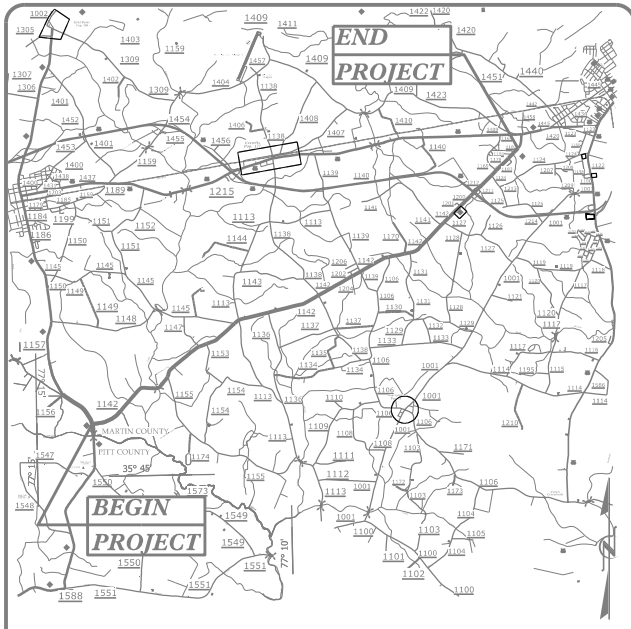


**TIP PROJECT: R-4705**



See Sheet I-A for Index of Sheets  
See Sheet I-B for  
See Sheet I-C for

VICINITY MAP

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**BUFFER DRAWING  
SHEET 1 OF 7**

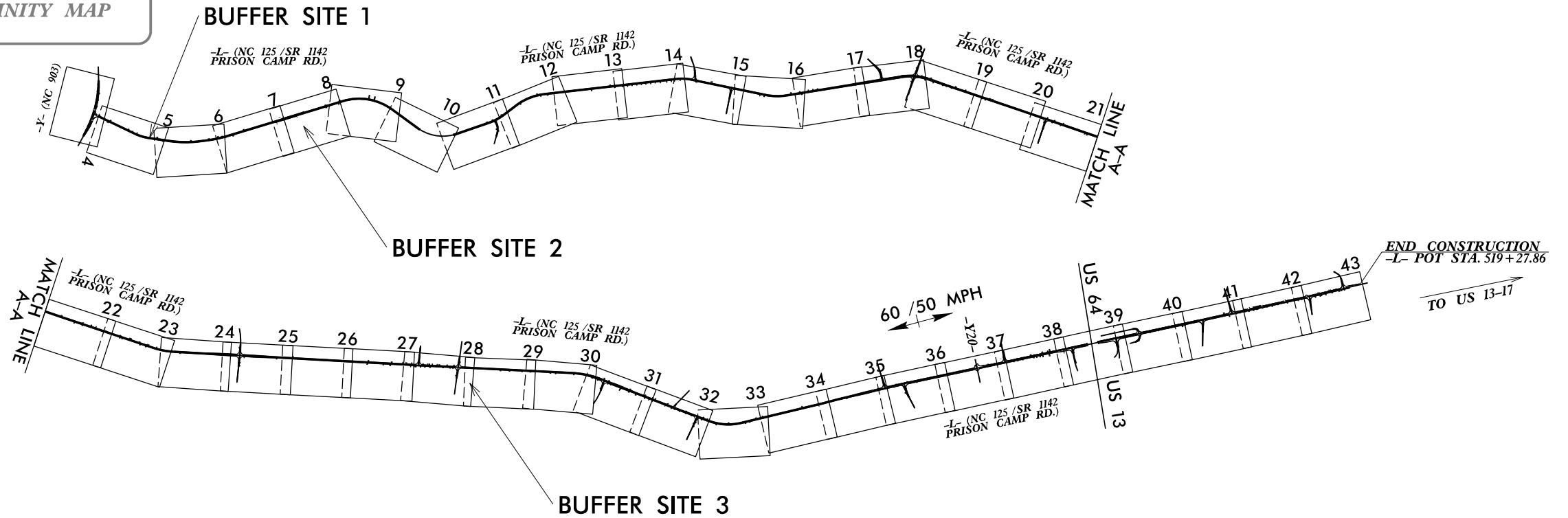
**MARTIN COUNTY**

**LOCATION: NC 125/SR 1142 (PRISON CAMP RD.)  
FROM NC 903 TO SR 1182 (EAST COLLEGE RD.)**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING, WIDENING  
& CULVERT.**

**BUFFER IMPACTS PERMIT**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-4705	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
38932.1.FD1		PE	

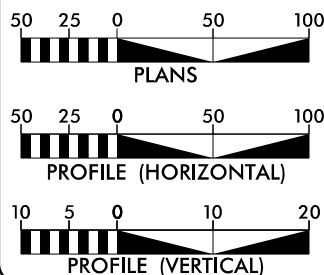


THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD \_\_\_\_.  
A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF WILLIAMSTON.

