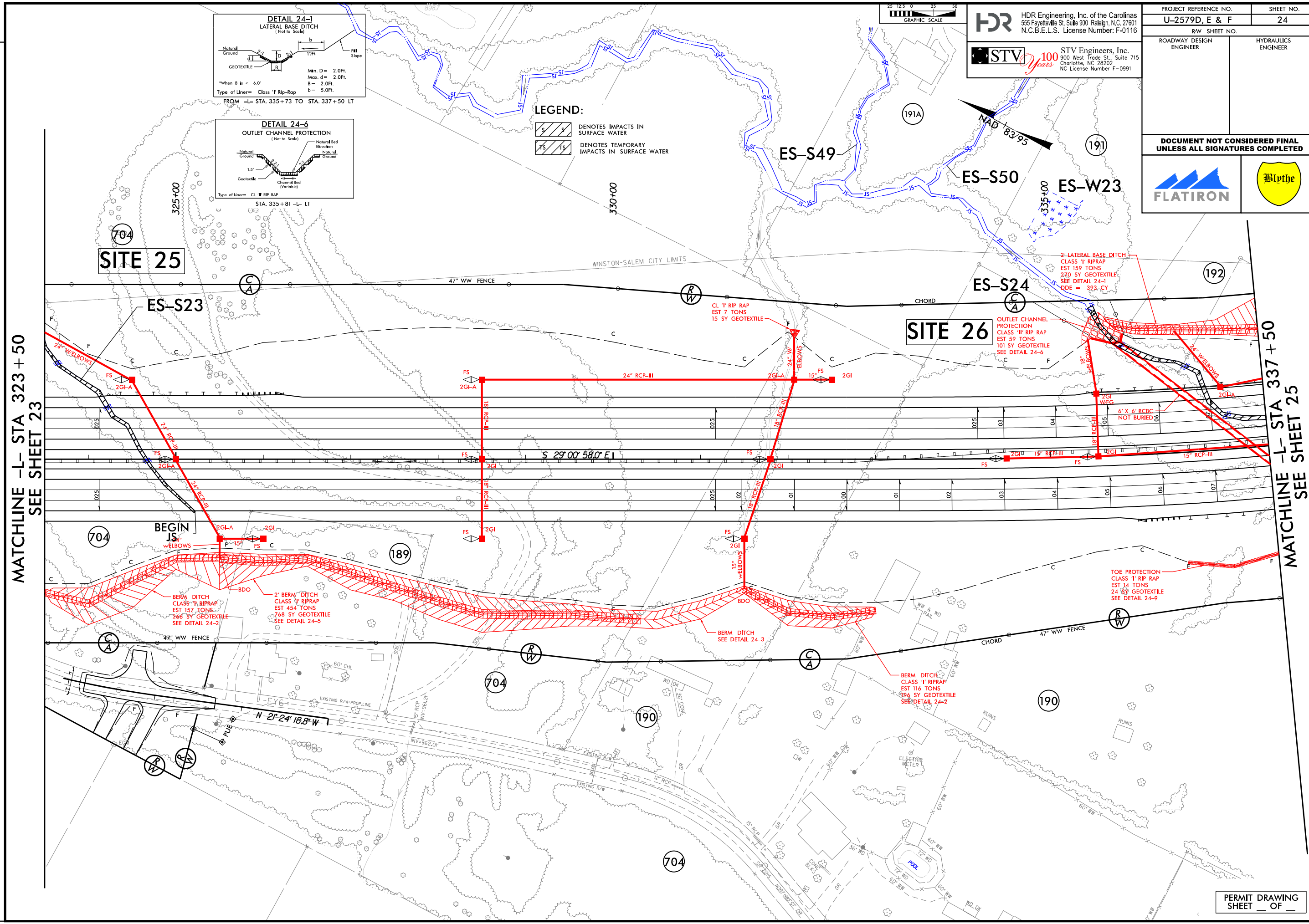
PROFILE ALONG CL OF CULVERT

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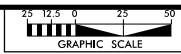
REVISIONS

