



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT L. MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

July 29, 2014

U.S. Army Corps of Engineers
Wilmington Regulatory Office
69 Darlington Avenue
Wilmington, NC 28402-1890

ATTN: Ms. Liz Hair
NCDOT 8 Coordinator

SUBJECT: **Additional Information for the Section 404 Individual Permit Application and Request for Modification to the Section 401 Water Quality Certification** for the proposed NC 24/27 Troy Bypass from west of SR 1138 (Dairy Road) to just east of Little River, Montgomery County, Division 8. WBS Element No. 34352.1.1, TIP No. R-0623.

REFERENCE: R-0623 Individual Permit Application, dated March 10, 2014
NCDWR Project No. 2014-0285, Certification No. 3992, dated May 23, 2014.

Dear Madam:

The purpose of this letter is to provide additional information for the Section 404 Individual Permit application and request a modification to the North Carolina Division of Water Resources Certification for the above referenced project. The additional information and modification is to account for additional permanent stream impacts including bank stabilization, decrease in temporary stream impacts, and additional permanent wetland excavation and hand clearing to the project since the submittal of the above permit application. Utility impacts also were changed, resulting in slightly less temporary impacts (see attached revised utility drawings). Also, please find attached the revised NCEEP acceptance letter. Please replace the current permit drawings with the new revised drawings (Revised Permit Drawing Sheets 12, 40, 41, 42, 43, 90, and 91 of 91) and revised utility drawings (Revised Utility Drawing Sheets 1-5 of 5) attached with this letter.

Changes in stream impacts for Permit Sites 11 and 11A are associated with the recent design change of the proposed pipe to box culvert. Permanent stream impacts (fill) will decrease from 322 linear feet to 319 linear feet for Permit Site 11 while bank stabilization will increase from 15 linear feet to 47 linear feet. Temporary stream impacts at Permit Site 11 will decrease from 83 linear feet to 56 linear feet. Permanent stream impacts (fill) will increase from 91 linear feet to 105 linear feet at Permit Site 11A while bank stabilization will increase from 0 linear feet to 6 linear feet. Temporary stream impacts at Permit Site 11A will decrease from 41 linear feet to 21 linear feet. These revised impacts for Permit Sites 11 and 11A are shown in the attached Revised Permit Drawing Sheets 40-43 of 91, and 90 of 91, and in Table 1 below in bold and italicized font.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1548

TELEPHONE: 919-707-6000
FAX: 919-212-5785
WEBSITE: NCDOT.GOV

LOCATION:
CENTURY CENTER, BUILDING B
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610

Table 1. Revised R-0623 Stream Impacts

Permit Site No.	Stream Name/JD Packet ID	I/P Flow Status	Impact Type	Permanent Impacts (ft)	Impacts requiring USACE mitigation (ft)	USACE Mitigation Ratio ¹	Impacts requiring NCDWR mitigation (ft)	Temp Impacts (ft)
1	UT to Rocky Creek/S1	I	Fill	136	136	1:1	0 ³	16
			BS	11	0 ²		0 ³	0
2	UT to Rocky Creek/S2	I	Fill	39	39	1:1	0 ³	34
3	UT to Warner Creek/S3	P	Fill	294	294	2:1	294	24
4	UT to Warner Creek/S5	P	Fill	271	271	2:1	271	73
5	UT to Warner Creek/S6	P	Fill	295	295	2:1	295	17
			BS	62	0 ²		62	0
5B	UT to Warner Creek/S8	I	Fill	500	500	1:1	0 ³	0
7	Warner Creek/S18	P	BS	43	0 ²		0 ⁴	0
7A	UT to Warner Creek/S17	P	BS	16	0 ²		0 ⁴	0
7B	UT to Warner Creek/S13	P	Fill	355	355	2:1	355	72
8	UT to Warner Creek/S76	P	Fill	0	0		0	10
11	UT to Turkey Creek/S37	P	Fill	319	319	2:1	319	56
			BS	47	0 ²		47	0
11A	UT to Turkey Creek/S36	P	Fill	105	105	2:1	0 ⁴	21
			BS	6	0 ²		0 ⁴	0
12	UT to Turkey Creek/S40	P	Fill	499	499	2:1	499	38
14	UT to Smithermans Creek/S50	I	Fill	229	229	1:1	0 ³	60
			BS	12	0 ²		0 ³	0
15	UT to Smithermans Creek/S53	P	Fill	370	370		370	31
			BS	13	0 ²		0 ⁴	0
17	UT to Smithermans Creek/S57	P	Fill	280	280	2:1	280	57
			BS	21	0 ²		21	0

Table 1. Revised R-0623 Stream Impacts continued

Permit Site No.	Stream Name/JD Packet ID	I/P Flow Status	Impact Type	Permanent Impacts (ft)	Impacts requiring USACE mitigation (ft)	USACE Mitigation Ratio ¹	Impacts requiring NCDWR mitigation (ft)	Temp Impacts (ft)
18	UT to Smithermans Creek/S59	I	Fill	297	297	1:1	0 ³	44
			BS	22	0 ²		0 ³	0
19B	UT to Smithermans Creek/S60	P	Fill	0	0		0	17
19C	Smithermans Creek/S64	P	Fill	340	340	2:1	340	0
			BS	9	0 ²		9	0
21	Little River	P	Fill	0	0		0	112
			BS	75	0 ²		0 ⁴	0
24A	Long Branch/S77	I	Fill	240	240	1:1	0 ³	18
			BS	10	0 ²		0 ³	0
TOTALS (ft)				4,916	4,569		3,176	700

Notes: P = Perennial; I = Intermittent; BS = Bank Stabilization. ¹Determined from USACE during verification site visit on March 7, 2012. ²Mitigation for bank stabilization not required by USACE. ³Intermittent streams grandfathered from NCDWR mitigation. ⁴Mitigation not required by NCDWR (less than 150 linear feet of stream).

