



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

June 14, 2019

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

ATTN: Mr. David Bailey
NCDOT Coordinator

Subject: **NCDOT Response to Request for Additional Information Dated April 22, 2019, and subsequent Application Modification** for the Widening of US 70 from Mt. Hope Church Road to Sun Lake Road in Guilford County. NCDOT Division 7, TIP No. U-2581 BA, WBS 34840.1.4.

Dear Sir:

The North Carolina Department of Transportation (NCDOT) is in receipt of your request for additional information dated April 22, 2019. Item number 4, section "a" request profile/cross section views for stream impact Sites 1, 2, 3, and 6.

Pursuant to this request and subsequent conversations, the drawings were revised by way of:

Site 1

Detail 10 was added to display the cross section of the stabilization impact at the pipe outlet. The rip-rap will be "keyed-in" to stabilize the system, but not impede aquatic passage.

Site 2

Detail 11 was added to display the cross section of the stabilization impact at the pipe outlet.

Site 3

Detail 10 was added to display the cross section of the stabilization impact at the pipe outlet. The rip-rap will be "keyed-in" to stabilize the system, but not impede aquatic passage.

While re-reviewing Site 3, the engineer increased the size of the rip rap at this location. This increased the permanent impact from 11 to 13 feet, and decreased the temporary impact from 16 to 13 feet.

Please find included DMS Mitigation Acceptance for the 2 additional feet of impact (increasing project totals from 298 to 300 feet).

Table 2 from the January application has been revised below to reflect this change.

Site 6

Detail 10 was added to display the cross section of the stabilization impact at the pipe outlet. The rip-rap will be “keyed-in” to stabilize the system, but not impede aquatic passage.

Revised Table 2: Stream Impacts (values in linear feet)

Permit Site	Stream Name/ NRTR ID	Status/ Class/ Index	Perm. Channel Impacts	Temp. Channel Impacts	ACOE Required Mitigation	DWR Required Mitigation	Impact Description
1	UT to Little Alamance Creek*	Perennial WS-IV NSW 16-19-3-(0.5)	10	19	10	--	The existing 24” reinforced concrete pipe will be upgraded to a 30”. The impact is a result of the pipe and riprap pad installation.
2	UT to Little Alamance Creek SC	Perennial WS-IV NSW 16-19-3-(0.5)	6	10	6	--	A 24” base ditch will outlet adjacent to the stream. Due to the small size of this system, it would not be possible to use bank stabilization without impacting the channel bottom. As such, the impact was accounted for as loss of water.
3			4 13	4 13	4 13	--	The 15” corrugated metal pipe will be replaced with a 30” reinforced concrete pipe.
5	UT to Little Alamance Creek SB	Perennial WS-IV NSW 16-19-3-(0.5)	251	33	251	--	The 46-foot long 10’ x 6’ culvert will be replaced with a 127-foot long, 10’ x 8’ culvert with sills.
6	UT to Little Alamance Creek **	Perennial WS-IV NSW 16-19-3-(0.5)	20	15	20	--	The existing 18” reinforced concrete pipe will be upgraded to a 24” reinforced concrete pipe. The impact is the result of raising the grade of the road as well as the larger pipe.
Total Stream Impacts			298 300	93 90	298 300	0	
Total Requested from DMS:					300		

* This system was outside of the original NRTR study limits. It was included due to the need to capture stormwater on the lane taper/transition.

**This stream was outside of the original NRTR study limits. Raising of the grade of this intersecting road was not originally accounted for.

The buffer drawings have been revised to match the changes in the drawings. However, there are no changes to Buffer Impacts as a result of these revisions.

Thank you for your assistance with this project. Please do not hesitate to contact me for additional questions or concerns at maturchy@ncdot.gov or (919) 707-6157.

