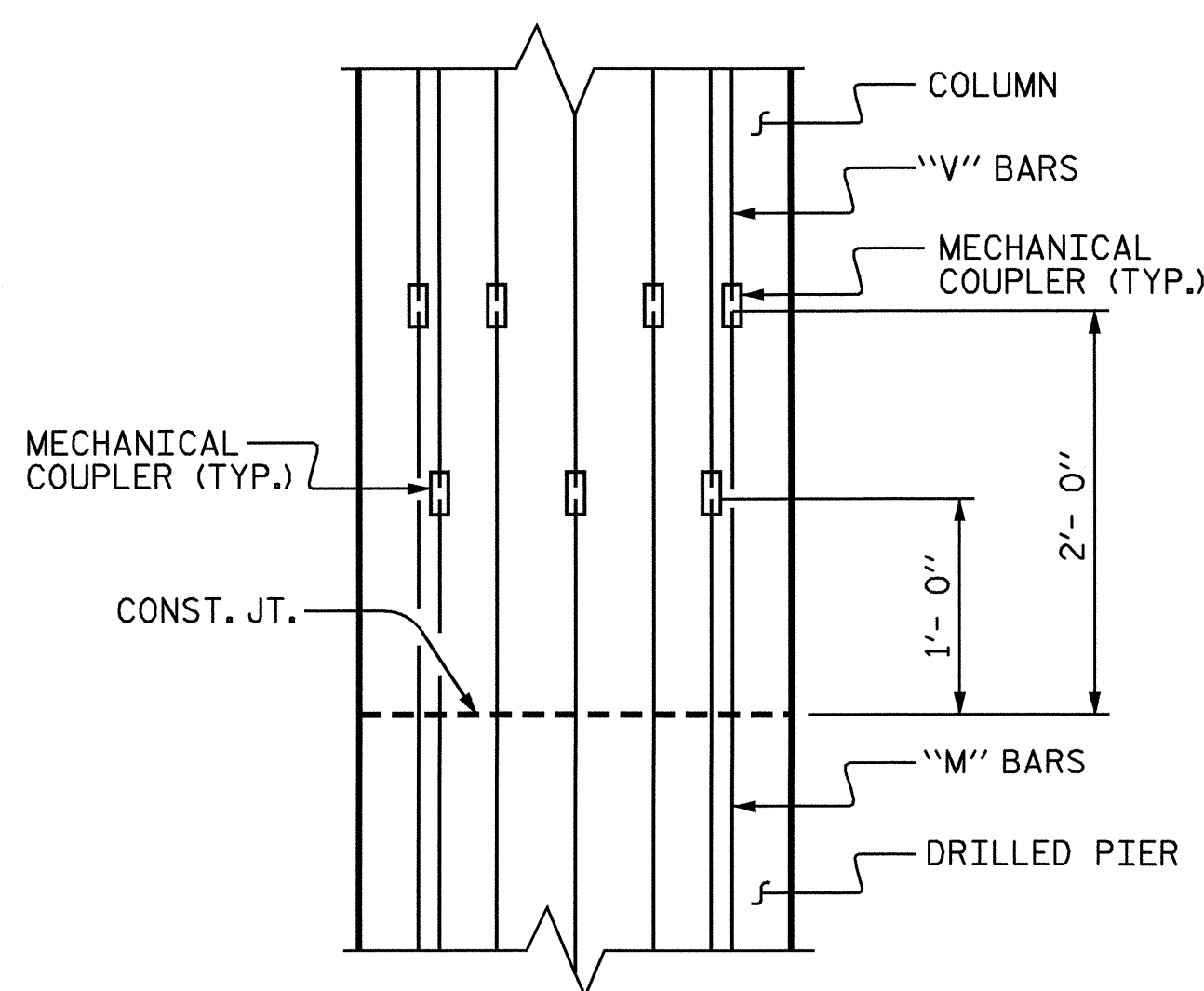
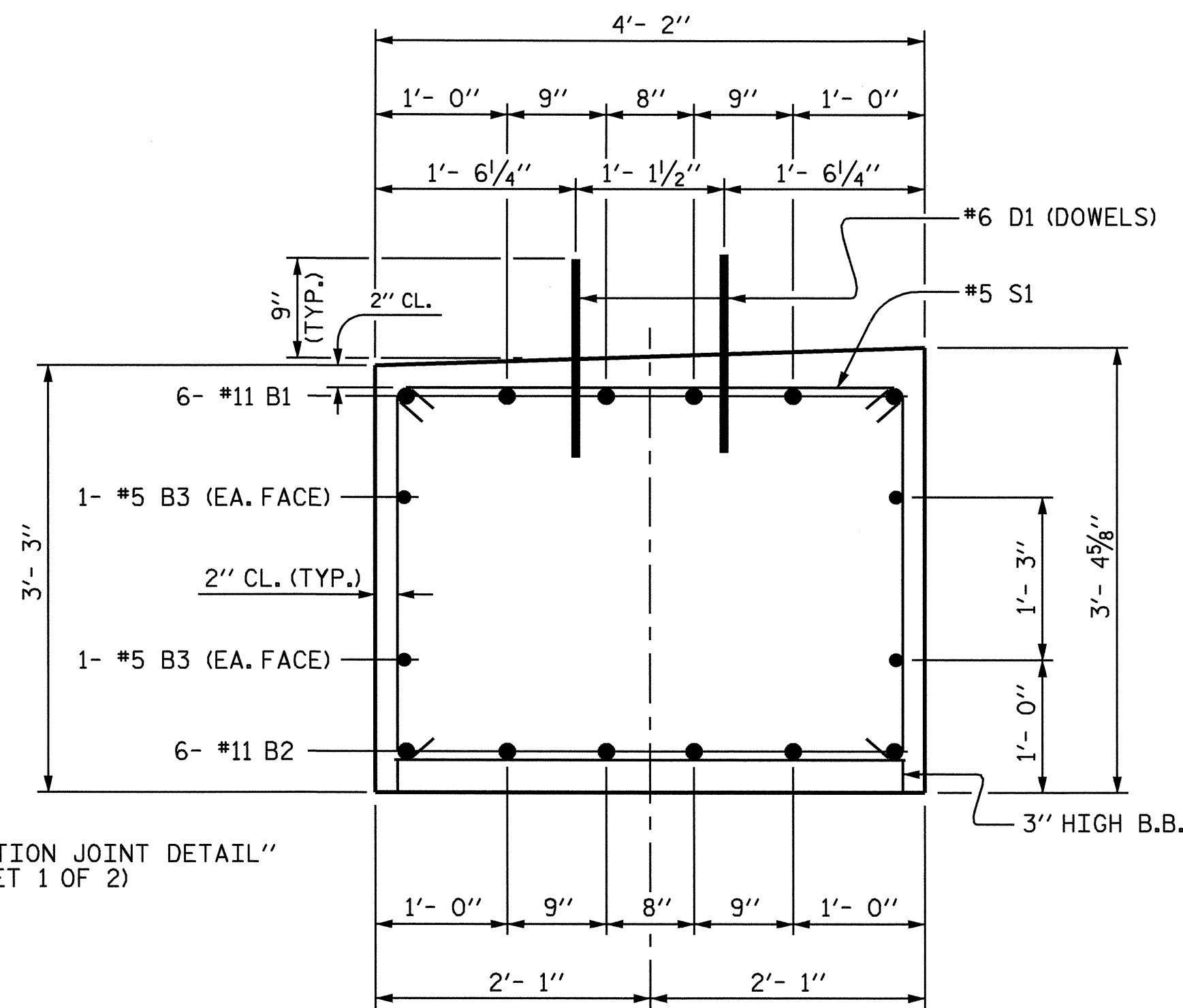


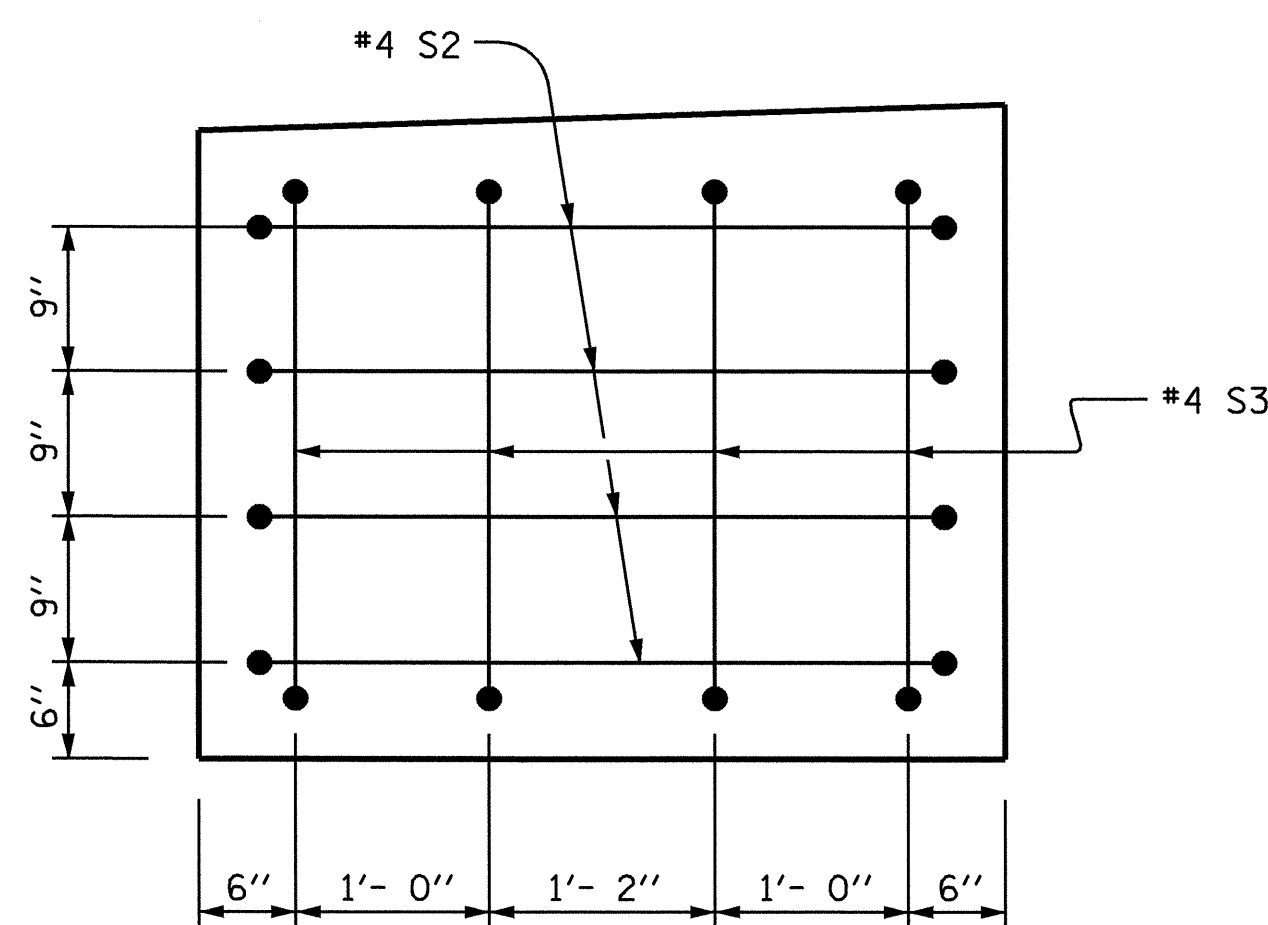
**END ELEVATION**



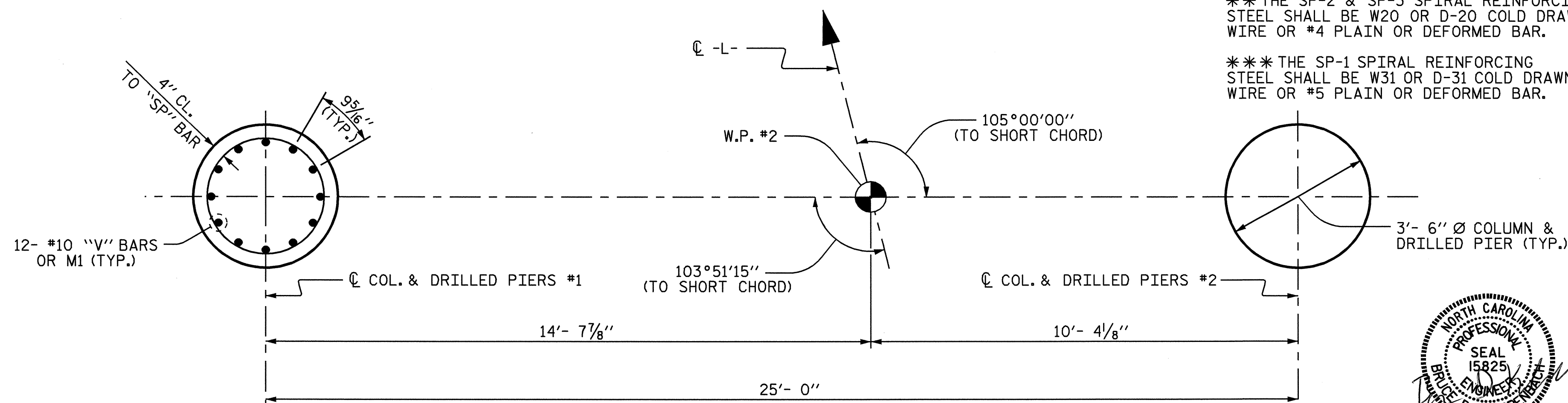
**MECHANICAL COUPLER STAGGER DETAIL**



**SECTION THRU CAP**

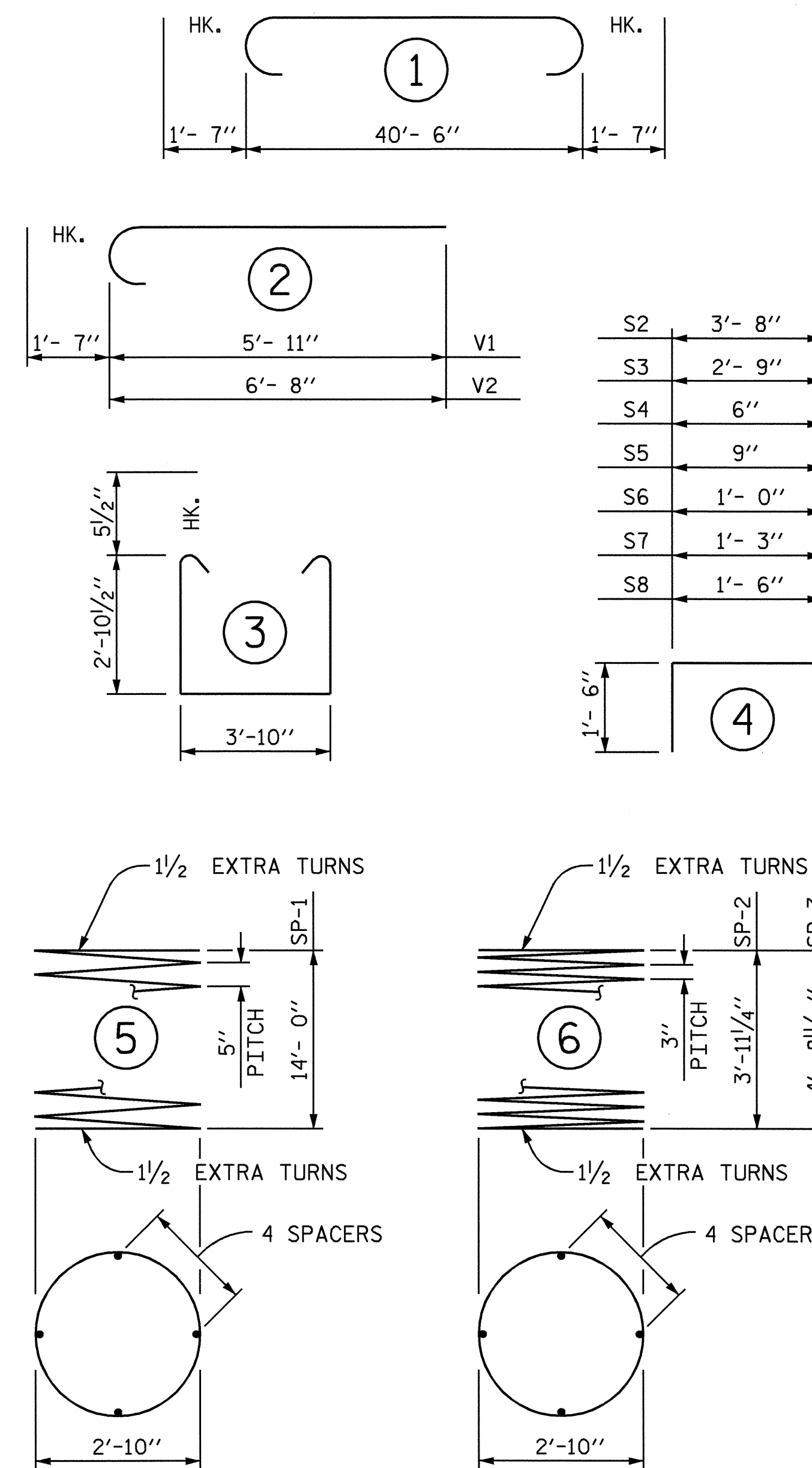


**SECTION "X-X"**



**PLAN OF COLUMNS & DRILLED PIERS**

**BAR TYPES**



ALL BAR DIMENSIONS ARE OUT TO OUT.

**BILL OF MATERIAL**

**BENT #1**

BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	6	#11	STR	43'-8"	1392
B2	6	#11	STR	40'-8"	1296
B3	4	#5	STR	40'-8"	170
B4	2	#4	STR	3'-10"	5
B5	2	#4	STR	3'-11"	5
D1	48	#6	STR	1'-6"	108
M1	24	#10	STR	16'-6"	1704
S1	40	#5	3	10'-6"	438
