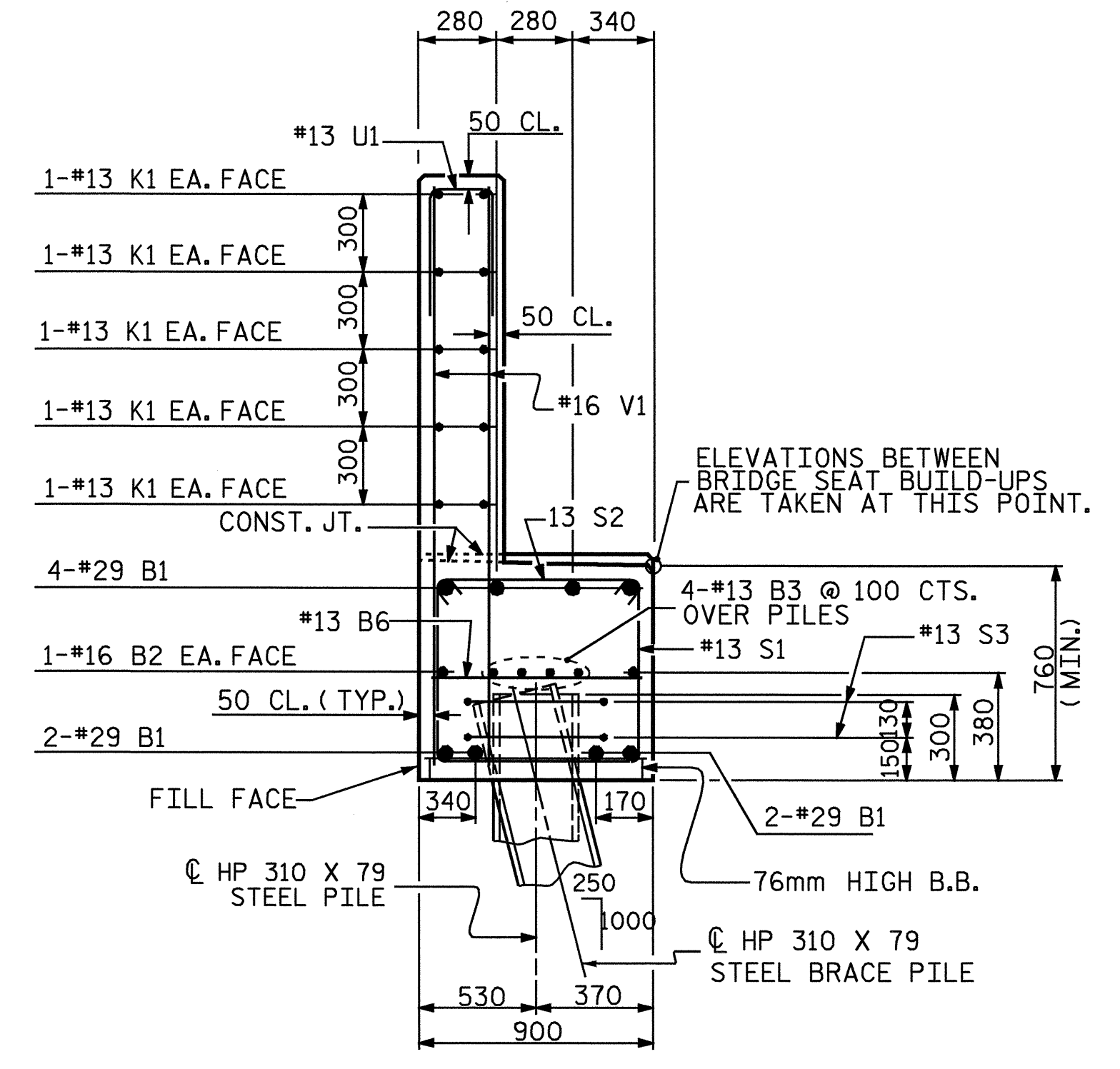


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

