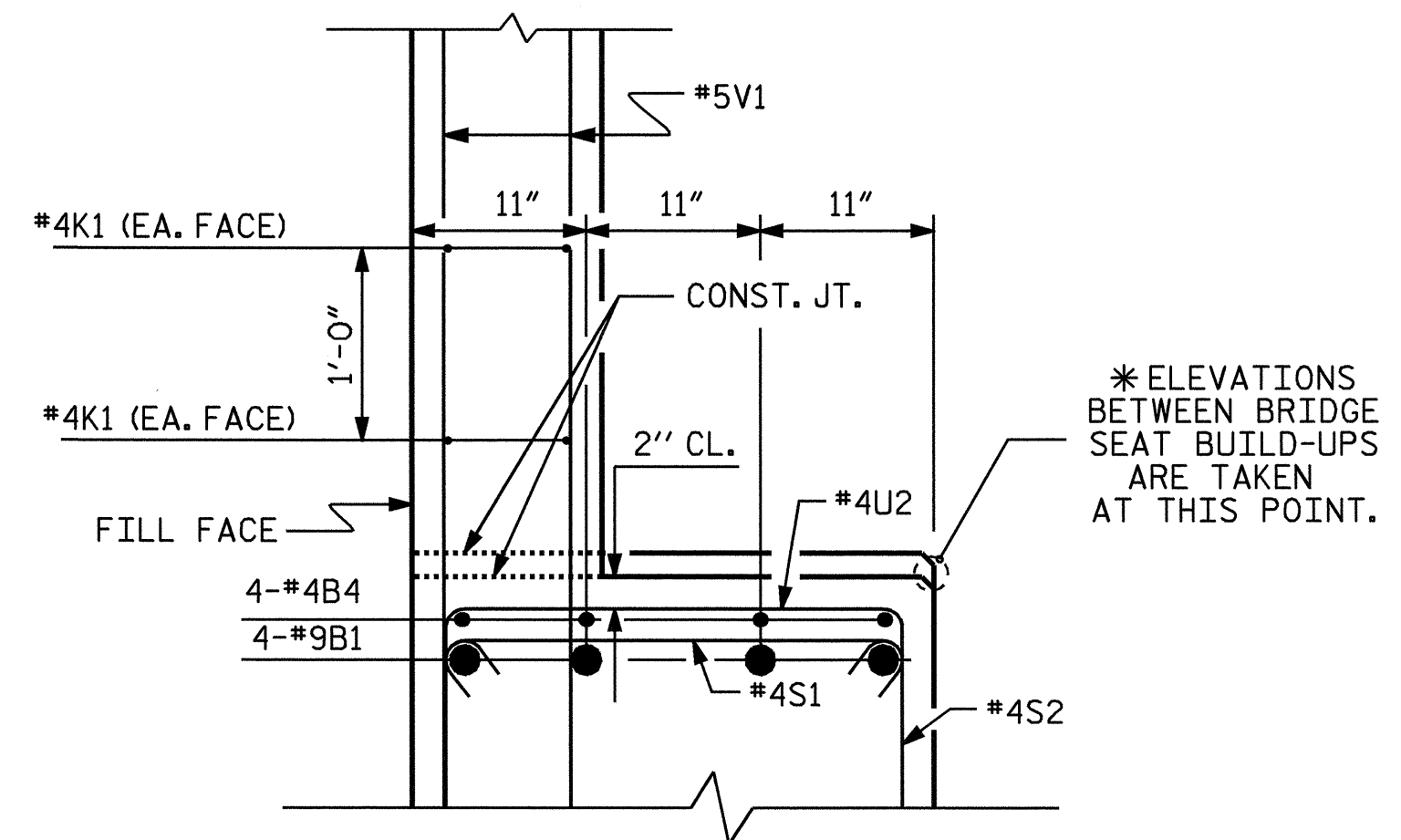
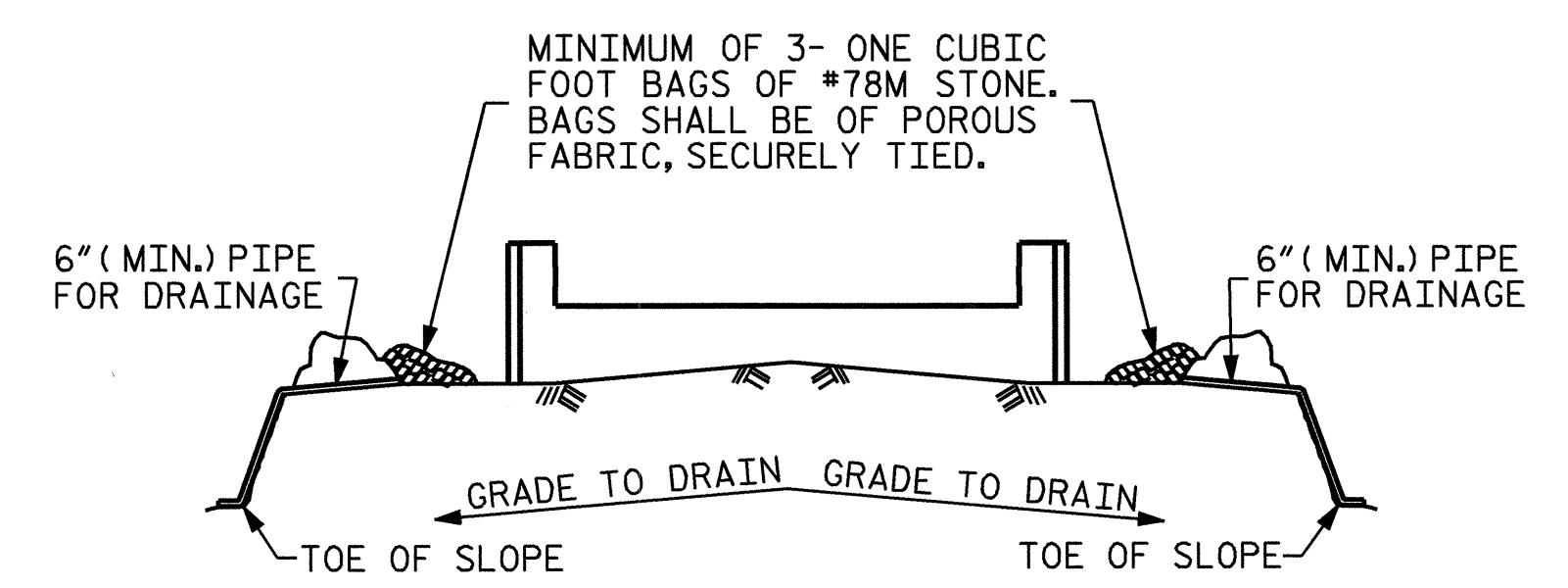


