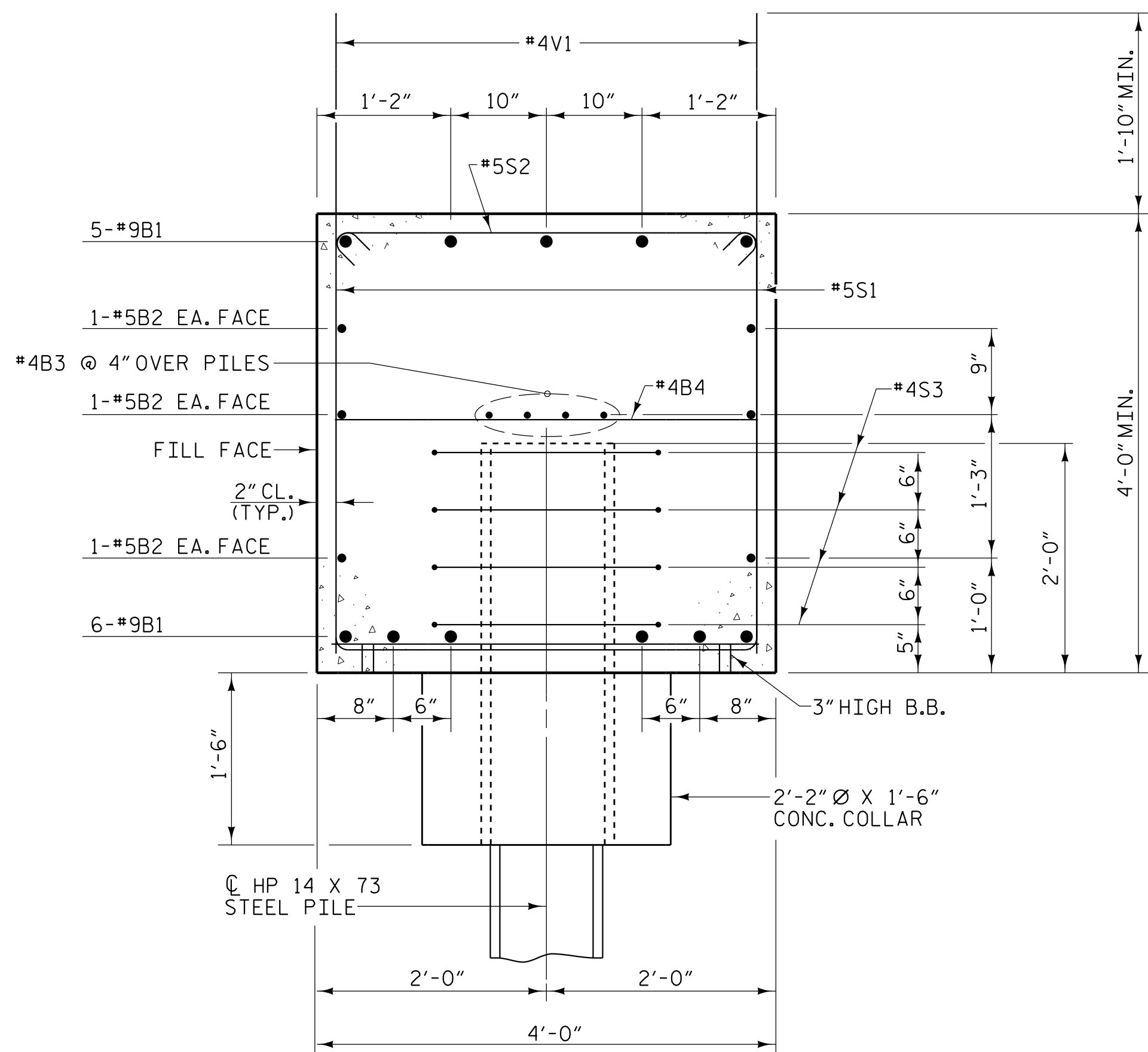


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

