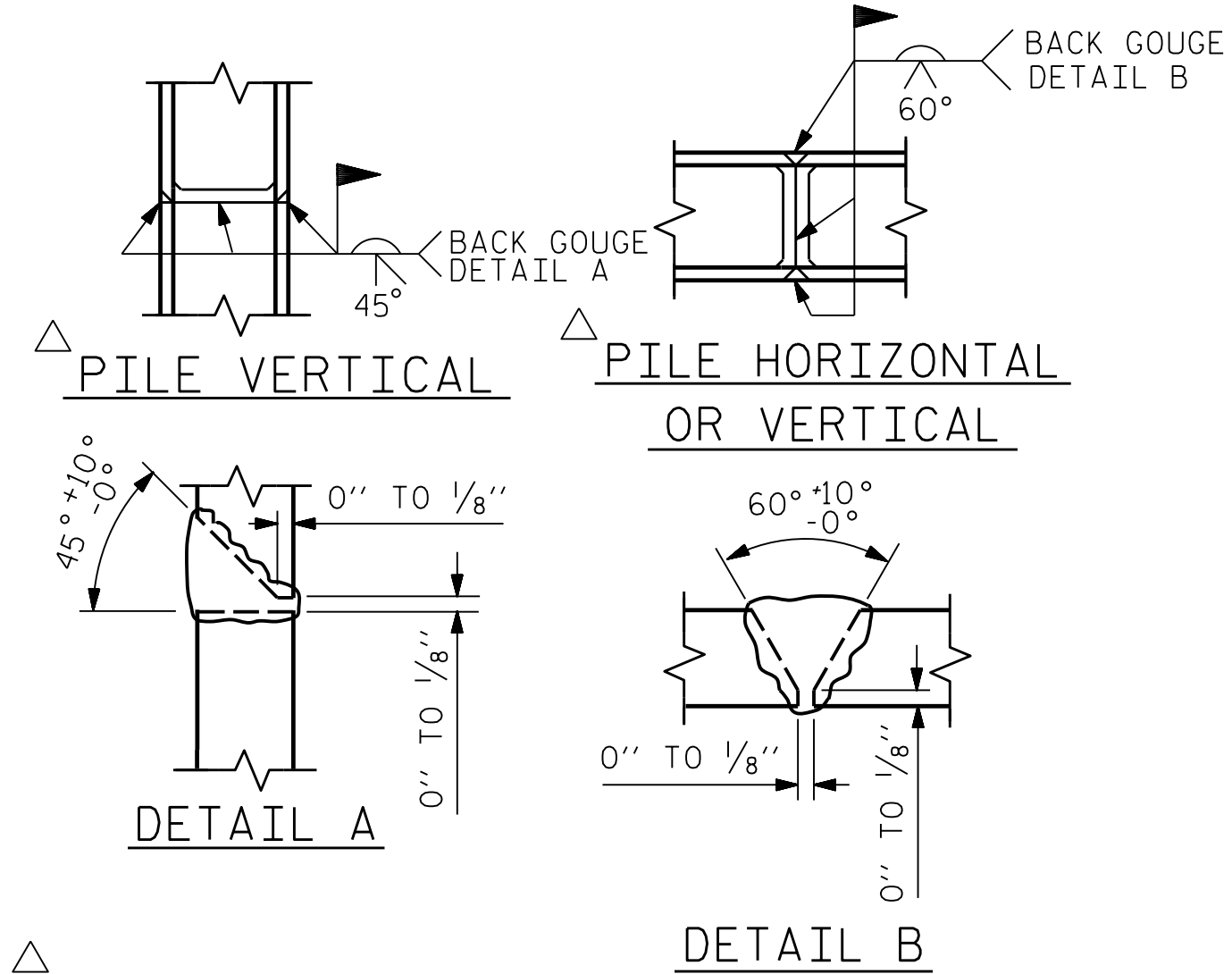


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

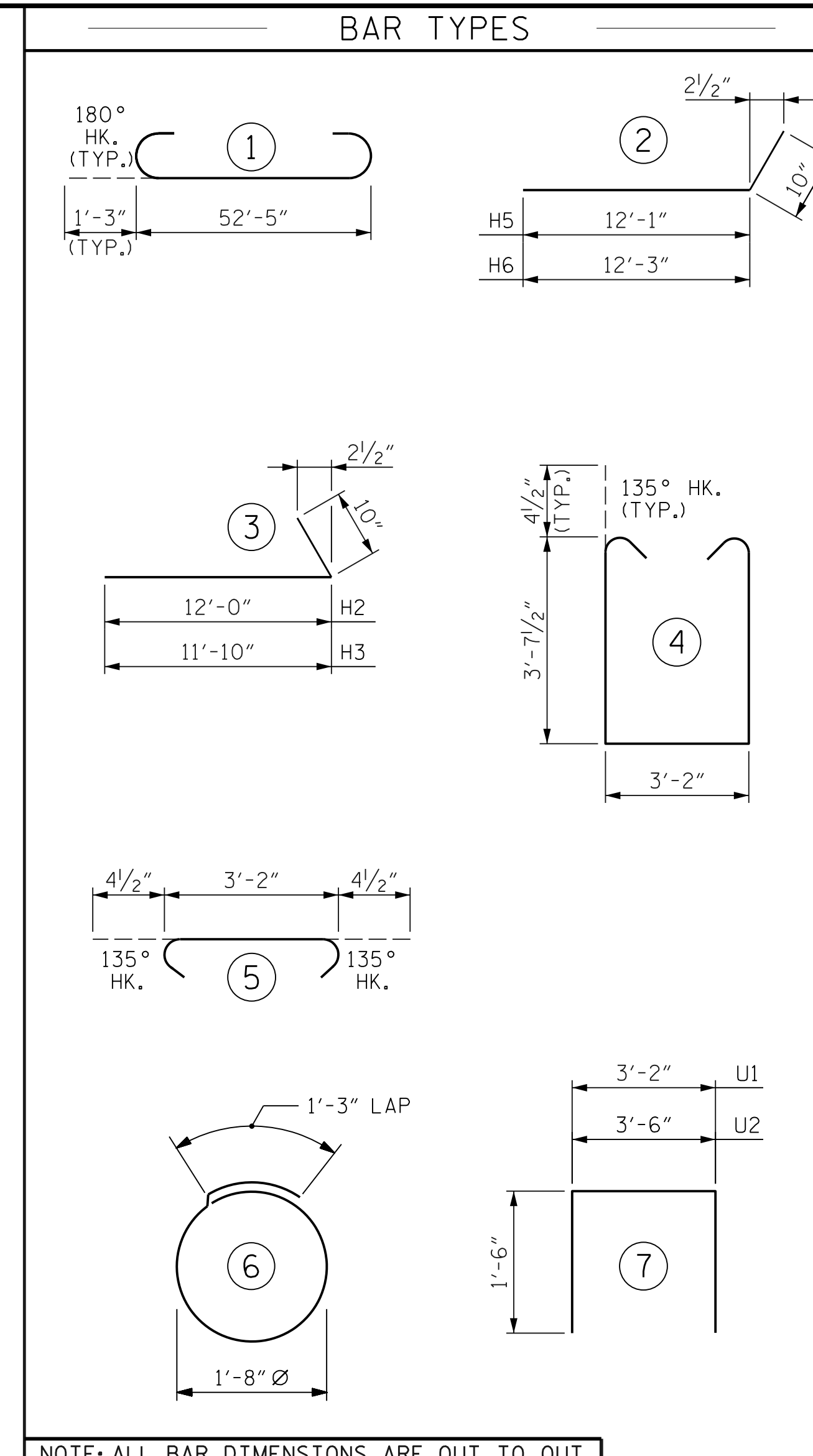
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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



