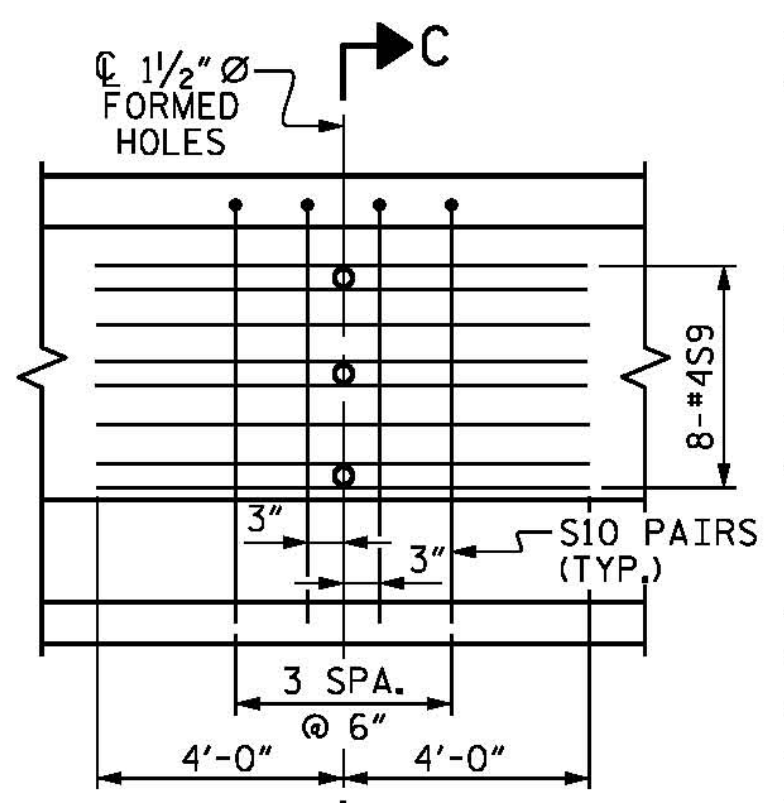


AT END OF GIRDER
AT C OF GIRDER
0.6" Ø LOW RELAXATION STRAND LAYOUT
(75 STRANDS REQUIRED)

- DEBONDING LEGEND**
- - FULLY BONDED STRANDS
 - - DEBONDED FOR 20'-0" FROM END OF GIRDER
 - - DEBONDED FOR 16'-0" FROM END OF GIRDER
 - ◇ - DEBONDED FOR 12'-0" FROM END OF GIRDER
 - △ - DEBONDED FOR 8'-0" FROM END OF GIRDER
 - ▽ - DEBONDED FOR 4'-0" FROM END OF GIRDER



PARTIAL ELEVATION
SHOWING INTERMEDIATE STEEL DIAPHRAGM REINFORCING STEEL FOR ALL SPANS.

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

REINFORCING STEEL FOR ONE GIRDER						
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	
S1	182	5	1	7'-10"	1487	
S2	120	5	1	7'-2"	897	
GDR. 1	S4	258	3	3	4'-4"	420
GDR. 2	S4	260	3	3	4'-4"	424
GDR. 3	S4	262	3	3	4'-4"	427
GDR. 4	S4	264	3	3	4'-4"	430
GDR. 5	S4	266	3	3	4'-4"	433
S5	46	3	2	3'-3"	56	
S6	24	5	STR	6'-0"	150	
*S7	10	5	STR	4'-0"	42	
GDR. 1	S8	163	4	STR	3'-8"	399
GDR. 2	S8	164	4	STR	3'-8"	402
GDR. 3	S8	165	4	STR	3'-8"	404
GDR. 4	S8	167	4	STR	3'-8"	409
GDR. 5	S8	168	4	STR	3'-8"	411
S9	16	4	STR	8'-0"	86	
S10	16	4	4	6'-8"	71	
S11	8	6	STR	28'-0"	336	
GDR. 1	S12	37	5	1	7'-11"	306
GDR. 2	S12	38	5	1	7'-11"	314
GDR. 3	S12	39	5	1	7'-11"	322
GDR. 4	S12	40	5	1	7'-11"	330
GDR. 5	S12	41	5	1	7'-11"	339
S13	14	5	5	12'-8"	185	

