

0.6" Ø L. R. GRADE 270 STRANDS

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

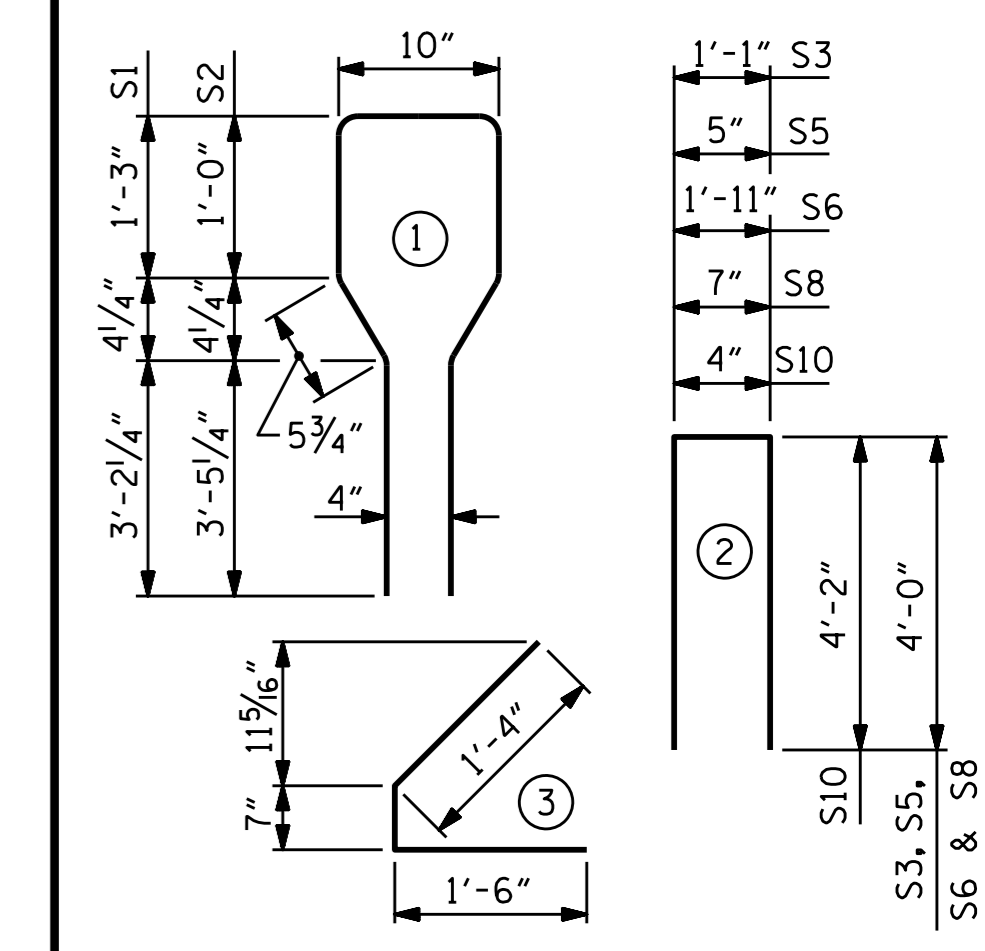
REINFORCING STEEL FOR ONE GIRDER

BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	
S1	133	#5	1	10'-8"	1480	
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	
EXTERIOR GDR.	S10	4	#5	2	8'-8"	36
INTERIOR GDR.	S10	8	#5	2	8'-8"	72
EXTERIOR GDR.	S11	10	#4	STR	7'-0"	47
INTERIOR GDR.	S12	10	#4	STR	13'-6"	90

