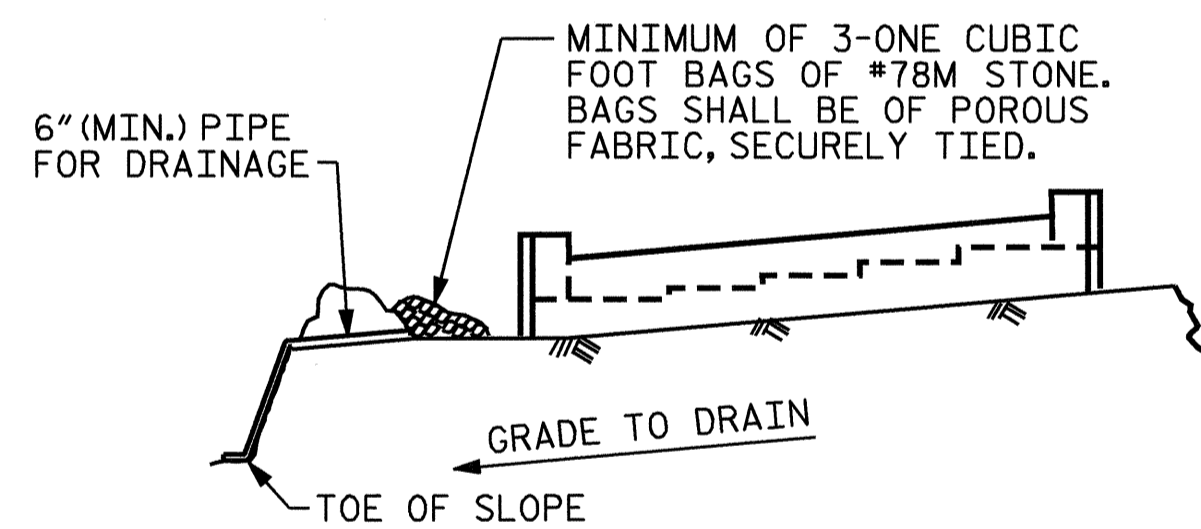


NOTE: NO SEPARATE PAYMENT WILL BE MADE FOR FURNISHING AND INSTALLING THE PVC PLASTIC PIPE DRAINS, HARDWARE CLOTH AND FASTENERS, THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