It was recently determined from the NCDOT Geotechnical Unit that undercutting the wetland at Permit Site 3 will be necessary resulting in a total of 0.02 acre of excavation and 0.02 acre of hand clearing (increase of 0.01 acre for each activity from original permit application). The undercutting of the wetland detail at Permit Site 3 is shown in the attached Revised Permit Drawing Sheet 12 of 91 and revised impacts are shown in Table 2 below in bold and italicized font.

Table 2. Revised R-0623 Wetland Impacts

Permit Site No.	JD Package ID	Permanent Fill (ac)	Excavation (ac)	Total Impacts (ac)
1	W1	0.13		0.13
2	W2		<0.01	<0.01
3	W5		0.02	0.02
4	W52	0.02		0.02
5A	W11	0.04		0.04
5B	W53	0.01		0.01
5C	W13	0.02	0.02	0.04
6	W54	0.08		0.08
7B	W55	0.16		0.16
8	W56	<0.01		<0.01
9*	W57	0.03		0.03
10	W25	0.14	<0.01	0.14
13	W62	0.05		0.05
16	W63	0.14		0.14
17	W63	0.10	0.01	0.11
18	W64	0.11	<0.01	0.12

Table 2. Revised R-0623 Wetland Impacts continued

Permit Site No.	JD Package ID	Permanent Fill (ac)	Excavation (ac)	Total Impacts (ac)
19	W67	0.04		0.04
19A	W68	0.01		0.01
20	W50	0.05		0.05
24	W71	<0.01		<0.01
24A	W72	0.04		0.04
TOTALS (ac)		1.17	0.06	1.23

Notes: Totals are rounded based upon sum of actual impacts. *The wetland at Permit Site 9 is an isolated and therefore, a non-404 regulated wetland. Mitigation for this site will only be required by NCDWR at 2:1 ratio.

Revised compensatory mitigation requirements for R-0623 are summarized below in Table 3. This project will permanently impact 4,916 feet of warm water streams. Of these 4,916 feet, there are 347 feet of bank stabilization that do not require mitigation by the USACE, resulting in 4,569 feet of stream impacts requiring USACE mitigation.

The USACE is requiring 2:1 mitigation for 3,128 feet and requiring 1:1 mitigation for 1,441 feet of stream impacts. NCDWR is requiring 1:1 mitigation for 3,176 feet. Therefore, the total USACE mitigation requirement exceeds the NCDWR requirement. The mitigation requirements of 4,569 feet of permanent warm water stream impacts will be provided by the NCEEP for R-0623 (Table 3)

This project will also permanently impact 1.23 acres of wetlands. The wetland at Permit Site 9 (0.03 acres) does not require mitigation by USACE due to its isolated status. However, this wetland will require mitigation by NCDWR at 2:1 ratio. The overall USACE mitigation requirement is 1.20 acres at 2:1 ratio while the overall NCDWR mitigation requirement is 1.23 acres at 2:1 ratio. The NCDWR wetland mitigation requirement exceeds the USACE requirement. The mitigation requirements of 1.20 acres of permanent riparian wetland impacts and 0.03 acres of permanent non-riparian wetland impacts will be provided by the NCEEP for R-0623 (Table 3).

Table 3. R-0623 Revised Required Compensatory Mitigation Summary

	Stream Impacts (ft)	Wetland Impacts (ac)
Impacts Requiring Mitigation	4,569	1.23
Required EEP Mitigation	3,128 @ 2:1	1.20 @ 2:1 Riparian
	1,441 @ 1:1	0.03 @ 2:1 Non-riparian
Total EEP Mitigation	7,697	2.40 Riparian
		0.06 Non-riparian

A copy of this permit modification application and its distribution list will be posted on the NCDOT website at <https://connect.ncdot.gov/resources/Environmental/Pages/default.aspx>. Thank you for your time and assistance with this project. Please contact Greg Price at either gwprice@ncdot.gov or (919) 707-6148 if you have any questions or need additional information.

Sincerely,



for

Richard W. Hancock, P.E., Manager
Project Development and Environmental Analysis Unit

Cc: NCDOT Permit Application Standard Distribution List



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Michael Ellison, Director
Ecosystem Enhancement Program

John E. Skvarla, III
Secretary

July 28, 2014

Mr. Richard W. Hancock, P.E.
Manager, Project Development and Environmental Analysis Unit
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Mr. Hancock:

Subject: EEP Mitigation Acceptance Letter:

R-0623, Troy Bypass – NC 24 / 27 from SR 1138 (Dairy Road) to East of the Little River, Montgomery County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory stream and wetland mitigation for the subject project. Based on the information supplied by you on July 25, 2014, the impacts are located in CU 03040104 of the Yadkin River basin in the Southern Piedmont (SP) Eco-Region, and are as follows:

Yadkin 03040104 SP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	4,569.0	1.20	0.03	0	0	0

*Some of the stream and wetland impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details on the mitigation ratio proposal. EEP is proposing to provide riparian wetland mitigation for all wetland impacts associated with this project.

This mitigation acceptance letter replaces the mitigation acceptance letters issued on February 25 and March 7, 2014. In accordance with the directive from the February 8, 2011 IRT meeting, non-riparian wetland impacts located in the mountains and piedmont areas of North Carolina will be accepted as requested but mitigated utilizing riparian wetland mitigation credits. EEP commits to implementing sufficient compensatory warm stream mitigation and riparian wetland mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies in accordance with the N.C. Department of Environment and Natural Resources' Ecosystem Enhancement Program In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

