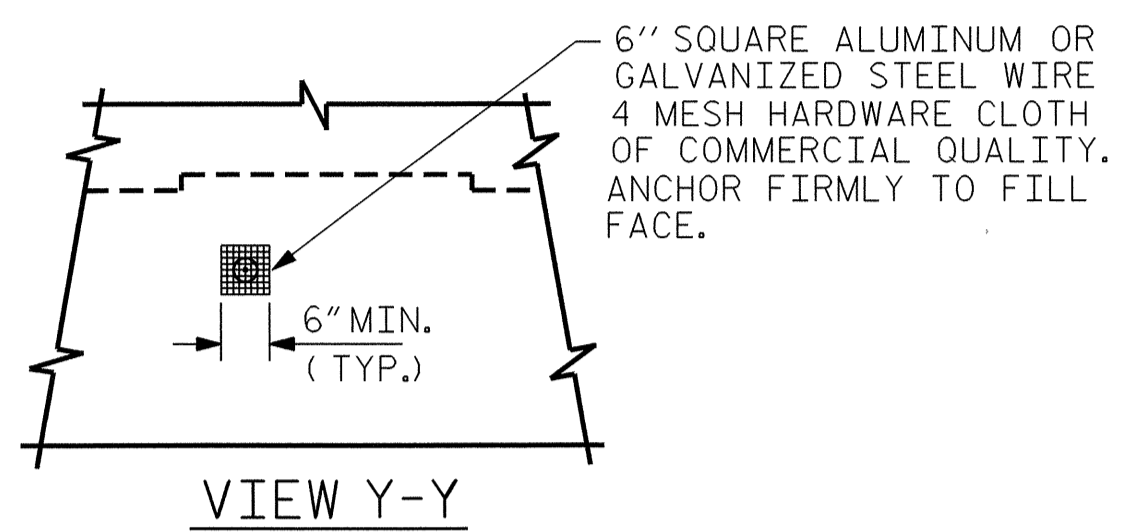


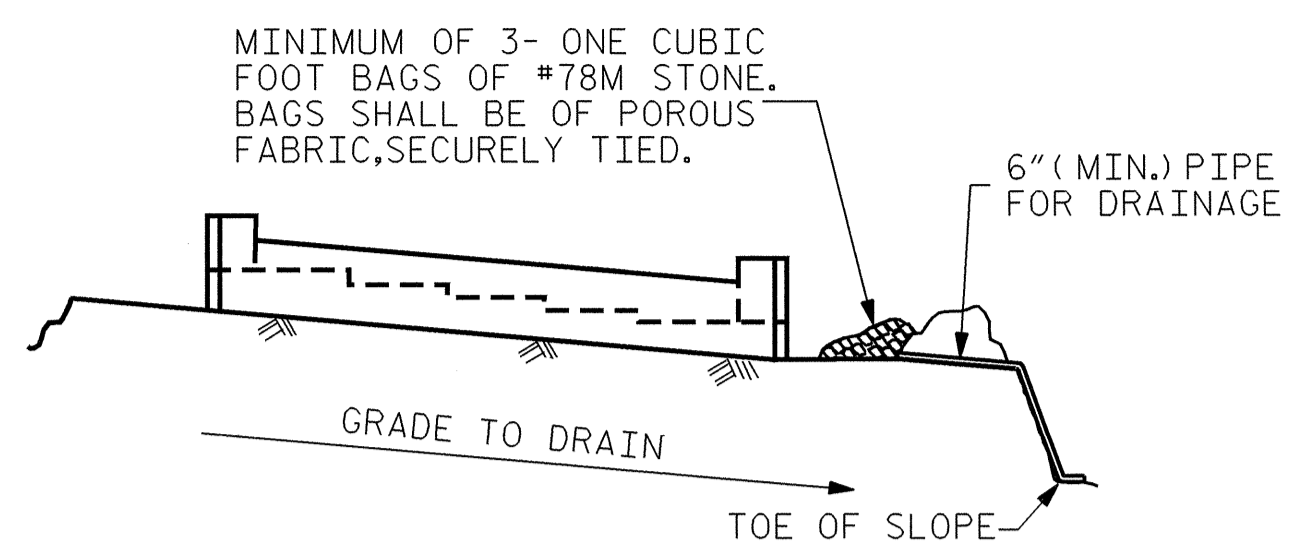
SECTION THRU CAP



VIEW Y-Y

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 BID FOR THE SEVERAL PAY ITEMS.

