

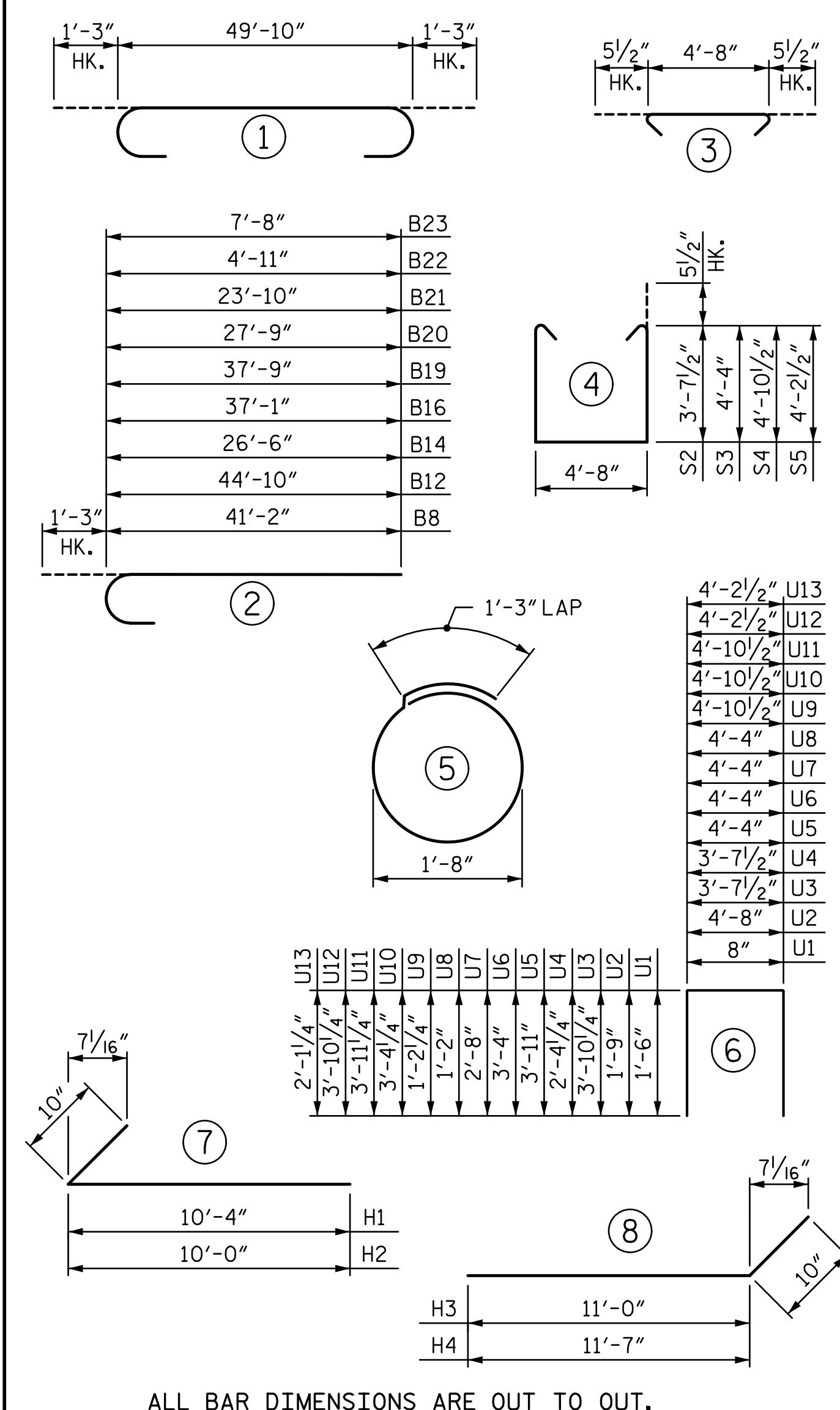
**NOTES:**

STIRRUPS AND "U" BARS 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 NCDOT 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 OUTSIDE FACE AT A RATE OF 2%.

**BAR TYPES**



ALL BAR DIMENSIONS ARE OUT TO OUT.