**PIPE DRAIN DETAILS**

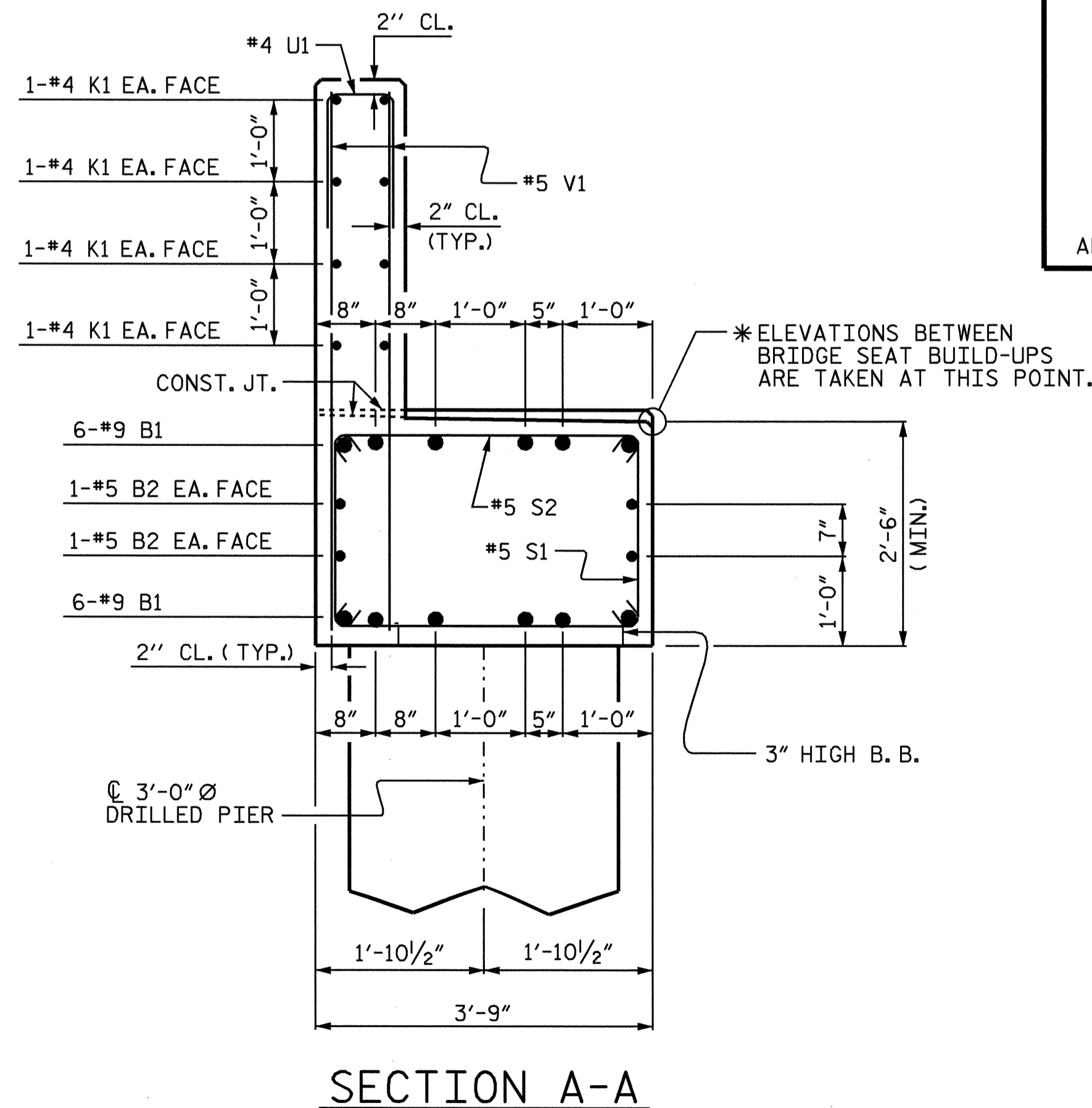


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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**



