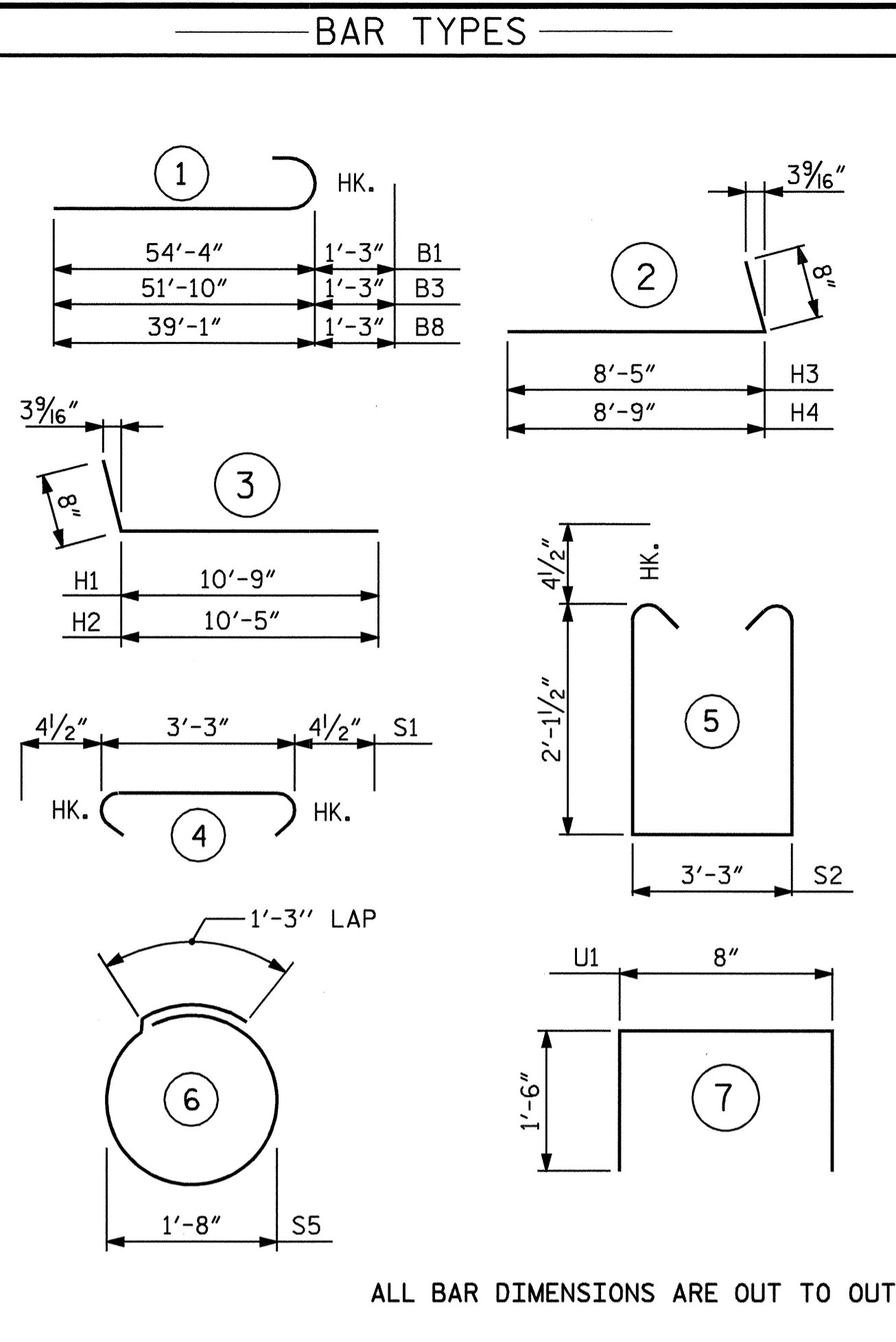
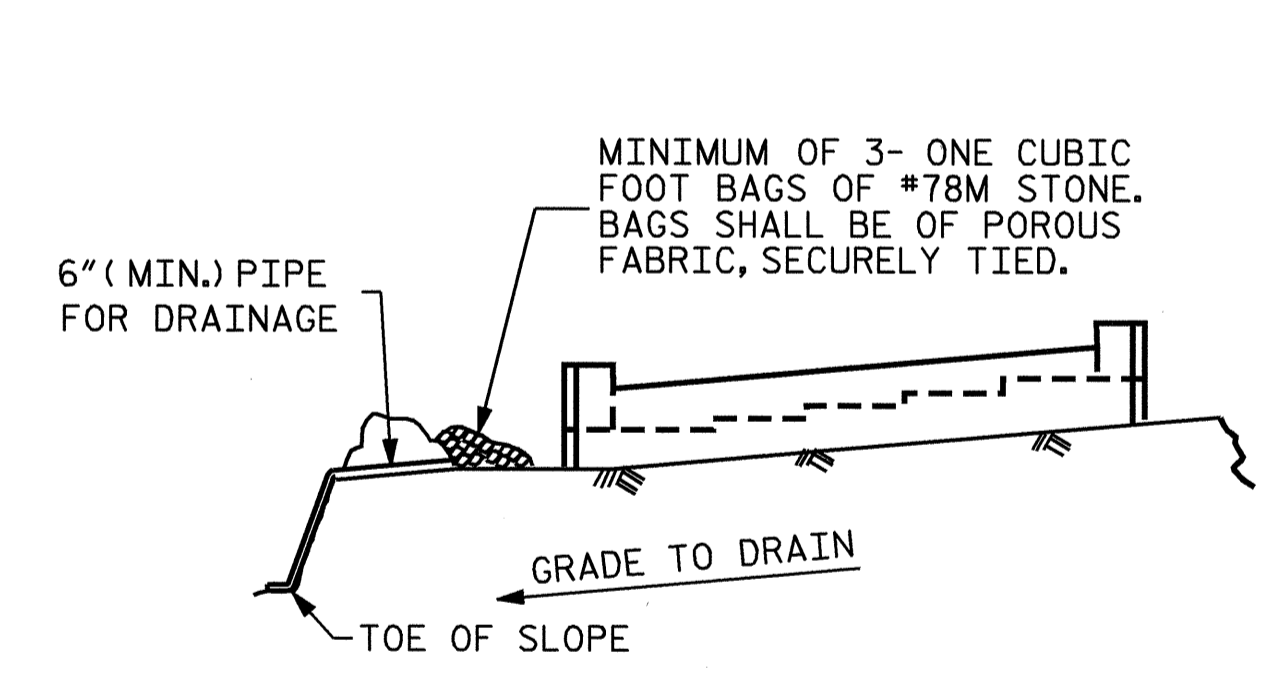