**BILL OF MATERIAL**

**STAGE 1**

BAR	NO	SIZE	TYPE	LENGTH	WEIGHT
B1	6	#9	1	52'-4"	1,068
B2	8	#5	STR	50'-0"	417
B3	8	#4	STR	26'-4"	141
B4	12	#4	STR	4'-8"	37
B5	6	#9	1	52'-4"	1,068
B6	12	#4	STR	4'-8"	37
B7	6	#5	STR	8'-4"	52
H1	19	#5	7	11'-2"	221
H2	19	#5	7	10'-10"	215
K1	16	#4	STR	26'-4"	281
K4	10	#4	STR	3'-5"	23
S1	50	#5	3	5'-7"	291
S2	50	#5	4	12'-10"	669
S6	20	#4	5	6'-6"	87
U1	46	#4	6	3'-8"	113
U2	40	#4	6	8'-2"	218
U3	2	#5	6	11'-4"	24
U4	3	#5	6	8'-4"	26
U5	1	#5	6	12'-2"	13
U6	1	#5	6	11'-0"	11
U7	1	#5	6	9'-8"	10
U8	2	#5	6	6'-8"	14
V1	93	#5	STR	6'-6"	630
V2	29	#5	STR	8'-9"	265

**BILL OF MATERIAL**

**STAGE 2**

BAR	NO	SIZE	TYPE	LENGTH	WEIGHT
B4	18	#4	STR	4'-8"	56
B6	24	#4	STR	4'-8"	75
B8	6	#9	2	42'-5"	865
B9	6	#9	STR	23'-1"	471
B10	20	#5	STR	31'-8"	661
B11	8	#4	STR	31'-5"	168
B12	6	#9	2	46'-1"	940
B13	2	#5	STR	18'-2"	38
B14	3	#9	2	27'-9"	283
B21	3	#9	2	25'-1"	256
K2	16	#4	STR	31'-5"	336
S1	64	#5	3	5'-7"	373
S3	37	#5	4	14'-3"	550
S4	27	#5	4	15'-4"	432
S6	24	#4	5	6'-6"	104
U1	60	#4	6	3'-8"	147
U2	40	#4	6	8'-2"	218
U5	1	#5	6	12'-2"	13
U6	1	#5	6	11'-0"	11
U7	1	#5	6	9'-8"	10
U8	2	#5	6	6'-8"	14
U9	1	#5	6	7'-3"	8
V1	120	#5	STR	6'-6"	814

**BILL OF MATERIAL**

**STAGE 3**

BAR	NO	SIZE	TYPE	LENGTH	WEIGHT
B4	17	#4	STR	4'-8"	53
B6	12	#4	STR	4'-8"	37
B15	6	#9	STR	26'-4"	537
B16	6	#9	2	38'-4"	782
B17	20	#5	STR	31'-4"	654
B18	8	#4	STR	31'-0"	166
B19	6	#9	STR	39'-0"	796
B20	6	#9	2	29'-0"	592
B22	3	#9	2	6'-2"	63
B23	3	#9	2	8'-11"	91
H3	20	#5	8	11'-10"	247
H4	20	#5	8	12'-5"	259
K3	16	#4	STR	31'-0"	331
K4	10	#4	STR	3'-5"	23
S1	61	#5	3	5'-7"	355
S4	6	#5	4	15'-4"	96
S5	55	#5	4	14'-0"	803
S6	24	#4	5	6'-6"	104
U1	56	#4	6	3'-8"	137
U2	40	#4	6	8'-2"	218
U9	1	#5	6	7'-3"	8
U10	1	#5	6	11'-7"	12
U11	1	#5	6	12'-9"	13
U12	2	#5	6	11'-11"	25
U13	2	#5	6	8'-5"	18
V1	113	#5	STR	6'-6"	766
V3	31	#5	STR	9'-4"	302

**QUANTITIES - STAGE 1**

REINFORCING STEEL	LBS.	5,931
CLASS A CONCRETE:		
POUR 1: CAP, LOWER WINGS & COLLARS C.Y.	41.8	
POUR 2: BACKWALL & UPPER WING C.Y.	8.3	
<b>TOTAL</b>	<b>C.Y.</b>	<b>50.1</b>

