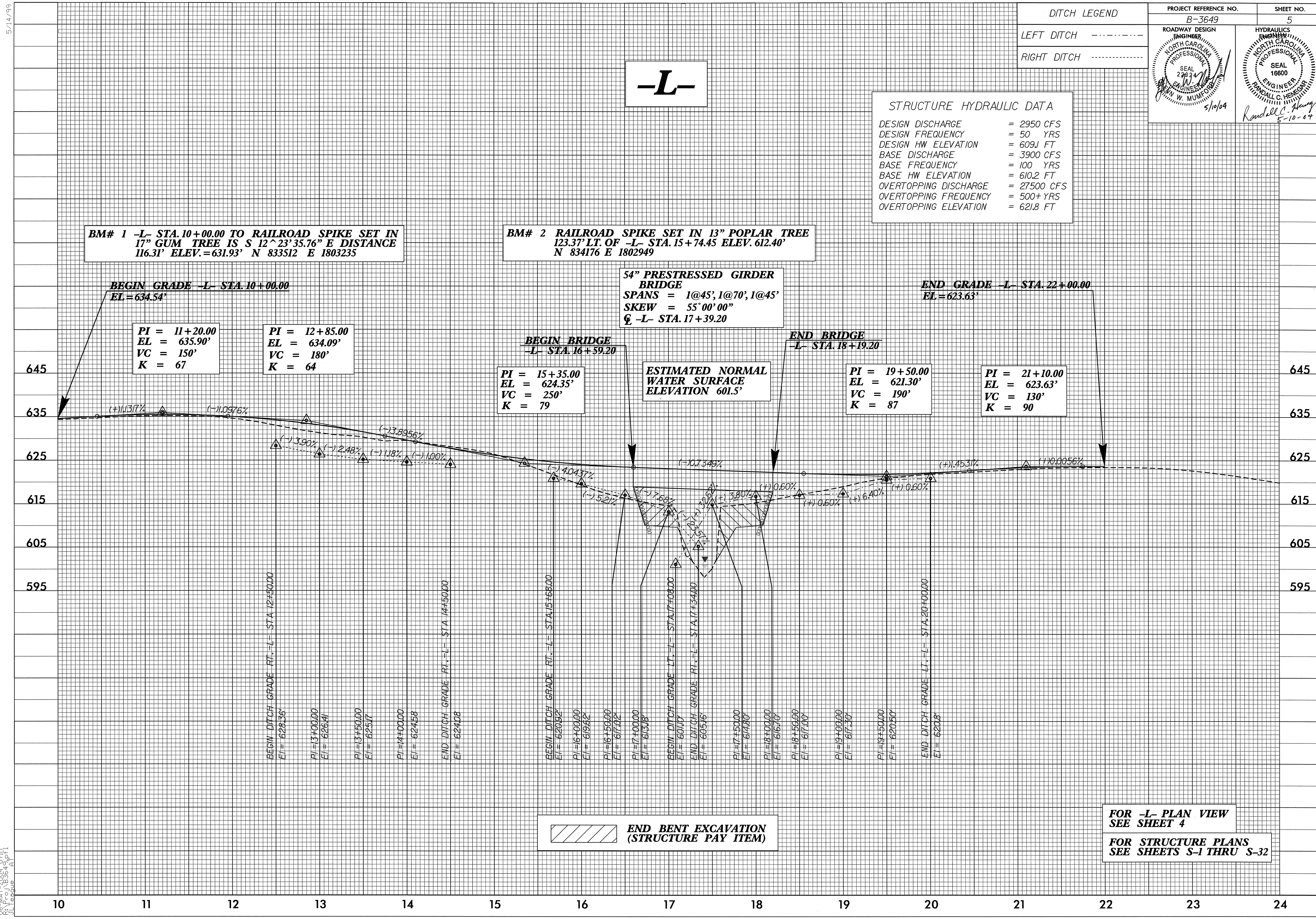

5/14/99
PROJECT REFERENCE NO. B-3649
SHEET NO. 5
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL ENGINEER
5/10/04
NORTH CAROLINA PROFESSIONAL SEAL 16600 ENGINEER RANDALL C. HENEGAR
5-10-04
DITCH LEGEND
LEFT DITCH
RIGHT DITCH
-L-
STRUCTURE HYDRAULIC DATA
DESIGN DISCHARGE = 2950 CFS
DESIGN FREQUENCY = 50 YRS
DESIGN HW ELEVATION = 609.1 FT
BASE DISCHARGE = 3900 CFS
BASE FREQUENCY = 100 YRS
BASE HW ELEVATION = 610.2 FT
OVERTOPPING DISCHARGE = 27500 CFS
OVERTOPPING FREQUENCY = 500+ YRS
OVERTOPPING ELEVATION = 621.8 FT
BM# 1 -L- STA. 10+00.00 TO RAILROAD SPIKE SET IN 17" GUM TREE IS S 12^23' 35.76" E DISTANCE 116.31' ELEV.=631.93' N 833512 E 1803235
BM# 2 RAILROAD SPIKE SET IN 13" POPLAR TREE 123.37' LT. OF -L- STA. 15+74.45 ELEV. 612.40' N 834176 E 1802949
54" PRESTRESSED GIRDER BRIDGE
SPANS = 1@45', 1@70', 1@45'
SKEW = 55° 00' 00"
℄ -L- STA. 17+39.20
BEGIN GRADE -L- STA. 10+00.00
EL=634.54'
END GRADE -L- STA. 22+00.00
EL=623.63'
PI = 11+20.00
EL = 635.90'
VC = 150'
K = 67
PI = 12+85.00
EL = 634.09'
VC = 180'
K = 64
BEGIN BRIDGE -L- STA. 16+59.20
END BRIDGE -L- STA. 18+19.20
