

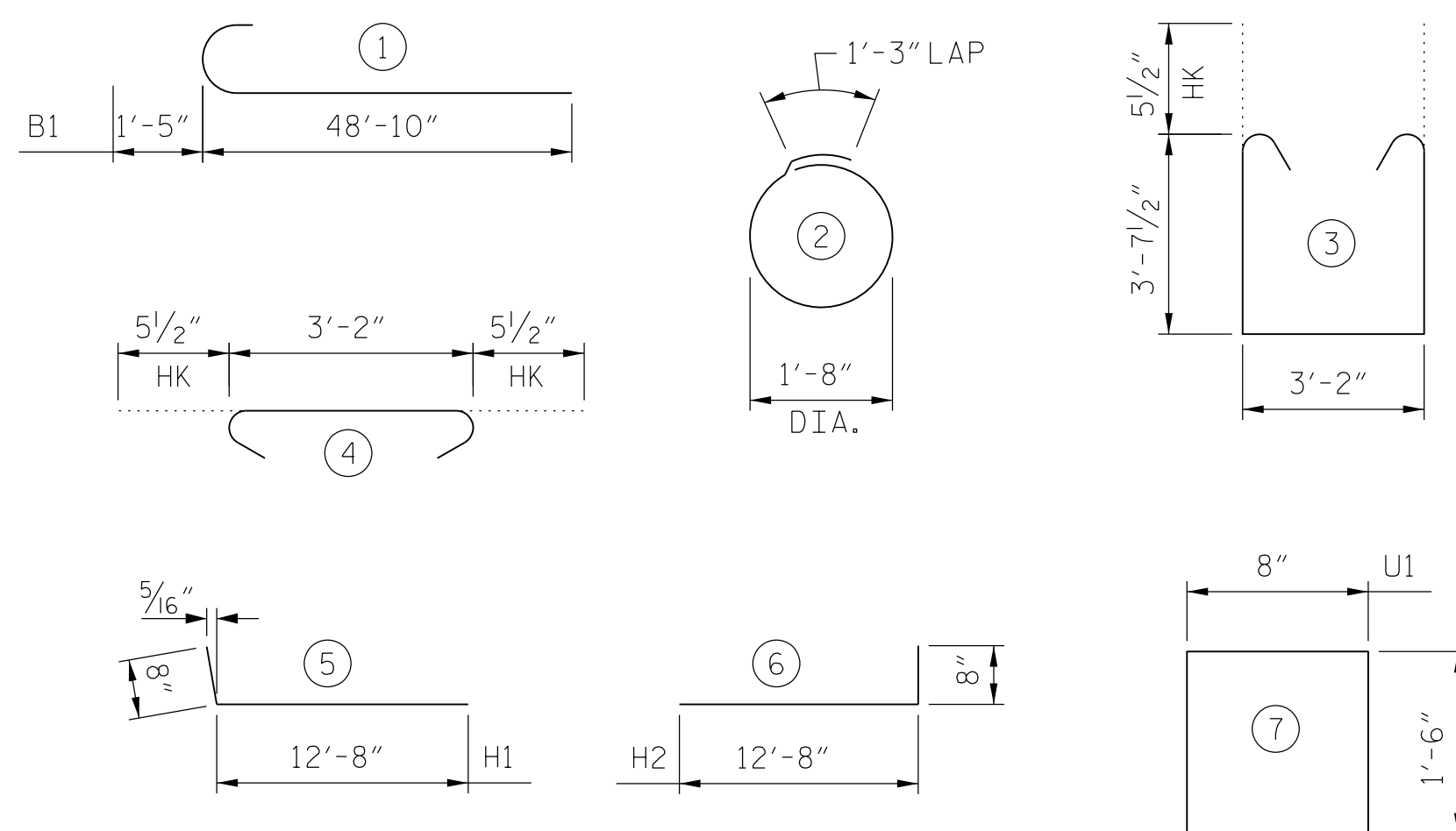
BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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 FOR THE SEVERAL PAY ITEMS.

