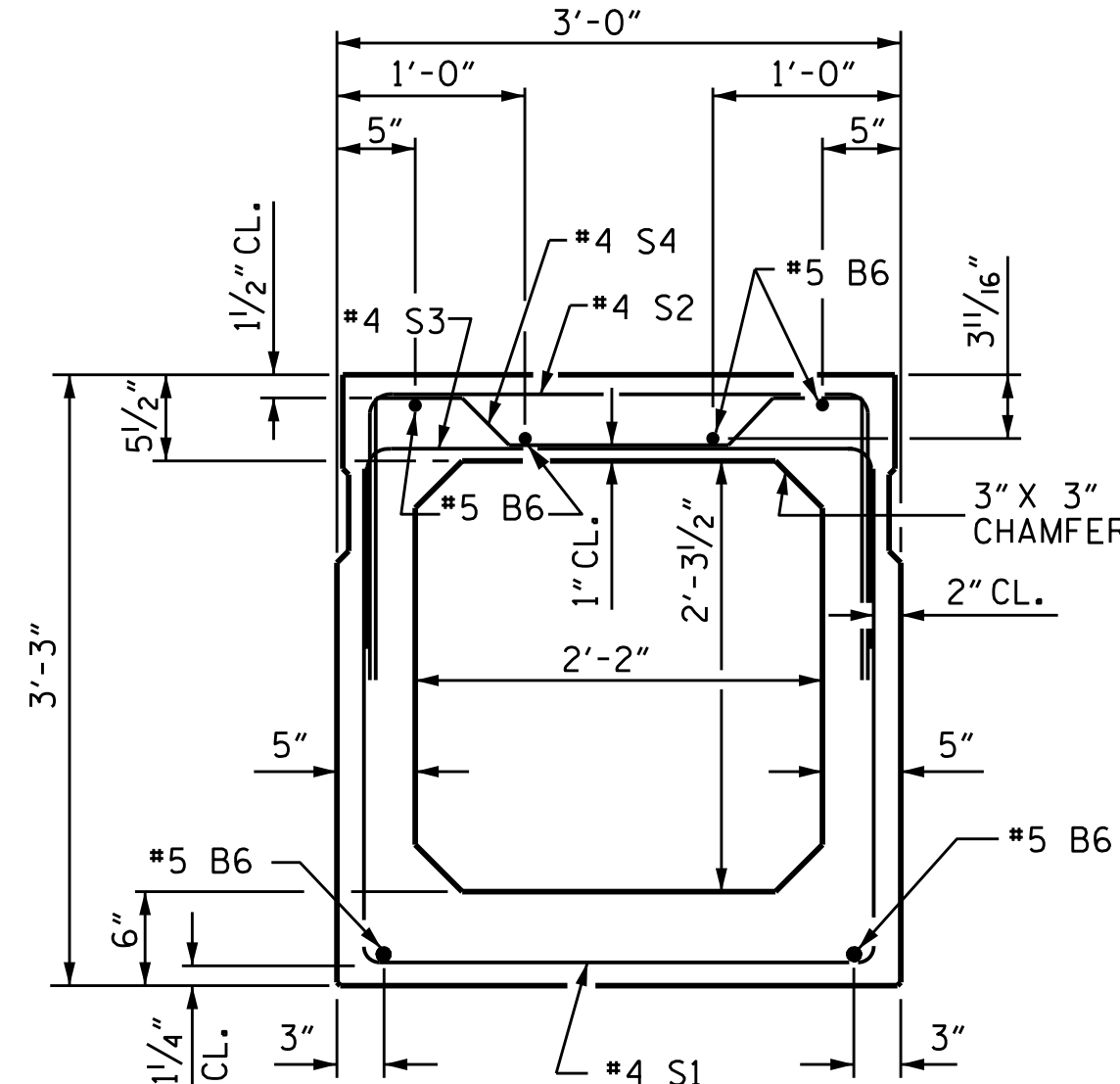