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

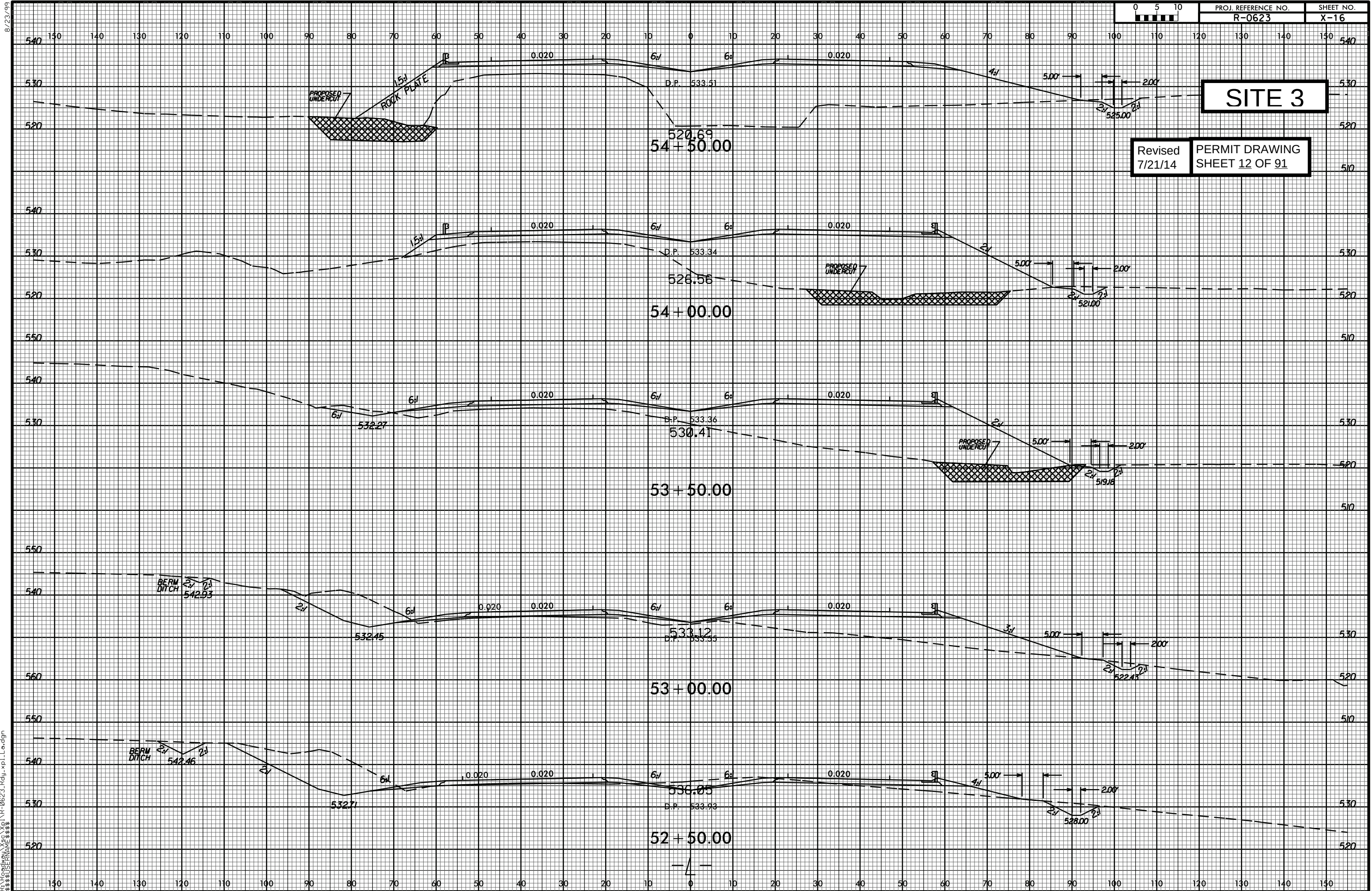
Sincerely,

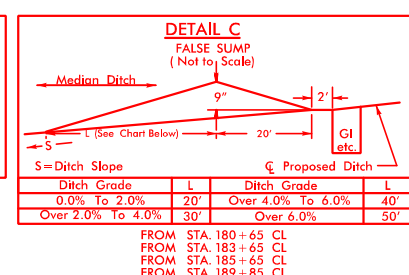
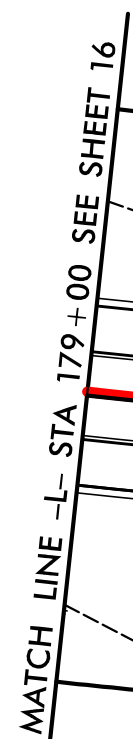
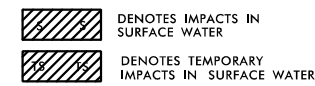
James B. Stanfill
EEP Asset Management Supervisor

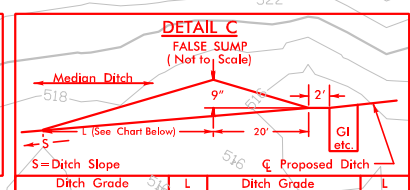
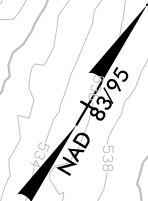
cc: Ms. Liz Hair, USACE – Wilmington Regulatory Field Office
Mr. David Wainwright, Division of Water Quality, Wetlands/401 Unit
File: R-0623 Revised

8/23/99

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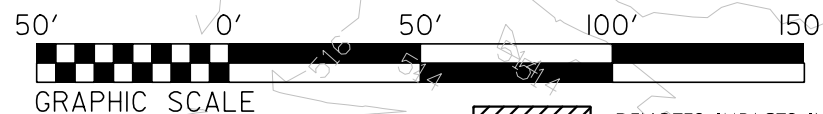
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FROM STA. 183+65 CL
FROM STA. 185+65 CL
FROM STA. 189+85 CL

FOR PROFILE OF LINE -L- SEE SHEET 43

SEE SHEETS 2-H & 2-I
FOR DRAINAGE DITCH DETAILS

PERMIT DRAWING
SHEET 42 OF 91

ENLARGEMENT SHEET



 DENOTES IMPACTS IN SURFACE WATER

 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

BANK STABILIZATION

SITE 11A

WOODS

SITE 11

CLASS B RIP RAP
- EST. 2 TONS
EST. 7 SY GF

BERM DITCH
SEE DETAIL 'AA'
EST. 114 SY PSRM

LAT BASE DITCH
SEE DETAIL 'L'
DDE=99 C.Y.

