

09/26/2023

TIP PROJECT: R-2829B

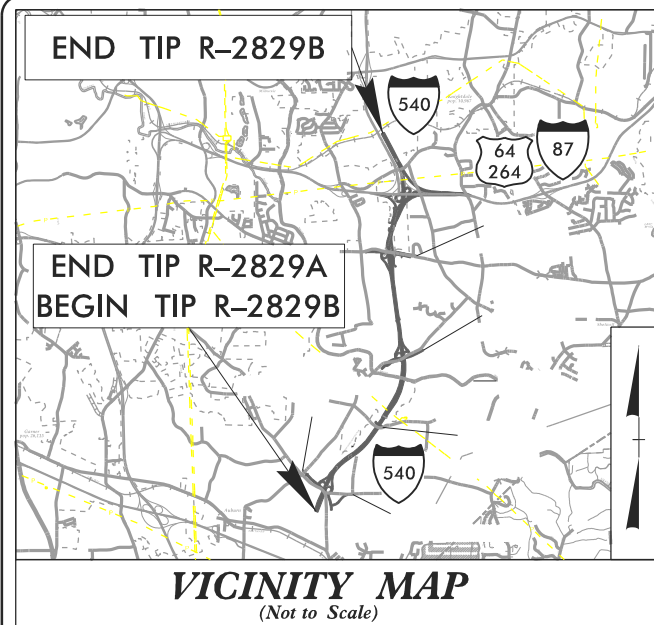
CONTRACT: C204825

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

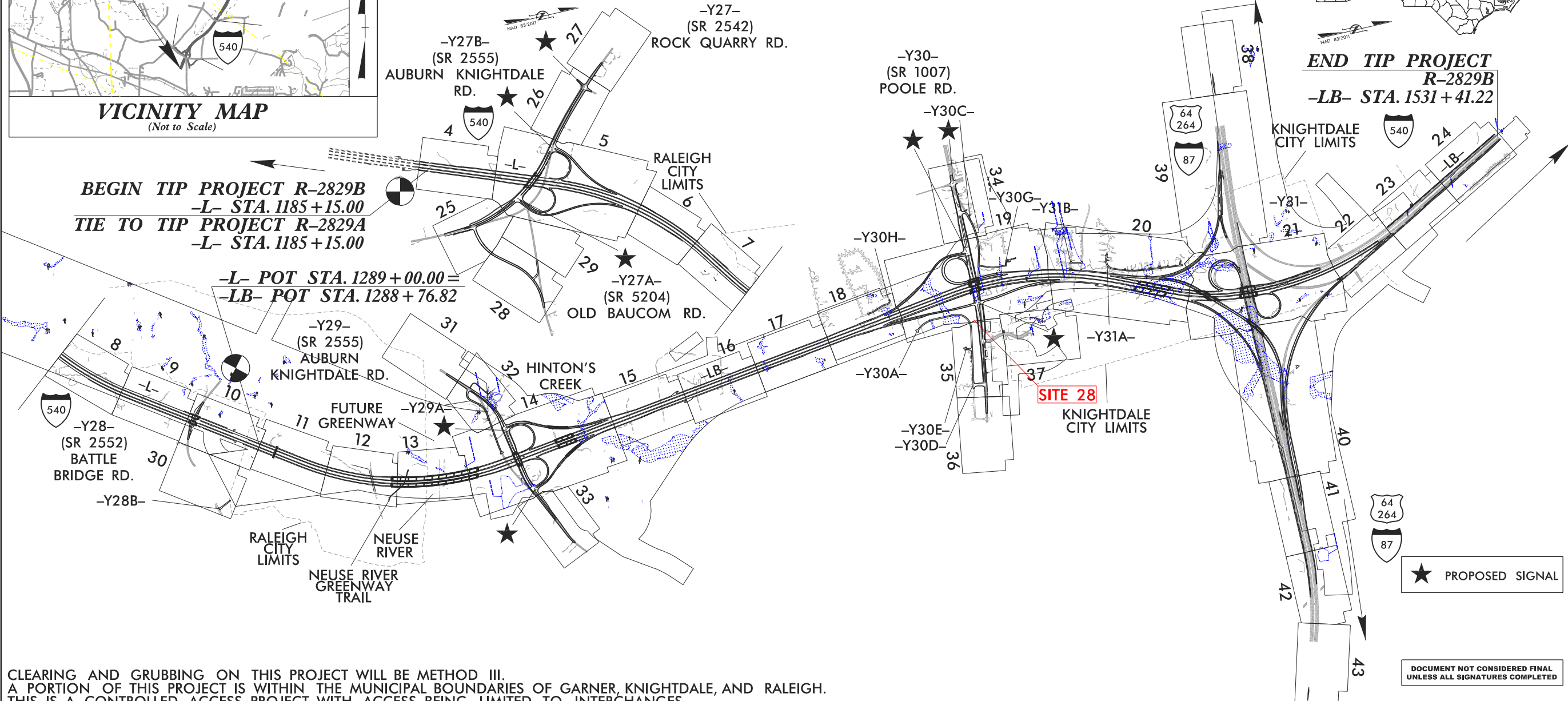
WAKE COUNTY

WETLAND UTILITY
PERMIT DRAWING
SHEET 1 OF 5

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2829B	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
35517.3.TA2	N/A	DESIGN-BUILD	
35517.3.TAGV2	0540048	DESIGN-BUILD	

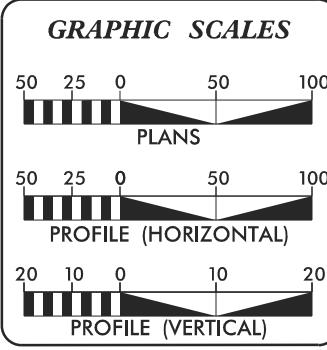


LOCATION: TRIANGLE EXPRESSWAY SOUTHEAST EXTENSION FROM SOUTH OF SR 2542 (ROCK QUARRY ROAD) TO I-87/US 64/US 264
TYPE OF WORK: GRADING, PAVING, DRAINAGE, STRUCTURES, SIGNING, AND SIGNALS



END TIP PROJECT
R-2829B
-LB- STA. 1531+41.22

CLEARING AND GRUBBING ON THIS PROJECT WILL BE METHOD III.
A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF GARNER, KNIGHTDALE, AND RALEIGH.
THIS IS A CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.



DESIGN DATA

ADT 2025 =	34,800
ADT 2045 =	66,600
K =	12%
D =	60/65%
T =	10% *
V =	75 MPH
* TTST =	4% DUAL = 6%
FUNC CLASS =	INTERSTATE
	STATEWIDE TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-2829B =	5.967 MILES
LENGTH STRUCTURE TIP PROJECT R-2829B =	0.595 MILES
TOTAL LENGTH TIP PROJECT R-2829B =	6.562 MILES

Prepared In the Office of:
ICE of CAROLINAS, PLLC
ICE of Carolinas, PLLC
4500 Falls of Neuse Road, Suite 110
Raleigh, North Carolina 27609
Phone: 919-872-0333
License # 120269

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
8/29/2023

LETTING DATE:
8/29/2023

Prepared For:
NORTH CAROLINA TURNPIKE AUTHORITY
1000 Birch Ridge Dr., Raleigh, NC 27618

