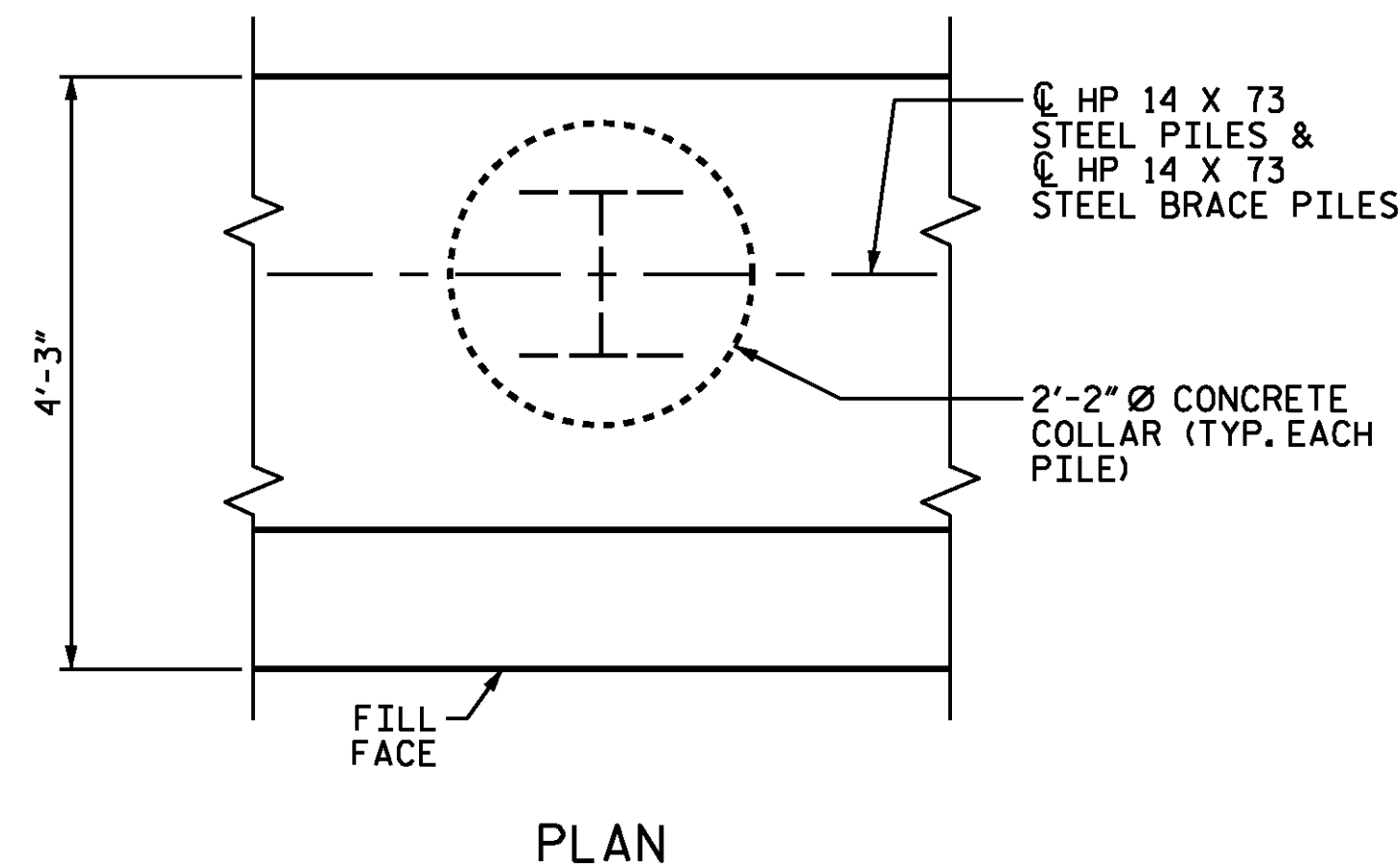
