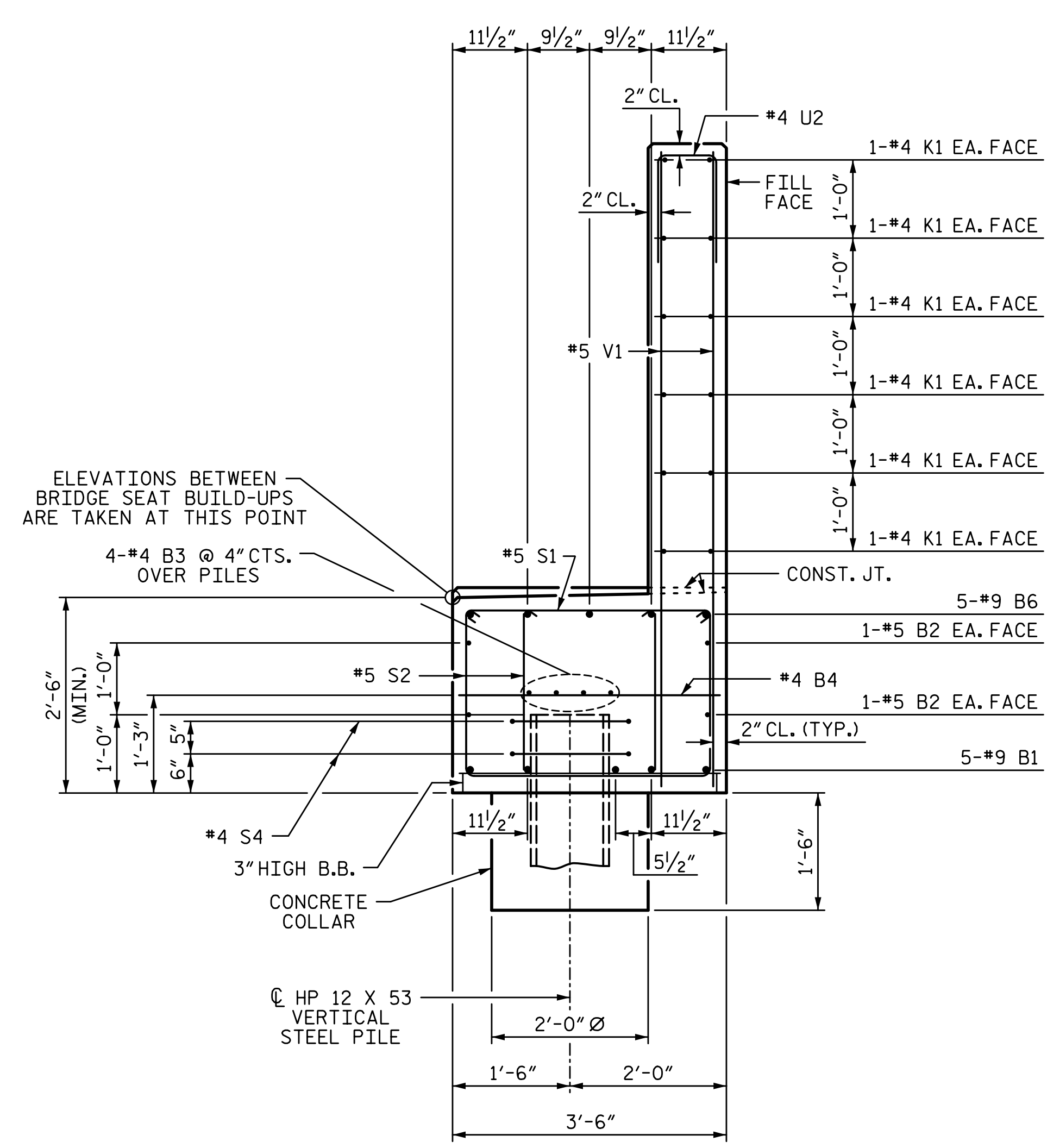