MATCHLINE -L- STA 323+50  
 SEE SHEET 23

MATCHLINE -L- STA 337+50  
 SEE SHEET 25



**LEGEND:**  
 DENOTES IMPACTS IN SURFACE WATER  
 DENOTES TEMPORARY IMPACTS IN SURFACE WATER



**HDR** HDR Engineering, Inc. of the Carolinas  
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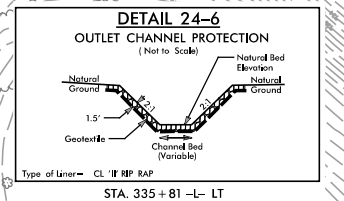
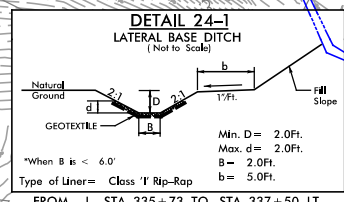
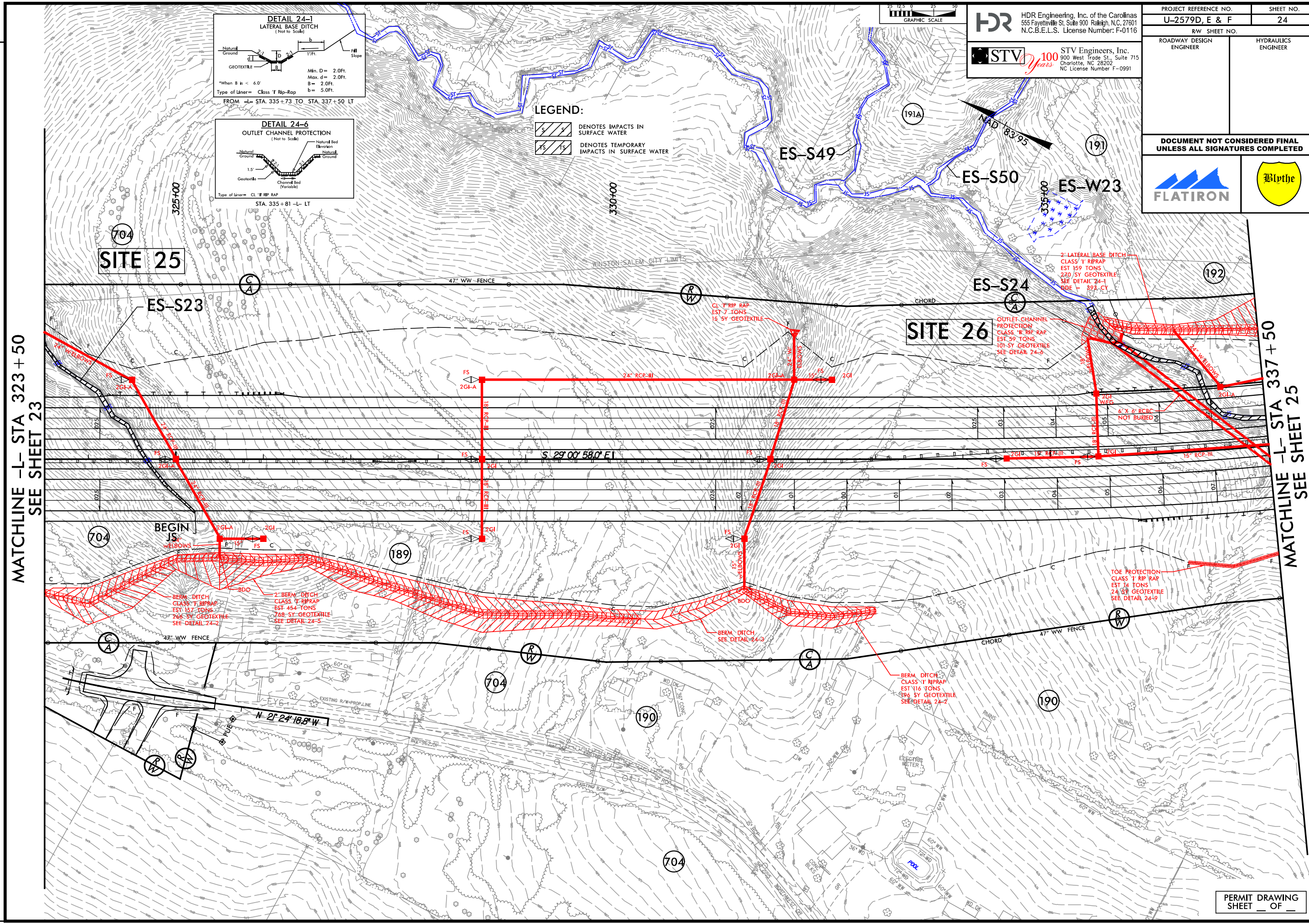
**STV** 100 Years  
 STV Engineers, Inc.  
 800 West Trade St., Suite 715  
 Charlotte, NC 28202  
 NC License Number F-0991

PROJECT REFERENCE NO. <b>U-2579D, E &amp; F</b>	SHEET NO. <b>24</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

REVISIONS

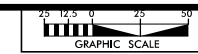
MATCHLINE -L- STA 323+50  
 SEE SHEET 23

MATCHLINE -L- STA 337+50  
 SEE SHEET 25



**LEGEND:**

- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER



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**STV** 100 Years  
 STV Engineers, Inc.  
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 Charlotte, NC 28202  
 NC License Number F-0991

PROJECT REFERENCE NO. <b>U-2579D, E &amp; F</b>	SHEET NO. <b>24</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