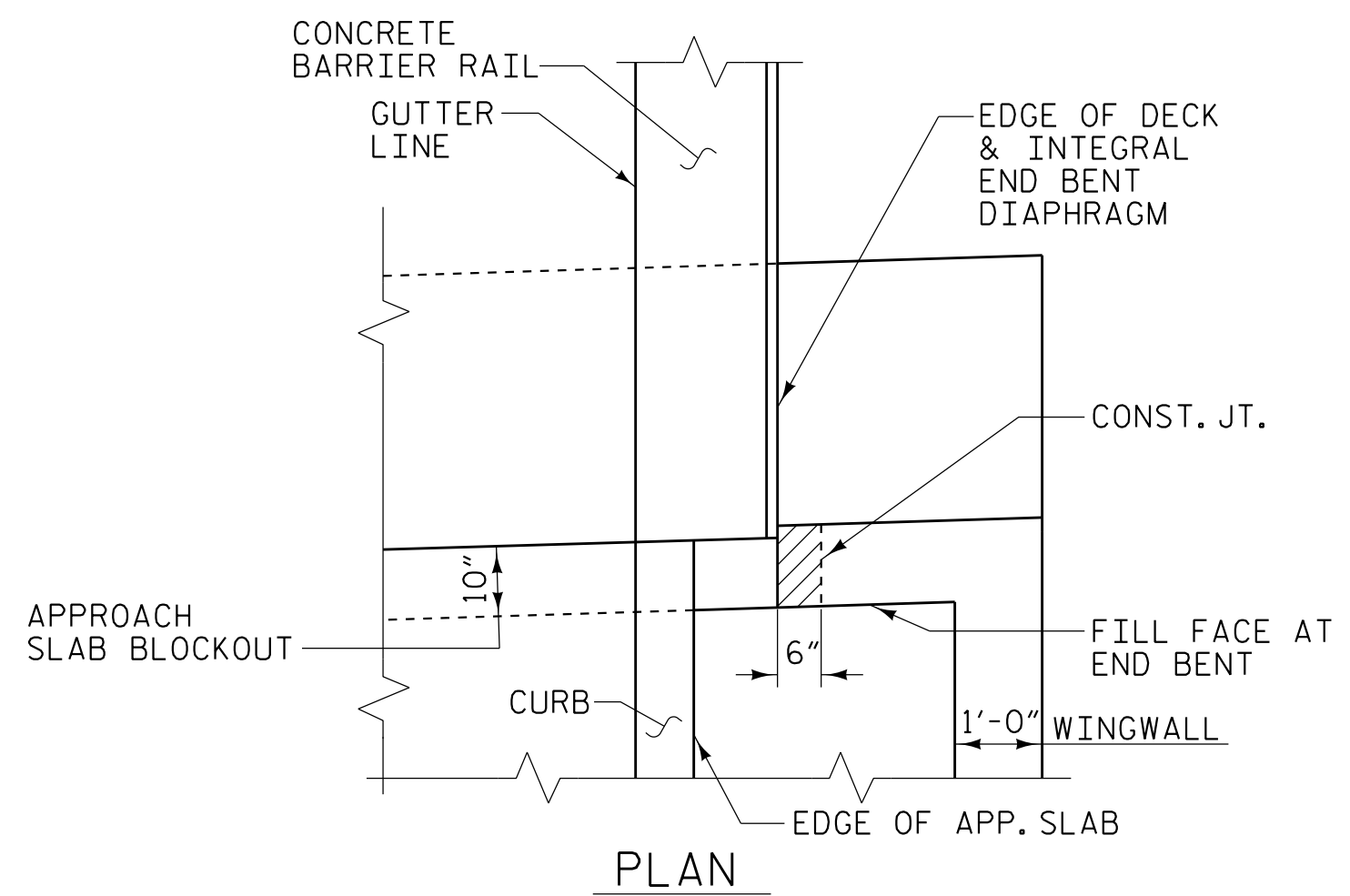
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

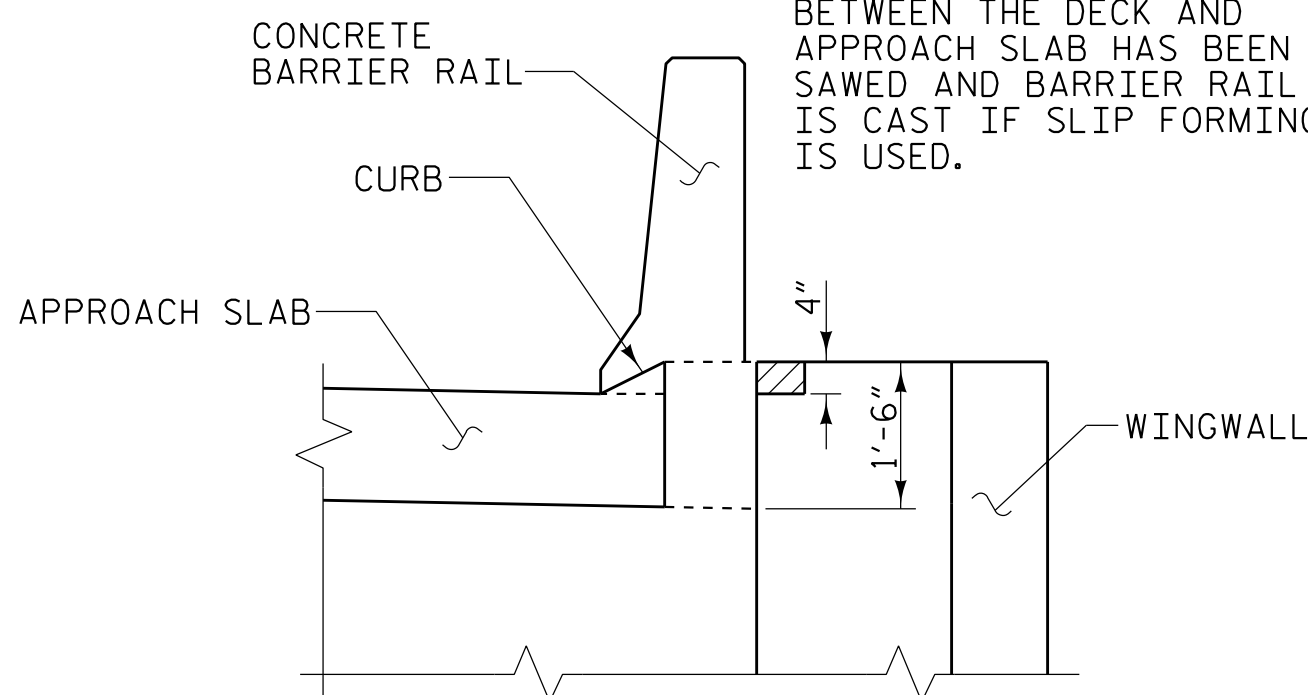
### TEMPORARY DRAINAGE AT END BENT



SECTION A-A

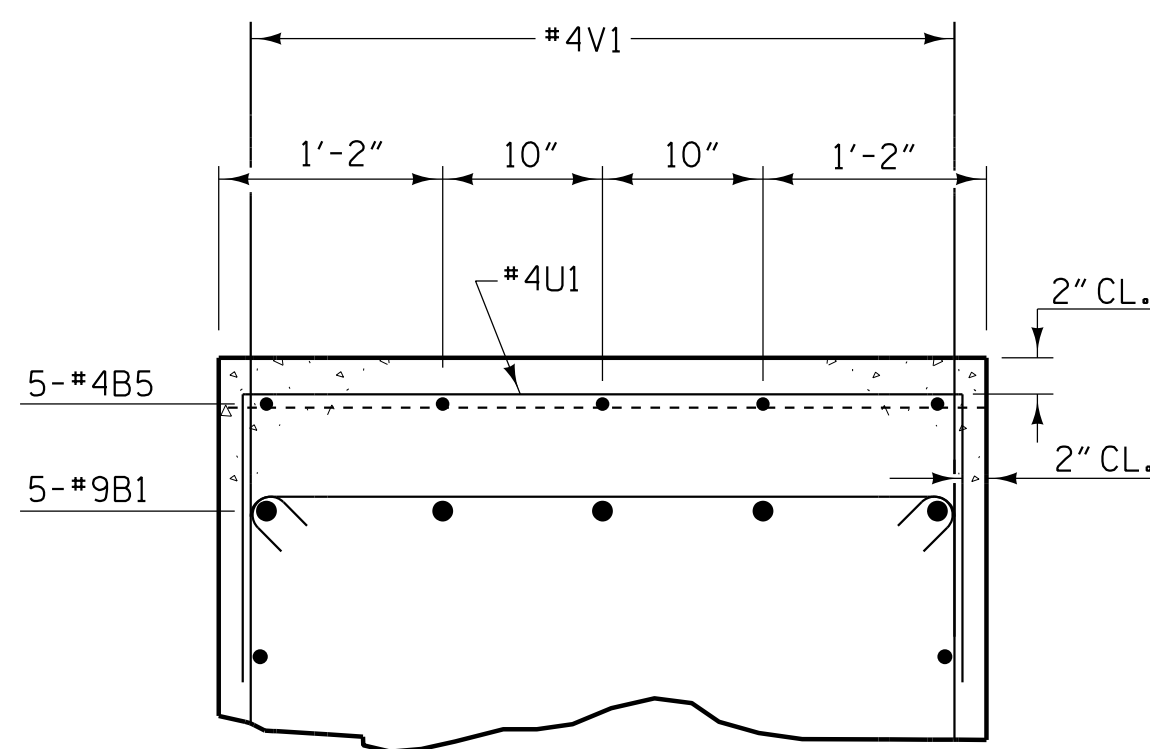


THE CONCRETE IN THE SHADED AREA OF THE WING SHALL BE POURED AFTER THE JOINT BETWEEN THE DECK AND APPROACH SLAB HAS BEEN SAWS AND BARRIER RAIL IS CAST IF SLIP FORMING IS USED.



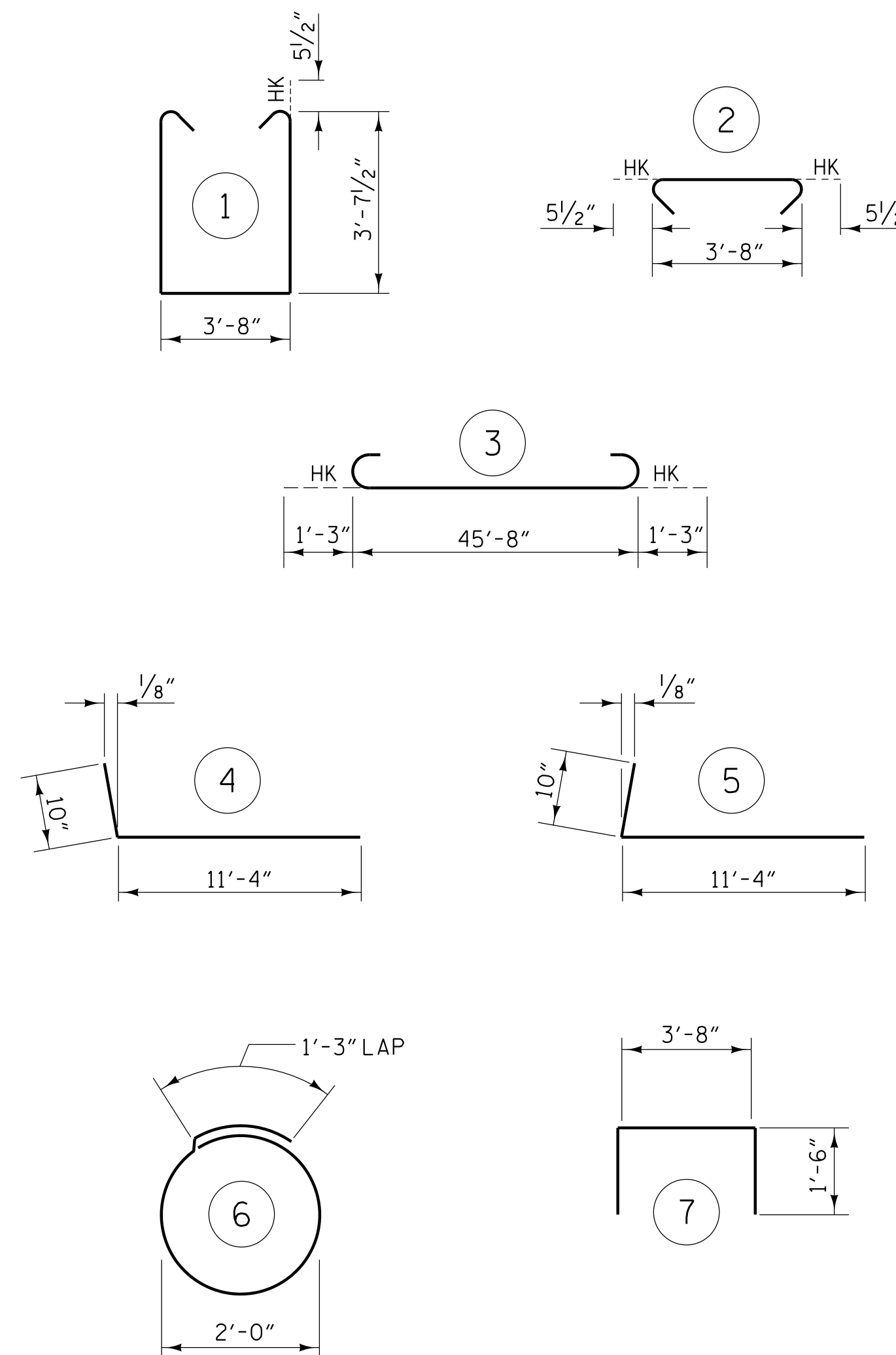
### WINGWALL BLOCKOUT

(RIGHT WINGWALL SHOWN, LEFT WINGWALL SIMILAR)