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

BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT



QUANTITIES FOR ONE GIRDER

REINFORCING STEEL	8000 PSI CONCRETE	0.6" Ø L. R. STRANDS
LB.	C.Y.	No.
2,175	21.9	46

GIRDERS REQUIRED

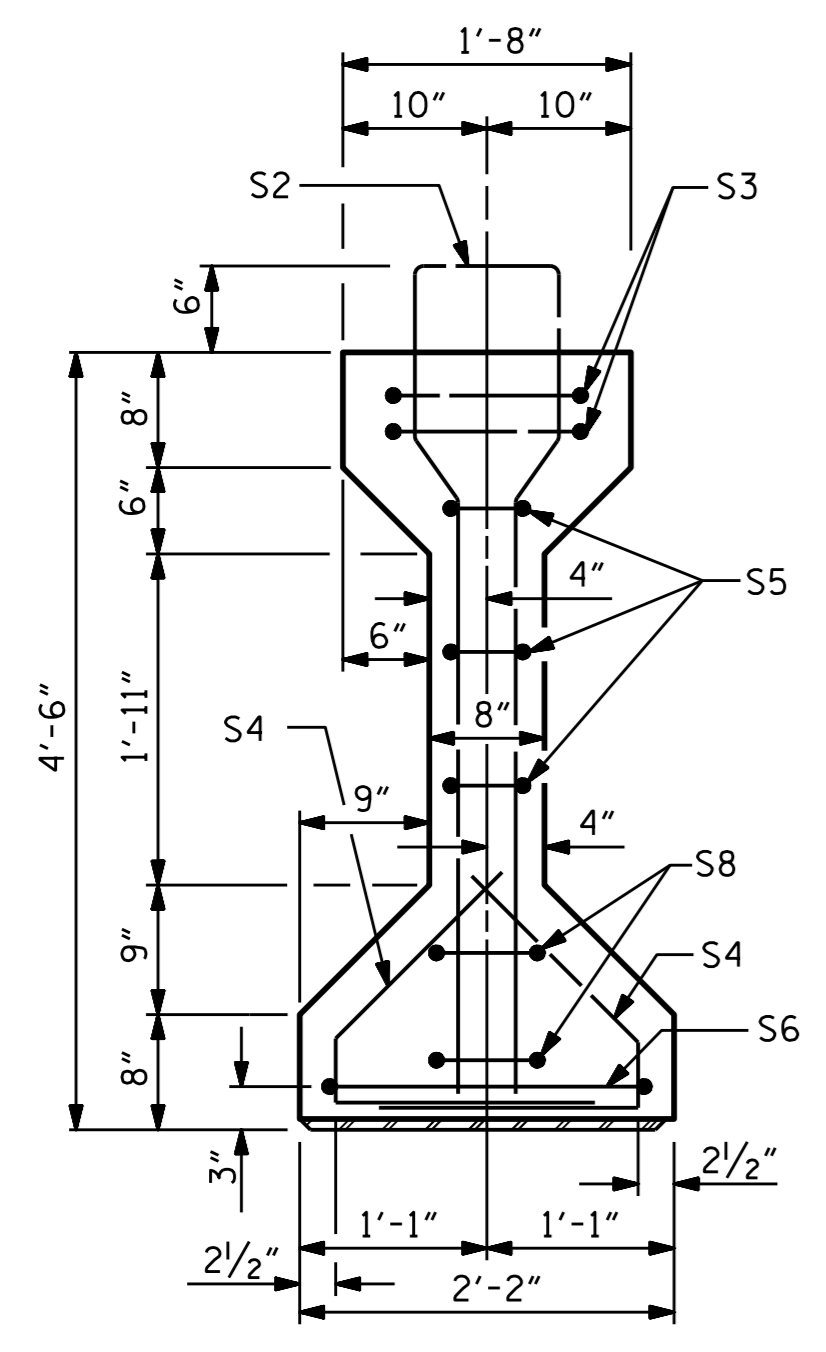
NUMBER	LENGTH	TOTAL LENGTH
8	107'-10 ⁷ / ₁₆ "	862.98