PIPE DRAIN DETAILS

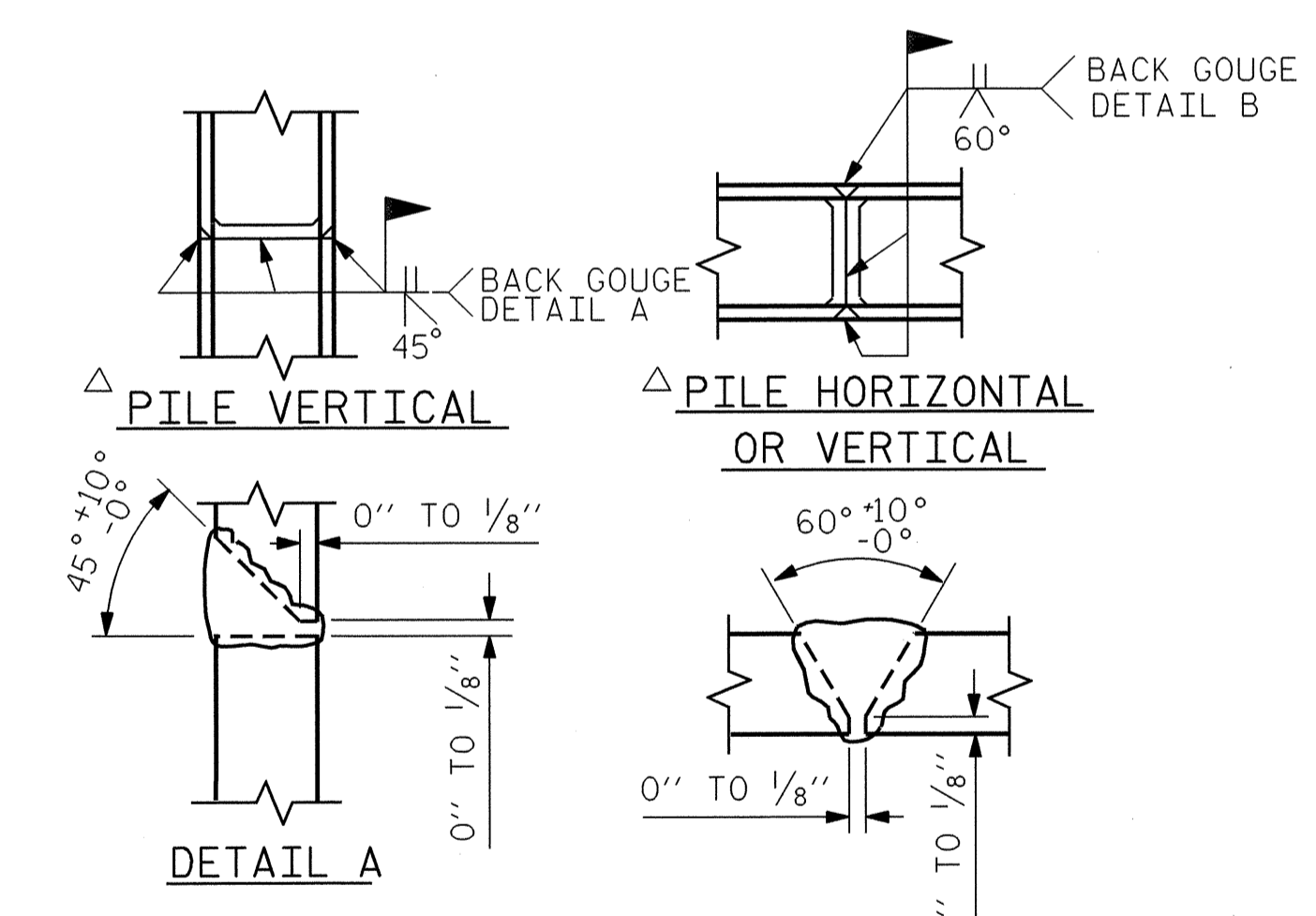


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