QUANTITIES FOR ONE GIRDER			
GIRDER	REINFORCING STEEL	10,000 PSI CONCRETE	0.6" Ø L.R. STRANDS
	LB.	C.Y.	NO.
GDR. 1	4435	41.4	75
GDR. 2	4450	41.7	75
GDR. 3	4463	42.1	75
GDR. 4	4479	42.4	75
GDR. 5	4493	42.8	75

GIRDERS REQUIRED			
NUMBER	LENGTH	TOTAL LENGTH	
5	VARIES	743.50'	

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

REINFORCING STEEL FOR ONE GIRDER						
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	
S1	152	5	1	7'-10"	1242	
S2	120	5	1	7'-2"	897	
GDR. 1	S3	67	5	1	8'-1"	565
GDR. 2	S3	68	5	1	8'-1"	573
GDR. 3	S3	69	5	1	8'-1"	582
GDR. 4	S3	70	5	1	8'-1"	590
GDR. 5	S3	71	5	1	8'-1"	599
GDR. 1	S4	258	3	3	4'-4"	420
GDR. 2	S4	260	3	3	4'-4"	424
GDR. 3	S4	262	3	3	4'-4"	427
GDR. 4	S4	264	3	3	4'-4"	430
GDR. 5	S4	266	3	3	4'-4"	433
S5	46	3	2	3'-3"	56	
S6	24	5	STR	6'-0"	150	
*S7	20	5	STR	4'-0"	83	
GDR. 1	S8	163	4	STR	3'-8"	399
GDR. 2	S8	164	4	STR	3'-8"	402
GDR. 3	S8	165	4	STR	3'-8"	404
GDR. 4	S8	167	4	STR	3'-8"	409
GDR. 5	S8	168	4	STR	3'-8"	411
S9	16	4	STR	8'-0"	86	
S10	16	4	4	6'-8"	71	
S11	8	6	STR	28'-0"	336	
S13	14	5	5	12'-8"	185	

QUANTITIES FOR ONE GIRDER			
GIRDER	REINFORCING STEEL	10,000 PSI CONCRETE	0.6" Ø L.R. STRANDS
	LB.	C.Y.	NO.
GDR. 1	4490	41.4	75
GDR. 2	4505	41.7	75
GDR. 3	4519	42.1	75
GDR. 4	4535	42.4	75
GDR. 5	4549	42.8	75