LAT BASE DITCH
SEE DETAIL 'G'
DDE=148 C.Y.
EST. 97 SY PSRM

1 @ 10' x 6'

RIP RAP
.3 TONS ✓
10 SY GF .4

LAT BASE DITCH
— SEE DETAIL 'G'
DDE=348 C.Y.
EST 144 SY PSRA
BANK STABILIZA

EST 144 SY PSRM
BANK STABILIZATION

BASE DITCH
SEE DETAIL 'HH'
EST. 50 CY DDE
EST. 25 SY PSRM

CLASS I RIP RAP
EST. 38 TONS
EST. 78 SY GF
RIP RAP BANKS ONLY

CLASS I RIP RAP
EST. 8 TONS
EST. 11 SY GF
RIP RAP BANKS ONLY

BANK STABILIZATION

JOHN WILLIS

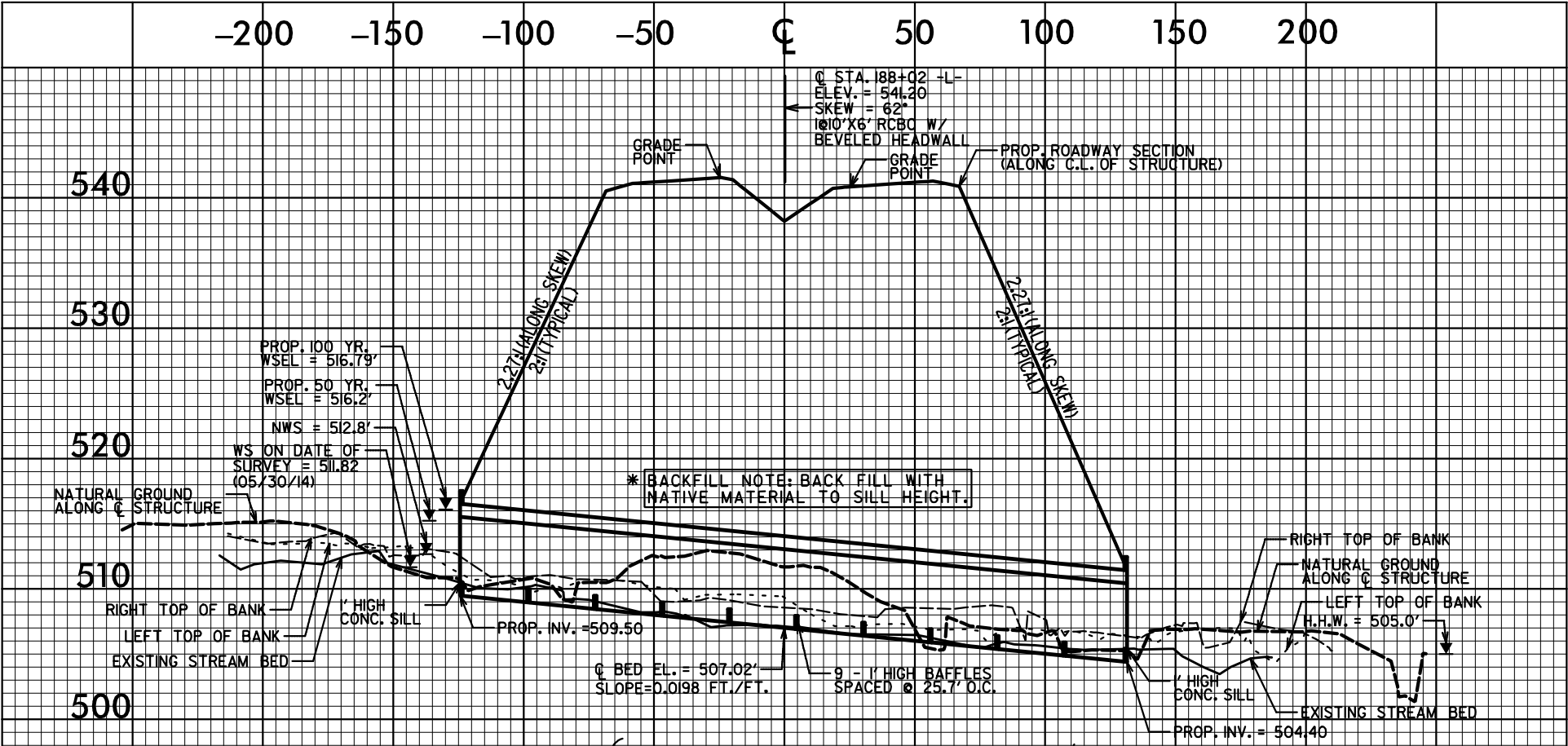
48

SWELL

REVISIONS

7/21/2014
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SITE 11



Revised
7/21/14

PERMIT DRAWING
SHEET 90 OF 91

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)
1	L2 26+14 to 28+48	Roadway Fill	0.13				0.02	0.01	<0.01	136	16	
		Bank Stabilization							<0.01	11		
2	L 30+39 to 30+81 Rt	15"			<0.01		<0.01	<0.01	<0.01	39	34	
3	L 53+20 to 55+42	2@8'x6' RCBC			0.02		0.02	0.03	<0.01	294	24	
4	L 70+83 to 73+70	60" RCP IV	0.02				0.06	0.02	<0.01	271	73	
5	L 75+30 to 84+50	2@10'x7' RCBC						0.05	<0.01	295	17	
		Bank Stabilization							0.01	62		
5A		Roadway Fill	0.04					0.02		500		
5B		Roadway Fill	0.01									
5C		Pond	0.02		0.02			0.34				
6	L 120+95 to 121+90 Lt	Roadway Fill	0.08									
7	L 122+87 to 123+78	Bank Stabilization							<0.01	43		
7A	L 124+42 Lt	Bank Stabilization							<0.01	16		
7B	L 124+91 to 128+04	Roadway Fill	0.16					0.02	<0.01	355	72	
8	L 131+38 to 132+10 Lt	Roadway Fill	<0.01				<0.01		<0.01		10	
9	L 137+97 to 138+55	Roadway Fill	0.03									
10	L 150+48 to Y6 11+00 Rt	Roadway Fill	0.14		<0.01		0.13					
11	L 187+35 to 188+66	1@10'x6' RCBC						0.03	0.01	319	56	
		Bank Stabilization							<0.01	47		
11A	L 187+80 to 187+98	Roadway Fill						0.01	0.01	105	21	
		Bank Stabilization							<0.01	6		
12	L 203+49 to 206+55	2@12'x8' RCBC						0.10	0.01	499	38	
13	L 228+85 to 229+98	Roadway Fill	0.05				0.04					
14	L 241+68 to 242+88	54" RCP IV						0.02	0.01	229	60	
		Bank Stabilization						<0.01		12		
15	L 250+61 to 251+71	66" RCP-IV						0.02	<0.01	370	31	
		Bank Stabilization							<0.01	13		
TOTALS:			0.68		0.04		0.27	0.68	0.07	3622	452	

