



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

April 25, 2024

MEMORANDUM TO: Division Environmental and Construction Units
FROM: *mat* Michael A. Turchy, ECAP Group Leader
Environmental Analysis Unit
SUBJECT: Environmental Permit for the Replacement of Bridge 430095 on US 74
over Blue Ridge Southern Railroad, Haywood County, Division 14,
TIP: B-5982.

Please find enclosed the following permit for this project:

Agency	Permit Type	Permit Expiration
US Army Corps of Engineers Section 404 Clean Water Act Permit	Nationwide 3 [issued statutorily]	March 14, 2026
NC Division of Water Resources Section 401 Water Quality Certification	General Certification No. 4239 [NW3] [non-notifying]	March 14, 2026

Work is authorized by the above referenced permit provided it is accomplished in strict accordance with the permitted plans.

The Environmental Coordination and Permitting Group or the Division Environmental Office must be consulted if any deviation from the permit(s) is required.

The General Conditions and Certifications for Nationwide and Regional Permits can be referenced at:
https://xfer.services.ncdot.gov/pdea/PermIssued/_General_Conditions_and_Certifications/

The Project Commitments "Greensheet" is located on the Preconstruction SharePoint Dashboard at:
<https://connect.ncdot.gov/site/preconstruction>



North Carolina Department of Transportation



Highway Stormwater Program
STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS

(Version 3.00; Released August 2021)

WBS Element: 47814.1.1 TIP/Proj No: B-5982 County(ies): Haywood Page 1 of 2

General Project Information

WBS Element:	47814.1.1	TIP Number:	B-5982	Project Type:	Bridge Replacement	Date:	8/10/2023
NCDOT Contact:	David S. Stutts, PE		Contractor / Designer:		Eric Berger, PE		
Address:	1000 Birch Ridge Drive Raleigh, NC 27610		Address:	940 Main Campus Drive, Suite 500 Raleigh, NC 27606			
Phone:	919-707-6442		Phone:	919-741-5780			
Email:	dstutts@ncdot.gov		Email:	berger@vhb.com			
City/Town:	Clyde		County(ies):	Haywood			
River Basin(s):	French Broad		CAMA County?	No			
Wetlands within Project Limits?	Yes						

Project Description

Project Length (lin. miles or feet):	0.28	Surrounding Land Use:	Rural Residential/Some Industrial					
	Proposed Project			Existing Site				
Project Built-Upon Area (ac.)	2.9	ac.	2.5	ac.				
Typical Cross Section Description:	4@12' lanes with 2@10' inside shoulders separated by a concrete barrier			4@12' lanes with varying shoulder widths				
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	44000	Year:	2042	Existing:	34000	Year:	2022

General Project Narrative:
(Description of Minimization of Water Quality Impacts)

This project involves the replacement of existing bridge NO. 430095 on US 74 over Southern Railroad. The proposed bridge was designed to minimize impacts to water quality as much as possible. 1.75:1 side slopes with guardrail were used to reduce impacts to the associated wetland from about STA. 21+25 to 25+25 -L- RT. Also, Energy dissipator pads were utilized at pipe outfalls to dissipate the water before entering wetlands.



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
 FOR NCDOT PROJECTS



(Version 3.00; Released August 2021)

WBS Element: 47814.1.1 TIP/Proj No.: B-5982 County(ies): Haywood Page 2 of 2

General Project Information

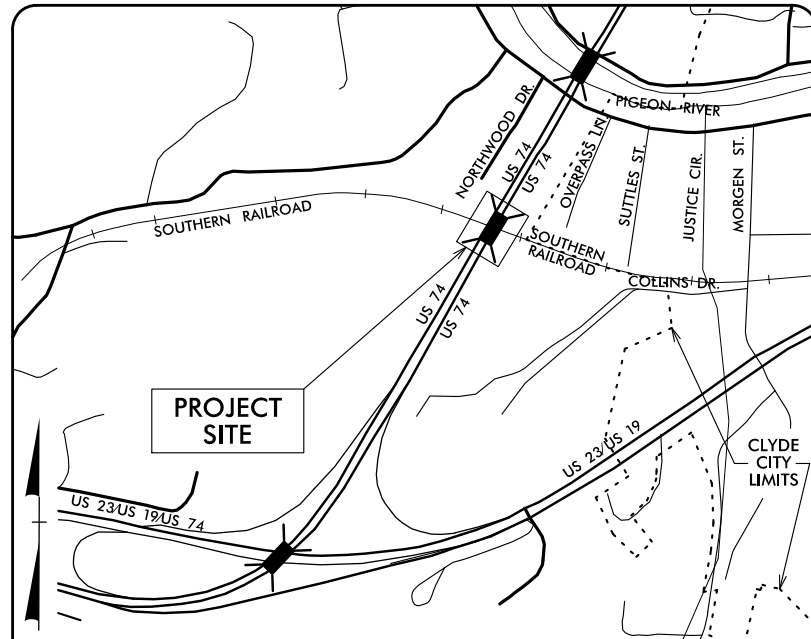
Waterbody Information

Surface Water Body (1):	Pigeon River		NCDWR Stream Index No.:	5-(7)	
NCDWR Surface Water Classification for Water Body	Primary Classification:		Class C		
	Supplemental Classification:				
Other Stream Classification:					
Impairments:					
Aquatic T&E Species?	No	Comments:			
NRTR Stream ID:	Pigeon River		Buffer Rules in Effect:	N/A	
Project Includes Bridge Spanning Water Body?	Yes	Deck Drains Discharge Over Buffer?	N/A	Dissipator Pads Provided in Buffer?	N/A
Deck Drains Discharge Over Water Body?	No	(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
	(If yes, provide justification in the General Project Narrative)				

Surface Water Body (2):	UT to Pigeon River		NCDWR Stream Index No.:	5-(7)	
NCDWR Surface Water Classification for Water Body	Primary Classification:		Class C		
	Supplemental Classification:				
Other Stream Classification:					
Impairments:					
Aquatic T&E Species?	No	Comments:			
NRTR Stream ID:	Stream B		Buffer Rules in Effect:	N/A	
Project Includes Bridge Spanning Water Body?	No	Deck Drains Discharge Over Buffer?	N/A	Dissipator Pads Provided in Buffer?	N/A
Deck Drains Discharge Over Water Body?	N/A	(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
	(If yes, provide justification in the General Project Narrative)				

