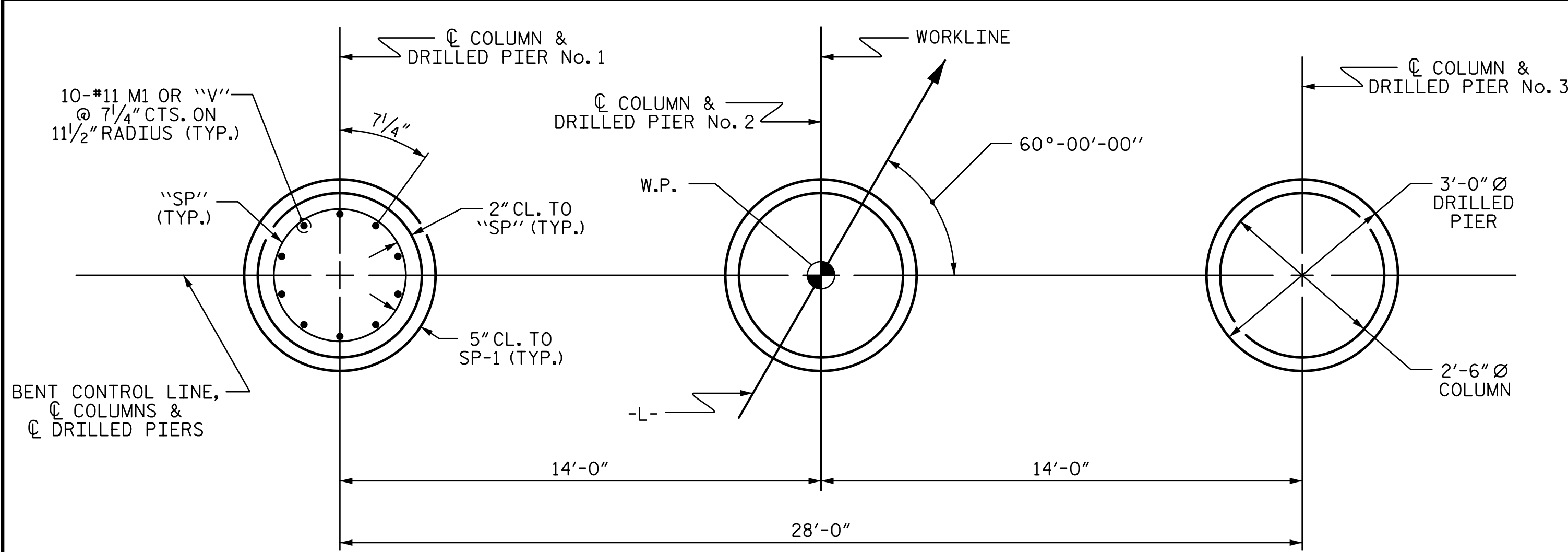
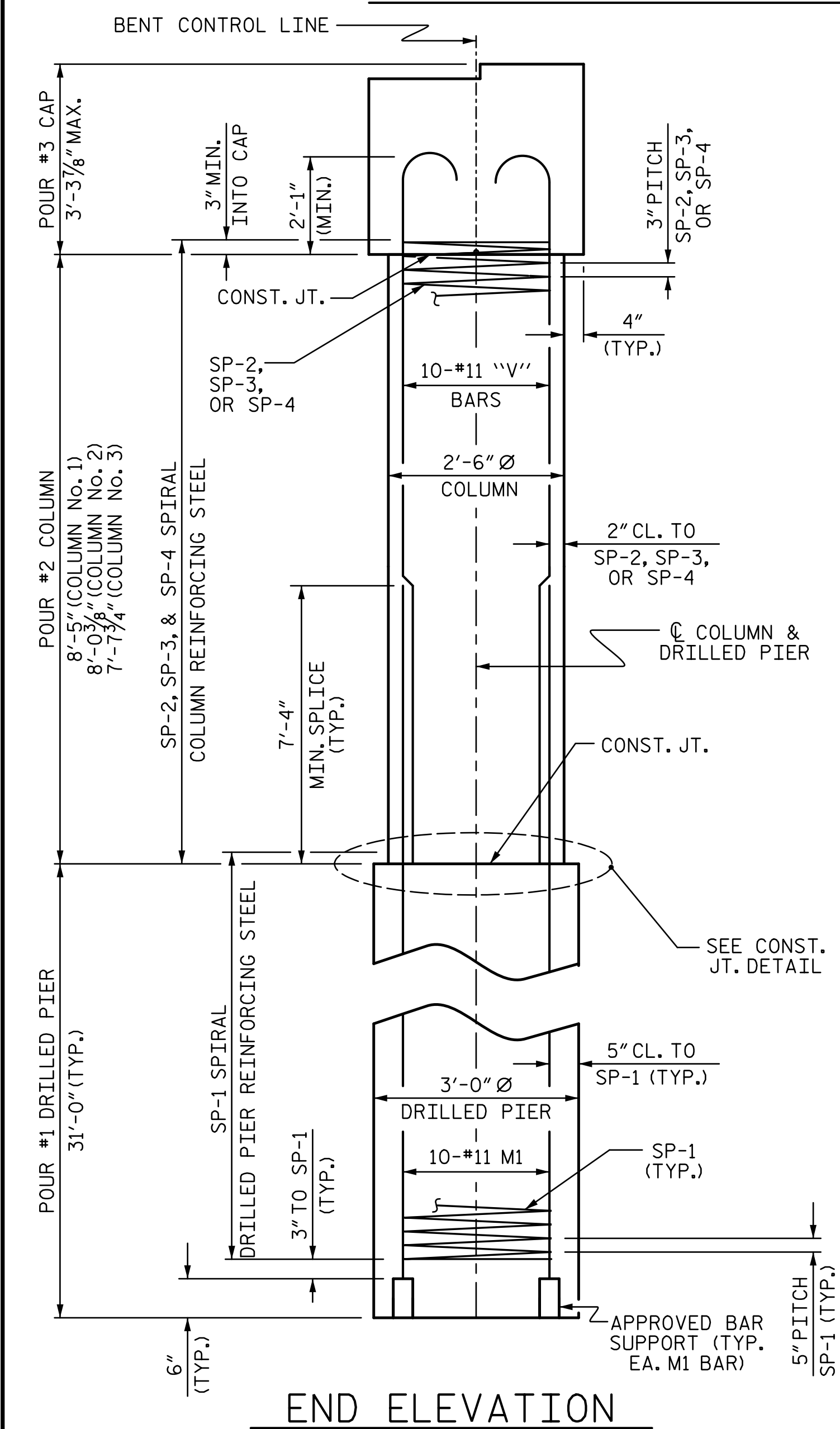


