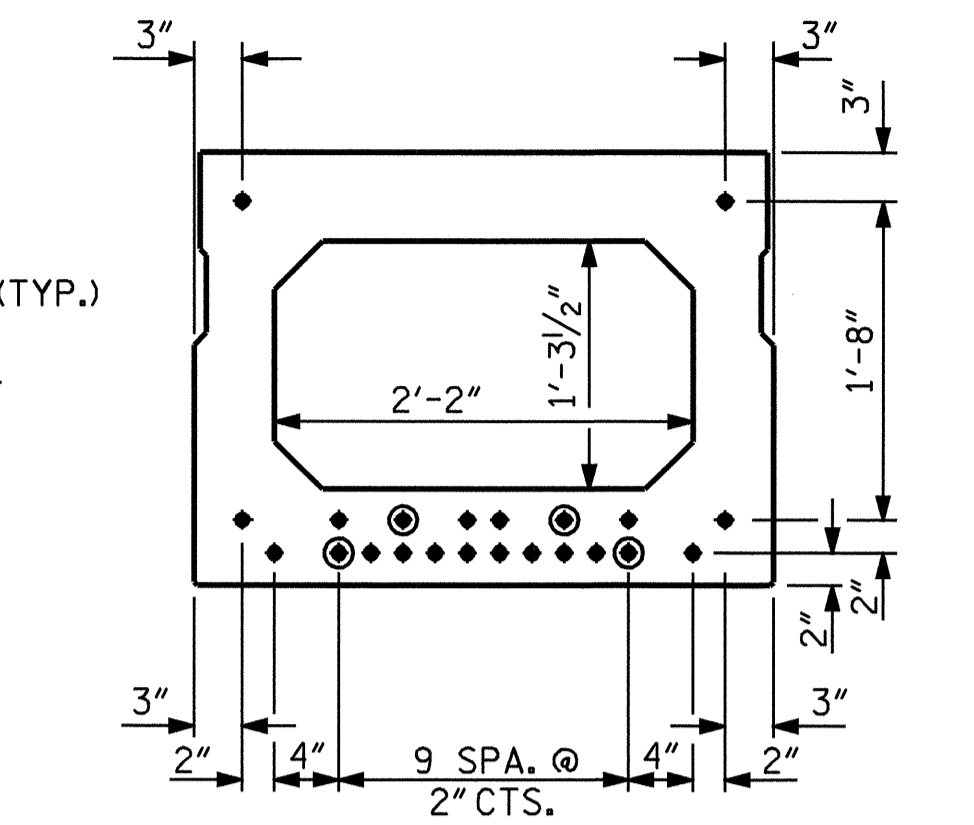


0.6" Ø LOW RELAXATION STRAND LAYOUT

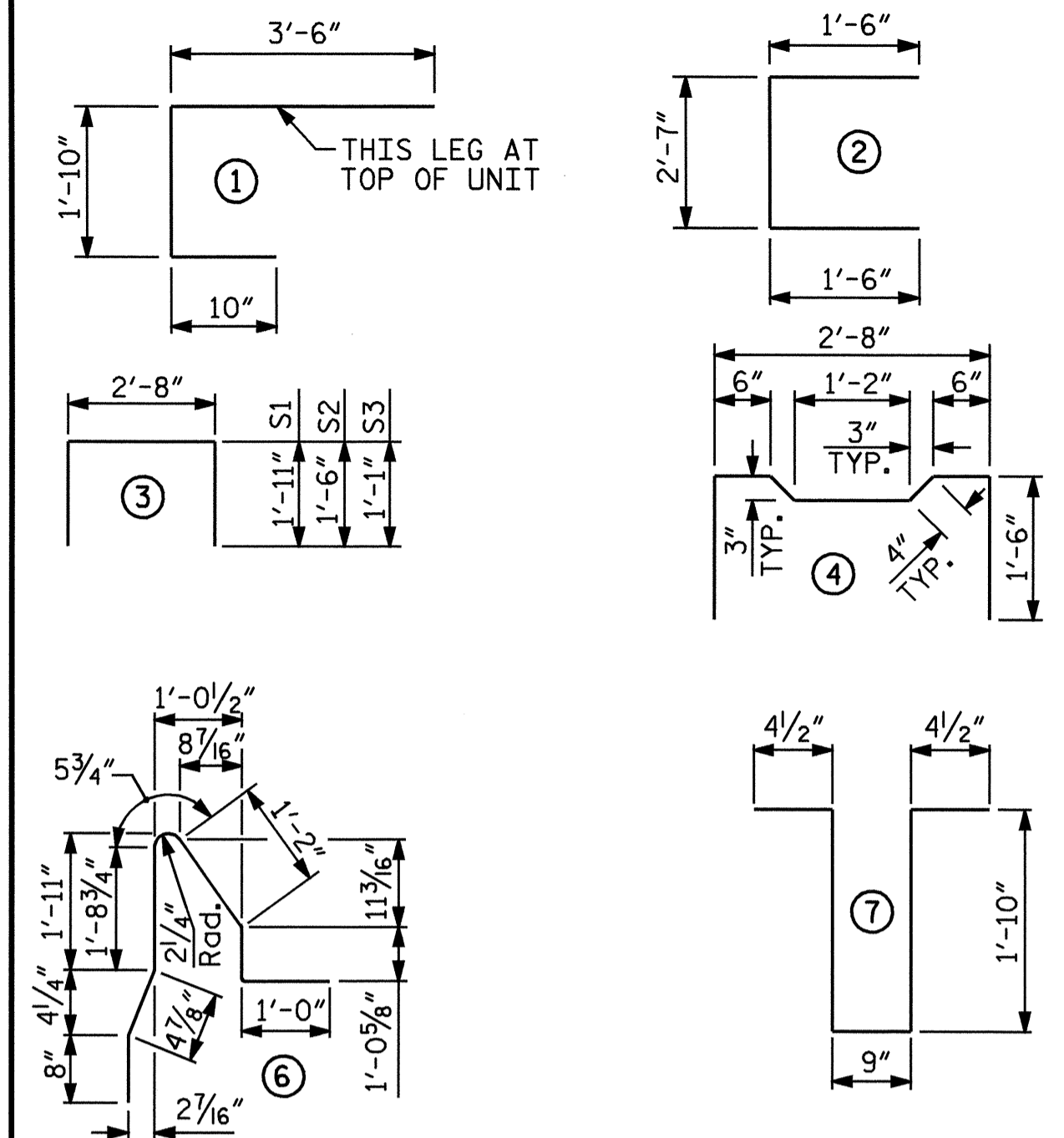


TYPICAL STRAND LOCATION
(22 STRANDS REQUIRED)
(INTERIOR BOX BEAM SECTION SHOWN-EXTERIOR SECTION SIMILAR EXCEPT SHEAR KEY LOCATION)