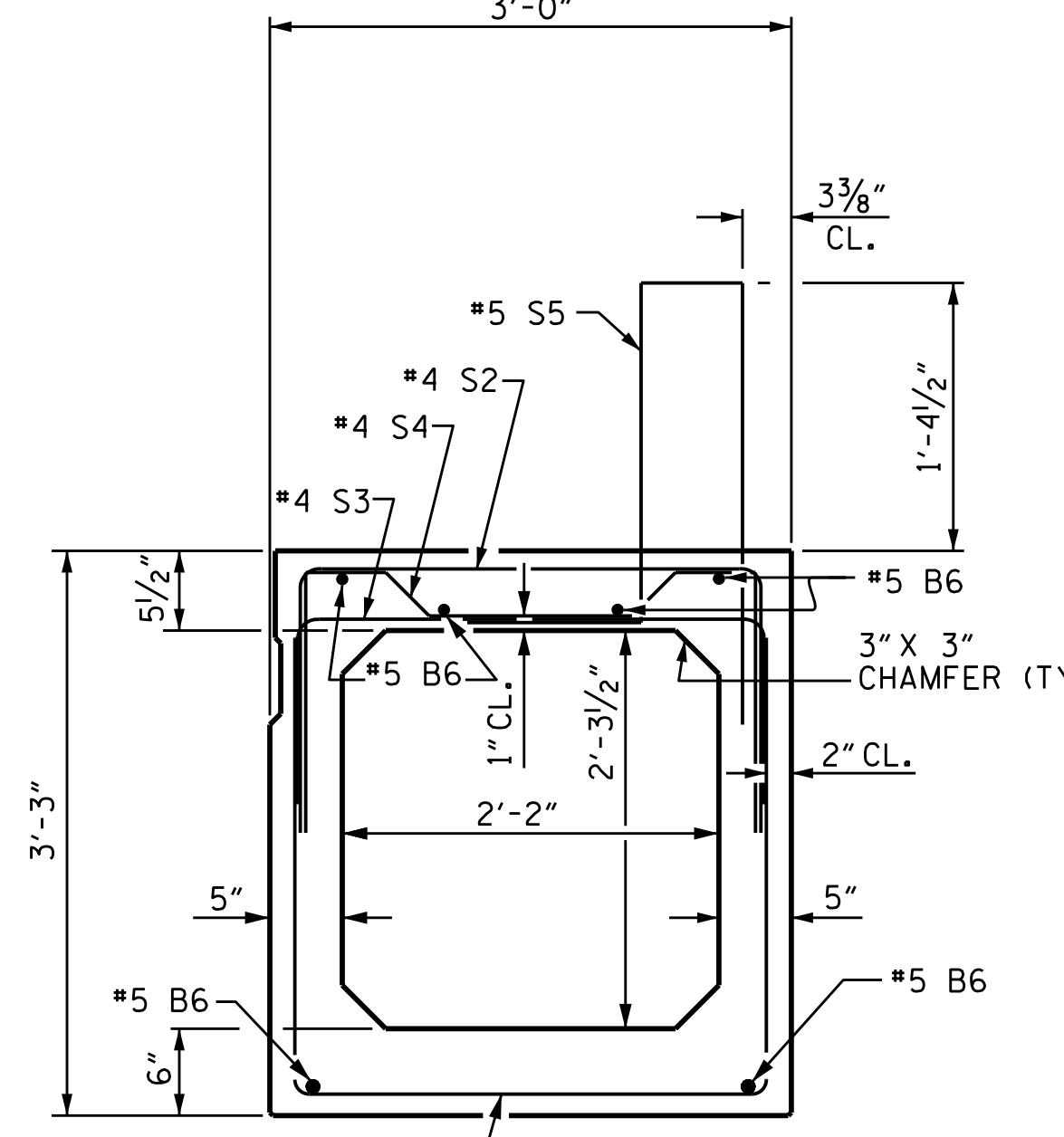