PI = 15+35.00
EL = 624.35'
VC = 250'
K = 79
ESTIMATED NORMAL WATER SURFACE ELEVATION 601.5'
PI = 19+50.00
EL = 621.30'
VC = 190'
K = 87
PI = 21+10.00
EL = 623.63'
VC = 130'
K = 90
(+)1.1317%
(-)1.0976%
(-)3.8956%
(-)0.7349%
(+)1.4531%
(+)0.0056%
(-) 3.90%
(-) 2.48%
(-) 1.18%
(-) 1.00%
(-) 4.0437%
(-) 5.21%
(+) 0.60%
(+) 0.60%
(+) 6.40%
(+) 0.60%
(+) 3.80%
645
635
625
615
605
595
BEGIN DITCH GRADE RT. -L- STA 12+50.00 El = 628.36'
PI=13+00.00 El = 626.41
PI=13+50.00 El = 625.17
PI=14+00.00 El = 624.58
END DITCH GRADE RT. -L- STA 14+50.00 El = 624.08
BEGIN GRADE RT. -L- STA.15+68.00 El = 620.92'
PI=16+00.00 El = 619.62'
PI=16+50.00 El = 617.02'
PI=17+00.00 El = 613.18'
BEGIN DITCH GRADE LT. -L- STA.17+08.00 El = 601.07'
END DITCH GRADE RT. -L- STA.17+34.00 El = 605.16'
PI=17+50.00 El = 614.80'
PI=18+00.00 El = 616.10'
PI=18+50.00 El = 617.00'
PI=19+00.00 El = 617.30'
PI=19+50.00 El = 620.50'
END DITCH GRADE LT. -L- STA.20+00.00 El = 620.8'
END BENT EXCAVATION (STRUCTURE PAY ITEM)
FOR -L- PLAN VIEW SEE SHEET 4
FOR STRUCTURE PLANS SEE SHEETS S-1 THRU S-32
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06-MAY-2004 07:47