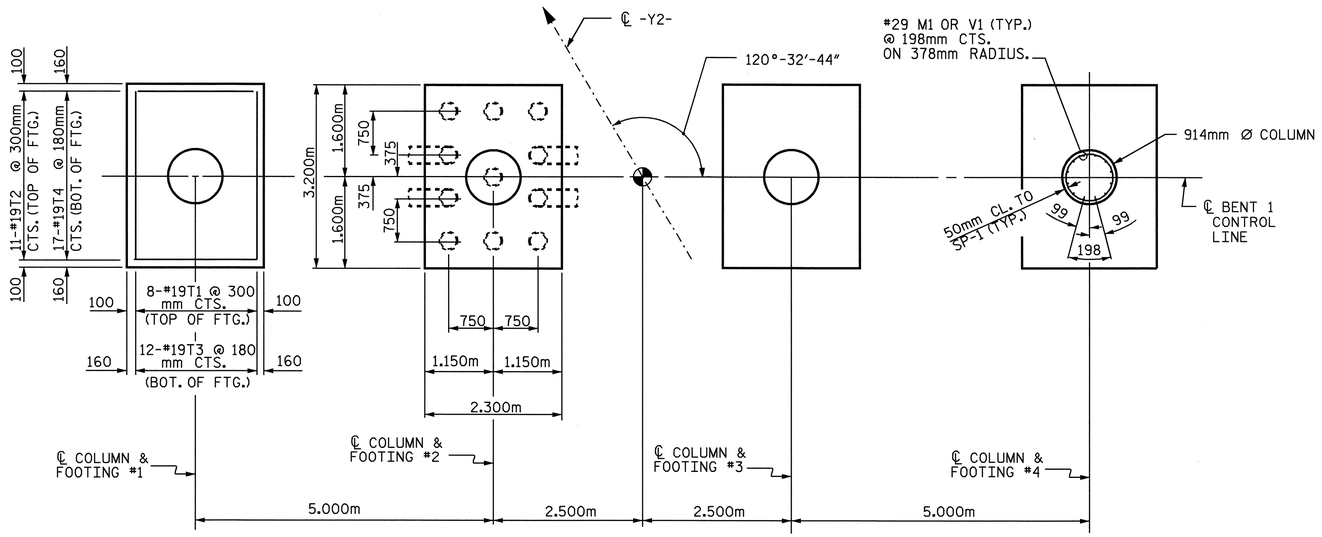
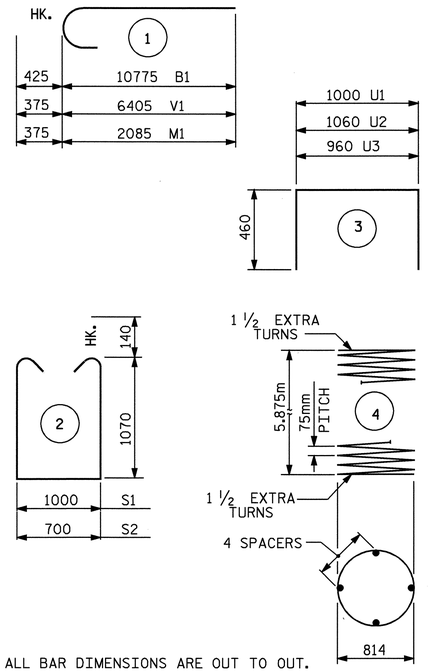


PLAN OF FOOTINGS

ALL REINFORCING STEEL AND DIMENSIONS ARE TYPICAL FOR ALL COLUMNS AND FOOTINGS.

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

BENT 1

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	14	32	1	11200	1004
B2	7	32	STR	17900	802
B3	4	19	STR	17900	160
B4	7	13	STR	4100	29
M1	48	29	1	2460	597
S1	50	16	2	3420	265
S2	48	16	2	3120	232
T1	32	19	STR	3040	217
T2	44	19	STR	2140	210
T3	48	19	STR	3040	326
T4	68	19	STR	2140	325
U1	35	13	3	1920	67
U2	6	13	3	1980	12
U3	8	13	3	1880	15
V1	48	29	1	6780	1647

TOTAL REINFORCING STEEL (kg) 5908

SPIRAL REINFORCING STEEL (kg)

SP-1	4	**	4	204400	813

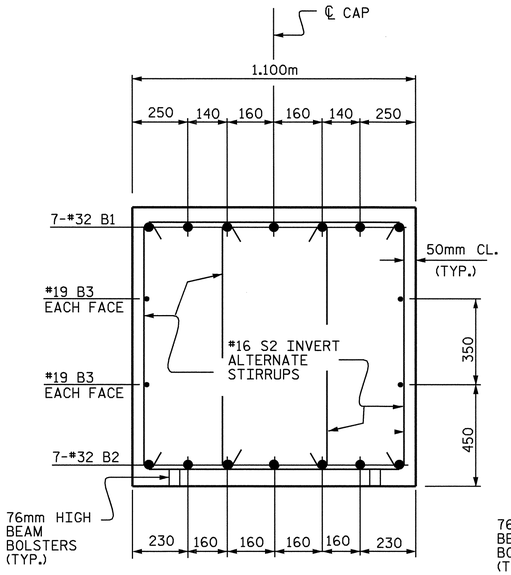
TOTAL SPIRAL REINFORCING STEEL (kg) 813

CLASS A CONCRETE BREAKDOWN (m3)

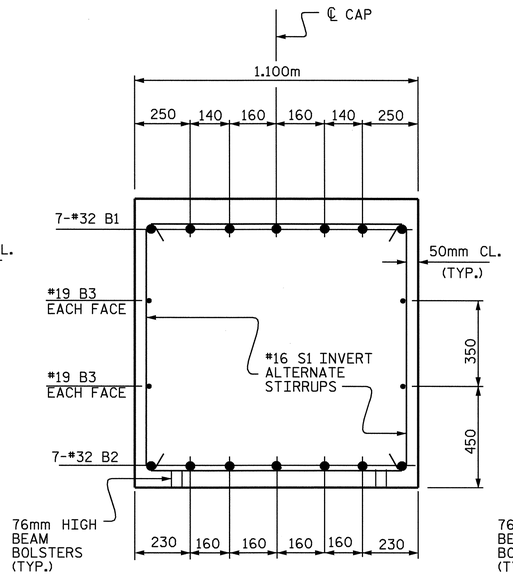
POUR #1 (FOOTINGS)	29.4
POUR #2 (COLUMNS)	15.2
POUR #3 (BENT CAP)	25.0
TOTAL	69.6

PP 305 x 9.5 STEEL PILES
NO. 44 METERS 814

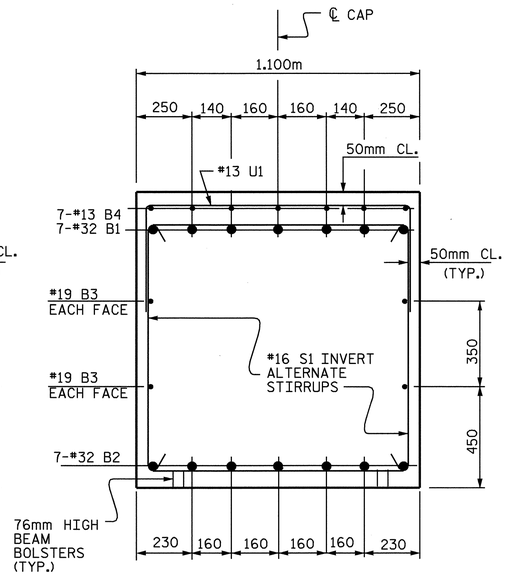
** THE SP-1 SPIRAL REINFORCING STEEL SHALL BE W20 OR D20 COLD DRAWN WIRE OR #13 PLAIN OR DEFORMED BAR.



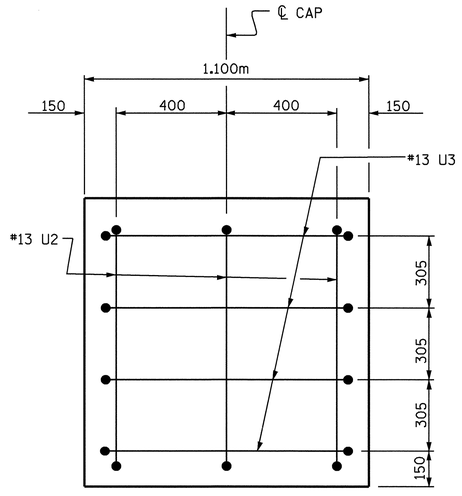
SECTION A-A



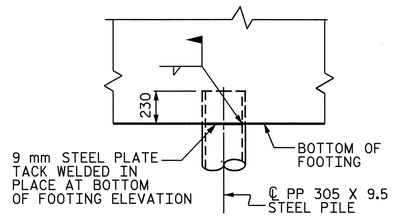
SECTION B-B



SECTION C-C



SECTION X-X



PIPE PILE IN FOOTING DETAIL

PROJECT NO. R-513A

ROBESON COUNTY

STATION: 68+75.743 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE BENT #1

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-59
1			3			TOTAL SHEETS
2			4			172

NORTH CAROLINA PROFESSIONAL SEAL 21545 ENGINEER STEVEN K. WARNER
05/24/04

DRAWN BY : N. Q. TRAN DATE : 5-19-03
CHECKED BY : SWANcePE DATE : 5-9-04

20-MAY-2004 09:12
W:\SquadM\r0513a\str2\ntran\MicromB\r513a02b1.dgn

STR. 2