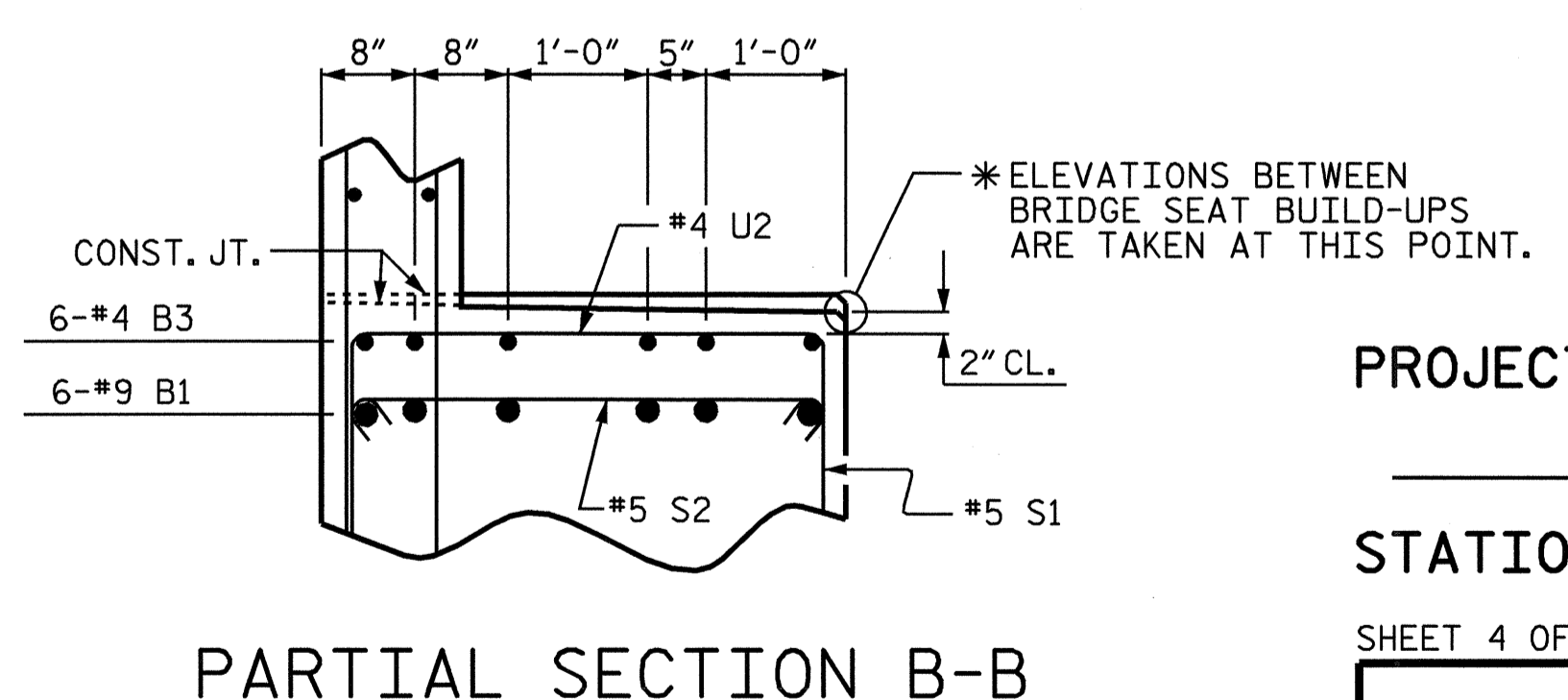
**SECTION A-A**

**BAR TYPES**

**BILL OF MATERIAL**

END BENT No. 1					
BAR NUMBER	SIZE	TYPE	LENGTH	WEIGHT	
B1	12	9	1	44'-11"	1833
B2	4	5	STR	42'-6"	177
B3	12	4	STR	10'-8"	86
B4	12	4	STR	2'-8"	21
H1	8	5	2	9'-9"	81
H2	8	5	2	10'-1"	84
H3	10	5	3	11'-8"	122
H4	10	5	3	11'-3"	117
K1	16	4	STR	22'-6"	240
K2	8	4	STR	2'-11"	16
M1	36	10	4	20'-1"	3111
S1	38	5	6	8'-7"	340
S2	38	5	5	4'-4"	172
U1	37	4	7	4'-8"	115
U2	16	4	7	7'-5"	79
V1	74	5	STR	5'-9"	444
V2	28	4	STR	7'-0"	131
V3	31	4	STR	7'-9"	160
REINFORCING STEEL				7,329	LBS.
SP-1	3	★	8	265'-8"	831
SPIRAL COLUMN REINFORCING STEEL				831	LBS.
★ THE SP-1 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.					
CLASS A CONCRETE (C.Y.)					
POUR #2 (CAP & LOWER WINGS) = 19.2					
POUR #3 (BACKWALL & UPPER WINGS) = 9.8					
TOTAL = 29.0 C.Y.					
DRILLED PIERS:					
DRILLED PIER CONCRETE (C.Y.)					
POUR #1 (DRILLED PIER) = 11.2 C.Y.					
3'-0" Ø DRILLED PIER IN SOIL = 12.75 LIN. FT.					
3'-0" Ø DRILLED PIER NOT IN SOIL = 30.0 LIN. FT.					
CSL TUBES = 201.0 LIN. FT.					

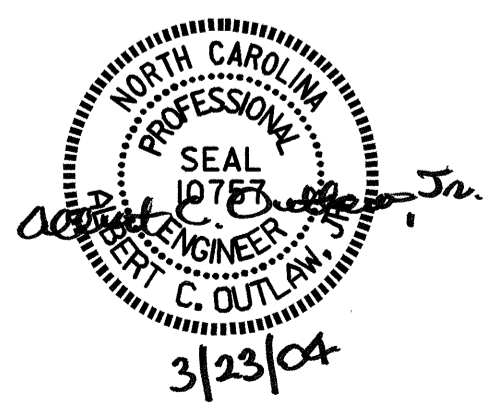
ALL BAR DIMENSIONS ARE OUT TO OUT.



**PARTIAL SECTION B-B**

PROJECT NO. B-3885  
ORANGE COUNTY  
 STATION: 17+75.00 -L-  
 SHEET 4 OF 4

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SUBSTRUCTURE  
 END BENT No. 1



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

TOTAL SHEETS: 33

DRAWN BY: P.C. BREWER DATE: 1/20/04  
 CHECKED BY: S.B. WILLIAMS DATE: 1/29/04

22-MAR-2004 14:41  
 W:\squad\B3885\pbrw\l\crosstation\B3885.ed.EB1.01.dwg  
 outlaw