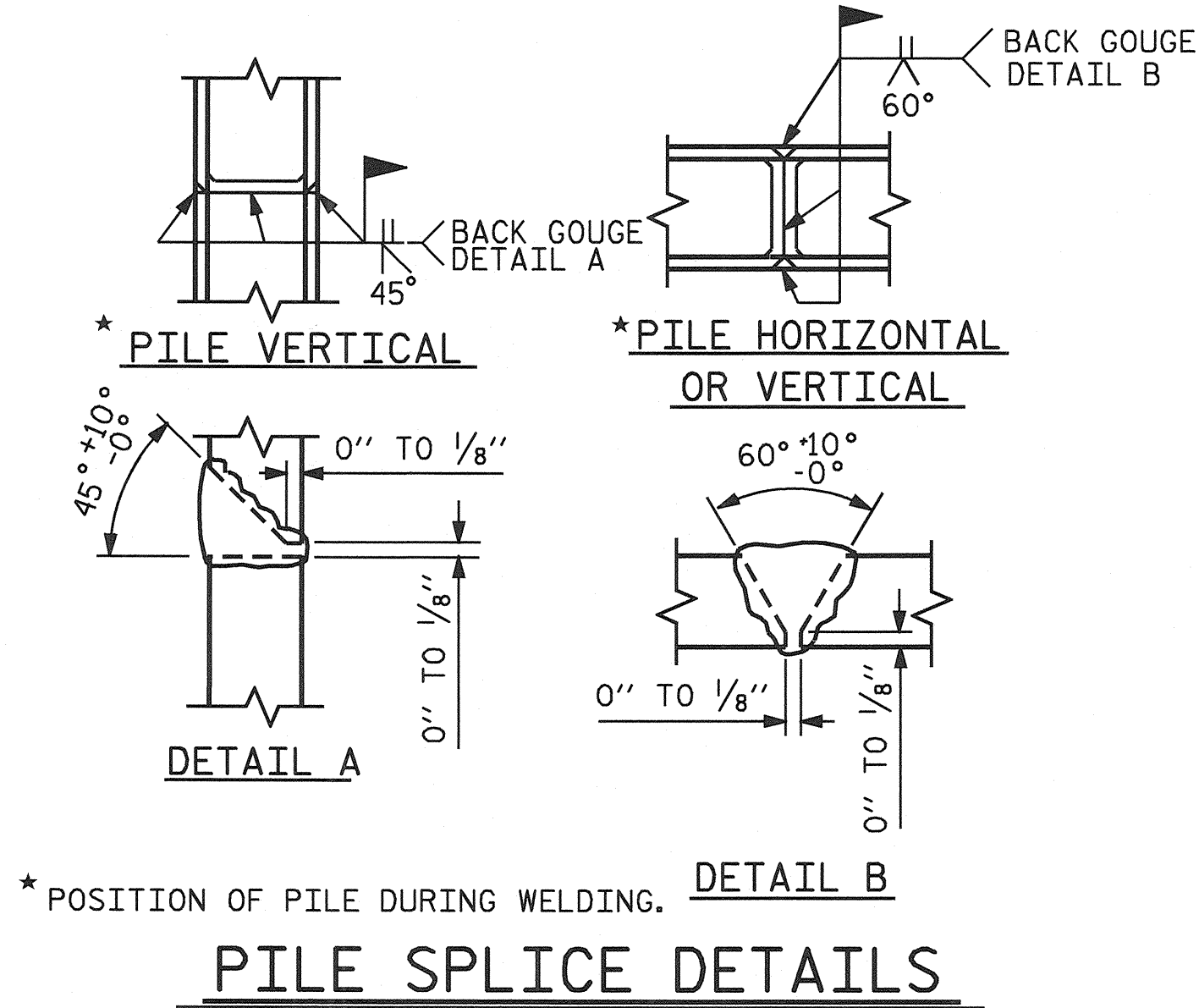


NOTE: NO SEPARATE PAYMENT WILL BE MADE FOR FURNISHING AND INSTALLING THE PVC PLASTIC PIPE DRAINS, HARDWARE CLOTH AND FASTENERS. THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