**SECTION A-A**



**SECTION B-B**



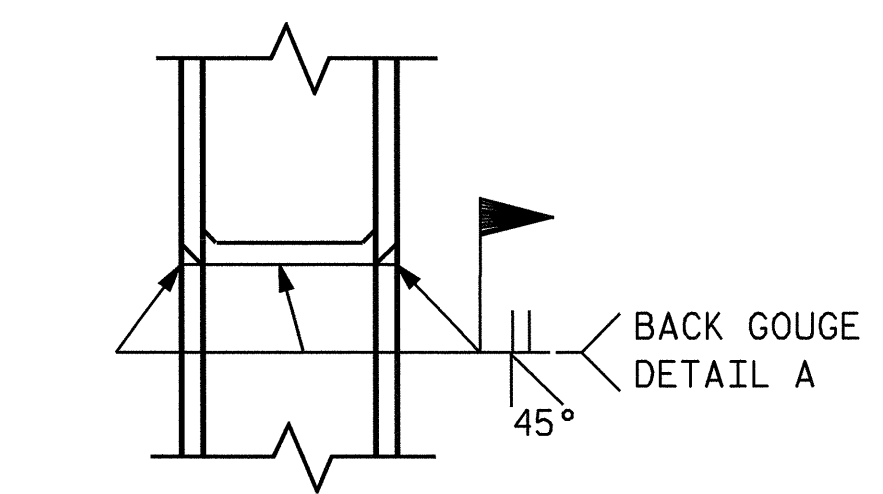
MINIMUM OF 3- ONE CUBIC FOOT BAGS OF #78M STONE. BAGS SHALL BE OF POROUS FABRIC, SECURELY TIED.