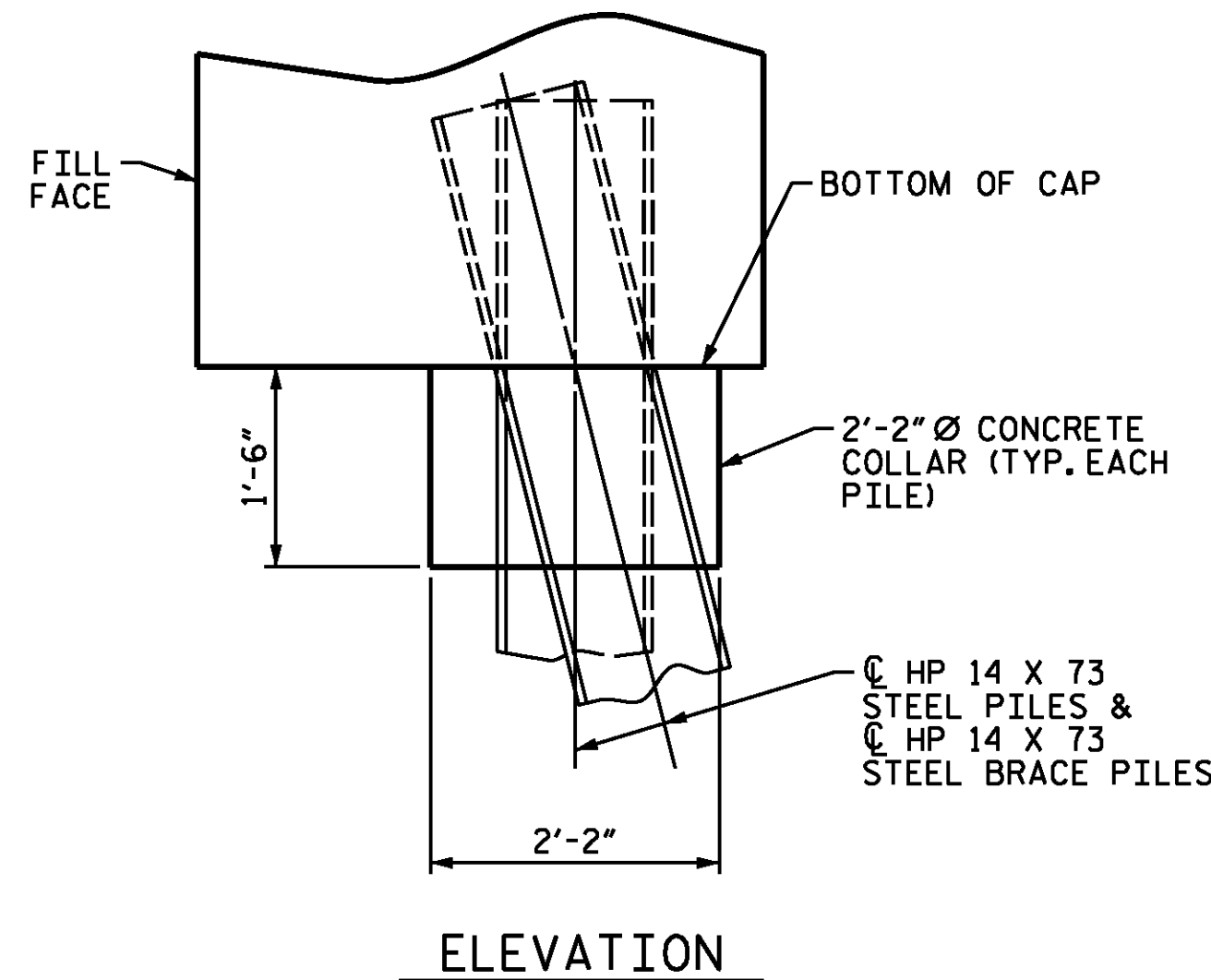