**TEMPORARY DRAINAGE AT END BENT**

**BAR TYPES**



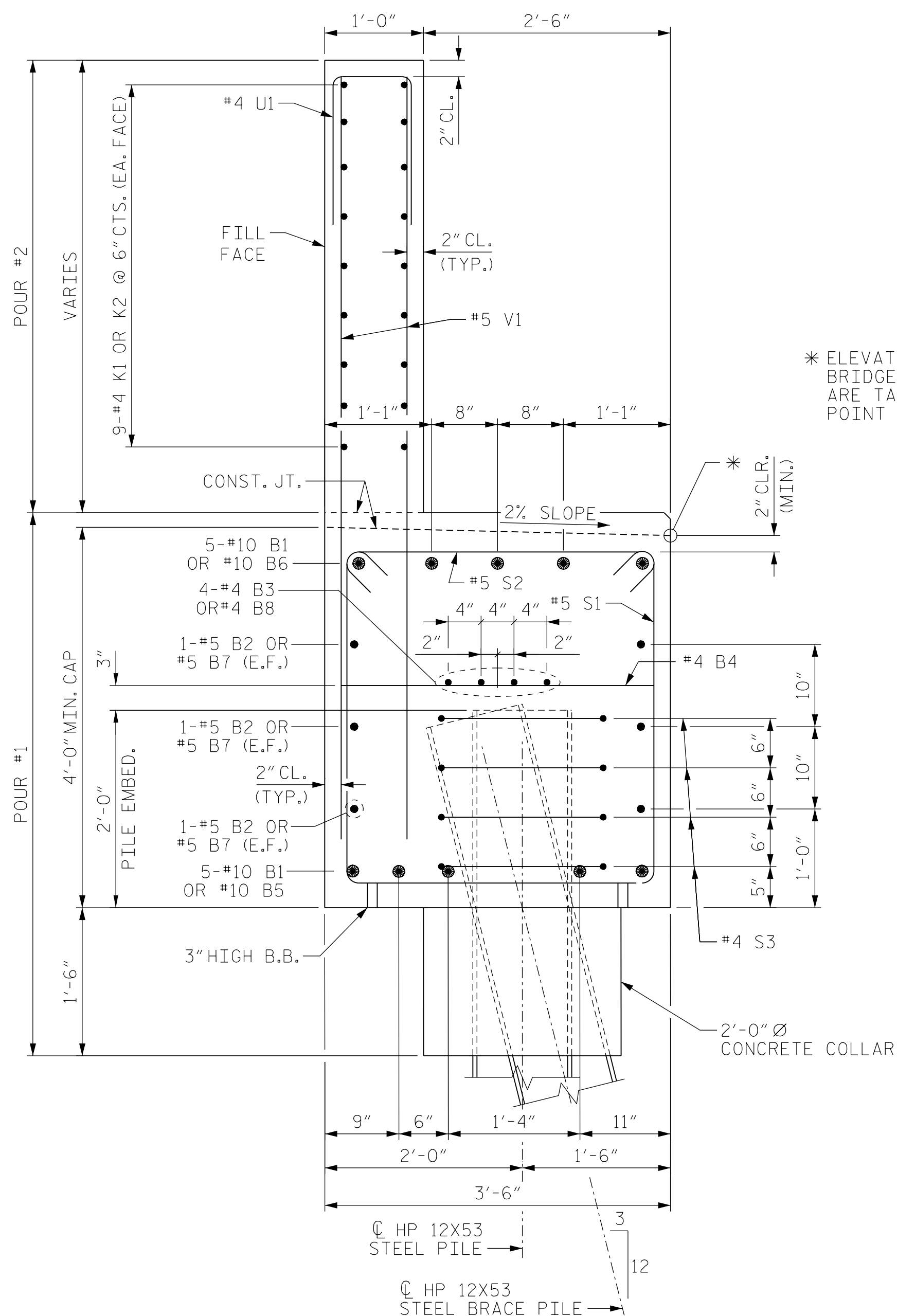
ALL BAR DIMENSIONS ARE OUT TO OUT.