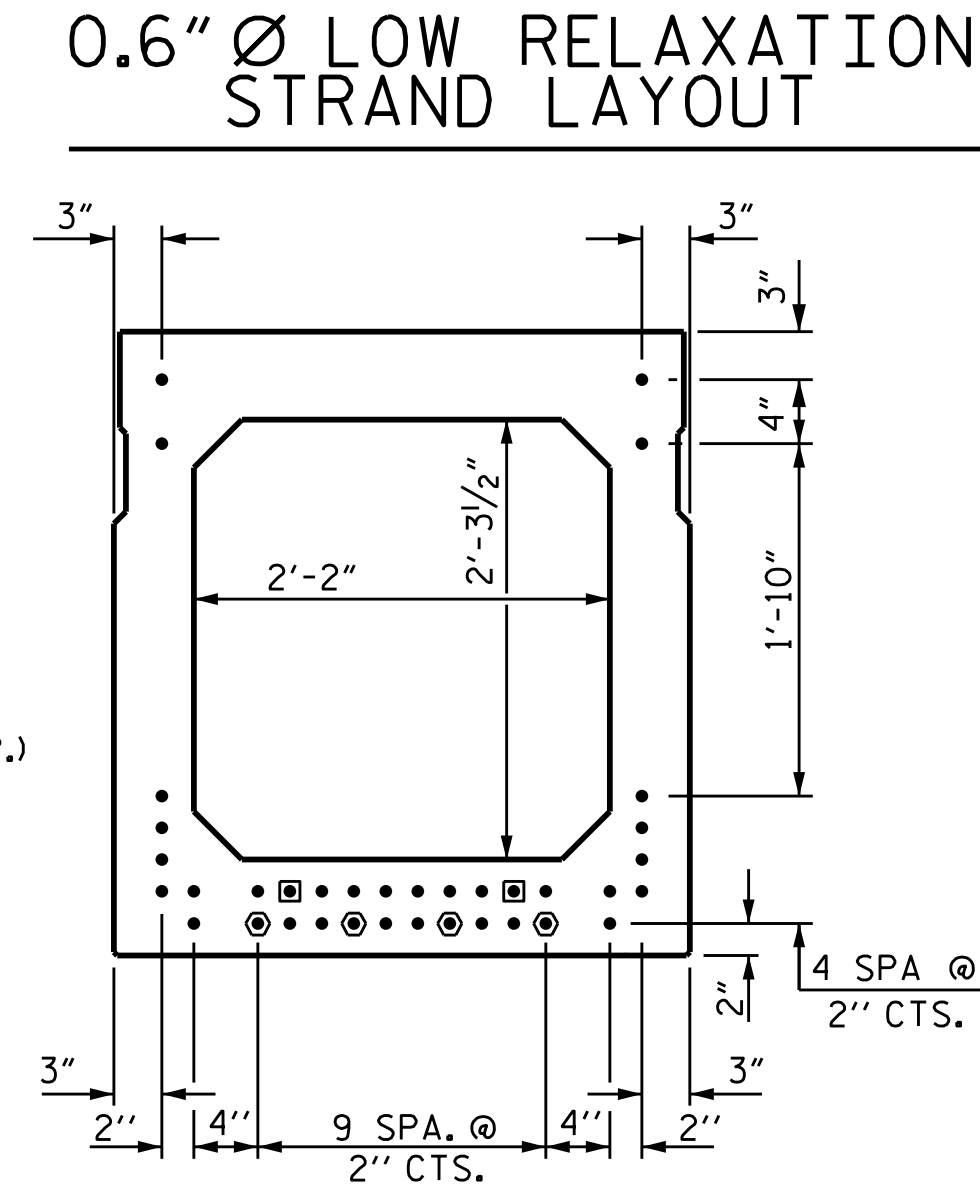
END ELEVATION
SHOWING PLACEMENT OF #5 & #4 "A" BARS AND LOCATION OF DOWEL HOLES. (INTERIOR BOX BEAM SECTION SHOWN-EXTERIOR SECTION SIMILAR EXCEPT SHEAR KEY LOCATION, STRAND LAYOUT NOT SHOWN.)