TIP PROJECT: B-5982

See Sheet 1-B For Conventional Symbols



VICINITY MAP

NOT TO SCALE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

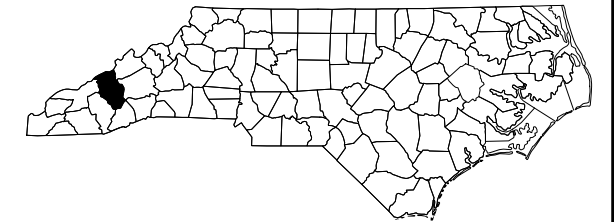
HAYWOOD COUNTY

LOCATION: TOWN OF CLYDE - REPLACE BRIDGE
430095 ON US 74 OVER BLUE RIDGE
SOUTHERN RAILROAD

**TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND
STRUCTURE**

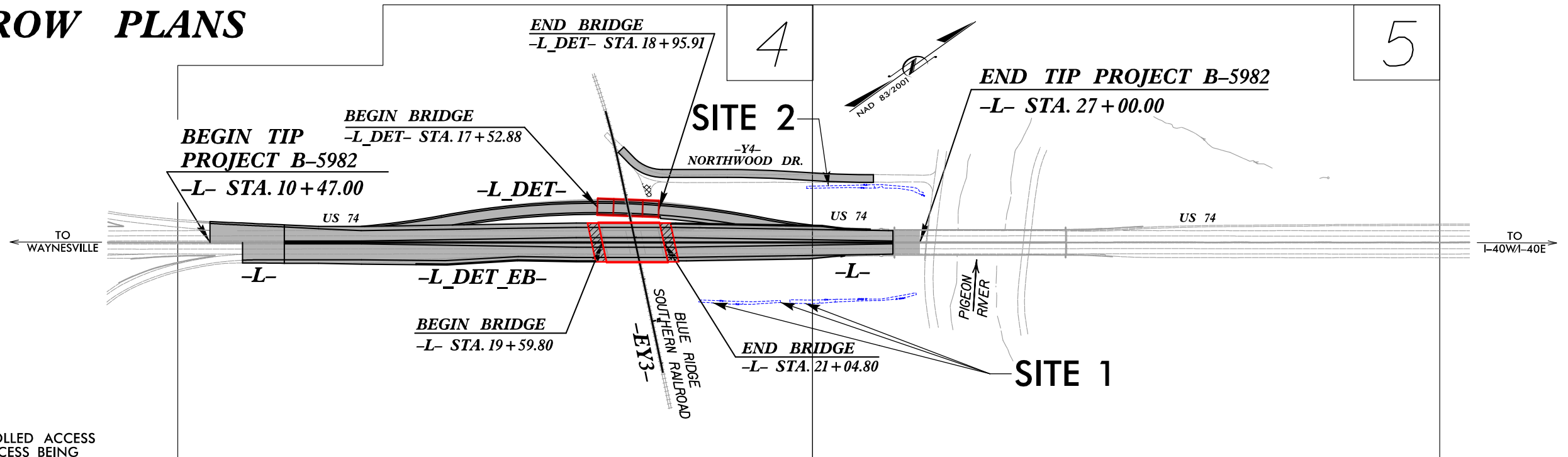
WETLAND AND SURFACE WATER IMPACTS PERMIT

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5982	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
47814.1.1		PE	
47814.2.1		RW, UTIL	



**PERMIT DRAWING
SHEET 1 OF 10**

ROW PLANS



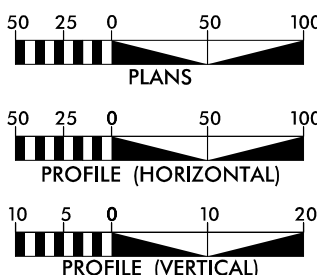
THIS IS A CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT:

GRAPHIC SCALES



DESIGN DATA

ADT 2022 = 34,000
ADT 2042 = 44,000
K = 8 %
D = 55 %
T = 9 % *
V = 65 MPH
* TTST = 5% DUAL 4%
FUNC CLASS =
FREEWAY
STATEWIDE TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-5982 = 0.286 MI.
LENGTH OF STRUCTURE TIP PROJECT B-5982 = 0.027 MI.
TOTAL LENGTH OF TIP PROJECT B-5982 = 0.313 MI.

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



2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
APRIL 28, 2023

LETTING DATE:
MAY 21, 2024

NCDOT CONTACT

MARK A. COLGAN, PE
PROJECT ENGINEER

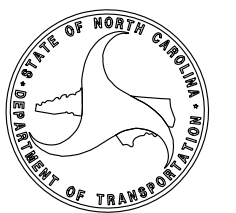
KYLE F. SMIACH, PE
PROJECT DESIGN ENGINEER

DAVID S. STUTTS, PE
PROJECT ENGINEER-ROADWAY DESIGN




HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.
ROADWAY DESIGN ENGINEER

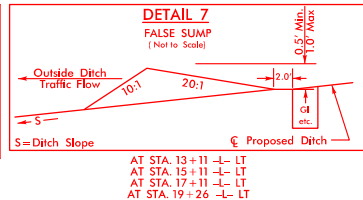
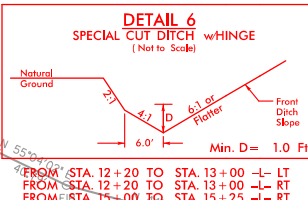
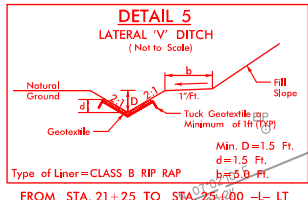
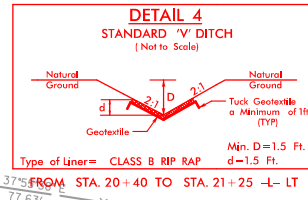
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**PERMIT DRAWING
SHEET 2 OF 10**