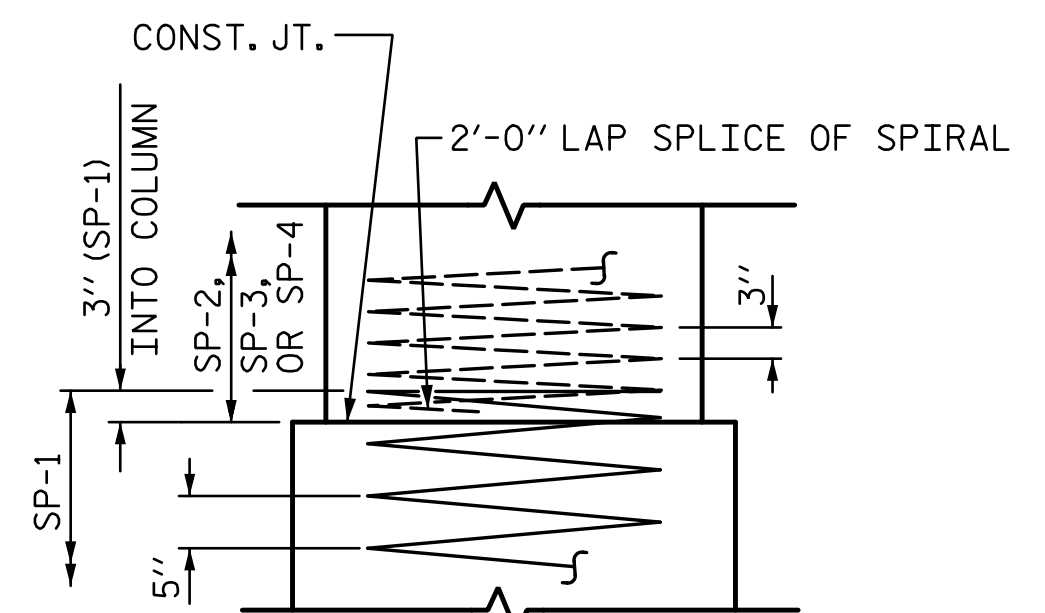
3/12/2020 5:51:48 PM R:\Structures\ustation\Finals\40L\_BR-015\_SMJ\_B4\_02\_480I66.dgn