INTERIOR BOX BEAM SECTION
(STRAND LAYOUT NOT SHOWN)



EXTERIOR BOX BEAM SECTION
(STRAND LAYOUT NOT SHOWN)

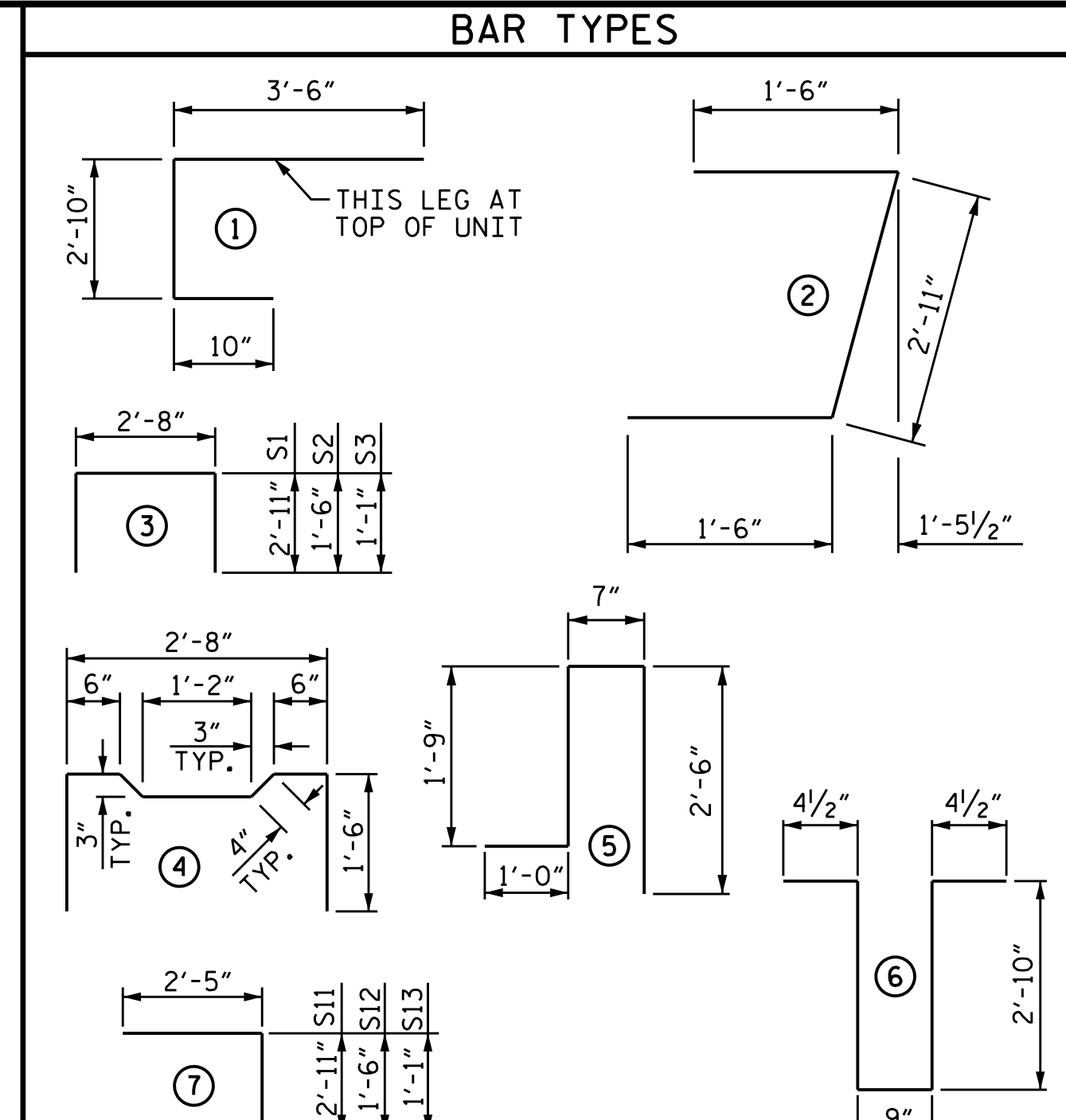


TYPICAL STRAND LOCATION
(36 STRANDS REQUIRED)
DEBONDING LEGEND

- FULLY BONDED STRANDS