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.

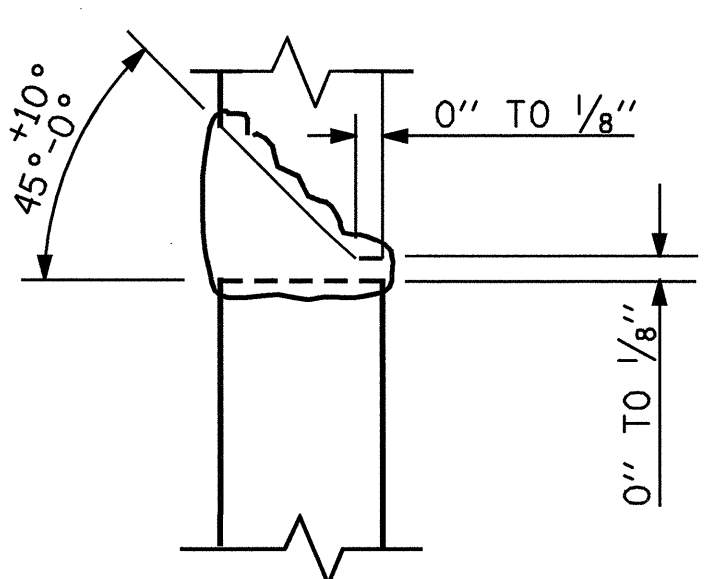
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