BRIAN LUSK, P.E.
PROJECT ENGINEER

RON McCOLLUM, P.E.
NCTA CONTACT
DEPUTY CHIEF
ENGINEER FOR
PRECONSTRUCTION,
NCTA

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

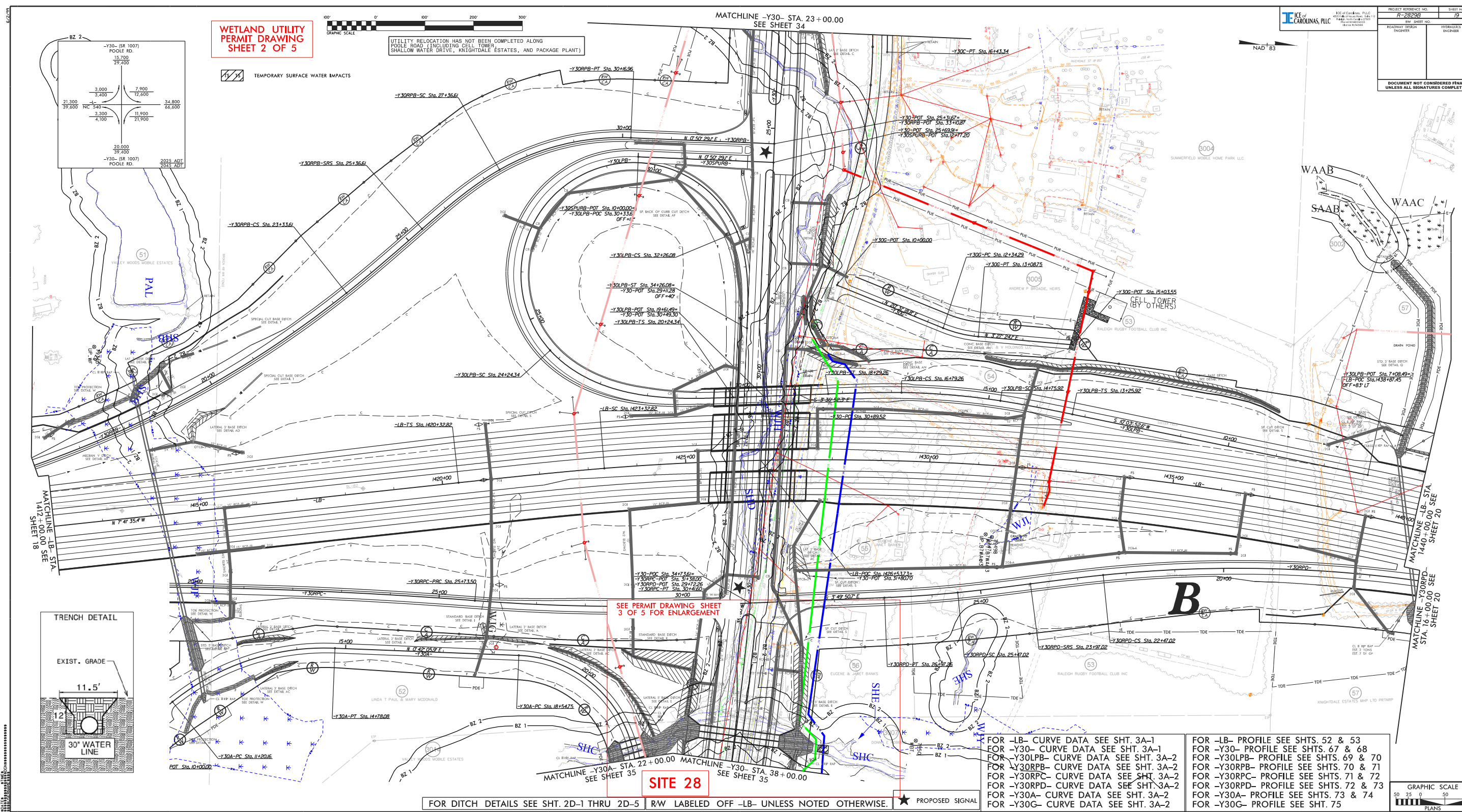
ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

