5/14/99

PROJECT REFERENCE NO.	SHEET NO.
W-5107	U02
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ARCADIS
G & M of North Carolina, Inc.
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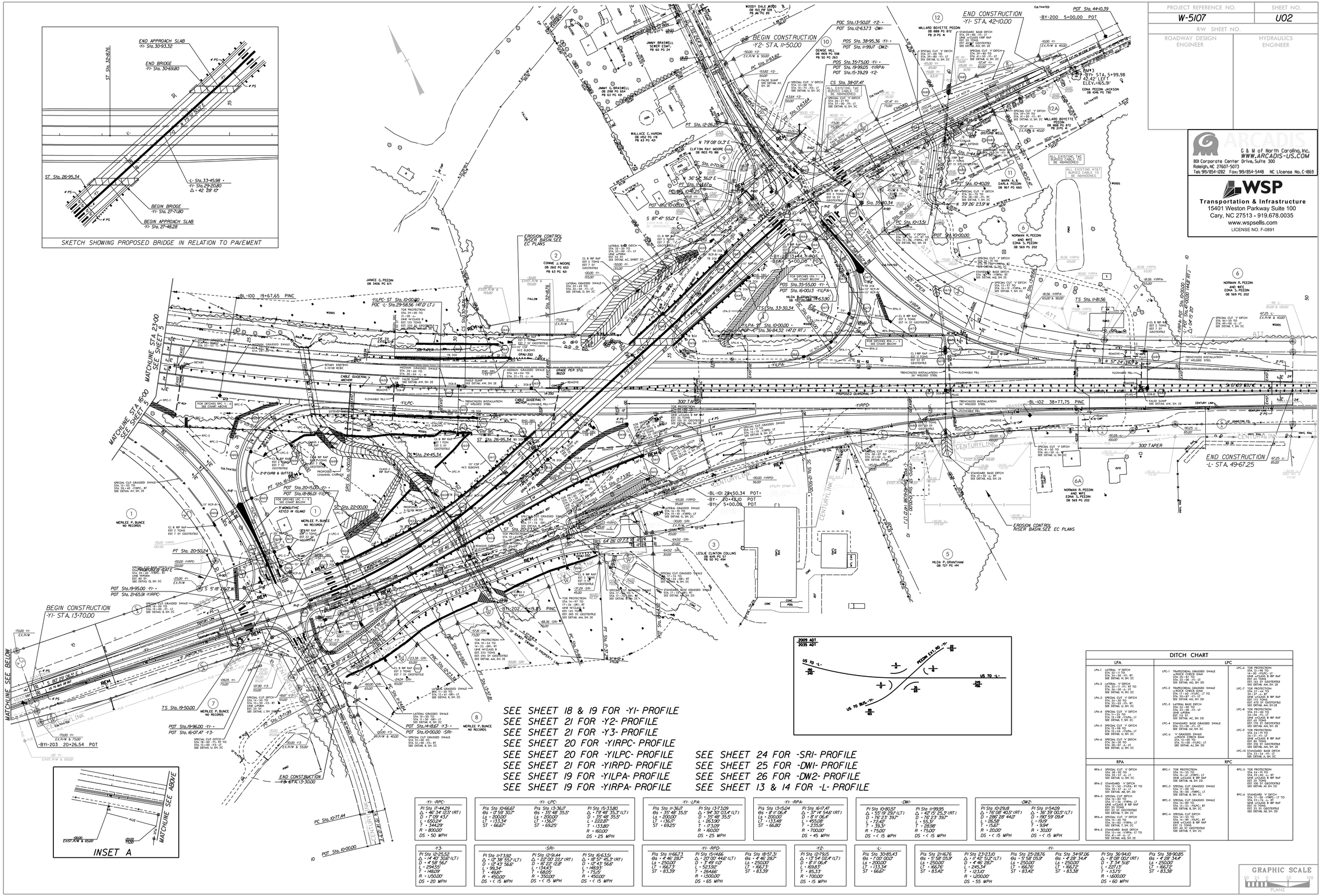
www.wspsells.com
LICENSE NO. F-0891