**END BENT 1 - BILL OF MATERIAL**

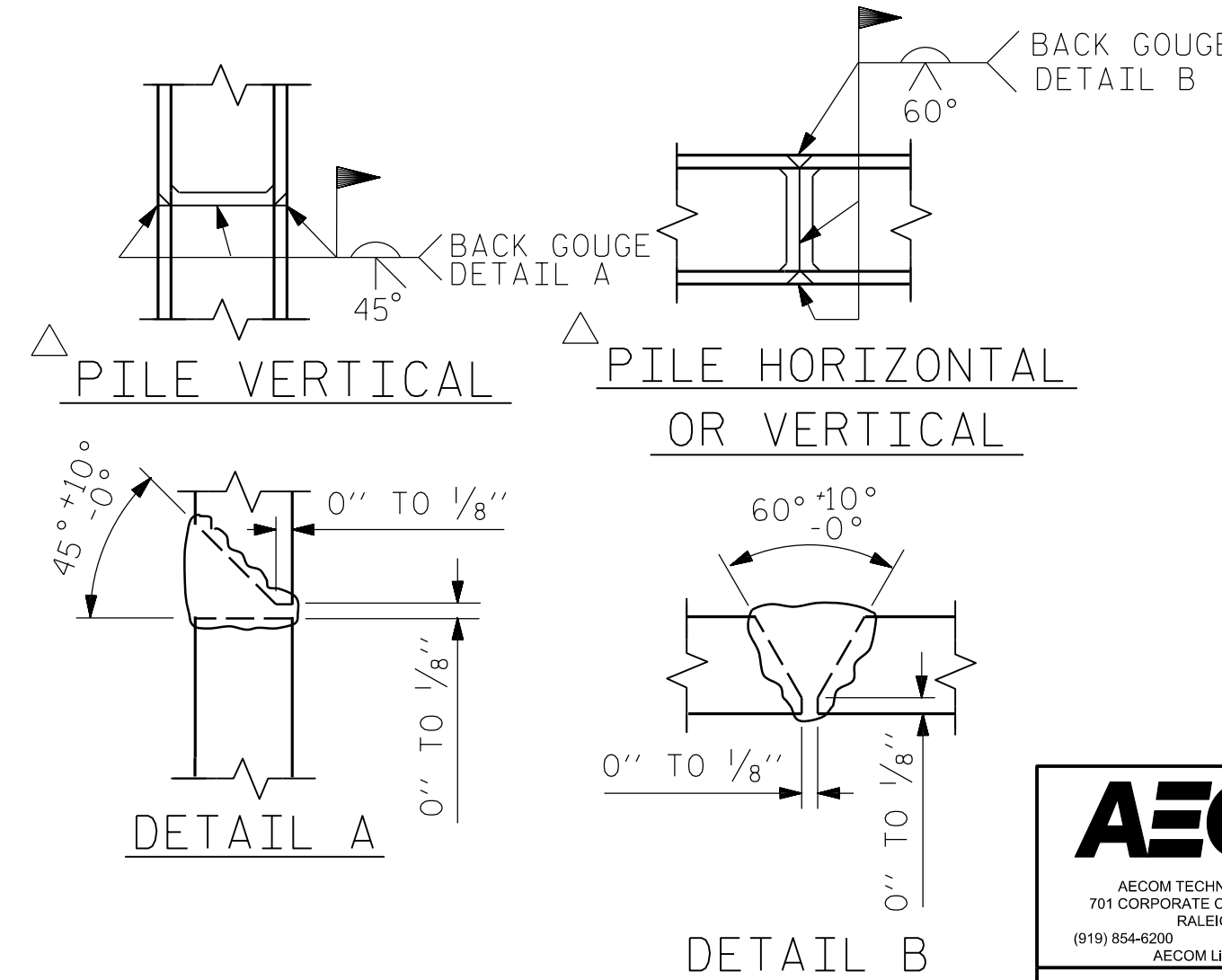
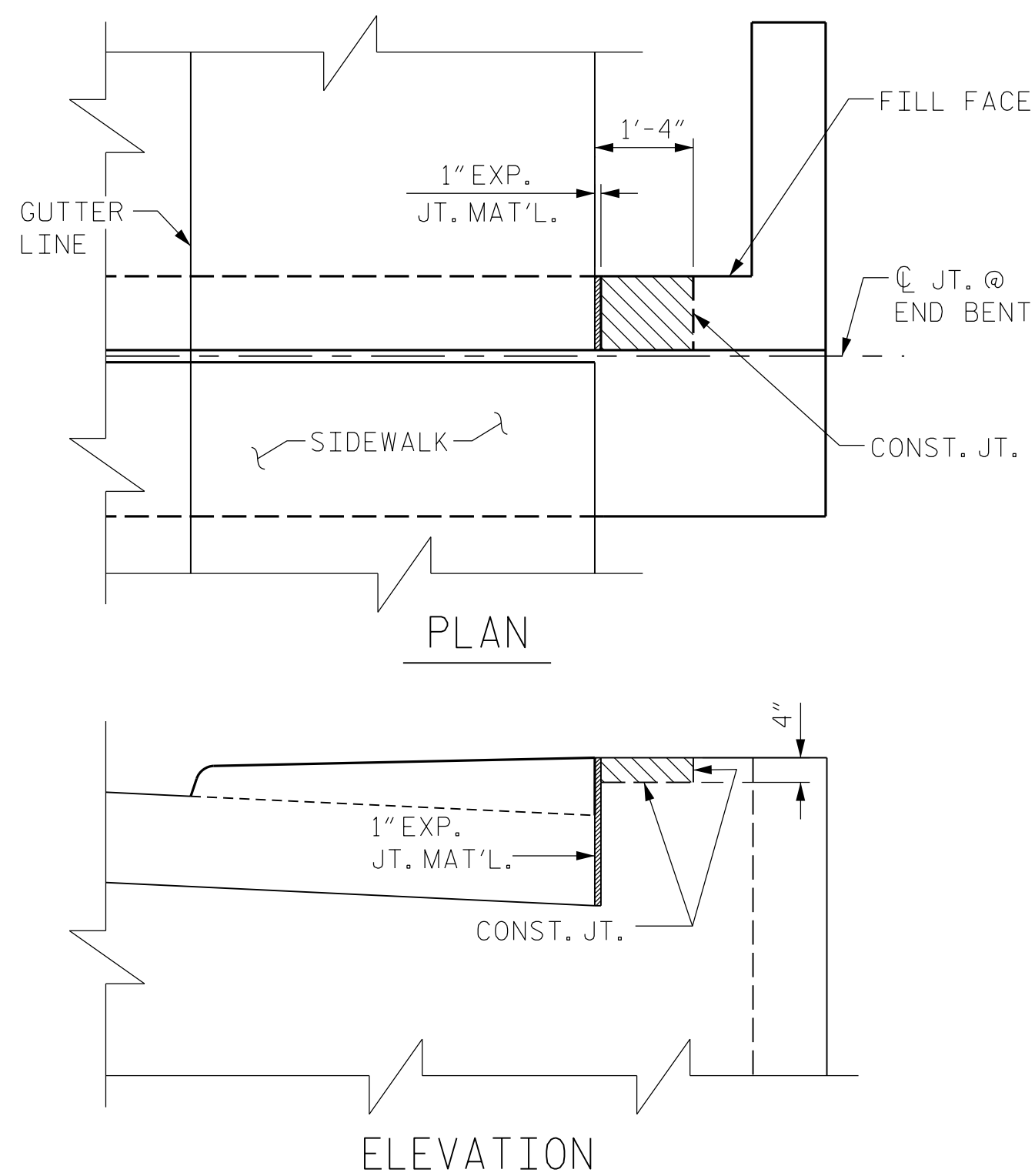
STAGE I						STAGE II					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	10	#10	(1)	50'-3"	2162	B1	10	#10	(1)	50'-3"	2162
B2	6	#5	STR	49'-10"	312	B4	16	#4	STR	3'-2"	34
B3	8	#4	STR	26'-2"	140	B5	5	#10	STR	22'-11"	493
B4	12	#4	STR	3'-2"	25	B6	5	#10	STR	26'-1"	561
						B7	12	#5	STR	33'-5"	418
						B8	8	#4	STR	33'-2"	177
H1	40	#5	(5)	13'-4"	556	H2	38	#5	(6)	13'-4"	528
K1	36	#4	STR	26'-2"	629	K2	54	#4	STR	22'-11"	827
K3	2	#4	STR	2'-9"	4	K3	2	#4	STR	2'-9"	4
K4	4	#4	STR	4'-0"	11	K4	4	#4	STR	4'-0"	11
S1	56	#5	(3)	11'-4"	662	S1	79	#5	(3)	11'-4"	934
S2	56	#5	(4)	4'-1"	238	S2	79	#5	(4)	4'-1"	336
S3	24	#4	(2)	6'-6"	104	S3	28	#4	(2)	6'-6"	122
U1	43	#4	(7)	3'-8"	105	U1	60	#4	(7)	3'-8"	147
V1	86	#5	STR	8'-3"	740	V1	120	#5	STR	8'-3"	1033
V2	36	#5	STR	10'-6"	394	V3	36	#5	STR	9'-10"	369
REINFORCING STEEL						REINFORCING STEEL					
LBS. 6082						LBS. 8156					
CLASS A CONCRETE						CLASS A CONCRETE					
POUR #1 (CAP, COLLAR & LOWER WING) C.Y. 27.7						POUR #1 (CAP, COLLAR & LOWER WING) C.Y. 36.8					
POUR 2 (BACKWALL & UPPER WING) C.Y. 11.2						POUR 2 (BACKWALL & UPPER WING) C.Y. 13.7					
TOTAL C.Y. 38.9						TOTAL C.Y. 50.5					
HP 12x53 STEEL PILES NO. 6						HP 12x53 STEEL PILES NO. 7					
LIN. FT. 240						LIN. FT. 280					

