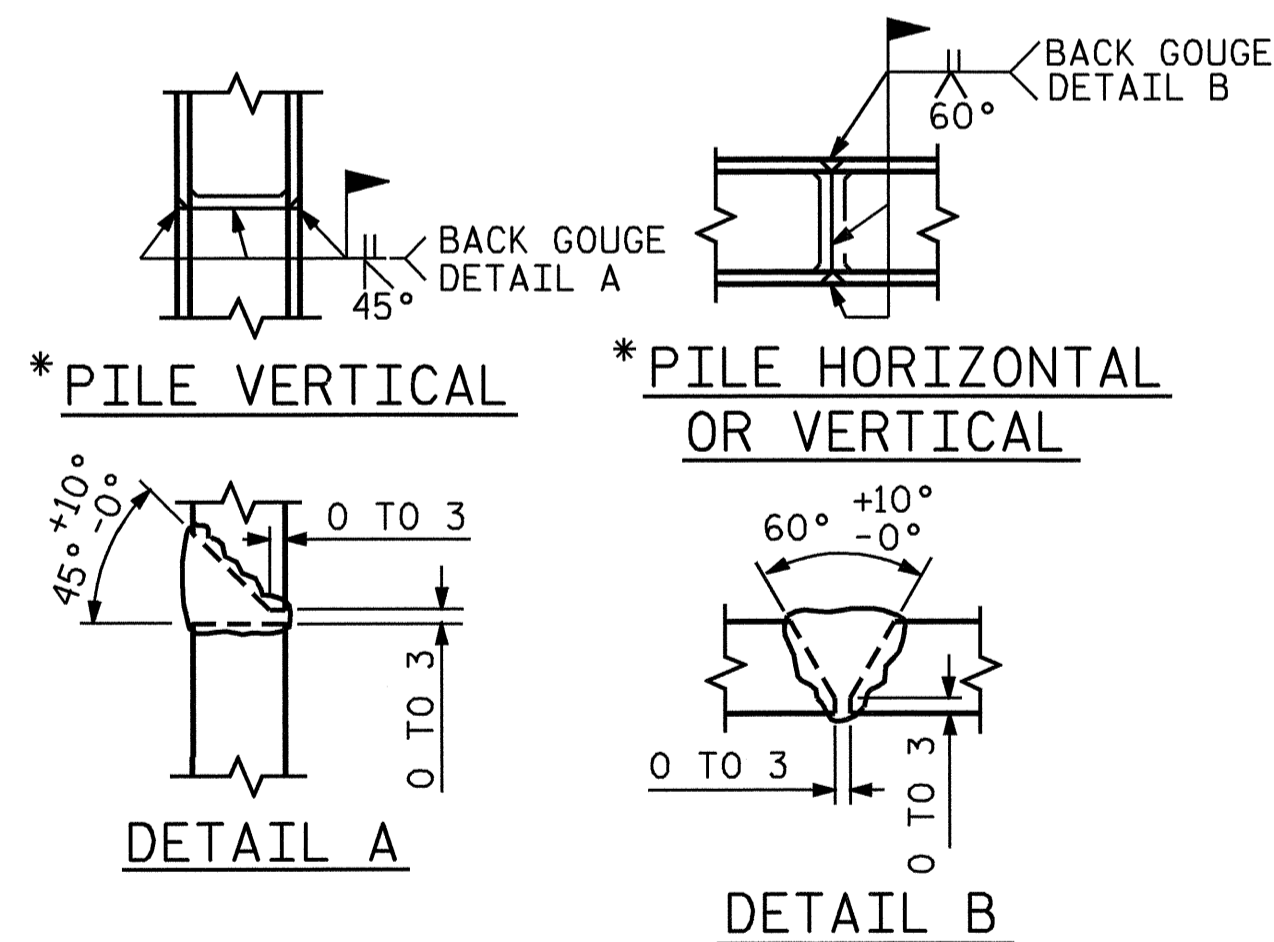


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

