

0.6" Ø L. R. GRADE 270 STRANDS

AREA (SQ. INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.217	58,600	43,950

REINFORCING STEEL FOR ONE GIRDER

BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	77	#4	1	10'-8"	549
S2	12	#6	1	10'-8"	192
S3	4	#4	2	9'-1"	24
S4	64	#4	3	3'-5"	146
S5	6	#4	2	8'-5"	34
S6	1	#4	2	9'-11"	7
*S7	6	#5	STR	3'-8"	23
S8	4	#4	2	8'-7"	23
S9	1	#3	STR	1'-10"	1
S10	2	#5	2	8'-8"	18
GA2, GA3, GC2, GC3	4	#5	2	8'-8"	36
GA1, GA4, GC1, GC4	5	#4	STR	7'-0"	23
GA2, GA3	5	#4	STR	12'-1"	40
GC2, GC3	5	#4	STR	13'-6"	45

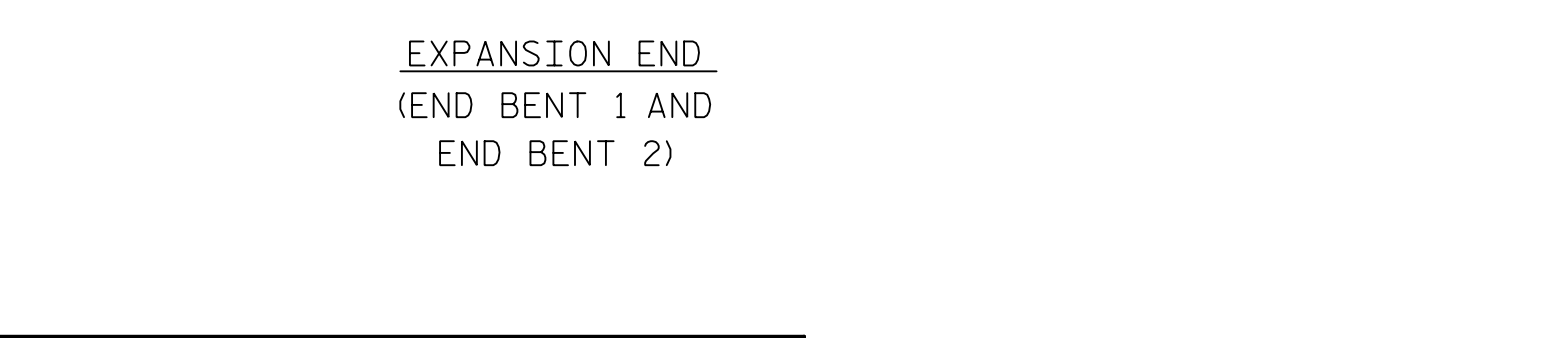
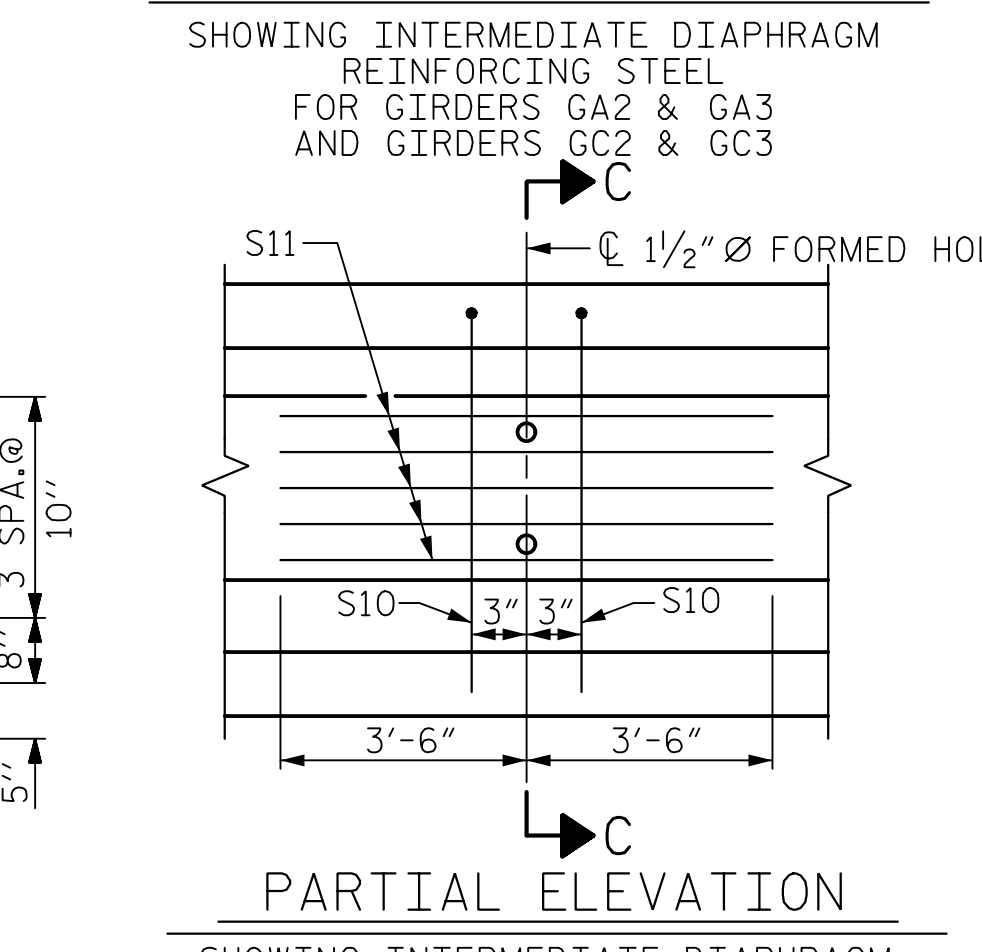
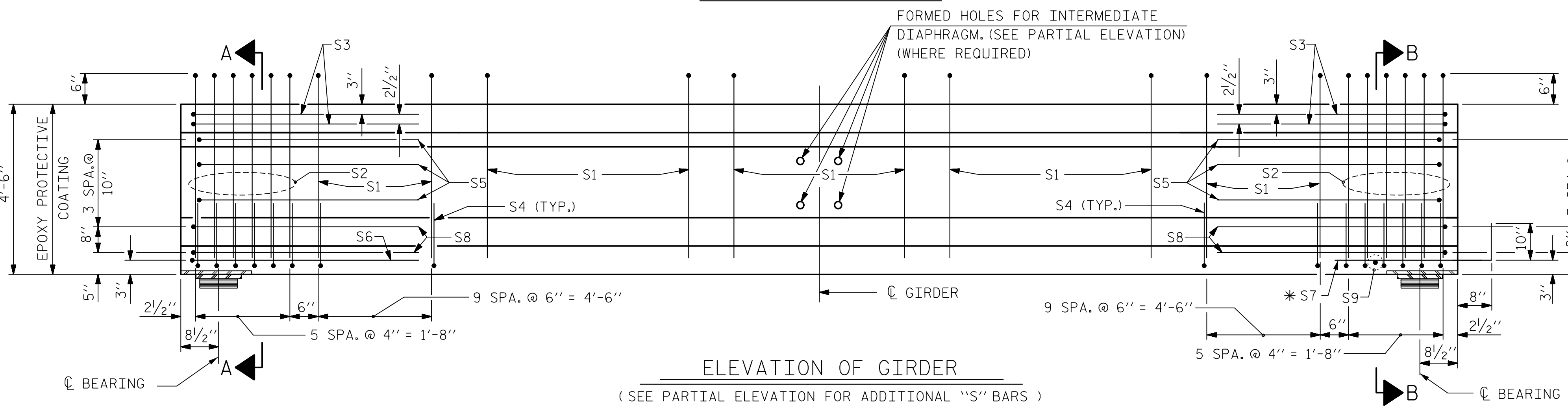
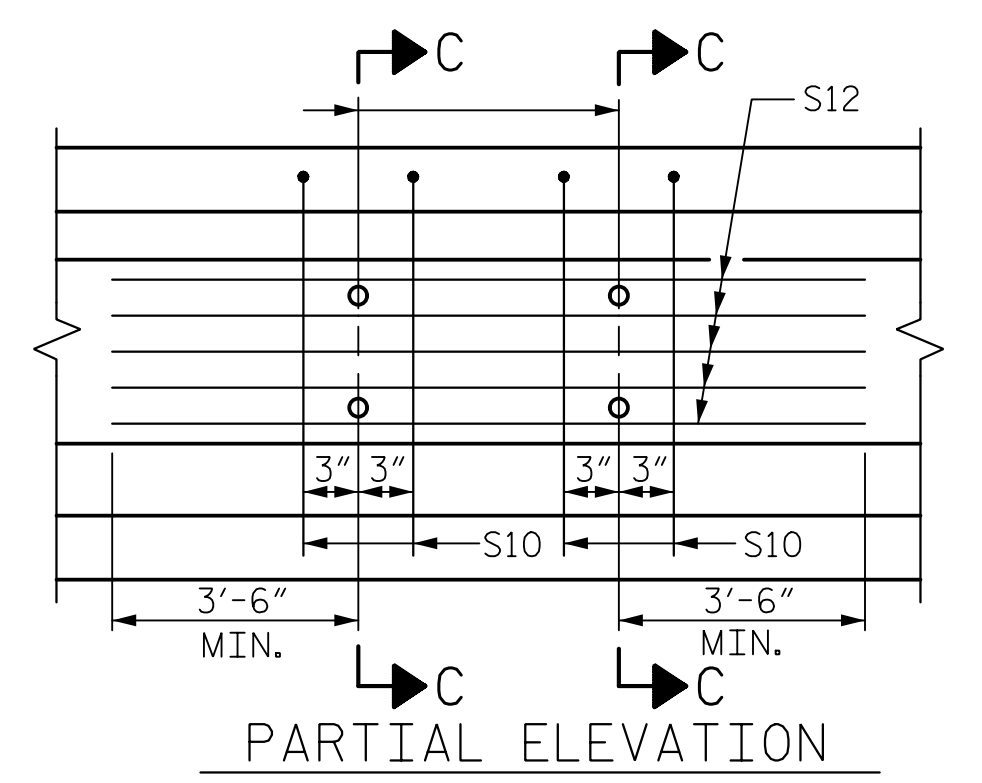
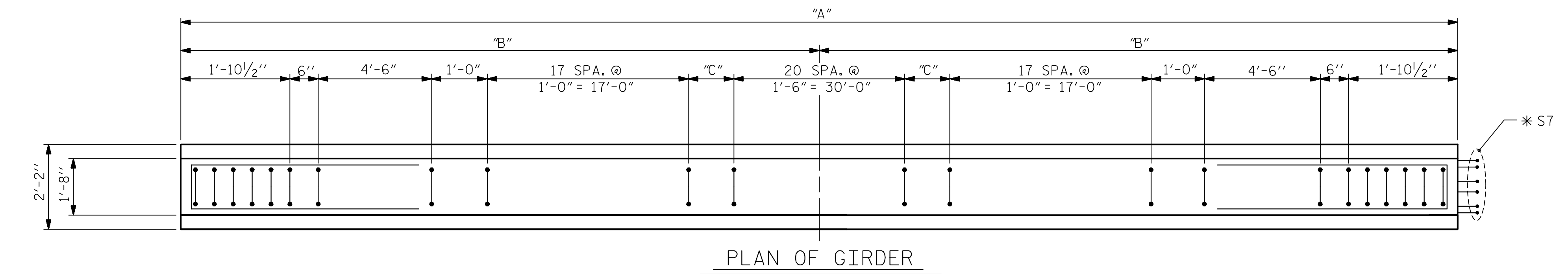
* NOTE: S7 BARS SHALL BE BENT BEFORE SHIPMENT. HEAT BENDING SHALL NOT BE ALLOWED.