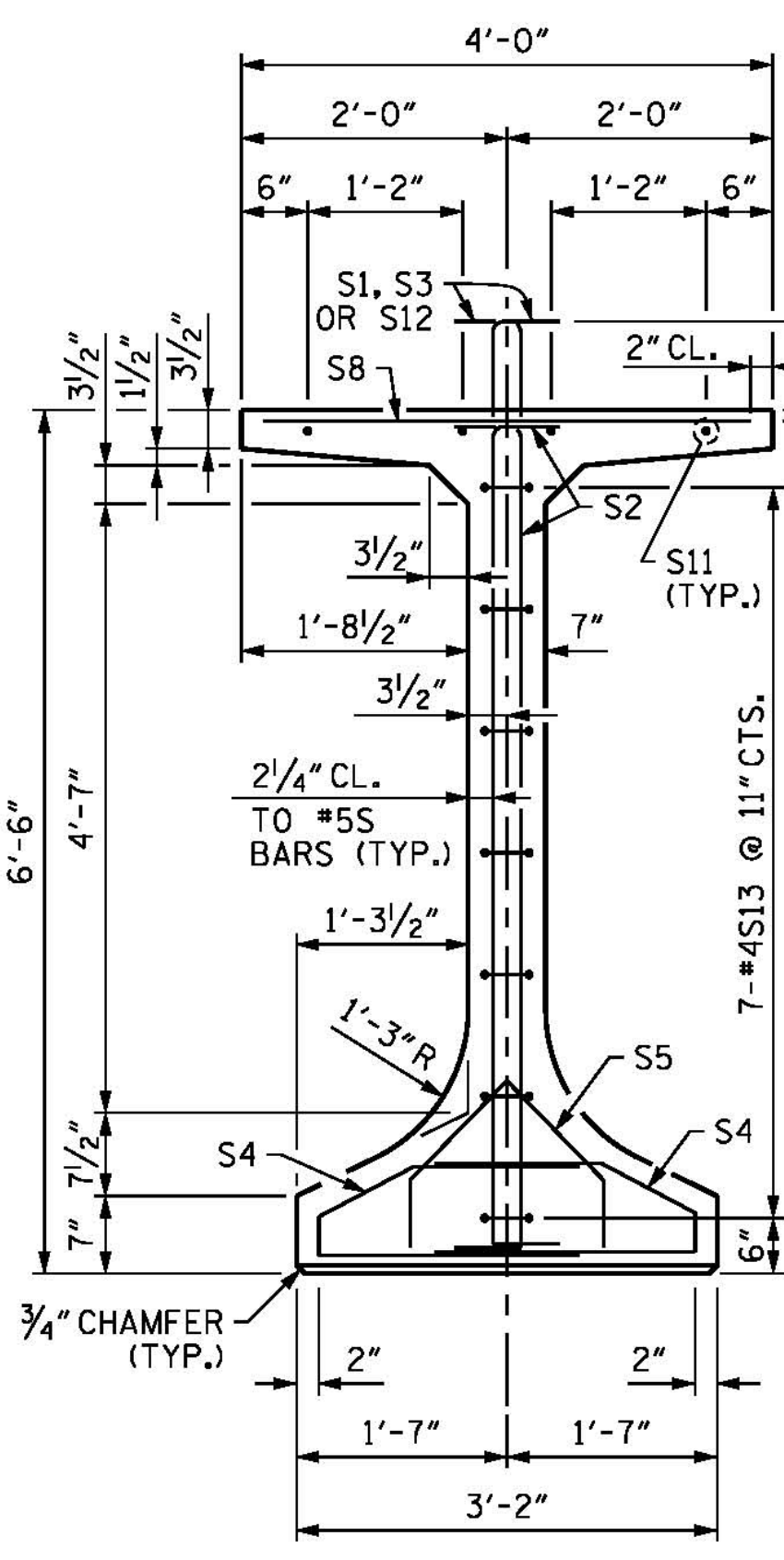
GIRDERS REQUIRED			
NUMBER	LENGTH	TOTAL LENGTH	
5	VARIES	743.07'	