-  **FILL IN WETLAND**
-  **MECHANIZED CLEARING (GRUBBING)**
-  **TEMPORARY FILL IN WETLAND**

CHARLES DAVID LITTLEJOHN
DB 719 PG 1743



-L- POT Sta. 10+00.00

-EY3- POT Sta. 10+00.00
-EY3- PC Sta. 10+20.96
-EY3- PT Sta. 11+25.43

-Y4- POT Sta. 10+00.00
-Y4- PC Sta. 10+35.46
-Y4- PT Sta. 11+15.01

-Y4- PC Sta. 12+66.25
-Y4- PT Sta. 13+98.94

LATERAL V DITCH
W/CLASS B RIP RAP
EST 175 TONS
EST 490 SY GEOTEXTILE
EST DDE=65 CY
SEE DETAIL 5

STANDARD V DITCH
W/CLASS B RIP RAP
SLOPE = 15.7%
L=88 FT
EST 45 TONS
EST 190 SY GEOTEXTILE
EST DDE=15 CY
SEE DETAIL 4

SPECIAL CUT DITCH
WITH HINGE
SEE DETAIL 6

SPECIAL CUT DITCH
WITH HINGE &
CLASS I RIP RAP
EST 50 TONS
EST 90 SY GEOTEXTILE
SEE DETAIL 11

LATERAL BASE DITCH
W/CLASS I RIP RAP
EST 120 TONS
EST 170 SY GEOTEXTILE
EST DDE=15 CY
SEE DETAIL 8

CLASS I RIP RAP
EST 7 TONS
EST 15 SY GEOTEXTILE

RETAIN LATERAL BASE DITCH
W/CLASS B RIP RAP
SEE PSH 28-01

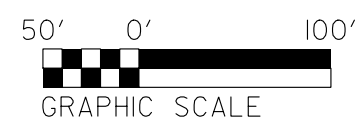
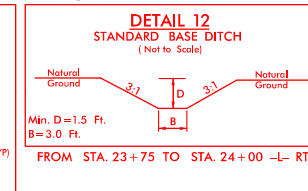
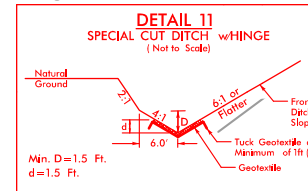
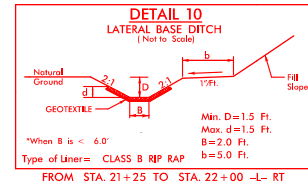
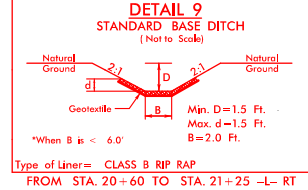
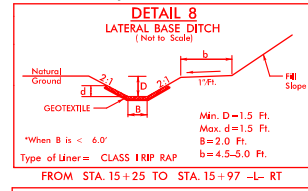
CLASS I RIP RAP
EST 7 TONS
EST 15 SY GEOTEXTILE

STANDARD BASE DITCH
W/CLASS B RIP RAP
SLOPE=1.9%
L=25 FT
EST 50 TONS
EST 90 SY GEOTEXTILE
EST DDE=5 CY
SEE DETAIL 12

STANDARD BASE DITCH
SLOPE=1.9%
L=25 FT
EST 50 TONS
EST 90 SY GEOTEXTILE
EST DDE=5 CY
SEE DETAIL 12

LATERAL BASE DITCH
W/CLASS B RIP RAP
EST 40 TONS
EST 100 SY GEOTEXTILE
EST DDE=15 CY
SEE DETAIL 10

CLASS B RIP RAP
EST 2 TONS
EST 7 SY GEOTEXTILE



SEE PERMIT DRAWING SHEET
3 OF 10 FOR ENLARGEMENT

Sta. = 22+00 -L- RT	Sta. = 24+00 -L- RT
DA=0.6 AC	DA=1.1 AC
CA=0.5	CA=0.5
I10=5.1 INHR	I10=5.1 INHR
Q10=1.5 CFS	Q10=2.8 CFS
V10=1.9 FFS	V10=1.9 FFS
d10=0.3 FT	d10=0.4 FT
s=0.047 F1FT	s=0.019 F1FT
n=0.065	n=0.045
Liner=CLASS B RIP RAP	Liner=GRASS

 **PAVEMENT REMOVAL**

FOR -L- PROFILE SEE SHEET 6 & 7

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

PROJECT REFERENCE NO. B-5982	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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CLARENCE SHELTON
DB 775 PG 1145