**INCOMPLETE PLANS  
DO NOT USE FOR R/W ACQUISITION  
DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

**CONTRACT:**

**GRAPHIC SCALES**



**DESIGN DATA**

ADT 2020 = 6,360  
ADT 2040 = 8,600  
K = 60 %  
D = 10 %  
T = 4 % \*  
V = 60 /\*\*50 MPH  
\* TTST = 1% DUAL = 3%  
FUNC. CLASS = RURAL  
MINOR COLLECTOR

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT R-4705 = MILES  
LENGTH STRUCTURE TIP PROJECT R-4705 = MILES  
TOTAL LENGTH TIP PROJECT R-4705 = 9.645 MILES

Prepared in the Office of:  
**WETHERILL ENGINEERING**  
1223 Jones Franklin Rd., Raleigh, N.C. 27606  
License No. F-0377  
Bus: 919.851.8077 Fax: 919.851.8107

Prepared for:  
**DIVISION OF HIGHWAYS  
DIVISION 1**  
113 Airport Drive, Suite 100  
Edenton, NC 27832

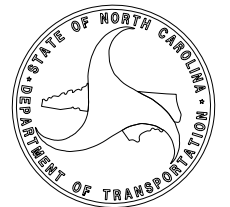
2018 STANDARD SPECIFICATIONS  
**RIGHT OF WAY DATE:**  
NOVEMBER 21, 2018  
**LETTING DATE:**  
OCTOBER 20, 2020

**EDWARD G. WETHERILL, PE**  
PROJECT ENGINEER  
**BOB A. MAY, PE**  
PROJECT DESIGN ENGINEER

**NCDOT CONTACT:** **JOHN S. ABEL, JR.**  
DIVISION PROJECT MANAGER

**HYDRAULICS ENGINEER**

**ROADWAY DESIGN ENGINEER**



**BUFFER DRAWING  
SHEET 2 OF 7**

**DRAINAGE DETAILS  
(NOT TO SCALE)**



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PROJECT REFERENCE NO. SHEET NO.

R-4705

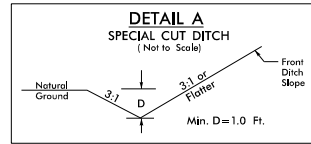
RW SHEET NO.

ROADWAY DESIGN ENGINEER

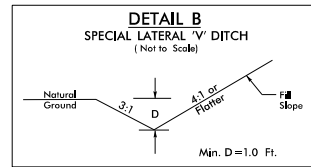
HYDRAULICS ENGINEER

**INCOMPLETE PLANS  
DO NOT USE FOR A/W ACQUISITION**

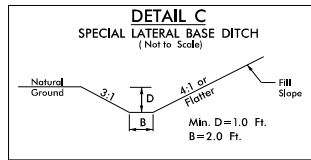
**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**



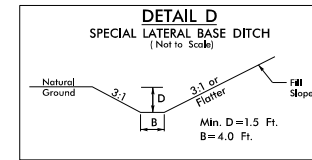
FROM STA. 12+35 TO STA. 13+50 -Y1- LT  
FROM STA. 11+00 TO STA. 15+24 -L- RT  
FROM STA. 31+82 TO STA. 32+42 -L- RT  
FROM STA. 32+20 TO STA. 32+50 -L- LT  
FROM STA. 54+80 TO STA. 58+00 -L- LT  
FROM STA. 55+50 TO STA. 56+50 -L- RT  
FROM STA. 58+00 TO STA. 62+00 -L- LT  
FROM STA. 58+50 TO STA. 62+50 -L- RT  
FROM STA. 64+08 TO STA. 67+00 -L- RT  
FROM STA. 93+35 TO STA. 97+00 -L- LT  
FROM STA. 93+50 TO STA. 99+90 -L- RT  
FROM STA. 110+50 TO STA. 114+00 -L- RT  
FROM STA. 123+25 TO STA. 124+75 -L- RT  
FROM STA. 124+80 TO STA. 126+00 -L- RT  
FROM STA. 124+70 TO STA. 127+00 -L- LT  
FROM STA. 134+50 TO STA. 136+50 -L- RT  
FROM STA. 133+50 TO STA. 137+50 -L- LT  
FROM STA. 137+50 TO STA. 138+96 -L- LT  
FROM STA. 11+00 TO STA. 13+00 -Y3- LT  
FROM STA. 11+00 TO STA. 13+00 -Y3- RT  
FROM STA. 146+00 TO STA. 148+50 -L- LT  
FROM STA. 161+00 TO STA. 165+75 -L- RT  
FROM STA. 178+50 TO STA. 179+65 -L- RT  
FROM STA. 12+50 TO STA. 13+50 -Y5- RT  
FROM STA. 12+40 TO STA. 14+85 -Y6- LT  
FROM STA. 12+40 TO STA. 12+41 -Y18- RT  
FROM STA. 10+45 TO STA. 12+50 -Y7- LT  
FROM STA. 207+50 TO STA. 212+99 -L- RT  
FROM STA. 210+50 TO STA. 212+99 -L- LT  
FROM STA. 226+50 TO STA. 227+55 -L- RT  
FROM STA. 233+00 TO STA. 235+33 -L- LT  
FROM STA. 240+00 TO STA. 241+37 -L- RT  
FROM STA. 240+50 TO STA. 241+37 -L- LT  
FROM STA. 249+00 TO STA. 257+01 -L- RT  
FROM STA. 13+00 TO STA. 14+50 -Y9- RT  
FROM STA. 265+00 TO STA. 268+50 -L- RT  
FROM STA. 10+50 TO STA. 12+00 -Y10- LT  
FROM STA. 10+39 TO STA. 12+41 -Y18- RT  
FROM STA. 10+34 TO STA. 12+38 -Y11- LT  
FROM STA. 353+25 TO STA. 354+50 -L- LT  
FROM STA. 355+00 TO STA. 356+00 -L- RT  
FROM STA. 358+50 TO STA. 359+50 -L- LT  
FROM STA. 358+50 TO STA. 359+75 -L- RT  
FROM STA. 378+00 TO STA. 380+00 -L- LT  
FROM STA. 376+50 TO STA. 384+50 -L- RT  
FROM STA. 390+50 TO STA. 393+45 -L- RT  
FROM STA. 393+45 TO STA. 397+00 -L- RT  
FROM STA. 406+25 TO STA. 409+00 -L- RT  
FROM STA. 406+25 TO STA. 406+88 -L- LT  
FROM STA. 10+50 TO STA. 11+00 -Y18- LT  
FROM STA. 10+48 TO STA. 11+50 -Y26- LT  
FROM STA. 12+71 TO STA. 15+25 -Y19- LT  
FROM STA. 469+67 TO STA. 470+25 -L- RT.