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

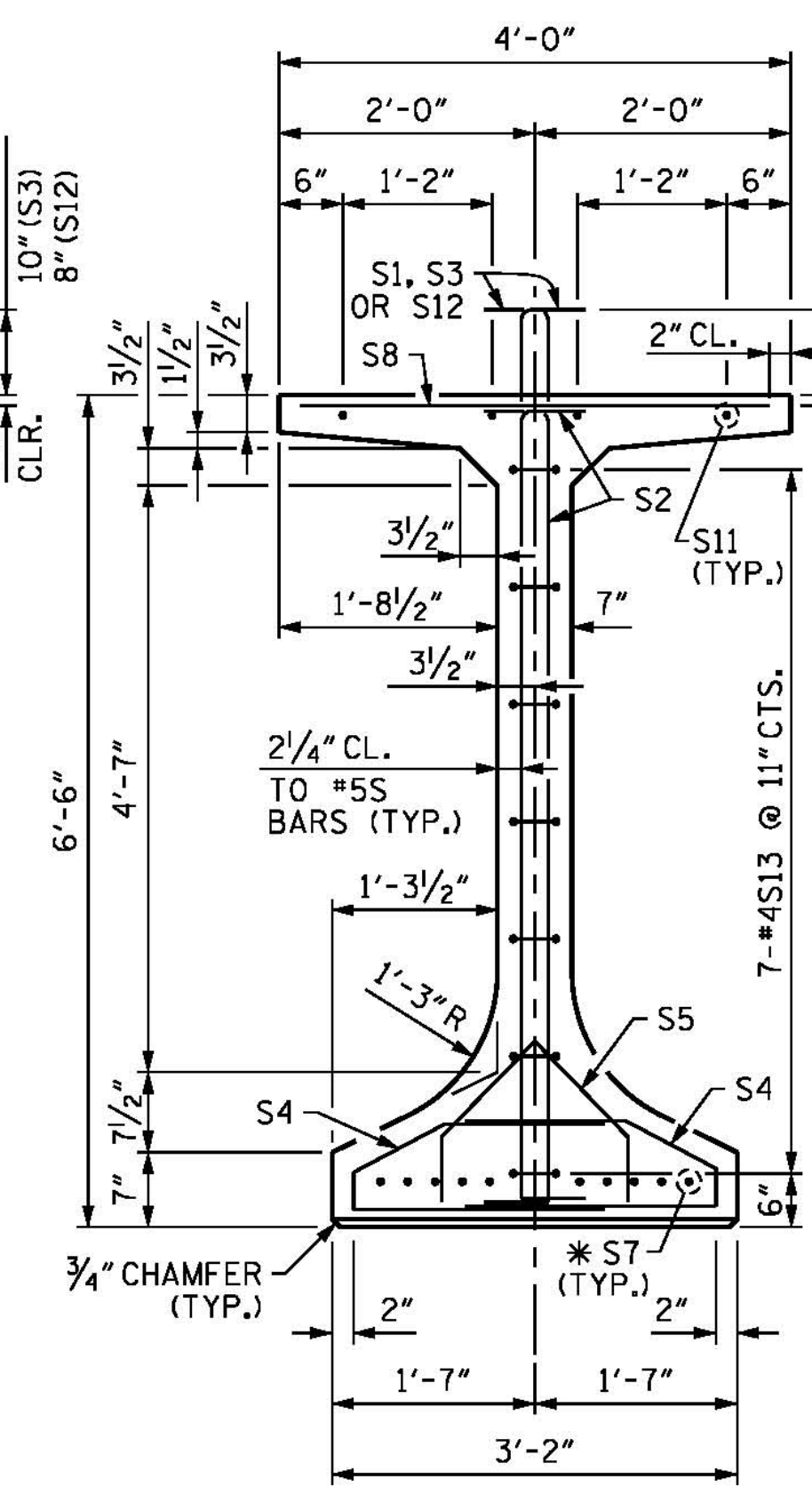
REINFORCING STEEL FOR ONE GIRDER						
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	
S1	152	5	1	7'-10"	1242	
S2	120	5	1	7'-2"	897	
GDR. 1	S3	67	5	1	8'-1"	565
GDR. 2	S3	68	5	1	8'-1"	573
GDR. 3	S3	69	5	1	8'-1"	582
GDR. 4	S3	70	5	1	8'-1"	590
GDR. 5	S3	71	5	1	8'-1"	599
GDR. 1	S4	258	3	3	4'-4"	420
GDR. 2	S4	260	3	3	4'-4"	424
GDR. 3	S4	262	3	3	4'-4"	427
GDR. 4	S4	264	3	3	4'-4"	430
GDR. 5	S4	266	3	3	4'-4"	433
S5	46	3	2	3'-3"	56	
S6	24	5	STR	6'-0"	150	
*S7	10	5	STR	4'-0"	42	
GDR. 1	S8	163	4	STR	3'-8"	399
GDR. 2	S8	164	4	STR	3'-8"	402
GDR. 3	S8	165	4	STR	3'-8"	404
GDR. 4	S8	167	4	STR	3'-8"	409
GDR. 5	S8	168	4	STR	3'-8"	411
S9	16	4	STR	8'-0"	86	
S10	16	4	4	6'-8"	71	
S11	8	6	STR	28'-0"	336	
S13	14	5	5	12'-8"	185	