HAROLD LENIER COLLINS
DB 928 PG 1090
DB 782 PG 2353

BETTY LOUISE FAGAN
DB 486 PG 874

ERNEST HOWELL JACKSON
DB 623 PG 1375

ROGER WILLIAM FRICKS
DB 856 PG 2463

SANDRA D. NELSON
DB 949 PG 2143

4

3

2

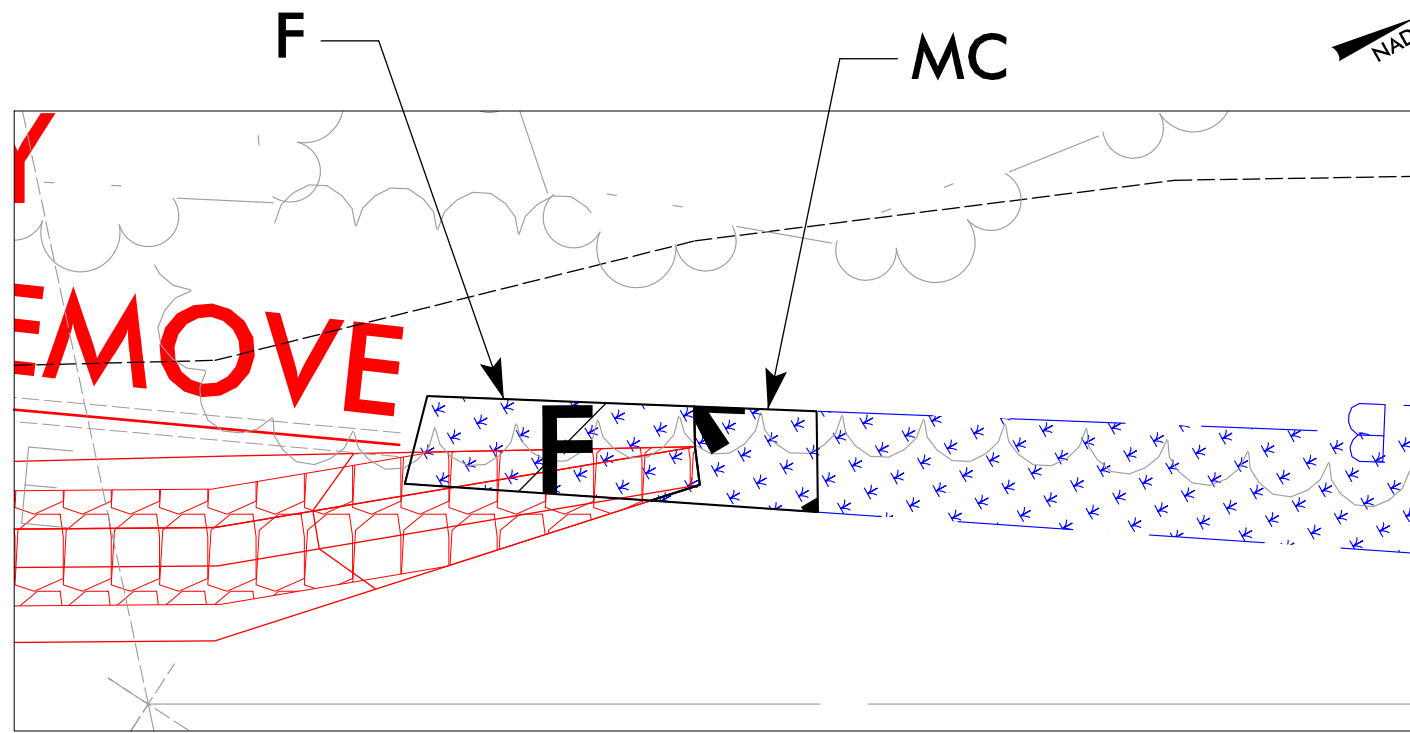
SITE 2

SITE 1

MATCHLINE -L- STA. 24+50 SEE SHEET 5

PROJECT REFERENCE NO. B-5982	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

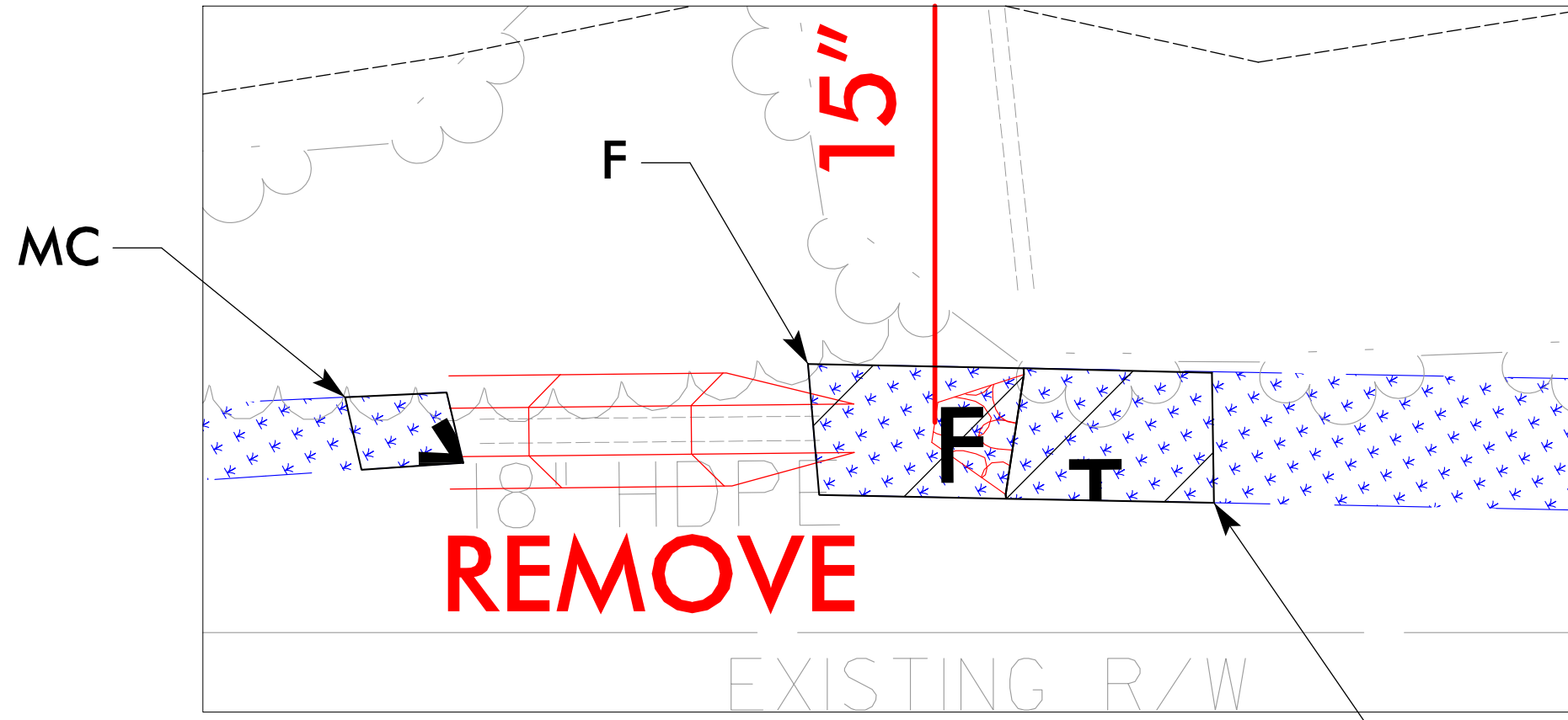
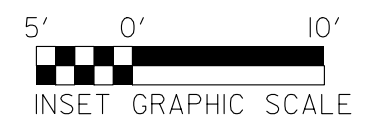
vhb
VHB Engineering NC, P.C. (C-3705)
940 Main Campus Drive, Suite 500
Raleigh, NC 27606



SITE 1

**PERMIT DRAWING
SHEET 3 OF 10**

- FILL IN WETLAND
- MECHANIZED CLEARING (GRUBBING)
- TEMPORARY FILL IN WETLAND






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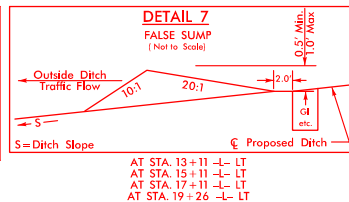
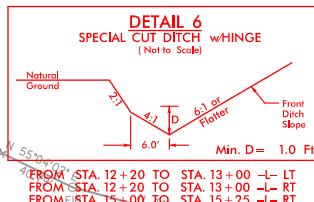
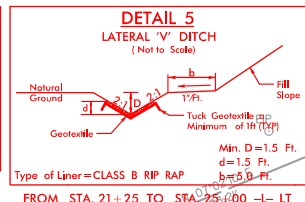
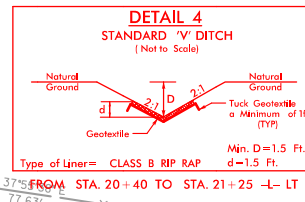
REVISIONS