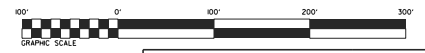
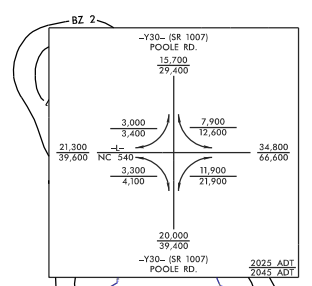
\$\$\$\$\$ SYSTEMS \$\$\$
\$\$\$\$\$ DGN \$\$\$
\$\$\$\$\$ USERNAME \$\$\$



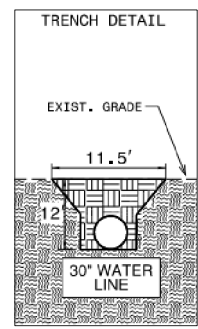
WETLAND UTILITY PERMIT DRAWING SHEET 2 OF 5

TEMPORARY SURFACE WATER IMPACTS

UTILITY RELOCATION HAS NOT BEEN COMPLETED ALONG POOLE ROAD (INCLUDING CELL TOWER, SHALLOW WATER DRIVE, KNIGHTDALE ESTATES, AND PACKAGE PLANT)



PROJECT REFERENCE NO.	179
DATE	11/28/23
BY	WJ
CHECKED BY	WJ
DESIGNED BY	WJ
ENGINEER	WJ
PROJECT LOCATION	WJ
PROJECT NO.	179
DATE	11/28/23
BY	WJ
CHECKED BY	WJ
DESIGNED BY	WJ
ENGINEER	WJ



SEE PERMIT DRAWING SHEET 3 OF 5 FOR ENLARGEMENT

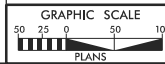
SITE 28

FOR DITCH DETAILS SEE SHT. 2D-1 THRU 2D-5 | R/W LABELED OFF -LB- UNLESS NOTED OTHERWISE.

★ PROPOSED SIGNAL

FOR -LB- CURVE DATA SEE SHT. 3A-1
 FOR -Y30- CURVE DATA SEE SHT. 3A-1
 FOR -Y30LPB- CURVE DATA SEE SHT. 3A-2
 FOR -Y30RPB- CURVE DATA SEE SHT. 3A-2
 FOR -Y30RPC- CURVE DATA SEE SHT. 3A-2
 FOR -Y30RPD- CURVE DATA SEE SHT. 3A-2
 FOR -Y30A- CURVE DATA SEE SHT. 3A-2
 FOR -Y30G- CURVE DATA SEE SHT. 3A-2

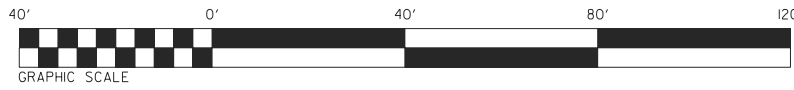
FOR -LB- PROFILE SEE SHTS. 52 & 53
 FOR -Y30- PROFILE SEE SHTS. 67 & 68
 FOR -Y30LPB- PROFILE SEE SHTS. 69 & 70
 FOR -Y30RPB- PROFILE SEE SHTS. 70 & 71
 FOR -Y30RPC- PROFILE SEE SHTS. 71 & 72
 FOR -Y30RPD- PROFILE SEE SHTS. 72 & 73
 FOR -Y30A- PROFILE SEE SHTS. 73 & 74
 FOR -Y30G- PROFILE SEE SHT. 75