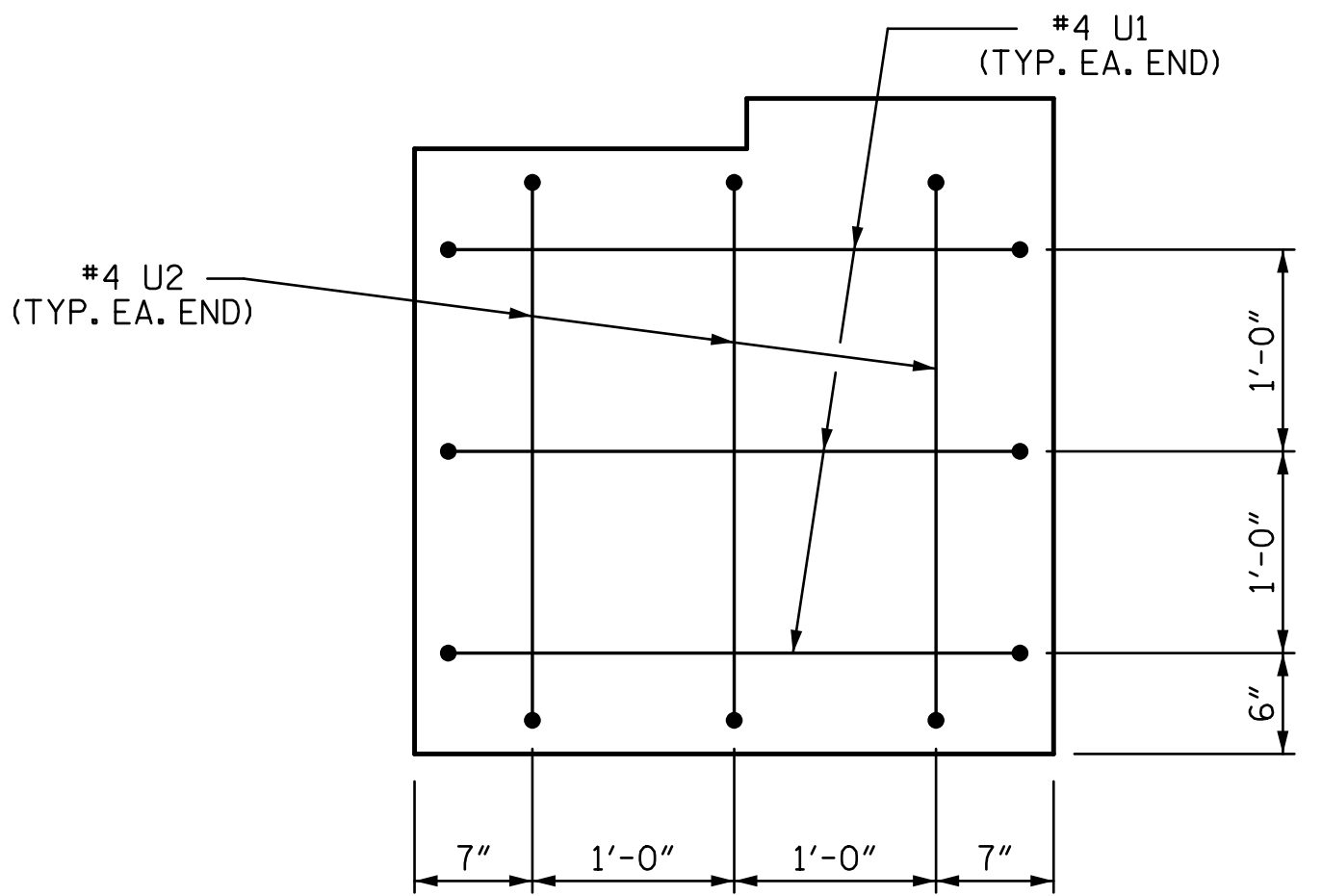
PLAN OF DRILLED PIERS & COLUMNS



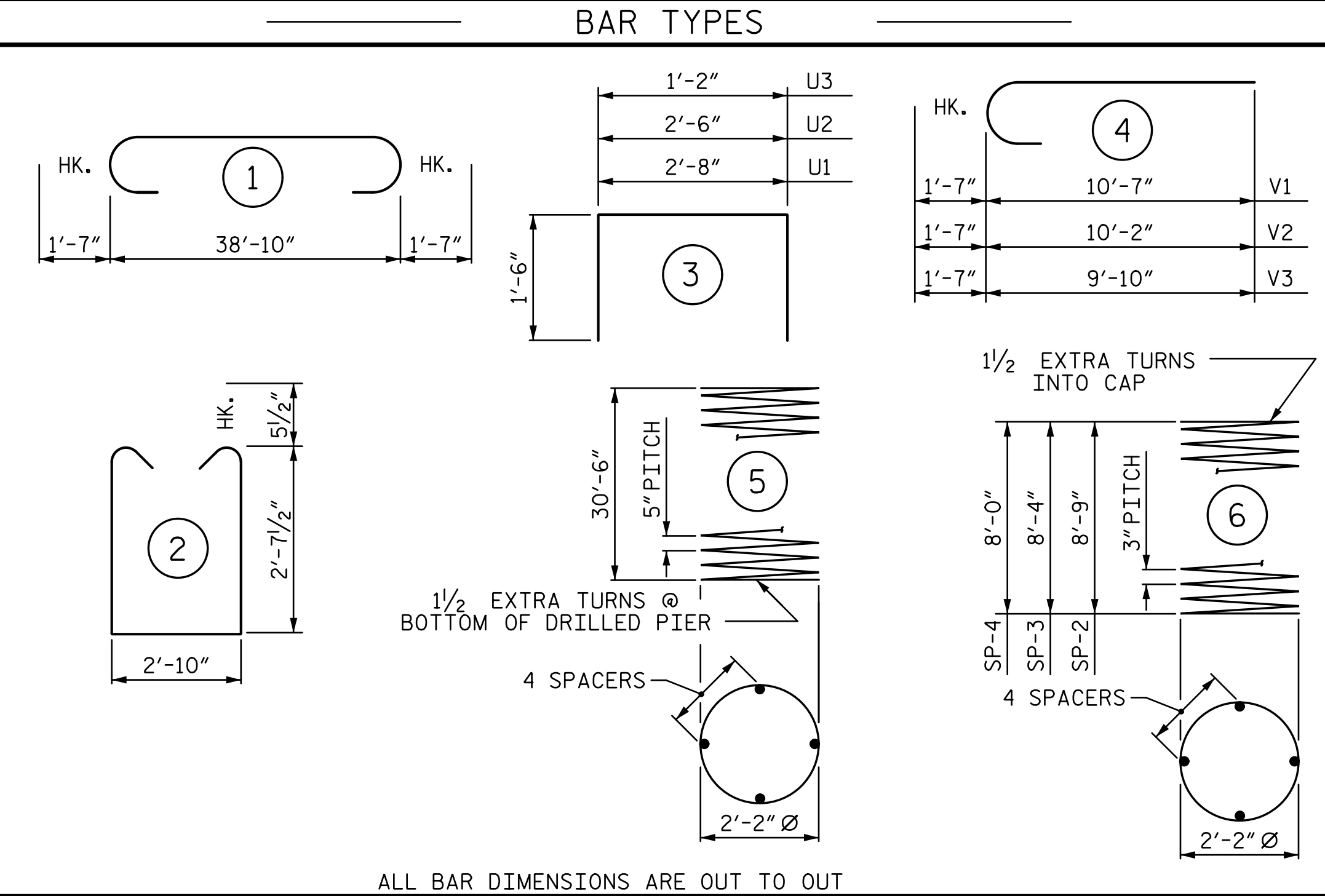
END ELEVATION



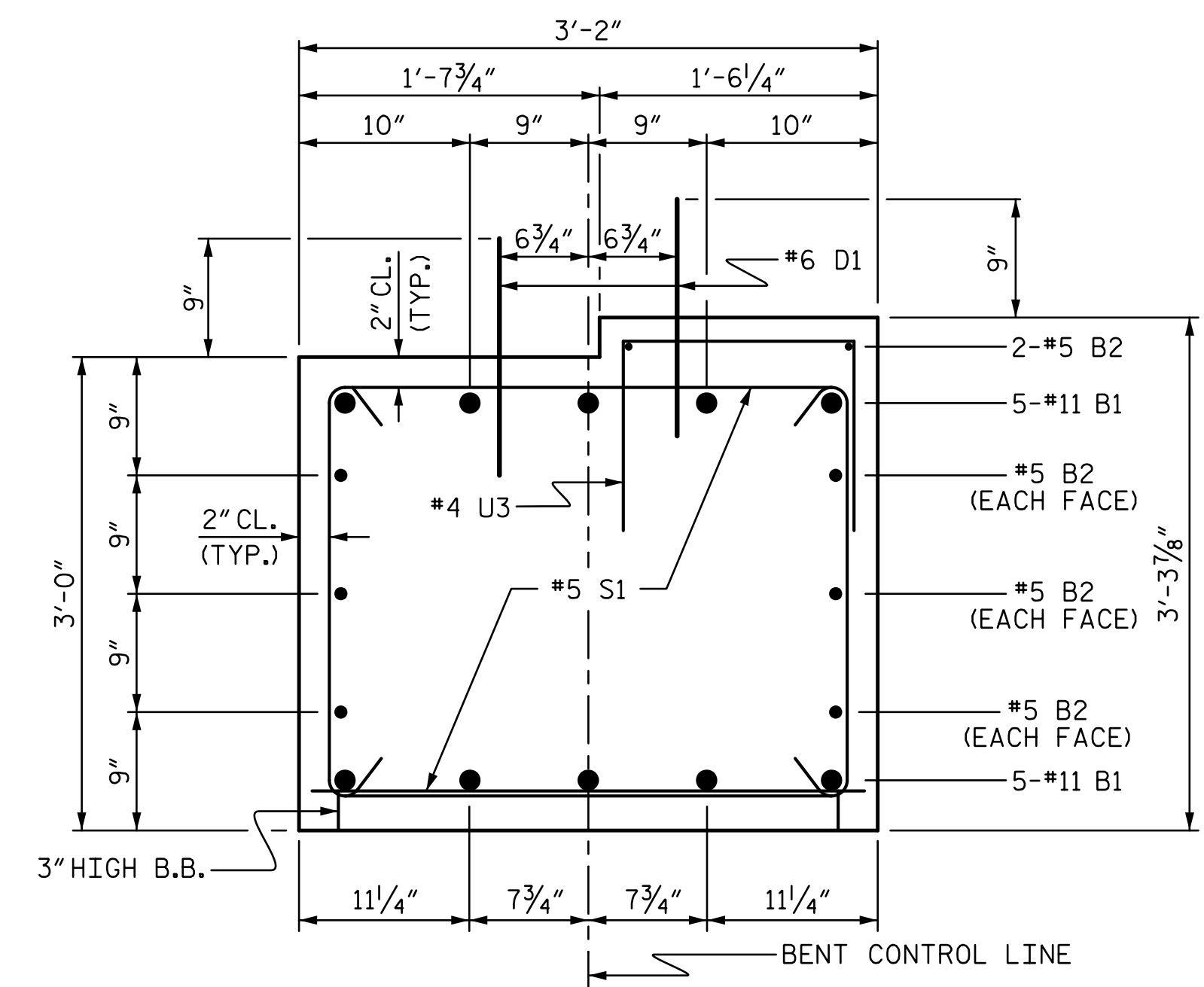
CONSTRUCTION JOINT DETAIL



END OF CAP VIEW (TYPICAL BOTH ENDS)



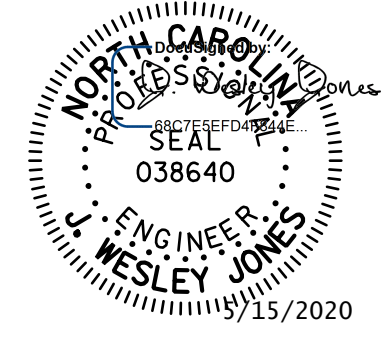
ALL BAR DIMENSIONS ARE OUT TO OUT



SECTION THRU CAP

BILL OF MATERIAL FOR ONE BENT					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	10	#11	1	42'-0"	2231
B2	8	#5	STR	39'-0"	325
D1	40	#6	STR	1'-6"	90
