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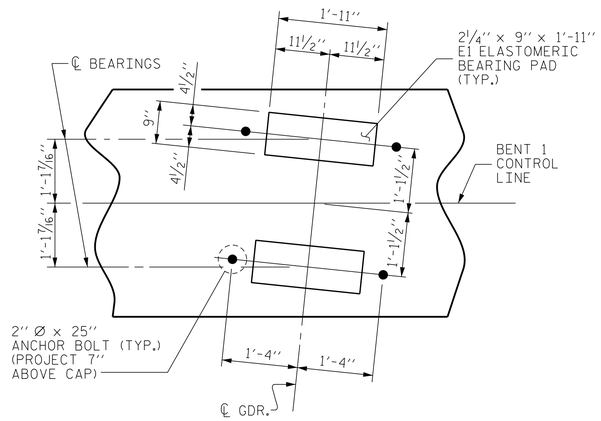
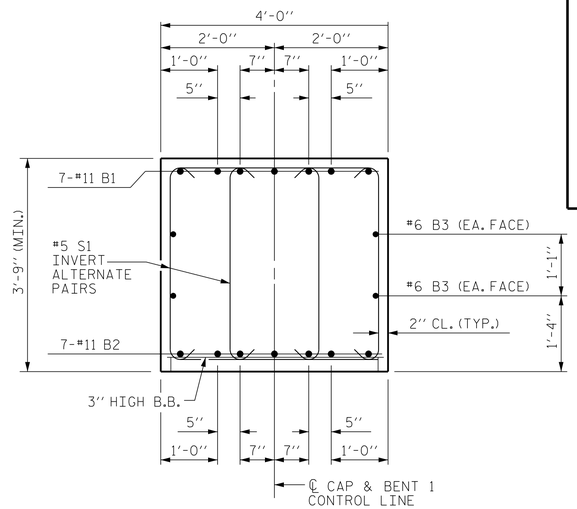
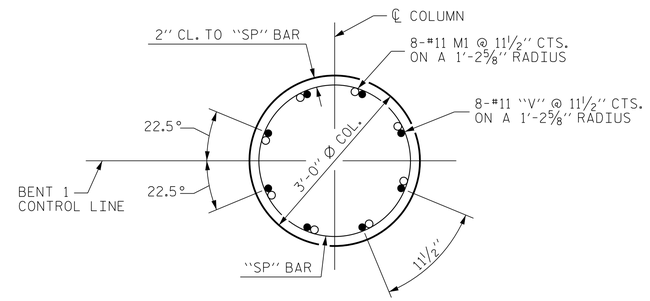


DETAIL "A"

NOTE :
ALL GIRDERS ARE PARALLEL
TO THE LONG CHORD



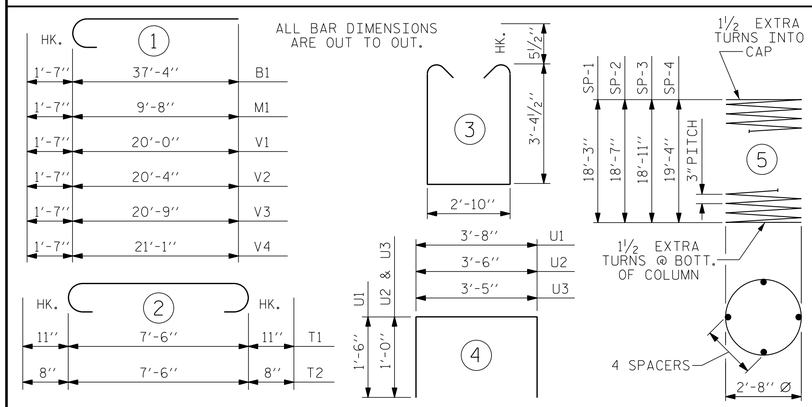
SECTION A-A



SECTION THRU COLUMN

(TYPICAL FOR EACH COLUMN)