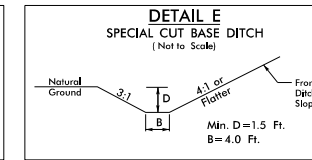
FROM STA. 18+00 TO STA. 20+00 -Y1- RT  
FROM STA. 20+12 TO STA. 21+50 -Y1- RT  
FROM STA. 22+25 TO STA. 25+00 -Y1- RT  
FROM STA. 21+50 TO STA. 25+50 -L- RT  
FROM STA. 105+70 TO STA. 108+00 -L- LT  
FROM STA. 138+96 TO STA. 144+50 -L- RT  
FROM STA. 448+85 TO STA. 451+00 -L- RT



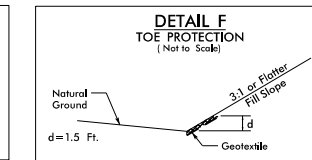
FROM STA. 12+35 TO STA. 17+00 -Y1- RT  
FROM STA. 10+50 TO STA. 19+00 -L- LT  
FROM STA. 21+65 TO STA. 31+80 -L- LT  
FROM STA. 105+70 TO STA. 108+00 -L- LT  
FROM STA. 138+96 TO STA. 144+50 -L- RT  
FROM STA. 448+85 TO STA. 451+00 -L- RT



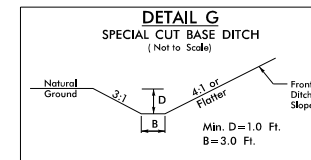
FROM STA. 15+24 TO STA. 21+48 -L- RT



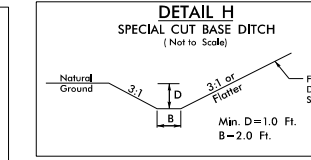
FROM STA. 62+50 TO STA. 64+02 -L- RT  
FROM STA. 165+80 TO STA. 167+65 -L- RT



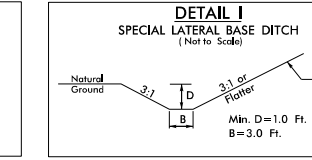
FROM STA. 73+18 TO STA. 83+00 -L- RT  
FROM STA. 78+50 TO STA. 83+50 -L- LT



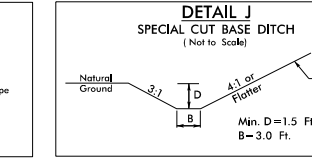
FROM STA. 62+00 TO STA. 62+50 -L- LT  
FROM STA. 62+50 TO STA. 63+85 -L- LT  
FROM STA. 64+15 TO STA. 71+00 -L- LT  
FROM STA. 113+88 TO STA. 115+00 -L- LT  
FROM STA. 179+65 TO STA. 188+05 -L- RT  
FROM STA. 179+50 TO STA. 185+40 -L- LT  
FROM STA. 13+38 TO STA. 15+25 -Y13- LT