**PIPE DRAIN DETAILS**

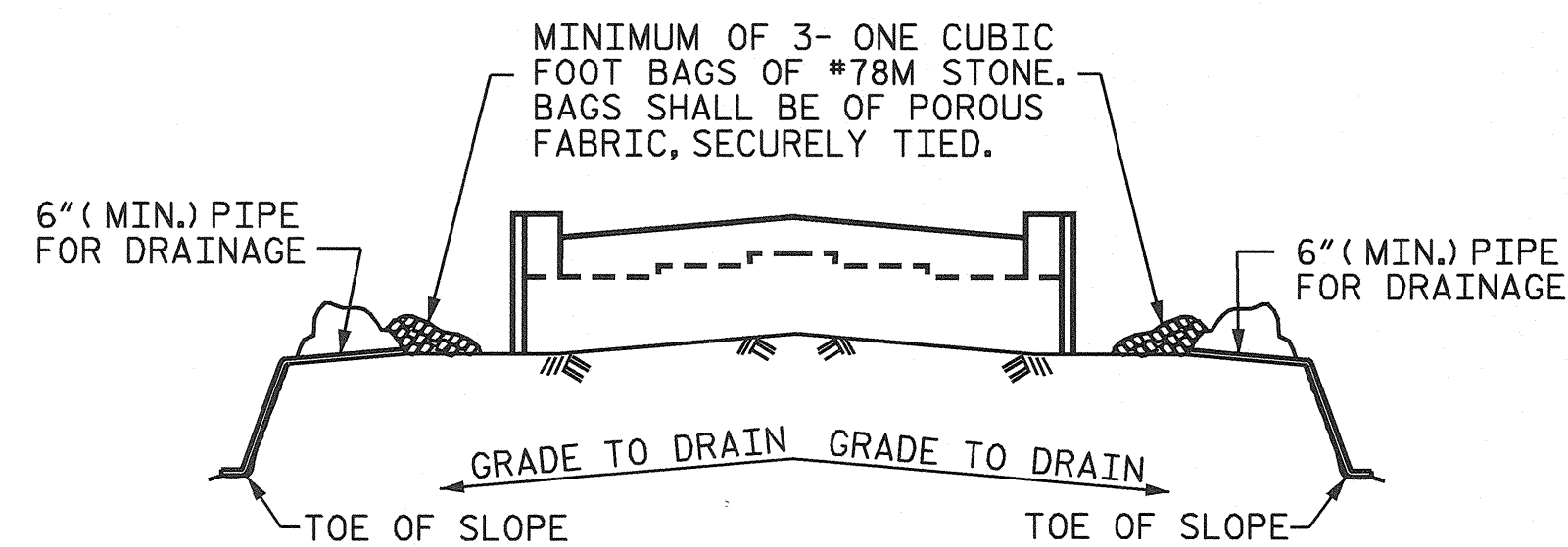


\* POSITION OF PILE DURING WELDING.

**PILE SPLICE DETAILS**

BAR TYPES					BILL OF MATERIAL				
END BENT No. 1									
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT				
B1	8	9	1	36'-0"	979				
B2	8	9	1	34'-9"	945				
B3	8	5	STR	31'-11"	266				
B4	12	4	STR	21'-11"	176				
B5	4	4	STR	19'-3"	51				
B6	15	4	STR	2'-8"	27				
H1	36	5	2	10'-9"	404				
K1	30	4	STR	21'-11"	439				
K2	8	4	STR	2'-6"	13				
S1	64	4	3	7'-8"	328				
S2	64	4	4	3'-5"	146				
S3	22	4	5	6'-6"	96				
U1	56	4	6	4'-8"	175				
U2	13	4	6	6'-8"	58				
V1	112	5	STR	6'-7"	769				
V2	56	5	STR	7'-9"	453				
REINFORCING STEEL					5,325	LBS.			
CLASS A CONCRETE BREAKDOWN :									
POUR #1 - (CAP & LOWER WINGS)					20.1	C.Y.			
POUR #2 - (BACKWALL & UPPER WINGS)					14.5	C.Y.			
TOTAL					34.6	C.Y.			
HP 12 x 53 STEEL PILES									
NO. = 11 LIN. FEET = 220									

ALL BAR DIMENSIONS ARE OUT TO OUT.

