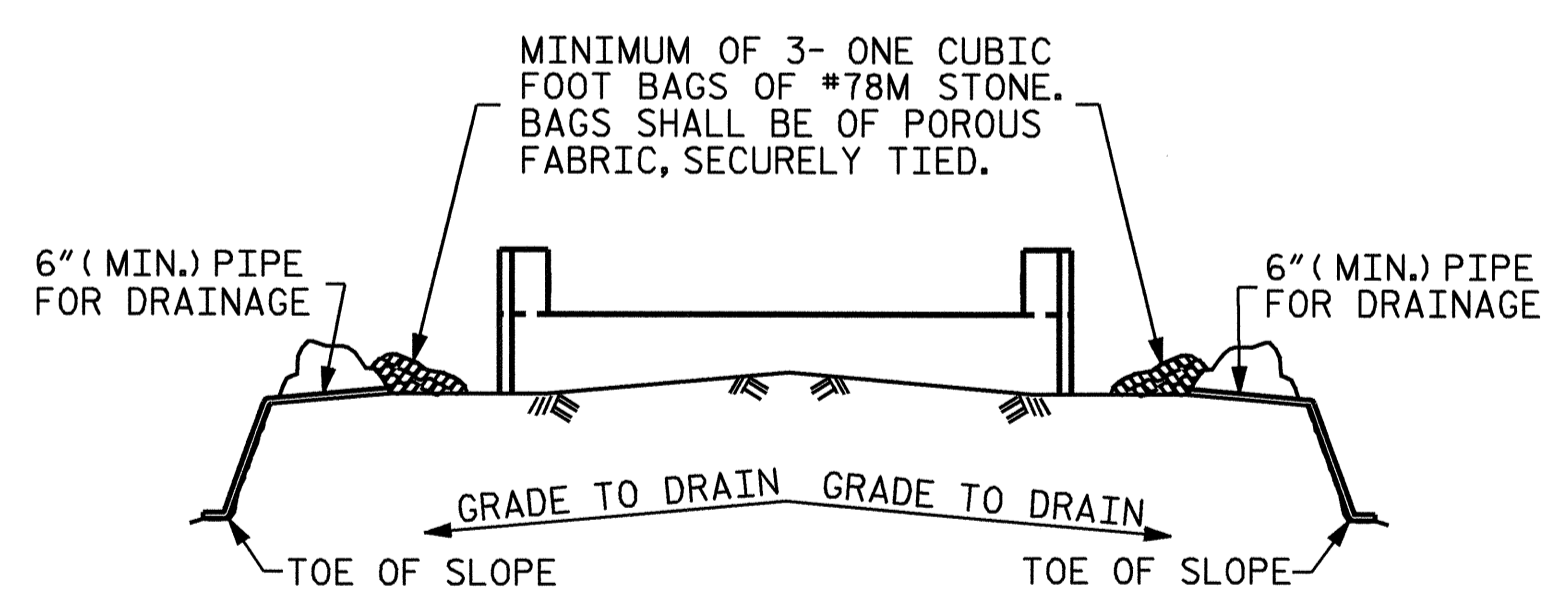


**SECTION A-A**

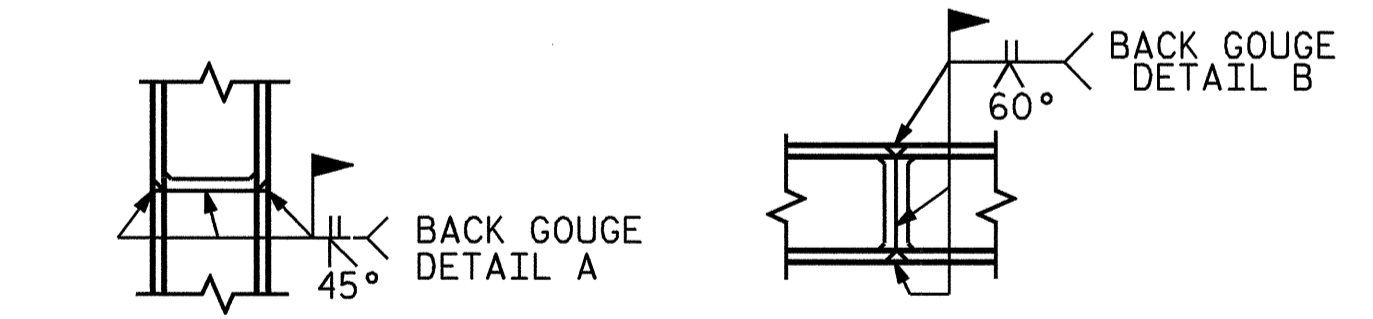