- STRANDS DEBONDED FOR 4'-0" FROM END OF GIRDER
- STRANDS DEBONDED FOR 12'-0" FROM END OF GIRDER

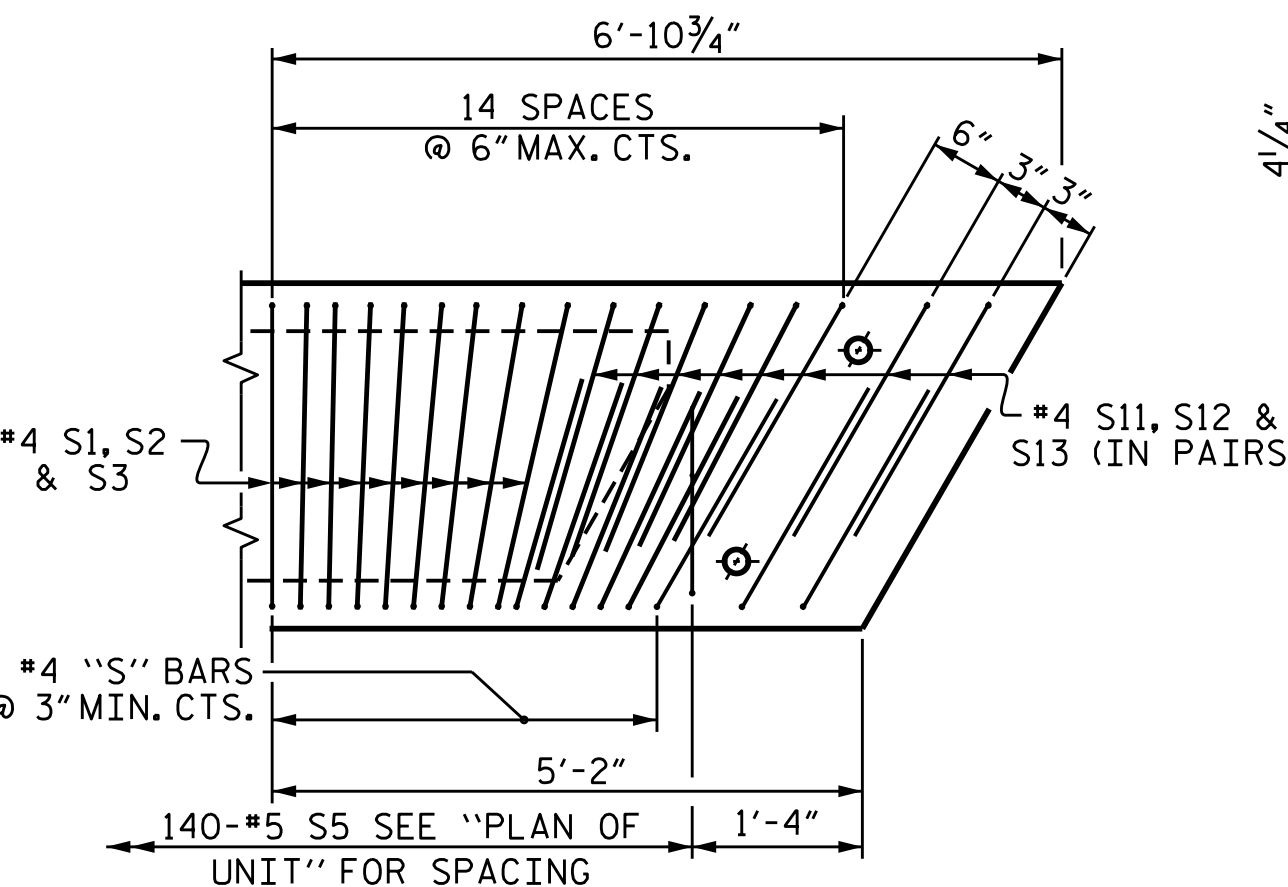
BOND SHALL BE BROKEN ON STRANDS AS SHOWN FOR THE SPECIFIED LENGTH FROM EACH END OF THE BOX BEAM. SEE STANDARD SPECIFICATIONS ARTICLE 1078-7.