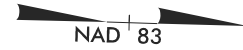
8/17/99

WETLAND UTILITY PERMIT DRAWING SHEET 3 OF 5

SITE 28 ENLARGEMENT



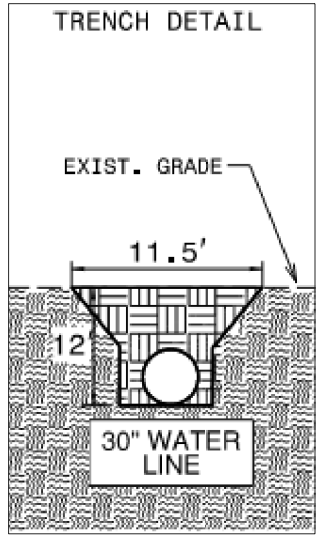
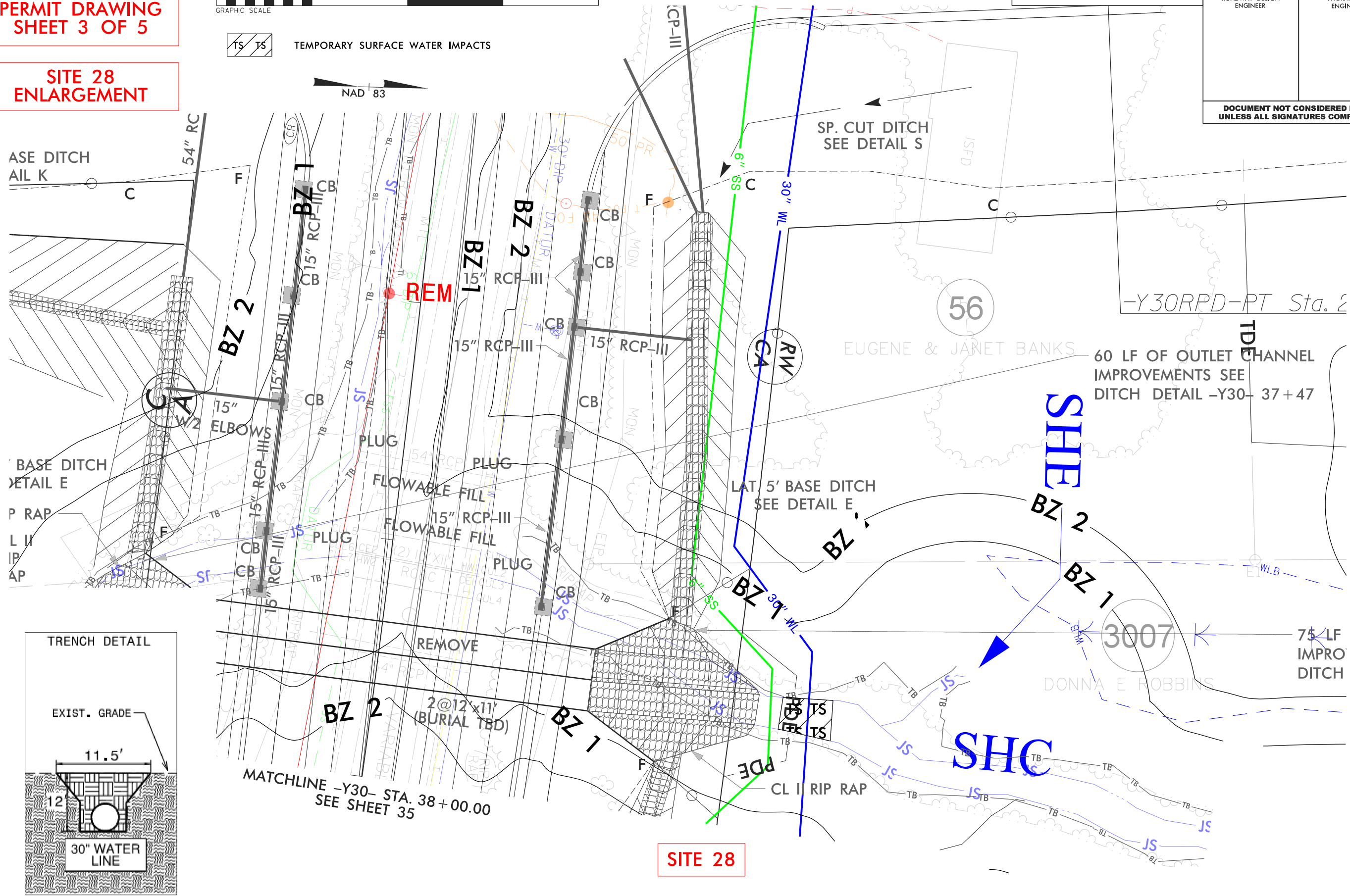
TEMPORARY SURFACE WATER IMPACTS