SKETCH SHOWING PROPOSED BRIDGE IN RELATION TO PAVEMENT



DITCH CHART

LPA	LPC
LPA-1 LATERAL 'V' DITCH STA. 12+50 TO STA. 17+00 -Y1- RT SEE DETAIL H, SH. 2C LPA-2 LATERAL 'V' DITCH STA. 32+11 -Y1- RT TO STA. 34+50 -L- LT SEE DETAIL H, SH. 2C LPA-3 SPECIAL CUT 'V' DITCH STA. 32+50 TO STA. 33+23 -Y1- RT SEE DETAIL I, SH. 2C LPA-4 SPECIAL CUT 'V' DITCH STA. 12+98 TO STA. 13+98 -YILPA- LT SEE DETAIL I, SH. 2C LPA-5 SPECIAL CUT 'V' DITCH STA. 12+98 TO STA. 13+98 -YILPA- LT SEE DETAIL U, SH. 2C LPA-6 SPECIAL CUT 'V' DITCH STA. 36+30 TO STA. 38+07 -L- LT SEE DETAIL U, SH. 2C	LPC-1 TRAPEZOIDAL GRASSED SWALE w/ROCK CHECK DAM STA. 17+00 -YILPC- LT TO STA. 20+87 -YILPC- LT SEE DETAIL AG, SH. 2D LPC-2 TRAPEZOIDAL GRASSED SWALE w/ROCK CHECK DAM STA. 17+00 -YILPC- LT TO STA. 20+87 -YILPC- LT SEE DETAIL AG, SH. 2D LPC-3 LATERAL BASE DITCH STA. 20+87 TO STA. 22+00 -YILPC- LT LINE W/CLASS B EST. 100 TONS LINE W/SRAP EST. 25 SY SEE DETAIL AC, SHEET 2D LPC-4 STANDARD BASE GRASSED SWALE STA. 20+87 TO STA. 22+00 -YILPC- LT SEE DETAIL AE, SH. 2D LPC-5 'V' GRASSED SWALE w/ROCK CHECK DAM STA. 20+87 TO STA. 22+00 -YILPC- LT SEE DETAIL AJ, SH. 2D	LPC-6 TOE PROTECTION STA. 12+98 TO STA. 13+98 -YILPC- LT LINE W/CLASS B RIP RAP EST. 40 TONS EST. 165 SY GEOTEXTILE SEE DETAIL AM, SH. 2E LPC-7 TOE PROTECTION STA. 17+00 TO STA. 27+ 4.4 -RT LINE W/CLASS B RIP RAP EST. 80 TONS EST. 415 SY GEOTEXTILE SEE DETAIL AM, SH.2E LPC-8 TOE PROTECTION STA. 21+ 00 TO STA. 22+ 00 -RT LINE w/CLASS B RIP RAP EST. 6.5 TONS EST. 35 SY GEOTEXTILE SEE DETAIL AM, SH. 2E LPC-9 TOE PROTECTION STA. 21+ 91 TO STA. 21+ 96 -L- LT LINE W/CLASS B RIP RAP EST. 60 TONS EST. 310 SY GEOTEXTILE SEE DETAIL AM, SH. 2E LPC-10 STANDARD BASE DITCH STA. 21+ 00 TO SEE DETAIL A, SH. 2C
RPA	**RPC**
RPA-1 SPECIAL CUT 'V' DITCH STA. 38+ 90 TO STA. 39+ 57 -L- LT SEE DETAIL U, SH. 2C RPA-2 STANDARD 'V' DITCH STA. 10+ 00 -YIRPC- RT TO STA. 12+ 52 -YIRPC- SEE DETAIL AB, SH. 2D RPA-3 SPECIAL CUT DITCH STA. 16+ 83 TO STA. 17+ 00 -YIRPA- LT LINE w/CLASS B RIP RAP EST. 20 TONS EST. 110 SY GEOTEXTILE SEE DETAIL AM, SH. 2E RPA-4 SPECIAL CUT 'V' DITCH STA. 15+ 00 TO STA. 16+ 83 -YIRPA- LT SEE DETAIL T, SH. 2C RPA-5 STANDARD BASE DITCH STA. 41+ 00 TO STA. 41+ 49 -L- LT SEE DETAIL AG, SH. 2E	RPC-1 TOE PROTECTION STA. 15+ 00 TO STA. 16+ 41 -YIRPC- LT LINE W/CLASS B RIP RAP EST. 30 TONS RPC-2 SPECIAL CUT GRASSED SWALE STA. 17+ 00 TO STA. 18+ 00 -YIRPC- LT SEE DETAIL B, SH. 2C RPC-3 SPECIAL CUT GRASSED SWALE STA. 14+ 89 TO STA. 15+ 00 -YIRPC- RT SEE DETAIL B, SH. 2C RPC-4 SPECIAL CUT DITCH STA. 14+ 89 TO STA. 16+ 89 -YIRPC- RT LINE w/CLASS B RIP RAP EST. 20 TONS EST. 45 SY GEOTEXTILE SEE DETAIL T, SH. 2C	RPC-5 TOE PROTECTION STA. 21+ 91 TO STA. 21+ 83 -L- RT LINE W/CLASS B RIP RAP EST. 30 TONS EST. 150 SY GEOTEXTILE SEE DETAIL AM, SH. 2E RPC-6 STANDARD 'V' DITCH STA. 17+ 00 -YIRPC- LT TO STA. 27+ 76 -L- RT LINE w/CLASS B RIP RAP EST. 80 TONS EST. 35 SY GEOTEXTILE SEE DETAIL AE, SH. 2D

