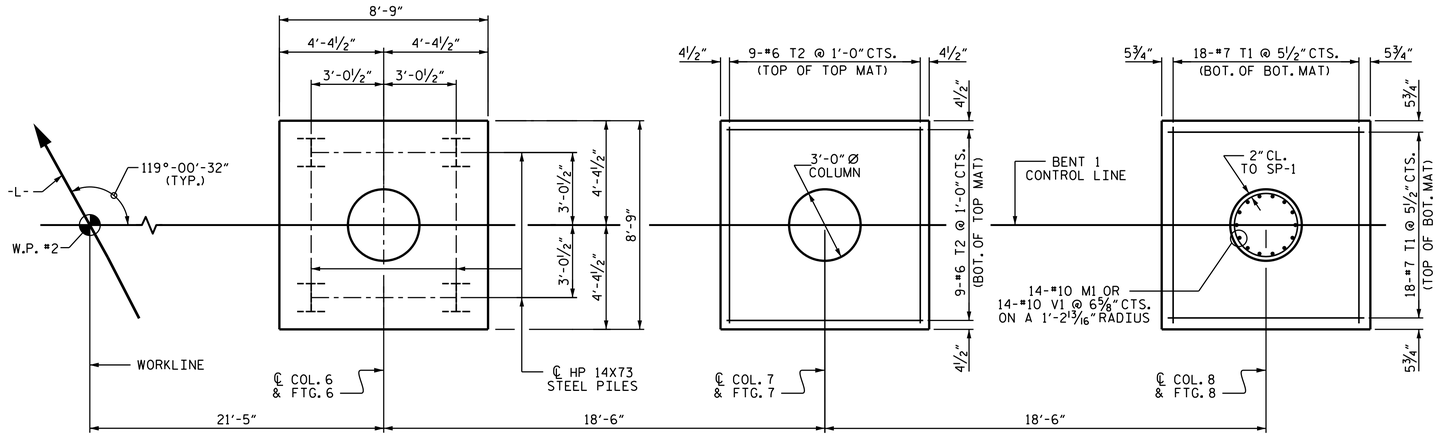


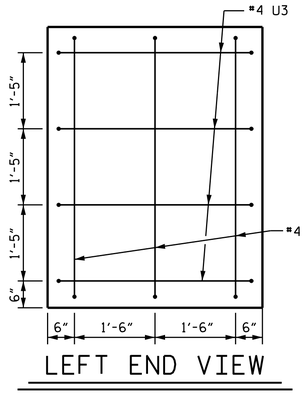
PLAN OF FOOTINGS & COLUMNS

PILES, REINFORCING STEEL, DIMENSIONS AND DETAILS ARE TYPICAL FOR EACH COLUMN AND FOOTING UNLESS OTHERWISE NOTED

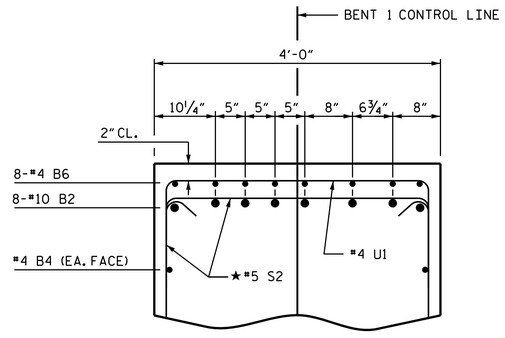
RIGHT END VIEW

SECTION A-A

★INVERT ALTERNATE STIRRUPS



LEFT END VIEW

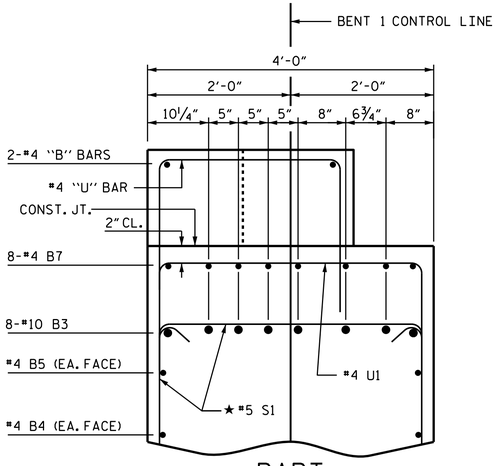


PART SECTION B-B

★INVERT ALTERNATE STIRRUPS

PART SECTION C-C

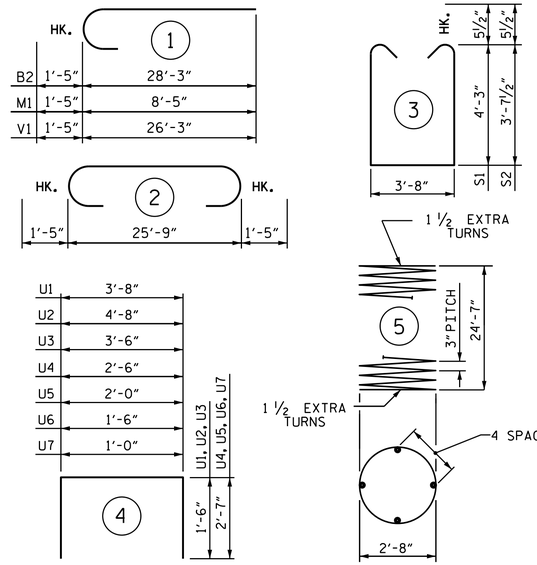
★INVERT ALTERNATE STIRRUPS



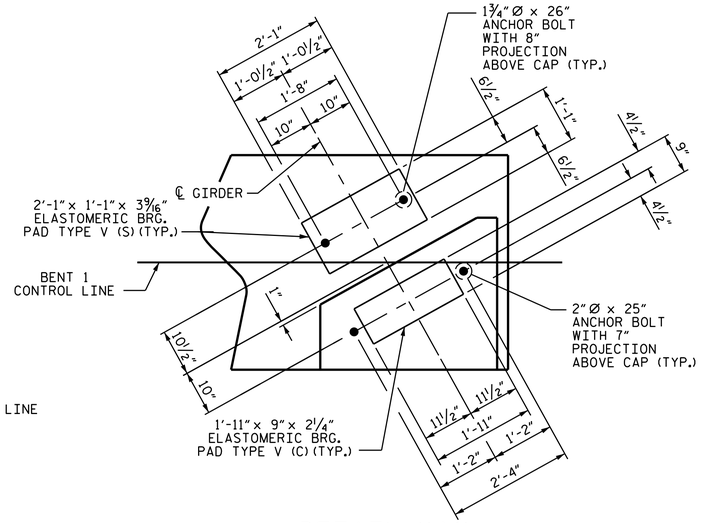
PART SECTION D-D

★INVERT ALTERNATE STIRRUPS

BAR TYPES

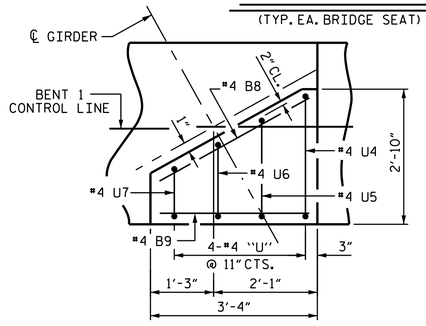


ALL BAR DIMENSIONS ARE OUT TO OUT.



DETAIL "A"

(TYP. EA. BRIDGE SEAT)



BRIDGE SEAT DETAIL

(TYP. EA. CONC. GDR. BRIDGE SEAT)

BILL OF MATERIAL

BENT 1-STAGE I

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#10	STR	47'-10"	1,647
B2	8	#10	1	29'-8"	1,021
B3	8	#10	2	28'-7"	984
B4	12	#4	STR	25'-2"	202
B5	2	#4	STR	22'-0"	29
B6	16	#4	STR	10'-10"	116
B7	8	#4	STR	4'-3"	23
B8	5	#4	STR	3'-5"	11
B9	5	#4	STR	3'-0"	10
M1	42	#10	1	9'-10"	1,777
S1	25	#5	3	13'-1"	341
S2	25	#5	3	11'-10"	309
T1	108	#7	STR	8'-3"	1,821
T2	54	#6	STR	8'-3"	669
U1	53	#4	4	6'-8"	236
U2	3	#4	4	7'-8"	15
U3	10	#4	4	6'-6"	43
U4	5	#4	4	7'-8"	26
U5	5	#4	4	7'-2"	24
U6	5	#4	4	6'-8"	22
U7	5	#4	4	6'-2"	21
V1	42	#10	1	27'-8"	5,000
REINFORCING STEEL				LBS.	14,347
SP-1	3	**	5	837'-6"	1,678
SPIRAL COLUMN REINFORCING STEEL				LBS.	1,678

CLASS A CONCRETE BREAKDOWN:			
POUR #1	(FOOTINGS)	C.Y.	29.8
POUR #2	(COLUMNS)	C.Y.	19.1
POUR #3	(CAP)	C.Y.	32.4
POUR #4	(STEPS)	C.Y.	1.6
TOTAL CLASS A CONCRETE		C.Y.	82.9

HP 14X73 STEEL PILES No. 12	LIN. FT.	660
FOUNDATION EXCAVATION		LUMP SUM

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

PROJECT NO. B-5136

CABARRUS COUNTY

STATION: 21+74.92 -L-

SHEET 2 OF 6

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

BENT 1

STAGE I

NORTH CAROLINA PROFESSIONAL SEAL 23371 ENGINEER VIPUL A. PATEL

DocuSigned by: vipul a patel 1C157DE15D4F4A0... 2/19/2015

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-57
1			3			TOTAL SHEETS
2			4			75

DRAWN BY : J.P. MCCARTHA DATE : 8/31/14
CHECKED BY : T. H. CARROLL DATE : 10/1/14
DESIGN ENGINEER OF RECORD: H.A. LOCKLEAR DATE : 10/1/14

18-FEB-2015 14:04
R:\Structures\Plans\B5136_SD_B1_01.dgn
thcarroll