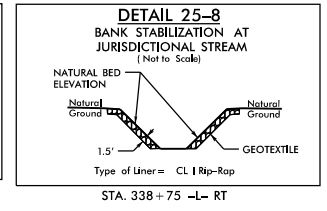
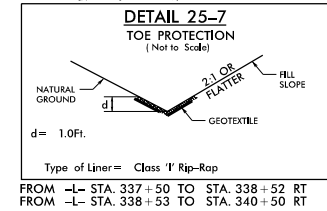
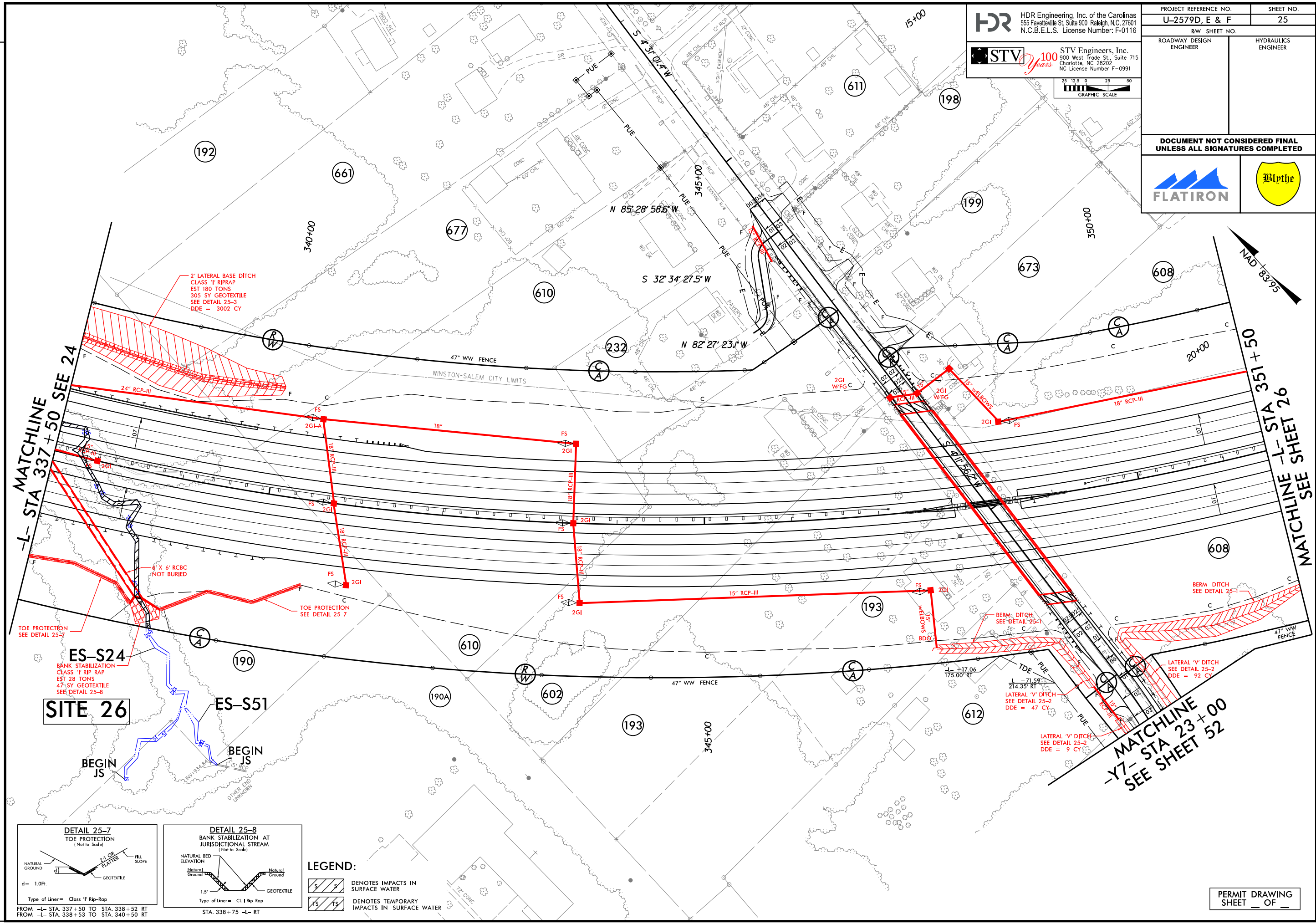


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 Charlotte, NC 28202  
 NC License Number F-0991

GRAPHIC SCALE  
 25 12.5 0 25 50  
 1" = 25'

PROJECT REFERENCE NO. <b>U-2579D, E &amp; F</b>	SHEET NO. <b>25</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



**LEGEND:**

DENOTES IMPACTS IN SURFACE WATER

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

PLOT DRIVER: NCDOT\_color\_eng\_100.plt  
 USER: CMYERS  
 DATE: 9/13/2019  
 TIME: 10:18:54 AM  
 FILE: Flatiron-Construction-Corp.\Flatiron-U-2579D.E.F.WS\6.0.CAD.BTM\6.2.WTP-U-2579DEF-Hydraulics\PERMITS\_Environment\Drawings\U2579DEF\_PRM\_4C\_PSH.dgn