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PERMIT DRAWING SHEET 4 OF 10

-  FILL IN WETLAND
-  MECHANIZED CLEARING (GRUBBING)
-  TEMPORARY FILL IN WETLAND

CHARLES DAVID LITTLEJOHN
DB 719 PG 1743



-L- POT Sta. 10+00.00

-EY3- POT Sta. 10+00.00
-EY3- PC Sta. 10+20.96
-EY3- PT Sta. 11+25.43

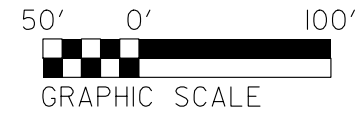
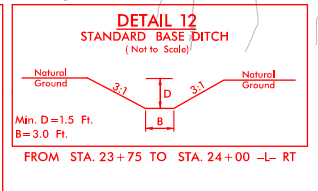
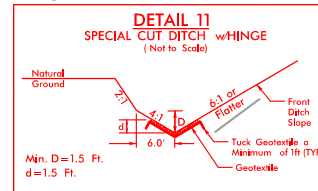
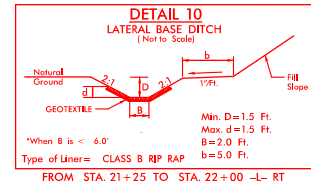
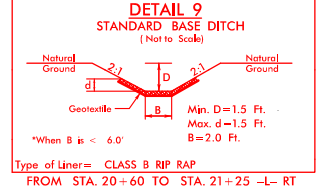
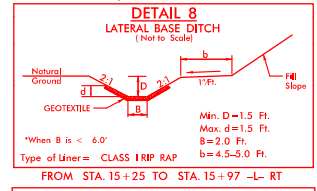
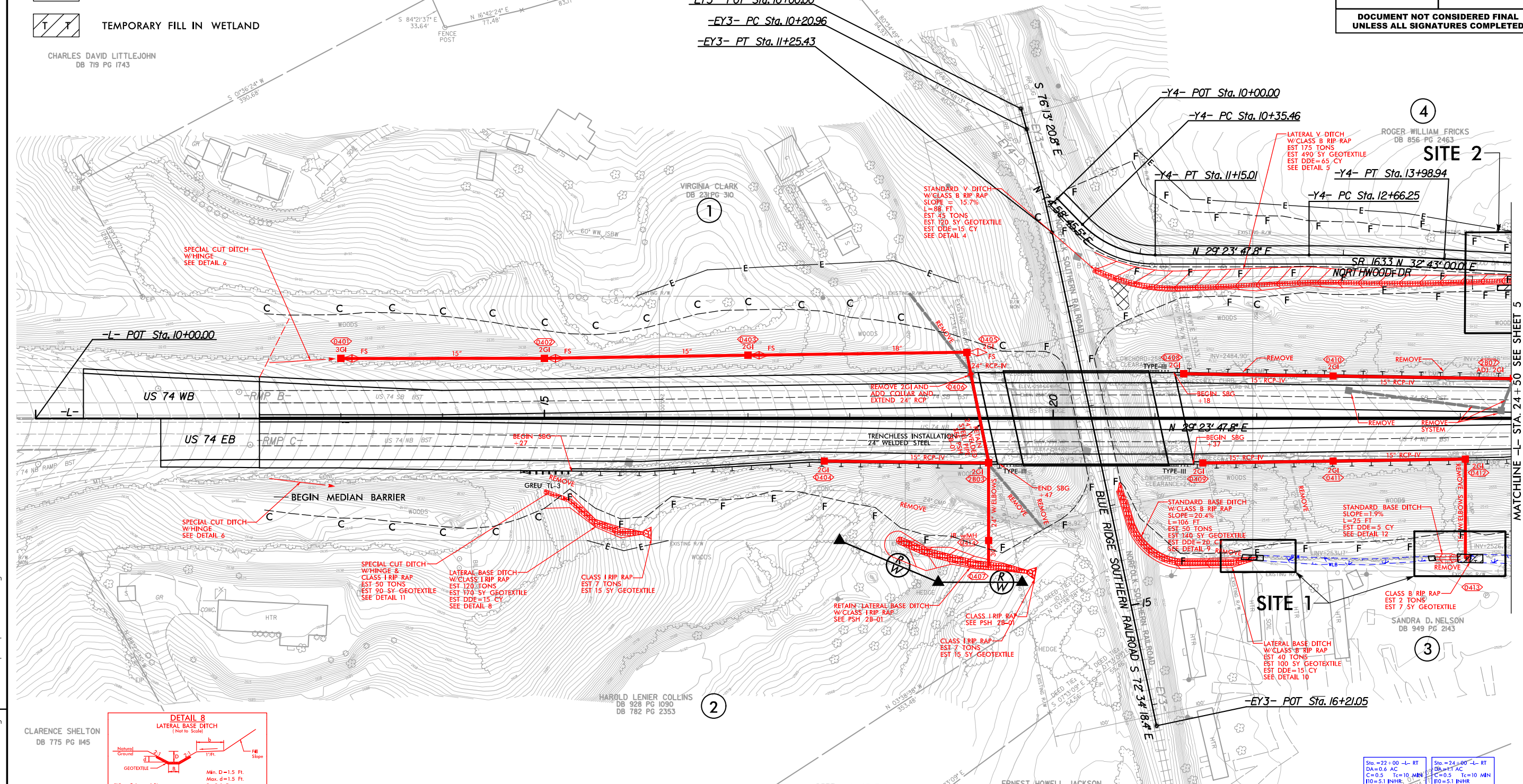
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-Y4- PC Sta. 10+35.46

-Y4- PT Sta. 11+50.01

-Y4- PC Sta. 12+66.25

-Y4- PT Sta. 13+98.94



SEE PERMIT DRAWING SHEET
3 OF 10 FOR ENLARGEMENT

Sta. = 22+00 -L- RT	Sta. = 24+00 -L- RT
DA = 0.6 AC	DA = 1 AC
C = 0.5	C = 0.5
I10 = 5.1 INHR	I10 = 5.1 INHR
Q10 = 1.5 CFS	Q10 = 2.8 CFS
V10 = 1.9 FFS	V10 = 1.9 FFS
d10 = 0.4 FT	d10 = 0.4 FT
s = 0.047 F1FT	s = 0.045 F1FT
n = 0.065	n = 0.045
Liner = CLASS B RIPRAP	Liner = GRASS