**SECTION THRU END BENT**



BILL OF MATERIAL											
END BENT #1											
STAGE I						STAGE II					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	5	#9	1	55'-7"	945	B8	10	#9	1	40'-4"	1371
B2	5	#9	STR	54'-4"	924	B9	2	#7	STR	39'-1"	160
B3	5	#9	1	53'-1"	902	B10	8	#4	STR	21'-0"	112
B4	5	#9	STR	51'-10"	881	B11	10	#4	STR	3'-3"	22
B5	4	#7	STR	50'-10"	416						
B6	16	#4	STR	25'-2"	269	H1	10	#5	3	11'-5"	119
B7	22	#4	STR	3'-3"	48	H2	10	#5	3	11'-1"	116
						K2	8	#4	STR	40'-5"	216
						K3	6	#4	STR	4'-4"	17
						S1	44	#4	4	4'-2"	122
						S2	44	#4	5	8'-5"	247
						S3	10	#4	6	6'-6"	43
						S1	96	#4	4	4'-0"	257
						S2	96	#4	5	8'-3"	529
						S3	22	#4	6	6'-6"	96
						U1	85	#4	7	3'-8"	208
						V1	170	#5	STR	6'-0"	1064
						V3	28	#5	STR	8'-3"	241
REINFORCING STEEL = 7498 LBS.						REINFORCING STEEL = 3344 LBS.					
CLASS A CONCRETE POUR #1 = 31.7 CU. YDS.						CLASS A CONCRETE POUR #1 = 14.7 CU. YDS.					
CLASS A CONCRETE POUR #2 = 15.0 CU. YDS.						CLASS A CONCRETE POUR #2 = 8.5 CU. YDS.					
CLASS A CONCRETE TOTAL = 46.7 CU. YDS.						CLASS A CONCRETE TOTAL = 23.2 CU. YDS.					
HP 12 x 53 STEEL PILES NO. 11 = 660 LIN. FEET						HP 12 x 53 STEEL PILES NO. 5 = 300 LIN. FEET					

