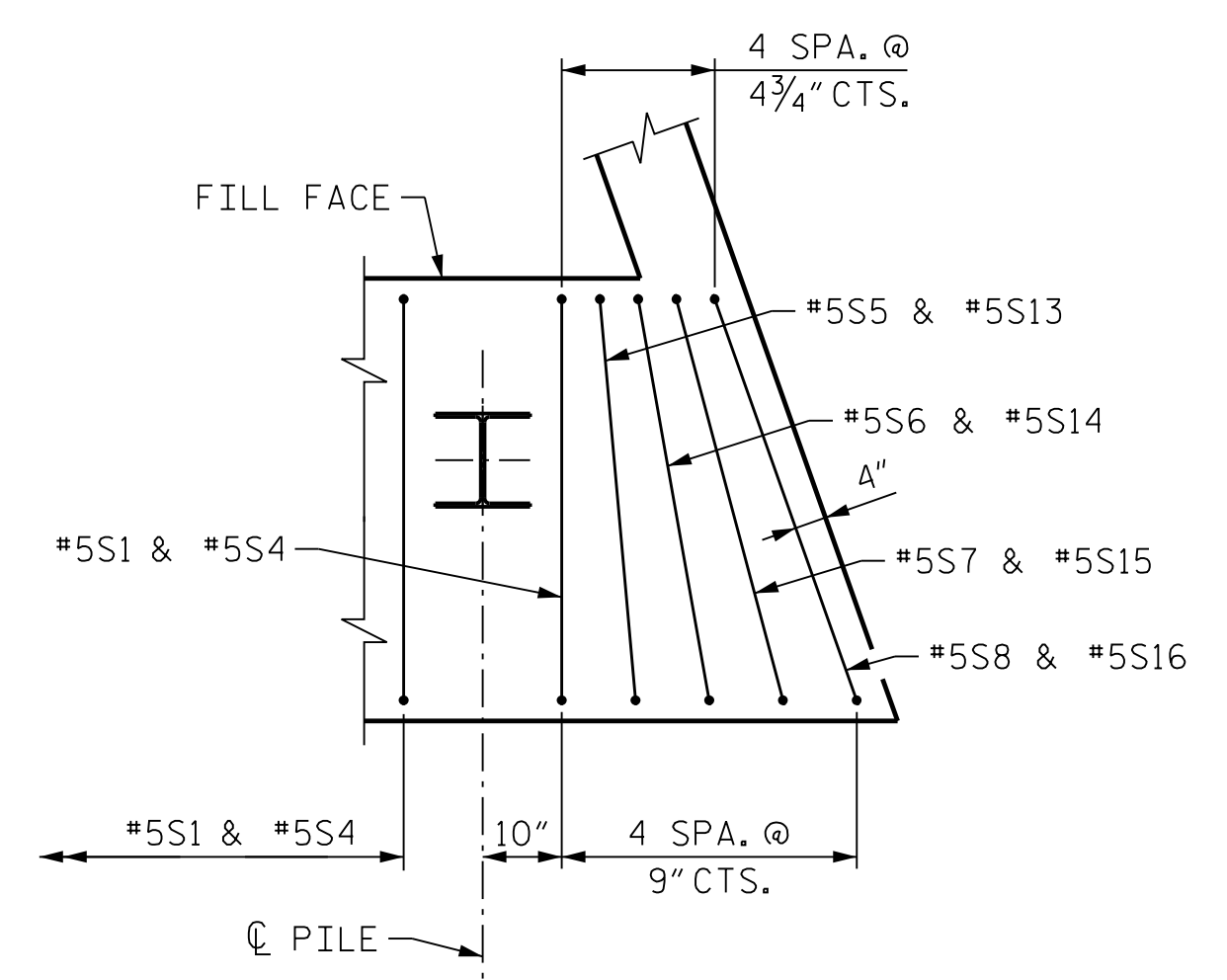