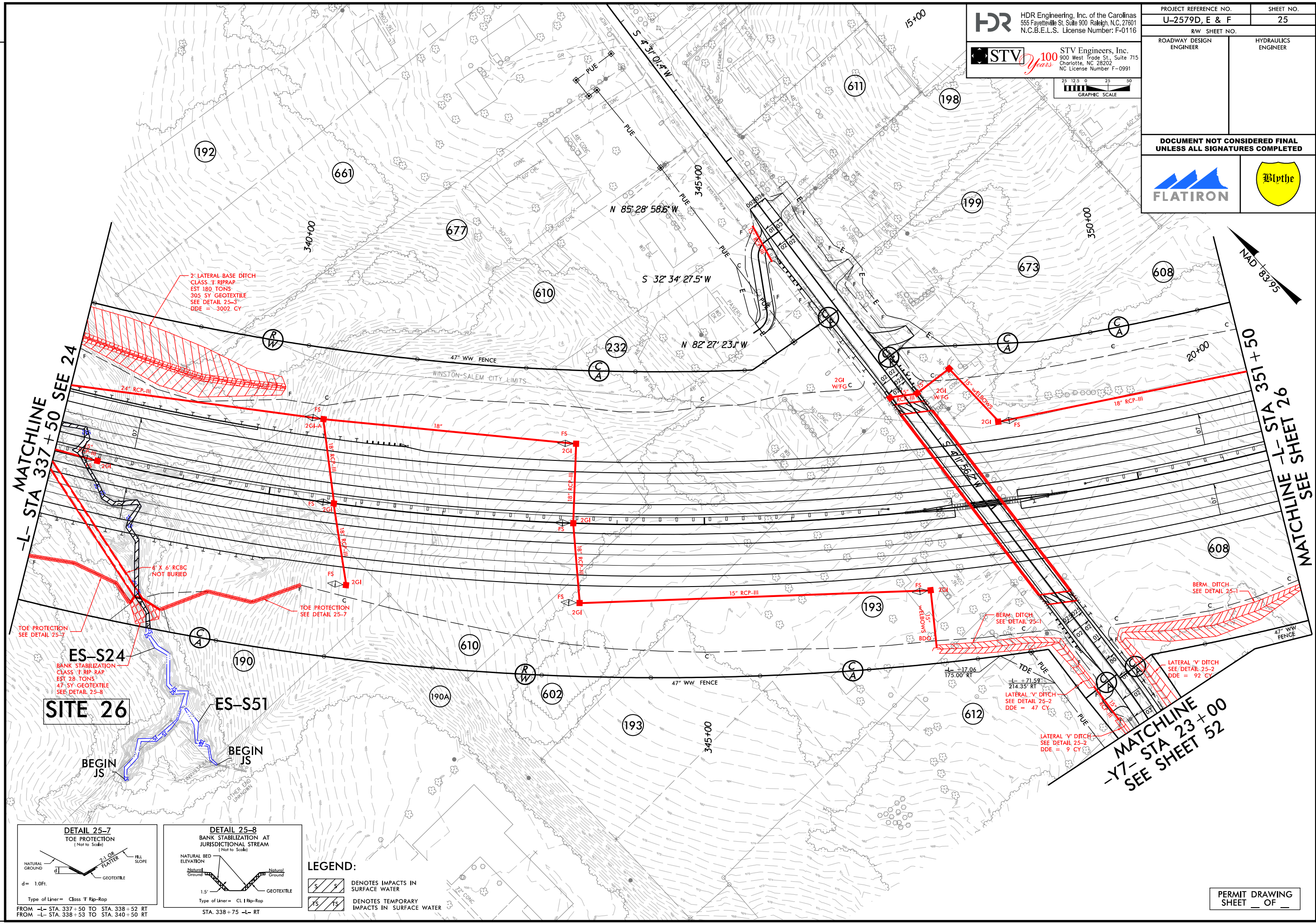
PERMIT DRAWING  
 SHEET 25 OF 25

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GRAPHIC SCALE  
 25 12.5 0 25 50

PROJECT REFERENCE NO. <b>U-2579D, E &amp; F</b>	SHEET NO. <b>25</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

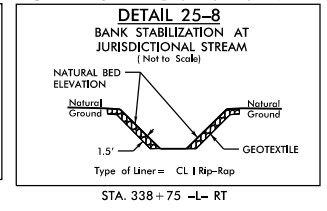
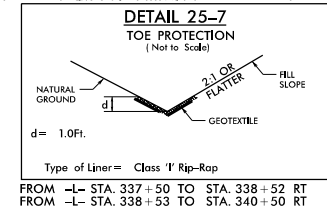


