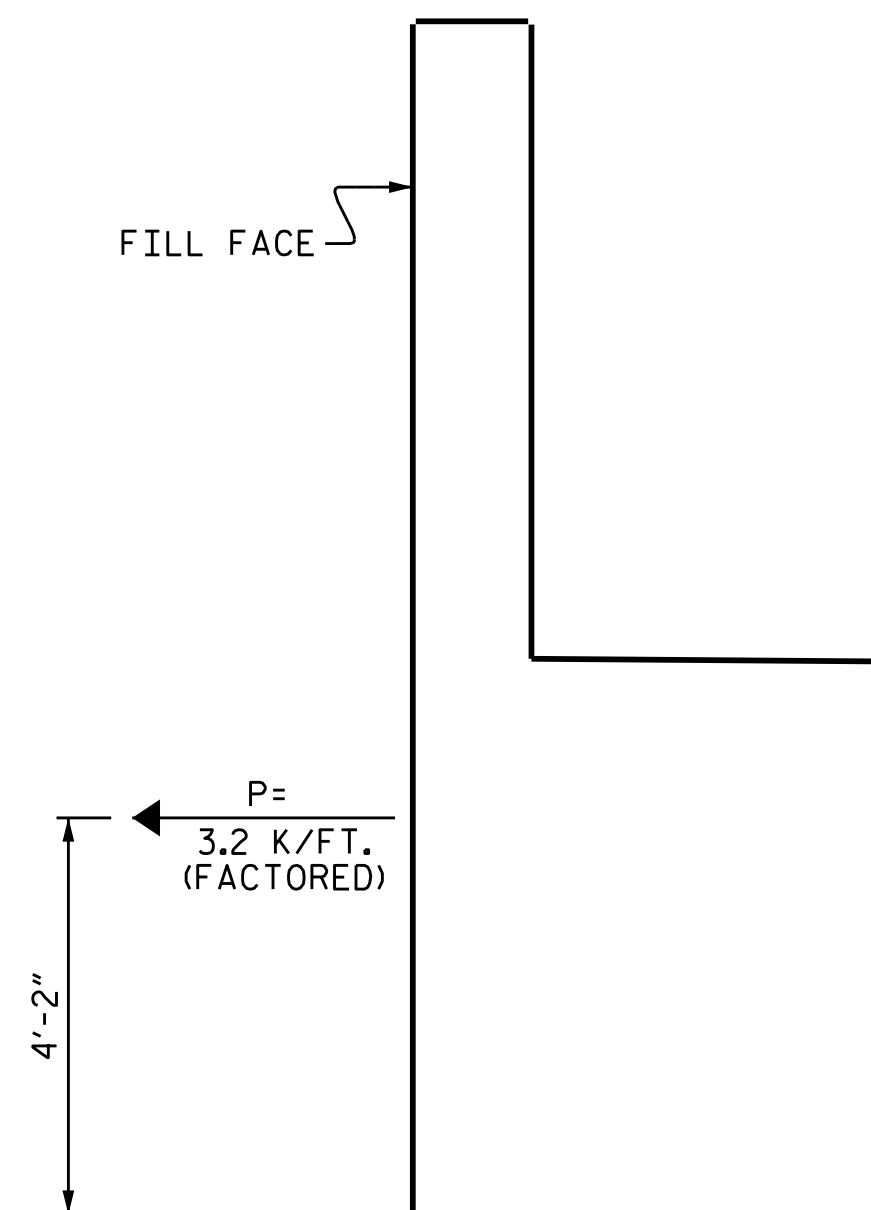


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

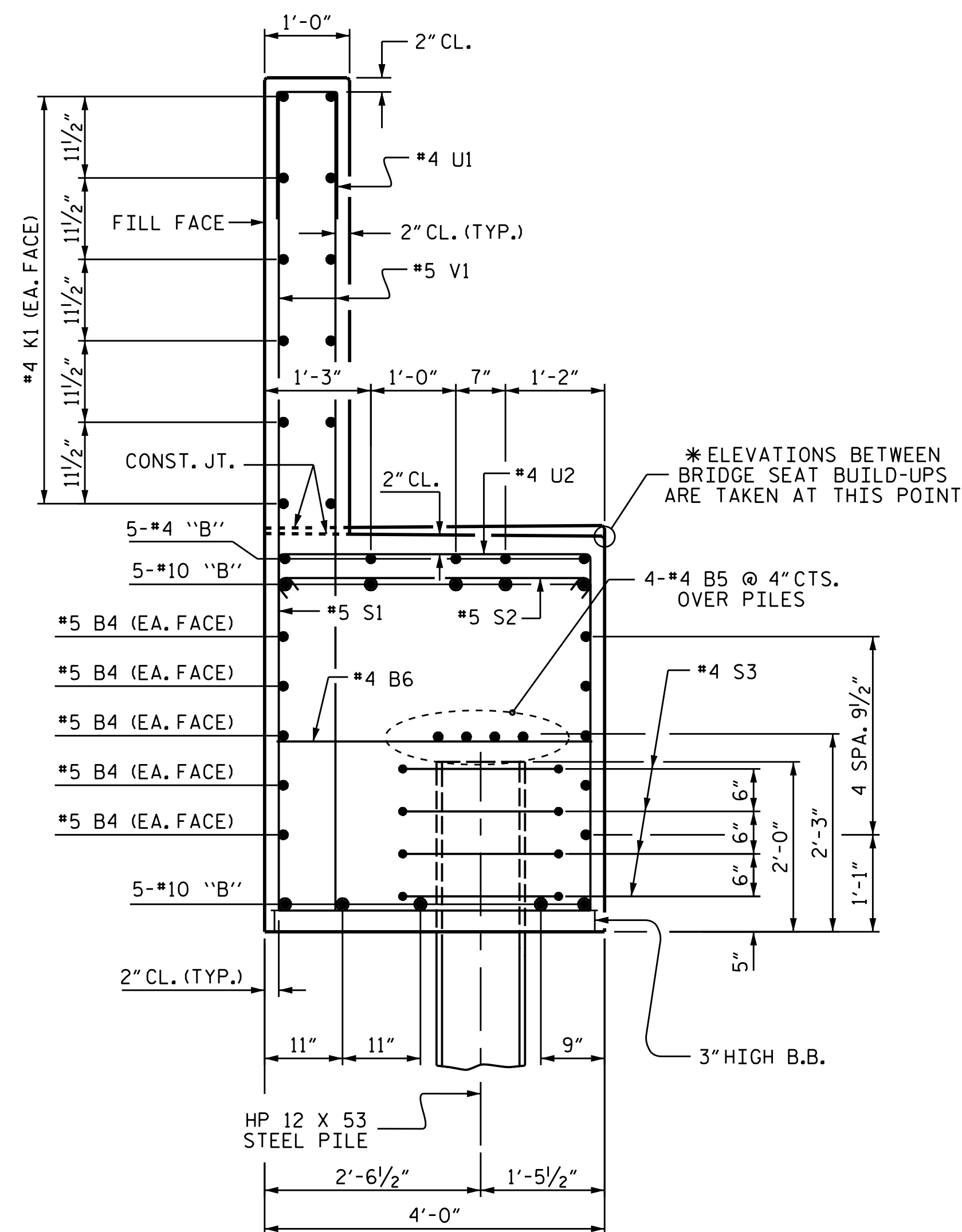
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT

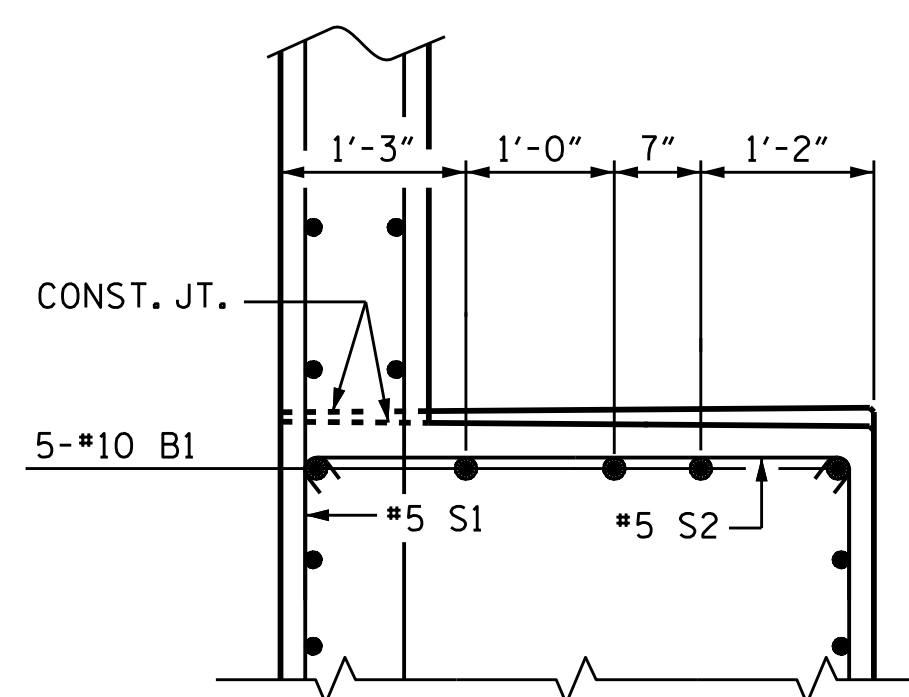


TIE BACK DETAILS

(DETAIL SHOWING TIE BACK RESTRAINT FOR END BENT)