DEBONDING LEGEND

- STRANDS DEBONDED FOR 10'-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.

BAR TYPES



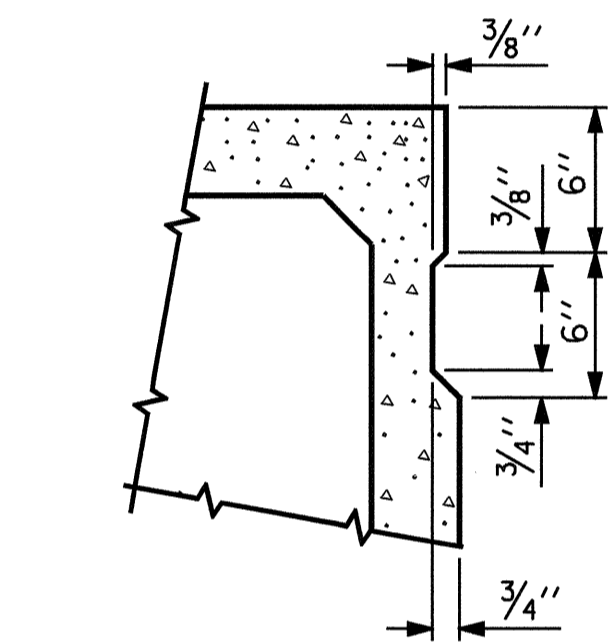
ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL FOR ONE BOX BEAM SECTION