Stream Bank Stabilization Sites 1-15 = 210 feet

Rounded totals are based on sum of actual impacts.

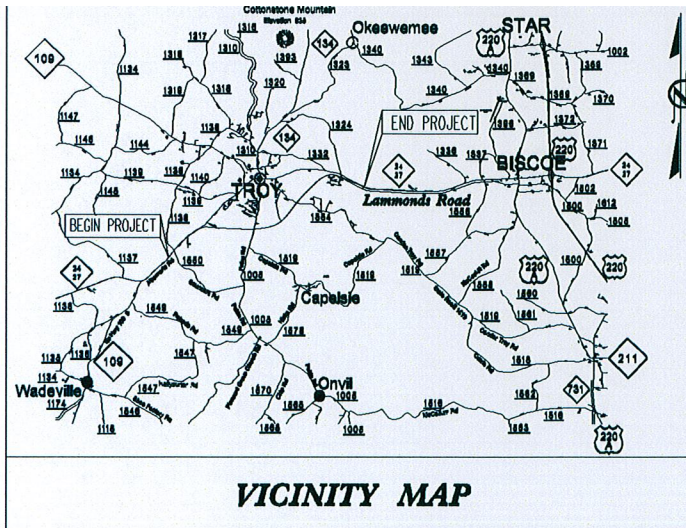
NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

MONTGOMERY COUNTY
WBS - 34352.1.1 (R-0623)

7/11/2014

16-JUL-2014 13:55
R:\Utilities\Engineering\NEU\Permit Plans and Narrative\R-0623-ewh-NEU-REVISED-SHEET-UEPL(07-16-14).dgn
\$\$\$\$\$USERNAME\$\$\$\$\$

TIP PROJECT: R-0623



VICINITY MAP

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARY OF TROY

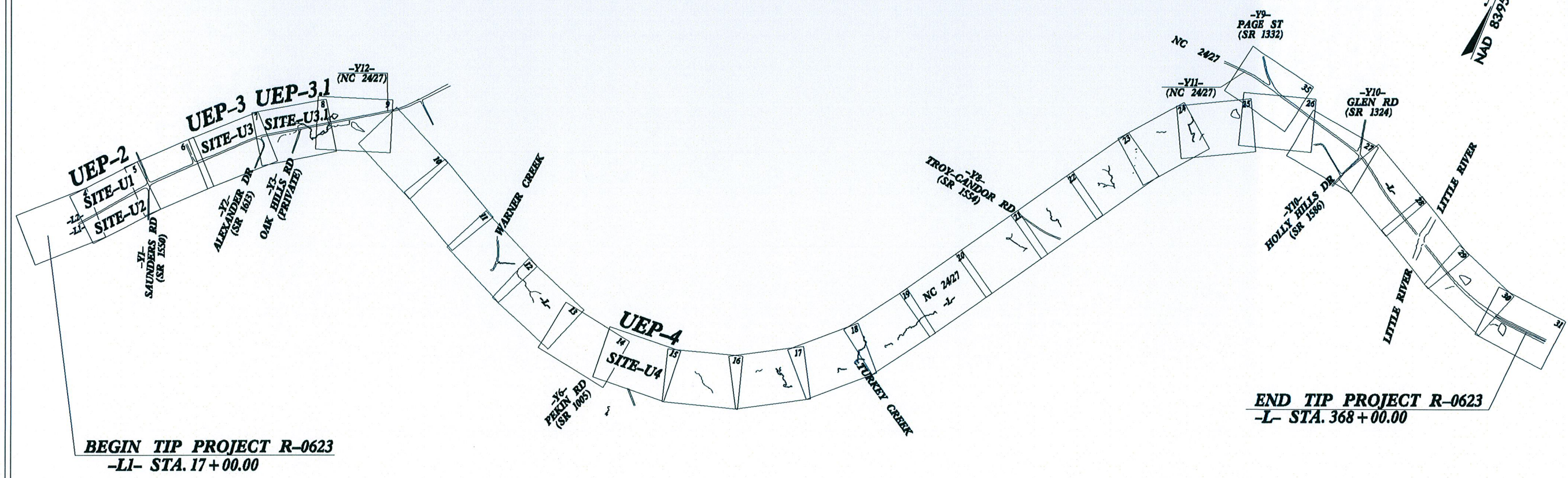
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITY ENVIRONMENTAL PLANS
MONTGOMERY COUNTY