 PAVEMENT REMOVAL

FOR -L- PROFILE SEE SHEET 6 & 7

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO. B-5982	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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940 Main Campus Drive, Suite 500
Raleigh, NC 27606



4

3

2

1

SITE 2

SITE 1

MATCHLINE -L- STA. 24+50 SEE SHEET 5

REVISIONS

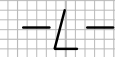
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**PERMIT DRAWING
SHEET 5 OF 10**

SITE 1

21+75

WETLAND



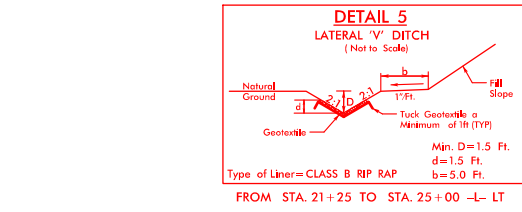
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B-5982	5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



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 940 Main Campus Drive, Suite 500
 Raleigh, NC 27606

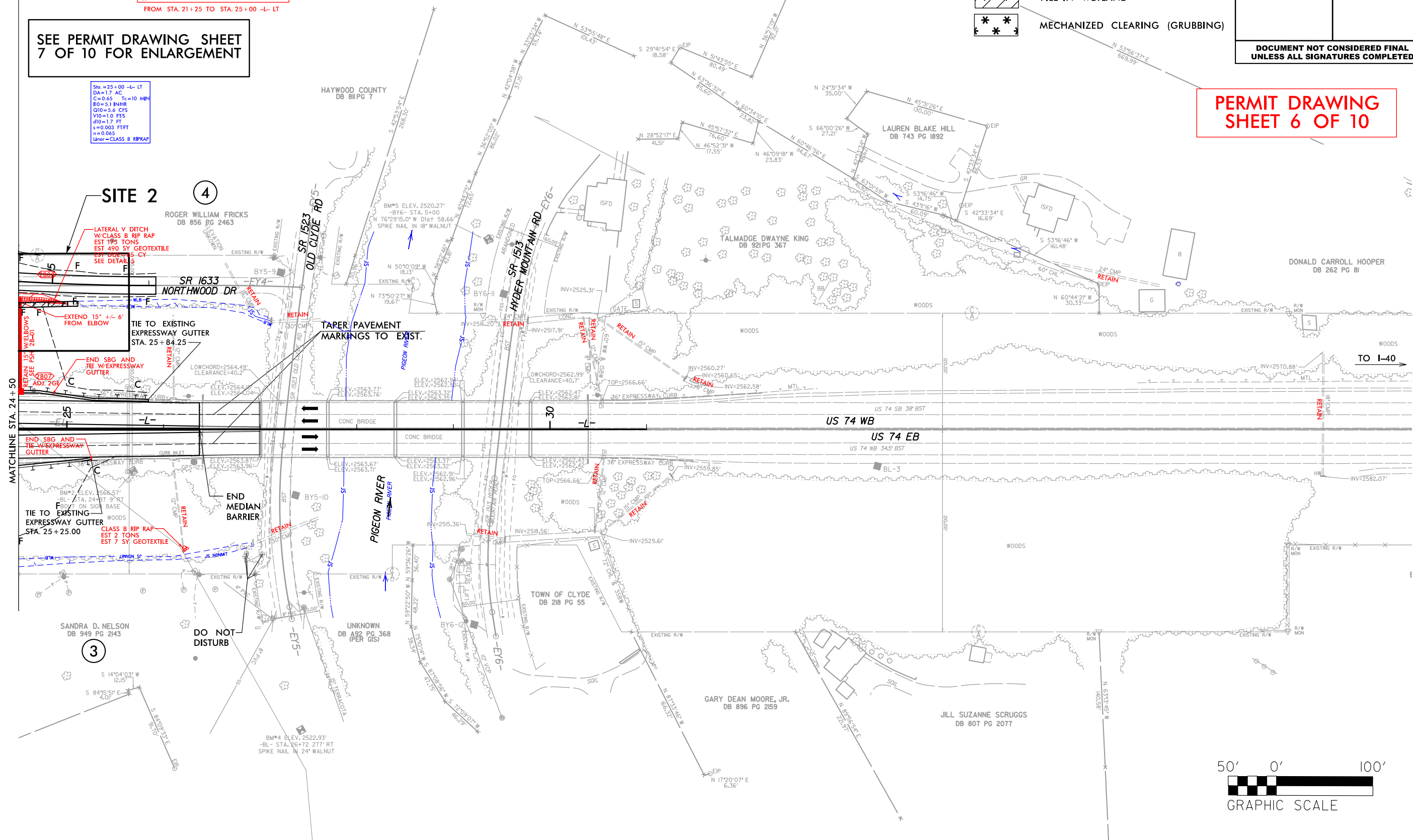
- F F FILL IN WETLAND
- * * * MECHANIZED CLEARING (GRUBBING)

PERMIT DRAWING SHEET 6 OF 10



SEE PERMIT DRAWING SHEET 7 OF 10 FOR ENLARGEMENT

Sta. = 25+00 -L- LT
 DA=17 AC
 C=0.65 Tc=10 MIN
 B0=5.1 INHR
 Q10=5.6 CFS
 V10=1.0 FFS
 d10=1.7 FT
 s=0.003 F/FT
 Liner=CLASS B RIPRAP



