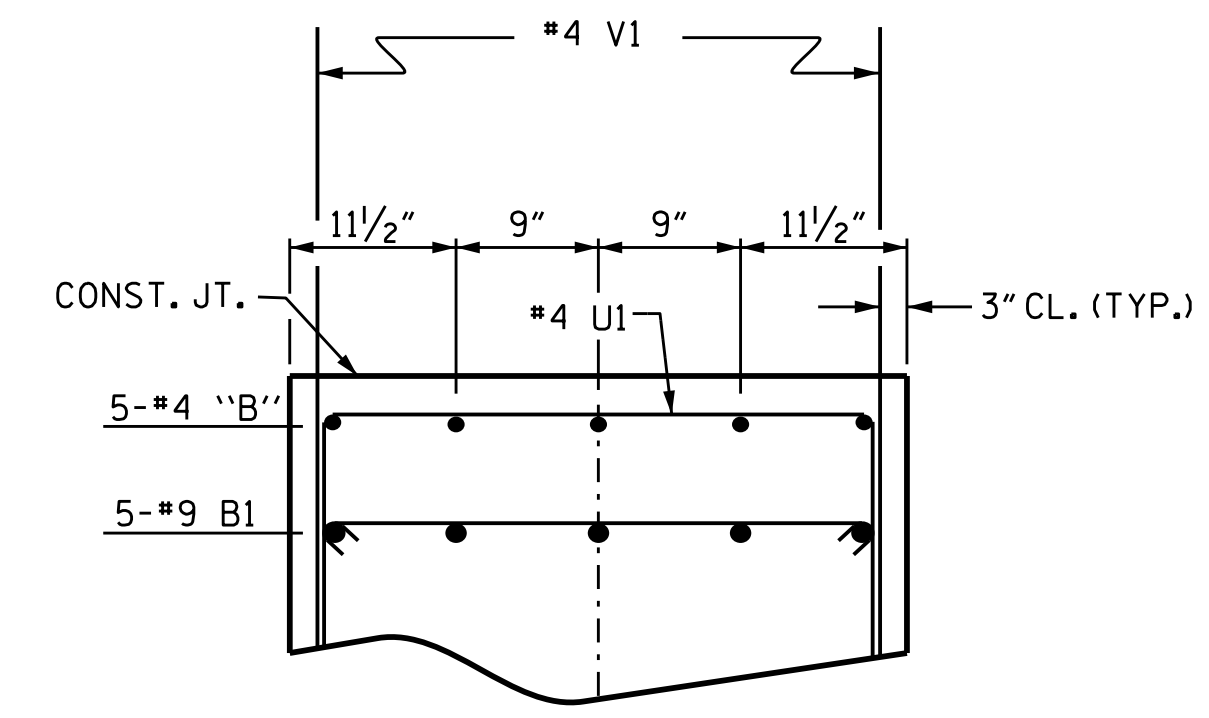