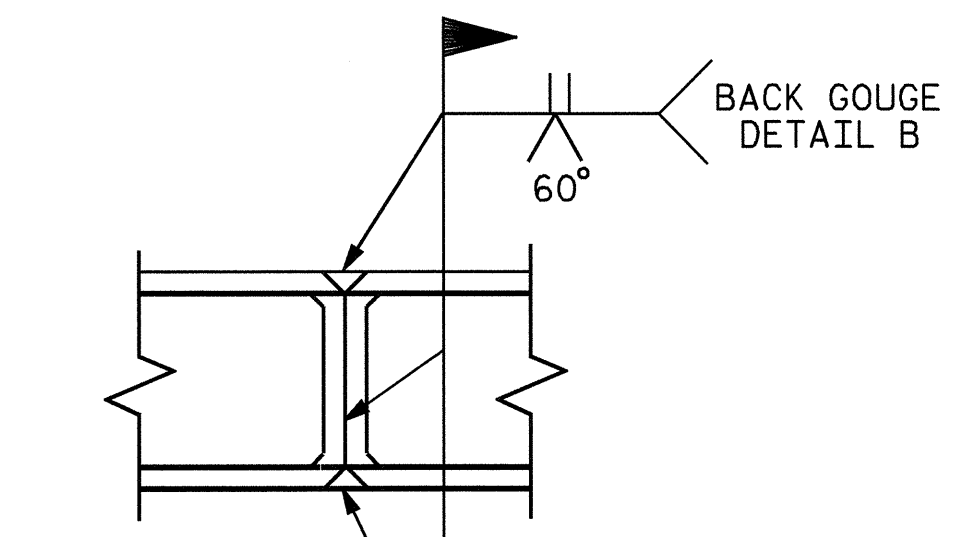
**TEMPORARY DRAINAGE AT END BENT**



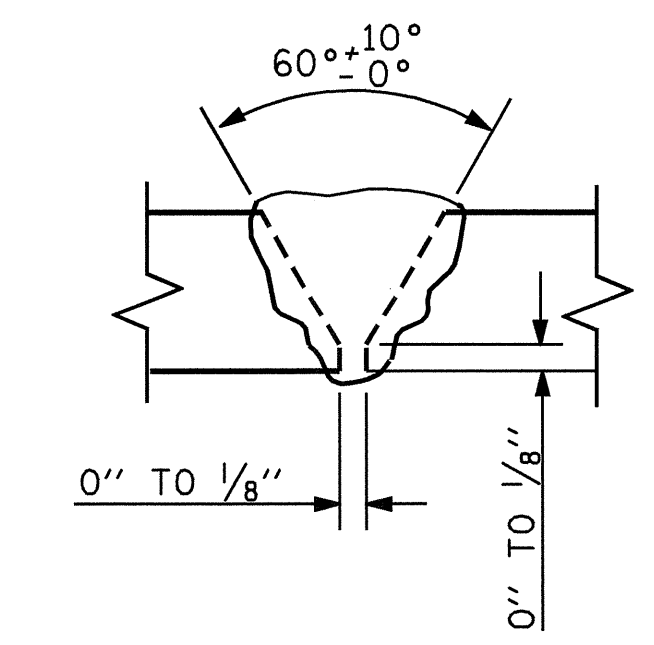
**\*\*PILE VERTICAL**



**DETAIL A**



**\*\*PILE HORIZONTAL OR VERTICAL**

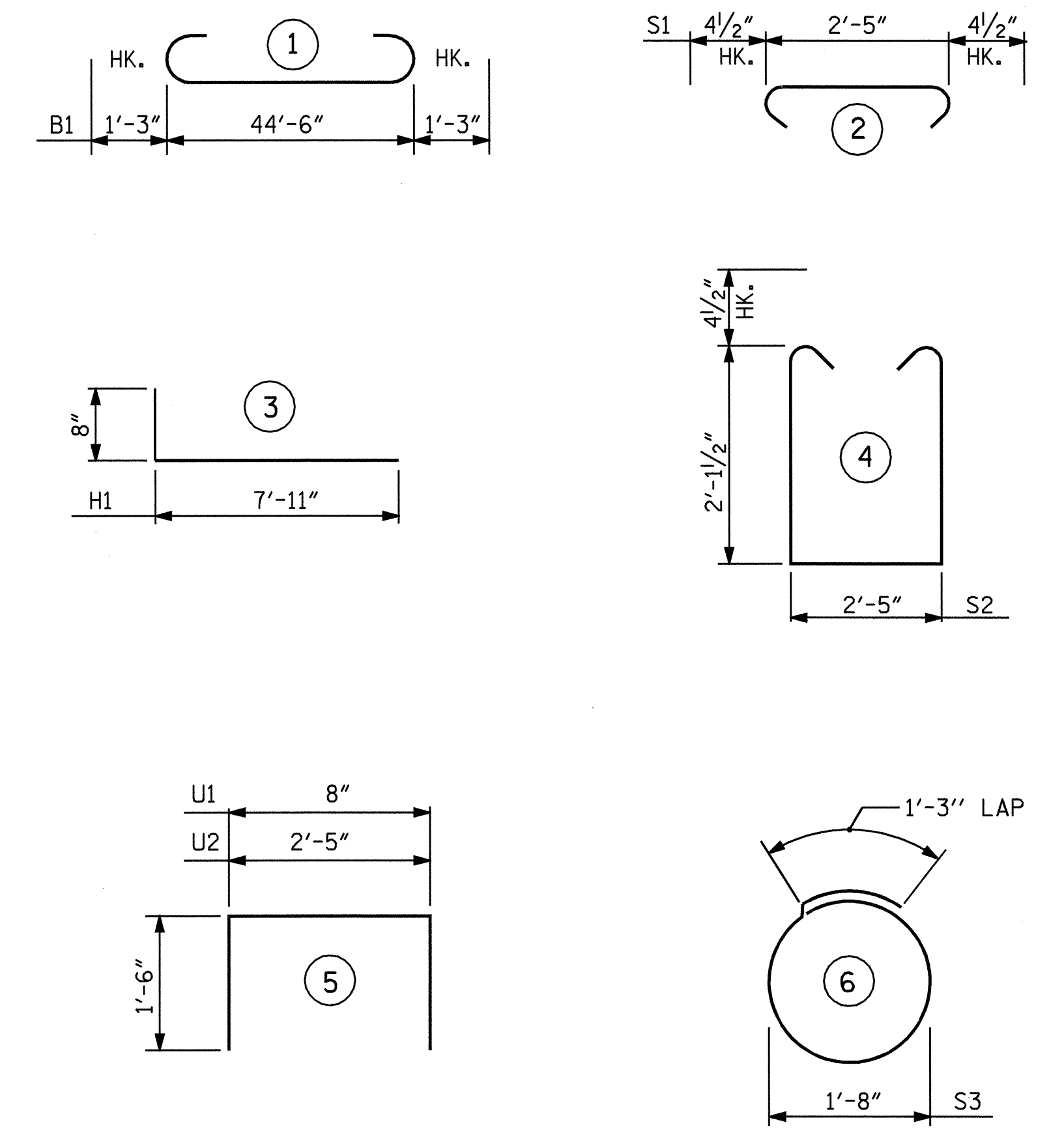


**DETAIL B**

**PILE SPLICING DETAILS**

\*\* POSITION OF PILE DURING WELDING.

**BAR TYPES**



ALL BAR DIMENSIONS ARE OUT TO OUT.

**BILL OF MATERIAL**

END BENT #2						
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	
B1	8	#9		47'-0"	1278	
B2	2	#5	STR.	44'-8"	93	
B3	8	#4	STR.	23'-7"	126	
B4	12	#4	STR.	2'-7"	21	
B5	12	#4	STR.	2'-5"	19	
H1	32	#5		8'-7"	286	
K1	12	#4	STR.	23'-7"	189	
K2	8	#4	STR.	2'-6"	13	
S1	42	#4		3'-2"	89	
S2	42	#4		7'-5"	208	
S3	18	#4		6'-6"	78	
U1	40	#4		3'-8"	98	
