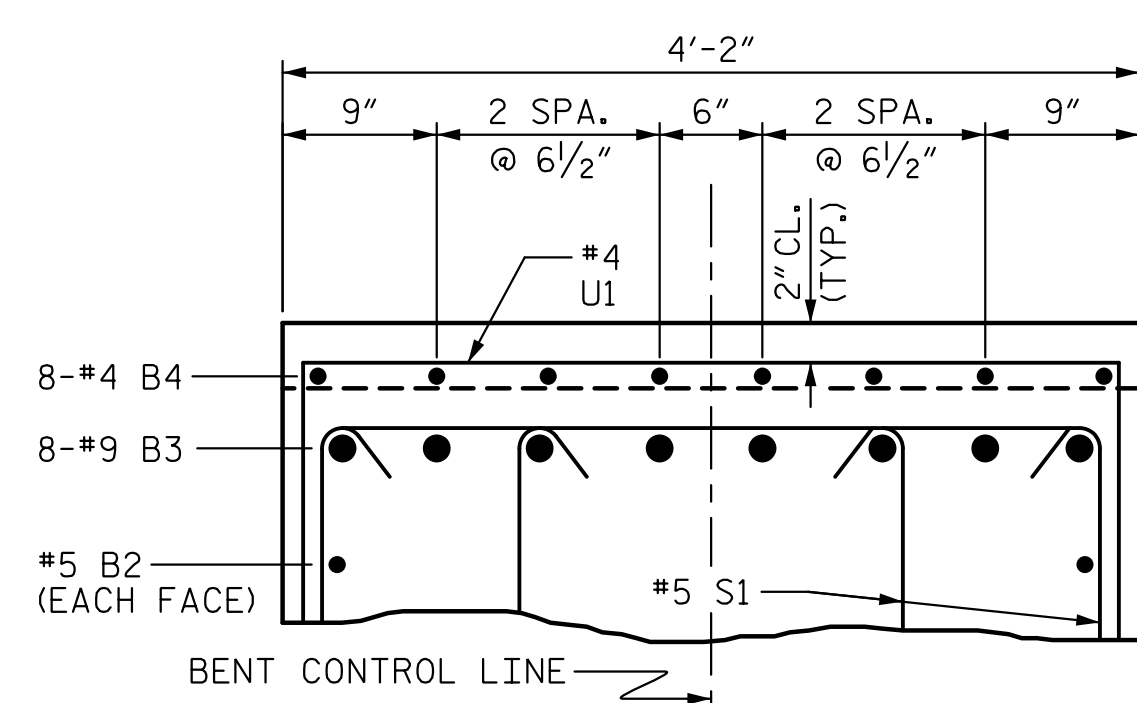