ICE of CAROLINAS, PLLC

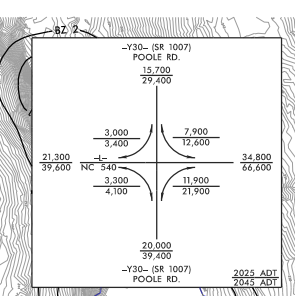
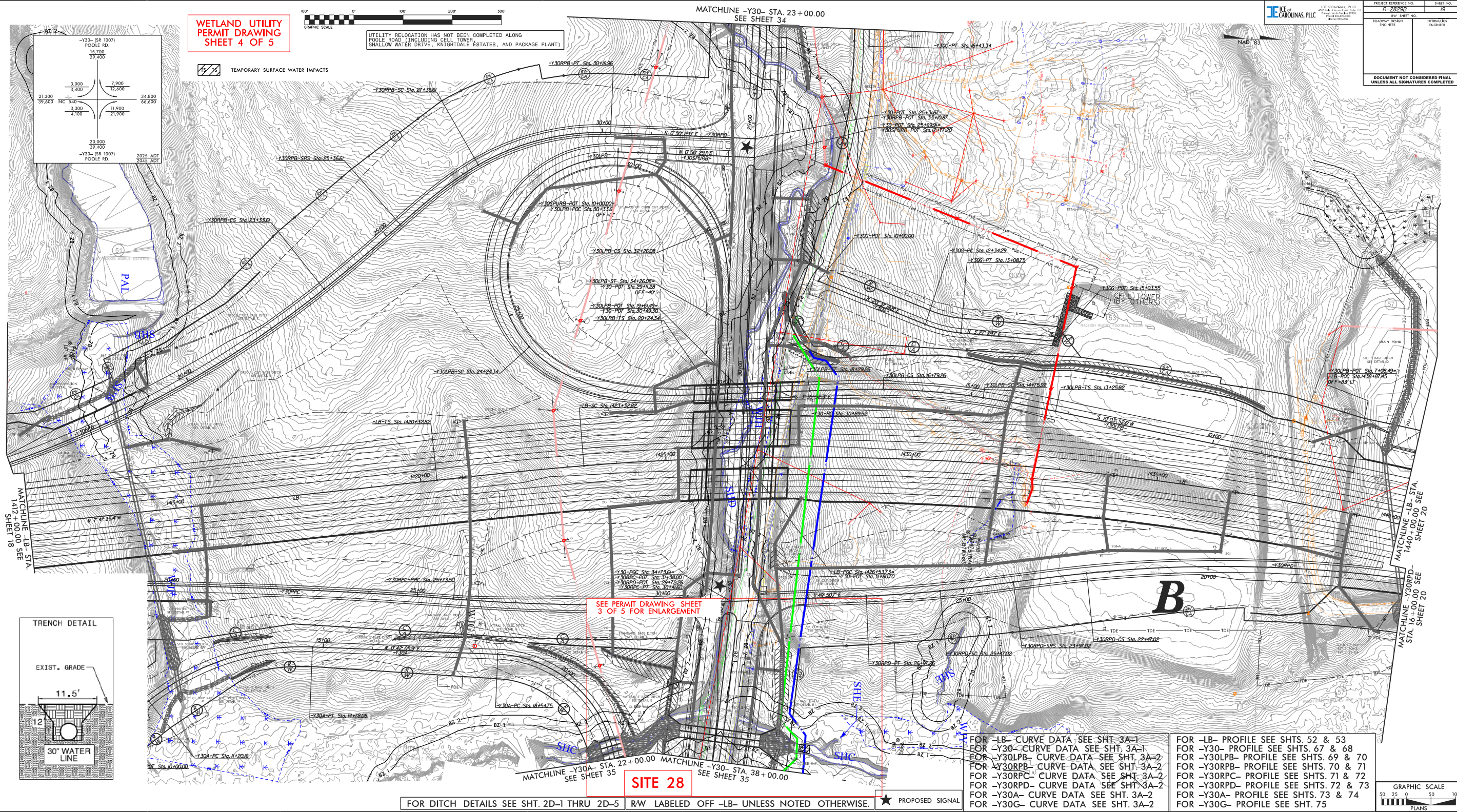
ICE of Carolinas, PLLC
4505 Falls of Neuse Road, Suite 110
Raleigh, North Carolina 27609
Phone: 803-822-0333
License #: P-29999