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

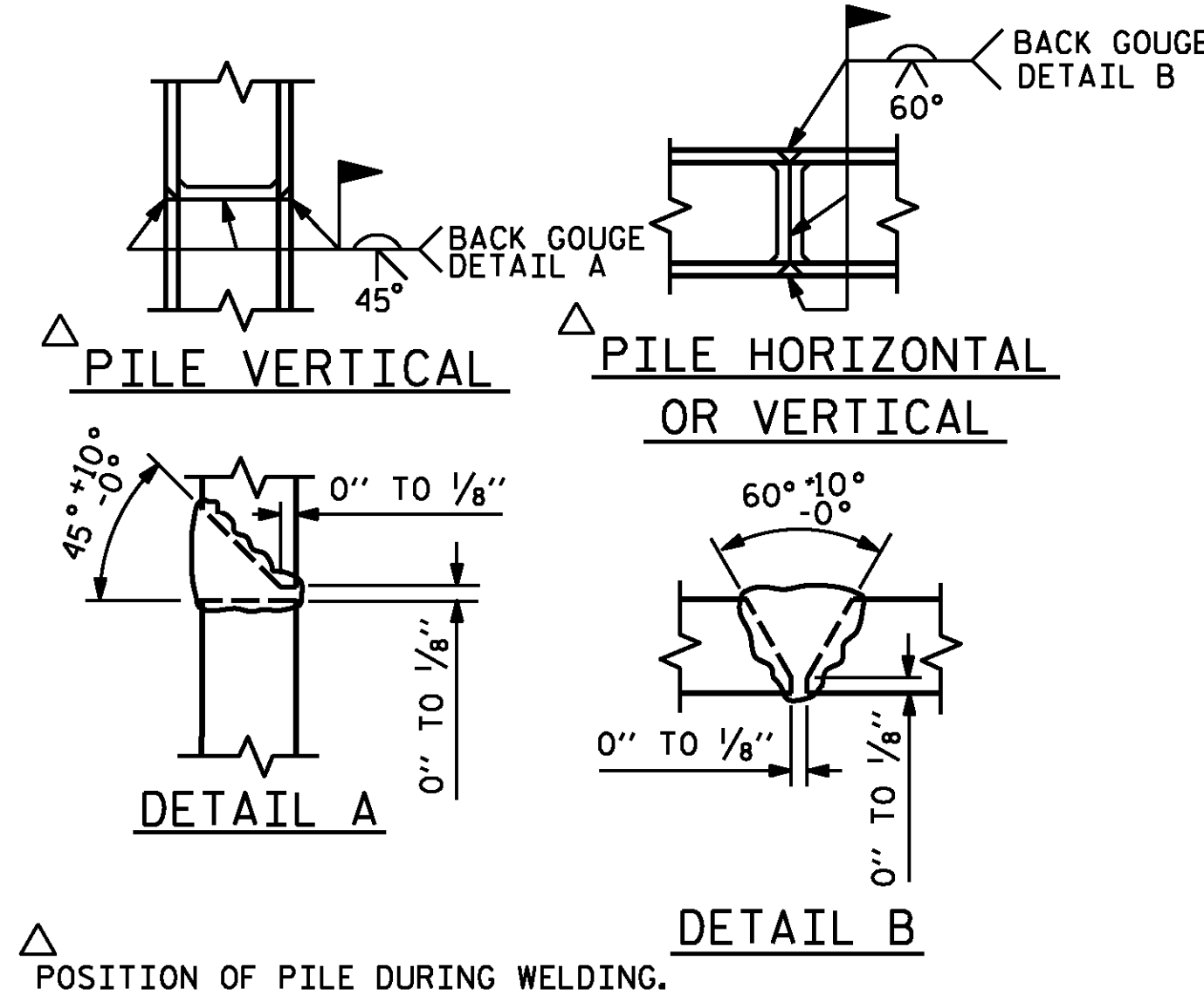
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR EFFECTIVENESS.

NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

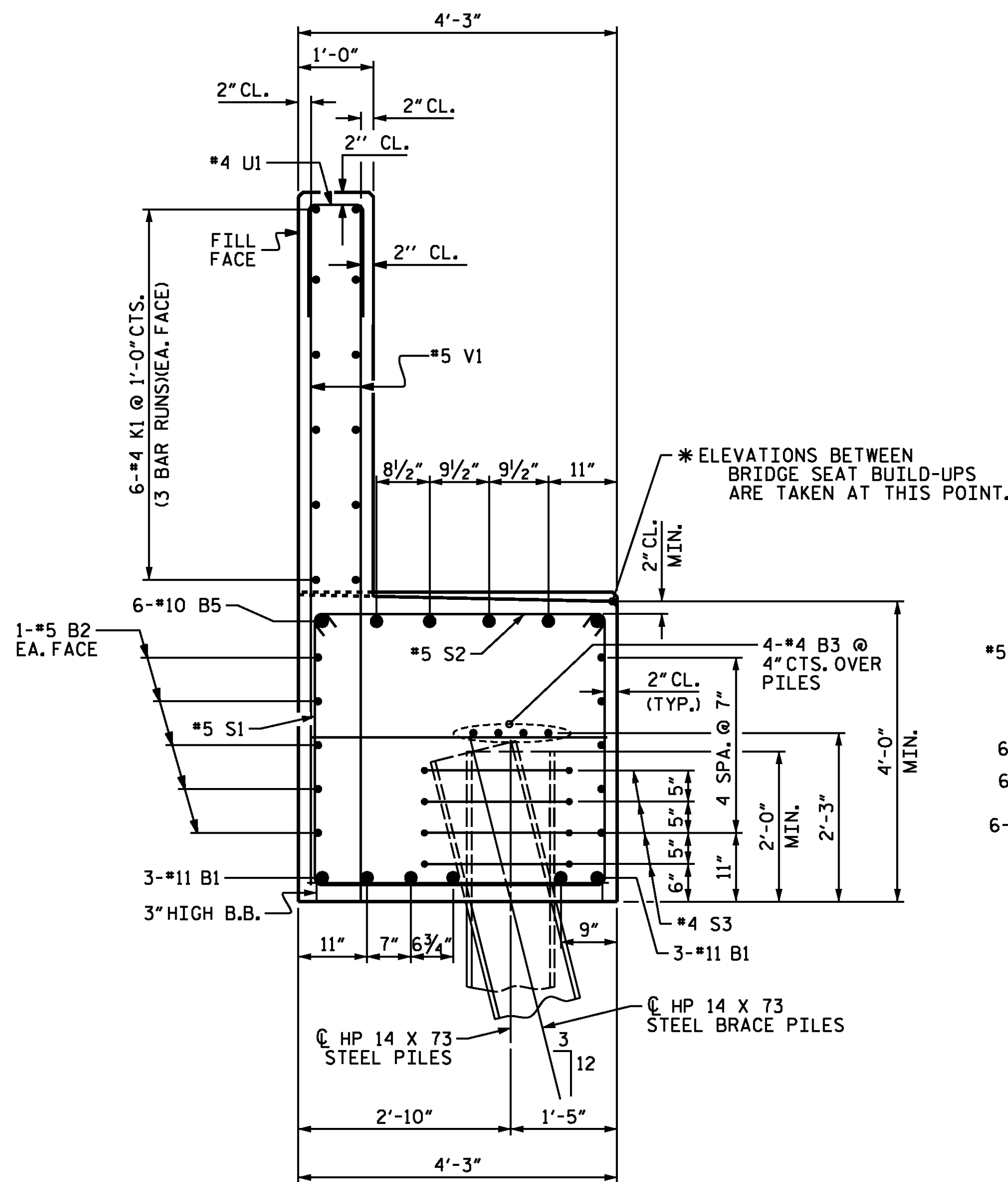
**TEMPORARY DRAINAGE AT END BENT**



**CORROSION PROTECTION FOR STEEL PILES DETAIL**

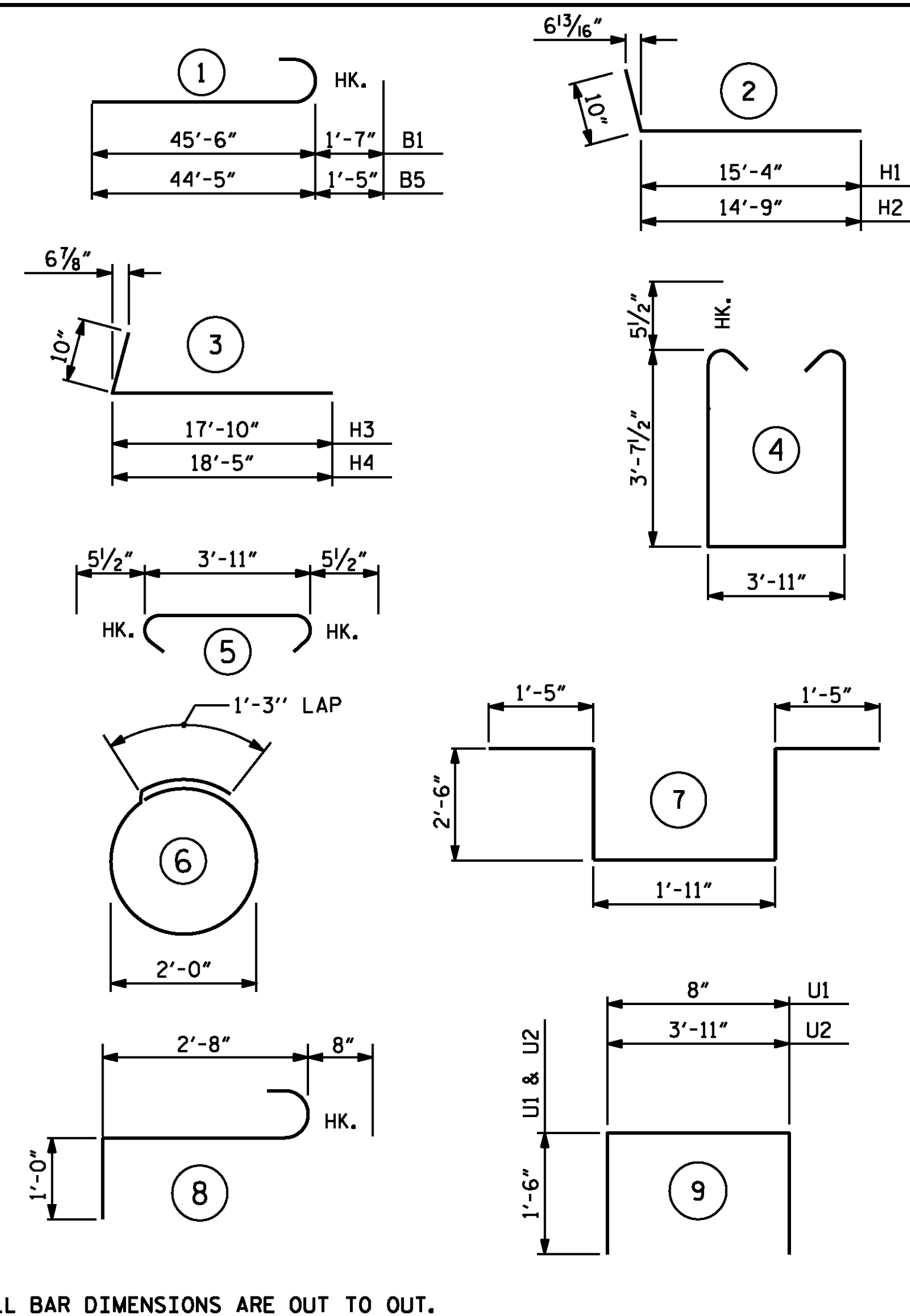


**PILE SPLICE DETAILS**



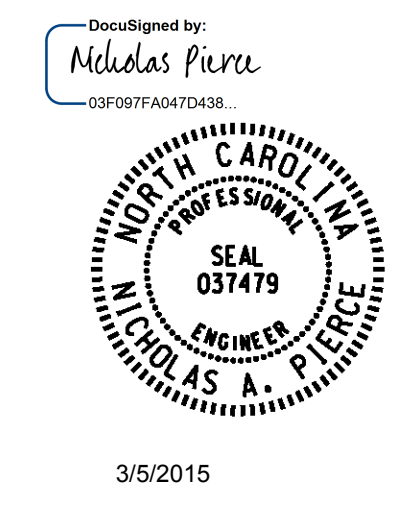
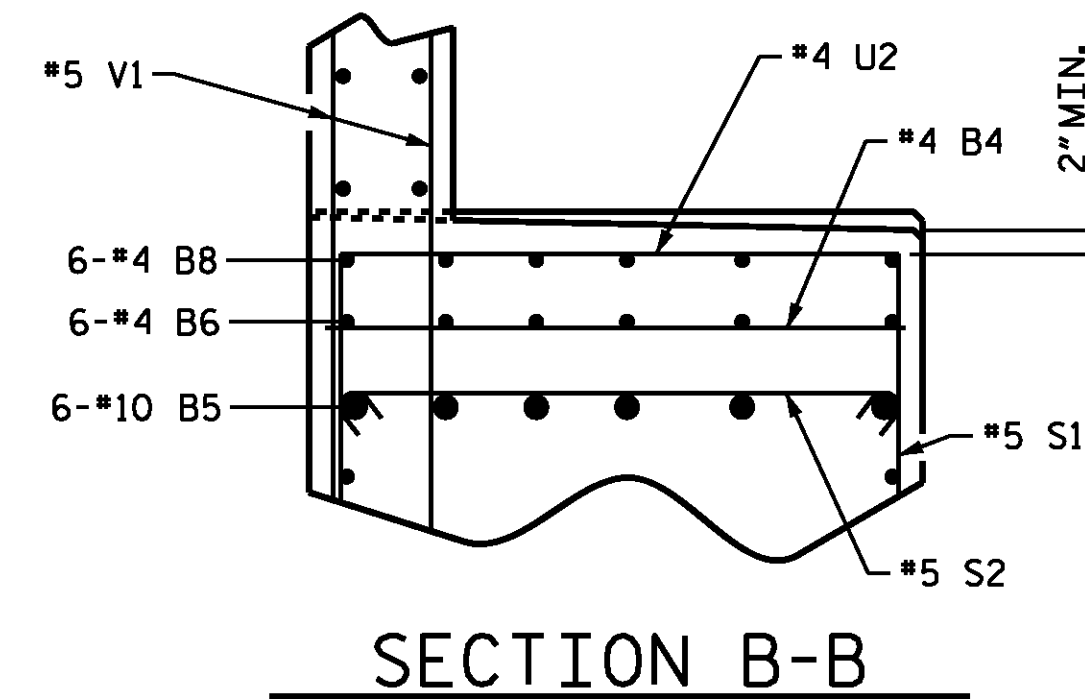
(CONCRETE COLLAR NOT SHOWN FOR CLARITY) (SEE "CORROSION PROTECTION FOR STEEL PILES DETAIL")

**BAR TYPES**



**BILL OF MATERIAL**

END BENT 1					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	12	#11	1	47'-1"	3,002
B2	20	#5	STR	40'-4"	841