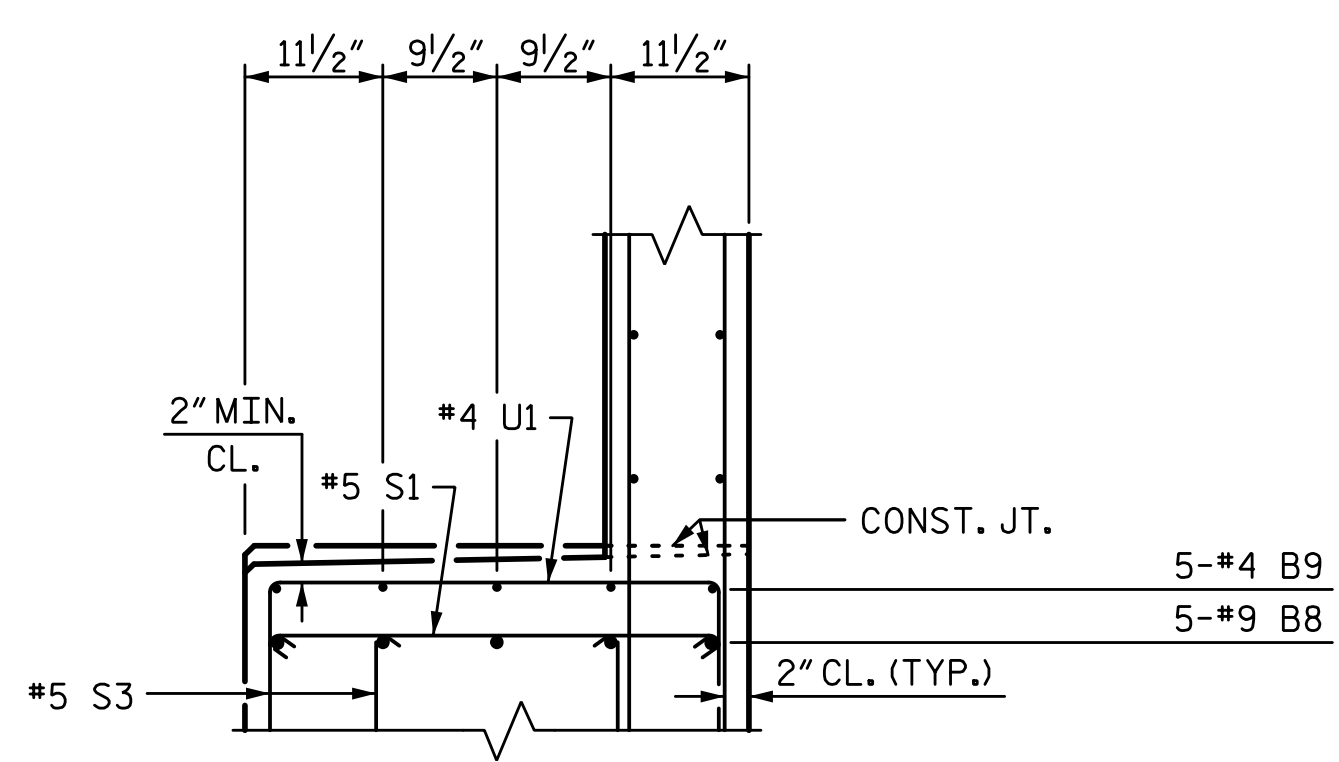


