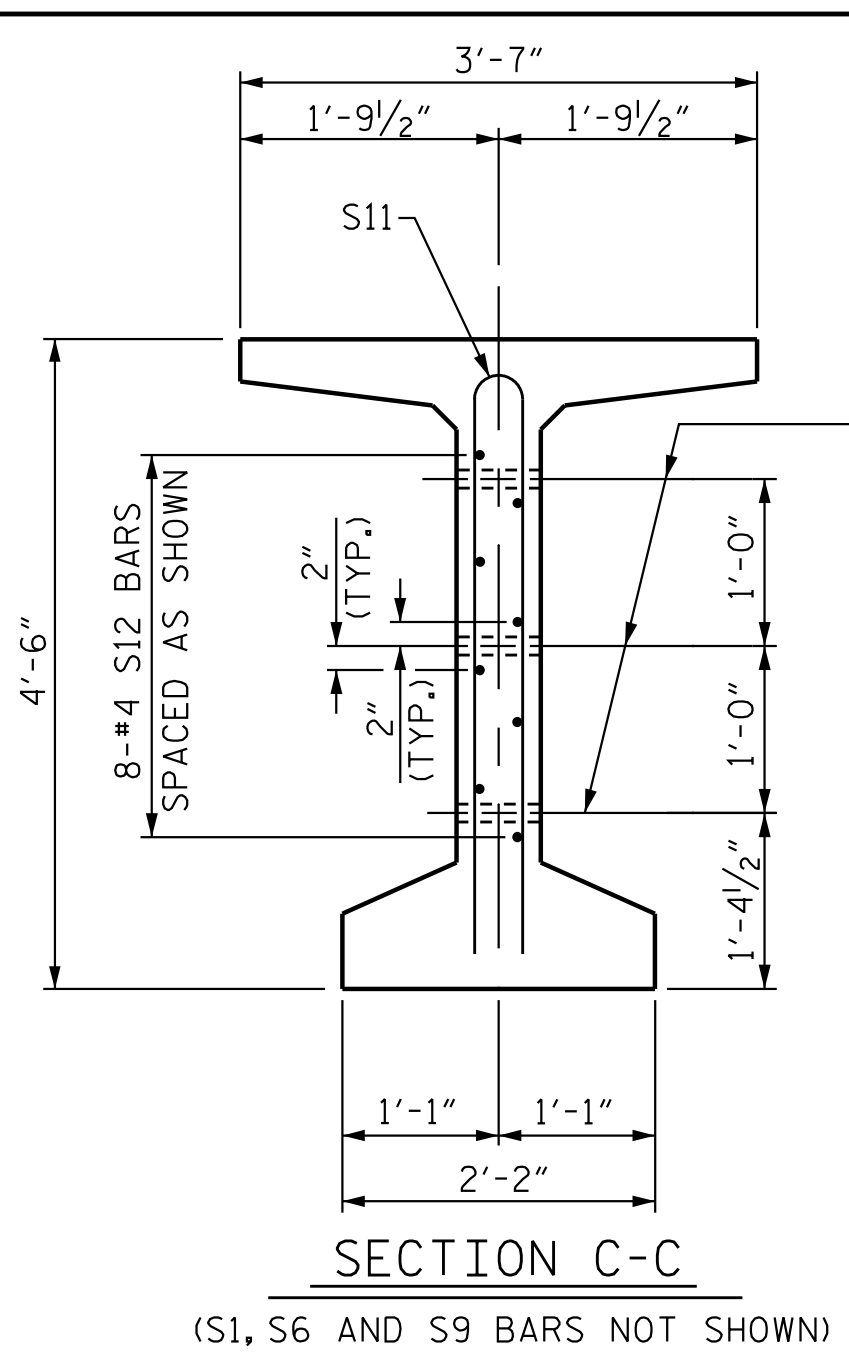