Sincerely,

Carla Dagnino

for

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

cc: Mr. John Fisher, Publix



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

TIM BAUMGARTNER
Director

June 3, 2019

Mr. Philip S. Harris, P.E., CPM
Environmental Analysis Unit
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Dear Mr. Harris:

Subject: DMS Mitigation Acceptance Letter:

U-2581BA, US 70 (Burlington Road) from West of SR 3045 (Mount Hope Church Road) / SR 2819 (McCleansville Road) to just East of SR 3175 (Birch Creek Road), Guilford County

The purpose of this letter is to notify you that the Division of Mitigation Services (DMS) will provide the stream, wetland and buffer mitigation for the subject project. Based on the information supplied by you on June 3, 2019, the impacts are located in CU 03030002 of the Cape Fear River basin in the Central Piedmont (CP) Eco-Region, and are as follows:

Stream and Wetlands	River Basin	CU Location	Eco-Region	Stream			Wetlands		
				Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh
Impacts	Cape Fear	03030002	CP	0	0	300.0	0.11	0	0

*Some of the impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details.

All buffer mitigation requests and approvals are administrated through the Riparian Restoration Buffer Fund. The NCDOT will be responsible to ensure that appropriate compensation for the buffer mitigation will be provided in the agreed upon method of fund transfer. Upon receipt of the NCDWR's Buffer Authorization Certification, DMS will transfer funds from the NCDOT 2984 Fund into the Riparian Restoration Buffer Fund. Upon completion of transfer payment, NCDOT will have completed its riparian buffer mitigation responsibility for TIP Number U-2581BA. Subsequently, DMS will conduct a review of current NCDOT ILF Program mitigation projects in the river basin to determine if available buffer mitigation credits exist. If there are buffer mitigation credits available, then the Riparian Restoration Buffer Fund will purchase the appropriate amount of buffer mitigation credits from NCDOT ILF Program.



Buffer	River Basin	CU	Eco-Region	Buffer Impacts		
				Zone 1	Zone 2	TOTAL
Impacts	Cape Fear	03030002 – Jordan – Haw	CP	11,763.0	4,355.0	16,118.0

This mitigation acceptance letter replaces the mitigation acceptance letter issued on February 15, 2019. The impacts and associated mitigation needs were not projected by the NCDOT in the 2019 impact data. DMS will commit to implement sufficient compensatory stream and wetland 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. If the above referenced impact amounts increase, 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,



James B. Stanfill
DMS Asset Management Supervisor

Cc: Mr. Monte Matthews, USACE – Raleigh Regulatory Field Office
Ms. Amy Chapman, NC Division of Water Resources
File: U-2581BA Revised

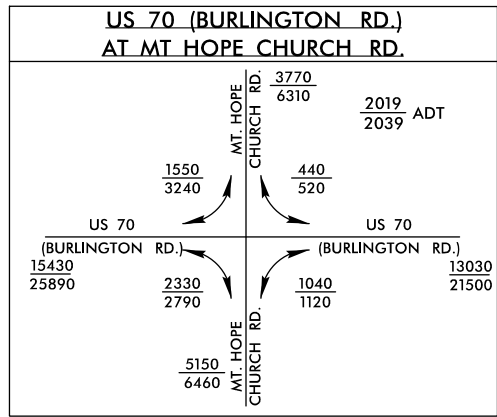


PROJECT REFERENCE NO. U-2581BA	SHEET NO. 4
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Prepared by vhb VHB Engineering Inc., P.C. (C-2705) 980 May Campus Drive, Suite 500 Raleigh, NC 27608	

PERMIT DRAWING
SHEET 2 OF 14
Revised 5/30/2019

-L- CURVE DATA
 PI Sta 17+66.41
 $\Delta = 12^\circ 58' 11.1"$ (LT)
 $D = 1'13" 08.6"$
 $L = 1063.91'$
 $T = 534.24'$
 $R = 4700.00'$
 $SE = 0.025$
 $RO = 105'$
 $INC = 42'$

