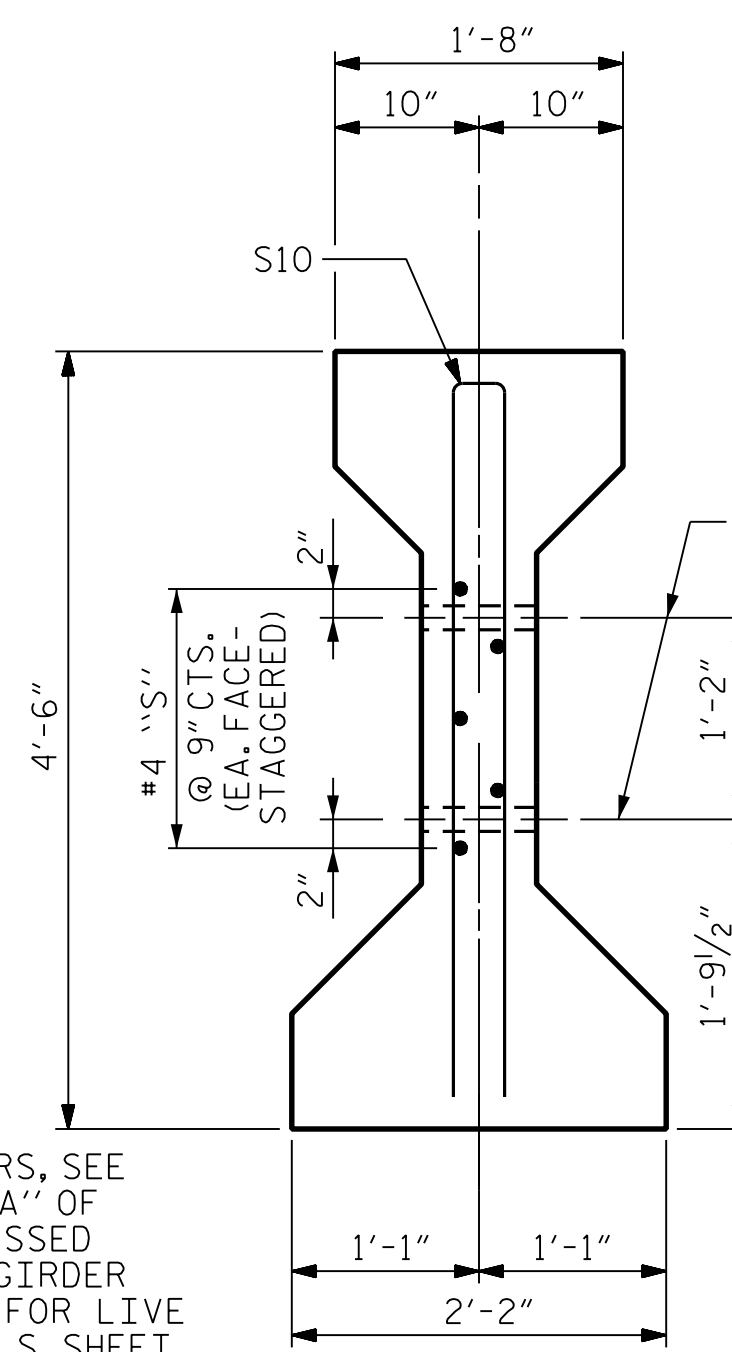


SECTION A-A

SECTION B-B



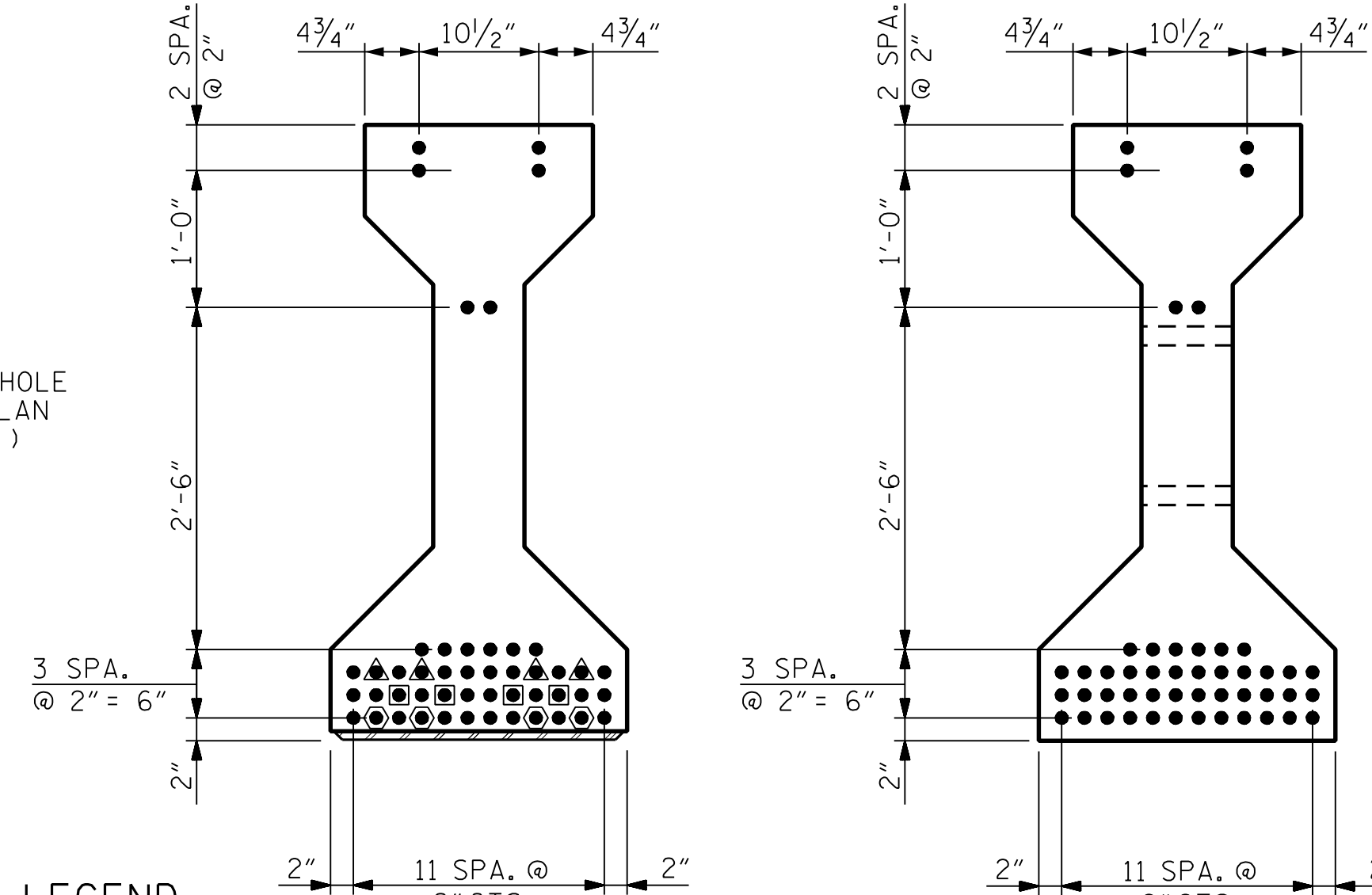
SECTION C-C  
(S1 BARS NOT SHOWN)

**DEBONDING LEGEND**

- FULLY BONDED STRANDS
- ▲ STRANDS DEBONDED FOR 8'-0" FROM END OF GIRDER
- STRANDS DEBONDED FOR 12'-0" FROM END OF GIRDER
- STRANDS DEBONDED FOR 30'-0" FROM END OF GIRDER

1/2" Ø FORMED HOLE  
(SEE FRAMING PLAN FOR LOCATION)