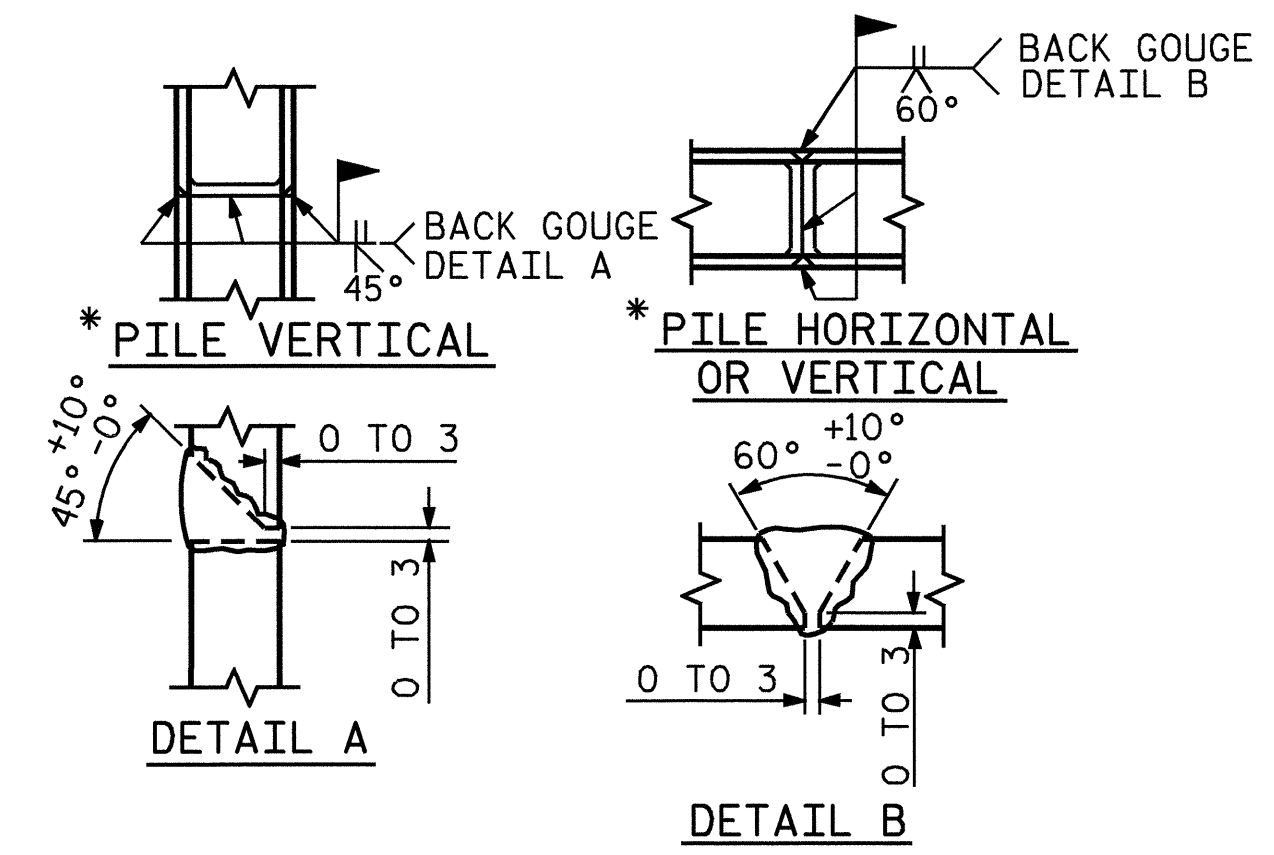
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