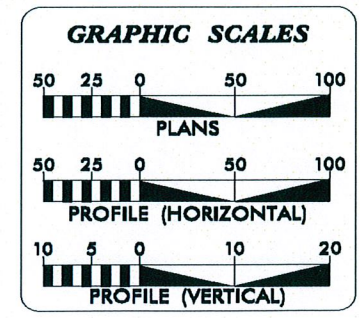
TYPE OF WORK: WATER AND SANITARY SEWER UTILITY CONSTRUCTION

T.I.P. NO.	SHEET NO.
R-0623	UEP-1

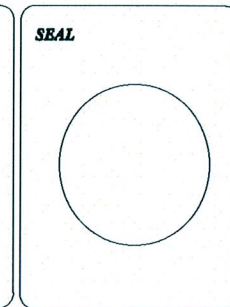
UTILITY SHEET: 1-OF-5



REVISED PLAN DATE: 07-17-14



SHEET NO.	DESCRIPTION
UEP-1	TITLE SHEET
UEP-2	UTILITY IMPACT SITES U1, U2
UEP-3	UTILITY IMPACT SITE U3
UEP-3.1	UTILITY IMPACT SITE U3.1
UEP-4	UTILITY IMPACT SITE U4
UEP-5	IMPACT SUMMARY SHEET



PREPARED IN THE OFFICE OF:
DIVISION OF HIGHWAYS
UTILITIES UNIT
UTILITIES ENGINEERING

1591 MAIL SERVICES CENTER
RALEIGH, NC 27699-1591
PHONE (919) 761-6699
FAX (919) 236-4151

Roger Worthington, P.E. UTILITIES SECTION ENGINEER
Ron Wilkins, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER
Eric Haugaard UTILITIES PROJECT DESIGNER

NCDOT PROJECT R-0623
UTILITY ENVIRONMENTAL PERMIT DRAWING
UTILITY IMPACT SITE-U1 AND SITE-U2

DESIGNED BY: -	
DRAWN BY: -	
CHECKED BY: -	
APPROVED BY: -	
REVISED: -	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

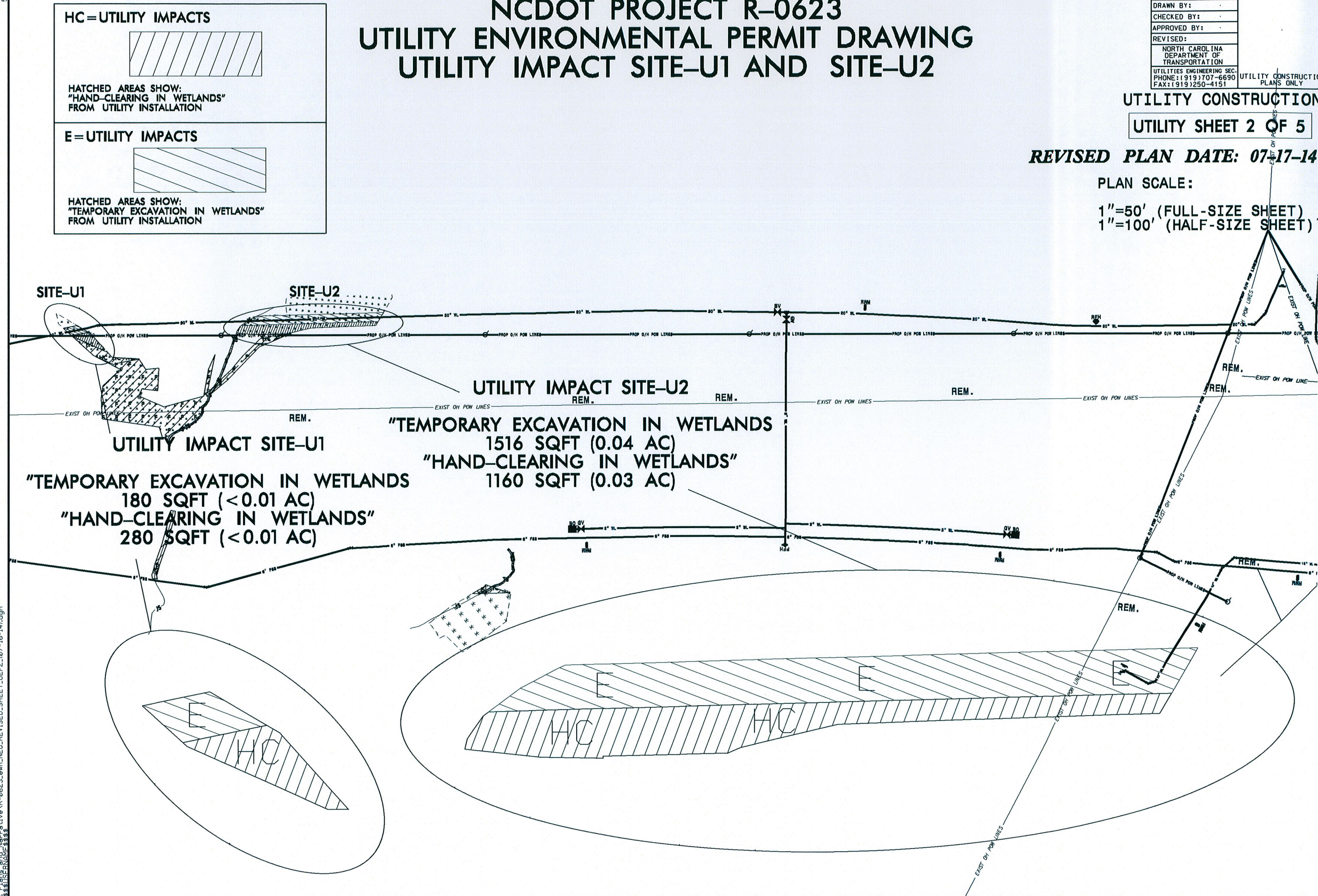
UTILITY CONSTRUCTION

UTILITY SHEET 2 OF 5

REVISED PLAN DATE: 07-17-14

PLAN SCALE:

1"=50' (FULL-SIZE SHEET)
1"=100' (HALF-SIZE SHEET)



NCDOT PROJECT R-0623

UTILITY ENVIRONMENTAL PERMIT DRAWING

UTILITY IMPACT SITE-U3.0

DESIGNED BY:	R-0623	UTILITY CONSTRUCTION
DRAWN BY:		
CHECKED BY:		
APPROVED BY:		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		PLANS ONLY