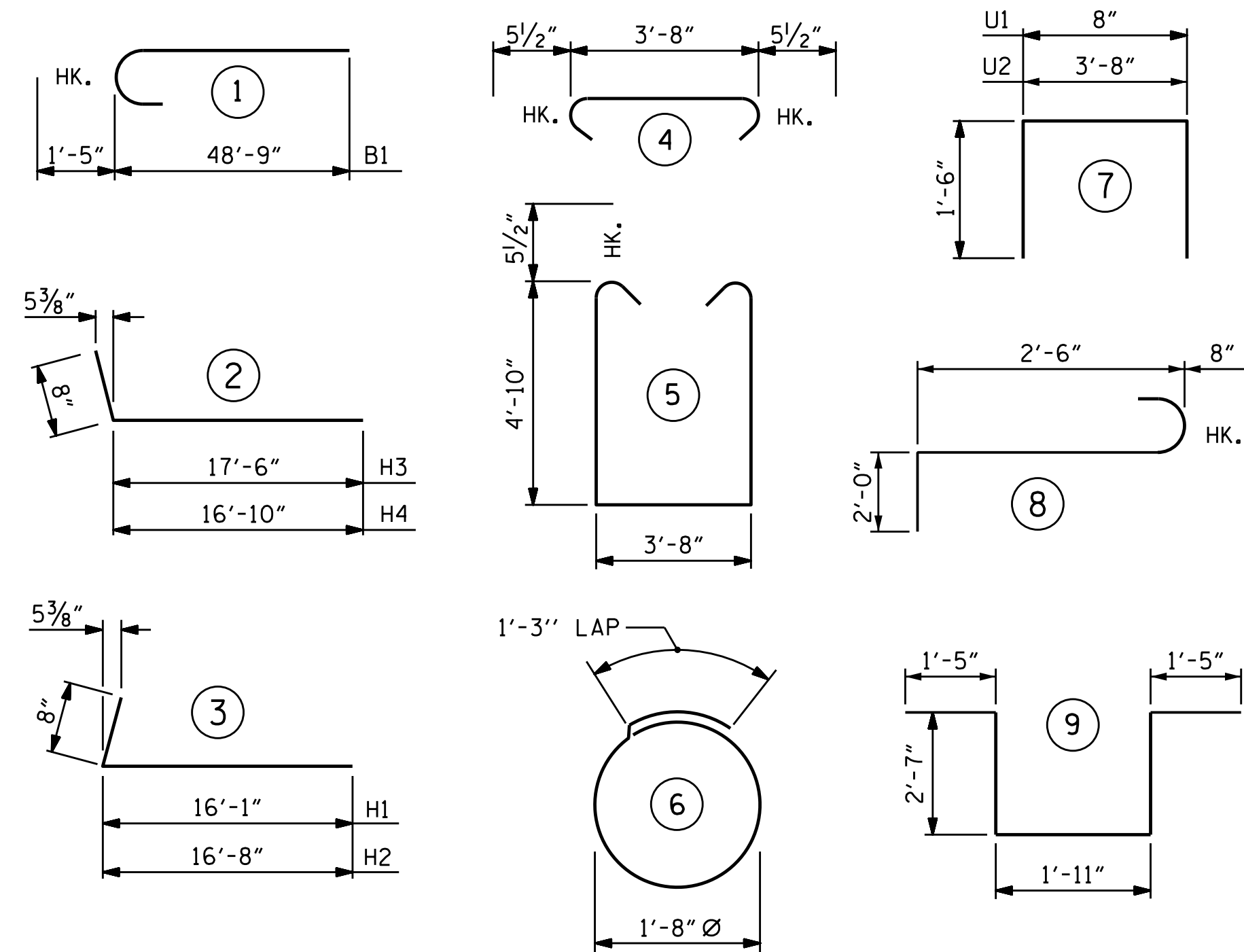


SECTION A-A



PARTIAL SECTION B

BAR TYPES