QUANTITIES FOR ONE GIRDER			
GIRDER	REINFORCING STEEL	10,000 PSI CONCRETE	0.6" Ø L.R. STRANDS
	LB.	C.Y.	NO.
GDR. 1	4449	41.4	75
GDR. 2	4464	41.7	75
GDR. 3	4478	42.1	75
GDR. 4	4494	42.4	75
GDR. 5	4508	42.8	75

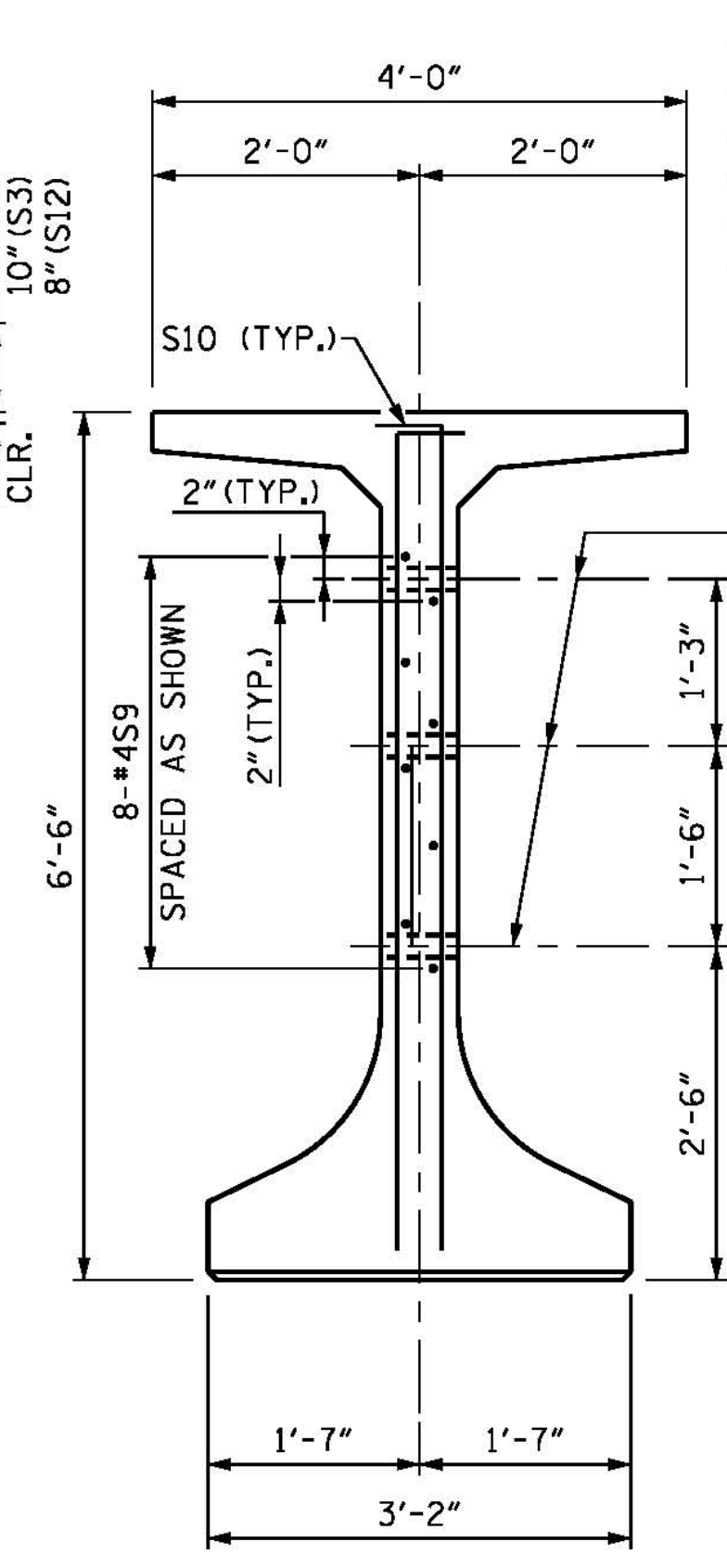
GIRDERS REQUIRED			
NUMBER	LENGTH	TOTAL LENGTH	
5	VARIES	743.07'	