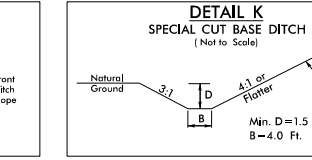
FROM STA. 32+50 TO STA. 37+50 -L- LT  
FROM STA. 32+42 TO STA. 39+20 -L- RT  
FROM STA. 40+50 TO STA. 51+80 -L- LT  
FROM STA. 40+00 TO STA. 52+30 -L- RT  
FROM STA. 100+50 TO STA. 105+70 -L- LT  
FROM STA. 115+05 TO STA. 124+35 -L- LT  
FROM STA. 138+96 TO STA. 145+50 -L- RT  
FROM STA. 153+87 TO STA. 161+00 -L- LT  
FROM STA. 160+00 TO STA. 165+75 -L- LT  
FROM STA. 165+80 TO STA. 174+65 -L- LT  
FROM STA. 167+65 TO STA. 174+65 -L- RT  
FROM STA. 188+05 TO STA. 192+10 -L- RT  
FROM STA. 186+25 TO STA. 192+50 -L- LT  
FROM STA. 197+03 TO STA. 207+00 -L- LT  
FROM STA. 194+00 TO STA. 200+20 -L- RT  
FROM STA. 212+99 TO STA. 223+25 -L- LT  
FROM STA. 212+99 TO STA. 222+00 -L- RT  
FROM STA. 223+50 TO STA. 232+50 -L- LT  
FROM STA. 227+55 TO STA. 239+50 -L- RT  
FROM STA. 235+33 TO STA. 240+00 -L- LT  
FROM STA. 241+37 TO STA. 245+30 -L- LT  
FROM STA. 247+00 TO STA. 252+90 -L- LT  
FROM STA. 253+50 TO STA. 263+00 -L- LT  
FROM STA. 267+15 TO STA. 274+40 -L- LT  
FROM STA. 276+00 TO STA. 303+80 -L- LT  
FROM STA. 276+00 TO STA. 317+00 -L- RT  
FROM STA. 10+39 TO STA. 12+41 -Y11- RT  
FROM STA. 10+40 TO STA. 12+00 -Y12- LT  
FROM STA. 313+67 TO STA. 316+50 -L- LT  
FROM STA. 316+50 TO STA. 321+10 -L- LT  
FROM STA. 332+00 TO STA. 338+00 -L- RT  
FROM STA. 324+95 TO STA. 338+50 -L- RT  
FROM STA. 338+00 TO STA. 353+23 -L- LT  
FROM STA. 339+50 TO STA. 352+69 -L- RT  
FROM STA. 367+00 TO STA. 372+00 -L- RT  
FROM STA. 393+65 TO STA. 406+00 -L- RT  
FROM STA. 406+88 TO STA. 414+50 -L- LT



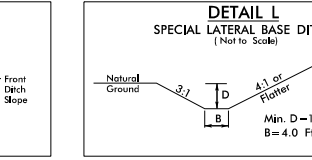
FROM STA. 359+85 TO STA. 367+00 -L- RT  
FROM STA. 359+75 TO STA. 368+40 -L- LT  
FROM STA. 390+50 TO STA. 393+59 -L- LT  
FROM STA. 476+00 TO STA. 480+00 -L- LT



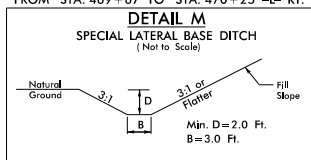
FROM STA. 105+30 TO STA. 110+50 -L- RT  
FROM STA. 146+00 TO STA. 148+00 -L- RT  
FROM STA. 148+60 TO STA. 152+80 -L- RT  
FROM STA. 241+37 TO STA. 249+00 -L- RT  
FROM STA. 262+50 TO STA. 267+15 -L- LT  
FROM STA. 303+80 TO STA. 312+50 -L- LT  
FROM STA. 12+62 TO STA. 14+50 -Y19- RT



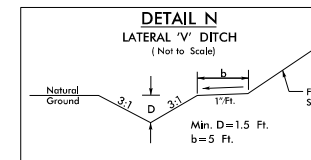
FROM STA. 115+05 TO STA. 122+94 -L- RT



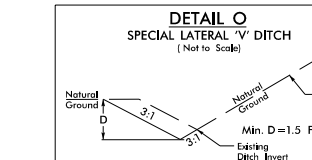
FROM STA. 12+25 TO STA. 13+00 -Y2- LT  
FROM STA. 325+00 TO STA. 332+00 -L- LT



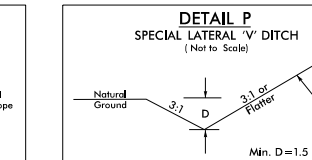
FROM STA. 421+00 TO STA. 428+50 -L- LT  
FROM STA. 486+00 TO STA. 490+66 -L- LT



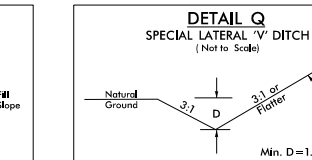
FROM STA. 452+00 TO STA. 455+88 -L- LT



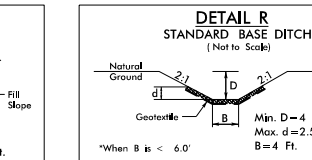
FROM STA. 452+00 TO STA. 454+44 -L- RT



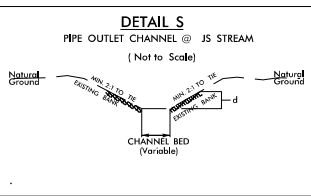
FROM STA. 485+50 TO STA. 491+15 -L- RT  
FROM STA. 492+50 TO STA. 494+50 -L- LT  
FROM STA. 498+75 TO STA. 503+40 -L- RT  
FROM STA. 504+00 TO STA. 506+00 -L- RT  
FROM STA. 507+00 TO STA. 507+50 -L- RT  
FROM STA. 509+00 TO STA. 513+00 -L- RT  
FROM STA. 510+00 TO STA. 512+50 -L- LT



FROM STA. 491+18 TO STA. 494+00 -L- RT  
FROM STA. 495+00 TO STA. 498+65 -L- RT  
FROM STA. 513+58 TO STA. 516+50 -L- RT



AT STA. 438+50 -L- RT.