**SITE 26**

**ES-S24**  
 BANK STABILIZATION  
 CLASS 'I' RIP-RAP  
 EST 28 TONS  
 47 SY GEOTEXTILE  
 SEE DETAIL 25-8

**ES-S51**

BEGIN JS



**LEGEND:**

DENOTES IMPACTS IN SURFACE WATER

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

PLOT DRIVER: NCDOT\_color\_eng\_100.plt  
 USER: CMYERS  
 PENTABLE: NCDOT\_permits.CON.tbl  
 DATE: 9/13/2019  
 TIME: 10:19:38 AM  
 FILE: Flatiron-Construction-Corp.\Flatiron-U-2579D.E.F.WS\6.0.CAD.BTM\6.2.WTP-U-2579DEF-Hydraulics\PERMITS\_Environment\Drawings\U2579DEF\_PRM\_4C\_PSH.dgn

5/14/99

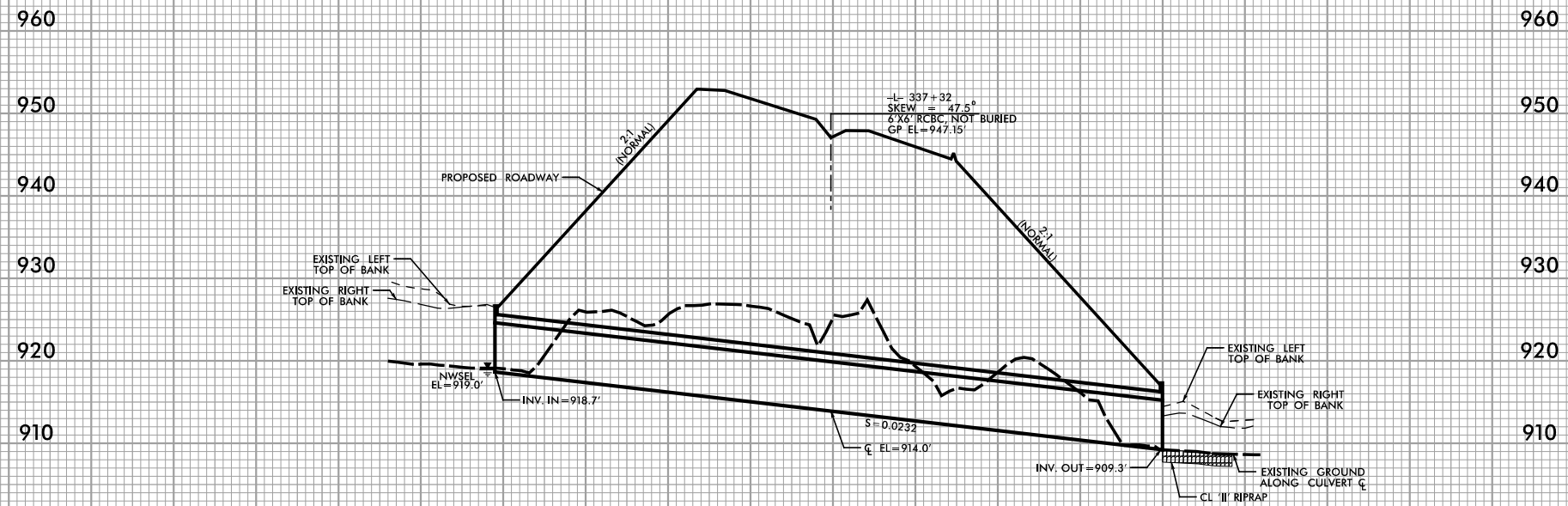
PROJECT REFERENCE NO. <i>U-2579D,E &amp; F</i>	SHEET NO.
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

