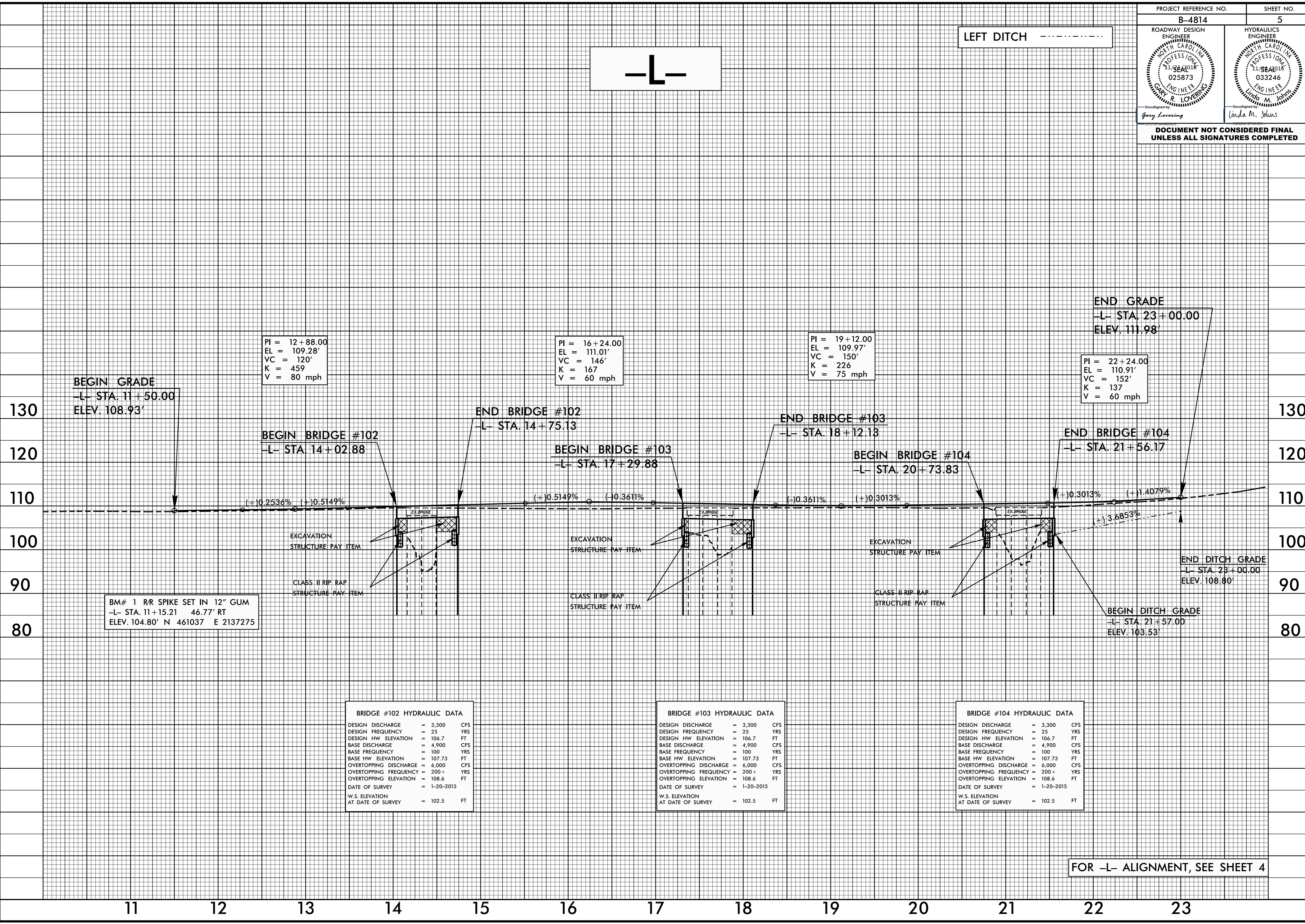
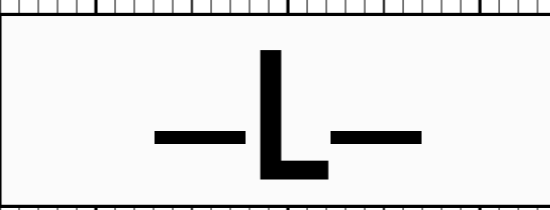


5/14/99

PROJECT REFERENCE NO. B-4814	SHEET NO. 5
ROADWAY DESIGN ENGINEER GARY R. LOVERING 025873 11/SEA016	HYDRAULICS ENGINEER LINDA M. JOHNS 033246 11/SEA016
<p>DocuSigned by: Gary Lovering</p> <p>DocuSigned by: Linda M. Johns</p>	
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	

LEFT DITCH - - - - -



BEGIN GRADE
-L- STA. 11+50.00
ELEV. 108.93'

PI = 12+88.00
EL = 109.28'
VC = 120'
K = 459
V = 80 mph

PI = 16+24.00
EL = 111.01'
VC = 146'
K = 167
V = 60 mph

PI = 19+12.00
EL = 109.97'
VC = 150'
K = 226
V = 75 mph

PI = 22+24.00
EL = 110.91'
VC = 152'
K = 137
V = 60 mph

BM# 1 RR SPIKE SET IN 12" GUM
-L- STA. 11+15.21 46.77' RT
ELEV. 104.80' N 461037 E 2137275

BEGIN BRIDGE #102
-L- STA. 14+02.88

END BRIDGE #102
-L- STA. 14+75.13

BEGIN BRIDGE #103
-L- STA. 17+29.88

END BRIDGE #103
-L- STA. 18+12.13

BEGIN BRIDGE #104
-L- STA. 20+73.83

END BRIDGE #104
-L- STA. 21+56.17

END GRADE
-L- STA. 23+00.00
ELEV. 111.98'

END DITCH GRADE
-L- STA. 23+00.00
ELEV. 108.80'

BEGIN DITCH GRADE
-L- STA. 21+57.00
ELEV. 103.53'

BRIDGE #102 HYDRAULIC DATA

DESIGN DISCHARGE	= 3,300	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 106.7	FT
BASE DISCHARGE	= 4,900	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 107.73	FT
OVERTOPPING DISCHARGE	= 6,000	CFS
OVERTOPPING FREQUENCY	= 200+	YRS
OVERTOPPING ELEVATION	= 108.6	FT
DATE OF SURVEY	= 1-20-2015	
W.S. ELEVATION AT DATE OF SURVEY	= 102.5	FT

BRIDGE #103 HYDRAULIC DATA

DESIGN DISCHARGE	= 3,300	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 106.7	FT
BASE DISCHARGE	= 4,900	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 107.73	FT
OVERTOPPING DISCHARGE	= 6,000	CFS
OVERTOPPING FREQUENCY	= 200+	YRS
OVERTOPPING ELEVATION	= 108.6	FT
DATE OF SURVEY	= 1-20-2015	
W.S. ELEVATION AT DATE OF SURVEY	= 102.5	FT

BRIDGE #104 HYDRAULIC DATA

DESIGN DISCHARGE	= 3,300	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 106.7	FT
BASE DISCHARGE	= 4,900	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 107.73	FT
OVERTOPPING DISCHARGE	= 6,000	CFS
OVERTOPPING FREQUENCY	= 200+	YRS
OVERTOPPING ELEVATION	= 108.6	FT
DATE OF SURVEY	= 1-20-2015	
W.S. ELEVATION AT DATE OF SURVEY	= 102.5	FT

FOR -L- ALIGNMENT, SEE SHEET 4

14-SEP-2016 10:31 AM B4814_Rdy-p1.dgn