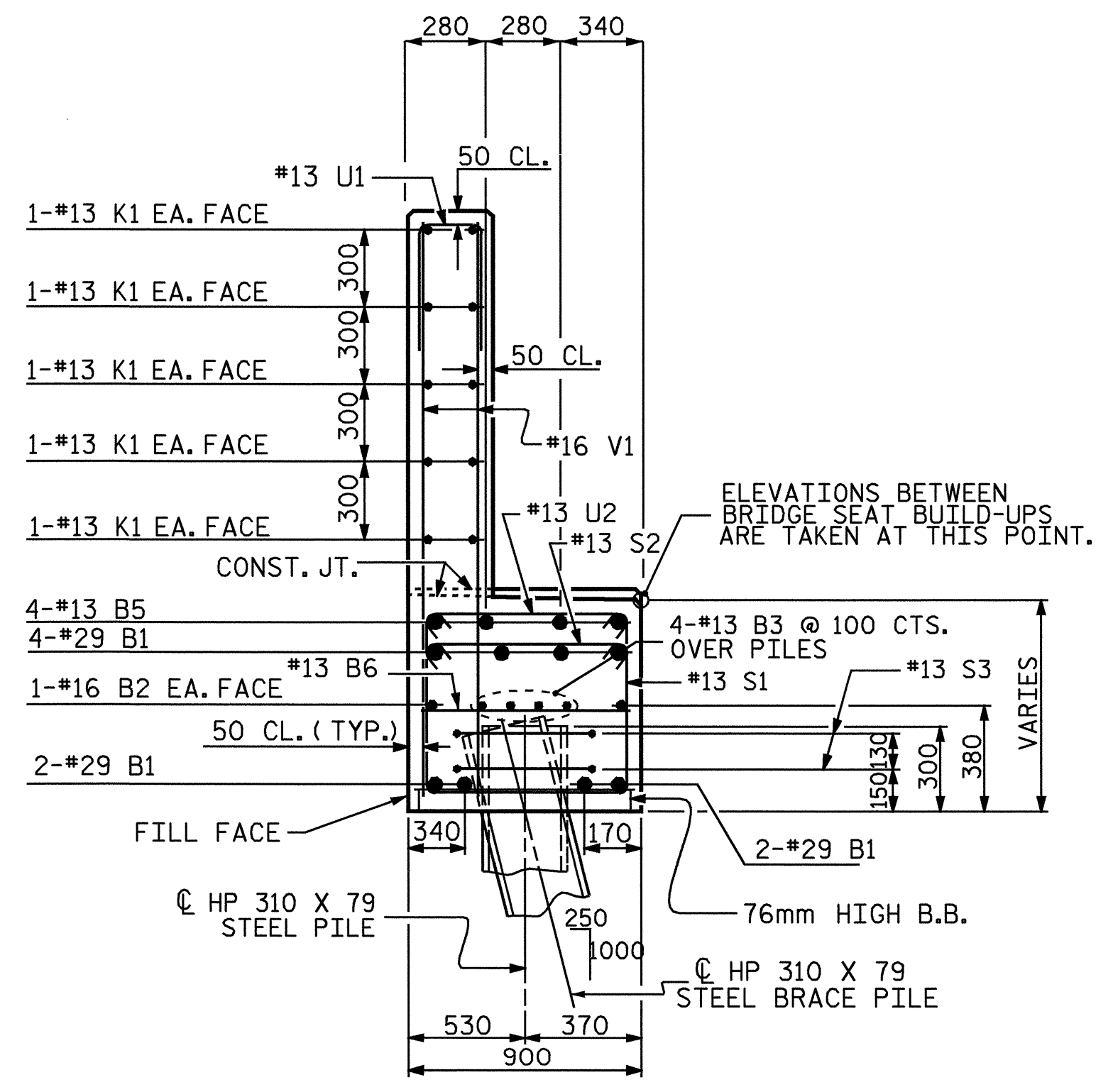


**SECTION A-A**



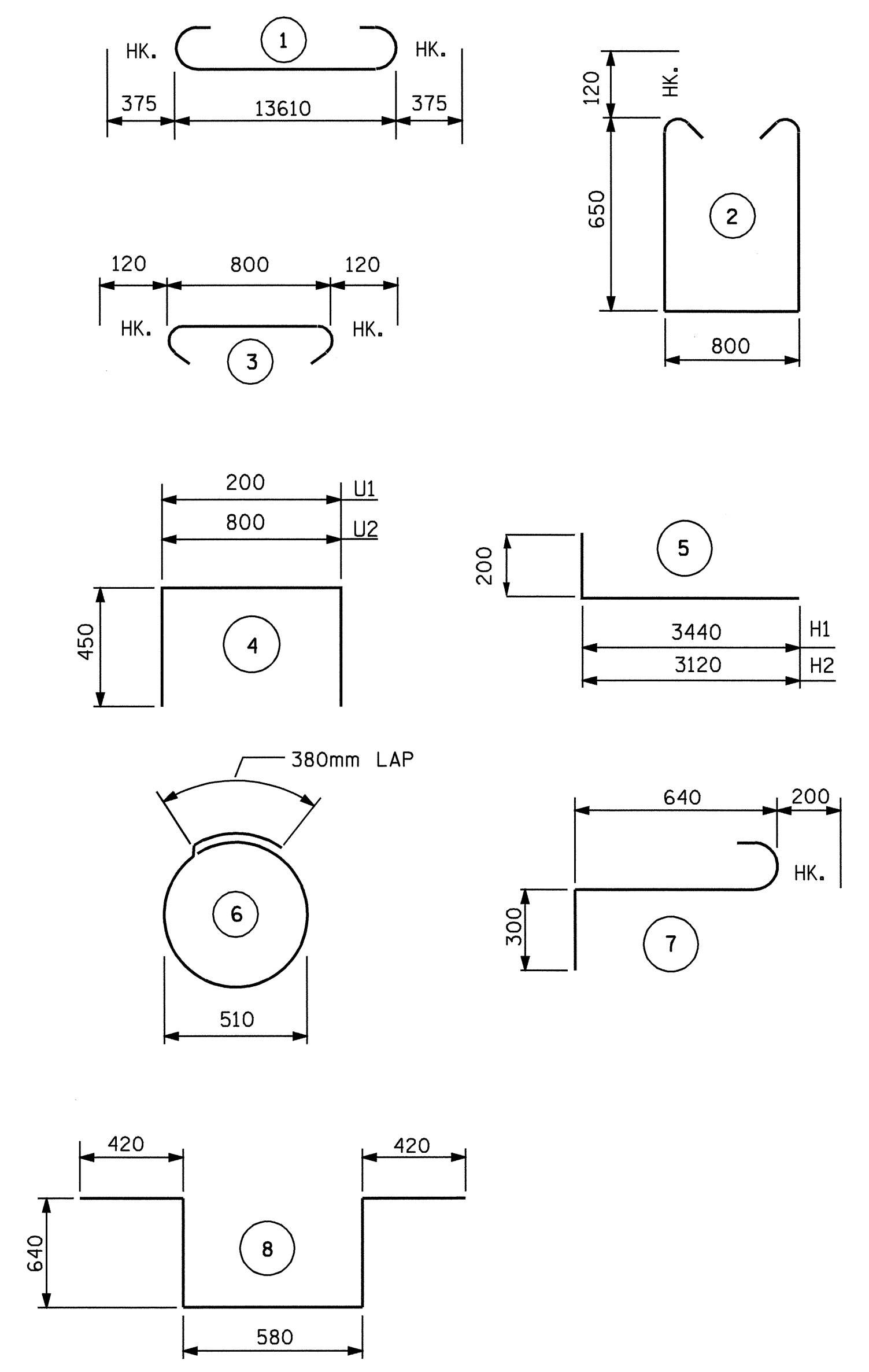
\* POSITION OF PILE DURING WELDING.

**PILE SPLICE DETAILS**



**SECTION B-B**

**BAR TYPES**



ALL BAR DIMENSIONS ARE OUT TO OUT.

**BILL OF MATERIAL**

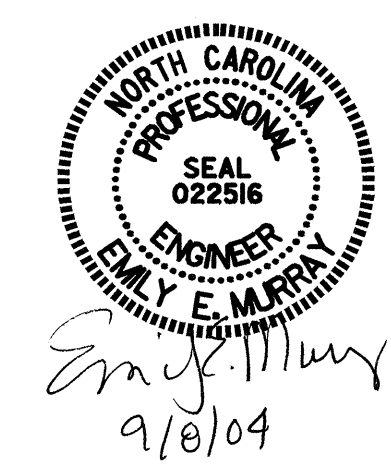
END BENT #1					
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT	
B1	8	29	1	14360	581
B2	2	16	STR	13640	42
B3	8	13	STR	7200	57
B4	8	13	STR	1000	8
B5	4	13	STR	7320	29
B6	11	13	STR	800	9
H1	20	16	5	3640	113
H2	20	16	5	3320	103
K1	20	13	STR	7200	143
K2	8	13	STR	840	7
S1	42	13	2	2340	98
S2	42	13	3	1040	43
S3	18	13	6	1980	35
S4	1	19	8	2700	6
S5	3	19	7	1140	8
U1	40	13	4	1100	44
U2	22	13	4	1700	37
V1	80	16	STR	2060	256
V2	32	16	STR	2660	132
V3	30	16	STR	2440	114
TOTAL REINFORCING STEEL				KG	1865

CLASS A CONCRETE BREAKDOWN	
POUR #1 CAP & LOWER WINGS & WING PILE BLOCK	12.5 CU. METERS
POUR #2 BACKWALL & UPPER WINGS	9.7 CU. METERS
<b>CLASS A CONCRETE TOTAL</b>	<b>22.2 CU. METERS</b>

HP 310 X 79 STEEL PILES NO. 10	METERS 110.0
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PROJECT NO. R-2206C  
LINCOLN-CATAWBA COUNTY  
 STATION: 199+48.000 -L-

SHEET 3 OF 3



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**SUBSTRUCTURE  
 END BENT #1  
 RIGHT LANE**

REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS: 374

DRAWN BY: L. GILCHRIST/ C. MILLER DATE: 3-04/ 06-04  
 CHECKED BY: P. ADKINS DATE: 06-04