STA. 22+00 -Y1- LT; L=14'; d=3.0'  
STA. 21+47 -L- RT; L=14'; d=3.0'  
STA. 115+05 -L- RT; L=12'; d=2.0'  
STA. 148+56 -L- LT; L=14'; d=3.0'  
STA. 324+92 -L- RT; L=16'; d=2.5'  
STA. 359+80 -L- RT; L=20'; d=4.0'  
STA. 379+43 -L- RT; L=16'; d=4.0'  
STA. 393+45 -L- RT; L=20'; d=4.0'  
STA. 498+69 -L- RT; L=12'; d=4.0'  
STA. 513+45 -L- RT; L=14'; d=3.5'

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8/17/99

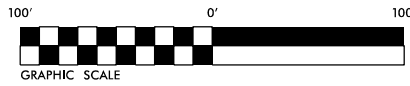
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USER: F.BROOKS

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 Fax: 919 851 8107

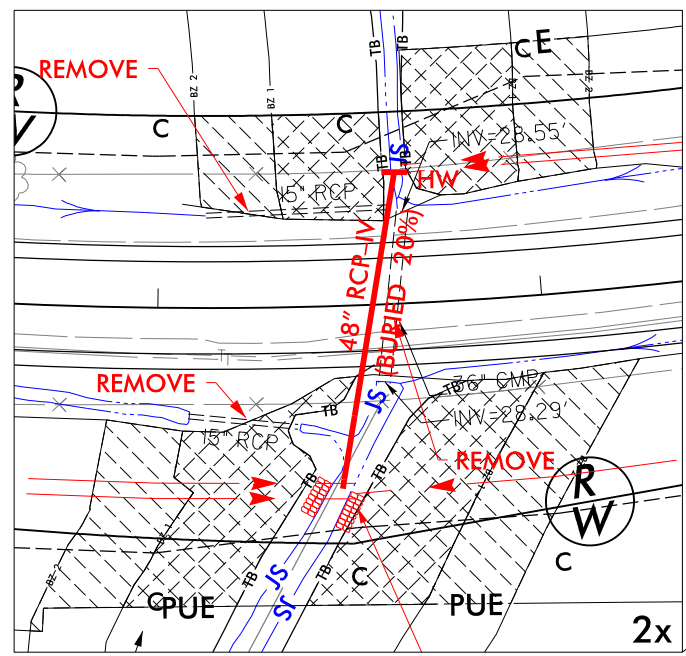
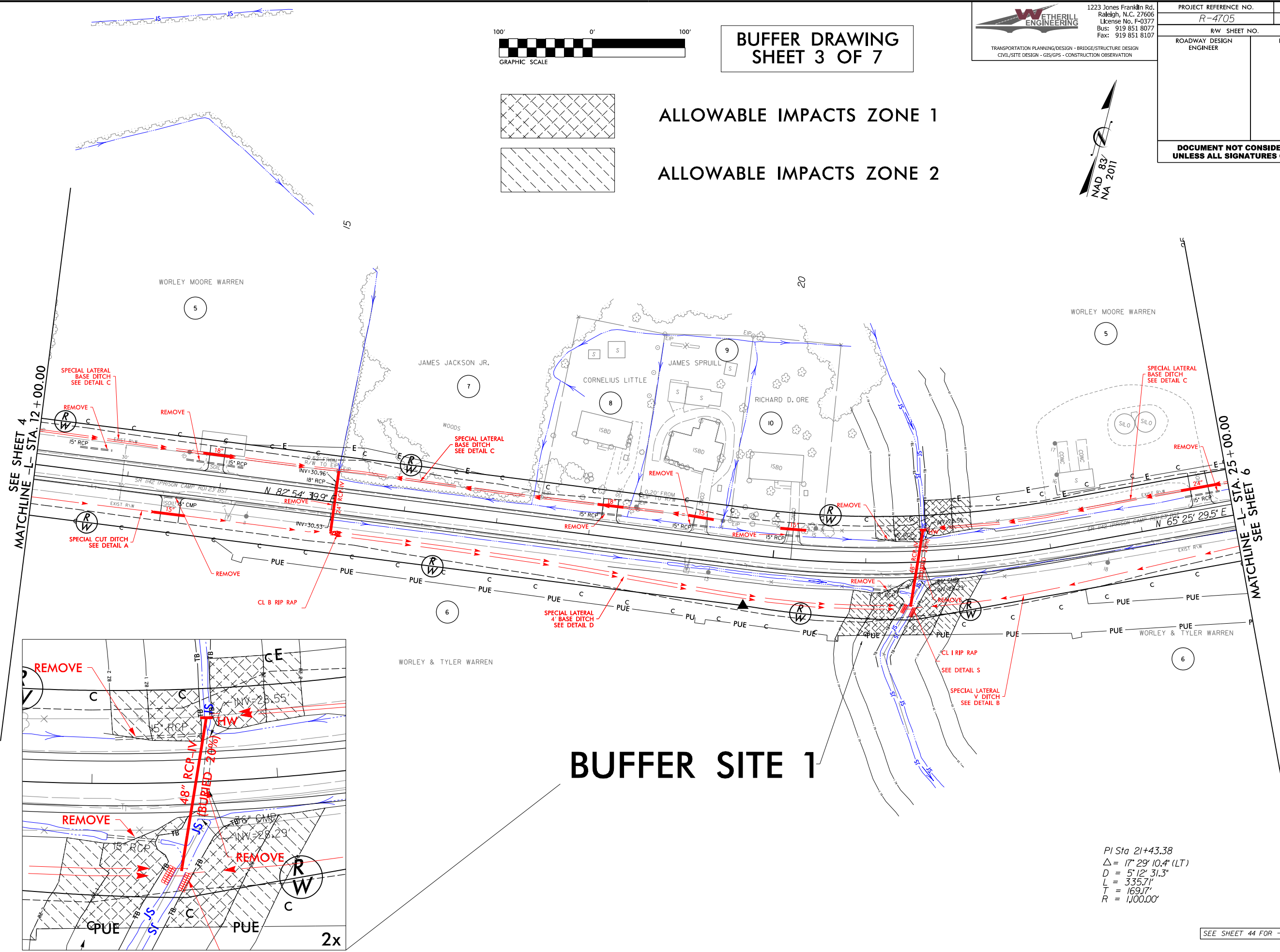
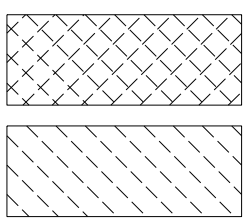
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