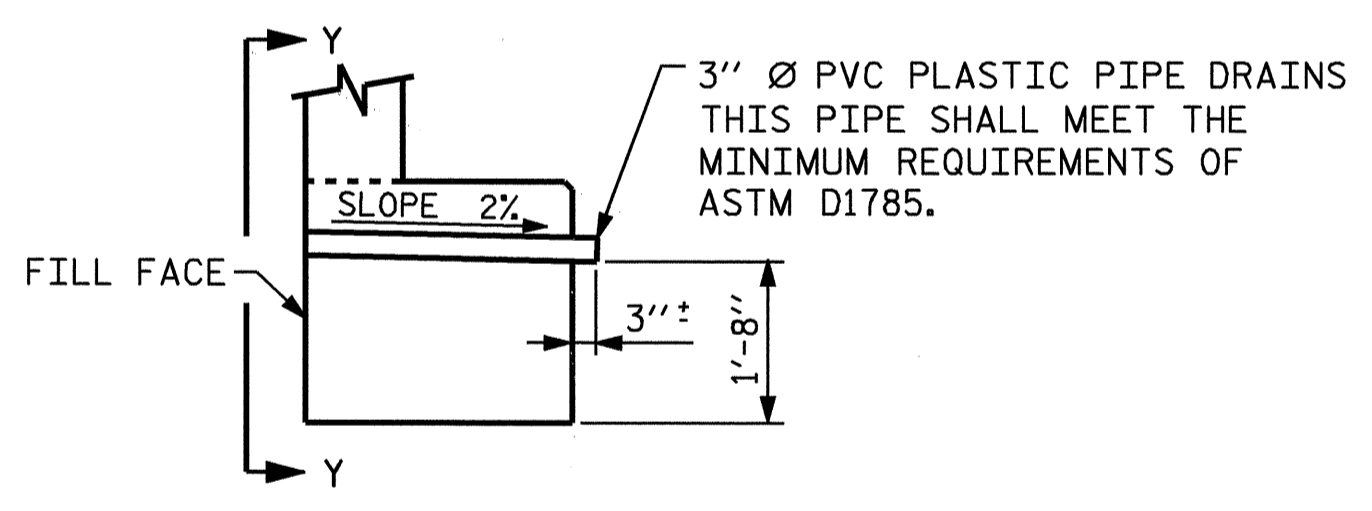


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

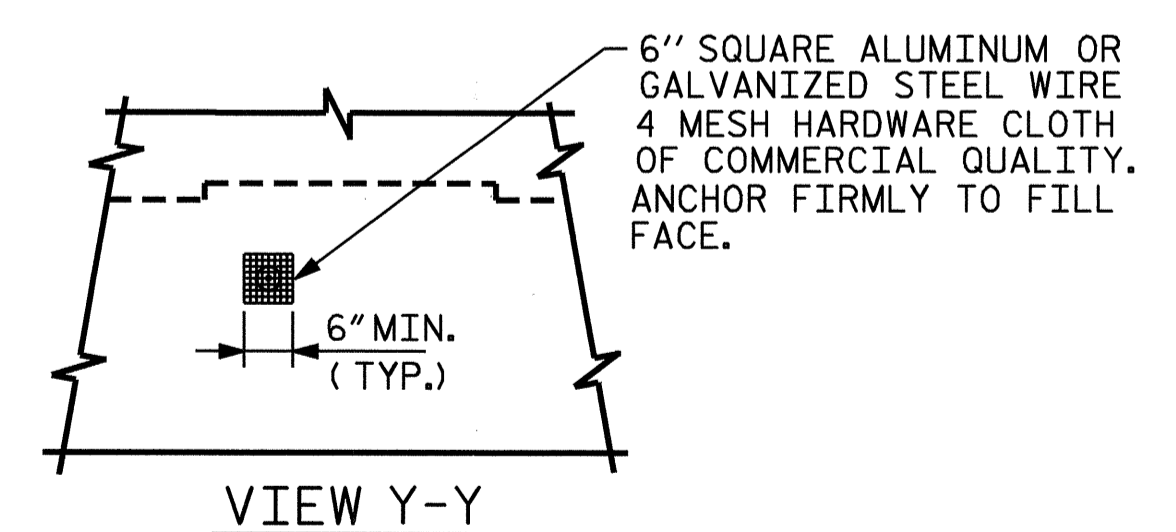
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