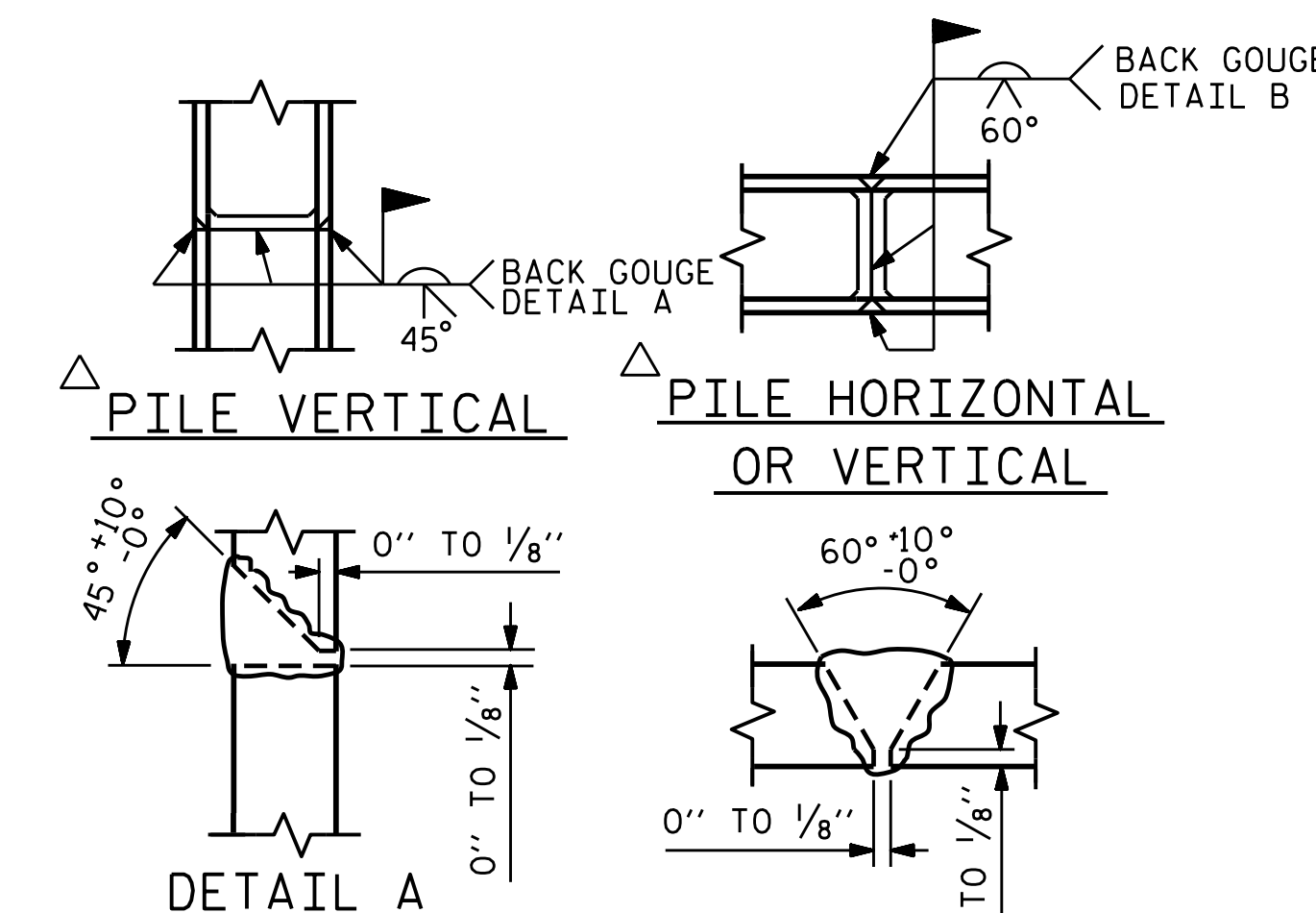
ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