**QUANTITIES - STAGE 2**

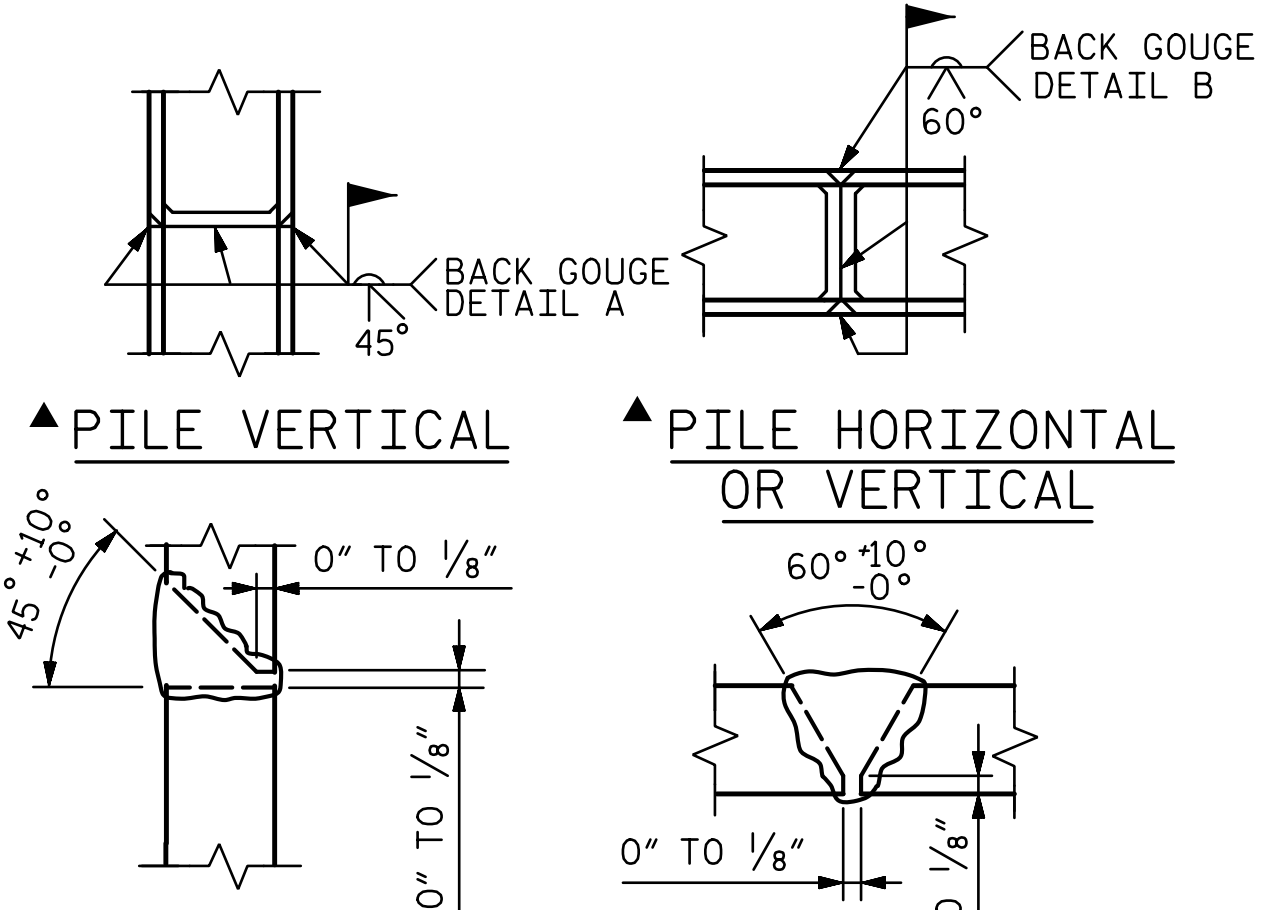
REINFORCING STEEL	LBS.	6,973
CLASS A CONCRETE:		
POUR 1: CAP & COLLARS C.Y.	56.9	
POUR 2: BACKWALL C.Y.	7.9	
<b>TOTAL</b>	<b>C.Y.</b>	<b>64.8</b>