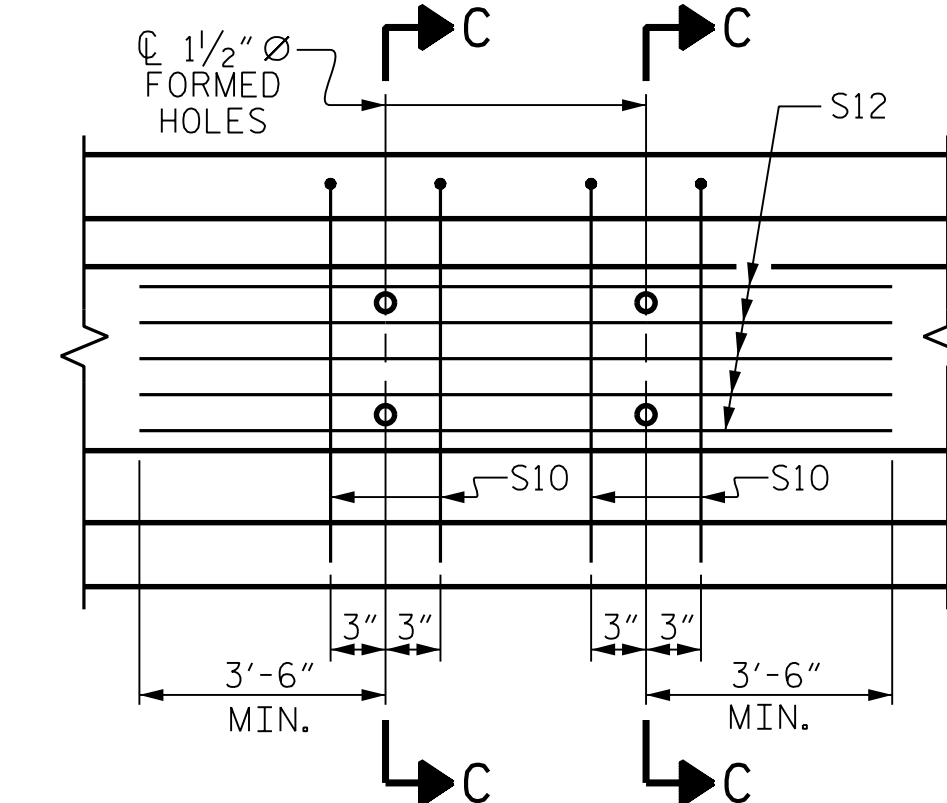
\* FOR S7 BARS, SEE DETAIL "A" OF PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS SHEET