PROJECT NO. U-2524D
 GUILFORD COUNTY
 STATION: 25+18.62 -Y6-

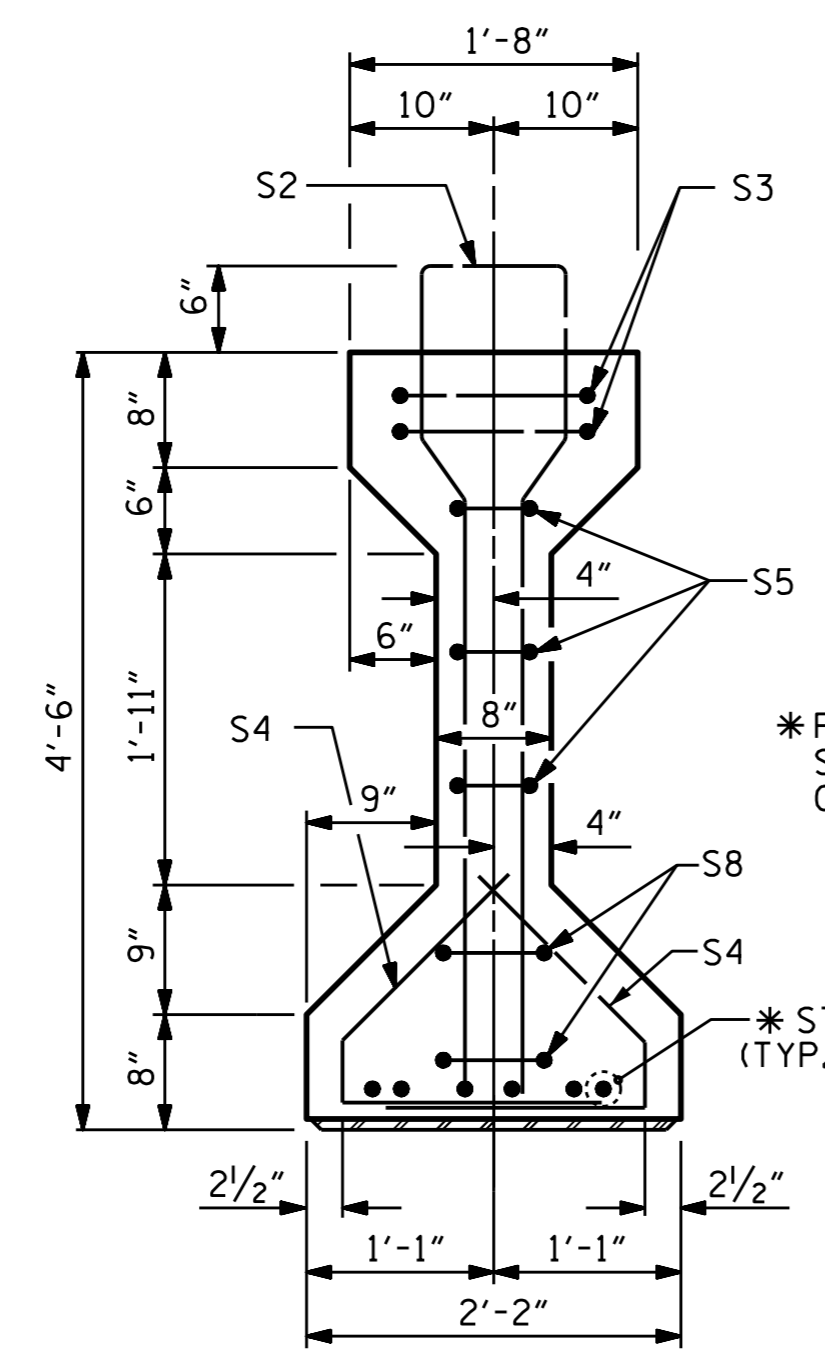
SHEET 2 OF 4

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD
 AASHTO TYPE IV
 PRESTRESSED CONCRETE GIRDER
 CONTINUOUS FOR LIVE LOAD
 SPAN B

NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			S1-12
2			4			TOTAL SHEETS 33