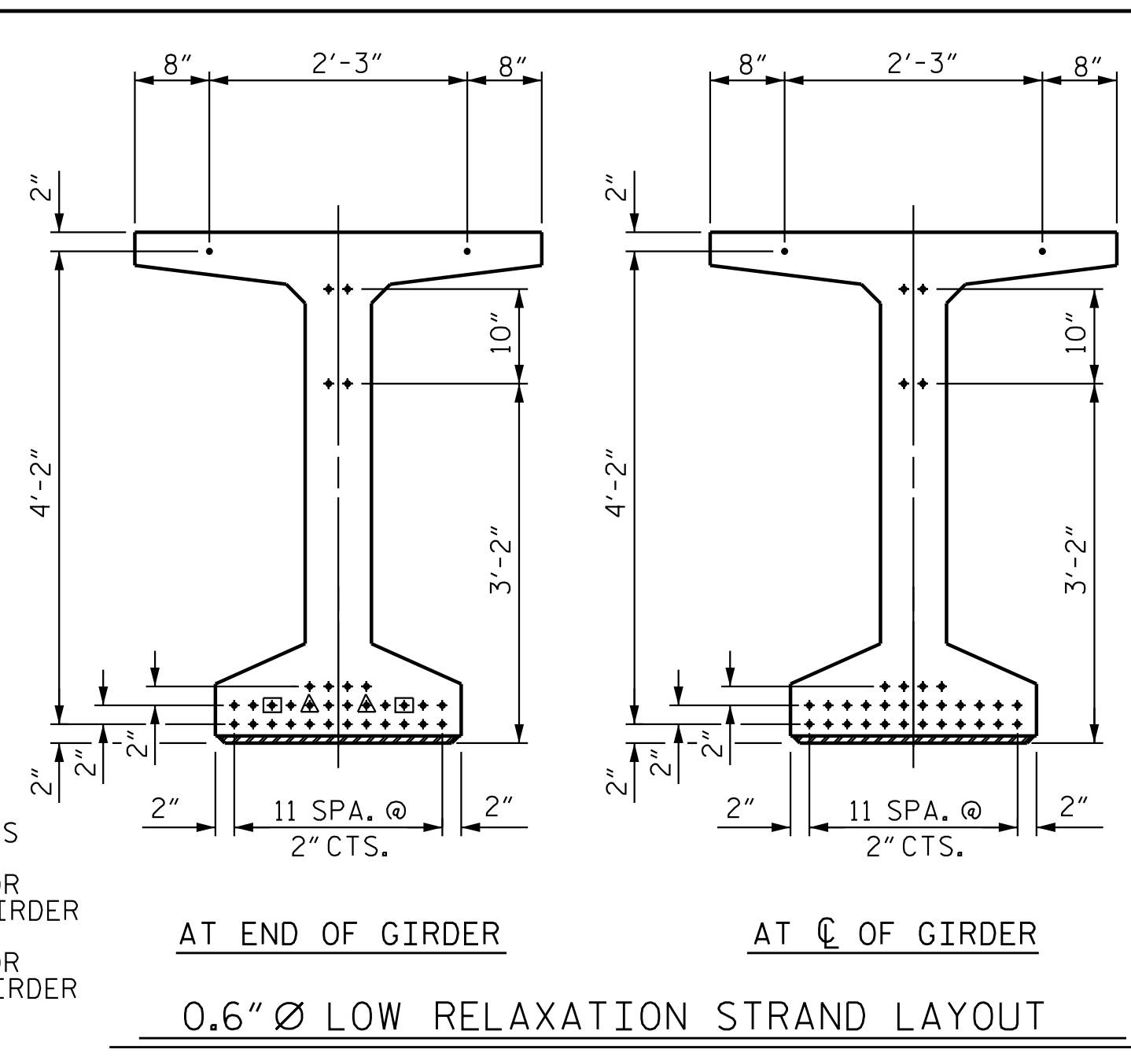


