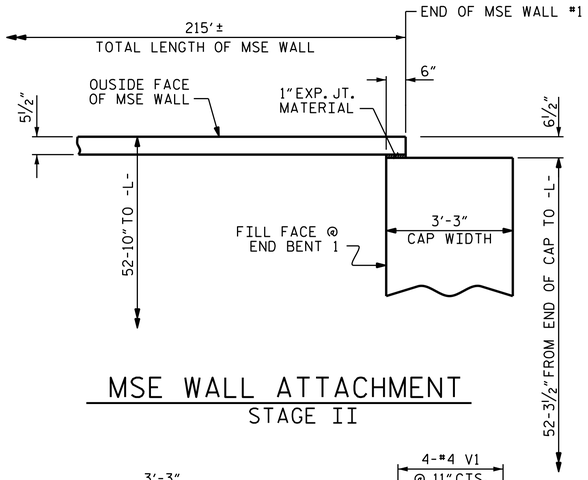
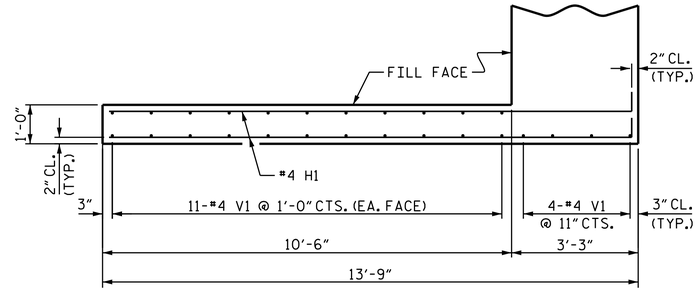
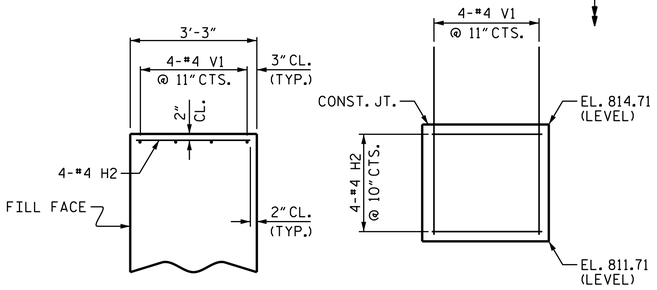


MSE WALL ATTACHMENT
STAGE II



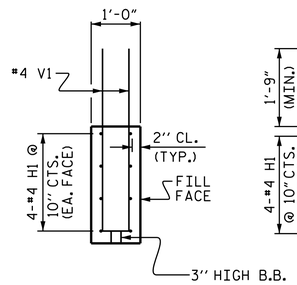
PLAN OF WING (W2)
STAGE I



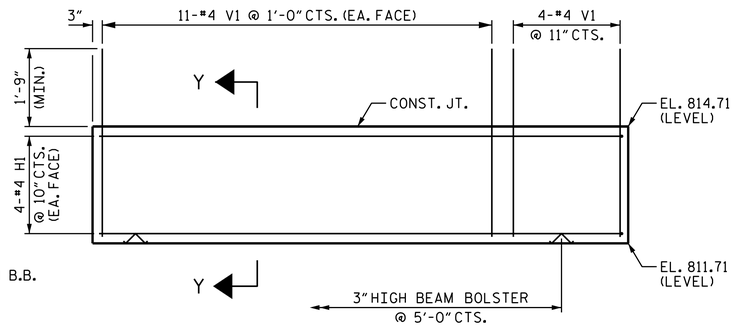
PLAN

ELEVATION

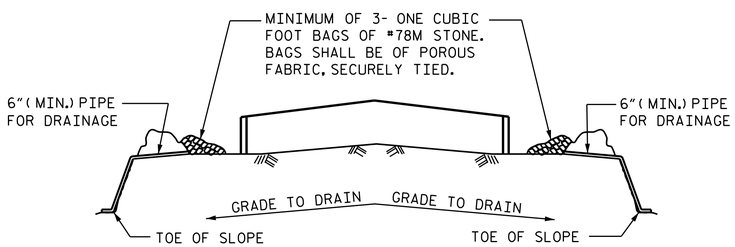
LEFT END BENT CAP
STAGE II



SECTION Y-Y



ELEVATION OF WING (W2)
STAGE I

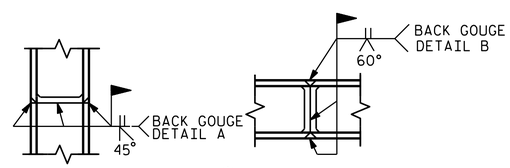


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

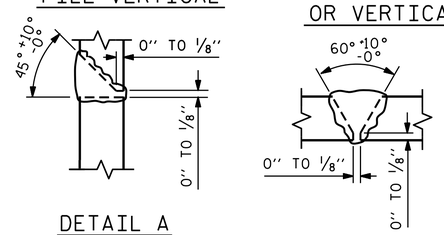
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT



* PILE VERTICAL

* PILE HORIZONTAL OR VERTICAL



DETAIL A

DETAIL B

* POSITION OF PILE DURING WELDING.

PILE SPLICE DETAILS

BILL OF MATERIAL
END BENT 1

STAGE I						STAGE II					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	4	#9	1	54'-10"	746	B6	15	#4	STR	2'-11"	29
B2	4	#9	1	32'-2"	437	B8	4	#9	1	52'-4"	712
B3	4	#9	STR	31'-5"	427	B9	4	#9	1	31'-4"	426
B4	2	#4	STR	26'-6"	35	B10	4	#9	STR	29'-3"	398
B5	16	#4	STR	28'-9"	307	B11	2	#4	STR	24'-5"	33
B6	15	#4	STR	2'-11"	29	B12	16	#4	STR	27'-4"	292
B7	4	#4	STR	13'-7"	36	B13	4	#4	STR	13'-3"	35
H1	8	#4	2	14'-1"	75	H2	4	#4	STR	2'-11"	8
S1	52	#4	3	3'-8"	127	S1	52	#4	3	3'-8"	127
S2	22	#4	5	8'-11"	131	S2	22	#4	5	8'-11"	131
S3	30	#4	5	9'-7"	192	S3	30	#4	5	9'-7"	192
S4	21	#4	6	6'-6"	91	S4	21	#4	6	6'-6"	91
U1	9	#4	4	5'-11"	36	U1	9	#4	4	5'-11"	36
V1	106	#4	STR	5'-5"	384	V1	86	#4	STR	5'-5"	311
REINFORCING STEEL = 3,053 LBS						REINFORCING STEEL = 2,820 LBS					

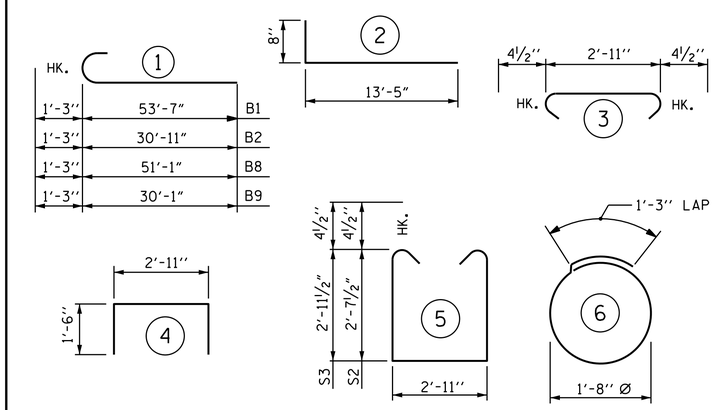
CLASS A CONCRETE QUANTITIES:
CAP, LOWER WINGS & COLLARS 23.8 C.Y.

HP 12 X 53 STEEL PILES:
NO. 7 LIN. FT. = 175
STEEL PILE POINTS NO. 7
PILE EXCAVATION IN SOIL: LIN. FT. = 147
PILE EXCAVATION NOT IN SOIL: LIN. FT. = 7

CLASS A CONCRETE QUANTITIES:
CAP, LOWER WINGS & COLLARS 22.2 C.Y.

HP 12 X 53 STEEL PILES:
NO. 7 LIN. FT. = 175
STEEL PILE POINTS NO. 7
PILE EXCAVATION IN SOIL: LIN. FT. = 147
PILE EXCAVATION NOT IN SOIL: LIN. FT. = 7

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

TOTAL QUANTITIES

	STAGE I	STAGE II	TOTAL
REINFORCING STEEL	3,053	2,820	5,873
CLASS A CONCRETE	23.8	22.2	46.0
HP 12 X 53 STEEL PILES:			
NUMBER REQUIRED	7	7	14
TOTAL LIN. FT.	175	175	350
STEEL PILE POINTS	7	7	14
EXCAVATION IN SOIL	147	147	294
EXCAVATION NOT IN SOIL	7	7	14

NORTH CAROLINA PROFESSIONAL SEAL 16301 ENGINEER TING-HSIUNG FANG

DocuSigned by: Ting H. Fang
E72088400977435...
12/3/2014

PROJECT NO. U-3615B
GUILFORD COUNTY
STATION: 238+33.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

END BENT 1
(INTEGRAL)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-31
1			3			TOTAL SHEETS
2			4			91

STR. #1

DRAWN BY : QT NGUYEN DATE : 9/10
CHECKED BY : E.C. LOCKLER DATE : 10/10
DESIGN ENGINEER OF RECORD: E. I. OMILE DATE : 1-7-14

03-DEC-2014 11:04
K:\TIPProjects-U\U3615b\Structures\Plans\str1\FinalPlans\u3615b_sd_e*.dgn
ttfang