FOR -L- PROFILE SEE SHEET 7

REVISIONS

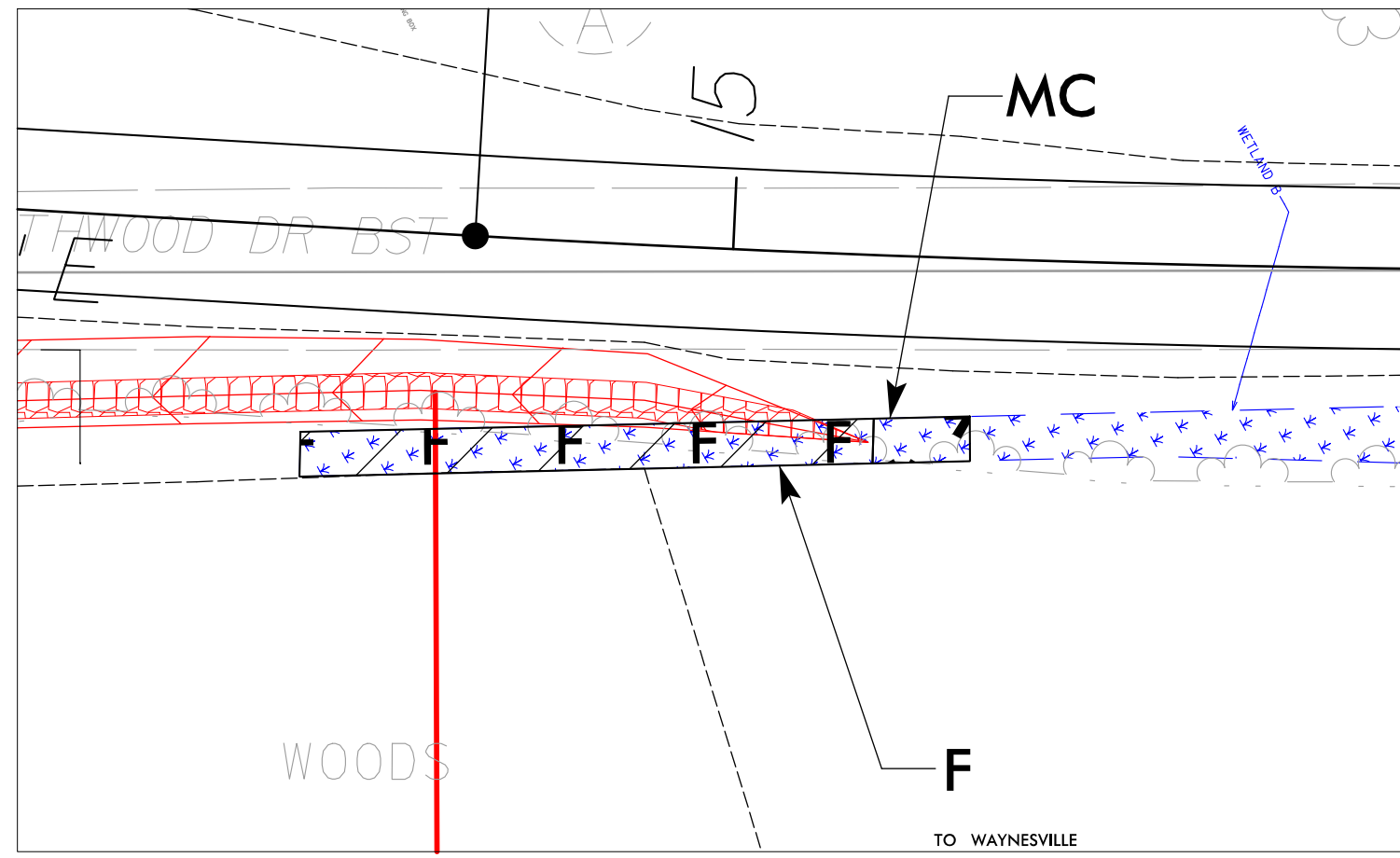
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


NAD 83/2011

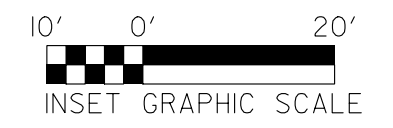
vhb
VHB Engineering NC, P.C. (C-3705)
940 Main Campus Drive, Suite 500
Raleigh, NC 27606

PROJECT REFERENCE NO.	SHEET NO.
B-5982	
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

**PERMIT DRAWING
SHEET 7 OF 10**



-  F F FILL IN WETLAND
-  * * * MECHANIZED CLEARING (GRUBBING)
-  TS TS TEMPORARY SURFACE WATER IMPACTS



SITE 2

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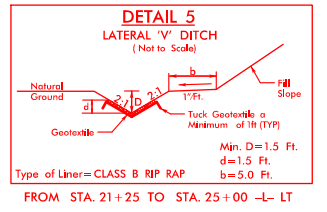
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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



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Raleigh, NC 27606

- F F FILL IN WETLAND
- * * * MECHANIZED CLEARING (GRUBBING)

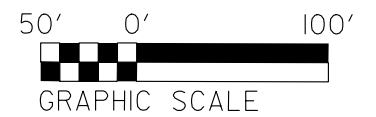
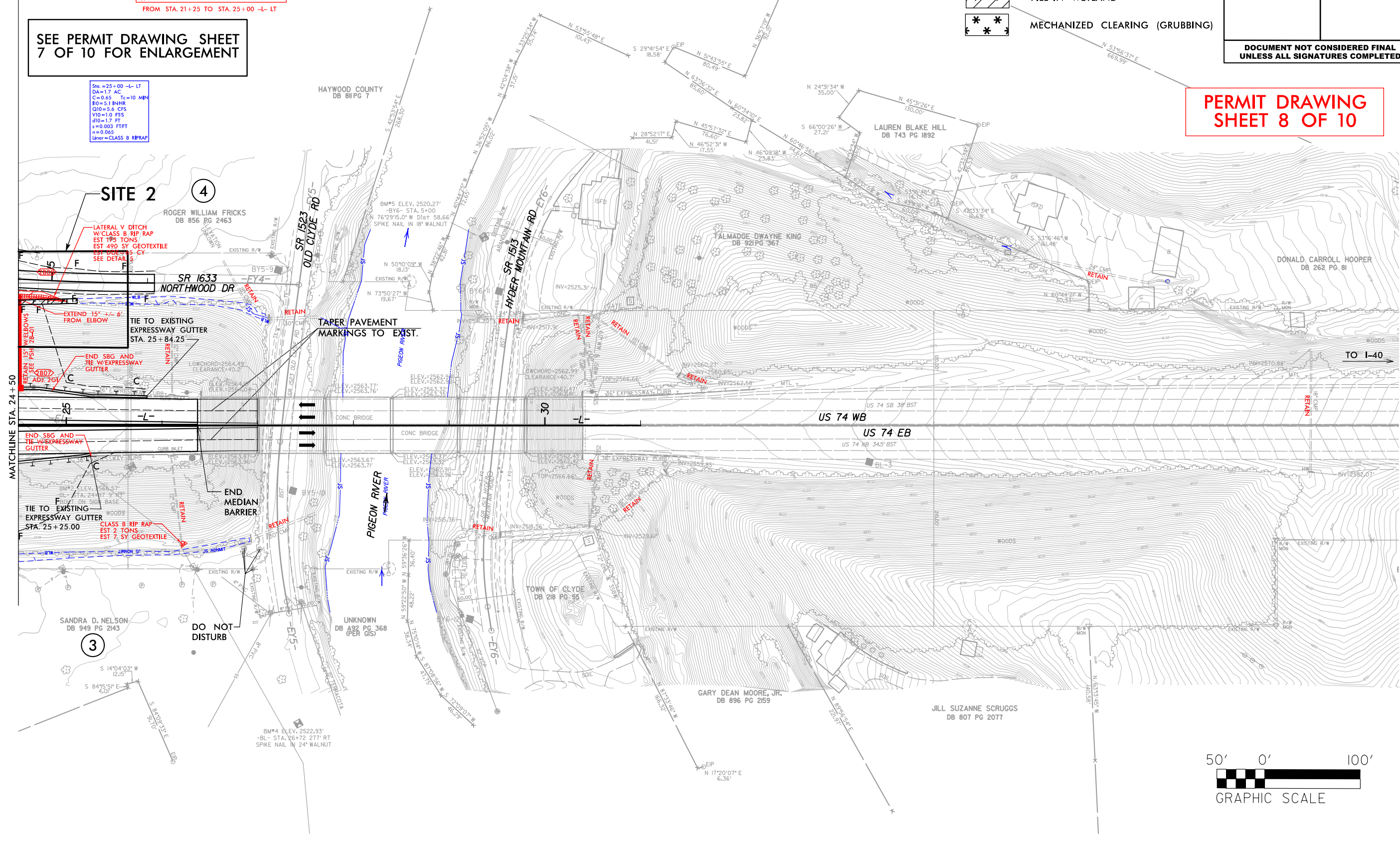
PERMIT DRAWING SHEET 8 OF 10