B3	12	#4	STR	27'-4"	219
B4	30	#4	STR	3'-11"	78
B5	12	#10	1	45'-10"	2,367
B6	12	#4	STR	30'-10"	247
B7	6	#4	STR	17'-0"	68
B8	12	#4	STR	19'-3"	154
H1	13	#4	2	16'-2"	140
H2	13	#4	2	15'-7"	135
H3	18	#4	3	18'-8"	224
H4	18	#4	3	19'-3"	231
K1	36	#4	STR	27'-4"	657
K2	8	#4	STR	4'-5"	24
S1	146	#5	4	12'-1"	1,840
S2	126	#5	5	4'-10"	635
S3	40	#4	6	7'-7"	203
S4	12	#6	7	9'-9"	176
S5	6	#6	8	4'-4"	39
U1	67	#4	9	3'-8"	164
U2	58	#4	9	6'-11"	268
V1	134	#5	STR	9'-4"	1,304
V2	41	#5	STR	11'-2"	478
V3	47	#5	STR	12'-2"	596
REINFORCING STEEL					LBS. 14,090
CLASS A CONCRETE BREAKDOWN					
POUR #1 (CAP, LOWER WINGS, & CONCRETE COLLARS) C.Y. 67.0					
POUR #2 (BACKWALL & UPPER WINGS) C.Y. 28.0					
TOTAL CLASS A CONCRETE C.Y. 95.0					
HP 14 X 73 STEEL PILES					
No. = 12					240.0 LIN. FT.
STEEL PILE POINTS					12 EA.



PROJECT NO. B-5114  
RANDOLPH COUNTY  
STATION: 19+99.61-L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
SUBSTRUCTURE  
END BENT 1

DESIGN ENGINEER OF RECORD N.A. PIERCE	DATE 11/14
DRAWN BY : N.A. PIERCE	DATE : 11/14
CHECKED BY : M.J. OSTRISHKO	DATE : 11/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			36
2			4			