END BENT 2

BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	20	#10	1	50'-2"	4317
B2	10	#10	STR	48'-9"	2098
B3	10	#10	STR	43'-0"	1850
B4	30	#5	STR	55'-10"	1747
B5	24	#4	STR	29'-0"	465
B6	40	#4	STR	3'-8"	98
B7	5	#4	STR	11'-1"	37
B8	45	#4	STR	14'-1"	423
H1	15	#5	3	16'-9"	262
H2	15	#5	3	17'-4"	271
H3	15	#5	2	18'-2"	284
H4	15	#5	2	17'-6"	274
K1	72	#4	STR	29'-0"	1435
K2	12	#4	STR	5'-6"	44
S1	151	#5	5	14'-3"	2244
S2	151	#5	4	4'-7"	722
S3	88	#4	6	6'-6"	382
S4	6	#6	8	5'-2"	47
S5	6	#6	9	9'-11"	89
U1	149	#4	7	3'-8"	365
U2	96	#4	7	6'-8"	428
V1	298	#5	STR	10'-6"	3264
V2	50	#5	STR	12'-6"	652
V3	20	#5	STR	12'-8"	264
V4	20	#5	STR	12'-10"	268
TOTAL REINFORCING STEEL					LBS. 22,330

CLASS A CONCRETE BREAKDOWN			
LEFT SIDE			
POUR #1 (CAP & LOWER PART OF WING)	C.Y.	67.7	
POUR #2 (BACKWALL & UPPER PART OF WING)	C.Y.	21.0	
RIGHT SIDE			
POUR #1 (CAP & LOWER PART OF WING)	C.Y.	71.0	
POUR #2 (BACKWALL & UPPER PART OF WING)	C.Y.	22.5	
CLASS A CONCRETE TOTAL	C.Y.	182.2	
HP 12 X 53 STEEL PILES NO. 24	LIN. FT.	1440	
PILE REDRIVES	EA.	11	



PILE SPLICE DETAILS

PROJECT NO. B-4490
CUMBERLAND COUNTY
 STATION: 29+57.01 -L-

SHEET 4 OF 4



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
 END BENT 2

DRAWN BY : A. SORSENGINH DATE : 3/2015
 CHECKED BY : J.P. ADAMS DATE : 8/2015
 DESIGN ENGINEER OF RECORD : A. SORSENGINH DATE : 9/2015

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S-39	
1			3			TOTAL SHEETS	84
2			4				