SCALE:  
1" = 50' HORIZONTAL  
1" = 10' VERTICAL

250 200 150 100 50 0 50 100 150 200

### SITE 26



PROFILE ALONG  $\zeta$  OF CULVERT

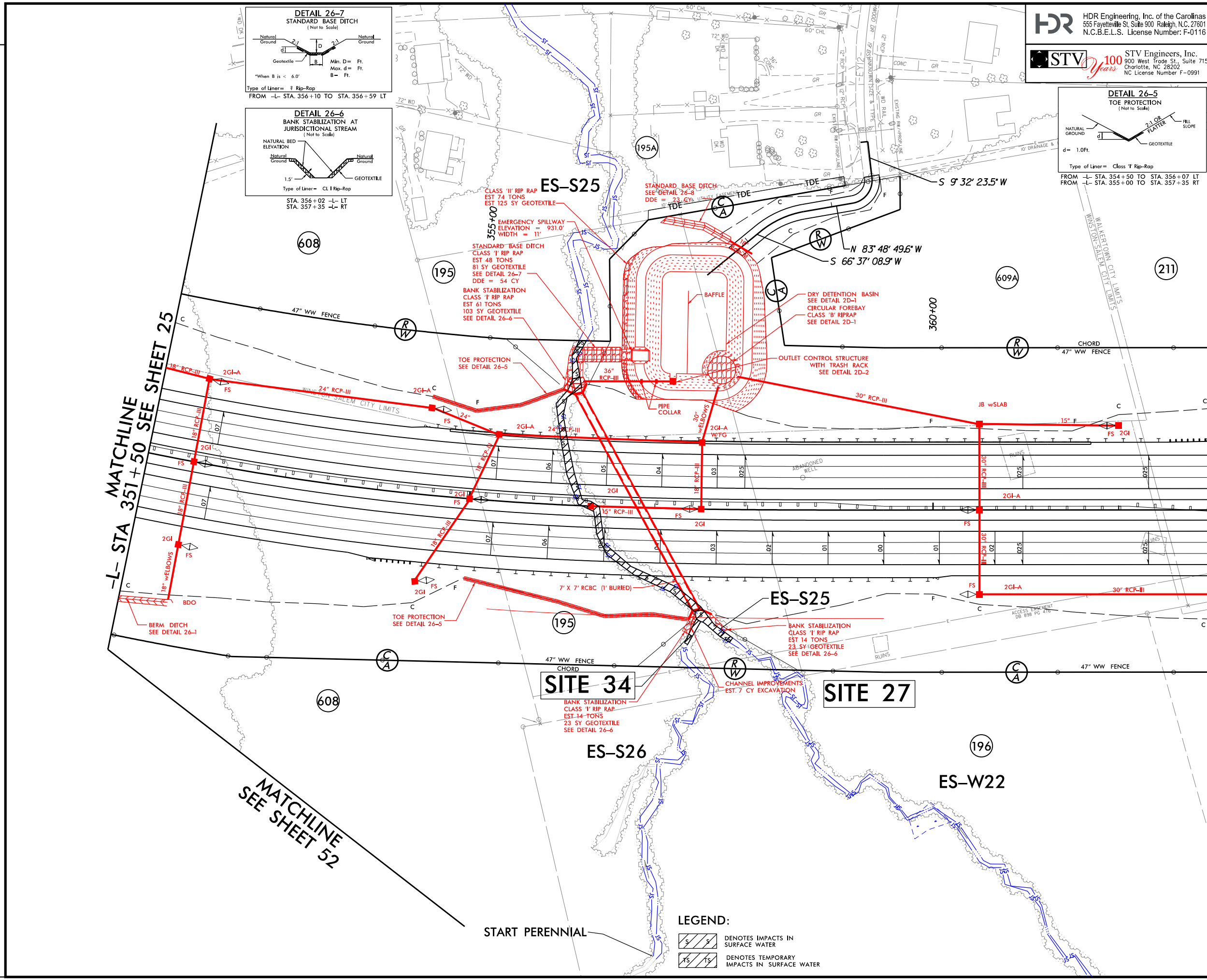
6:27:01 AM PRM\_CSR\_PSH.dgn  
C:\PROJECTS\U-2579D,E & F\PRM\_CSR\_PSH.dgn

REVISIONS

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 STV Engineers, Inc.  
 800 West Trade St., Suite 715  
 Charlotte, NC 28202  
 NC License Number F-0991

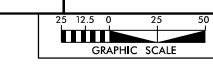
PROJECT REFERENCE NO. <b>U-2579D, E &amp; F</b>	SHEET NO. <b>26</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