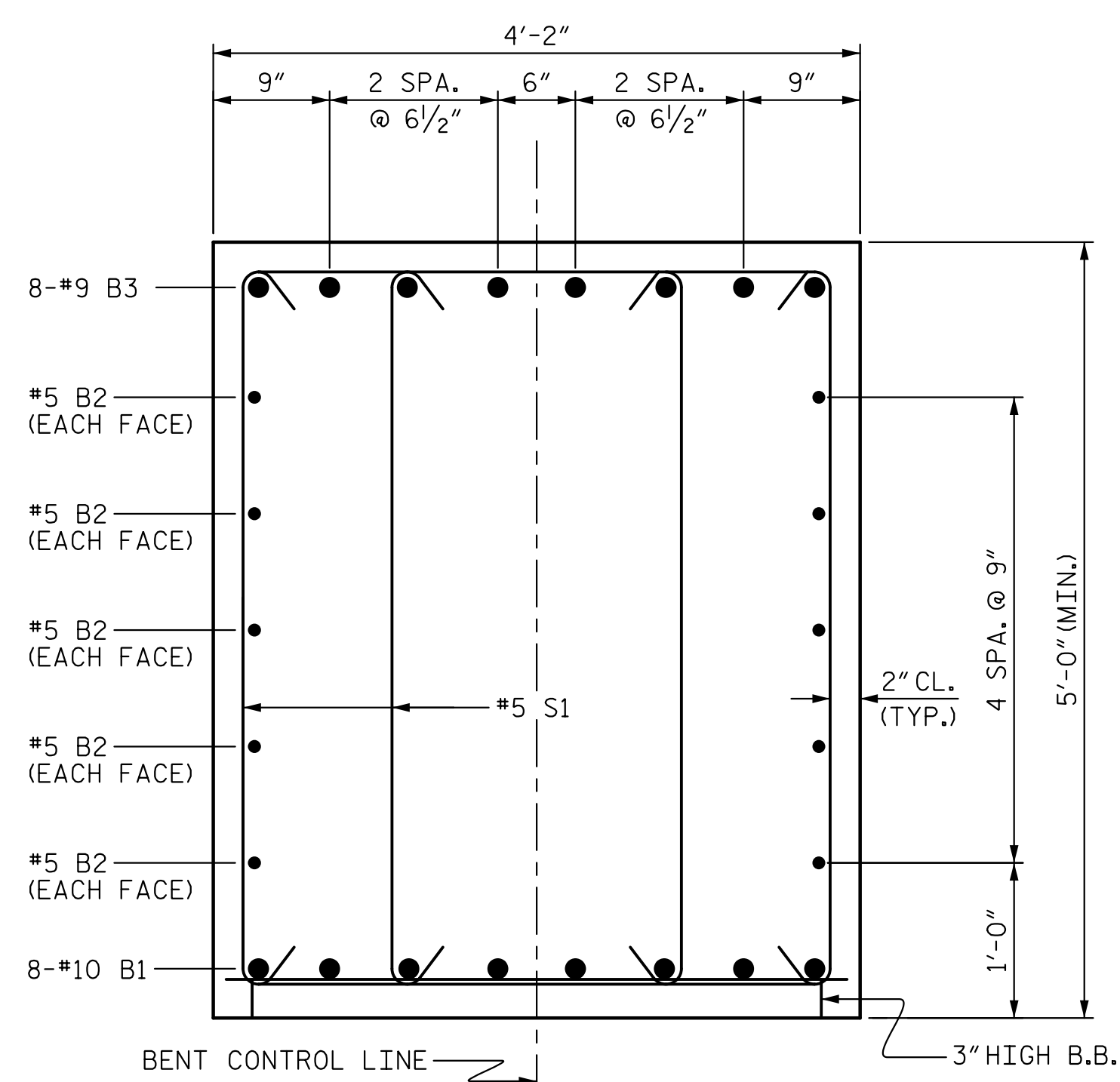