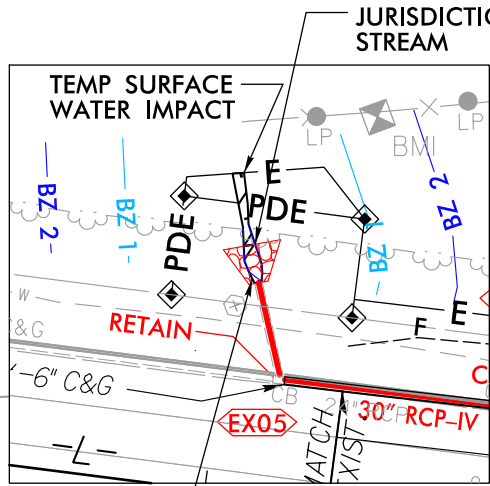
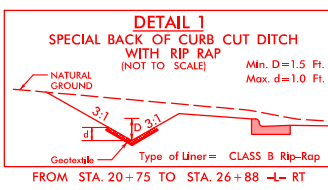
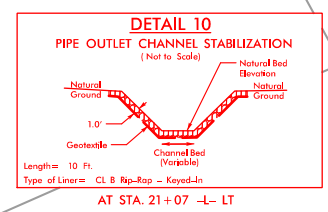
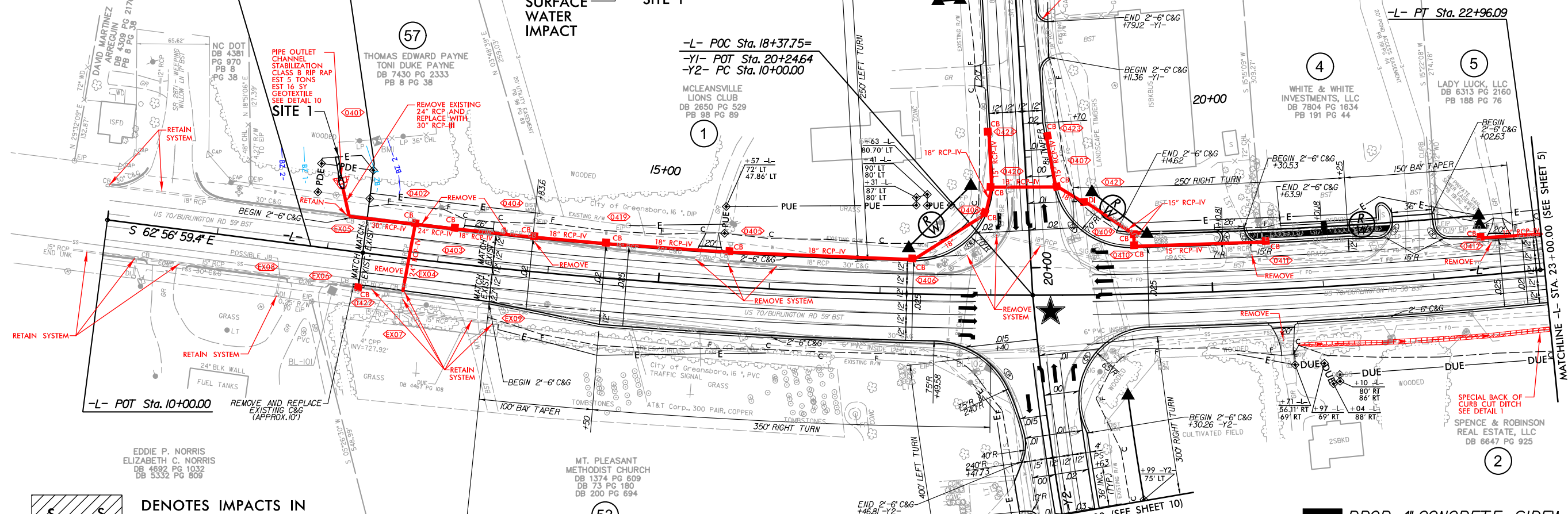
-Y2- CURVE DATA
 PI Sta 13+49.93
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 $L = 696.04'$
 $T = 349.93'$
 $R = 2720.00'$
 $SE = 0.04$
 $RO = 144'$



BEGIN TIP PROJECT U-2581BA

-L- PC STA. 12+32.17
 BEGIN MILL/RESURFACE
 BEGIN WIDENING (LT SIDE ONLY)

BEGIN CONSTRUCTION
-L- POT Sta. 11+85.00



DENOTES IMPACTS IN SURFACE WATER

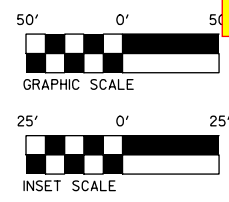
DENOTES TEMPORARY IMPACTS IN SURFACE WATER