-L- STA 351+50 SEE SHEET 25

MATCHLINE  
SEE SHEET 52

MATCHLINE -L- STA 363+00  
SEE SHEET 27

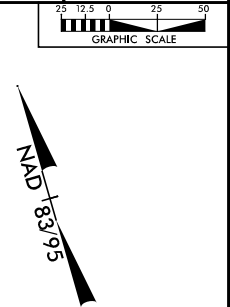
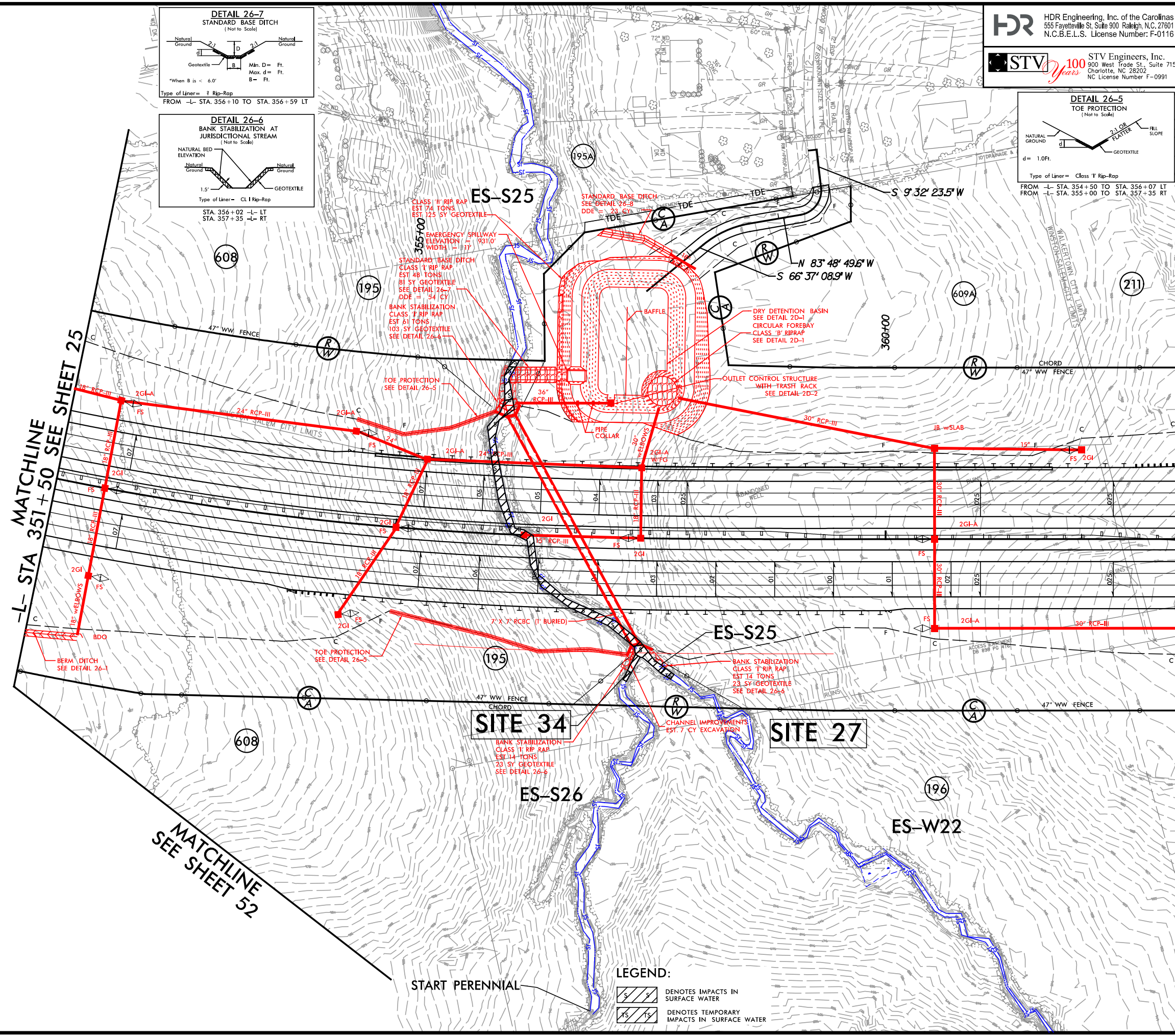


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PROJECT REFERENCE NO. <b>U-2579D, E &amp; F</b>	SHEET NO. <b>26</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



-L- STA 351 + 50 SEE SHEET 25

MATCHLINE SEE SHEET 52

MATCHLINE -L- STA 363 + 00 SEE SHEET 27

**SITE 34**

**SITE 27**

START PERENNIAL

5/14/99

PROJECT REFERENCE NO. SHEET NO.

U-2579D,E & F

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

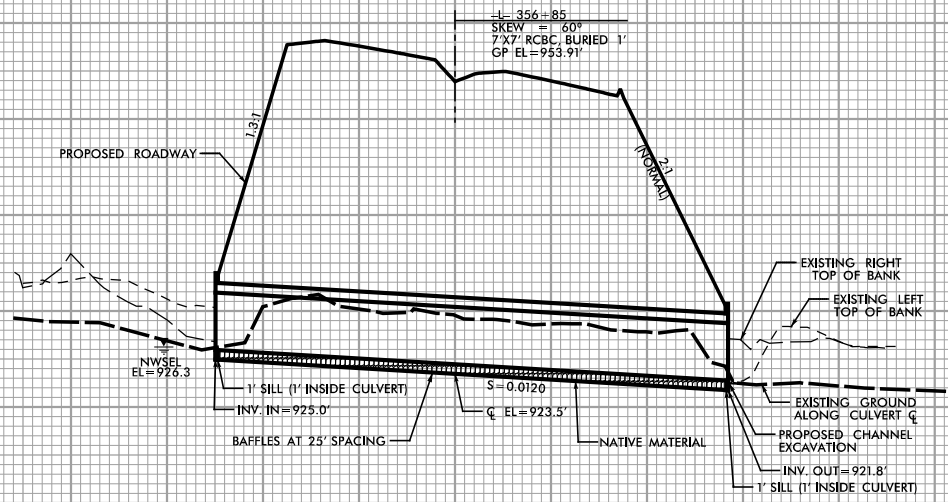
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SCALE: 1" = 50' HORIZONTAL 1" = 10' VERTICAL