BAR NUMBER	SIZE	TYPE	EXTERIOR UNIT		INTERIOR UNIT	
			LENGTH	WEIGHT	LENGTH	WEIGHT
A1	10	#5	6'-2"	64	6'-2"	64
A2	22	#4	5'-7"	82	5'-7"	82
B1	12	#5	37'-4"	467	37'-4"	467
K1	12	#4	5'-2"	41	5'-2"	41
K2	8	#4	2'-7"	14	2'-7"	14
S1	60	#4	6'-6"	261	6'-6"	261
S2	60	#4	5'-8"	227	5'-8"	227
S3	103	#4	4'-10"	333	4'-10"	333
S4	43	#4	5'-10"	168	5'-10"	168
* S5	97	#5	6'-6"	658		
REINFORCING STEEL				1657 LBS.		1657 LBS.
* EPOXY COATED REINF. STEEL				658 LBS.		
6000 P.S.I. CONCRETE				11.6 CU. YDS.		11.5 CU. YDS.
0.6" Ø L.R. STRANDS				No. 22		No. 22

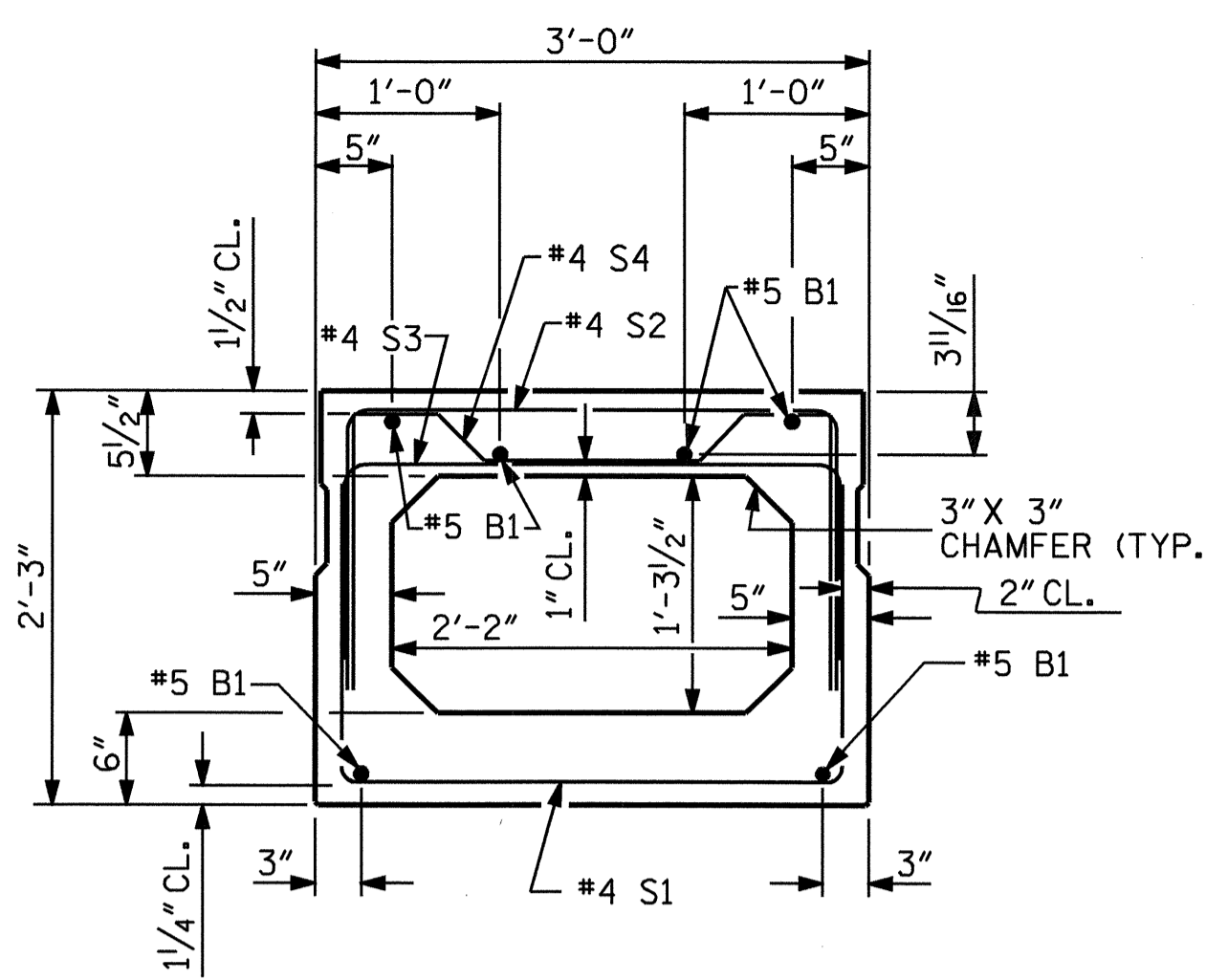
END ELEVATION

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.)