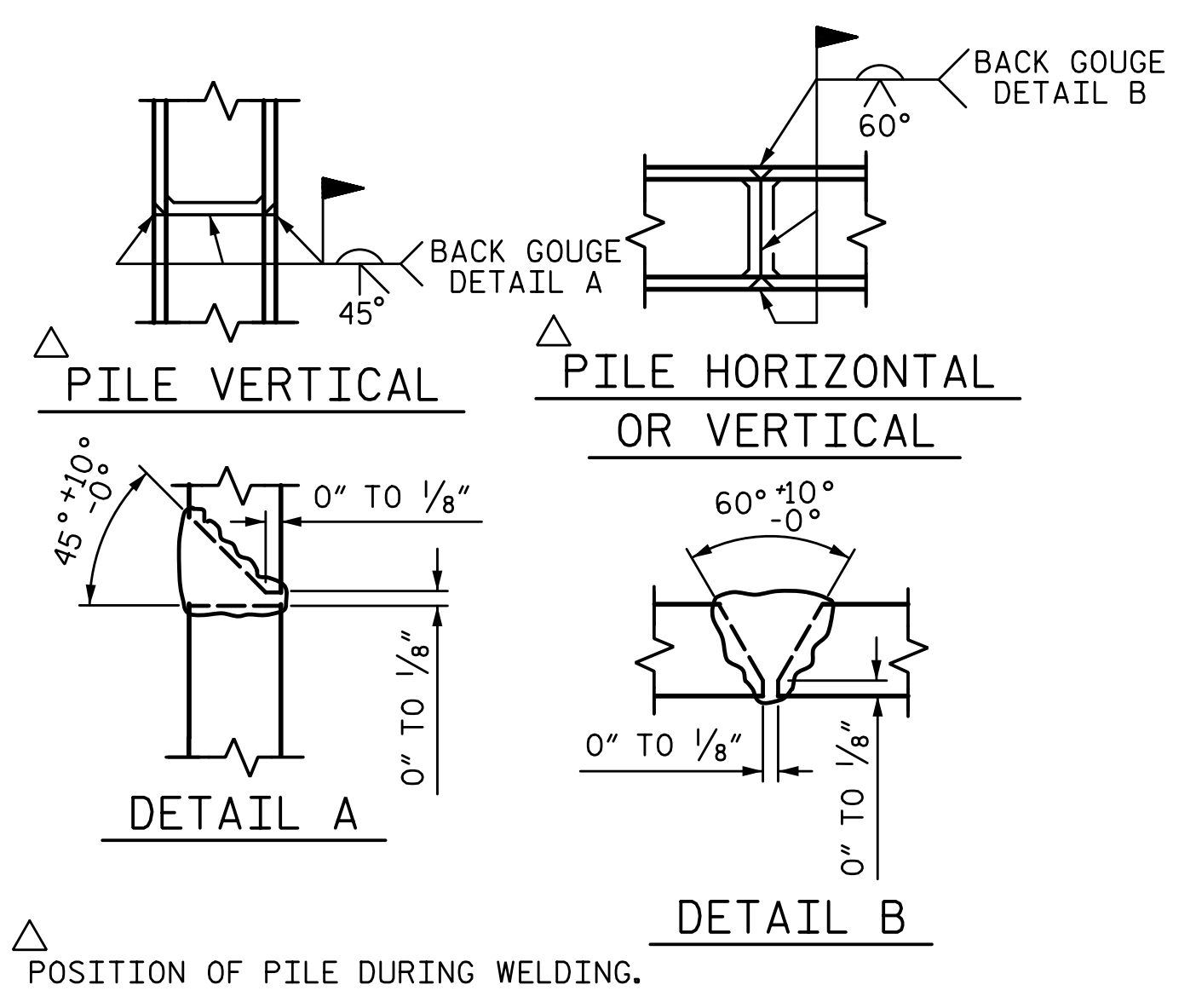
3/22/2017 8:30:09 AM G:\Projects\2014\U-3109A\Structures\Site 2\Site 2-Str 2 Bridge 436 (SBL)\Drawings\Final\402_U3109A_smu_eb2.dgn