M1	30	#11	STR	40'-10"	6508
S1	68	#5	2	9'-0"	638
U1	6	#4	3	5'-8"	23
U2	6	#4	3	5'-6"	22
U3	39	#4	3	4'-2"	109
V1	10	#11	4	12'-2"	646
V2	10	#11	4	11'-9"	624
V3	10	#11	4	11'-5"	607
REINFORCING STEEL (FOR ONE BENT)					11823 LBS.
SP-1	3	*	5	497'-3"	1556
SP-2	1	**	6	243'-11"	163
SP-3	1	**	6	232'-9"	155
SP-4	1	**	6	223'-10"	150
SPIRAL COLUMN REINFORCING STEEL (FOR ONE BENT)					2024 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, SP-3 & SP-4 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED BAR					
CLASS A CONCRETE BREAKDOWN (FOR ONE BENT)					
POUR #2 (COLUMNS)					4.4 C.Y.
POUR #3 (CAP)					14.6 C.Y.
TOTAL CLASS A CONCRETE					19.0 C.Y.
DRILLED PIERS: (FOR ONE BENT)					
DRILLED PIER CONCRETE					24.3 C.Y.
POUR #1 (DRILLED PIERS)					32.0 LIN. FT.
3'-0" Ø DRILLED PIER NOT IN SOIL					61.0 LIN. FT.
3'-0" Ø DRILLED PIER IN SOIL					36.0 LIN. FT.
PERMANENT STEEL CASING FOR 3'-0" Ø DRILLED PIER					390.0 LIN. FT.
CSL TUBES					

PROJECT NO. **BR-0115**  
**IREDELL** COUNTY  
 STATION: **15+74.00 -L-**  
 SHEET 2 OF 2



**STV** ENGINEERS, INC.  
 900 West Trade St., Suite 715  
 Charlotte, NC 28202  
 NC License Number F-0991

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
SUBSTRUCTURE BENT No. 2					
REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
					S-21
					TOTAL SHEETS 23

DRAWN BY : WAW	DATE : 10-19
CHECKED BY : JWJ	DATE : 1-20
DESIGN ENGINEER OF RECORD : JWJ	DATE : 3-20
DRAWN BY : DGE 3/10	REV. 11/14 MAA/TMG
CHECKED BY : MKT 3/10	