-Y1- -RPC-	-Y1- -LPC-		-Y1- -LPA-		-Y1- -RPA-		-DWI-		-DW2-	
PI Sta. 17+44.29 Δ = 45° 34' 12.5" (RT) D = 7° 09' 43.7" L = 653.24' T = 344.29' R = 800.00' DS = 50 MPH	PIs Sta. 10+66.67 Δ = 12° 38' 50.7" L = 200.00' T = 113.34' ST = 66.87'	PIs Sta. 13+36.17 Δ = 55° 48' 35.5" L = 200.00' T = 136.17' ST = 69.25'	PIs Sta. 15+33.80 Δ = 79° 48' 35.3" (LT) D = 35° 48' 35.5" L = 222.87' T = 133.80' R = 160.00' DS = 25 MPH	PIs Sta. 11+36.17 Δ = 55° 48' 35.5" L = 200.00' T = 136.17' ST = 69.25'	PIs Sta. 13+13.09 Δ = 94° 30' 03.4" (LT) D = 35° 48' 35.5" L = 263.98' T = 173.09' R = 160.00' DS = 25 MPH	PIs Sta. 13+15.04 Δ = 81° 11' 06.4" L = 200.00' LT = 133.48' ST = 66.80'	PIs Sta. 16+17.47 Δ = 37° 14' 54.8" (RT) D = 8° 11' 06.4" L = 455.08' T = 235.91' R = 700.00' DS = 45 MPH	PI Sta. 10+90.57 Δ = 55° 19' 29.4" (LT) D = 76° 23' 39.7" L = 72.46' T = 39.31' R = 75.00' DS = < 15 MPH	PI Sta. 11+99.95 Δ = 42° 15' 25.3" (RT) D = 76° 23' 39.7" L = 55.31' T = 28.98' R = 75.00' DS = < 15 MPH	PI Sta. 10+29.18 Δ = 76° 08' 40.5" (RT) D = 286° 28' 44.0" L = 26.58' T = 15.57' R = 20.00' DS = < 15 MPH	PI Sta. 11+54.09 Δ = 36° 39' 00.5" (LT) D = 190° 59' 09.4" L = 19.19' T = 9.94' R = 30.00' DS = < 15 MPH

-Y3-	-SRI-			-Y1- -RPD-			-Y2-	-L-		-Y1-		
PI Sta. 12+25.52 Δ = 14° 40' 30.6" (LT) D = 4° 58' 56.7" L = 294.55' T = 148.09' R = 1,150.00' DS = 20 MPH	PI Sta. 11+73.92 Δ = 12° 38' 55.7" (LT) D = 12° 43' 56.6" L = 99.34' T = 49.81' R = 450.00' DS = < 15 MPH	PI Sta. 12+91.44 Δ = 22° 00' 22.2" (RT) D = 16° 22' 12.8" L = 134.43' T = 68.05' R = 350.00' DS = < 15 MPH	PI Sta. 16+63.15 Δ = 18° 57' 45.3" (RT) D = 12° 43' 56.6" L = 148.93' T = 75.15' R = 450.00' DS = < 15 MPH	PIs Sta. 11+66.73 Δ = 4° 46' 28.7" L = 250.00' LT = 166.73' ST = 83.39'	PI Sta. 15+14.66 Δ = 20° 00' 44.6" (LT) D = 3° 49' 11.0" L = 523.92' T = 264.66' R = 1,500.00' DS = 65 MPH	PIs Sta. 18+57.31 Δ = 4° 46' 28.7" L = 250.00' LT = 166.73' ST = 83.39'	PI Sta. 12+79.15 Δ = 13° 54' 03.4" (LT) D = 8° 11' 06.4" L = 169.83' T = 85.33' R = 700.00' DS = 15 MPH	PIs Sta. 30+85.43 Δ = 1° 00' 00.0" L = 200.00' LT = 133.34' ST = 66.67'	PIs Sta. 21+67.76 Δ = 5° 58' 05.9" L = 250.00' LT = 166.76' ST = 83.42'	PI Sta. 23+23.10 Δ = 17° 42' 51.2" (LT) D = 4° 46' 28.7" L = 246.34' T = 123.70' R = 1,200.00' DS = 55 MPH	PIs Sta. 25+28.76 Δ = 5° 58' 05.9" L = 250.00' LT = 166.76' ST = 83.42'	PIs Sta. 34+97.06 Δ = 4° 28' 34.4" L = 250.00' LT = 166.72' ST = 83.38'	PI Sta. 36+94.10 Δ = 8° 08' 00.1" (RT) D = 3° 34' 51.6" L = 227.13' T = 113.75' R = 1,600.00' DS = 60 MPH	PIs Sta. 38+90.85 Δ = 4° 28' 34.4" L = 250.00' LT = 166.72' ST = 83.38'

GRAPHIC SCALE
50 25 0 50 100
PLANS

$$$$$SYSTIME$$$$$
$$$$$USERNAME$$$$$