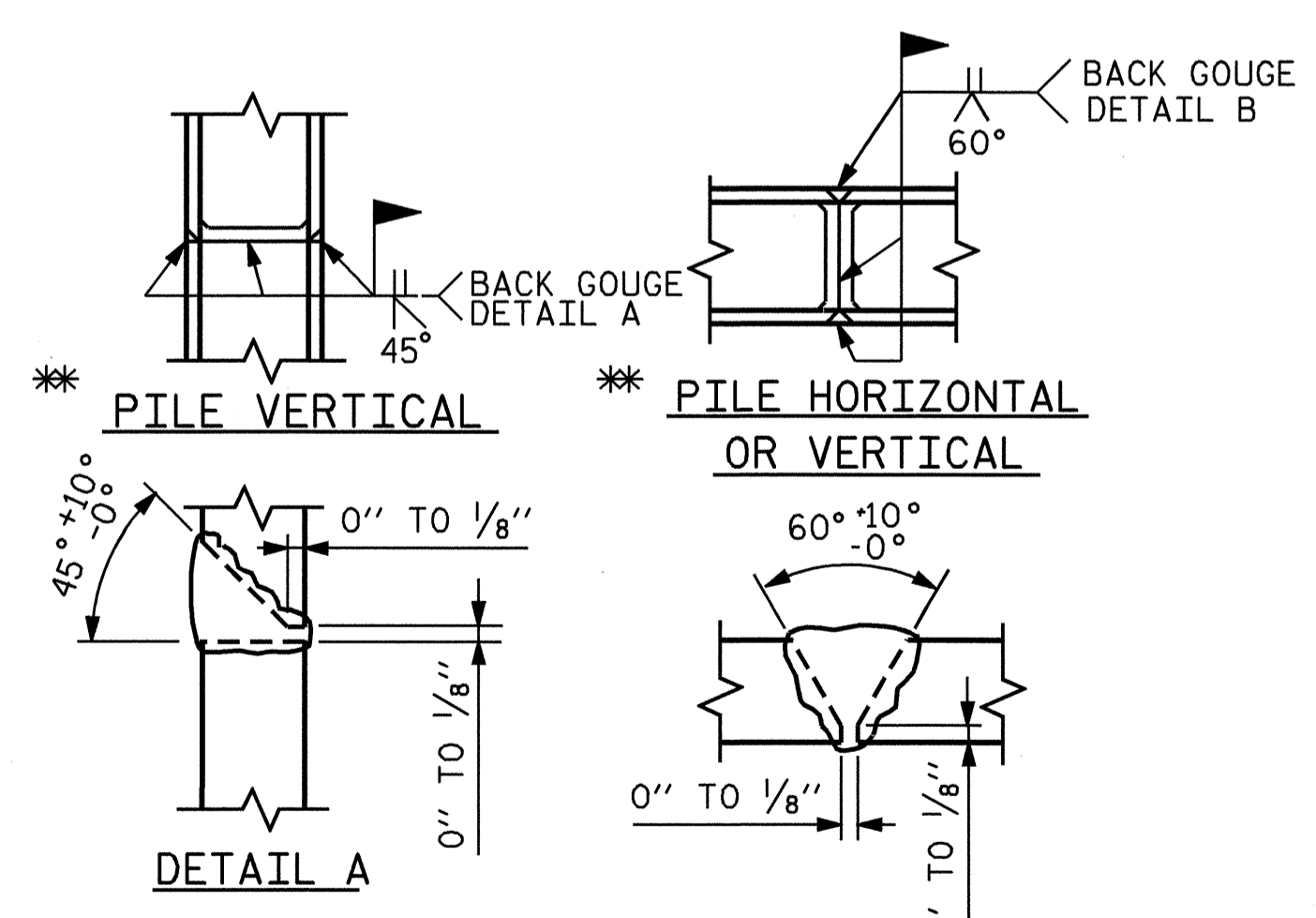


**SECTION THRU CAP**



**PIPE DRAIN DETAILS**

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 FOR THE SEVERAL PAY ITEMS.

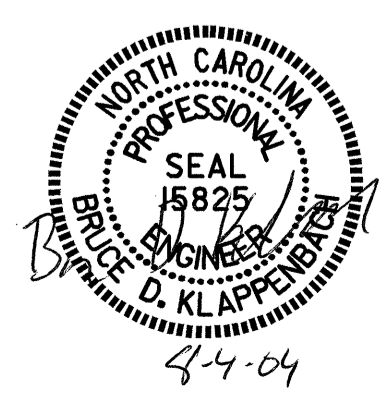


**PILE SPLICE DETAILS**

PROJECT NO. U-0620  
CUMBERLAND COUNTY  
 STATION: 32+18.00 -L-  
 SHEET 3 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

SUBSTRUCTURE  
 END BENT #1



DRAWN BY: M. G. SHAIKH DATE: 01-08-04  
 CHECKED BY: D. A. GLADDEN DATE: 03-05-04

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

TOTAL SHEETS: 129