S2	8	#4	4	6'-8"	36
S3	8	#4	4	5'-9"	31
S4	2	#4	4	3'-6"	5
S5	2	#4	4	3'-9"	5
S6	2	#4	4	4'-0"	5
S7	2	#4	4	4'-3"	6
S8	2	#4	4	4'-6"	6
V1	12	#10	2	7'-6"	387
V2	12	#10	2	8'-3"	426

REINFORCING STEEL = 6025 LBS

SP-1	2	***	5	324'-11"	678
SP-2	1	**	6	166'-9"	111
SP-3	1	**	6	193'-1"	129

SPIRAL COLUMN REINFORCING STEEL = 918 LBS

CLASS A CONCRETE BREAKDOWN

POUR #2 (COLUMNS)	2.9 C.Y.
POUR #3 (CAP)	20.6 C.Y.
POUR #3 (LATERAL GUIDES)	0.2 C.Y.
<b>CLASS A CONCRETE TOTAL</b>	<b>23.7 C.Y.</b>

**DRILLED PIER**

POUR #1 (DRILLED PIERS CONCRETE)	10.3 C.Y.
3'-6" Ø DRILLED PIER NOT IN SOIL NO. 2	LIN. FT. 11.5
3'-6" Ø DRILLED PIER IN SOIL NO. 2	LIN. FT. 3.0
PERMANENT STEEL CASING FOR 3'-6" Ø DRILLED PIER NO. 2	LIN. FT. 10.5

CROSSHOLE SONIC LOGGING	1 EACH
CSL TUBES NO. 8	LIN. FT. 136

PROJECT NO. B-3504  
RANDOLPH COUNTY  
 STATION: 18+70.50 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**SUBSTRUCTURE BENT #1**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-16
1			3			TOTAL SHEETS
2			4			27



DRAWN BY: D. A. GLADDEN DATE: 5-13-04  
 CHECKED BY: M. G. SHAIKH DATE: 6-16-04

24-JUN-2004 09:59  
 W:\squad\B3504\gladden\Mforstation\B3504b1.dgn  
 dgladden