PROJECT REFERENCE NO. <i>R-2829B</i>	SHEET NO.
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



SITE 28

DATE: 8/17/99
TIME: 10:00 AM
DRAWN BY: JSC
CHECKED BY: JSC
APPROVED BY: JSC



WETLAND UTILITY PERMIT DRAWING SHEET 4 OF 5

TEMPORARY SURFACE WATER IMPACTS

UTILITY RELOCATION HAS NOT BEEN COMPLETED ALONG POOLE ROAD (INCLUDING CELL TOWER, SHALLOW WATER DRIVE, KNIGHTDALE ESTATES, AND PACKAGE PLANT)

MATCHLINE -Y30- STA. 23+00.00 SEE SHEET 34

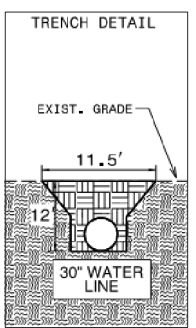
SEE PERMIT DRAWING SHEET 3 OF 5 FOR ENLARGEMENT

SITE 28

MATCHLINE -LB- STA. 141+00.00 SEE SHEET 18

MATCHLINE -LB- STA. 144+00.00 SEE SHEET 20

MATCHLINE -Y30RDP- STA. 16+00.00 SEE SHEET 20



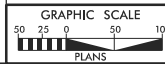
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 FOR -Y30LPB- CURVE DATA SEE SHT. 3A-2
 FOR -Y30RPB- CURVE DATA SEE SHT. 3A-2
 FOR -Y30RPC- CURVE DATA SEE SHT. 3A-2
 FOR -Y30RPD- CURVE DATA SEE SHT. 3A-2
 FOR -Y30A- CURVE DATA SEE SHT. 3A-2
 FOR -Y30G- CURVE DATA SEE SHT. 3A-2

FOR -LB- PROFILE SEE SHTS. 52 & 53
 FOR -Y30- PROFILE SEE SHTS. 67 & 68
 FOR -Y30LPB- PROFILE SEE SHTS. 69 & 70
 FOR -Y30RPB- PROFILE SEE SHTS. 70 & 71
 FOR -Y30RPC- PROFILE SEE SHTS. 71 & 72
 FOR -Y30RPD- PROFILE SEE SHTS. 72 & 73
 FOR -Y30A- PROFILE SEE SHTS. 73 & 74
 FOR -Y30G- PROFILE SEE SHT. 75

PROJECT REFERENCE NO. P-28233	SHEET NO. 19
DATE 11/20/2013	DESIGNED BY R. W. HARRIS
ROADWAY DESIGN ENGINEER	HYDROLOGIC ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



WETLAND AND SURFACE WATER IMPACTS SUMMARY

Site No.	Station (From/To)	Structure Size / Type	Wetland and/or Stream ID	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)
28	-Y30- 37+43 TO 37+59 LT	WATER/SEWER RELOCATION	SHC							< 0.01		22	
TOTALS*:										< 0.01	0	22	0

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 6/26/2024
 WAKE COUNTY

 R-2829B
 SHEET 5 OF 5