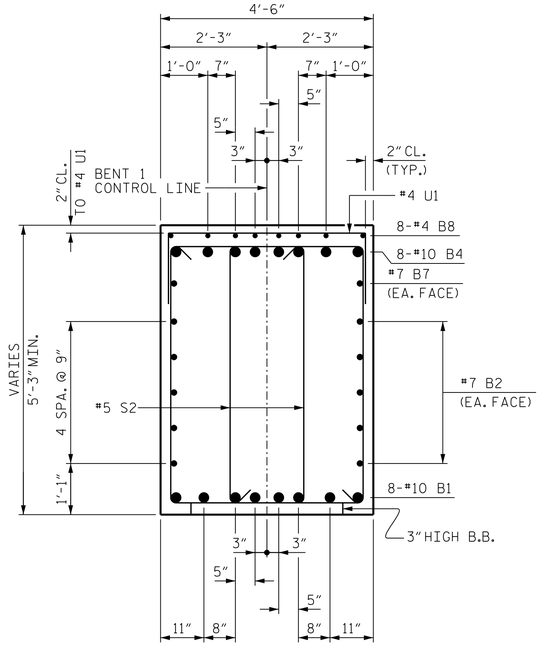
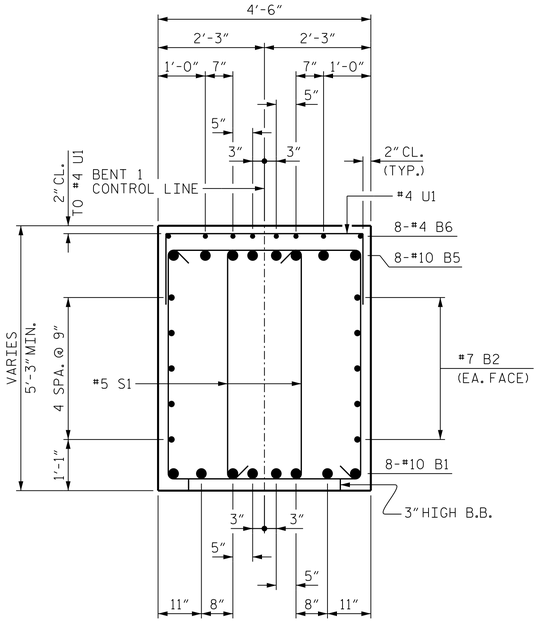
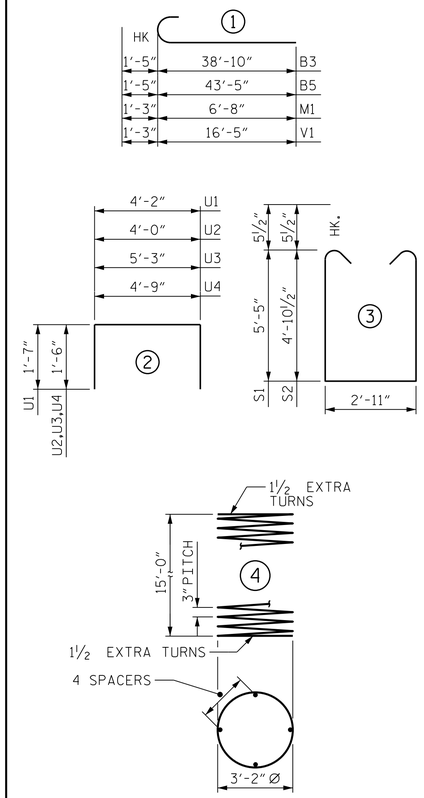


SECTION A-A



SECTION B-B

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

BENT 1

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	16	#10	STR	53'-0"	3649
B2	20	#7	STR	51'-8"	2112
B3	8	#10	1	40'-3"	1386
B4	8	#10	STR	38'-10"	1337
B5	8	#10	1	44'-8"	1538
B6	8	#4	STR	15'-7"	83
B7	8	#7	STR	60'-0"	981
B8	8	#4	STR	19'-5"	104
B9	8	#4	STR	4'-2"	22
M1	60	#9	1	7'-11"	1615
S1	180	#5	3	14'-8"	2754
S2	92	#5	3	13'-7"	1303
T1	276	#6	STR	7'-0"	2902
U1	73	#4	2	7'-4"	358
U2	12	#4	2	7'-0"	56
U3	4	#4	2	8'-3"	22
U4	4	#4	2	7'-9"	21
V1	60	#9	1	17'-8"	3604
REINFORCING STEEL					23,847 LBS.