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



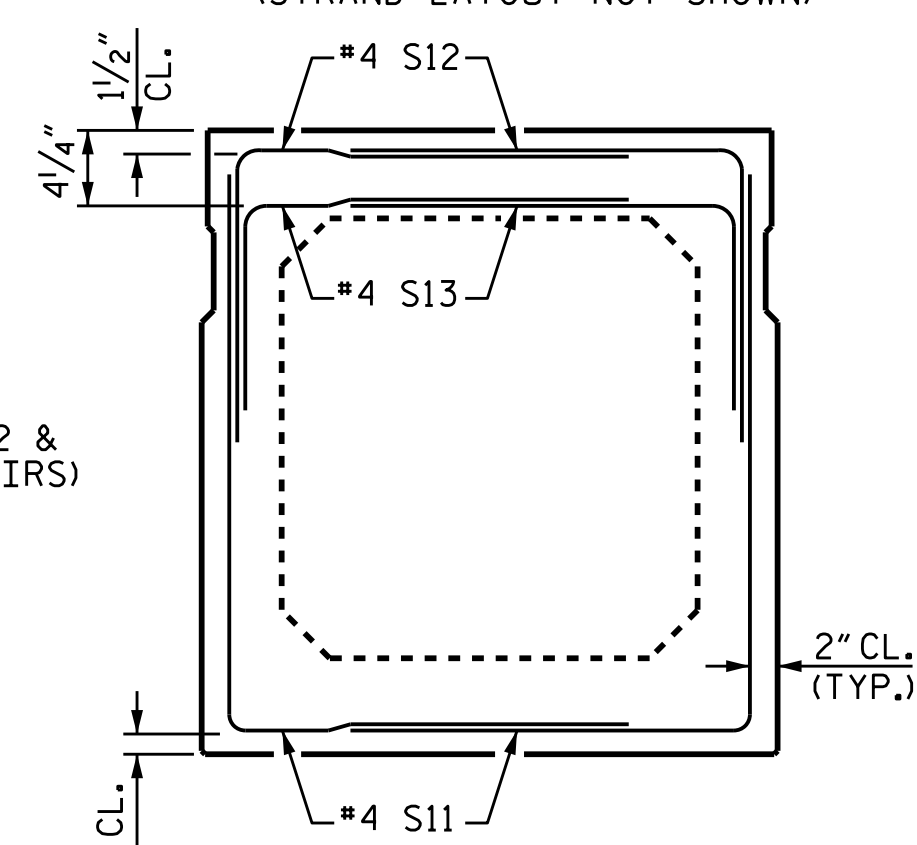
BILL OF MATERIAL FOR ONE BOX BEAM SECTION