250 200 150 100 50 0 50 100 150 200

### SITE 27

960  
950  
940  
930  
920  
910



PROFILE ALONG C OF CULVERT

6:36:30 AM PRM\_CSR\_PSH.dgn

**WETLAND PERMIT IMPACT 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)	
11	173+80 -L-	48" RCP							0.04		615		
11A**	174+23 -L- RT	48" RCP	0.08										
12	203+75 - 207+10 -L- RT	ROADWAY FILL							0.02	< 0.01	410	10	
12A	205+69 -L- RT	FILL IN WETLAND	0.08										
13	207+24 -L-	5x6 CULVERT							0.03	< 0.01	337	22	
13A	209+14 -L- LT	4' BASE DITCH				< 0.01							
14	222+50 - 223+56 -L- RT	48" RCP							0.01	< 0.01	220	11	
14A	222+65 -L- LT	POND							3.06				
15	242+86/244+20 -L-	5'x6' RCBC							0.05	< 0.01	520	15	
15A	243+60/244+00 -L-	5'x6' RCBC	0.04										
16	253+92/255+58 -L-	42" RCP AND DITCH							0.05	< 0.01	513	20	
17	261+02/262+96 -L-	6'x6' RCBC							0.08	< 0.01	928	23	
18	275+75/276+78 -L-	42" RCP							0.03	< 0.01	161	11	
19	279+30/280+86 -L-	5'x7' RCBC							0.04	< 0.01	250	11	
19	280+86/281+71 -L-	5' STANDARD BASE DITCH							< 0.01	< 0.01	91	15	
20	280+61/281+66 -L-	REMOVE 2 - 72" CMP							0.02	< 0.01	35	31	
20A	286+51/286+74 -L-	BANK STABILIZATION							< 0.01	< 0.01	16	21	
20B	285+56/285+81 -L-	BANK STABILIZATION							< 0.01	< 0.01	20	21	
20C	285+19/285+65 -L-	TEMPORARY WORK PAD								0.06		165	
21	285+19/285+65 -L-	CHANNEL CHANGE							< 0.01		133		
21	285+19 -L-	BANK STABILIZATION							< 0.01	< 0.01	10	10	
22	303+57/304+09 -L-	30" RCP/ 36" RCP							< 0.01	< 0.01	97	7	
23	316+25/317+41 -L-	6'x6' RCBC							0.04		363		
23	317+40/317+49 -L-	BANK STABILIZATION							< 0.01	< 0.01	28	10	
TOTALS SHEET 2*:			0.20			< 0.01			3.50	0.09	4747	403	0

\*Rounded totals are sum of actual impacts

NOTES:

- \*\*Wetland ES-W33 is total take
- Site 24 is a Channel Relocation

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**WETLAND PERMIT IMPACT 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)
24	316+84/317+01 -L-	CHANNEL CHANGE						< 0.01	< 0.01	120	10	
25	323+23/325+22 -L-	24" RCP						0.02	< 0.01	294	10	
26	335+66/338+74 -L-	6'x6' RCBC						0.05	< 0.01	523	10	
26	338+82 -L-	BANK STABILIZATION						< 0.01	< 0.01	29	8	
27	356+07/357+64 -L-	7'x7' RCBC						0.05		328		
27	356+07 -L- LT	BANK STABILIZATION						< 0.01	< 0.01	35	8	
27	357+63 -L- RT	BANK STABILIZATION						< 0.01	< 0.01	37	12	
28**	397+37/400+85 -L-	ROADWAY FILL	0.26									
29**	398+61/405+73 -L-	ROADWAY FILL / 5' BASE DITCH						0.06		906		
29**	398+61/405+73 -L-	BANK STABILIZATION						< 0.01	< 0.01	40	10	
29A**	401+96 -L-	ROADWAY FILL	< 0.01									
29B**	402+33/405+59 -L-	ROADWAY FILL / 5' BASE DITCH	0.26		0.03	0.01						
30***	409+52/411+61 -L-	54" RCP						0.05	< 0.01	563	14	
30***	409+53 -L-	BANK STABILIZATION						< 0.01	< 0.01	15	10	
31	49+59 - 50+28 -Y3- LT	2' BASE DITCH						< 0.01		57		
32	35+68/37+32 -Y6-	BANK STABILIZATION						0.03	< 0.01	172	19	
33	173+50 -L- LT	CHANNEL IMPROVEMENT TIE-IN						0.03	< 0.01	20	21	
34	357+38/357+49 -L-	BANK STABILIZATION						< 0.01	< 0.01	24	11	
		TOTAL SHEET 1	0.87		< 0.01	0.01		0.49	< 0.01	5694	49	
		TOTAL SHEET 2	0.20			< 0.01		3.50	0.09	4747	403	
		TOTAL SHEET 3	0.53		0.03	0.01		0.30	0.02	3163	143	
<b>TOTALS ALL SHEETS*:</b>			<b>1.60</b>	<b>0.00</b>	<b>0.03</b>	<b>0.03</b>	<b>0.00</b>	<b>4.30</b>	<b>0.11</b>	<b>13604</b>	<b>595</b>	

\*Rounded totals are sum of actual impacts

\*\* SITE 28, 29, 29A, AND 29B - SITE 1 IN U-2579C PHASE 2 PERMIT

\*\*\* SITE 30 - SITE 2 IN U-2579C PHASE 2 PERMIT

**NOTES**

- ISOLATED WETLANDS SITE
- SITE 24 IS A CHANNEL RELOCATION

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