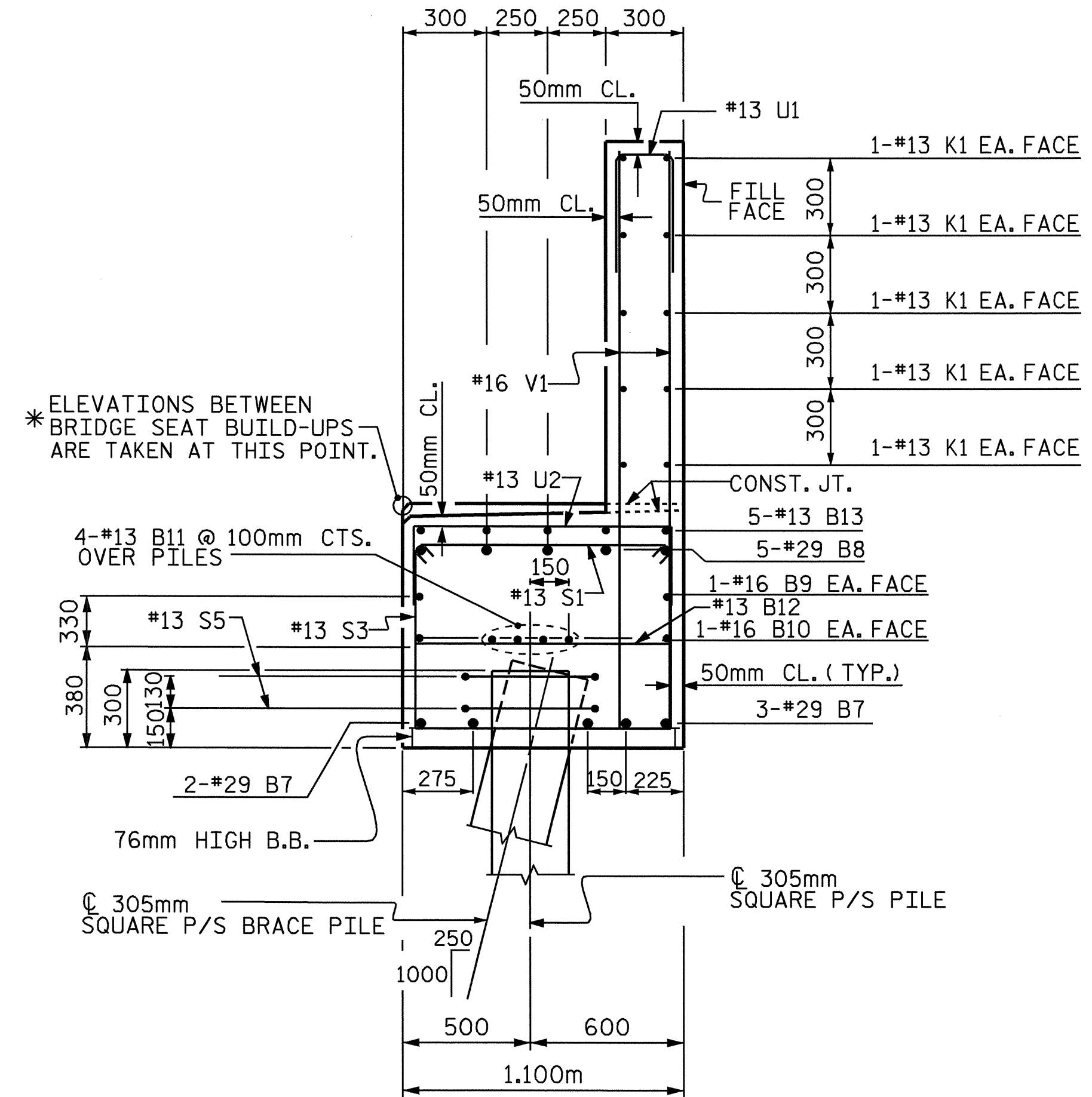