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

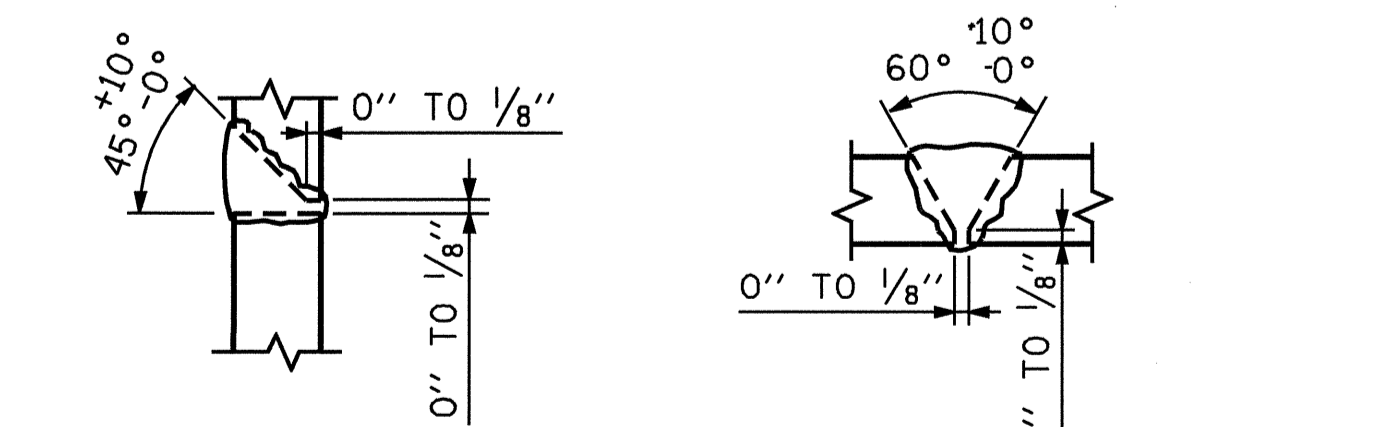
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

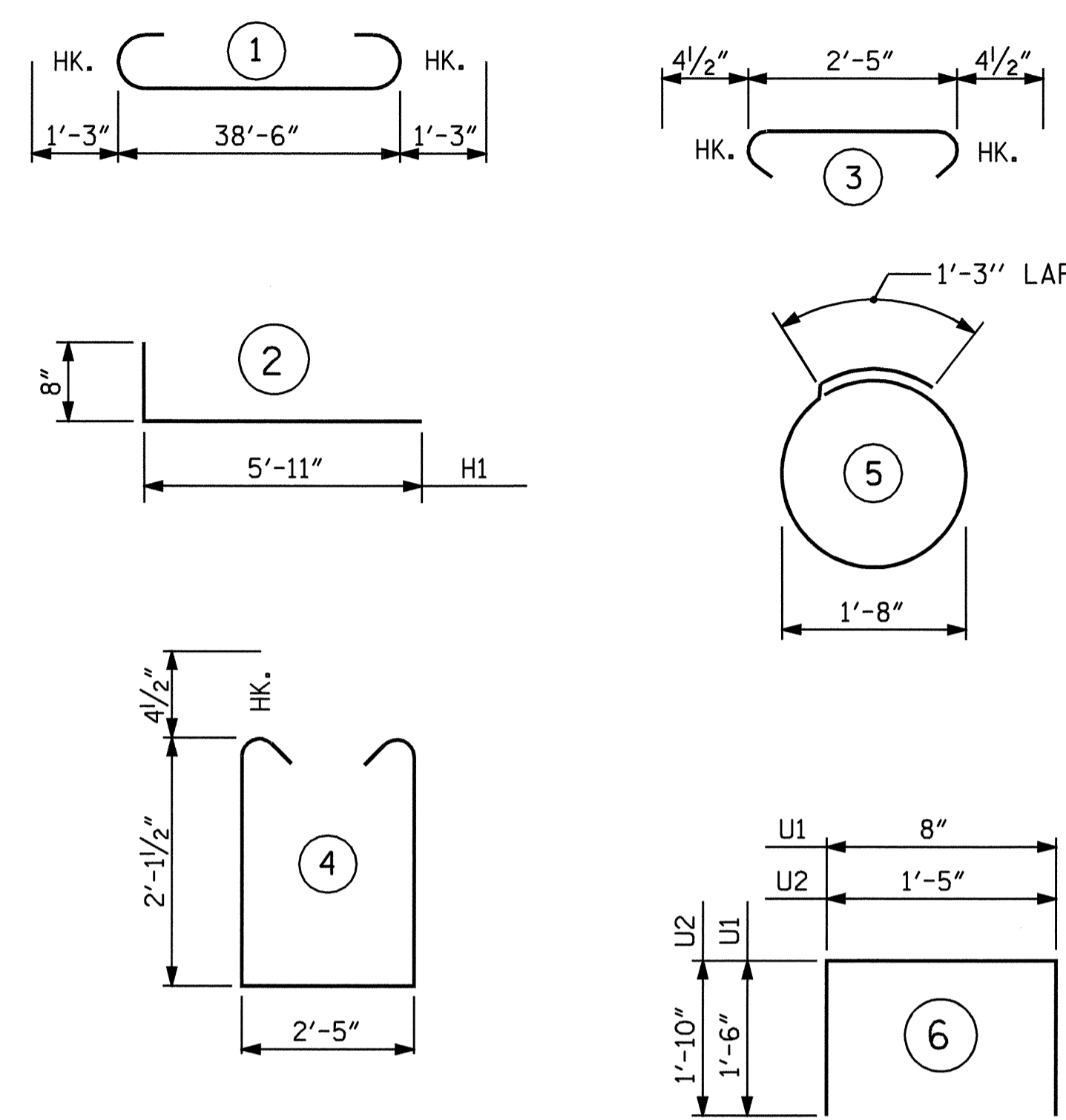


**DETAIL A**      **DETAIL B**

**\*\* POSITION OF PILE DURING WELDING.**

**PILE SPLICE DETAILS**

**BAR TYPE**



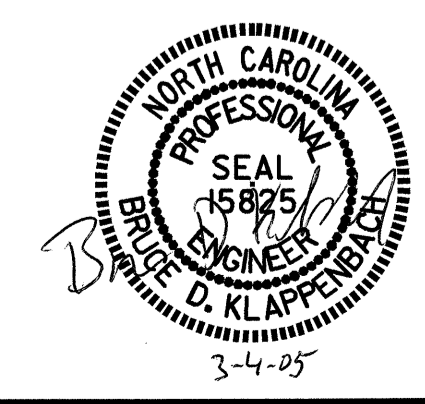
ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL FOR END BENT #1						
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	
B1	8	#9	1	41'-0"	1115	
B2	2	#6	STR	38'-8"	116	
B3	8	#4	STR	20'-7"	110	
B4	10	#4	STR	2'-5"	16	
D1	22	#8	STR	2'-3"	132	
H1	24	#4	2	6'-7"	106	
K1	8	#4	STR	20'-7"	110	
K2	8	#4	STR	2'-7"	14	
S1	34	#4	3	3'-2"	72	
S2	34	#4	4	7'-5"	168	
S3	18	#4	5	6'-6"	78	
U1	33	#4	6	3'-8"	81	
U2	4	#4	6	5'-1"	14	
V1	66	#4	STR	3'-8"	162	
V2	40	#4	STR	5'-0"	134	
REINFORCING STEEL					=	2428 LBS
CLASS A CONCRETE BREAKDOWN						
POUR #1 CAP & LOWER PART OF WINGS					C.Y.	11.0
POUR #2 UPPER PART OF WINGS & BACKWALL					C.Y.	3.8
POUR #3 LATERAL GUIDES					C.Y.	0.1
TOTAL CLASS A CONCRETE					C.Y.	14.9
HP 12 X 53 STEEL PILES NO. 9					LIN. FT.	90
STEEL PILE POINTS					EACH	9

PROJECT NO. B-4180  
MACON COUNTY  
STATION: 17+06.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
**SUBSTRUCTURE  
END BENT #1**



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-11
1			3			TOTAL SHEETS
2			4			18