QUANTITIES FOR ONE GIRDER

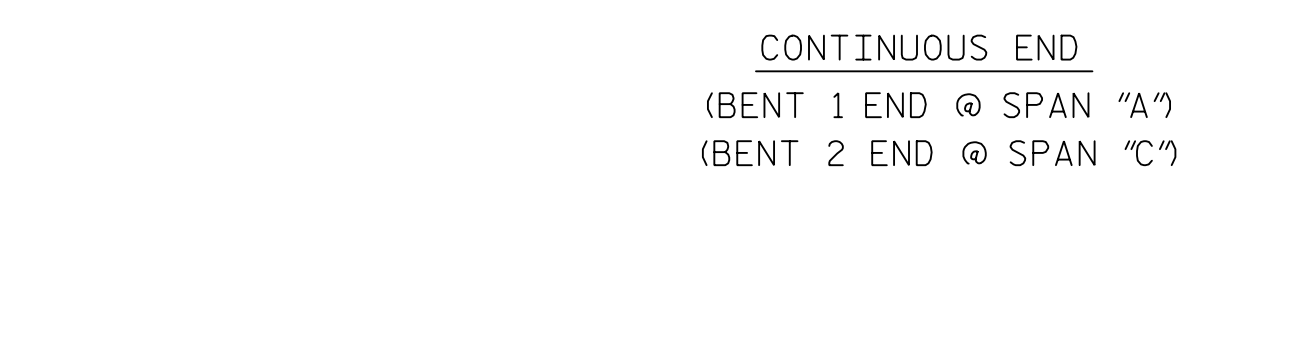
	REINFORCING STEEL LB.	5,500 PSI CONCRETE C.Y.	0.6" Ø L. R. STRANDS No.
GA1	1,040	16.7	28
GA2	1,075	16.7	28
GA3	1,075	16.7	28
GA4	1,040	16.8	28
GC1	1,040	16.6	28
GC2	1,080	16.7	28
GC3	1,080	16.7	28
GC4	1,040	16.8	28

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
GA1	82'-3"	82'-3"
GA2	82'-4 ⁵ / ₈ "	82'-4 ⁵ / ₈ "
GA3	82'-6 ³ / ₈ "	82'-6 ³ / ₈ "
GA4	82'-8"	82'-8"
GC1	81'-10 ¹ / ₂ "	81'-10 ¹ / ₂ "
GC2	82'-1 ¹ / ₄ "	82'-1 ¹ / ₄ "
GC3	82'-4"	82'-4"
GC4	82'-6 ³ / ₄ "	82'-6 ³ / ₄ "



GIRDER	"A"	"B"	"C"
GA1	82'-3"	41'-1 ¹ / ₂ "	1'-3"
GA2	82'-4 ⁵ / ₈ "	41'-2 ⁵ / ₁₆ "	1'-3 ³ / ₁₆ "
GA3	82'-6 ³ / ₈ "	41'-3 ³ / ₁₆ "	1'-4 ¹ / ₁₆ "
GA4	82'-8"	41'-4"	1'-5 ¹ / ₂ "
GC1	81'-10 ¹ / ₂ "	40'-11 ¹ / ₄ "	1'-0 ³ / ₄ "
GC2	82'-1 ¹ / ₄ "	41'-0 ⁵ / ₈ "	1'-2 ¹ / ₈ "
GC3	82'-4"	41'-2"	1'-3 ¹ / ₂ "
GC4	82'-6 ³ / ₄ "	41'-3 ³ / ₈ "	1'-4 ¹ / ₈ "



NOTES:
THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 4,200 PSI FOR SPAN A AND SPAN C GIRDERS.

GIRDER CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5,500 PSI AT THE AGE OF 28 DAYS.

PROJECT NO. B-4811
RUTHERFORD COUNTY
STATION: POC 15+25.00 -L-

SHEET 1 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD
AASHTO TYPE IV
PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD
SPANS A & C

ASSEMBLED BY : J. BAYNE	DATE : 3/15
CHECKED BY : D. RAGAN	DATE : 3/15
DRAWN BY : ELR 8/91	REV. 5/1/06R TLA/GM
CHECKED BY : CRP 8/91	REV. 10/1/11 MAA/GM
	REV. 1/15 MAA/TMG

NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

HNTB HNTB NORTH CAROLINA, P.C.
NC License No. C-1554
343 E. Six Forks Rd., Suite 200, Raleigh, N.C. 27609

DRAWN BY: J. BAYNE DATE: 3/15
CHECKED BY: D. RAGAN DATE: 3/15

DWG. NO. 12

DocuSigned by:
David W. Hawkins
1/29/2016

DocuSigned by:
Paul J. Barber
1/29/2016

SEAL 27812
NORTH CAROLINA PROFESSIONAL ENGINEER
DAVID W. HAWKINS

SEAL 12916
NORTH CAROLINA PROFESSIONAL ENGINEER
PAUL J. BARBER