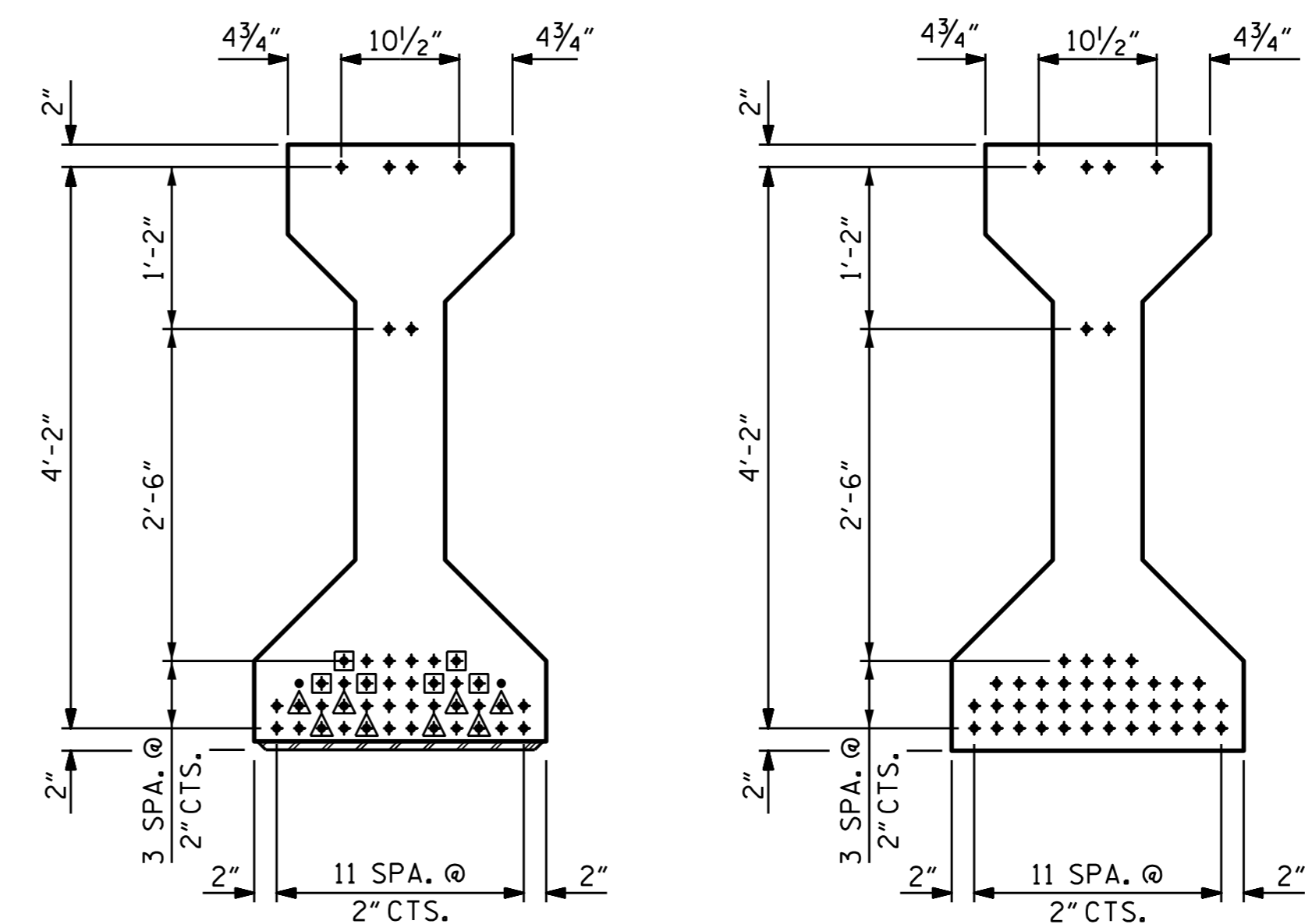
SECTION A-A



SECTION B-B

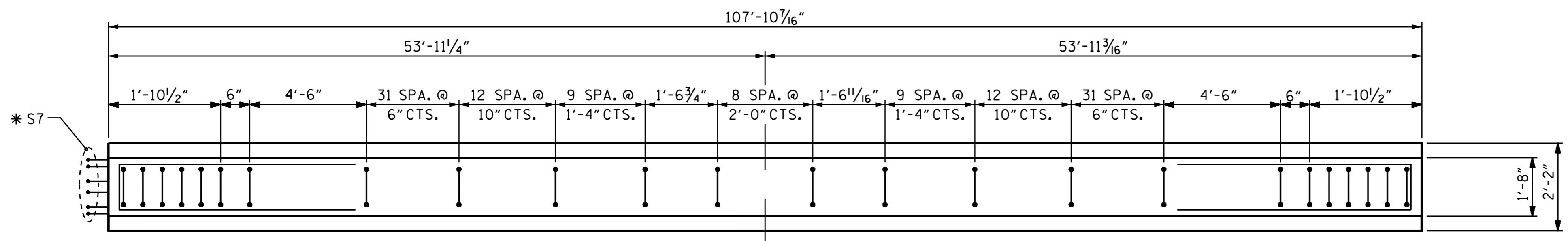
*FOR S7 BARS, SEE DETAIL "A" ON SHEET S1-14

- DEBONDING LEGEND**
- FULLY BONDED STRANDS
 - STRANDS DEBONDED FOR 8'-0" FROM END OF GIRDER
 - STRANDS DEBONDED FOR 16'-0" FROM END OF GIRDER

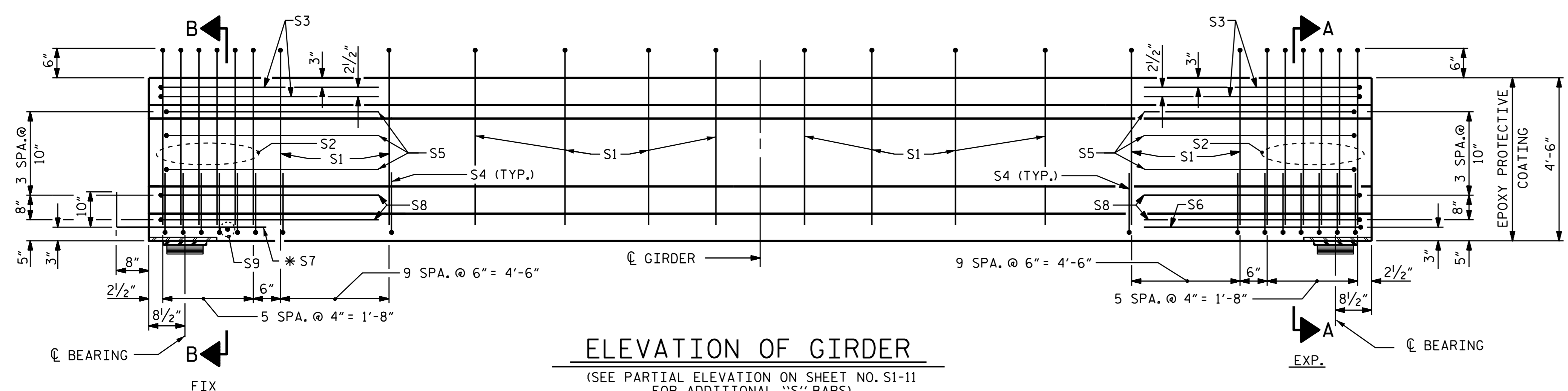


AT END OF GIRDER AT C OF GIRDER
 0.6" Ø LOW RELAXATION STRAND LAYOUT

46 STRANDS, ALL STRAIGHT, 14 DEBONDED



PLAN OF GIRDER



ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION ON SHEET NO. S1-11 FOR ADDITIONAL "S" BARS)

DESIGN ENGINEER OF RECORD: P. K. NEWTON	DATE: 5/9/2016
ASSEMBLED BY: P. K. NEWTON	DATE: 11/4/15
CHECKED BY: P. N. HOLDER	DATE: 1/8/16
DRAWN BY: ELR 8/91	REV. 5/1/06R TLA/GM
CHECKED BY: GRP 8/91	REV. 10/1/11 MAA/GM
	REV. 1/15 MAA/TMG



Designed by:
 Ting Fang 7/8/2016
 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED