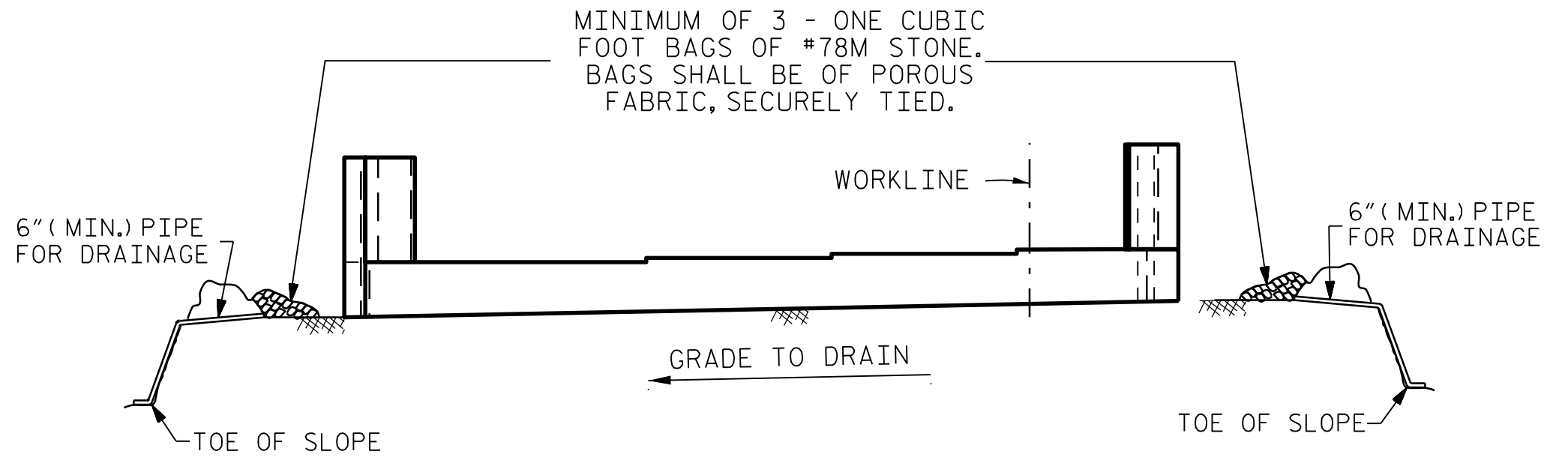


PILE SPlice DETAILS



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

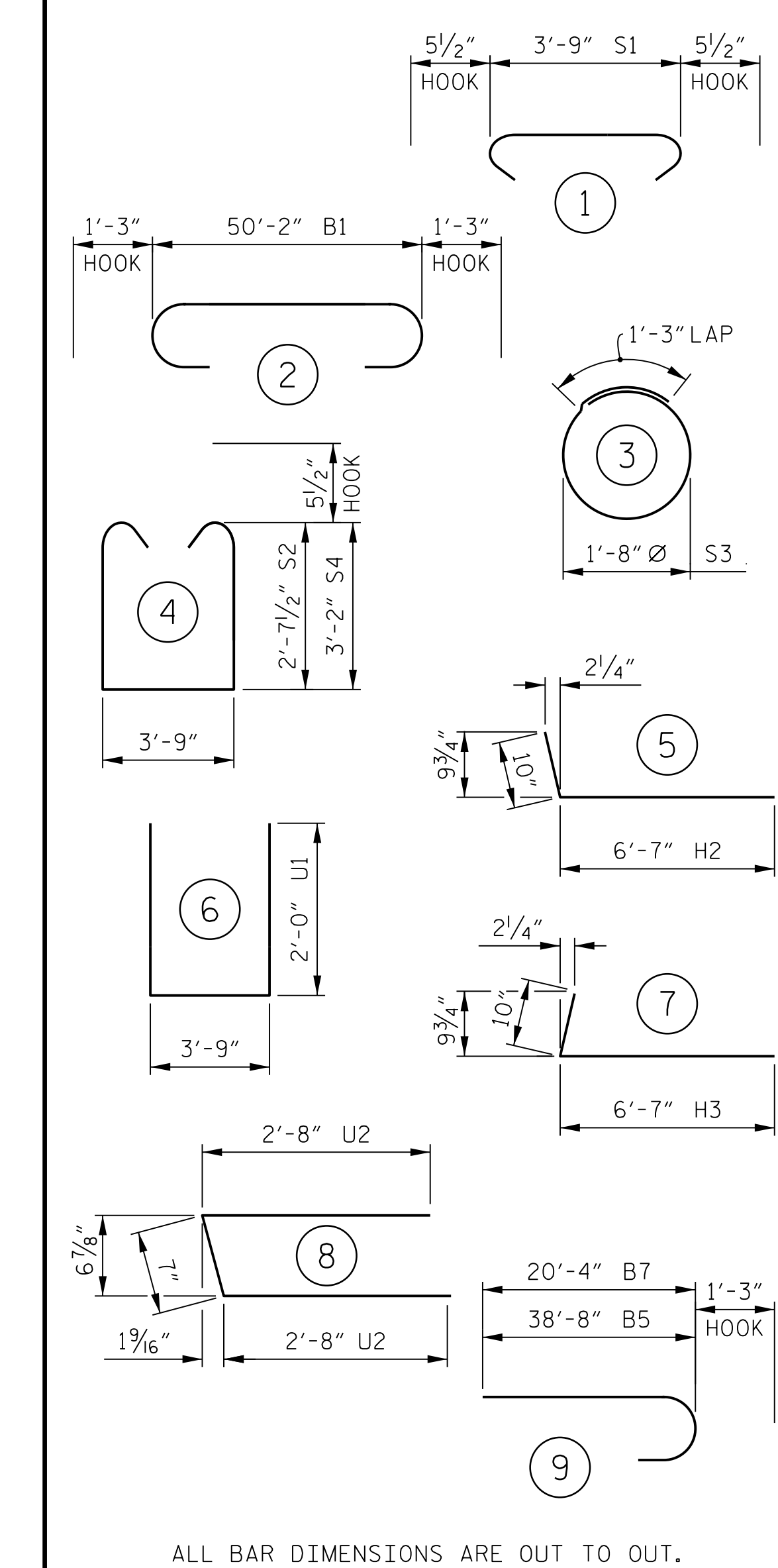
BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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 FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