SEE PERMIT DRAWING SHEET 7 OF 10 FOR ENLARGEMENT

Sta. = 25+00 -L- LT
DA=17 AC
C=0.45 Tc=10 MIN
BO=5.1 INHR
Q10=5.6 CFS
V10=1.0 FFS
d10=1.7 FT
s=0.003 F/FT
n=0.065
Liner=CLASS B RIP RAP

REVISIONS



FOR -L- PROFILE SEE SHEET 7

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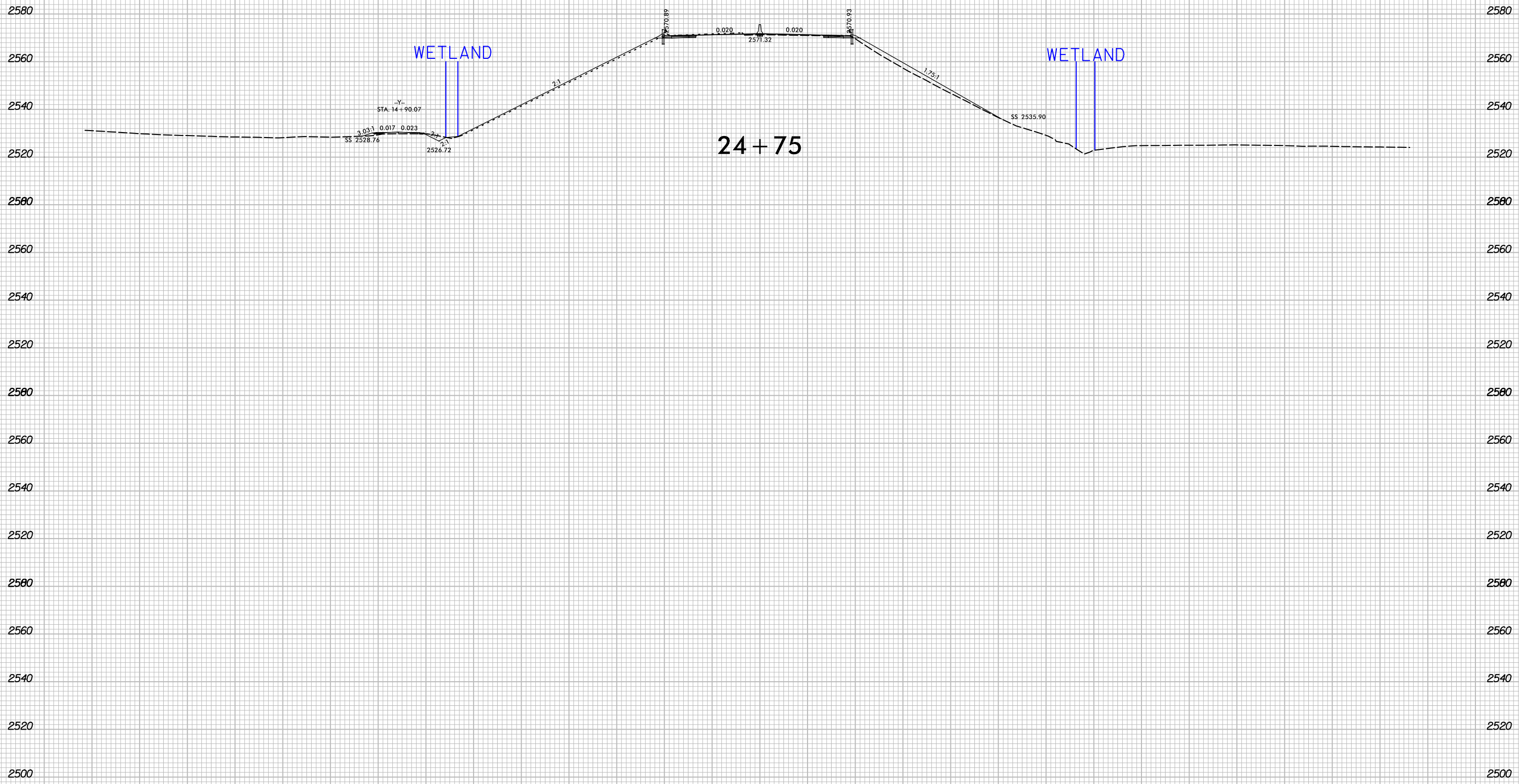
6/23/16

300 280 260 240 220 200 180 160 140 120 100 80 60 40 20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300

**PERMIT DRAWING
SHEET 9 OF 10**

SITE 2

24+75



3:48 PM
 R:\Highways\Drawings\B5982_HYD.L_XPL.dgn
 gavette

300 280 260 240 220 200 180 160 140 120 100 80 60 40 20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300