		EXTERIOR UNIT		INTERIOR UNIT	
BAR NUMBER	SIZE	LENGTH	WEIGHT	LENGTH	WEIGHT
A1	#5	7'-2"	90	7'-2"	90
A2	#4	5'-11"	174	5'-11"	174
B6	#5	53'-4"	668	53'-4"	668
K1	#4	7'-2"	72	7'-2"	72
K2	#4	2'-10"	19	2'-10"	19
S1	#4	8'-6"	454	8'-6"	454
S2	#4	5'-8"	303	5'-8"	303
S3	#4	4'-10"	455	4'-10"	455
S4	#4	5'-10"	238	5'-10"	238
S11	#4	5'-4"	114	5'-4"	114
S12	#4	3'-11"	84	3'-11"	84
S13	#4	3'-6"	75	3'-6"	75
* S5	#5	5'-10"	852	--	--
REINFORCING STEEL		2746	LBS.	2746	LBS.
* EPOXY COATED REINF. STEEL		852	LBS.		
8500 P.S.I. CONCRETE		20.6	CU. YDS.	20.5	CU. YDS.
0.6" Ø L.R. STRANDS		No.	36	No.	36

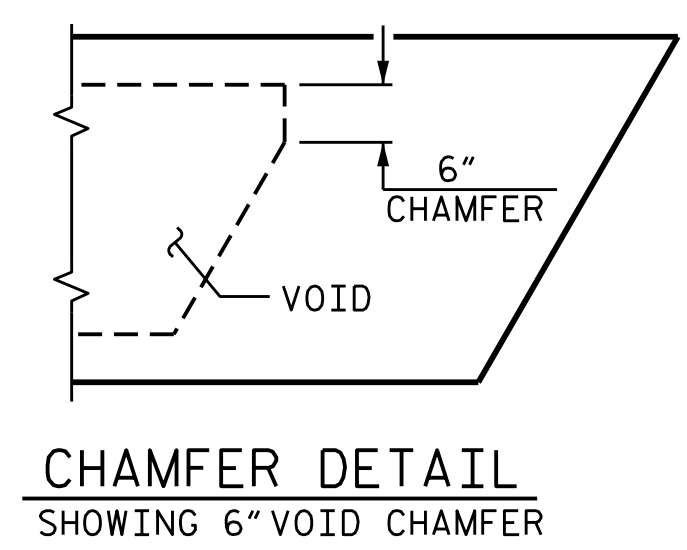


DETAIL "B"

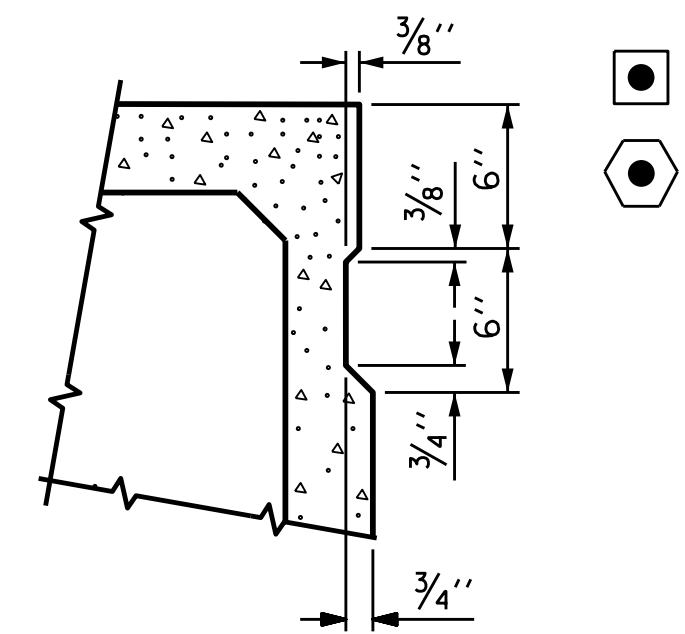
EXTERIOR UNIT SHOWN, INTERIOR UNIT SIMILAR EXCEPT OMIT #5 S5 BARS. "B" BARS AND "A" BARS NOT SHOWN.