END BENT 1					
BAR No.	SIZE	TYPE	LENGTH	WEIGHT	
B1	6	#9	2	52'-8"	1,074
B2	6	#5	STR	50'-2"	314
B3	15	#4	STR	3'-9"	38
B4	8	#4	STR	26'-4"	141
B5	6	#9	9	39'-11"	814
B6	6	#4	STR	14'-6"	58
B7	6	#9	9	21'-7"	440
B8	6	#4	STR	8'-9"	35
H1	14	#5	STR	6'-7"	96
H2	14	#5	5	7'-5"	108
H3	14	#5	7	7'-5"	108
S1	76	#5	1	4'-8"	370
S2	45	#5	4	9'-11"	465
S3	36	#4	3	6'-6"	156
S4	31	#5	4	11'-0"	356
U1	17	#4	6	7'-9"	88
U2	14	#4	8	5'-11"	55
V1	20	#5	STR	8'-11"	186
V2	60	#4	STR	4'-6"	180
V3	20	#5	STR	9'-11"	207
REINFORCING STEEL				5,289	LBS.
CLASS "A" CONCRETE					
POUR 1 COLLARS, CAP AND LOWER WINGS				27.8	CU. YDS.
POUR 2 BACKWALL AND UPPER WINGS				4.4	CU. YDS.
TOTAL				32.2	CU. YDS.
PILE DRIVING EQUIPMENT SETUP FOR HP 12 x 53 STEEL PILES				9	EACH
HP 12 x 53 STEEL PILES				9	REQUIRED
				700.0	LIN. FT.

PROJECT NO. R-2707C  
CLEVELAND COUNTY  
 STATION: 611+32.01 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

SUBSTRUCTURE  
 END BENT 1  
 (LEFT LANE)

REVISIONS					
No.	BY	DATE	No.	BY	DATE
1			3		
2			4		

SHEET No. **S9-19**  
 TOTAL SHEETS **25**  
 STR. #9

DRAWN BY : K. E. LOFTON DATE : 6-16  
 CHECKED BY : A. D. SHAH DATE : 10-16  
 DESIGN ENGINEER : T. M. HARRIS DATE : 10-16

PLANS PREPARED BY :  
**PARSONS**  
 5540 CenterView Drive, Suite 217  
 Raleigh, NC 27606-3386  
 NC LICENSE No. F-0246  
 FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED

**NORTH CAROLINA**  
 PROFESSIONAL  
 SEAL  
 19299  
 CIVIL ENGINEER  
 T. M. HARRIS  
 2/17/2017