

SECTION A-A

BILL OF MATERIAL  
BENT No. 1

BAR No.	SIZE	TYPE	LENGTH	WEIGHT
B1	6	#29 STR	9640	293
B2	6	#29 1	10360	315
B3	4	#16 STR	9640	60
M1	40	#29 STR	10800	2186
S1	43	#16 2	3120	208
U1	32	#13 3	2100	67
U2	6	#13 3	2060	12
U3	6	#13 3	1700	10
V1	40	#29 4	2480	502

REINFORCING STEEL 3653 kg

BAR No.	SIZE	TYPE	LENGTH	WEIGHT
SP1	2	**	5	71,900
SP2	2	***	6	205,800

SPIRAL COLUMN REINFORCING STEEL 782 kg

CLASS A CONCRETE BREAKDOWN

POUR #2 ( COLUMNS )	= 2.9 m <sup>3</sup>
POUR #3 ( CAP )	= 12.2 m <sup>3</sup>

TOTAL CLASS A CONCRETE = 15.1 m<sup>3</sup>

DRILLED PIER CONCRETE BREAKDOWN

POUR #1 ( DRILLED PIERS )	= 19.9 m <sup>3</sup>
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1220mm Ø DRILLED PIERS NOT IN SOIL = 8.0 m

1220mm Ø DRILLED PIERS IN SOIL = 9.0 m

PERMANENT STEEL CASING FOR 1220mm DRILLED PIER = 5.0 m

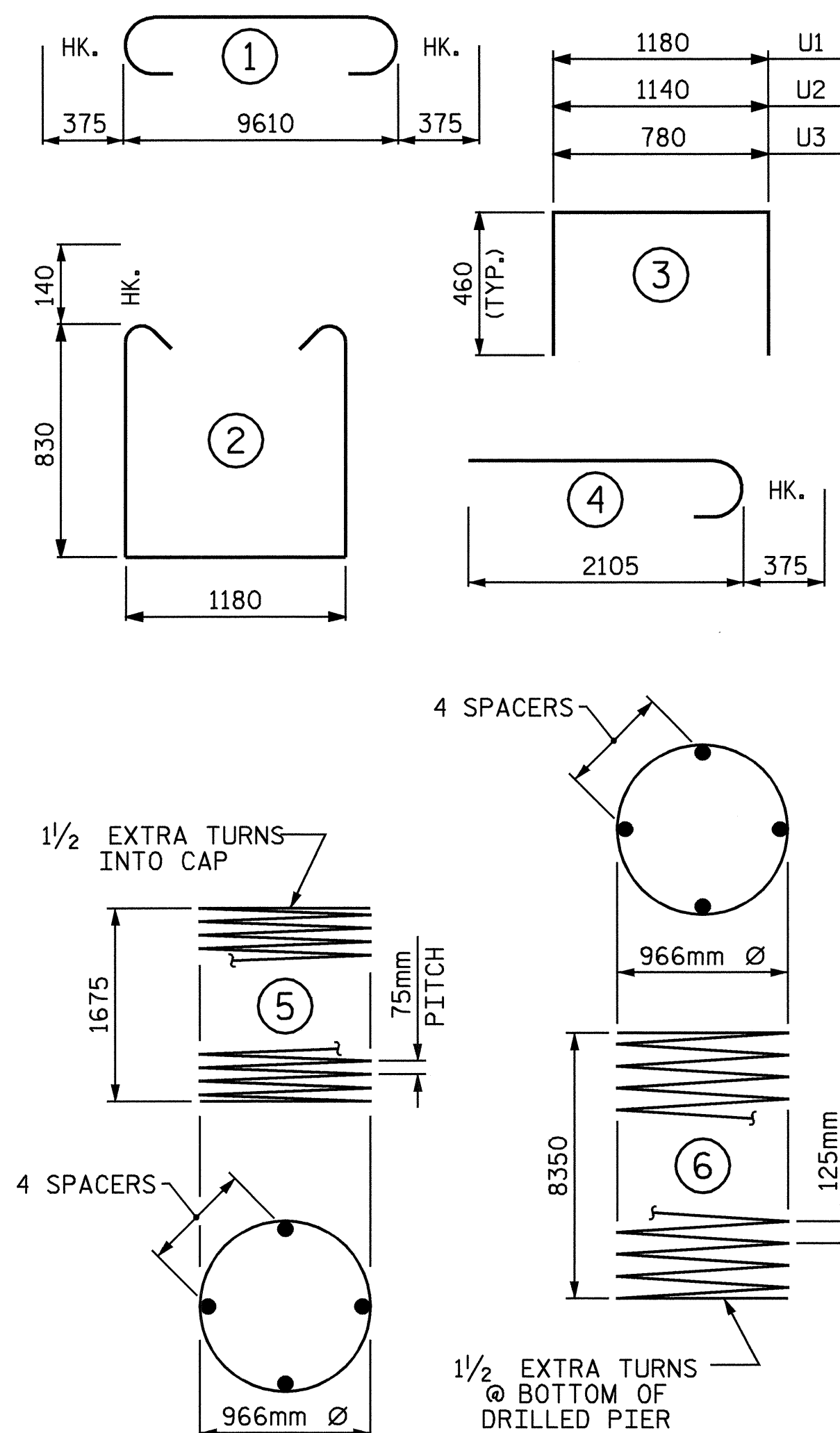
SPT TESTING = 2 EACH

CROSSHOLE SONIC LOGGING = 1 EACH

CSL TUBES = 74.1 m

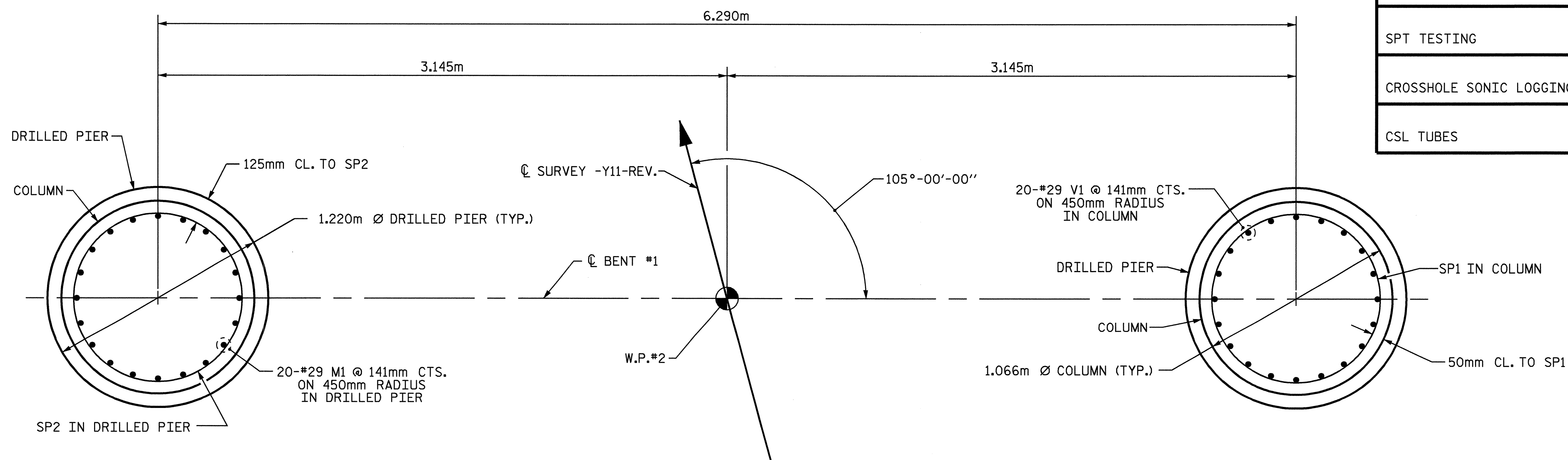
BAR TYPES

ALL BAR DIMENSIONS ARE OUT TO OUT



\*\* THE SP1 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #13 PLAIN OR DEFORMED BAR.

\*\*\* THE SP2 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #16 PLAIN OR DEFORMED BAR.



PLAN OF COLUMNS AND DRILLED PIERS

DRAWN BY : P. S. ERVIN DATE : 2/16/05  
CHECKED BY : G. S. HOLMES DATE : 2/17/05

04-MAR-2005 11:47  
W:\r2552b\_ranch road\r2552b\_sd\_btl.04.dgn  
gsholmes



PROJECT NO. R-2552B  
JOHNSTON COUNTY  
STATION: 14+72.000 -Y11-REV.

SHEET 2 OF 2

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

SUBSTRUCTURE  
BENT No. 1

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO.

S-170

TOTAL SHEETS

431

STR. #4