END VIEW
(SHOWING #4 "S" BARS IN END OF BEAM)

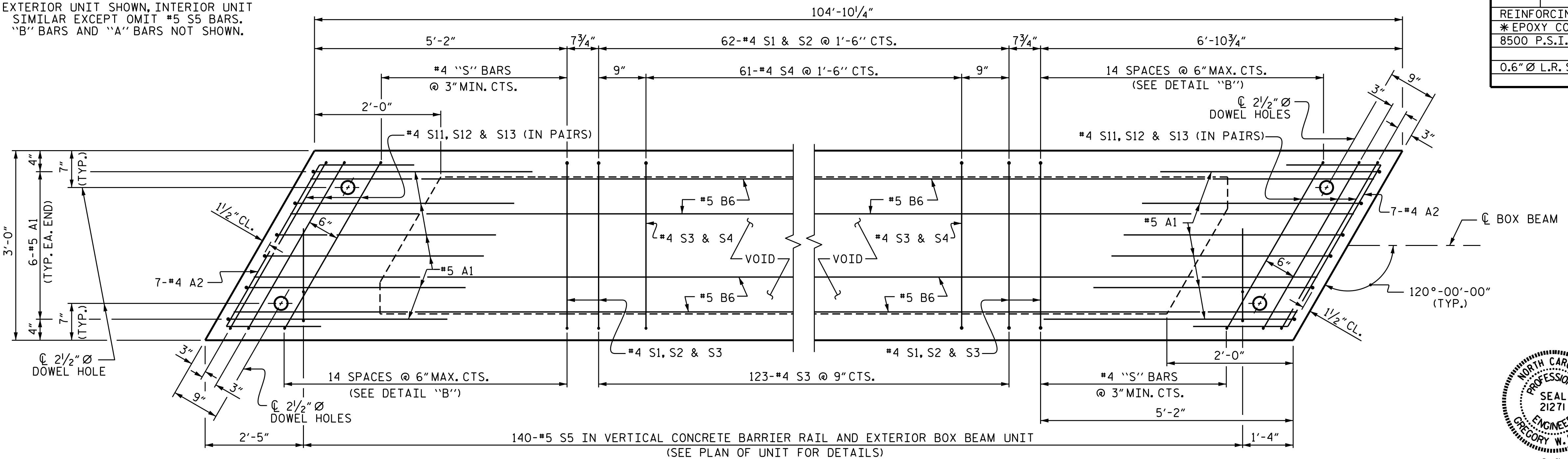


CHAMFER DETAIL
SHOWING 6" VOID CHAMFER



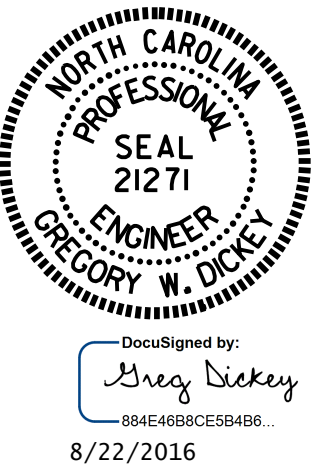
SHEAR KEY DETAIL

NOTE: OMIT SHEAR KEY ON OUTSIDE FACE OF EXTERIOR BOX BEAMS.



PLAN OF BOX BEAM

EXTERIOR UNIT SHOWN, INTERIOR UNIT SIMILAR EXCEPT OMIT #5 S5 BARS. FOR LOCATION OF DIAPHRAGMS, SEE "PLAN OF UNIT". FOR THREADED INSERTS, SEE "THREADED INSERT DETAIL". FOR REINFORCING STEEL IN DIAPHRAGMS, SEE "DOUBLE DIAPHRAGM DETAILS".



PROJECT NO. B-5360
RANDOLPH COUNTY
STATION: 23+68.00 -L-
SHEET 4 OF 7

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

3'-0" X 3'-3" PRESTRESSED CONCRETE BOX BEAM UNIT

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-8
1			3			TOTAL SHEETS
2			4			38

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ASSEMBLED BY: A. K. PATEL	DATE: 1/14/16
CHECKED BY: W. F. PARKER	DATE: 3/16
DESIGN ENGINEER OF RECORD: K. P. SEDA	DATE: 6/16

DRAWN BY: DGE II/II	REV. 9/14	MAA/TMG
CHECKED BY: TMG II/II		