\* FOR S7 BARS, SEE  
DETAIL "C" OF  
PRESTRESSED  
CONCRETE GIRDER  
CONTINUOUS FOR LIVE LOAD  
DETAILS, SHEET 3 OF 4.



1/2" Ø FORMED HOLE. SEE ELEVATION FOR LOCATION.

- DEBONDING LEGEND**
- FULLY BONDED STRANDS
  - ◻ STRANDS DEBONDED FOR 10'-0" FROM END OF GIRDER
  - ◻ STRANDS DEBONDED FOR 12'-0" FROM END OF GIRDER

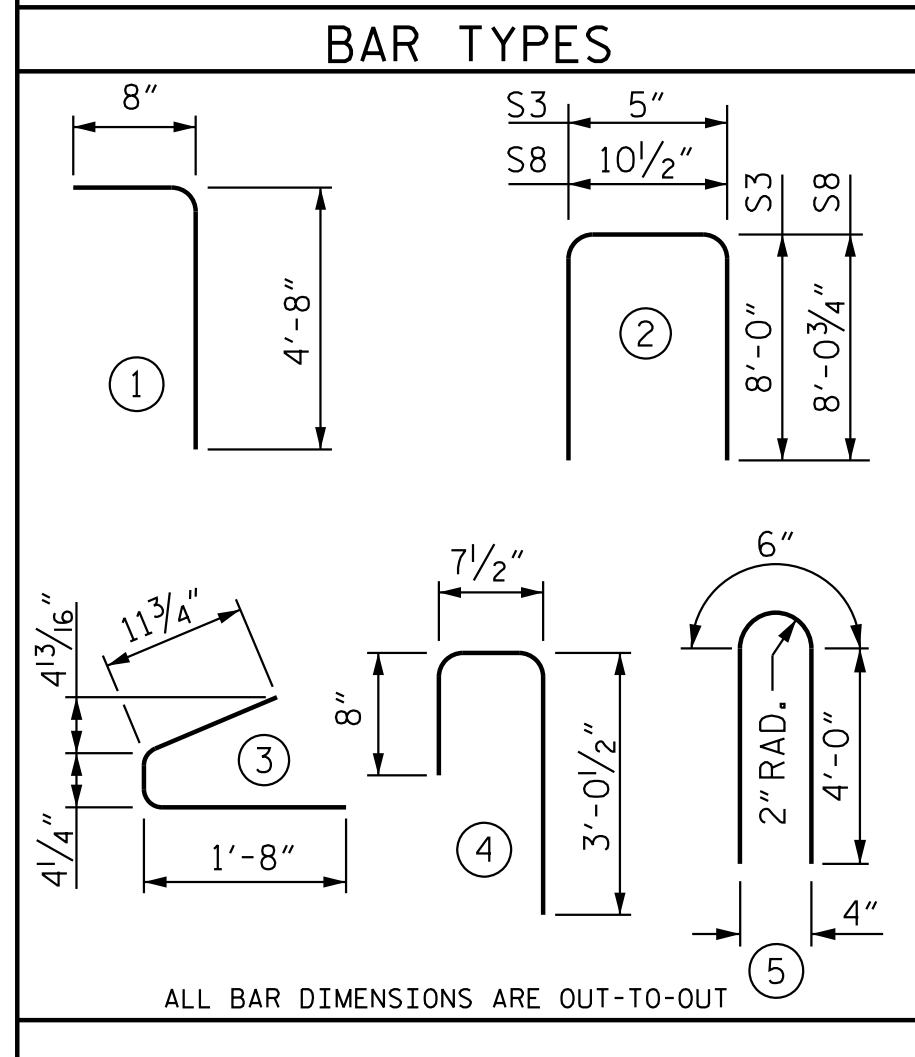


0.6" Ø L. R. GRADE 270 STRANDS		
AREA (SQUARE INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.217	58,600	43,950

REINFORCING STEEL FOR ONE GDR					
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	196	#5	1	5'-4"	1090
S2	80	#6	1	5'-4"	641
S3	10	#4	2	16'-5"	110
S4	80	#4	3	3'-0"	160
S6	276	#5	4	4'-4"	1247
*S7	30	#5	STR	3'-8"	115
S8	2	#5	2	17'-0"	35
S9	45	#5	STR	3'-3"	153
S10	2	#3	STR	1'-10"	1
S11	4	#5	5	8'-6"	35
S12	8	#4	STR	8'-0"	43

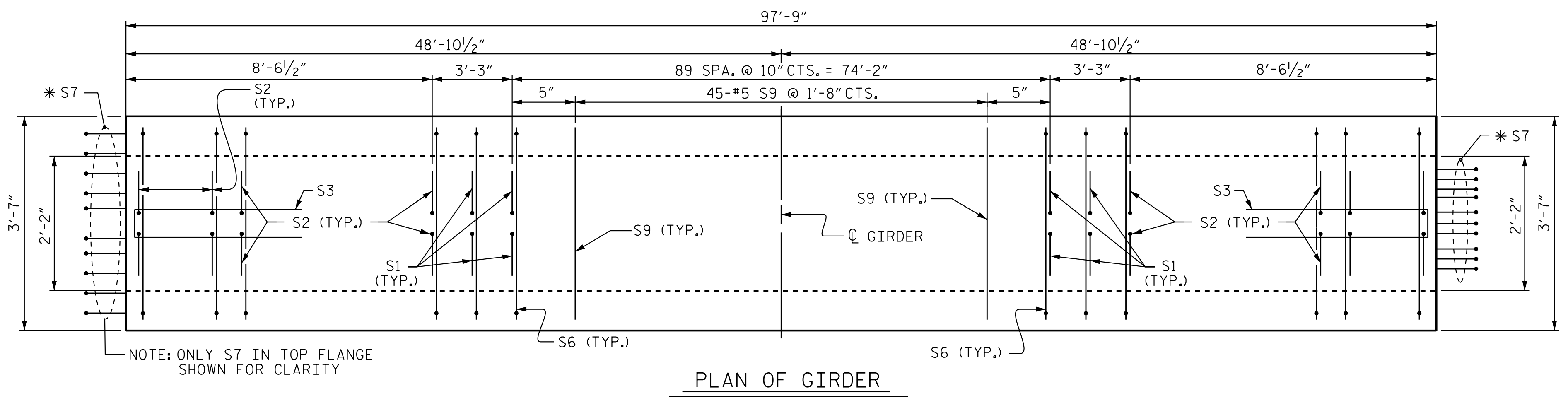
\* NOTE: S7 BARS SHALL BE BENT BEFORE SHIPMENT. HEAT BENDING SHALL NOT BE ALLOWED.