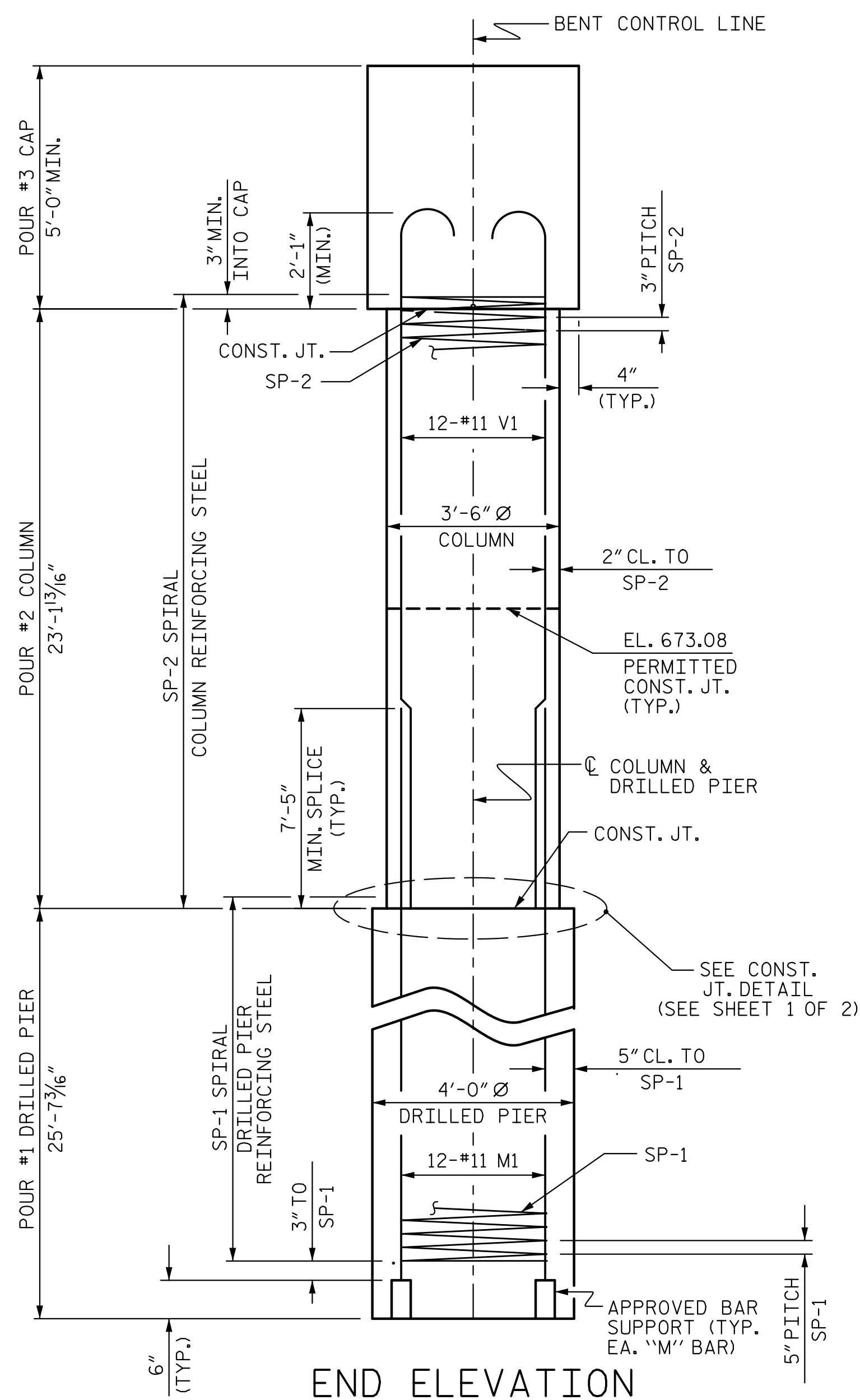
END OF CAP DETAIL (TYP.)