BAR TYPES



BILL OF MATERIAL

BENT 1

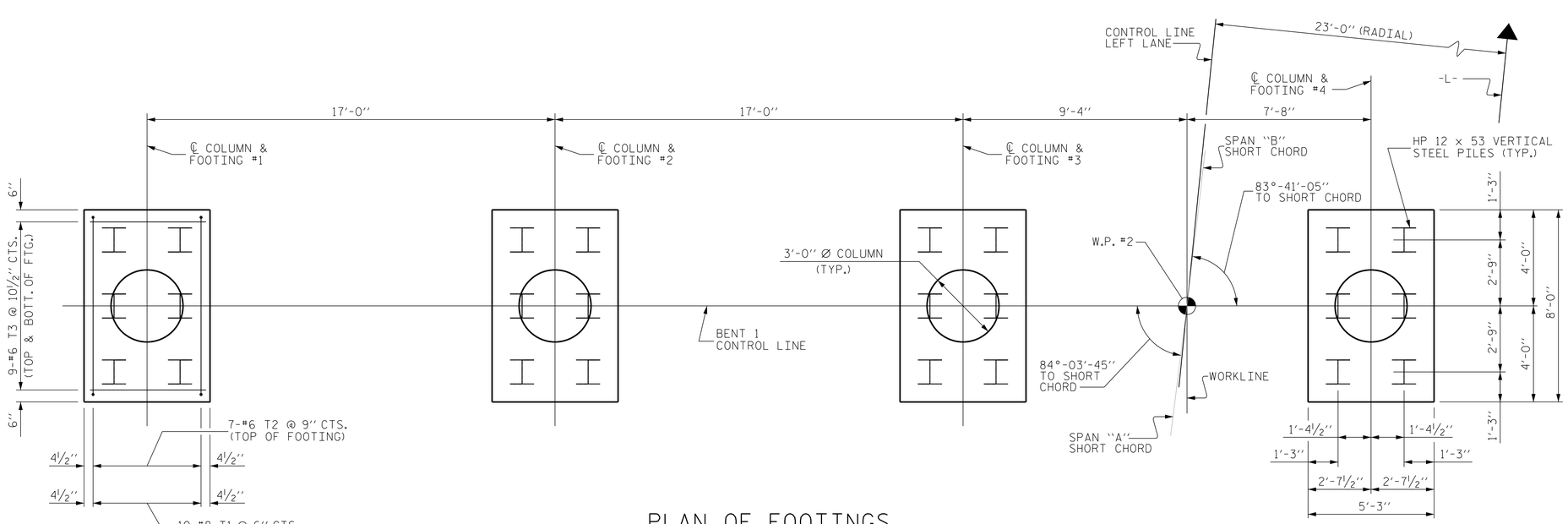
BAR	No.	SIZE	TYPE	LENGTH	WEIGHT
B1	14	#11	1	38'-11"	2895
B2	14	#11	STR	35'-6"	2641
B3	8	#6	STR	32'-6"	391
M1	32	#11	1	11'-3"	1913
S1	178	#5	3	10'-6"	1949
U1	42	#4	4	6'-8"	187
U2	8	#4	4	5'-6"	29
U3	8	#4	4	5'-5"	29
T1	40	#8	2	9'-4"	997
T2	28	#6	2	8'-10"	371
T3	72	#6	STR	4'-11"	532
V1	8	#11	1	21'-7"	917
V2	8	#11	1	21'-11"	932
V3	8	#11	1	22'-4"	949
V4	8	#11	1	22'-8"	963
REINFORCING STEEL					15,695 LBS.

SP-1	1	*	5	627'-1"	419
SP-2	1	*	5	643'-7"	430
SP-3	1	*	5	651'-10"	435
SP-4	1	*	5	668'-4"	446
SPIRAL COLUMN REINFORCING STEEL					1,730 LBS.

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

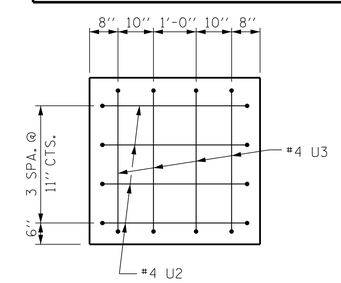
CLASS A CONCRETE BREAKDOWN	
POUR #1 (FOOTINGS)	21.8 CU. YDS.
POUR #2 (COLUMNS)	19.3 CU. YDS.
POUR #3 (CAP)	35.4 CU. YDS.
TOTAL CLASS A CONCRETE	76.5 CU. YDS.

HP 12 x 53 STEEL PILES	
No. 24	1,470 LIN. FT.
PREDRILLING FOR PILES	69 LIN. FT.
FOUNDATION EXCAVATION	LUMP SUM



PLAN OF FOOTINGS

DIMENSIONS, REINFORCING STEEL AND PILE LAYOUT ARE TYPICAL FOR EACH FOOTING



VIEW X-X

(TYPICAL EACH END)

PROJECT NO. U-2579B
FORSYTH COUNTY
STATION: 642+81.42 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

BENT 1

(LEFT LANE)

NORTH CAROLINA PROFESSIONAL SEAL 026897 ENGINEER JOHN T. DIFFEE
DocuSigned by: John T. Diffee 6/9/2014

WETHERILL ENGINEERING
559 Jones Franklin Rd. Suite 164
Raleigh, N.C. 27606
Bus: 919 851 8077
Fax: 919 851 8107
License: F-0377

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

REVISIONS							SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:		S-500
1			3				TOTAL SHEETS
2			4				707

DRAWN BY : J.M. BRITT DATE : 3-26-14
CHECKED BY : B.C. HUNT DATE : 4-14-14
DESIGN ENGINEER OF RECORD : J. DIFFEE DATE : 4-15-14

P:\2013\13109.22 U-2579B\Structures\DGN\Str 13 (L-LtLane)U2579B_SD_STR13_BT1_WEI.dgn
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