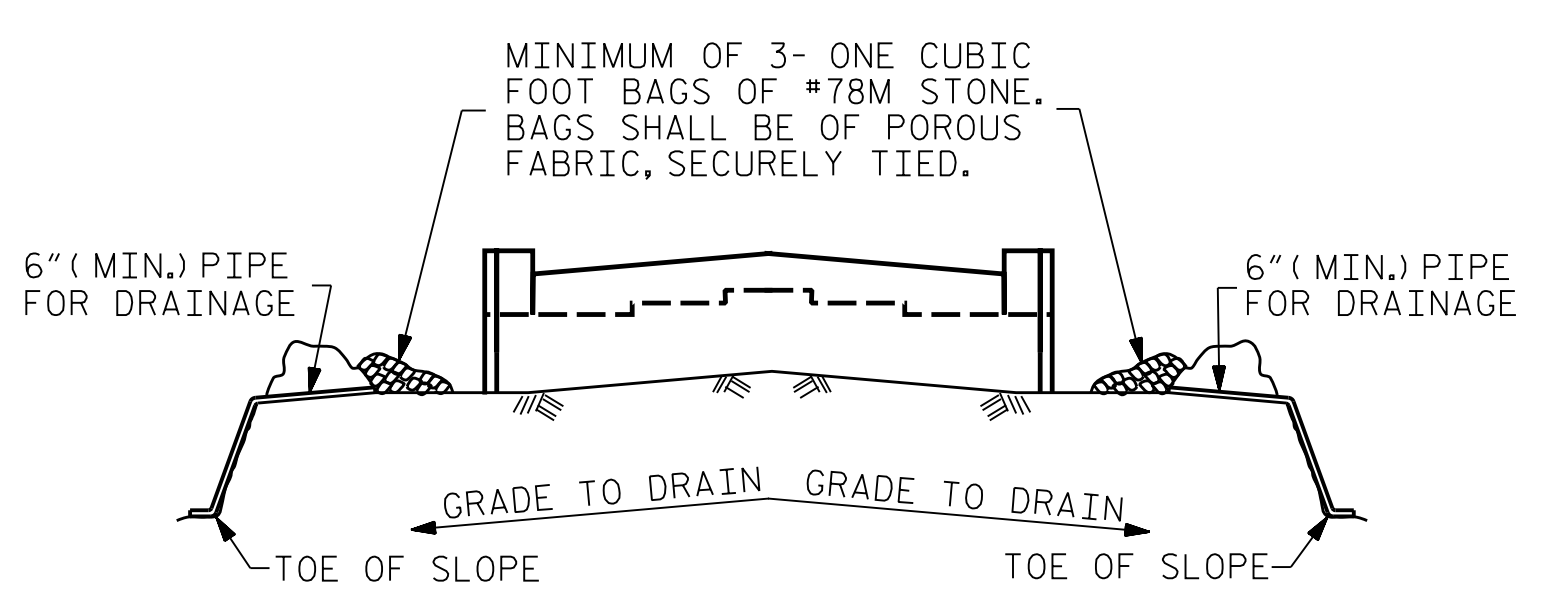