U2	9	#4		5'-5"	33	
V1	80	#5	STR.	4'-11"	410	
V2	22	#5	STR.	6'-4"	145	
V3	22	#5	STR.	6'-5"	147	
REINFORCING STEEL					= 3233 LBS	
CLASS A CONCRETE BREAKDOWN						
POUR #1 CAP & LOWER PART OF WINGS						
					C.Y.	13.6
POUR #2 BACKWALL & UPPER PART OF WINGS						
					C.Y.	7.2
TOTAL CLASS A CONCRETE						
					C.Y.	20.8
HP 12 X 53 STEEL PILES						
NO. 9					LIN.FT.	270

PROJECT NO. B-4009  
ANSON COUNTY  
 STATION: 38+66.50 -L-

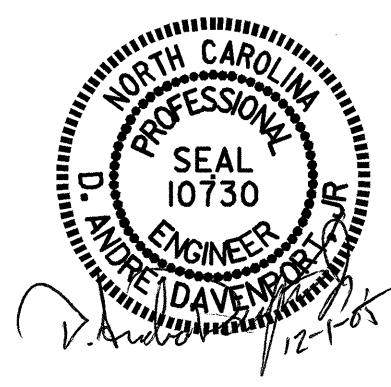
SHEET 3 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**SUBSTRUCTURE  
 END BENT #2**

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

SHEET NO. S-60  
 TOTAL SHEETS 64



DRAWN BY : A. SORSENGINH/B.G. DATE : 3/8/05  
 CHECKED BY : A. COLE DATE : 3/16/05