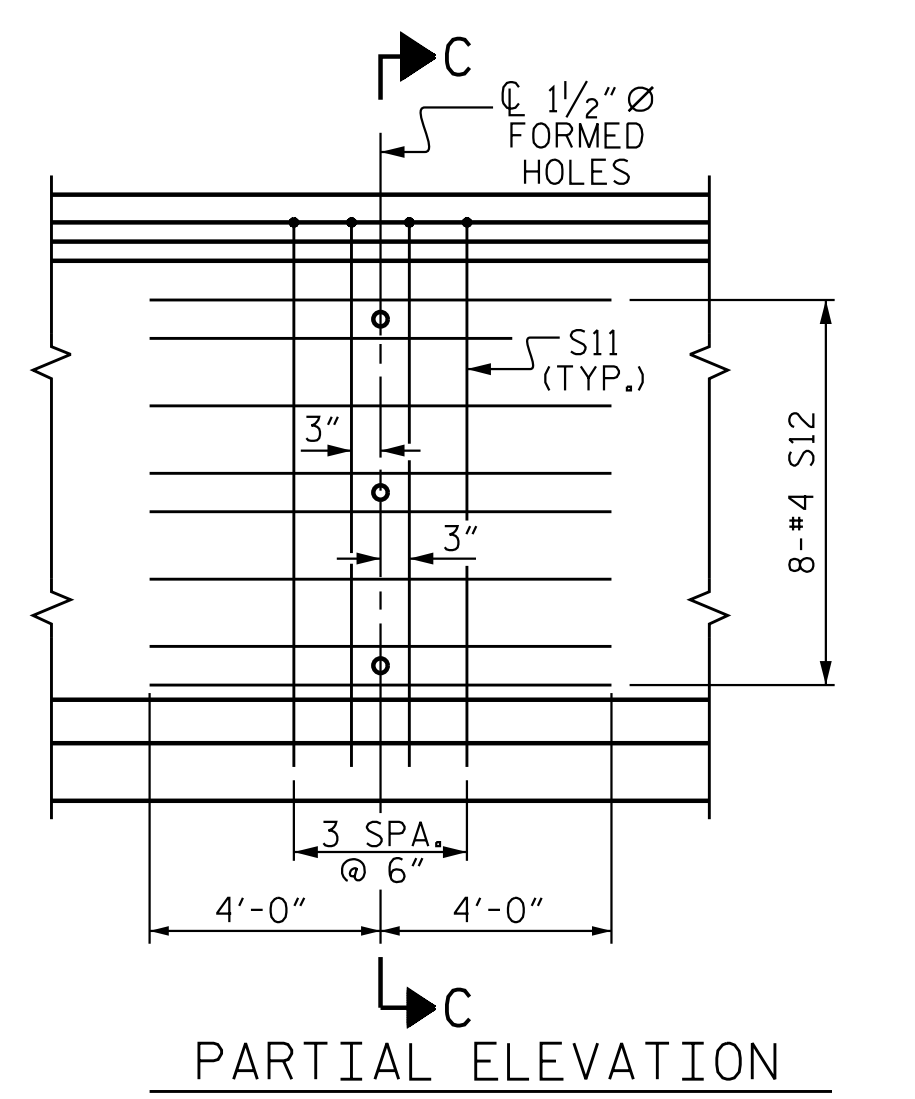
ALL BAR DIMENSIONS ARE OUT-TO-OUT

QUANTITIES FOR ONE GIRDER			
REINFORCING STEEL	8,000 PSI CONCRETE		0.6" Ø L.R. STRANDS
	LB.	C.Y.	No.
	3,630	17.8	34

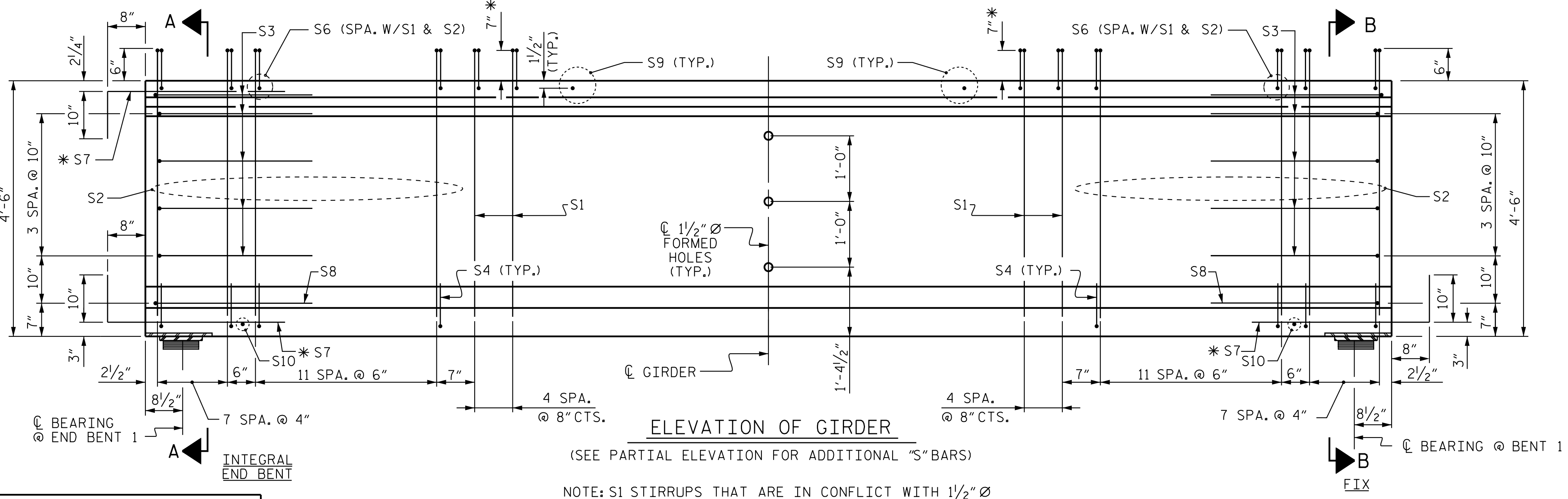
GIRDERS REQUIRED		
NUMBER	LENGTH	TOTAL LENGTH
4	97'-9"	391'-0"



NOTE: ONLY S7 IN TOP FLANGE SHOWN FOR CLARITY



SHOWING INTERMEDIATE STEEL DIAPHRAGM REINFORCING STEEL FOR ALL GIRDERS



(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)

NOTE: S1 STIRRUPS THAT ARE IN CONFLICT WITH 1/2" Ø FORMED HOLES MAY BE SHIFTED SLIGHTLY AS NECESSARY TO CLEAR HOLES AND S11 BARS.

\* SET 90 S1 & S6 BAR PAIRS 7" ABOVE TOP OF GIRDER AS SHOWN, PROVIDE 6" PROJECTION ABOVE GIRDER AT ALL OTHER LOCATIONS.

4/27/2023 10:24:45 AM jhagenbush 4/27/2023 10:24:45 AM jhagenbush

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License No. F-0672

DRAWN BY: J. E. HAGENBUSH DATE: 01/22/18  
CHECKED BY: N.D. AIUTO DATE: 01/29/18  
DESIGN ENGINEER OF RECORD: J. KELVINGTON DATE: 04/27/23



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT NO. R-2707D  
CLEVELAND COUNTY  
STATION: 19+82.46 -Y1-

SHEET 1 OF 4

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
SUPERSTRUCTURE  
MODIFIED 54" PRESTRESSED  
CONCRETE GIRDER  
CONTINUOUS FOR LIVE LOAD  
SPAN A

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

SHEET NO.	
S1-13	TOTAL SHEETS 32