**NOTES:**

- STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR ANCHOR BOLTS.
- BACKWALL SHALL BE PLACED BEFORE APPLYING THE EPOXY PROTECTIVE COATING.
- THE TOP SURFACE AREAS OF THE END BENT CAP SHALL BE CURED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS EXCEPT THAT THE MEMBRANE CURING COMPOUND METHOD SHALL NOT BE USED.
- 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%.
- FOR OTHER NOTES, SEE "FOUNDATION LAYOUT" SHEET AND "LONG CHORD LAYOUT" SHEET.
- THE CONCRETE IN THE SHADED AREA OF THE WING SHALL BE POURED AFTER THE JOINT BETWEEN THE DECK AND THE APPROACH SLAB HAS BEEN SAWED AND THE END POST ARE CAST IF SLIP FORMING IS USED.
- INSTALL THE 4" DIA. 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.



\* ELEVATIONS BETWEEN BRIDGE SEAT BUILD-UPS ARE TAKEN AT THIS POINT



**PILE SPLICE DETAILS**

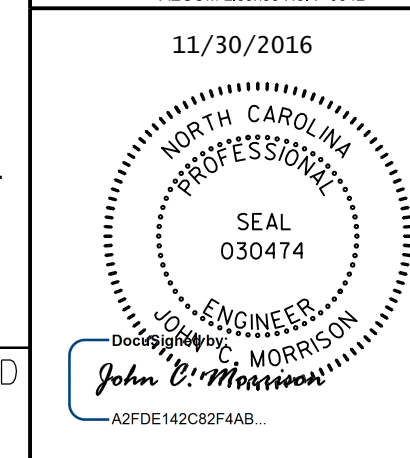
△ POSITION OF PILE DURING WELDING.

PROJECT NO. U-4910A  
CABARRUS COUNTY  
 STATION: 147+80.00 -L-

SHEET 4 OF 4



AECOM TECHNICAL SERVICES, INC.  
 701 CORPORATE CENTER DRIVE, SUITE 475  
 RALEIGH, NC 27607  
 (919) 854-6200 www.aecom.com  
 AECOM License No. F-0342



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**SUBSTRUCTURE  
 END BENT 1  
 SECTION AND DETAILS**

REVISIONS

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

SHEET NO.  
**S-38**  
 TOTAL SHEETS  
**55**

DRAWN BY : K.H. COMPTON DATE : 3/2016  
 CHECKED BY : G.L. HAMILTON DATE : 7/2016  
 DESIGNED BY : K.H. COMPTON DATE : 3/2016

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DATE: 11/30/2016  
 TIME: 10:24:40 AM

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