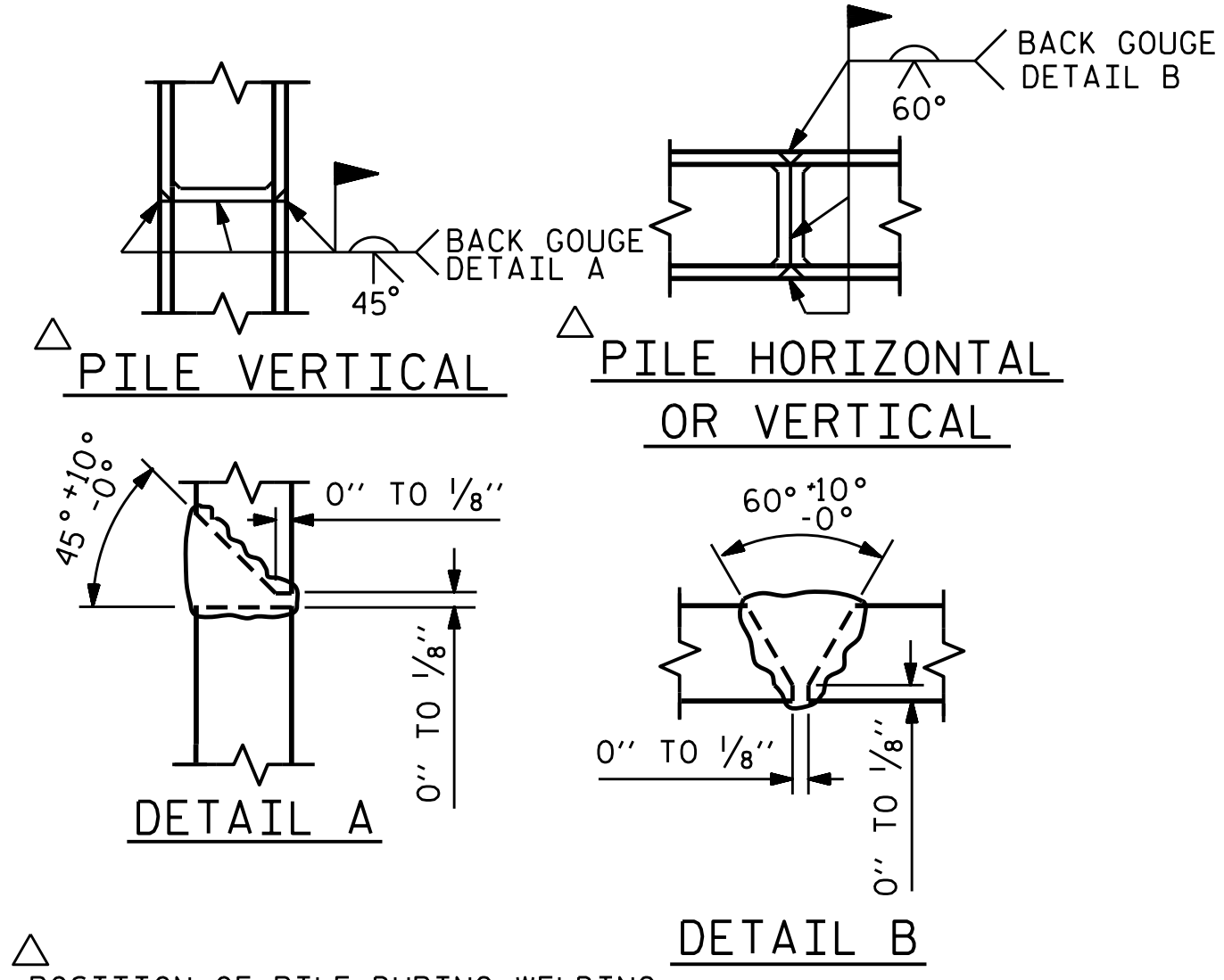