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-L- POT STA. 13+50.00

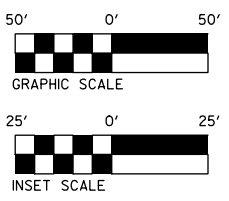
★ EXISTING SIGNAL TO BE MODIFIED

PROP. 4" CONCRETE SIDEWALK

FOR -L- PROFILE SEE SHEET 11
 FOR -Y1- & -Y2- PROFILES SEE SHEET 14

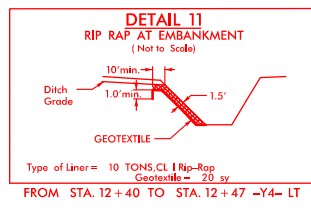
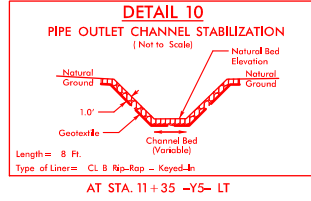
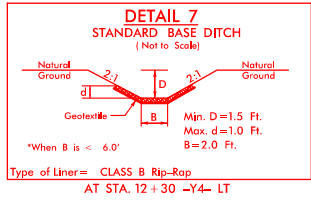


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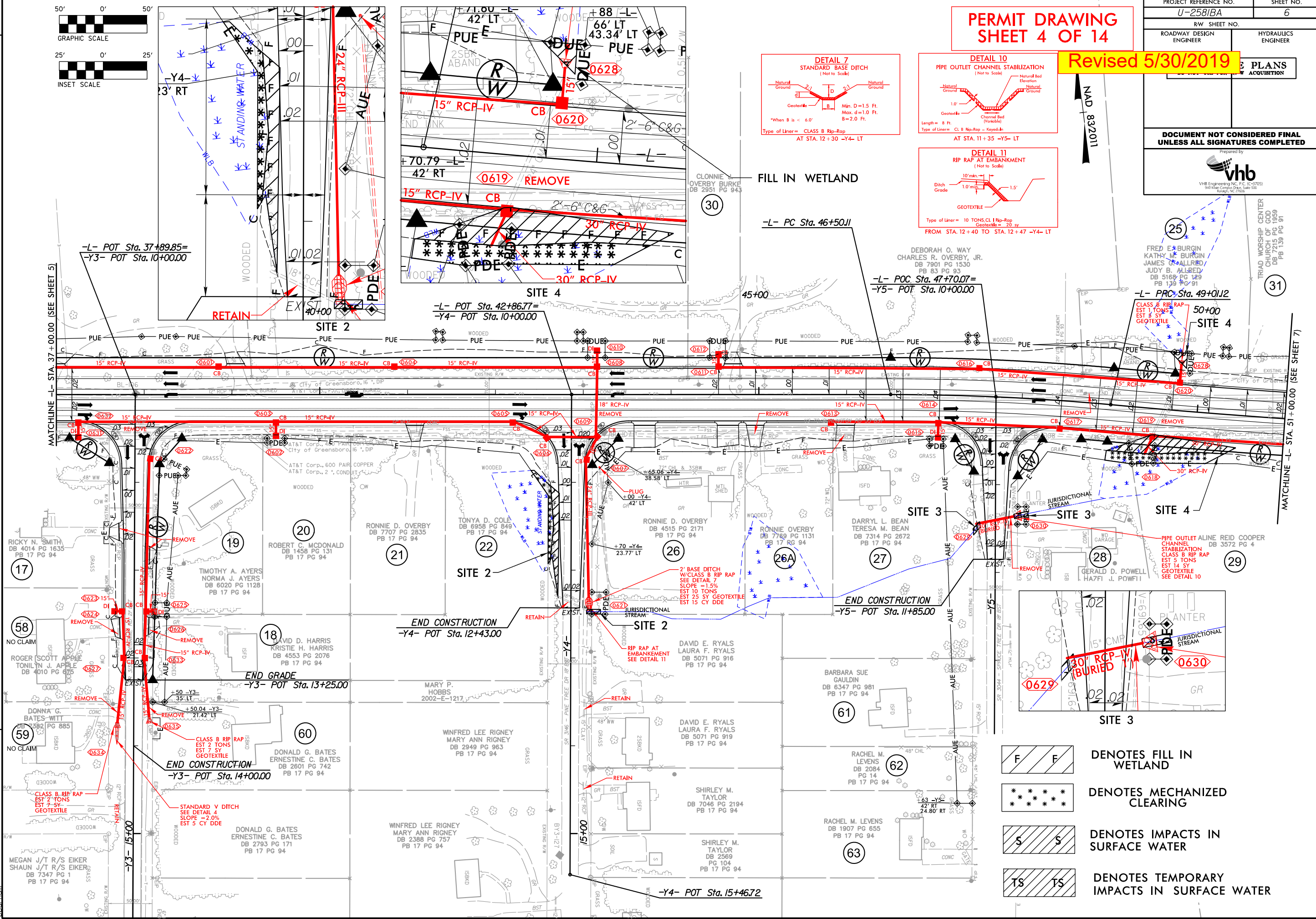
PERMIT DRAWING SHEET 4 OF 14