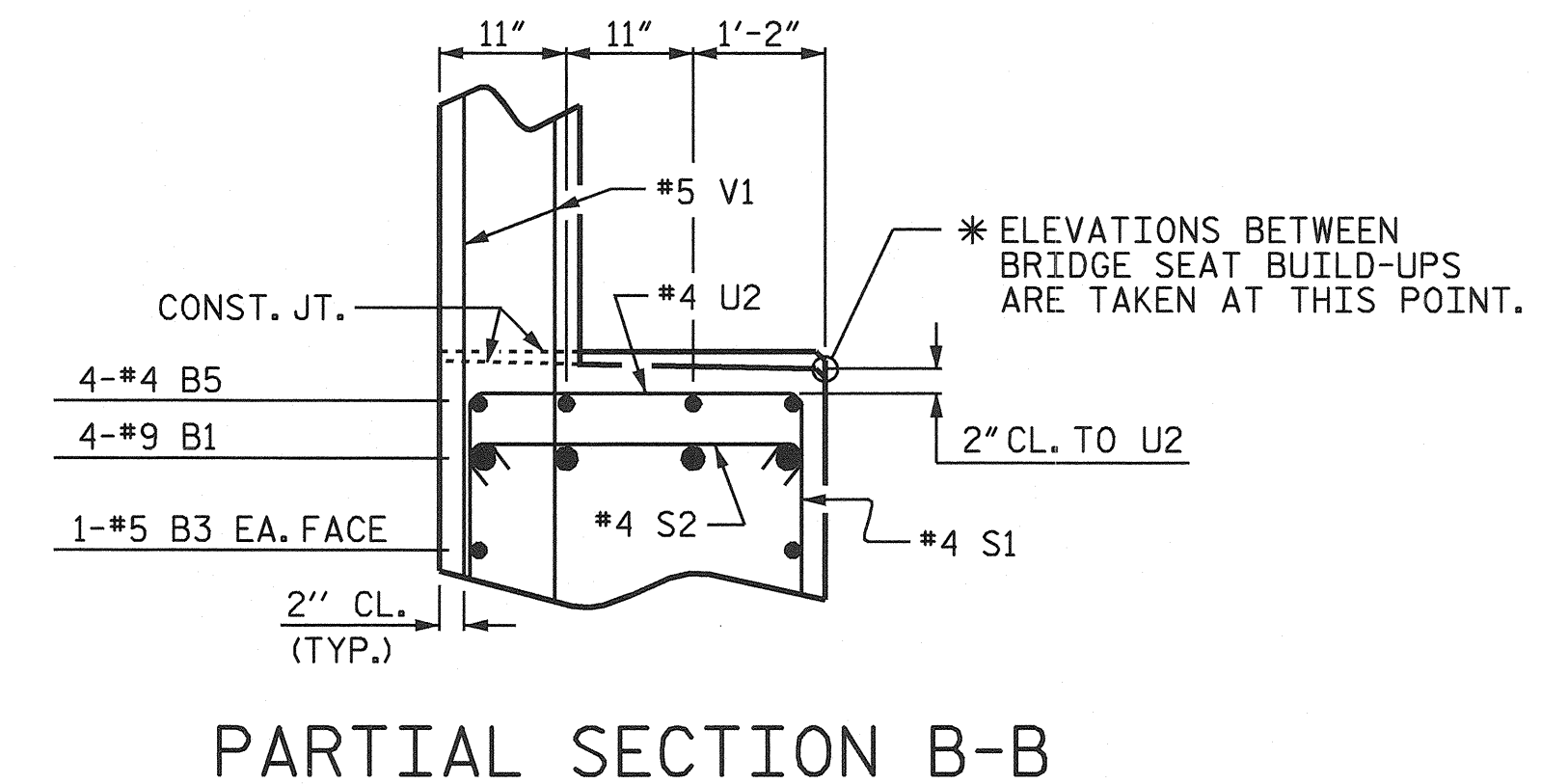
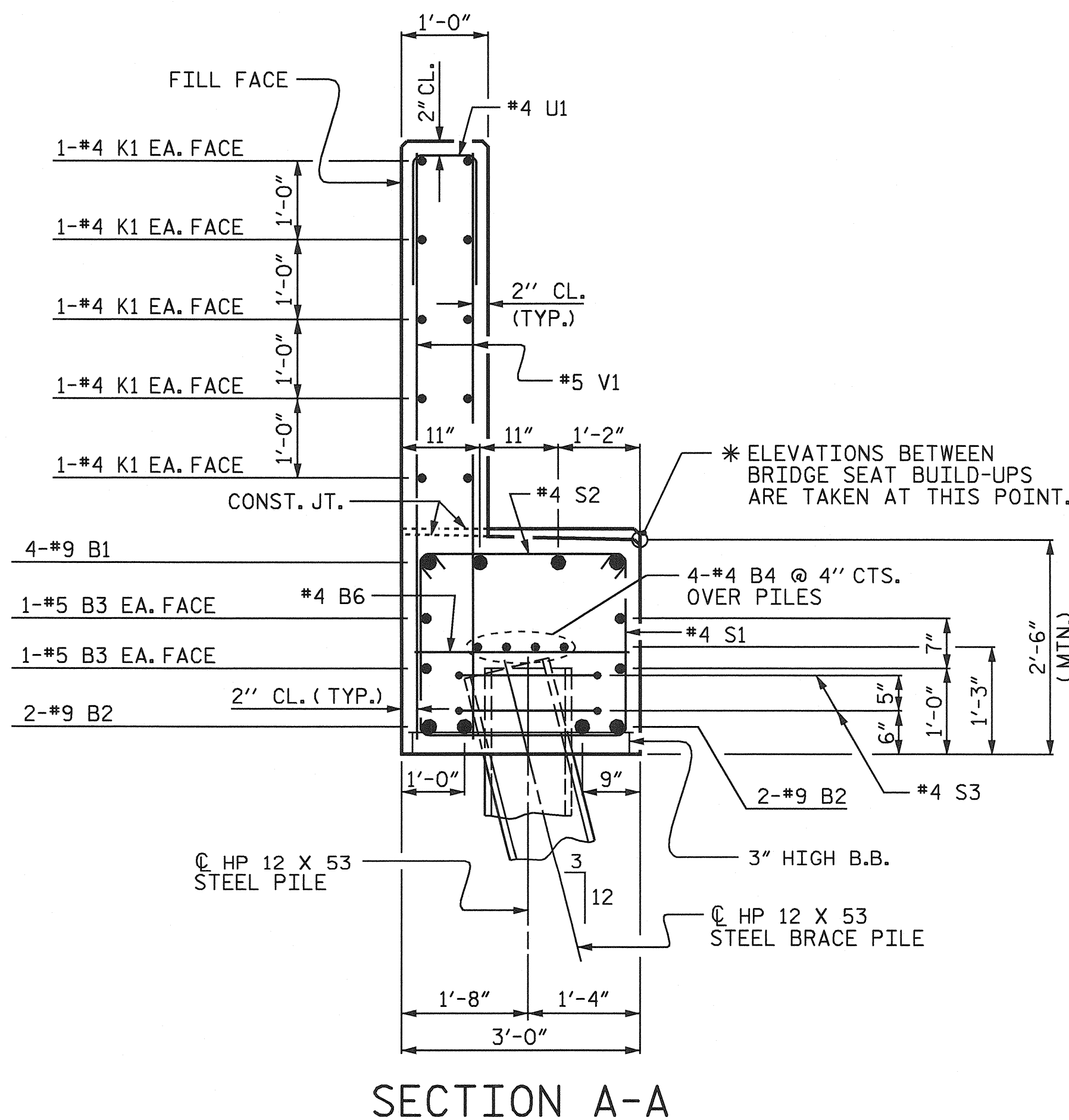


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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**



PROJECT NO. R-3427  
YADKIN COUNTY  
 STATION: 236+73.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

SUBSTRUCTURE  
 END BENT No. 1

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-20
1			3			TOTAL SHEETS
2			4			31



*Theo J. Beach* 8/13/14

DRAWN BY : P.C. BREWER DATE : 6/30/03  
 CHECKED BY : S.B. WILLIAMS DATE : 7/16/03