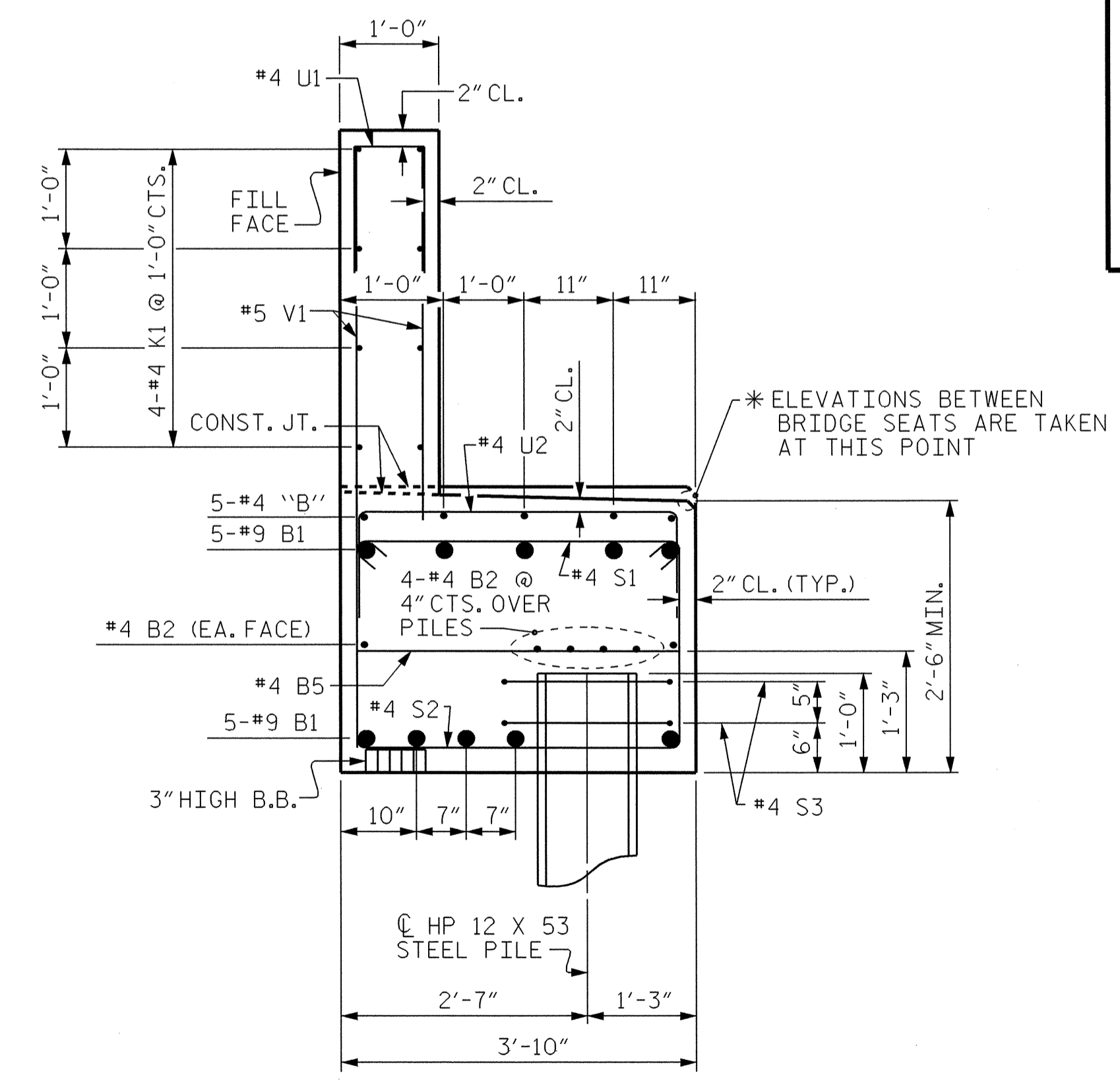
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

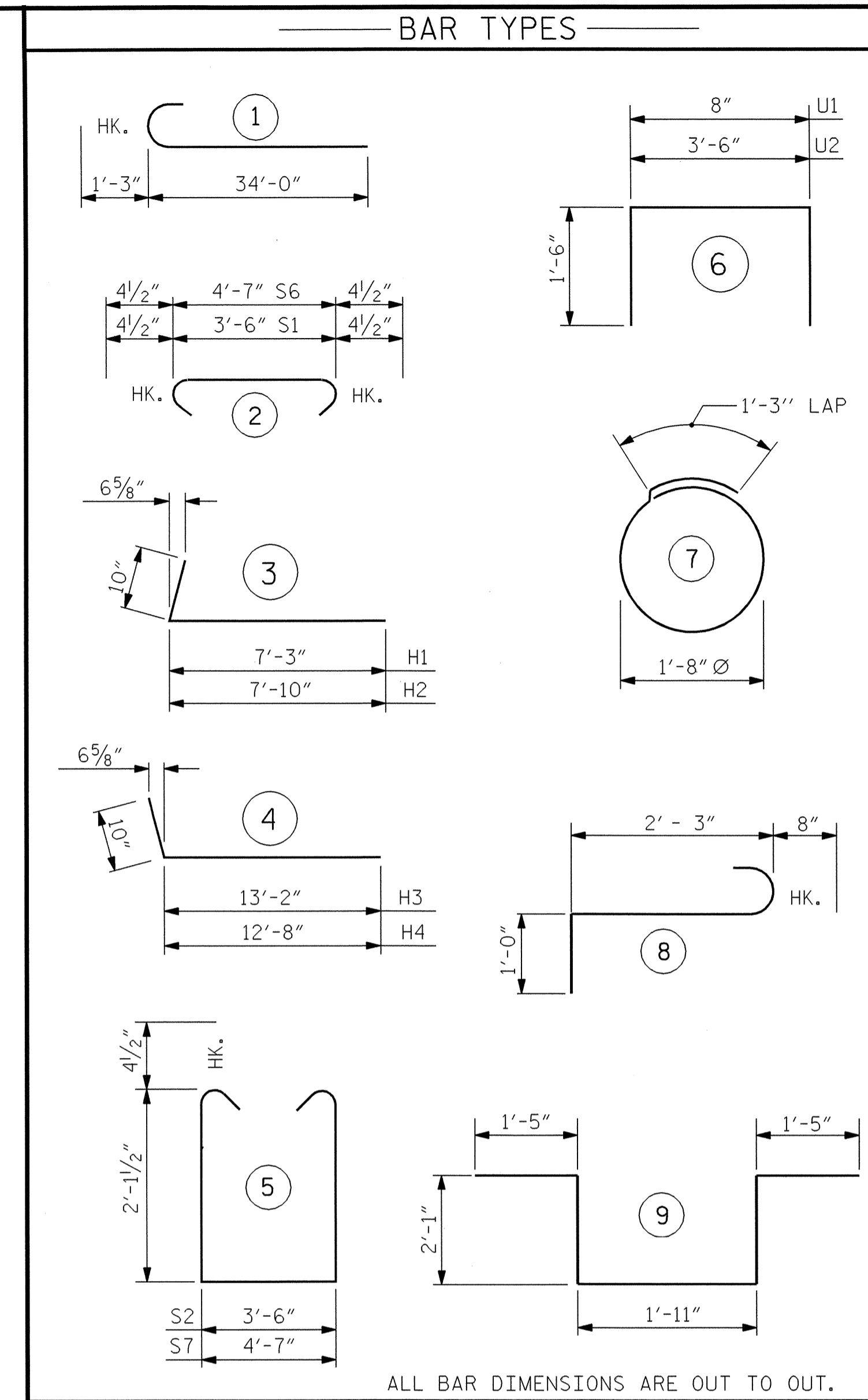
TEMPORARY DRAINAGE AT END BENT



PILE SPLICE DETAILS



SECTION A-A



NOTES :

- STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR ANCHOR BOLTS.
- FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.
- BACKWALL SHALL BE PLACED BEFORE APPLYING THE EPOXY PROTECTIVE COATING.
- THE TOP SURFACE OF THE CAP EXCEPT THE BRIDGE SEAT BUILDUPS SHALL BE SLOPED TRANSVERSELY FROM THE FILL FACE TO THE BACK FACE AT THE RATE OF 2%.
- THE CONTRACTOR SHALL PROVIDE FOR INSTALLATION OF THE 4" DIAMETER DRAIN PIPE THROUGH THE WING WALL AS REQUIRED FOR REINFORCED BRIDGE APPROACH FILLS. SEE THE ROADWAY PLANS. REINFORCING STEEL IN THE WING WALL MAY BE SHIFTED AS NECESSARY TO CLEAR THE DRAIN PIPE.
- THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT BOULDERS WERE FOUND IN THE SUBSURFACE INVESTIGATION AT END BENT 1 AT ELEVATION 2265.000 TO 2254.000. PILE EXCAVATION MAY BE REQUIRED TO INSTALL THE PILES TO THE MINIMUM REQUIRED TIP ELEVATION. FOR PILE EXCAVATION, SEE SPECIAL PROVISIONS.
- PIPE DRAINS MAY BE SHIFTED SLIGHTLY AS NECESSARY TO CLEAR REINFORCING STEEL AND ANCHOR BOLTS.

BILL OF MATERIAL					
END BENT 1					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	20	#9		35'-3"	2397
B2	18	#4	STR	21'-5"	258
B3	5	#4	STR	11'-8"	39
B4	20	#4	STR	6'-0"	80
B5	15	#4	STR	3'-6"	35
H1	9	#5		8'-1"	76
H2	9	#5		8'-8"	82
H3	10	#5		14'-0"	146
H4	10	#5		13'-6"	141
K1	24	#4	STR	21'-5"	343
K2	8	#4	STR	3'-6"	19
S1	63	#4		4'-3"	179
S2	63	#4		8'-6"	358
S3	20	#4		6'-6"	87
S4	3	#6		3'-11"	18
S5	1	#6		8'-11"	13
S6	2	#4		5'-4"	7
S7	2	#4		9'-7"	13
U1	52	#4		3'-8"	127
U2	29	#4		6'-6"	126
V1	104	#5	STR	6'-9"	732
V2	24	#5	STR	7'-4"	184
V3	35	#5	STR	7'-8"	280
REINFORCING STEEL				=	5740 LBS

CLASS A CONCRETE BREAKDOWN :

POUR #1 (CAP & LOWER WINGS) 27.4 C.Y.

POUR #2 (BACKWALL & UPPER WINGS) 12.9 C.Y.

CLASS A CONCRETE TOTAL 40.3 C.Y.

HP 12 X 53 STEEL PILES
NO. 11 L.F. 215

PILE EXCAVATION NOT IN SOIL----- 25.0 FT.

PILE EXCAVATION IN SOIL----- 40.0 FT.

STEEL PILE POINTS 11 EACH

PROJECT NO. B-3310
BUNCOMBE COUNTY
STATION: 19+80.00 -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:	TOTAL SHEETS
1			3			32
2			4			