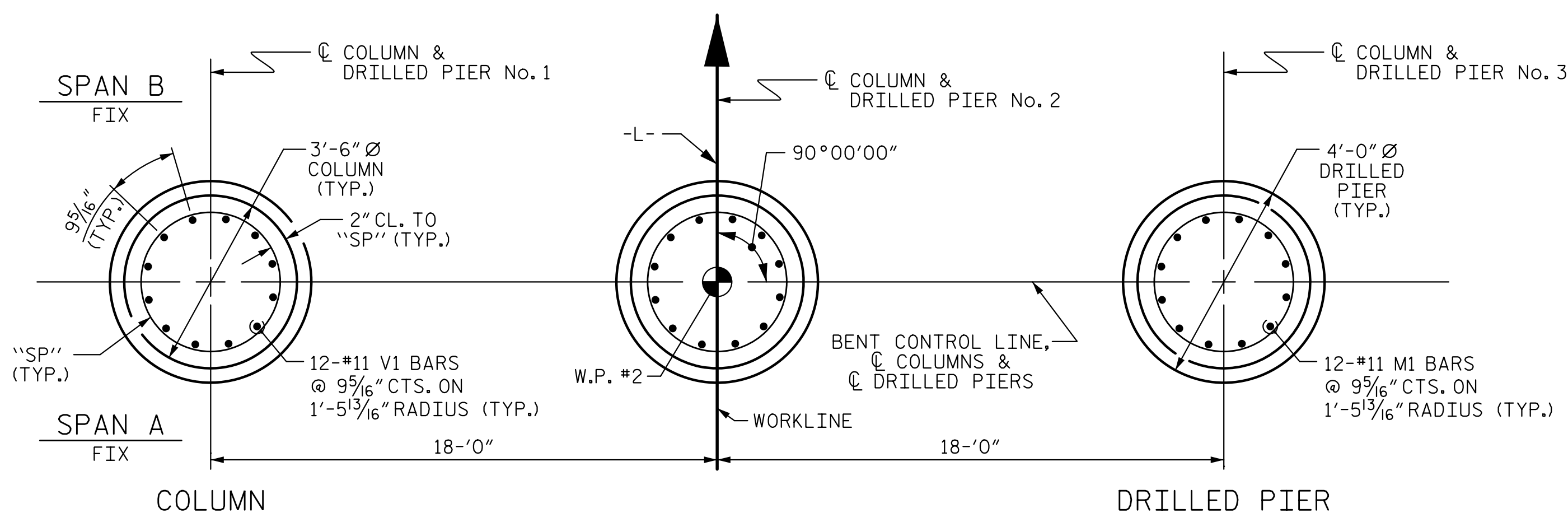
SECTION B-B



SECTION A-A



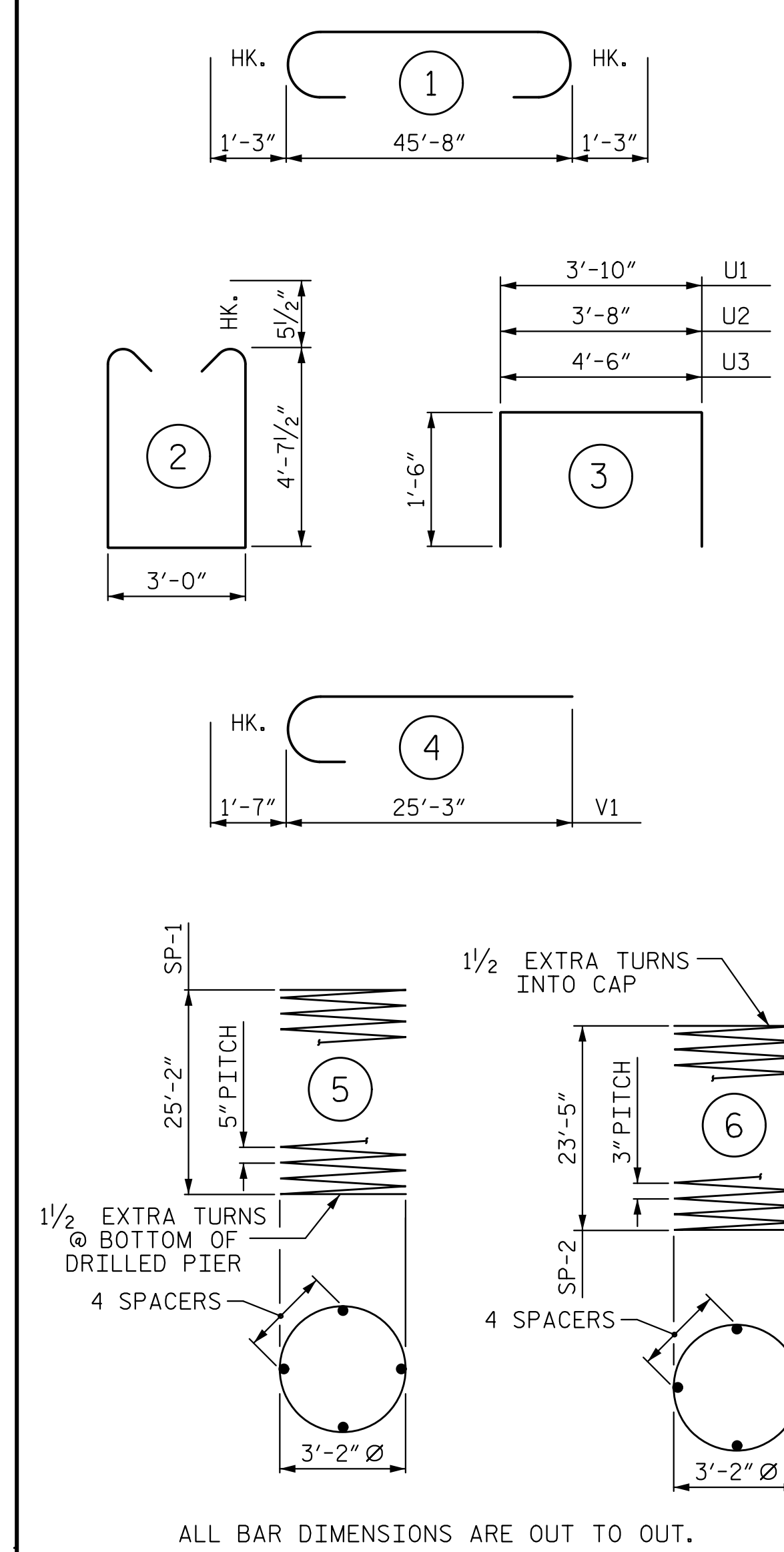
END ELEVATION



PLAN OF DRILLED PIERS & COLUMNS

(DETAILS ARE TYPICAL EACH DRILLED PIER & COLUMN)

BAR TYPES



BILL OF MATERIAL

BENT 1					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#10	STR	45'-10"	1,578
B2	10	#5	STR	45'-10"	478
B3	8	#9	1	48'-2"	1,310
B4	8	#4	STR	3'-10"	20
M1	36	#11	STR	35'-7"	6,806
S1	120	#5	2	13'-2"	1,648
U1	40	#4	3	6'-10"	183
U2	10	#4	3	6'-8"	45
U3	10	#4	3	7'-6"	50
V1	36	#11	4	26'-10"	5,132

REINFORCING STEEL 17,250 LBS.					
SP-1	3	*	5	607'-3"	1,900
SP-2	3	**	6	935'-6"	1,875

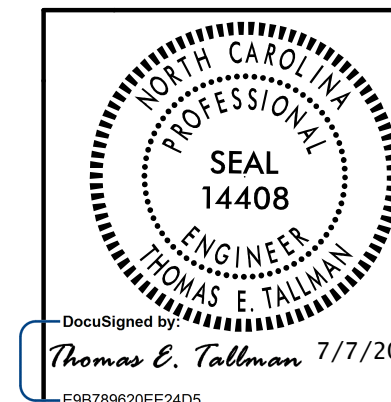
SPIRAL COLUMN REINFORCING STEEL 3,775 LBS.					
*THE SP-1 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR					
**THE SP-2 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED BAR					

CLASS A CONCRETE BREAKDOWN	