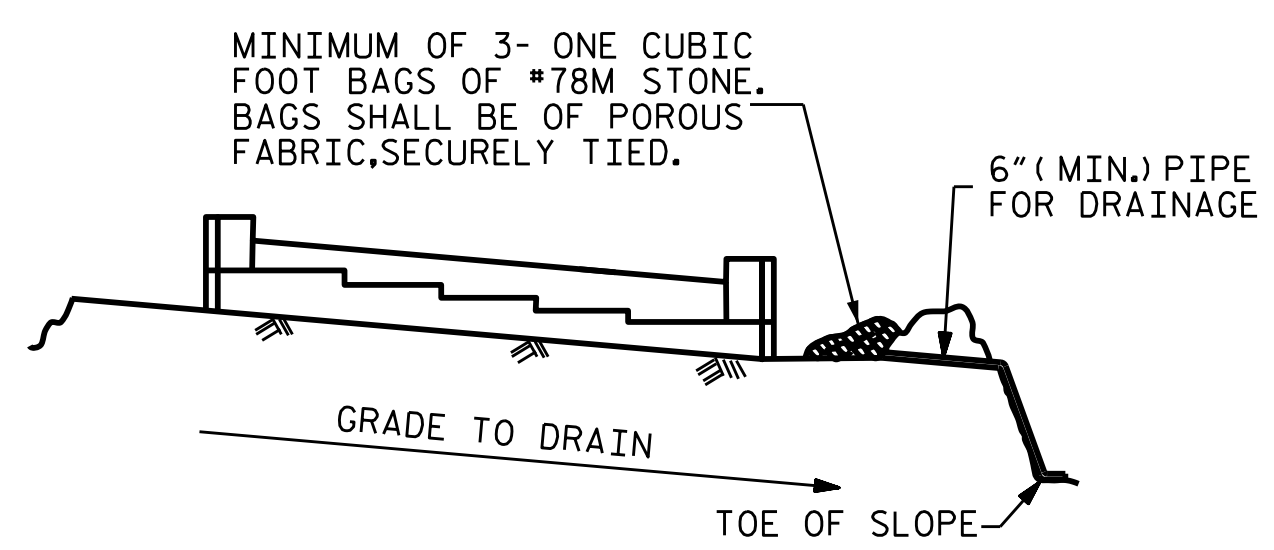
SECTION A-A



PARTIAL SECTION B-B



PILE SPLICE DETAILS



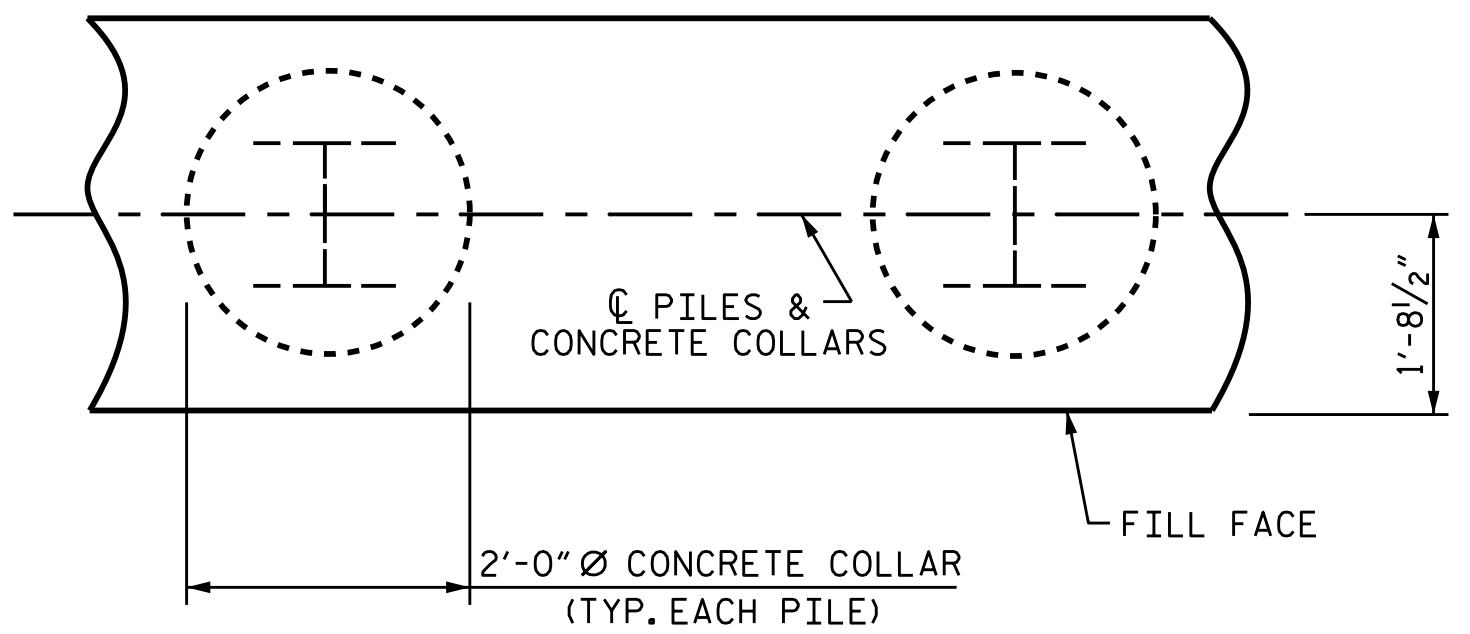
MINIMUM OF 3- ONE CUBIC FOOT BAGS OF #78M STONE. BAGS SHALL BE OF POROUS FABRIC, SECURELY TIED.

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.