AT END OF GIRDER

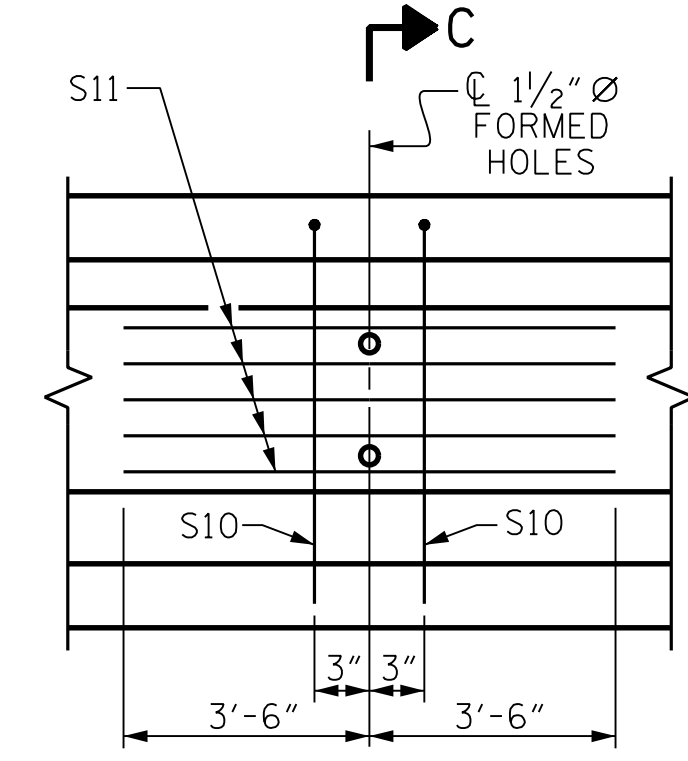
AT C OF GIRDER

**0.6" Ø LOW RELAXATION STRAND LAYOUT**



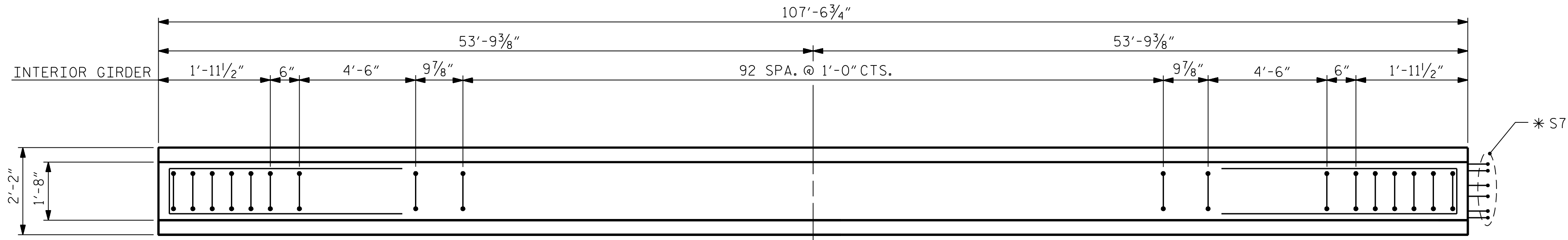
PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR INTERIOR GIRDERS.

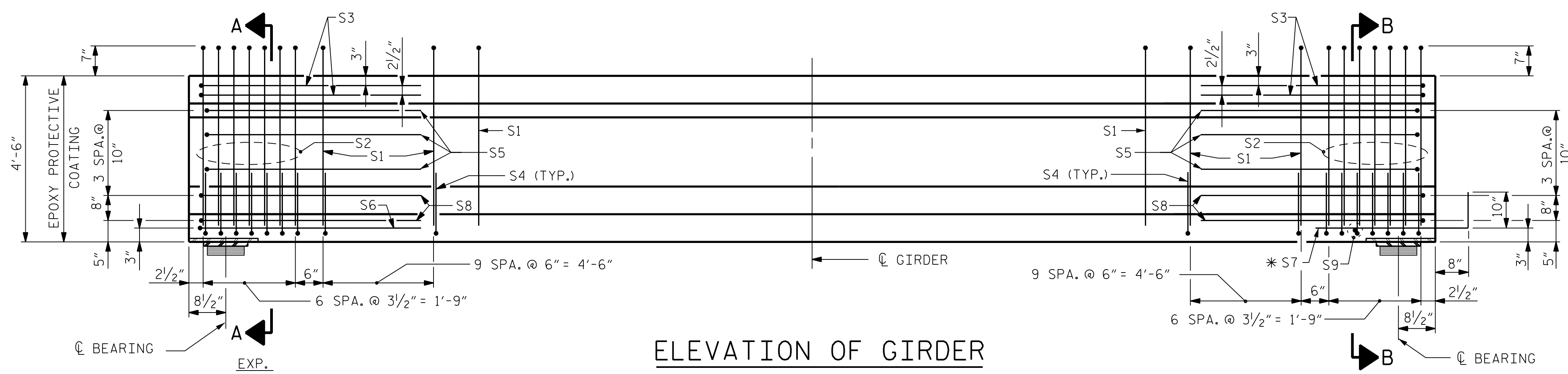


PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR EXTERIOR GIRDERS.



PLAN OF GIRDER



ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)  
(SPAN A SHOWN, SPAN B SIMILAR BY ROTATION)