SECTION A-A

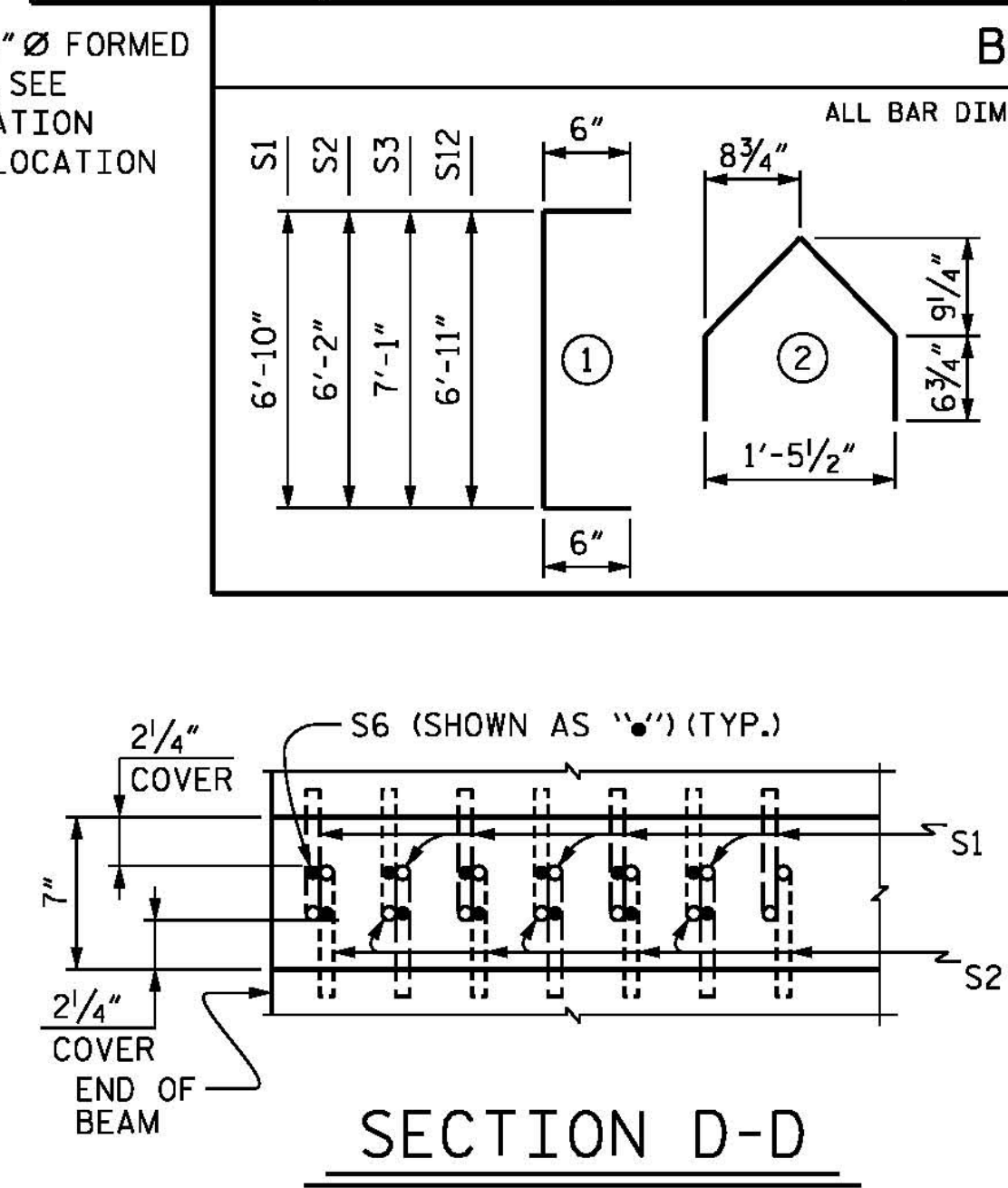


SECTION B-B

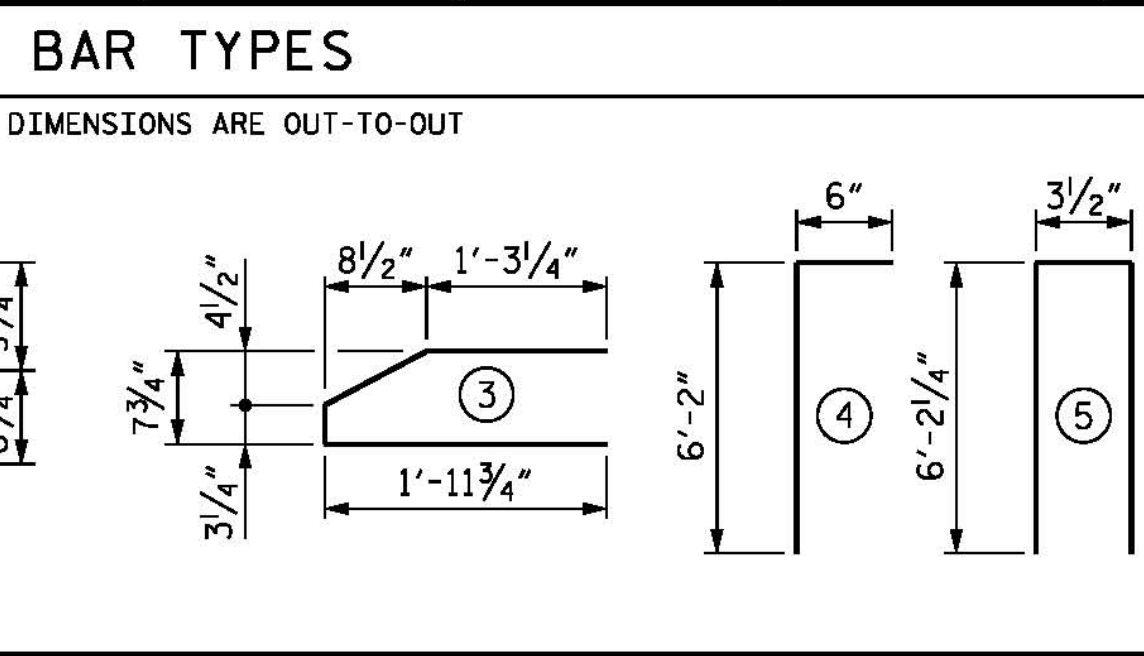


SECTION C-C

(S3, S12, S4 AND S8 BARS NOT SHOWN)



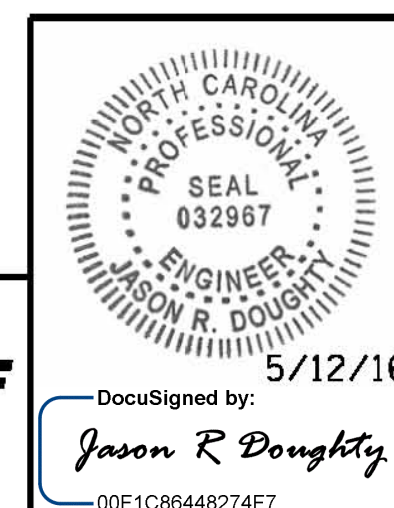
SECTION D-D



BAR TYPES
ALL BAR DIMENSIONS ARE OUT-TO-OUT

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

PROJECT NO. B-4929
PENDER COUNTY
STATION: 38+13.81 -L2-
SHEET 4 OF 4



PARSONS BRINCKERHOFF
434 FAYETTEVILLE STREET
SUITE 1500
RALEIGH, NC 27601
LICENSE NO. F-0165

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
F.I.B. 78"
PRESTRESSED
CONCRETE GIRDER
(SPANS N, O AND P)

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

TOTAL SHEETS: 278

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

5/10/2016 400.173_B4929_SMU_FIB78_04.dgn

DESIGNED BY: B. LOFLIN DATE: JAN 2016
DRAWN BY: M. HOBBS DATE: JAN 2016
CHECKED BY: J. SHERMAN DATE: FEB 2016
DESIGN ENGINEER OF RECORD: J. DOUGHTY DATE: MAY 2016