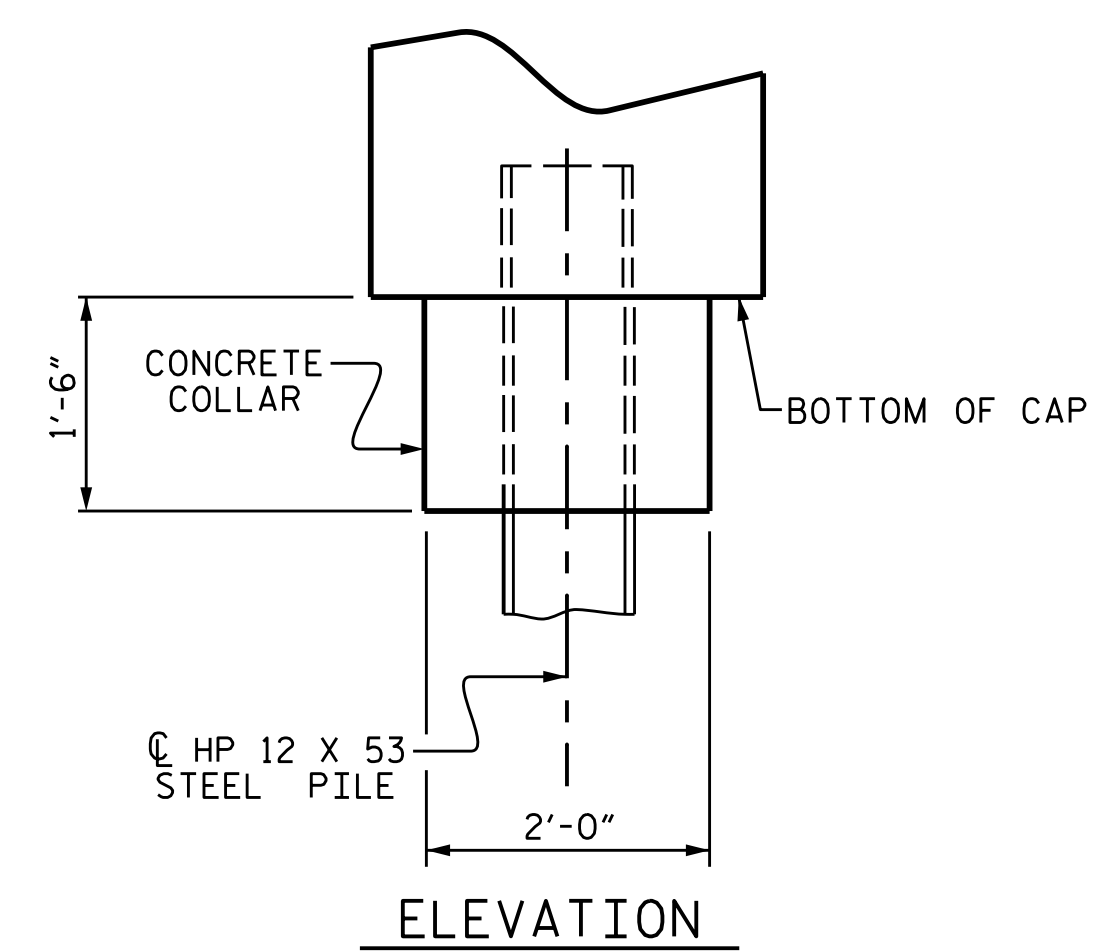
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