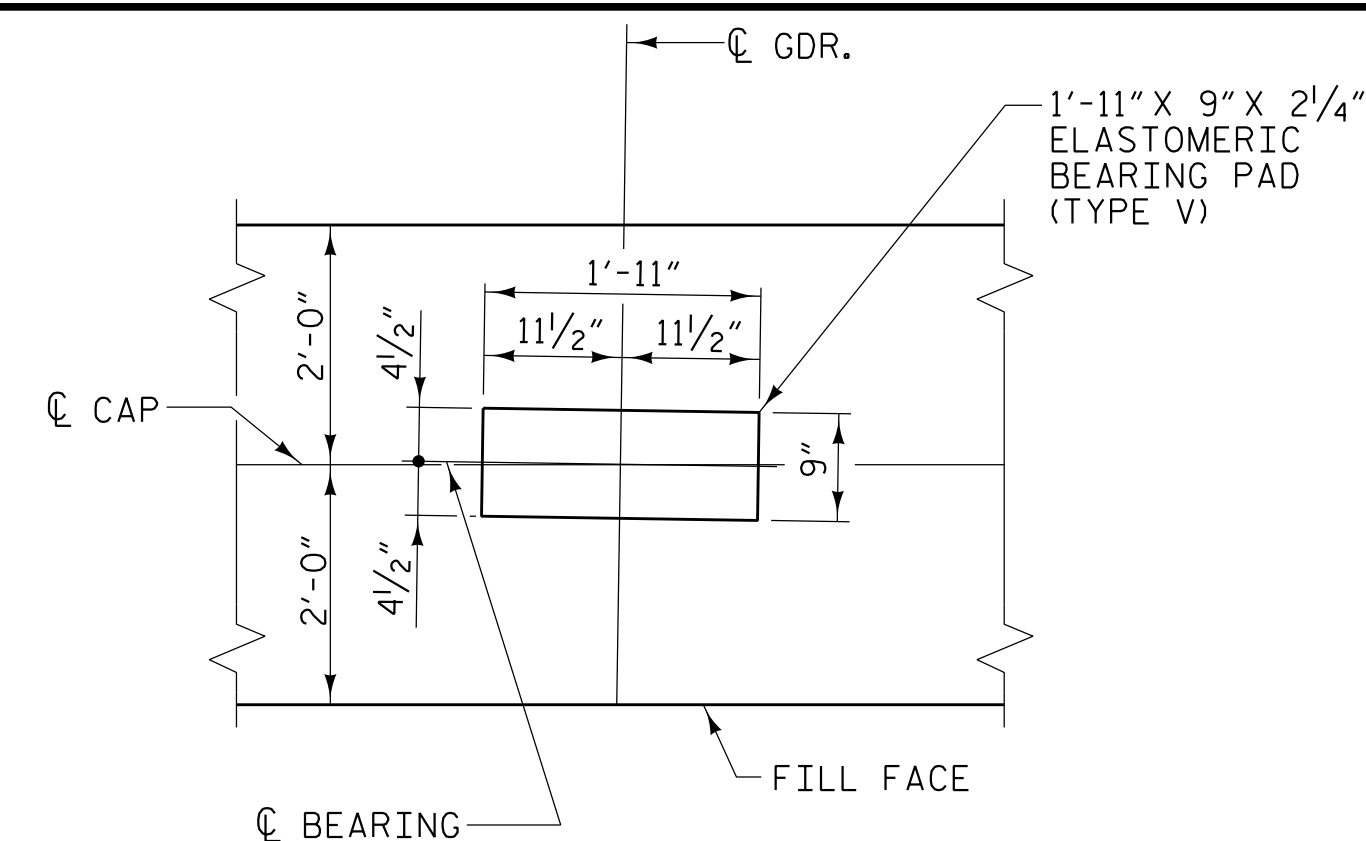


PART SECTION B-B

### BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT



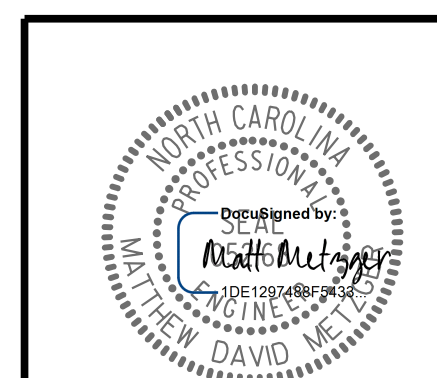
### DETAIL "A"

PLANS PREPARED BY:

**NV5**

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CARY, NC 27518  
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NC License # F-1333  
Formerly CAVI Engineers & Consultants



4/12/2022

### BILL OF MATERIAL

#### END BENT 1

BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	11	#9	3	48'-2"	1801
B2	6	#5	STR	45'-8"	286
B3	8	#4	STR	24'-1"	129
B4	12	#4	STR	3'-8"	29
B5	5	#4	STR	12'-8"	42
H1	32	#5	STR	14'-4"	478
H2	28	#5	4	12'-2"	355
H3	56	#5	STR	2'-7"	151
H4	28	#5	5	12'-2"	355
S1	76	#5	1	11'-10"	938
S2	76	#5	2	4'-7"	363
S3	32	#4	6	7'-7"	162
U1	9	#4	7	6'-8"	40
V1	54	#4	STR	6'-0"	216
V2	16	#5	STR	11'-0"	184
V3	88	#5	STR	6'-8"	612
TOTAL REINFORCING STEEL					6141 lbs.
CLASS "A" CONCRETE - CU. YARDS					
POUR 1 (CAP, COLLARS, LOWER WINGS) 32.5 cu. yds.					
POUR 2 (UPPER WINGS) 7.4 cu. yds.					
TOTAL					39.9 cu. yds.
HP 14 X 73 STEEL PILES					
8 PILES REQUIRED - LIN. FEET					696
PILE DRIVING EQUIPMENT SETUP FOR HP 14 X 73 STEEL PILES - EACH 8					
STEEL PILE POINTS - EACH 8					
PILE REDRIVES - EACH 4					

PROJECT NO. R-5819  
COLUMBUS COUNTY  
STATION: 40+06.72 -Y2- POT

SHEET 3 OF 3

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
SUBSTRUCTURE  
INTEGRAL END BENT 1  
DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			38
2			4			

DRAWN BY : W. B. ALLEN DATE : 8/21  
CHECKED BY : M. D. METZGER DATE : 1/22  
DESIGN ENGINEER OF RECORD: M. D. METZGER DATE : 1/22

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

4/12/2022 10:25:24 AM C:\N\Project\2016\20160320\CLIENT\Structures\R-5819 -Y2-YR5819-SM1.E3.230422.dgn