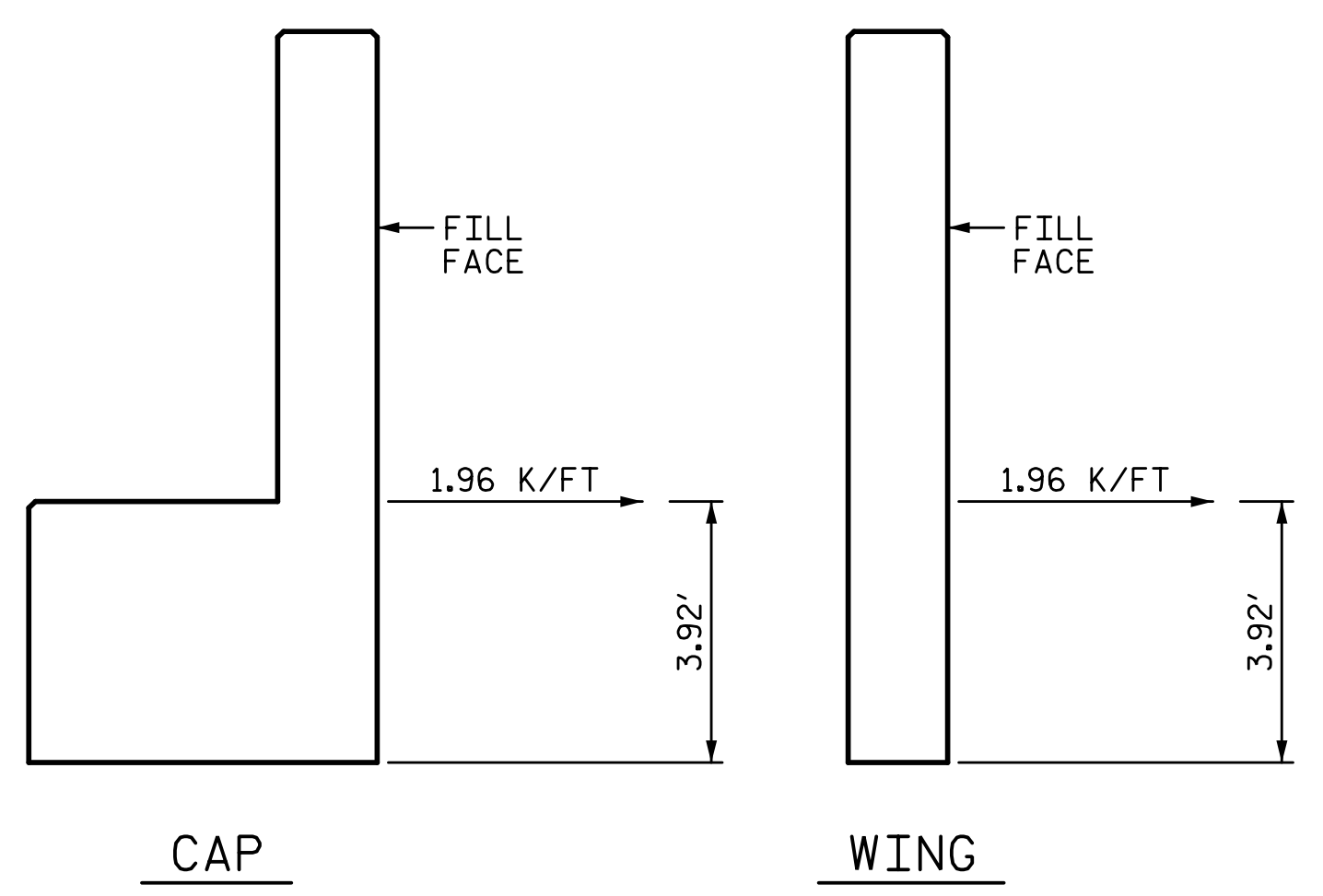
SECTION A-A
(TIEBACK NOT SHOWN FOR CLARITY)



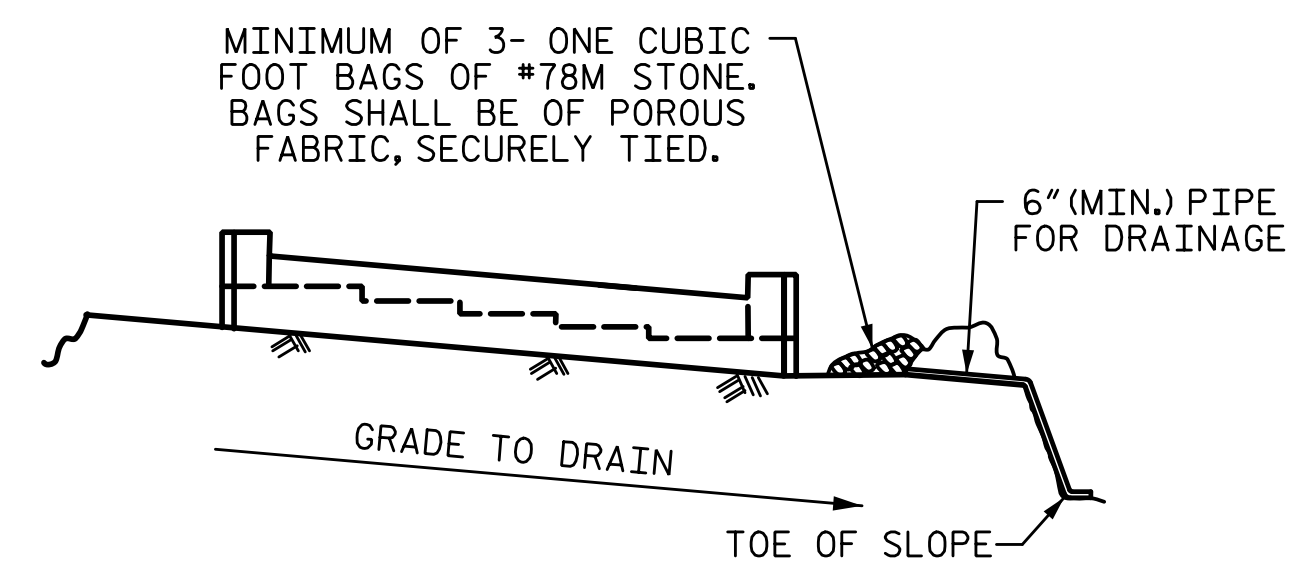
SECTION B-B



PILE SPLICE DETAILS



TIEBACK DETAILS



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

6" (MIN.) PIPE FOR DRAINAGE

GRADE TO DRAIN

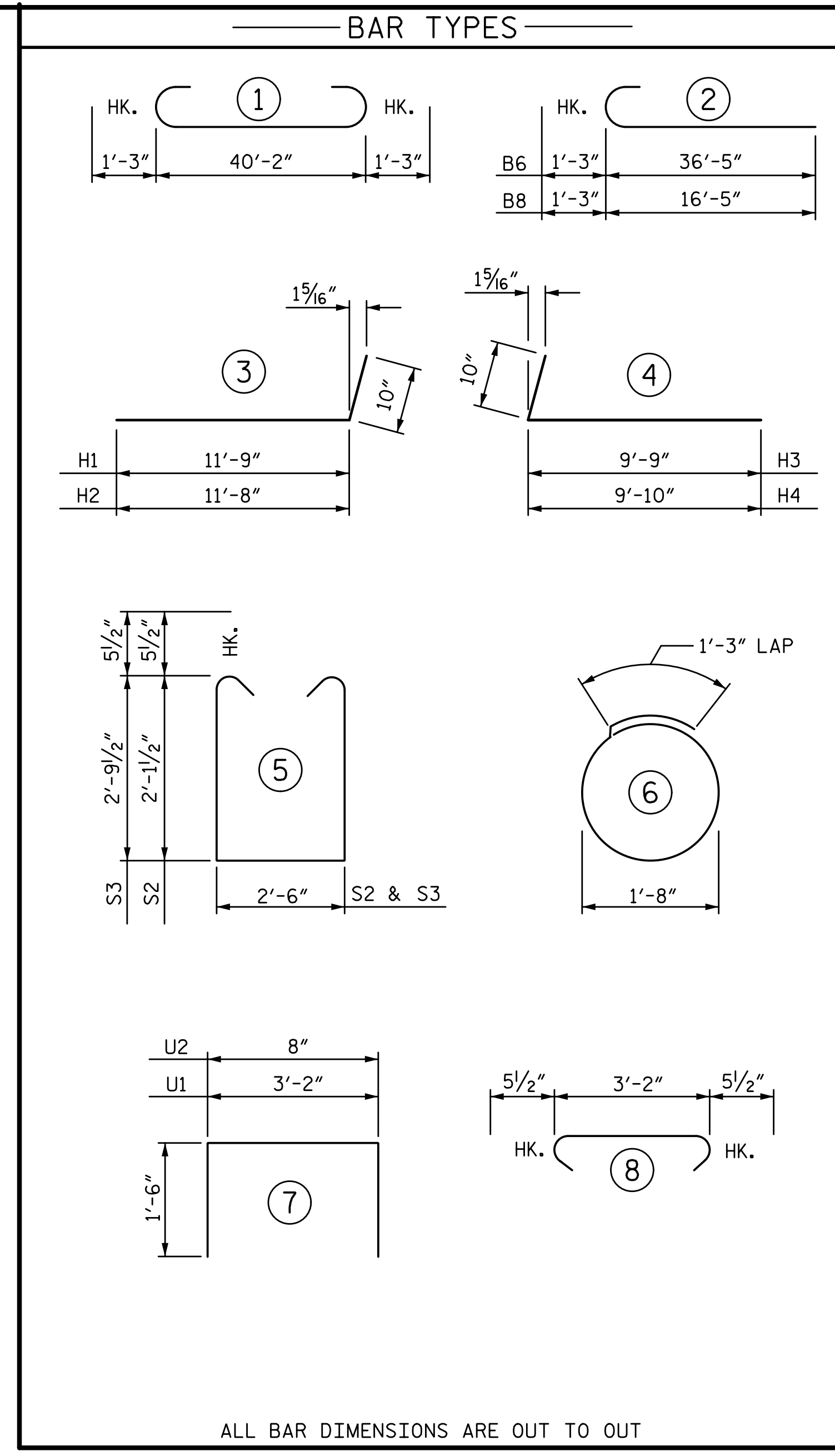
TOE OF SLOPE

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



BILL OF MATERIAL					
END BENT 2					
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT	
B1	5	9	1	42'-8"	725
B2	4	5	STR	40'-4"	168
B3	8	4	STR	21'-5"	114
B4	13	4	STR	3'-2"	27
B5	2	5	STR	6'-11"	14
B6	5	9	2	37'-8"	640
B7	5	4	STR	8'-9"	29
B8	5	9	2	17'-8"	300
B9	5	4	STR	6'-9"	23
H1	22	5	3	12'-7"	289
H2	22	5	3	12'-6"	287
H3	20	5	4	10'-7"	221
H4	20	5	4	10'-8"	223
K1	24	4	STR	21'-5"	343
K2	8	4	STR	2'-7"	14
S1	62	5	8	4'-1"	264
S2	37	5	5	7'-8"	296
S3	50	5	5	9'-0"	469
S4	12	4	6	6'-6"	52
U1	12	4	7	6'-2"	49
U2	35	4	7	3'-8"	86
V1	70	5	STR	7'-11"	578
V2	34	5	STR	10'-10"	384
V3	30	5	STR	9'-9"	305
TOTAL REINFORCING STEEL					5900 LB
CLASS "A" CONCRETE BREAKDOWN					
POUR 1					
(CAP, COLLARS, & LOWER WINGS)					18.9 CY
POUR 2					
(BACKWALL AND UPPER WINGS)					15.2 CY
TOTAL CLASS "A" CONCRETE					34.1 CY
HP 12 X 53 STEEL PILES					
NO. 6					495 LF
PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES					6 EA

DRAWN BY: S.D. COOPER	DATE: 9-15
CHECKED BY: J.A. BATTS	DATE: 9-15
DESIGN ENGINEER OF RECORD: J.A. BATTS	DATE: 9-15

PLANS PREPARED BY:
SIMPSON ENGINEERS & ASSOCIATES
 5640 Dillard Drive
 Suite 200
 Cary, NC 27518
 (919) 852-0468
 (919) 852-0598 (Fax)
 www.simpsonengr.com
 LICENSURE NO. C-2521



PROJECT NO. U-3109A
ALAMANCE COUNTY
 STATION: 146+61.35 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE

END BENT 2

(SBL)

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

SHEET NO.
S02-47

TOTAL SHEETS
S02-51

STR. #2