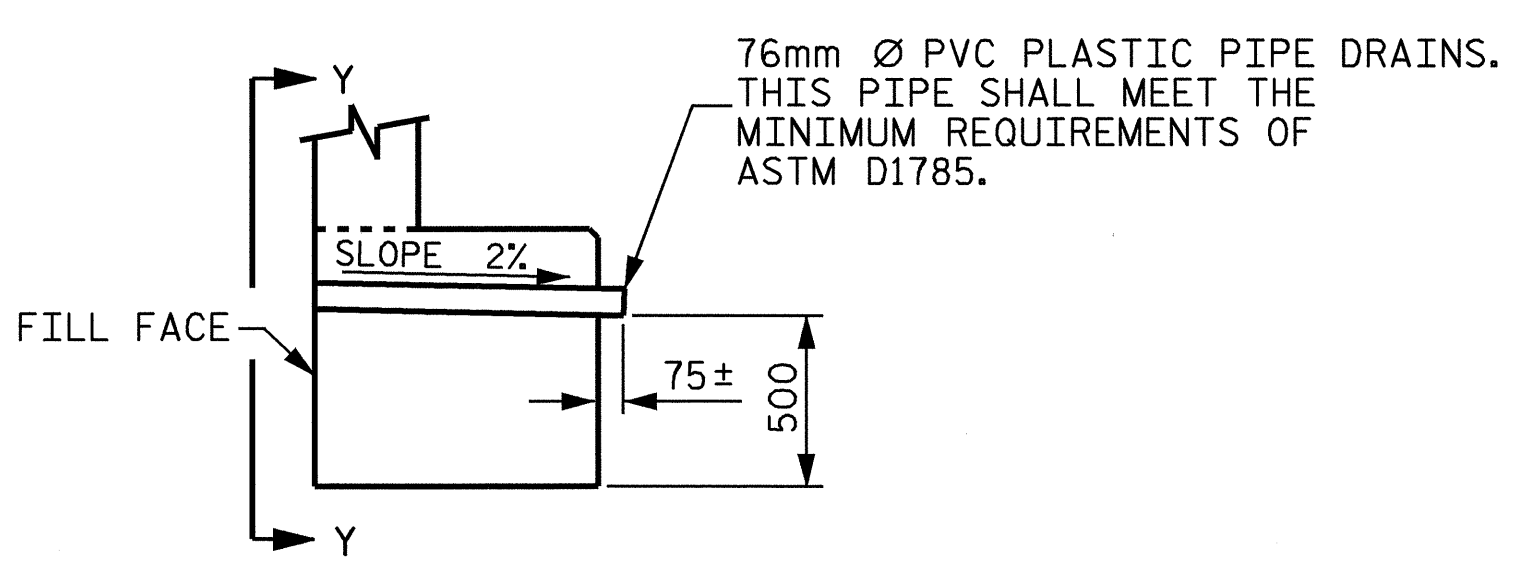


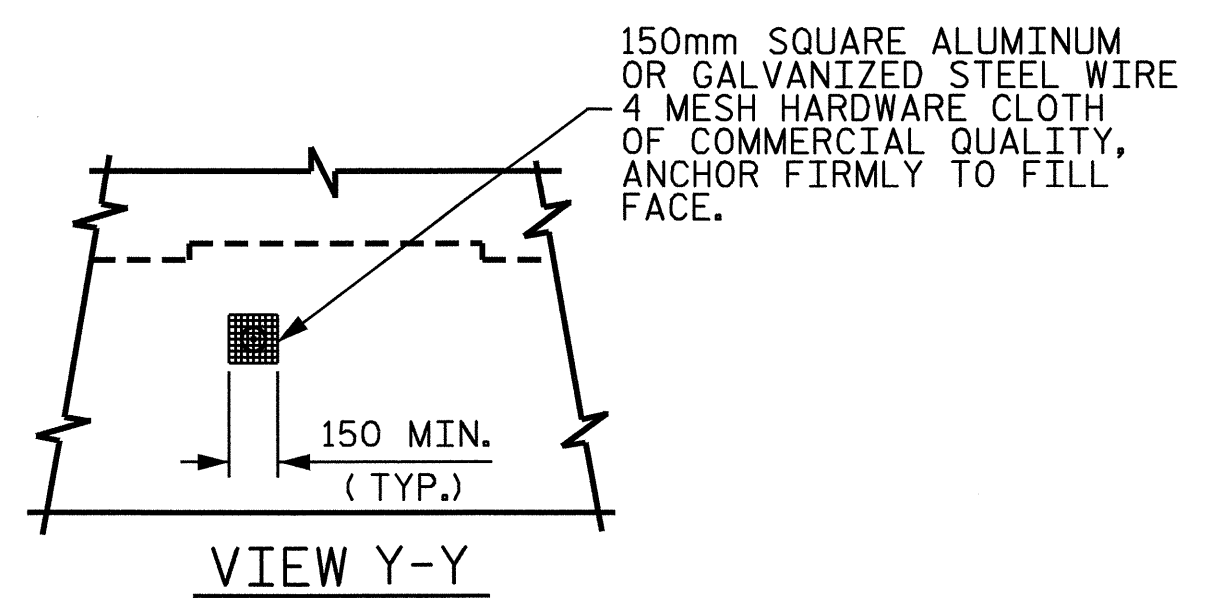
SECTION A-A



SECTION B-B



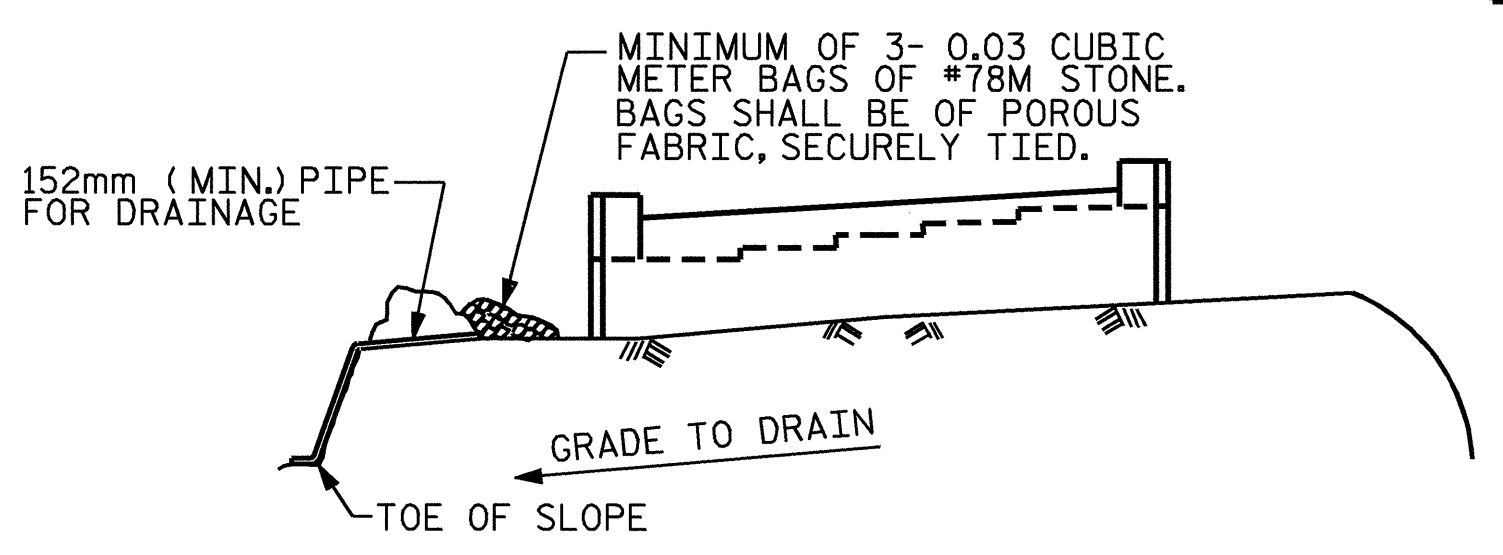
SECTION THRU CAP



VIEW Y-Y

NOTE: NO SEPARATE PAYMENT WILL BE MADE FOR FURNISHING AND INSTALLING THE PVC 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



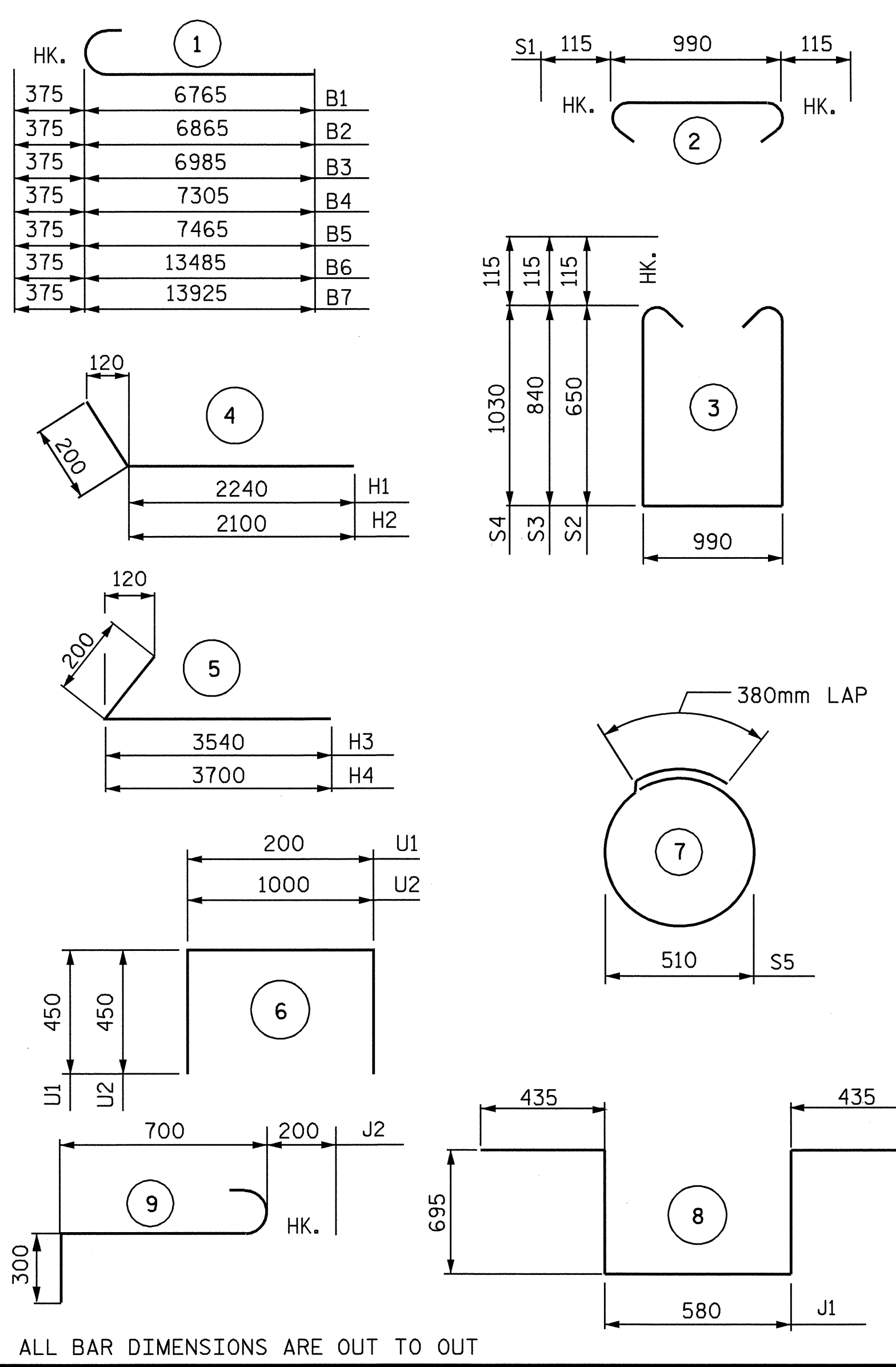
TEMPORARY DRAINAGE AT END BENT

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.

BAR TYPES



BILL OF MATERIAL
END BENT 2

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	1	29	1	7140	36
B2	1	29	1	7240	37
B3	1	29	1	7360	37
B4	1	29	1	7680	39
B5	1	29	1	7840	40
B6	5	29	1	13860	351
B7	10	29	1	14300	724
B8	5	29	STR	11040	279
B9	2	16	STR	14180	44
B10	4	16	STR	13440	83
B11	16	13	STR	7060	112
B12	26	13	STR	1000	26
B13	15	13	STR	1100	16
H1	10	16	4	2440	38
H2	10	16	4	2300	36
H3	11	16	5	3740	64
H4	11	16	5	3900	67
J1	1	19	8	2840	6
J2	3	19	9	1200	8
K1	40	13	STR	7060	281
K2	8	13	STR	1080	9
S1	110	13	2	1220	133
S2	39	13	3	2520	98
S3	46	13	3	2900	133
S4	25	13	3	3280	82
S5	28	13	7	2000	56
U1	79	13	6	1100	86
U2	9	13	6	1900	17
V1	158	16	STR	2220	544
V2	20	16	STR	2580	80
V3	34	16	STR	3100	164
REINFORCING STEEL					kg 3736
CLASS A CONCRETE BREAKDOWN					
POUR 1 (CAP AND LOWER PORTION OF WINGS)					
					3 m ³ 30.5
POUR 2 (BACKWALL AND UPPER PORTION OF WINGS)					
					3 m ³ 16.9
TOTAL					3 m ³ 47.4
305mm SQUARE PRESTRESSED CONCRETE PILES					
NO. 15 METERS					225.0

PROJECT NO. R-513C
 ROBESON COUNTY
 STATION: 277+68.339 -L-

SHEET 3 OF 3

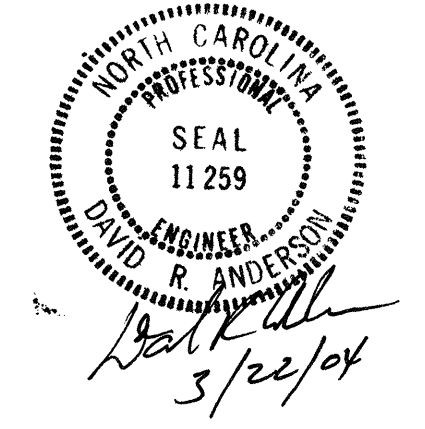
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
 END BENT 2

REVISIONS

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

SHEET NO. 5-162
 TOTAL SHEETS 312



DRAWN BY: S. M. RASHIDI DATE: 9/28/01
 CHECKED BY: K. P. SEDAI DATE: 8/09/02