Revised 5/30/2019



NAD 83/2011

FILL IN WETLAND



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

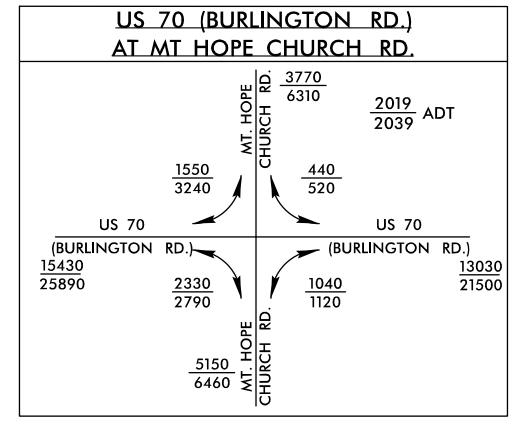
REVISIONS

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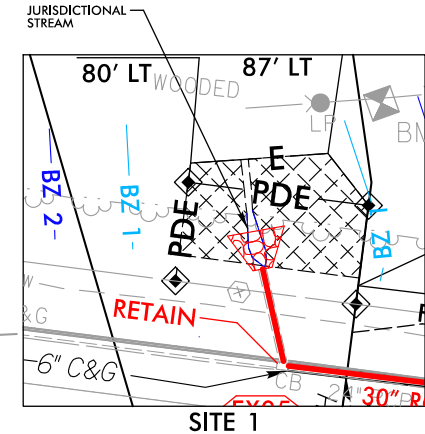
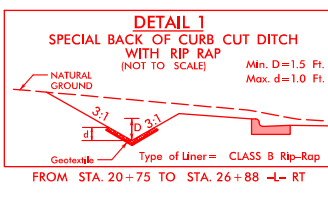
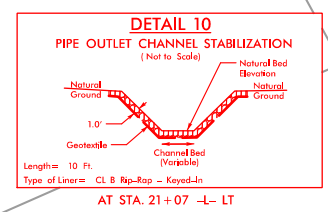
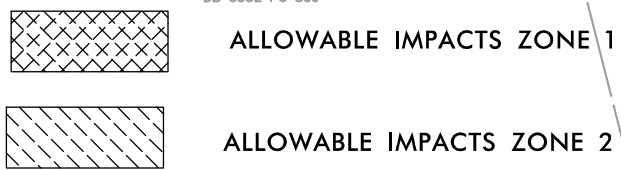
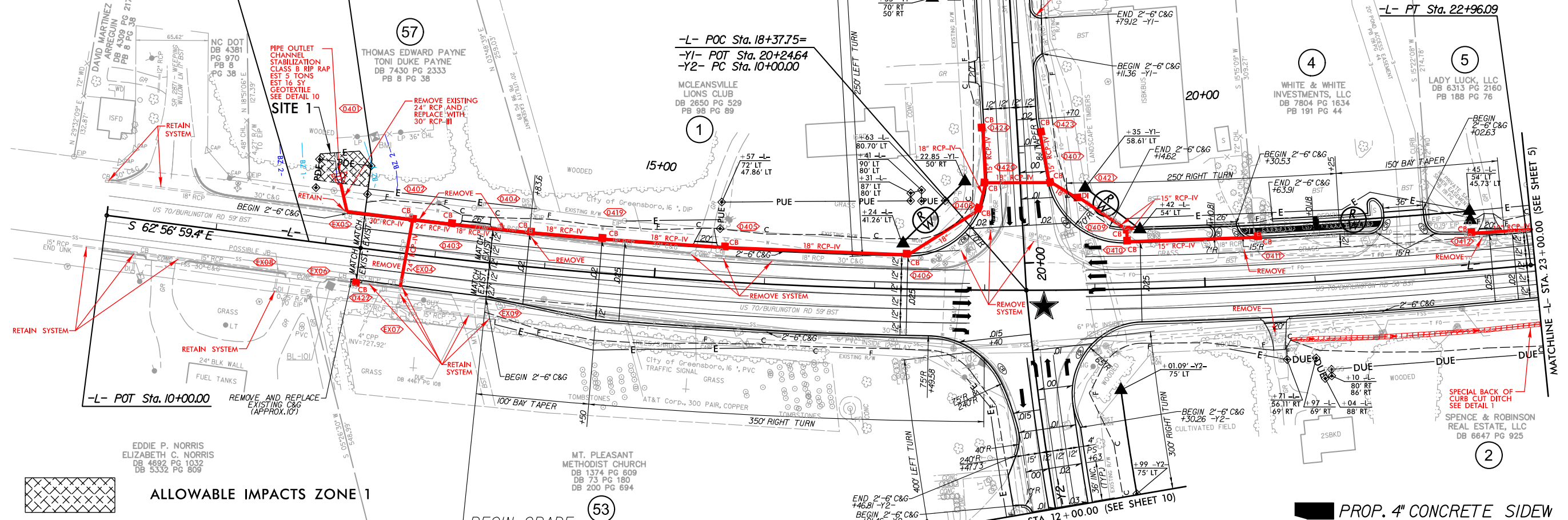
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 BEGIN WIDENING (LT SIDE ONLY)