POUR #2 (COLUMNS)	24.8 C.Y.
POUR #3 (CAP)	36.6 C.Y.
TOTAL CLASS A CONCRETE	61.4 C.Y.

DRILLED PIERS:	
DRILLED PIER CONCRETE POUR #1 (DRILLED PIERS)	35.8 C.Y.
4'-0" Ø DRILLED PIERS NOT IN SOIL	36.00 LIN. FT.
4'-0" Ø DRILLED PIERS IN SOIL	40.80 LIN. FT.
PERMANENT STEEL CASING FOR 4'-0" Ø DRILLED PIER	44.72 LIN. FT.
CSL TUBES	325.2 LIN. FT.

PROJECT NO. W-5516  
 ROWAN COUNTY  
 STATION: 61+79.40 -L-  
 SHEET 2 OF 2

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SUBSTRUCTURE  
 BENT 1



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

SHEET NO.	
S-29	TOTAL SHEETS 41

5/28/2015 10:53 AM C:\Users\pep\Documents\Projects\5516 - w-5516 - sd.bl.02.dgn  
 TCA Engineering, Inc.

DRAWN BY: D. H. CARTER DATE: MAY 2015  
 CHECKED BY: M. T. NEIHEISEL DATE: MAY 2015  
 DESIGN ENGINEER OF RECORD: T. E. TALLMAN DATE: MAY 2015