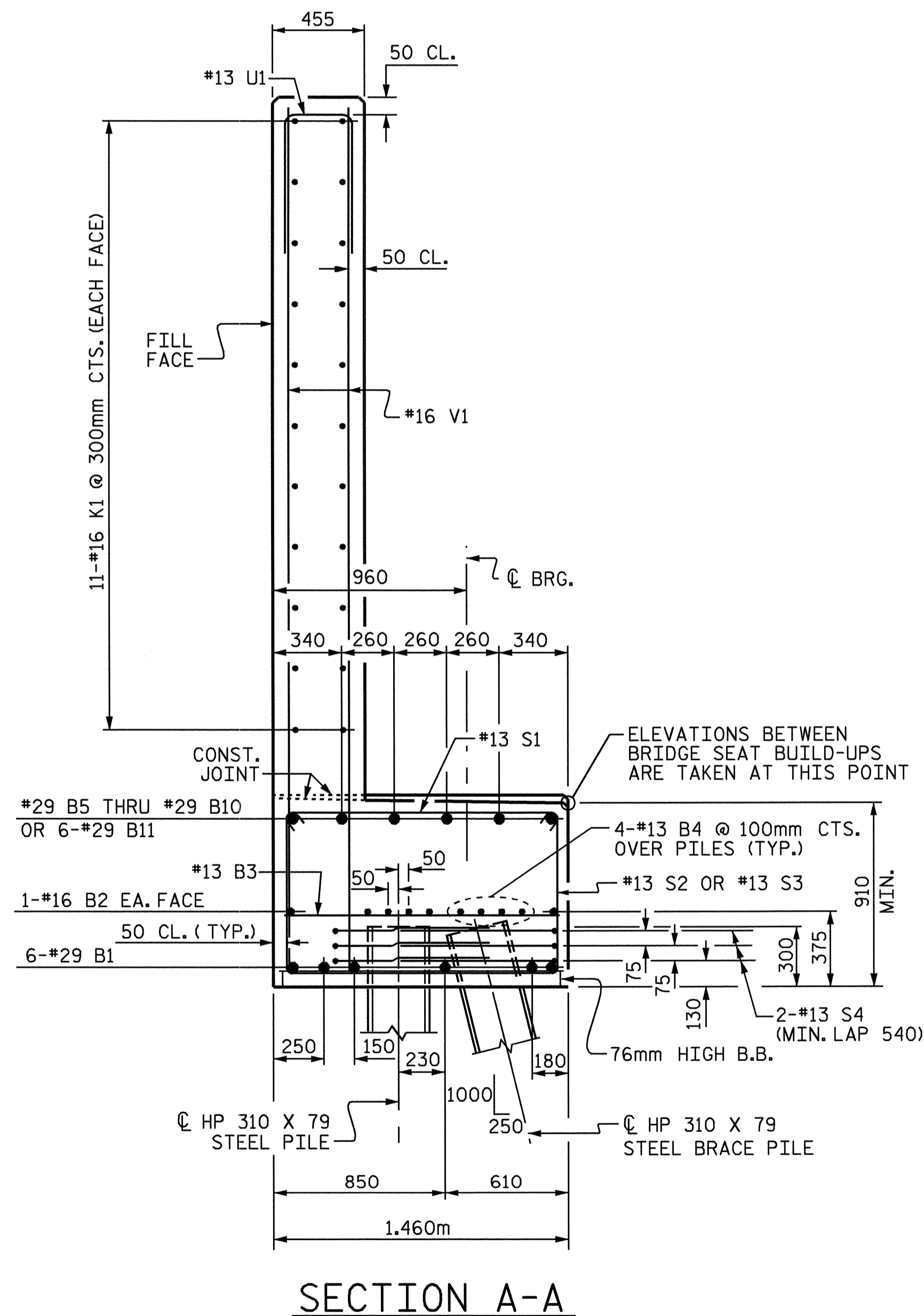
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT

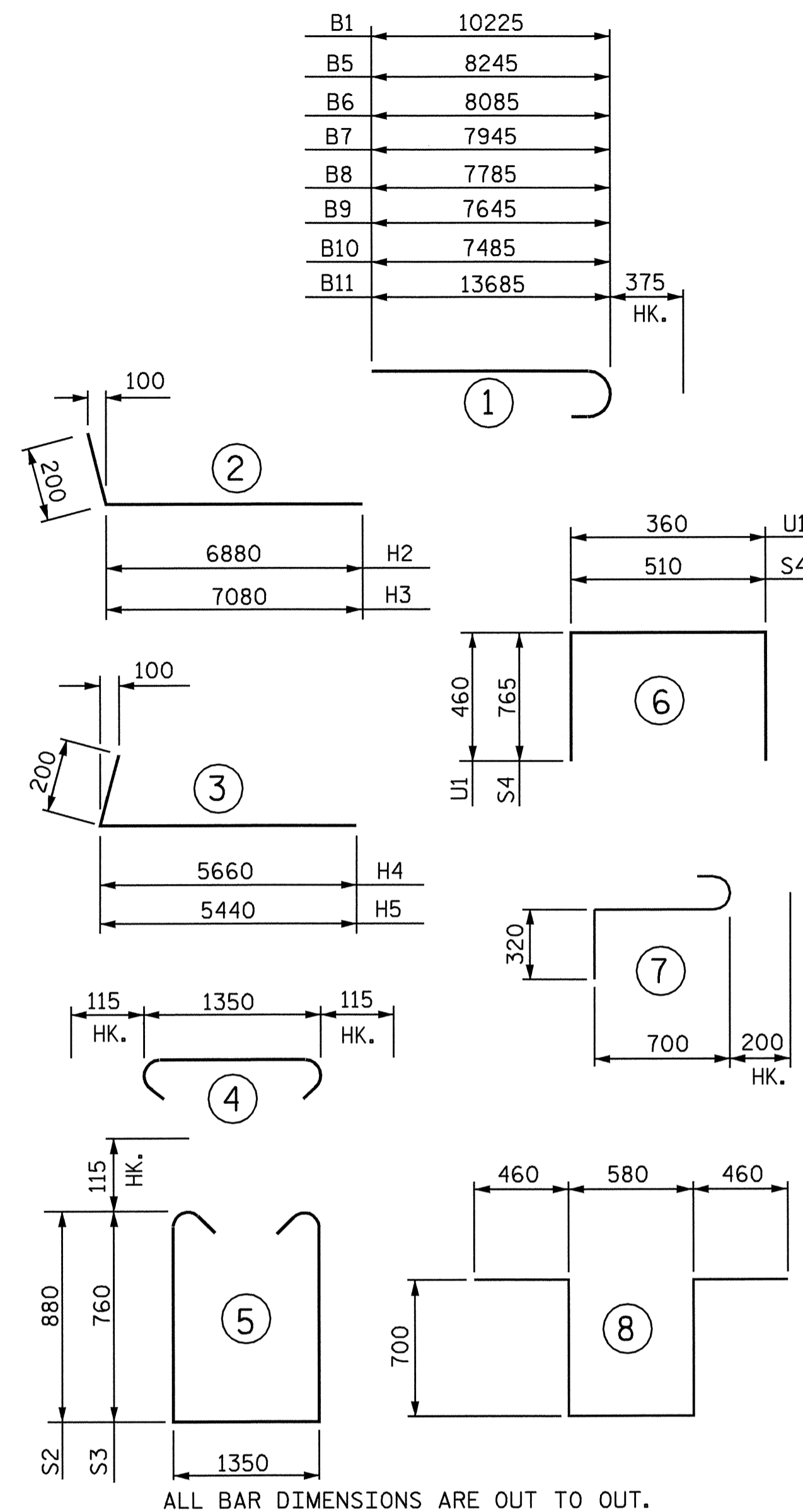


PILE SPLICE DETAILS

* POSITION OF PILE DURING WELDING.



BAR TYPES



BILL OF MATERIAL

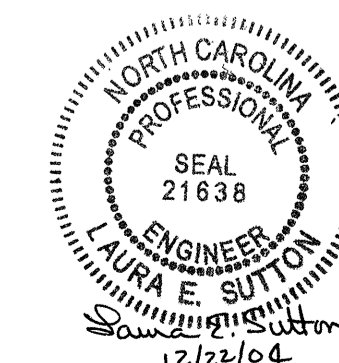
END BENT 2

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	12	#29	1	10600	644
B2	4	#16	STR	9760	61
B3	15	#13	STR	1360	20
B4	24	#13	STR	6700	160
B5	1	#29	1	8620	44
B6	1	#29	1	8460	43
B7	1	#29	1	8320	42
B8	1	#29	1	8160	41
B9	1	#29	1	8020	41
B10	1	#29	1	7860	40
B11	6	#29	1	14060	427
H1	4	#16	STR	1000	6
H2	16	#16	2	7080	176
H3	16	#16	2	7280	181
H4	16	#16	3	5860	146
H5	16	#16	3	5640	140
K1	44	#16	STR	9760	666
S1	74	#13	4	1580	116
S2	28	#13	5	3340	93
S3	46	#13	5	3100	142
S4	60	#13	6	2040	122
S5	6	#19	7	1220	16
S6	1	#19	8	2900	13
S7	8	#16	STR	1000	12
U1	54	#13	6	1280	69
V1	108	#16	STR	4100	687
V2	52	#16	STR	4620	373
V3	42	#16	STR	4540	296
REINFORCING STEEL					4897 kg
CLASS A CONCRETE BREAKDOWN					
POUR #1 (CAP & WINGS)					32.6 C.M.
POUR #2 (BACKWALL & WINGS)					47.6 C.M.
TOTAL					80.2 C.M.
HP 310 x 79 STEEL PILES					330 METERS

PROJECT NO. R-0977A
CHEROKEE COUNTY
 STATION: 16+02.300-LC1B-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE
 END BENT 2



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			230
2			4			

DRAWN BY: A.S. CALLAWAY DATE: 8/23/04
 CHECKED BY: A.K. PATEL DATE: 9/22/04