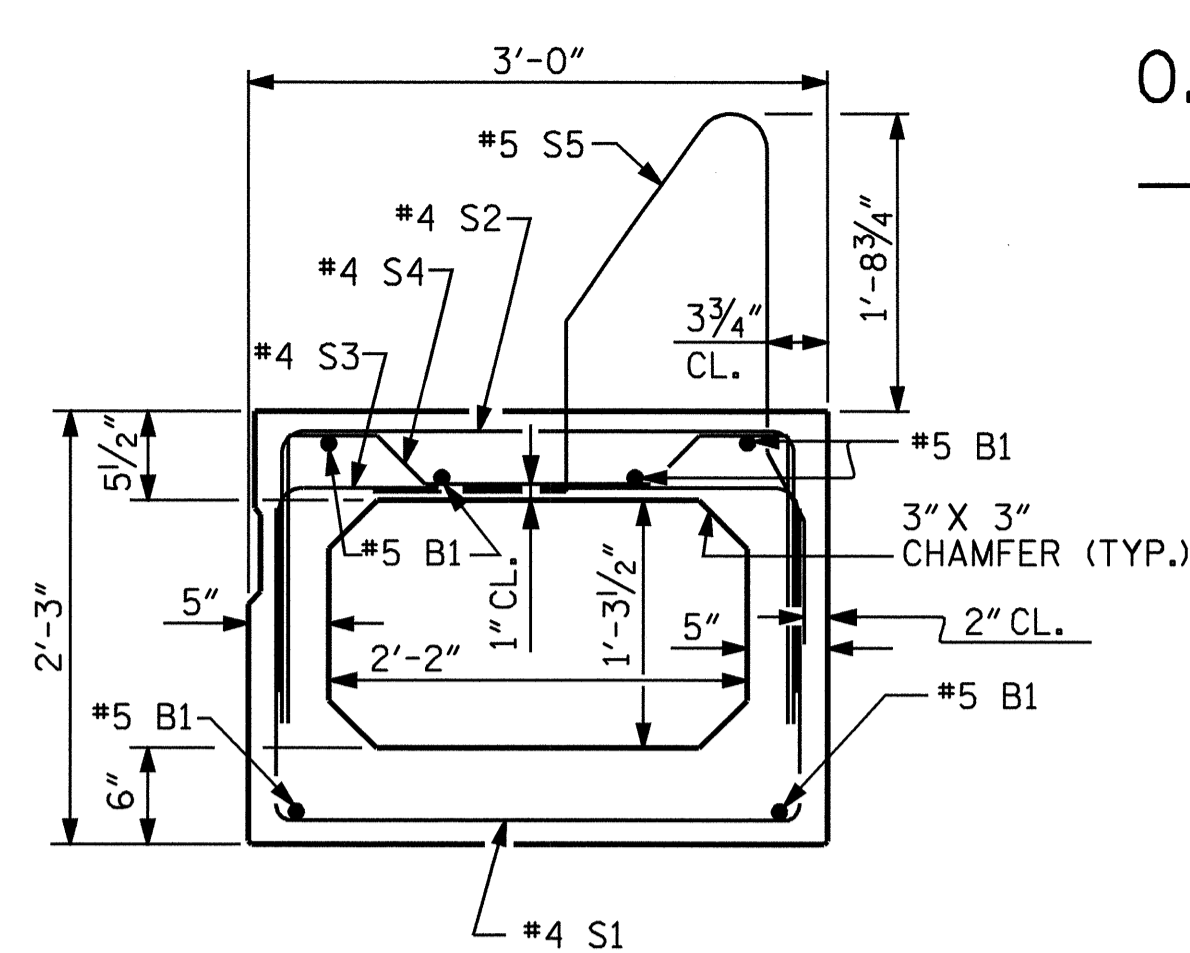
SHEAR KEY DETAIL

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



INTERIOR BOX BEAM SECTION

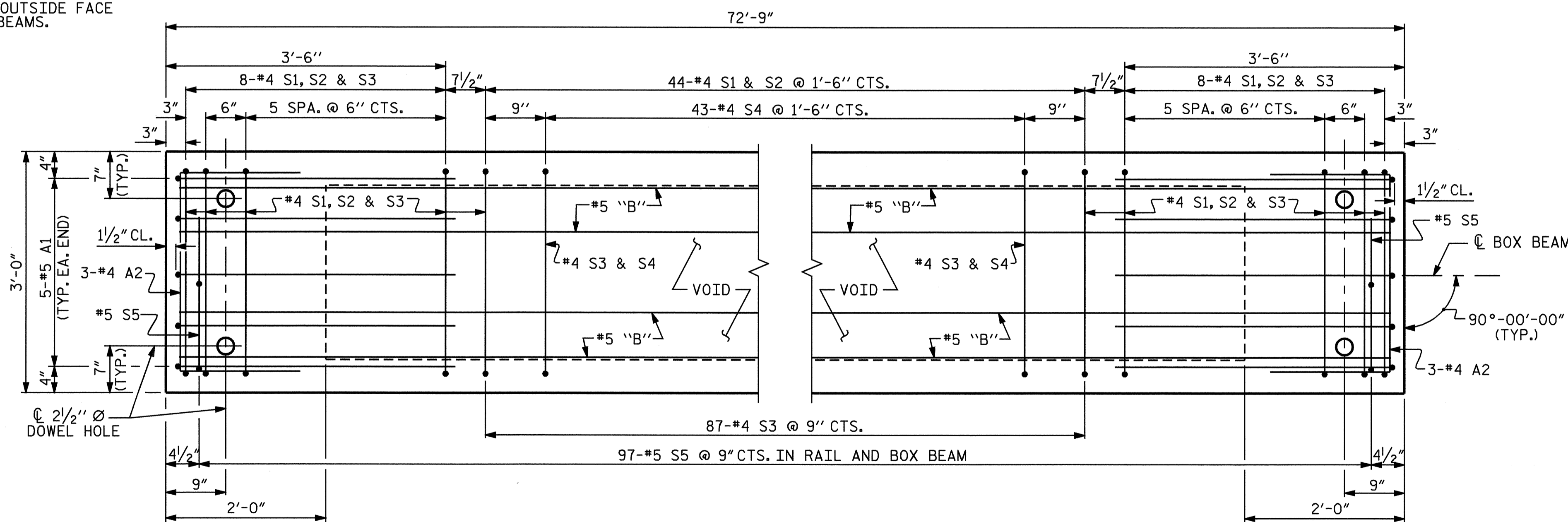
(STRAND LAYOUT NOT SHOWN)



EXTERIOR BOX BEAM SECTION

(STRAND LAYOUT NOT SHOWN)

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



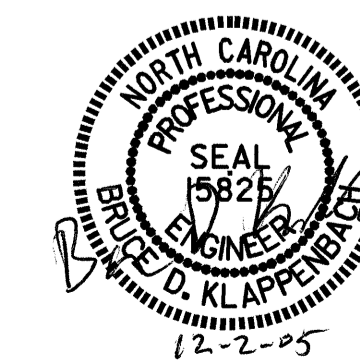
PLAN OF BOX BEAM

EXTERIOR UNIT SHOWN, INTERIOR UNIT SIMILAR EXCEPT OMIT #5 S5 BARS.
FOR LOCATION OF DIAPHRAGMS, SEE PLAN OF SPANS.
FOR REINFORCING STEEL IN DIAPHRAGMS, SEE DIAPHRAGM DETAILS.

ASSEMBLED BY : J.B. WILSON	DATE : 1/18/05
CHECKED BY : D.A. GLADDEN	DATE : 2/9/05
DRAWN BY : TLA	5/05
CHECKED BY : GM	6/05

ADDED 7/11/05

01-DEC-2005 09:56
L:\Structures\mshalkh\Microstation\B4180.sd_S*_01.dgn
mshalkh



PROJECT NO. B-4180
MACON COUNTY
STATION: 17+06.00 -L-

SHEET 3 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

3'-0" X 2'-3"
PRESTRESSED CONCRETE
BOX BEAM UNIT

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-6
1			3			TOTAL SHEETS
2			4			18