PROJECT REFERENCE NO. <b>R-4705</b>	SHEET NO. <b>5</b>
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



**BUFFER DRAWING  
SHEET 3 OF 7**



**BUFFER SITE 1**

PI Sta 21+43.38  
 $\Delta = 17^\circ 29' 10.4''$  (LT)  
 $D = 5' 12'' 31.3''$   
 $L = 335.71'$   
 $T = 169.17'$   
 $R = 1,100.00'$

SEE SHEET 44 FOR -L- PROFILE

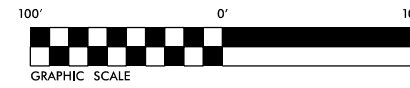
**BUFFER DRAWING  
SHEET 4 OF 7**

**WETHERILL  
ENGINEERING**  
1223 Jones Franklin Rd.  
Raleigh, N.C. 27606  
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Fax: 919 851 8107  
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

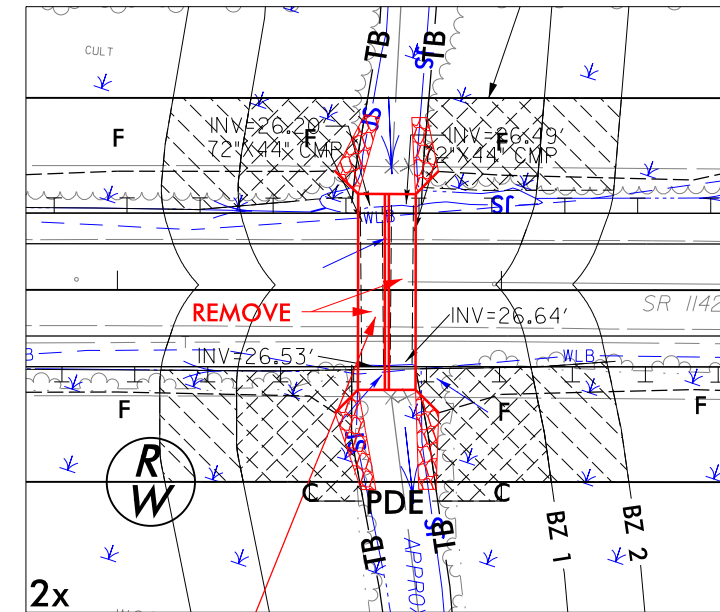
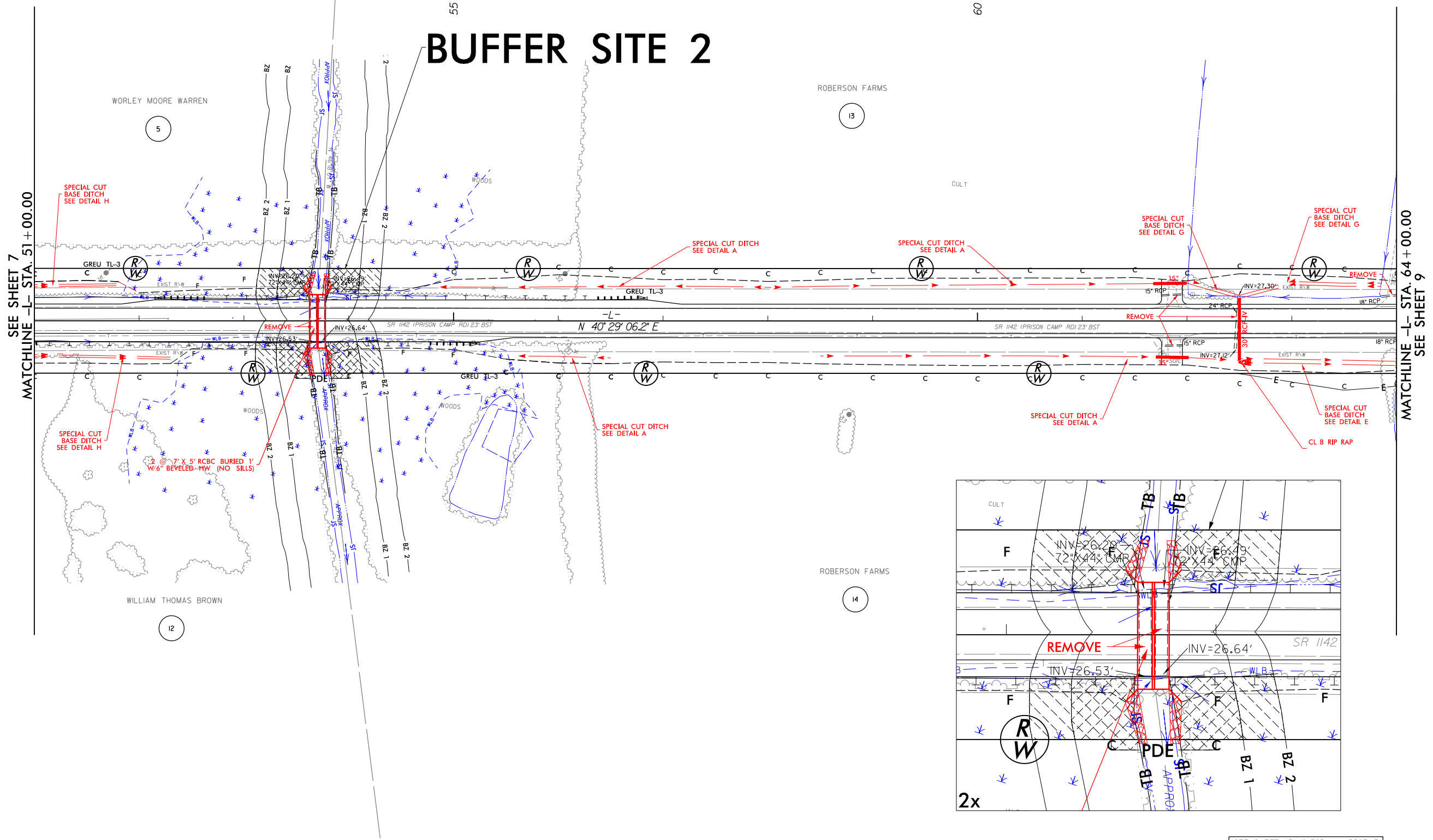
PROJECT REFERENCE NO. <i>R-4705</i>	SHEET NO. 8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

**ALLOWABLE IMPACTS ZONE 1**

**ALLOWABLE IMPACTS ZONE 2**



**BUFFER SITE 2**

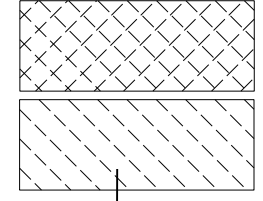
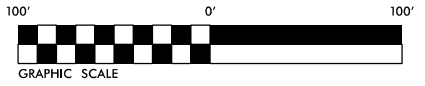


SEE SHEET 45&46 FOR -L- PROFILE

REVISIONS

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USER: F Brooks

**BUFFER DRAWING  
SHEET 5 OF 7**



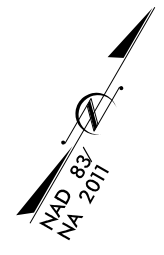
ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

**BUFFER SITE 3**

**WETHERILL ENGINEERING**  
1223 Jones Franklin Rd.  
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Fax: 919 851 8107  
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

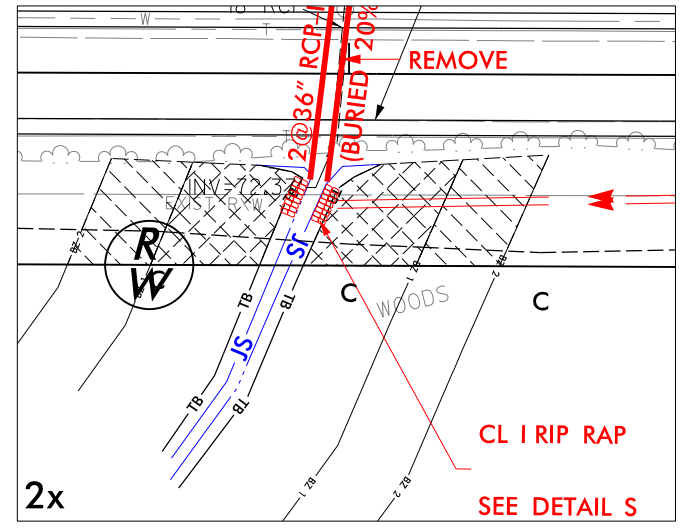
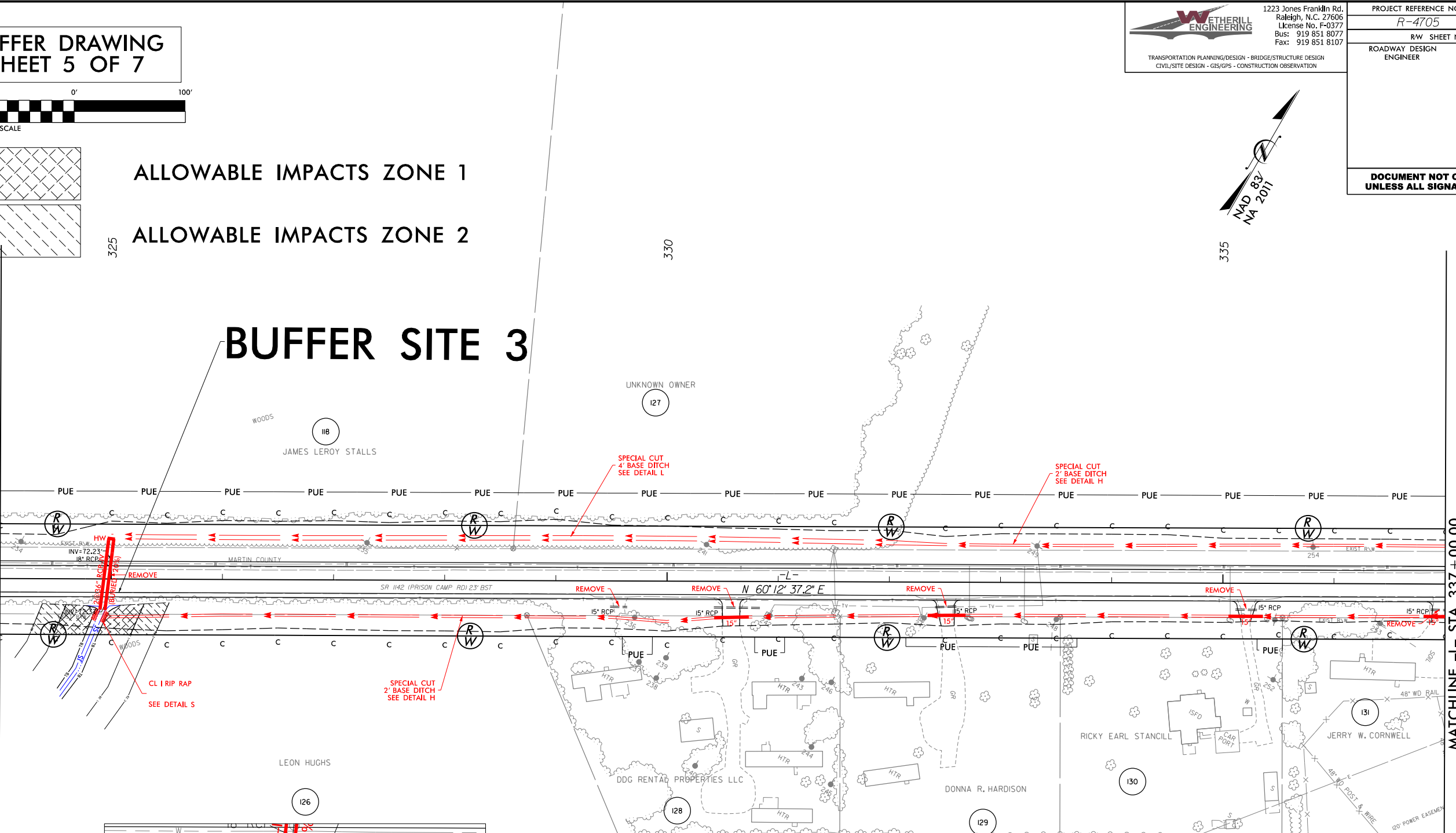
PROJECT REFERENCE NO. <i>R-4705</i>	SHEET NO. 29
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



REVISIONS

SEE SHEET 28  
MATCHLINE -L- STA. 324 + 00.00

MATCHLINE -L- STA. 337 + 00.00  
SEE SHEET 30



SEE SHEET 56 FOR -L- PROFILE

8/17/99  
2/22/2019 11:17:50 AM L:\R-4705-F\mol\Hydro-outlets\PERMIT\T.S.Environmental\Drawings\buf\_psh\R4705\_hyd\_psh\_29.dgn  
USER: F.Br...

## BUFFER IMPACTS SUMMARY

			IMPACT									BUFFER REPLACEMENT	
SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	TYPE			ALLOWABLE			MITIGABLE			ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )	TOTAL (ft <sup>2</sup> )	ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )	TOTAL (ft <sup>2</sup> )		
1	48" RCP	-L- 20+70 to 22+23	X			5058	3695	8753					
2	2 @ 7'X5' RCBC	-L- 53+11 to 54+33	X			3457	2261	5718					
3	18" and 2@36"	-L- 324+27 to 325+52	X			1505	1209	2714					
<b>TOTAL:</b>						10020	7165	17185	0	0	0		

N.C. DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
  
 MARTIN COUNTY  
 PROJECT: R-4705 (38932.1.FD1)  
  
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 SHEET 6 OF 7

## WETLANDS IN BUFFER IMPACTS SUMMARY

SITE NO.	STATION (FROM/TO)		WETLANDS IN BUFFERS	
			ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )
2	-L- 53+11 to 54+33		3457	2261
<b>TOTAL:</b>			3457	2261

N.C. DEPT. OF TRANSPORTATION  
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