NOTE: ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

END BENT 2

BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	11	#9	1	54'-11"	2054
B2	20	#4	STR	27'-6"	368
B3	5	#4	STR	11'-8"	39
B4	13	#4	STR	3'-2"	28
B5	8	#4	STR	27'-6"	147
D1	88	#4	STR	4'-6"	265
H1	12	#5	STR	14'-5"	181
H2	6	#5	3	12'-10"	81
H3	6	#5	3	12'-8"	80
H4	12	#5	STR	14'-8"	184
H5	6	#5	2	12'-11"	81
H6	6	#5	2	13'-1"	82
H7	24	#4	STR	2'-7"	42
S1	71	#4	4	11'-2"	530
S2	71	#4	5	3'-11"	186
S3	24	#4	6	6'-6"	105
U1	19	#4	7	6'-2"	79
U2	10	#4	7	6'-6"	44
V1	64	#4	STR	7'-11"	339

REINFORCING STEEL 4,915 LBS.

CLASS A CONCRETE

POUR 1 (CAP, LOWER WINGS & COLLARS) 32.7 C.Y.

POUR 2 (UPPER WINGS) 4.7 C.Y.

TOTAL CONCRETE 37.4 C.Y.

HP 12 x 53 STEEL PILES

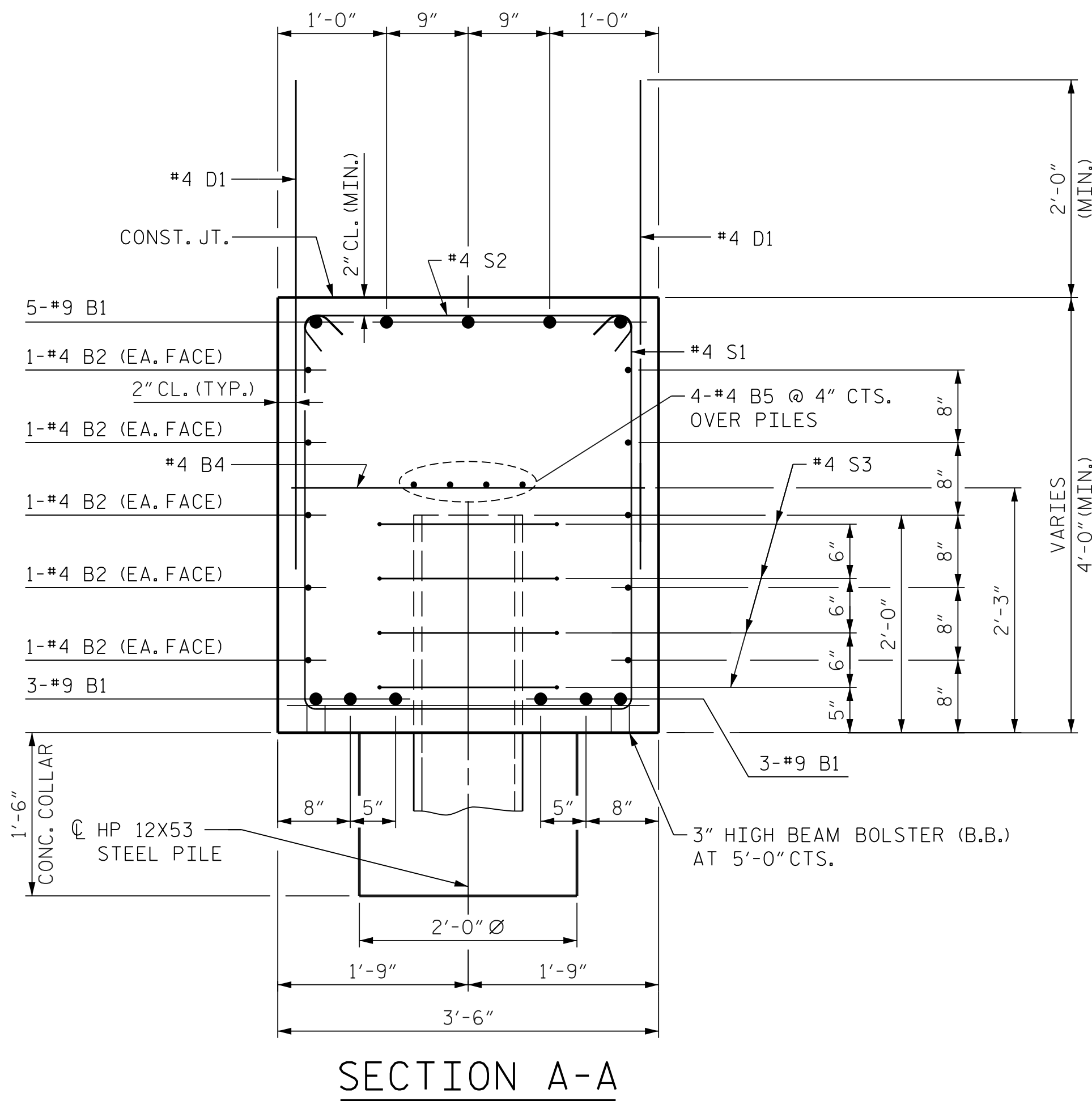
NO. 6

L.F. 270

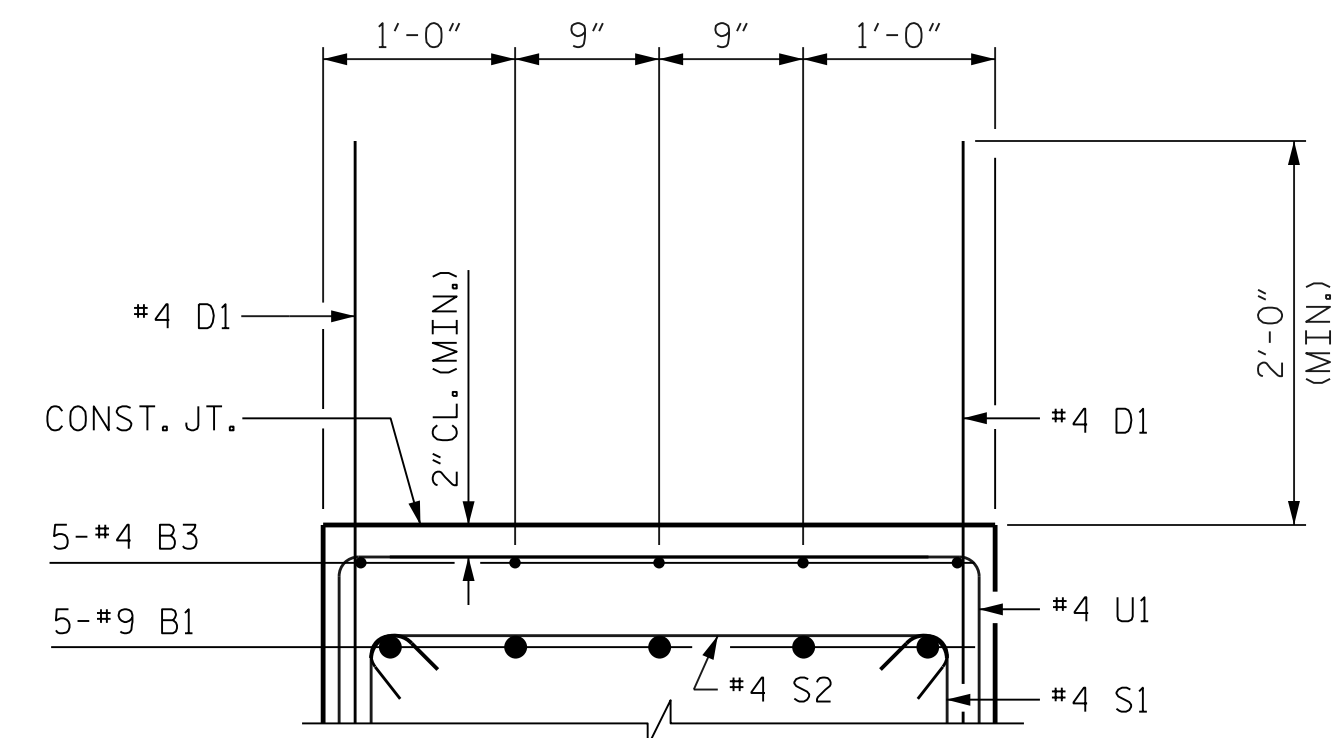
STEEL PILE POINTS EA. 6

PILE DRIVING EQUIPMENT

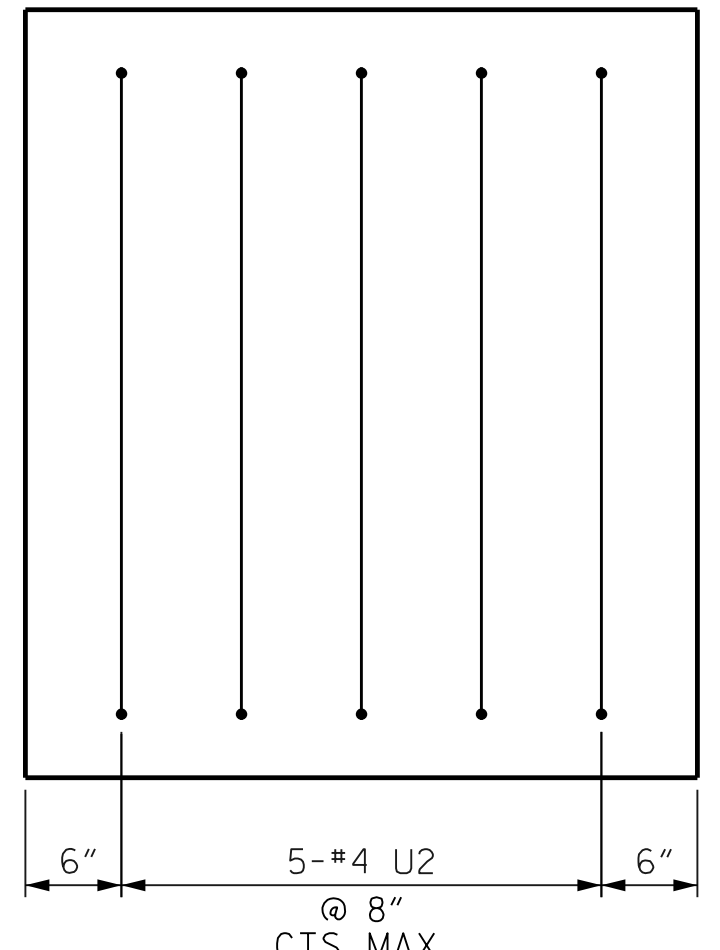
SETUP FOR HP 12 X 53 STEEL PILES EA. 6



SECTION A-A



SECTION B-B



END VIEW

DRAWN BY : D. H. CARTER DATE : FEB 2018

CHECKED BY : M. T. NEIHEISEL DATE : FEB 2018

DESIGN ENGINEER OF RECORD: M. T. NEIHEISEL DATE : FEB 2018

PLOT DRIVER: NCDOT STRUCTURES DEFAULT PLOTTER.PHT PENTABLE: NCDOT STRUCTURES DEFAULT PEN.TBI

USER: dcorfer DATE: 2/19/2018 TIME: 1:45:30 PM

FILE: ... \Structures\dgm\Final\CAD\1192

ICA Engineering, Inc. 555 Fayetteville St., Suite 900 Raleigh, NC 27601 NC License No: F-0258



DocuSigned by: Matthew Neiheisel 2/20/2018

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT NO. B-5352

ROCKINGHAM COUNTY

STATION: P.O.T. 22+16.89 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

SUBSTRUCTURE

END BENT 2

MISCELLANEOUS DETAILS AND BILL OF MATERIAL

REVISIONS				SHEET NO.	
BY:	DATE:	NO.	BY:	DATE:	S-34
		3			TOTAL SHEETS 37
		4			