**DETAIL "X"**  
(SHOWING STIRRUPS ONLY)



**DETAIL "Y"**  
(SHOWING STIRRUPS ONLY)



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

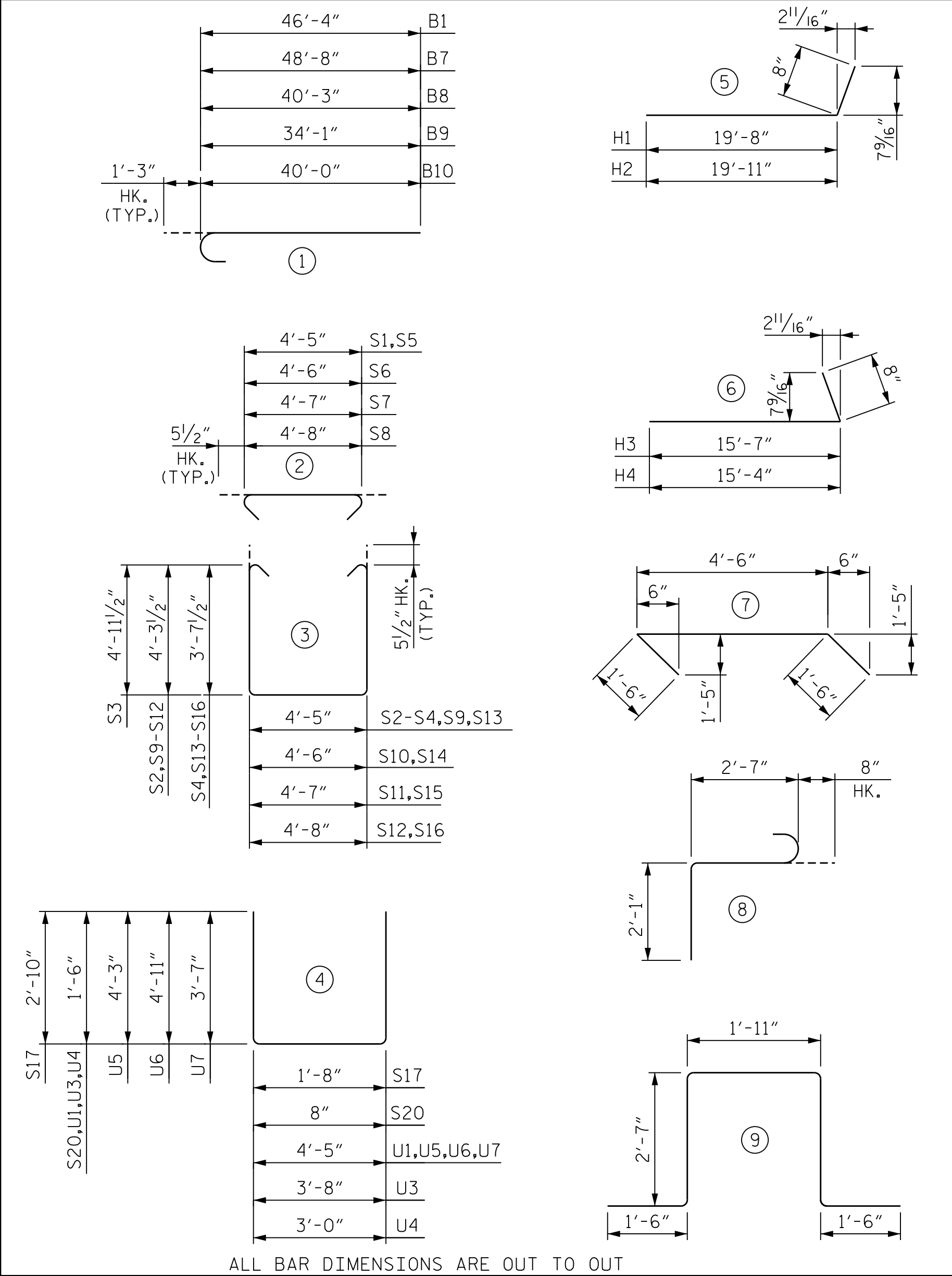
BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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**