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
SP-1	6	*	4	618'-9"	2480
SPIRAL COLUMN REINFORCING STEEL					2480 LBS.

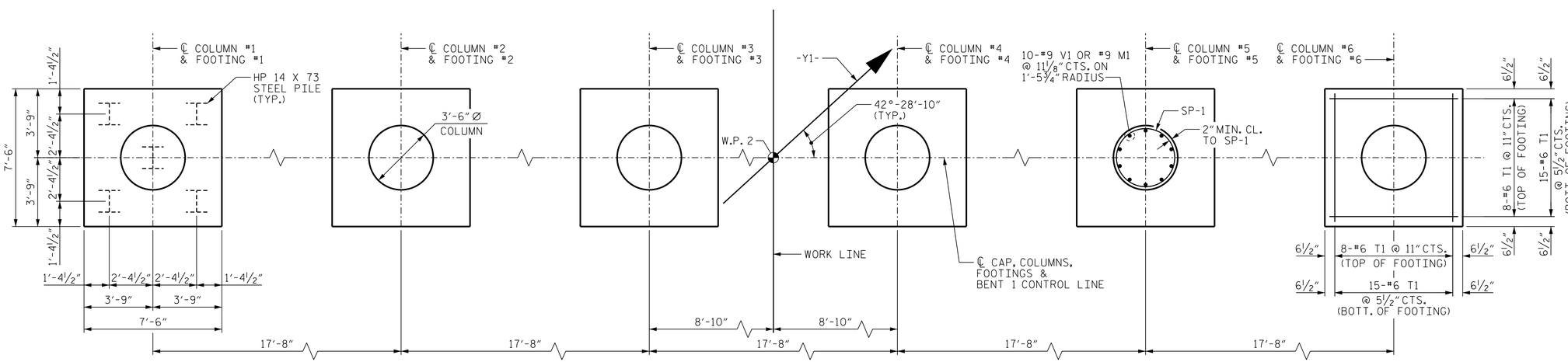
* THE SP-1 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED BAR.

CLASS A CONCRETE BREAKDOWN

POUR #1 (FOOTINGS)	37.5	C.Y.
POUR #2 (COLUMNS)	31.5	C.Y.
POUR #3 (CAP)	43.8	C.Y.
POUR #4 (CAP)	51.3	C.Y.
TOTAL	164.1	C.Y.

HP 14 x 73 STEEL PILES
NO. 30 1200.0 LIN. FT.

STEEL PILE POINTS 30



PLAN OF COLUMNS AND FOOTINGS

(DIMENSIONS AND REINFORCING STEEL ARE TYPICAL FOR EACH COLUMN AND FOOTING)

PROJECT NO. W-5107
JOHNSTON COUNTY
STATION: 33+45.98 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
BENT 1

NORTH CAROLINA PROFESSIONAL SEAL 027799 ENGINEER ALLYSON K. ORR
11/26/2014

DRAWN BY : B.E. LANNING DATE : 10/14
CHECKED BY : G.R. COLS DATE : 10/14
DESIGN ENGINEER OF RECORD : A.K. ORR DATE : 11/14

MI ENGINEERING
1011 SCHAUB DRIVE, SUITE 100
RALEIGH, NC 27606
(919) 851-6606
FIRM PE NUMBER : P-0671

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-33
1			3			TOTAL SHEETS
2			4			70

11/25/2014
2:15:12 PM
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