**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**

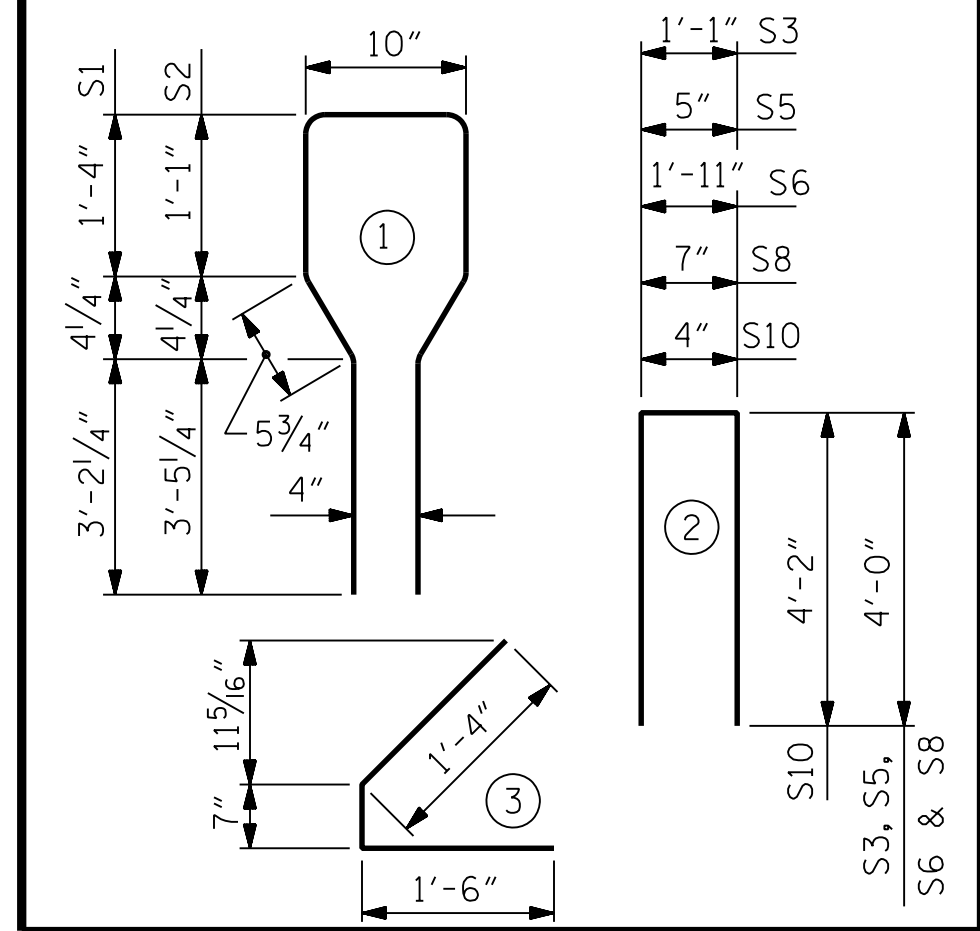
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	113	#4	1	10'-10"	818
S2	14	#6	1	10'-10"	228
S3	4	#4	2	9'-1"	24
S4	68	#4	3	3'-5"	155
S5	6	#4	2	8'-5"	34
S6	1	#4	2	9'-11"	7
* S7	6	#5	STR.	3'-8"	23
S8	4	#4	2	8'-7"	23
S9	1	#3	STR.	1'-10"	1
S10	4	#5	2	8'-8"	36
S11	10	#4	STR.	7'-0"	47
S12	10	#4	STR.	13'-6"	90

EXTERIOR GDR.	S10	8	#5	2	8'-8"	72
INTERIOR GDR.	S11	10	#4	STR.	7'-0"	47
EXTERIOR GDR.	S12	10	#4	STR.	13'-6"	90

\* NOTE: 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 LB.	7,500 PSI CONCRETE C.Y.	0.6" Ø L. R. STRANDS No.
GRD'S 1 & 11	1,396	21.8	48
GRD'S 2-5 & 8-10	1,475	21.8	48

**GIRDERS REQUIRED**

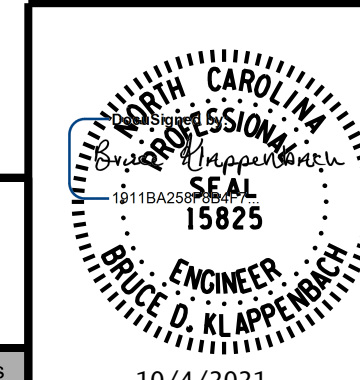
NUMBER	LENGTH	TOTAL LENGTH
18	107'-6 3/4"	1,936'-1 1/2"

PROJECT NO. I-5972  
JOHNSTON COUNTY  
 STATION: 36+93.50 -Y1-

SHEET 1 OF 4

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**SUPERSTRUCTURE**  
 AASHTO TYPE IV  
 PRESTRESSED CONCRETE GIRDER  
 CONTINUOUS FOR LIVE LOAD  
 GIRDERS 1-5 AND 8-11



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 Engineers | Construction Managers | Planners | Scientists  
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REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S-15	
1			3			TOTAL SHEETS	
2			4			54	

**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**

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DRAWN BY: B. A. HAAG DATE: JUN 2021  
 CHECKED BY: B. D. KLAPPENBACH DATE: JUN 2021  
 DESIGN ENGINEER OF RECORD: B. D. KLAPPENBACH DATE: JUN 2021