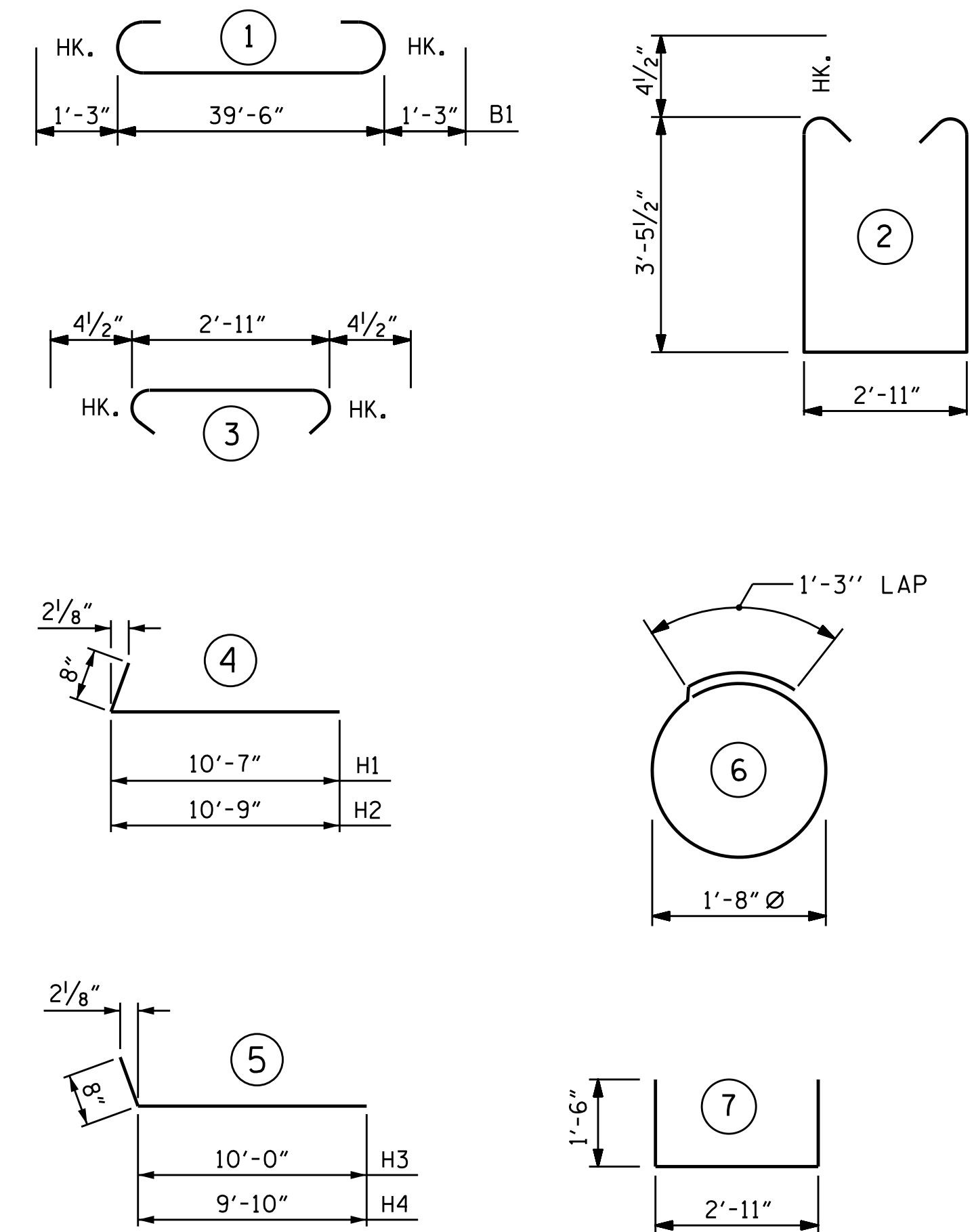


CORROSION PROTECTION FOR STEEL PILES DETAIL



ELEVATION

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
*B1	9	#9	1	42'-0"	1285
*B2	4	#9	STR	8'-9"	119
*B3	6	#5	STR	39'-8"	248
*B4	10	#4	STR	2'-11"	19
*B5	8	#4	STR	21'-1"	113
*B6	10	#4	STR	6'-6"	43
*B7	5	#4	STR	7'-0"	23
*H1	13	#5	4	11'-3"	153
*H2	13	#5	4	11'-5"	155
*H3	12	#5	5	10'-8"	134
*H4	12	#5	5	10'-6"	131
*K1	24	#4	STR	3'-4"	53
*S1	42	#4	2	10'-7"	297
*S2	42	#4	3	3'-8"	103
*S3	20	#4	6	6'-6"	87
*U1	15	#4	7	5'-11"	59
*V1	58	#4	STR	5'-0"	174
*V2	32	#4	STR	8'-1"	173
*V3	30	#4	STR	7'-6"	150

\* EPOXY COATED REINFORCING STEEL = 3519 LBS.

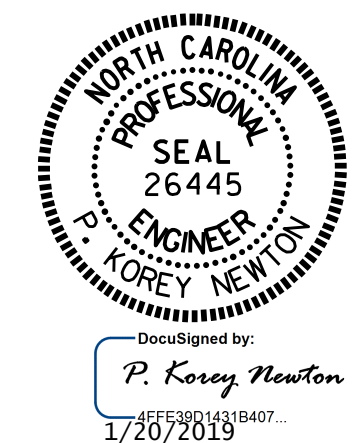
CLASS AA CONCRETE  
 POUR #1 (CAP, CONC, COLLARS, & LOWER PART OF WINGS) = 25.6 C.Y.  
 POUR #2 (UPPER PART OF WINGS) = 4.0 C.Y.  
 TOTAL = 29.6 C.Y.

HP 12 X 53 STEEL PILES  
 No. 5 \_\_\_\_\_ LIN FT. 325  
 PILE REDRIVES \_\_\_\_\_ EA. 5  
 STEEL PILE POINTS \_\_\_\_\_ NO. 5

PROJECT NO. R-5021  
 BRUNSWICK COUNTY  
 STATION: 369+42.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SUBSTRUCTURE  
 INTEGRAL  
 END BENT 1  
 (EBL)



REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-29	
1			3			TOTAL SHEETS	
2			4			38	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY: O. T. NGUYEN DATE: 5/17/18  
 CHECKED BY: M. K. BEARD DATE: 8/18  
 DESIGN ENGINEER OF RECORD: A. K. PATEL DATE: 1/10/19