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-L- POT Sta. 11+85.00



BEGIN CONSTRUCTION
-Y1- POT Sta. 13+45.00

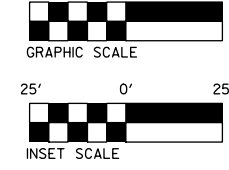
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-Y1- POT Sta. 20+24.64
-Y2- PC Sta. 10+00.00

BEGIN GRADE
END MILL/RESURFACE
-L- POC STA. 13+50.00

★ EXISTING SIGNAL TO BE MODIFIED

FOR -L- PROFILE SEE SHEET 11
 FOR -Y1- & -Y2- PROFILES SEE SHEET 14

BUFFER DRAWING
SHEET 2 OF 7
 Revised 5/30/2019



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Prepared by vhb VHB Engineering Inc., P.C. (C-2705) 980 Main Campus Drive, Suite 500 Raleigh, NC 27606	



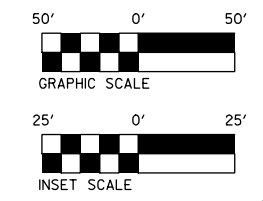
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PROJECT REFERENCE NO. U-2581BA	SHEET NO. 9
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	ENGINEER
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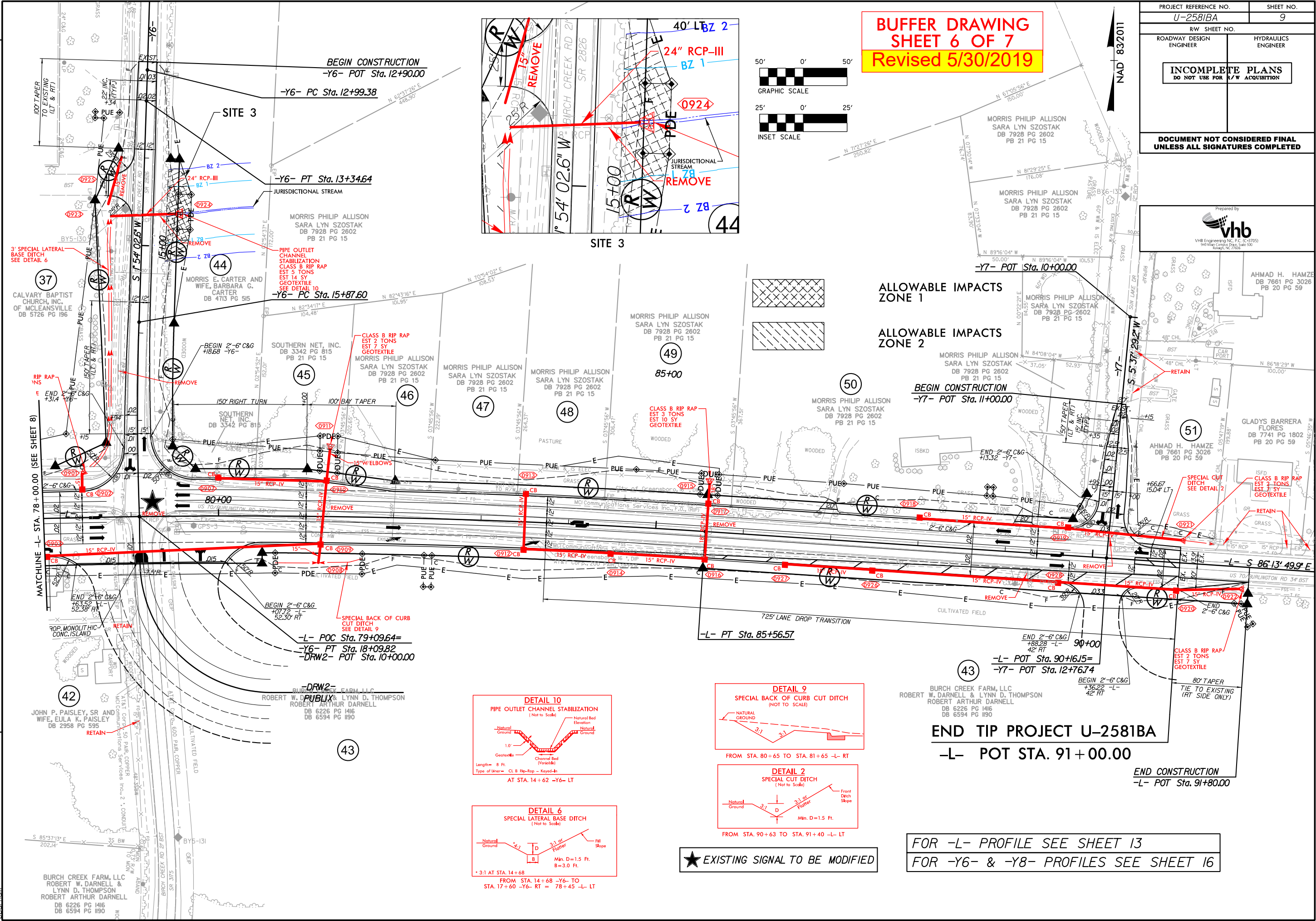
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UNLESS ALL SIGNATURES COMPLETED



BUFFER DRAWING
SHEET 6 OF 7
Revised 5/30/2019



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★ EXISTING SIGNAL TO BE MODIFIED

FOR -L- PROFILE SEE SHEET 13
FOR -Y6- & -Y8- PROFILES SEE SHEET 16

BURCH CREEK FARM, LLC
ROBERT W. DARNELL & LYNN D. THOMPSON
ROBERT ARTHUR DARNELL
DB 6226 PG 1416
DB 6594 PG 1190

JOHN P. PAISLEY, SR AND WIFE, EULA K. PAISLEY
DB 2958 PG 595

BURCH CREEK FARM, LLC
ROBERT W. DARNELL & LYNN D. THOMPSON
ROBERT ARTHUR DARNELL
DB 6226 PG 1416
DB 6594 PG 1190

BURCH CREEK FARM, LLC
ROBERT W. DARNELL & LYNN D. THOMPSON
ROBERT ARTHUR DARNELL
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DB 6594 PG 1190

GLADYS BARRERA FLORES
DB 7741 PG 1802
PB 20 PG 59

AHMAD H. HAMZE
DB 7661 PG 3026
PB 20 PG 59

MORRIS PHILIP ALLISON
SARA LYN SZOSTAK
DB 7928 PG 2602
PB 21 PG 15

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PB 21 PG 15

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