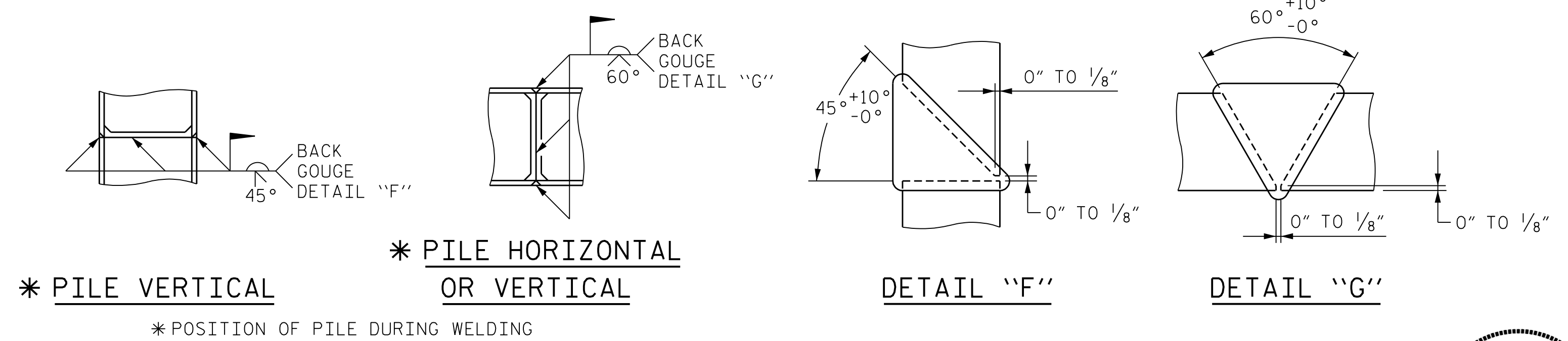
**BAR TYPES**



ALL BAR DIMENSIONS ARE OUT TO OUT

**BILL OF MATERIAL**

END BENT 2												
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	
B1	12	#9	1	47'-7"	1942	V1	320	#5	STR	9'-0"	3004	
B2	12	#9	STR	46'-4"	1891	V2	48	#5	STR	11'-9"	589	
B3	30	#5	STR	57'-6"	1800	V3	40	#5	STR	10'-8"	446	
B4	48	#4	STR	4'-5"	141	REINFORCING STEEL					LBS.	24,951
B5	48	#4	STR	29'-10"	957	CLASS A CONCRETE						
B6	6	#5	STR	46'-4"	290	POUR #1 (COLLARS, CAP, LOWER PART OF WINGS)					CU. YDS.	166.8
B7	6	#9	1	49'-11"	1019	POUR #2 (BACKWALL & UPPER PART OF WINGS)					CU. YDS.	48.9
B8	12	#9	1	41'-6"	1694	TOTAL					CU. YDS.	215.7
B9	6	#9	1	35'-4"	721	HP 14x73 STEEL PILES						
B10	6	#9	1	41'-3"	842	NO.					LF.	
B11	4	#5	STR	33'-9"	141	PILES W3, 2-7 (FRONT ROW), 1-7 (BACK ROW)					14	660
B12	96	#4	STR	4'-2"	268	PILES 8-14 (FRONT ROW), 8-14 (BACK ROW)					14	520
H1	18	#4	5	20'-4"	245	PILES 15-20 (FRONT ROW), 15-21 (BACK ROW), W4					14	520
H2	18	#4	5	20'-7"	248	TOTAL					42	1700
H3	13	#4	6	16'-3"	142	PILE DRIVING EQUIPMENT SETUP FOR HP14x73 STEEL PILES					EA.	42
H4	13	#4	6	16'-0"	139	PILE LENGTHS ARE BASED ON ESTIMATED TIP ELEVATIONS AND INCLUDE 2' MIN. EMBEDMENT INTO CAP.						
S1	190	#5	2	5'-4"	1057							
S2	73	#5	3	13'-11"	1060							
S3	84	#5	3	15'-3"	1337							
S4	33	#5	3	12'-7"	434							
S5	2	#5	2	5'-4"	12							
S6	2	#5	2	5'-5"	12							
S7	2	#5	2	5'-6"	12							
S8	2	#5	2	5'-7"	12							
S9	1	#5	3	13'-11"	15							
S10	1	#5	3	14'-0"	15							
S11	1	#5	3	14'-1"	15							
S12	1	#5	3	14'-2"	15							
S13	1	#5	3	12'-7"	14							
S14	1	#5	3	12'-8"	14							
S15	1	#5	3	12'-9"	14							
S16	1	#5	3	12'-10"	14							
S17	252	#4	4	7'-4"	1235							
S18	6	#6	9	10'-1"	91							
S19	6	#6	8	5'-4"	49							
S20	160	#4	4	3'-8"	392							
U1	144	#4	4	7'-5"	714							
U2	9	#5	7	7'-6"	71							
U3	5	#5	4	6'-8"	35							
U4	5	#5	4	6'-0"	32							
U5	8	#5	4	12'-11"	108							
U6	9	#5	4	14'-3"	134							
U7	4	#5	4	11'-7"	49							



**PILE SPLICE DETAILS**

PROJECT NO. U-2579AB  
 FORSYTH COUNTY  
 STATION: 47+28.33 -Y15REV-  
 SHEET 6 OF 6

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

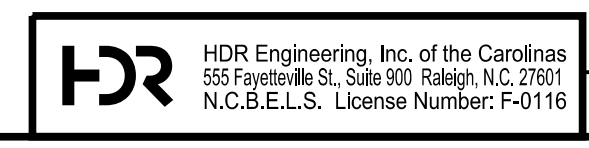
**SUBSTRUCTURE  
 END BENT 2  
 COMMON DETAILS**



10/18/2021

PLOT DRIVER: NCDOT\_pdf\_color\_eng-50dpi  
 USER: PPEIERSO DATE: 10/14/2021  
 FILE: ...SUBSTRUCTURE-END.B

DES BY: S. NIFONG	DATE: 02/19	DWG BY: B. PETERSON	DATE: 02/19
DES CHK: M. NEIHEISEL	DATE: 02/19	CHK BY: M. NEIHEISEL	DATE: 05/19



DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED

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

SHEET NO. 503-54  
 TOTAL SHEETS 61