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PROJECT REFERENCE NO.	SHEET NO.
R-5020B	9
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
DocuSigned by: Barry S. Smith
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY S. SMITH
6/24/2020

HYDRAULICS ENGINEER
DocuSigned by: Joshua G. Dalton
NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G. DALTON
6/24/2020

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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905 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-6258
ENG FIRM LICENSE NO. C-890

NAD 83/NA 2011

DETAIL 3
SPECIAL LATERAL BASE DITCH
(Not to Scale)
Natural Ground, 3:1, D, B, 3:1 or Flatter, Fill Slope
Min. D=1.5 Ft.
B=2 Ft.
FROM STA. 13+63 –Y31– TO STA. 14+71 –Y31– RT

DETAIL 7
STANDARD 'V' DITCH
(Not to Scale)
Natural Ground, 3:1, D, 3:1, Natural Ground
Min. D=1.5 Ft.
STA. 11+35 –Y31A– LT

DETAIL 2
SPECIAL CUT DITCH
(Not to Scale)
Natural Ground, 3:1, D, 4:1 or Flatter, Front Ditch Slope
Min. D=1.5 Ft.
FROM STA. 13+30 –Y31– TO STA. 14+65 –Y31– LT

–Y31A–		
PI Sta 10+58.46	PI Sta 11+84.25	PI Sta 13+47.92
△ = 47° 02' 39.9" (LT)	△ = 18° 21' 47.0" (RT)	△ = 4° 38' 24.6" (RT)
D = 95° 29' 34.7"	D = 9° 01' 22.6"	D = 3° 41' 47.4"
L = 49.26'	L = 203.51'	L = 125.53'
T = 26.12'	T = 102.64'	T = 62.80'
R = 60.00'	R = 635.00'	R = 1,550.00'

–Y31–
PI Sta 13+41.53
△ = 24° 41' 36.4" (LT)
D = 5° 27' 24.3"
L = 452.53'
T = 229.83'
R = 1,050.00'
SE = .04
RO = 100'

–L–
PI Sta 239+89.66
△ = 4° 30' 55.8" (LT)
D = 0° 42' 58.3"
L = 630.48'
T = 315.40'
R = 8,000.00'
SE = .025

US 701 BYP & SR 1552

	3600 / 4600	
SR 1552 (SMYRNA RD.)		–Y31–
2017 / 2600		1383 / 1800
20150 / 24400	US 701 BYP	–L– 19733 / 23900
1433 / 1600		1650 / 1900
MCDONALD'S		ENTRANCE
	3283 / 3700	2020 ADT / 2040 ADT

MATCHLINE –L– STA. 235+40 SEE SHEET 8

MATCHLINE –L– STA. 249+00 SEE SHEET 10

BEGIN CONSTRUCTION –Y31– POC Sta.12+25.00
–Y31A– POT Sta. 10+00.00 =
–Y31– POC Sta. 13+08.30
–Y31A– PC Sta. 10+32.34
BEARING BK = S 1° 52' 36.1" W
–Y31A– PCC Sta. 12+85.12
–Y31A– PT Sta. 14+10.65
BEARING AH = S 22° 09' 52.2" E
–Y31A– PRC Sta. 10+81.61
BEGIN CONSTRUCTION –Y31A– POC Sta.11+30.00
–Y31A– POT Sta. 14+87.96
–Y29– POT Sta. 10+00.00
BEARING AH = N 74° 14' 21.9" E
BEGIN CONSTRUCTION –Y29– POT Sta.10+09.71
–Y30– POT Sta. 10+00.00
BEARING AH = N 89° 52' 57.7" E
BEGIN CONSTRUCTION –Y30– POT Sta.11+20.00
–Y29– Sta.11+52.54 =
–L– Sta. 236+26.37, OS=37.5'LT
–L– POT Sta.236+34.93
–Y29– PI Sta. 11+91.01
–L– PC Sta. 236+74.26
–Y30– Sta.12+53.00 =
–L– Sta. 240+19.85, OS=37.5'LT
–L– POC Sta.240+16.40 =
–Y30– POT Sta. 12+90.66
–Y31– PT Sta. 15+64.23
BEARING AH = S 89° 30' 55.3" E
–Y31– Sta.17+35.10 =
–L– POT Sta.244+15.36, OS=37.5'LT
–Y30– Sta.13+28.32 =
–L– Sta. 240+12.98, OS=37.5'RT
–L– POT Sta.244+10.16 =
–Y31– POT Sta. 17+72.96
–Y29– Sta.12+28.66 =
–L– Sta. 236+38.27,
OS=37.5'RT
END CONSTRUCTION –Y29– POT Sta.12+95.00
–Y29– POT Sta. 14+63.29
BEARING BK = N 82° 00' 17.9" E
END CONSTRUCTION –Y30– POT Sta.14+85.00
–Y30– POT Sta. 16+61.63
–L– POT Sta. 243+04.74

NATIONAL REGISTER ELIGIBLE

REVISED SIGNAL

FOR –L– PROFILE, SEE SHEETS 17 & 18
FOR –Y29–, –Y30–, –Y31–, & –Y31A– PROFILES, SEE SHEETS 22 & 23
FOR RIGHT-OF-WAY DATA, SEE SHEET RW-9
FOR –Y29–, –Y30–, –Y31– INTERSECTION DETAILS, SEE SHEETS 2B-5 & 2B-6

29-APR-2020 11:29
R:\2016\2016018\8\NCDOT R-5020B US 701 Widening\Roadway\Proj\R-5020B_Rdy_psh_9.dgn
$$$$USERNAME$$$$