**QUANTITIES - STAGE 3**

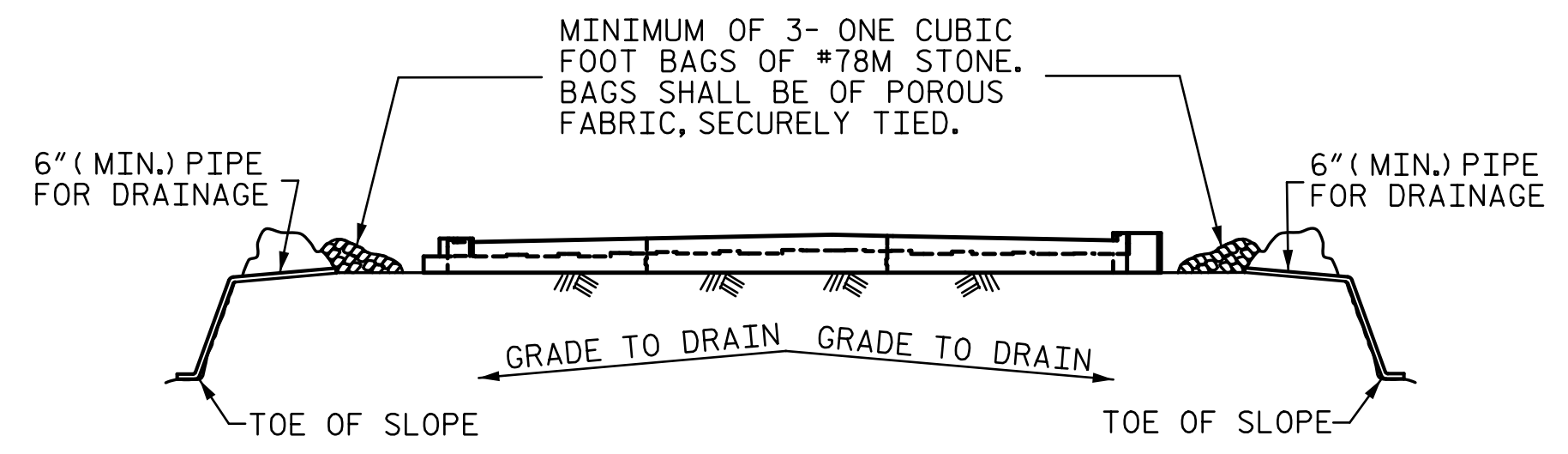
REINFORCING STEEL	LBS.	7,488
CLASS A CONCRETE:		
POUR 1: CAP, LOWER WINGS & COLLARS C.Y.	56.6	
POUR 2: BACKWALL & UPPER WING C.Y.	9.9	
<b>TOTAL</b>	<b>C.Y.</b>	<b>66.5</b>

**TOTAL END BENT QUANTITIES**

REINFORCING STEEL	LBS.	20,392
CLASS A CONCRETE:	C.Y.	181.4



**PILE SPLICE DETAILS**  
 ▲ POSITION OF PILE DURING WELDING.



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**

PROJECT NO. **B-5808**  
**CABARRUS** COUNTY  
 STATION: **20+64.00 -L-**

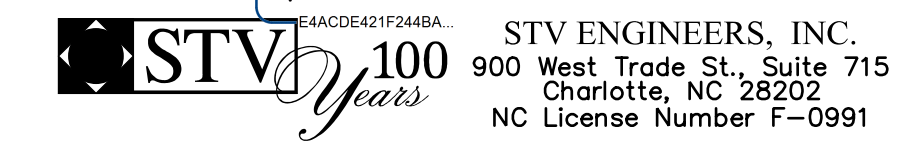
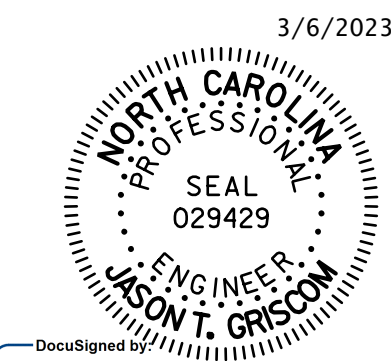
SHEET 6 OF 6

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**END BENT 1**

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

TOTAL SHEETS: 65



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED