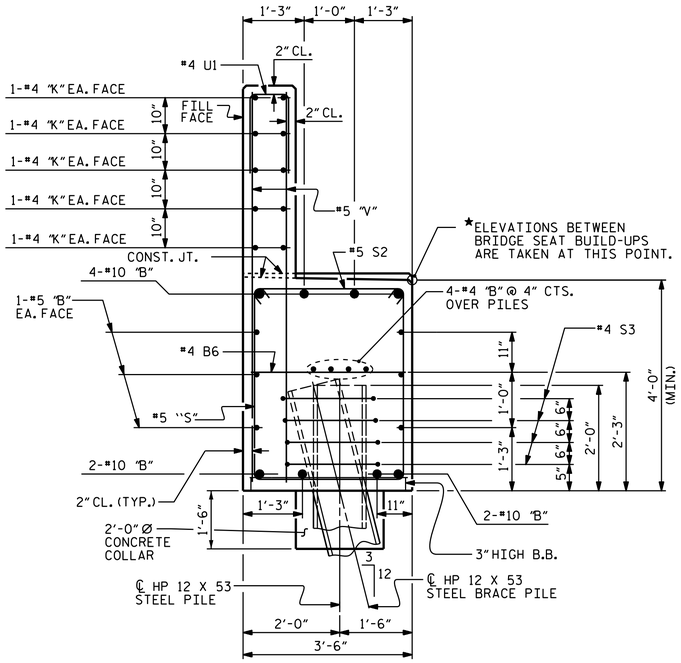
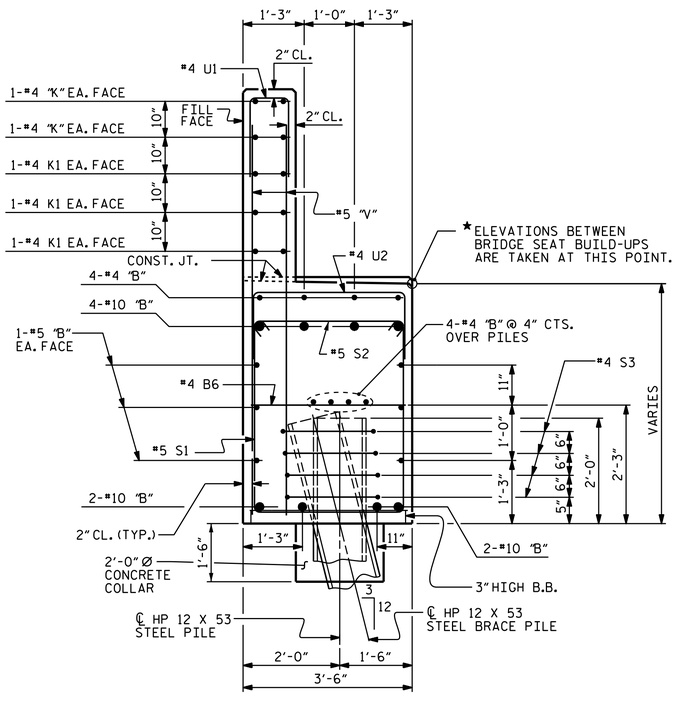
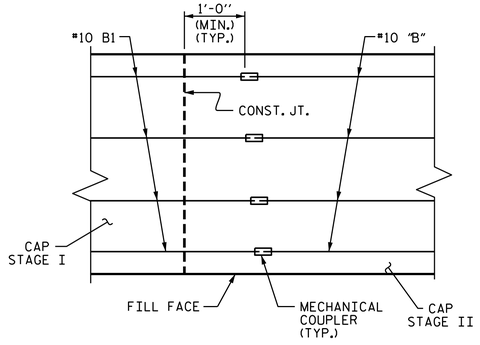


SECTION A-A



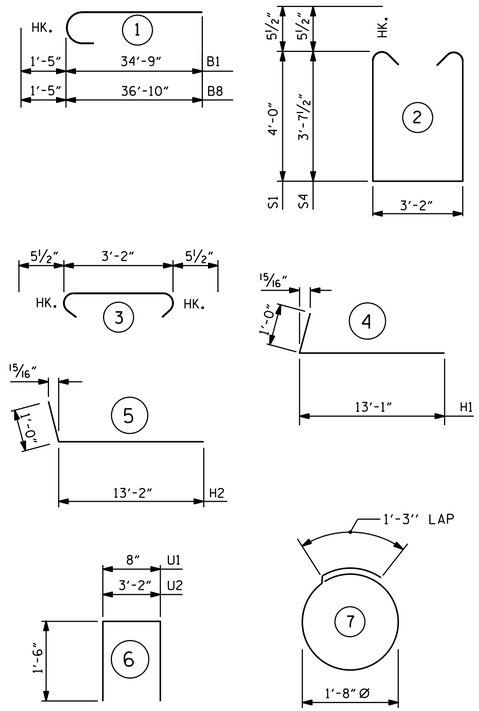
SECTION B-B



MECHANICAL COUPLER DETAIL

PLAN VIEW OF TOP MAIN STEEL, BOTTOM MAIN STEEL SIMILAR.

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL — STAGE I

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	10	1	36'-2"	1,245
B2	6	5	STR	36'-10"	231
B3	8	4	STR	19'-8"	105
B4	4	4	STR	2'-7"	7
B5	4	4	STR	11'-3"	30
B6	8	4	STR	3'-2"	17
H1	42	6	4	14'-1"	888
K1	20	4	STR	19'-8"	263
K3	4	4	STR	3'-5"	9
S1	34	5	2	12'-1"	428
S2	34	5	3	4'-1"	145
S3	20	4	7	6'-6"	87
U1	30	4	6	3'-8"	73
U2	13	4	6	6'-2"	54
V1	60	5	STR	8'-0"	501
V2	24	5	STR	9'-10"	246
V3	14	5	STR	9'-8"	141

REINFORCING STEEL 4,470 LBS.

CLASS A CONCRETE BREAKDOWN

POUR 1 CAP, LOWER PART OF WINGS & CONCRETE COLLARS 23.1 CU. YDS.

POUR 2 BACKWALL & UPPER PART OF WINGS 8.1 CU. YDS.

TOTAL CLASS A CONCRETE 31.2 CU. YDS.

HP 12 X 53 STEEL PILES

NO. 5 175 LIN. FT.

BILL OF MATERIAL — STAGE II

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B4	4	4	STR	2'-7"	7
B6	17	4	STR	3'-2"	36
B7	4	10	STR	34'-4"	591
B8	8	10	1	38'-3"	1,317
B9	4	10	STR	36'-3"	624
B10	12	5	STR	33'-0"	413
B11	4	4	STR	16'-10"	45
B12	12	4	STR	22'-8"	182
B13	4	4	STR	10'-0"	27
H2	40	6	5	14'-2"	851
K2	30	4	STR	22'-8"	454
K4	4	4	STR	3'-11"	10
S1	39	5	2	12'-1"	492
S2	65	5	3	4'-1"	277
S3	32	4	7	6'-6"	139
S4	26	5	2	11'-4"	307
U1	59	4	6	3'-8"	145
U2	23	4	6	6'-2"	95
V4	118	5	STR	7'-7"	933
V5	14	5	STR	9'-2"	134
V6	24	5	STR	9'-4"	234

REINFORCING STEEL 7,313 LBS.

CLASS A CONCRETE BREAKDOWN

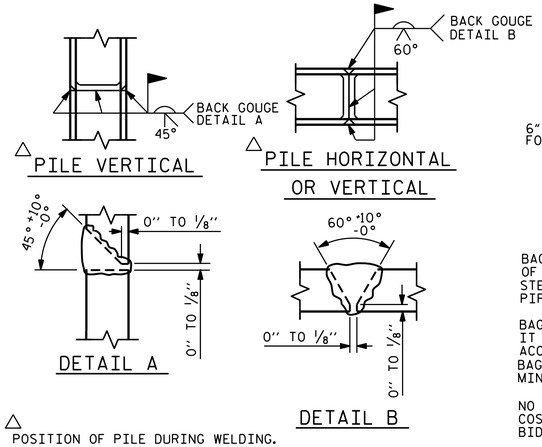
POUR 3 CAP, LOWER PART OF WINGS & CONCRETE COLLARS 40.2 CU. YDS.

POUR 4 BACKWALL & UPPER PART OF WINGS 12.6 CU. YDS.

TOTAL CLASS A CONCRETE 52.8 CU. YDS.

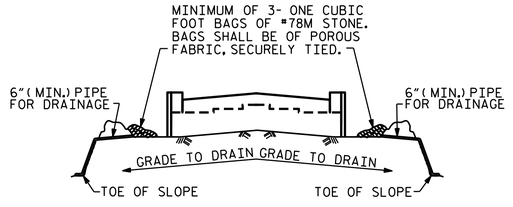
HP 12 X 53 STEEL PILES

NO. 8 280 LIN. FT.



△ POSITION OF PILE DURING WELDING.

PILE SPLICE DETAILS



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. U-3308

DURHAM COUNTY

STATION: 16+42.70-LALT-

SHEET 4 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

END BENT 1

NORTH CAROLINA PROFESSIONAL SEAL 031480 ENGINEER DONALD R. SMITH, JR.

DocuSigned by: Donald R. Smith, Jr
EDC87706174849...
4/1/2016

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

SHEET NO. S1-35

TOTAL SHEETS 47

STR. #1

DRAWN BY : P.S. ADKINS DATE : 10/30/14
CHECKED BY : J.D. HAWK DATE : 11/20/14
DESIGN ENGINEER OF RECORD: H. LOCKLEAR DATE : 12/17/14

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

22-MAR-2016 10:36
R:\Structures\Plans\str1\U3308_sd_E1_01.dgn
jdhawk