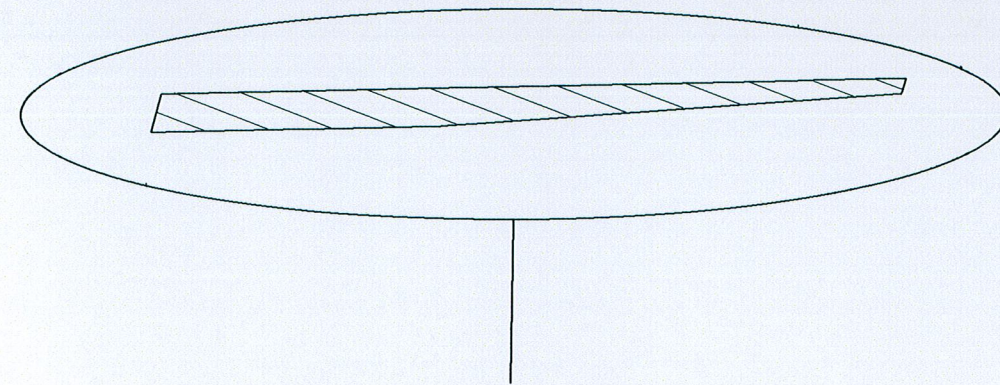
UTILITY CONSTRUCTION

UTILITY SHEET 3.0 OF 5

REVISED PLAN DATE: 07-17-2014

PLAN SCALE:

1"=50' (FULL-SIZE SHEET)
1"=100' (HALF-SIZE SHEET)



UTILITY IMPACT SITE-U3.0

"TEMPORARY EXCAVATION IN WETLANDS
260 SQFT (<0.01 AC)

HC=UTILITY IMPACTS

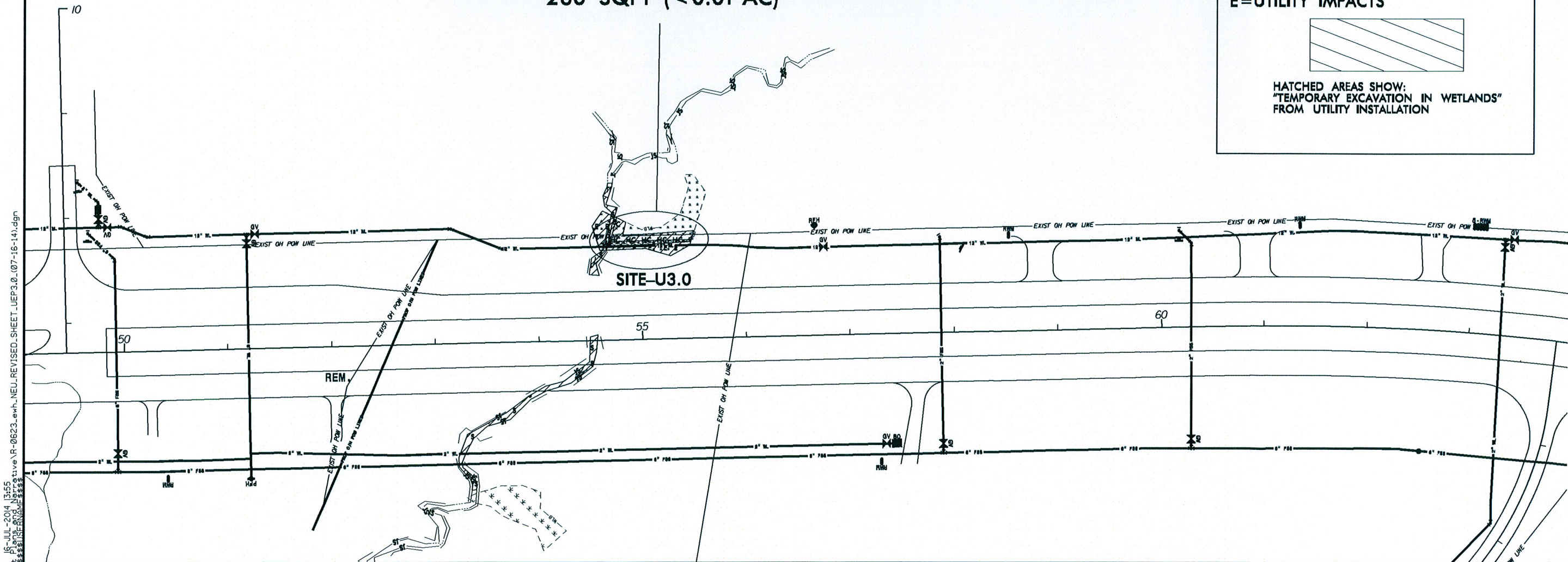


HATCHED AREAS SHOW:
"HAND-CLEARING IN WETLANDS"
FROM UTILITY INSTALLATION

E=UTILITY IMPACTS



HATCHED AREAS SHOW:
"TEMPORARY EXCAVATION IN WETLANDS"
FROM UTILITY INSTALLATION



16-JUL-2014 13:55
Permit Plans - 200 Narrative R-0623.evh, NEU-REVISED-SHEET-UEP3.0 (07-16-14).dgn

5/14

UTILITY CONSTRUCTION

REVISED PLAN DATE: 07-17-2014

1"=50' (FULL-SIZE SHEET)
1"=100' (HALF-SIZE SHEET)

**HATCHED AREAS SHOW:
"TEMPORARY EXCAVATION IN WETLANDS"
FROM UTILITY INSTALLATION**

UTILITY IMPACT SITE-U3.1

TEMPORARY EXCAVATION IN WETLANDS

510 SQFT + 390 SQFT = 900 SQFT (0.021 AC)



16-JUL-2014 13:55
Permit Plans and Narrative\R-0623_ewh_NEU_REVISED_SHEET_UEP3.1_(07-16-14).dgn
\$\$\$\$USERNAMF\$\$\$\$

NCDOT PROJECT R-0623
UTILITY ENVIRONMENTAL PERMIT DRAWING
UTILITY IMPACT SITE-U4

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION

UTILITY SHEET 4 OF 5

REVISED PLAN DATE: 07-15-14

PLAN SCALE:

1"=50' (FULL-SIZE SHEET)
1"=100' (HALF-SIZE SHEET)

HC=UTILITY IMPACTS

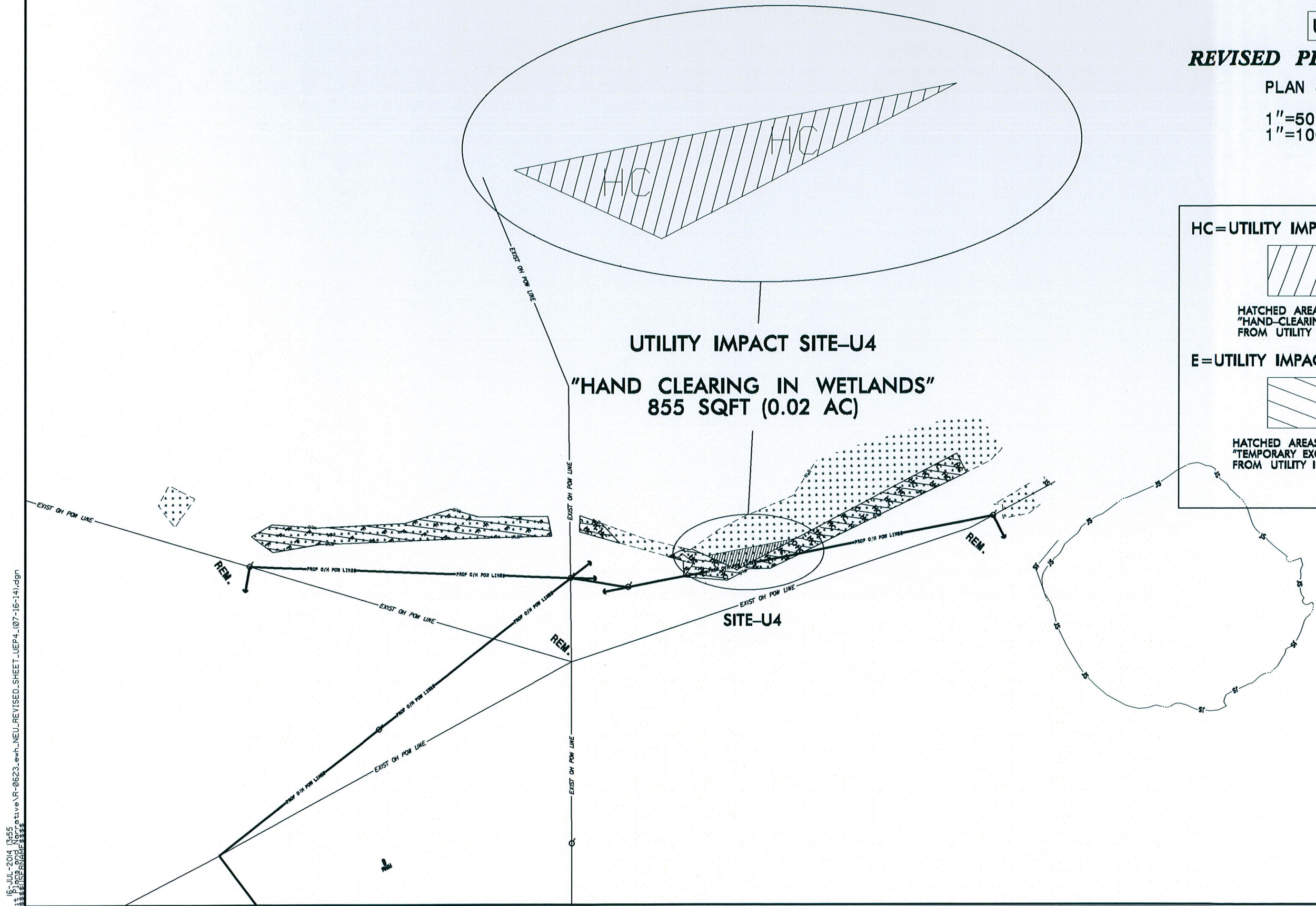


HATCHED AREAS SHOW:
"HAND-CLEARING IN WETLANDS"
FROM UTILITY INSTALLATION

E=UTILITY IMPACTS



HATCHED AREAS SHOW:
"TEMPORARY EXCAVATION IN WETLANDS"
FROM UTILITY INSTALLATION



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UTILITY WETLAND PERMIT IMPACT SUMMARY													
			WETLAND IMPACTS						SURFACE WATER IMPACTS				
			Permanent	Temp.	Excavation	Temp.	Mechanized	Hand			Existing	Existing	
Site	-L- Station	Structure	Fill In	Fill In	in	in	Clearing	Clearing	Permanent	Temp.	Channel	Channel	Natural
No.	(From/To)	Size / Type	Wetlands	Wetlands	Wetlands	Wetlands	in Wetlands	Wetlands	impacts	impacts	Permanent	Temp.	Design
			(ac)	(ac)	(ac)	(ac)	(ac)	(ac)	(ac)	(ac)	(ft)	(ft)	(ft)
U1	Sta 28+00L	overhead power line - clear 15' each side of line						< 0.01 (280 SQFT)					
U1	Sta 28+00L	open-trench excavation for installation of water line				< 0.01 (180 SQFT)							
U2	Sta 29+25L	overhead power line - clear 15' each side of line						0.03 (1160 SQFT)					
U2	Sta 29+25L	open-trench excavation for installation of water line				0.04 (1516 SQFT)							
U3, U3.1	Sta 55+00L	open-trench excavation for installation of water line				0.021 (900 SQFT)							
U4	Sta 153+50L	overhead power line - clear 15' each side of line						0.02 (855 SQFT)					
TOTALS:						0.060 (2596 SQFT)		0.052 (2295 SQFT)					

* total calculated summing square footage at each site and then rounding to the nearest one-hundredth acre

Revised SHEET 5 of 5
7/17/14

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

MONTGOMERY COUNTY
WBS - 37044.1.1 (R-0623)