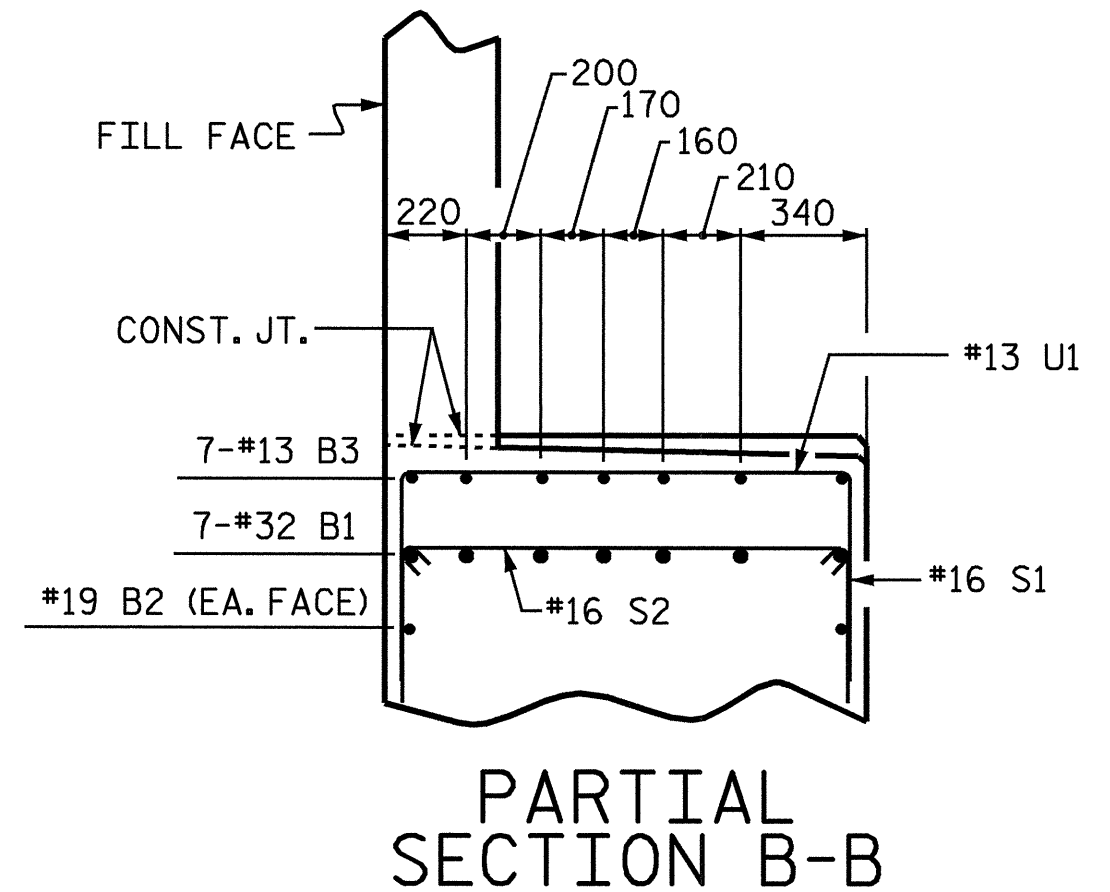
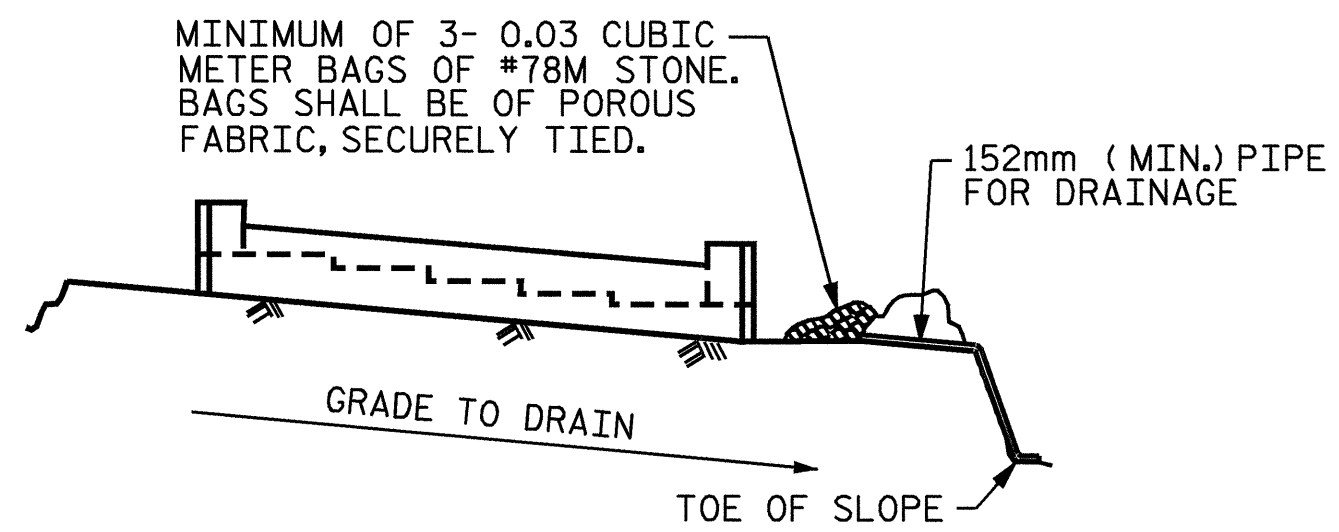


SECTION A-A
REINFORCING STEEL IN PIER NOT SHOWN FOR CLARITY.



PARTIAL SECTION B-B



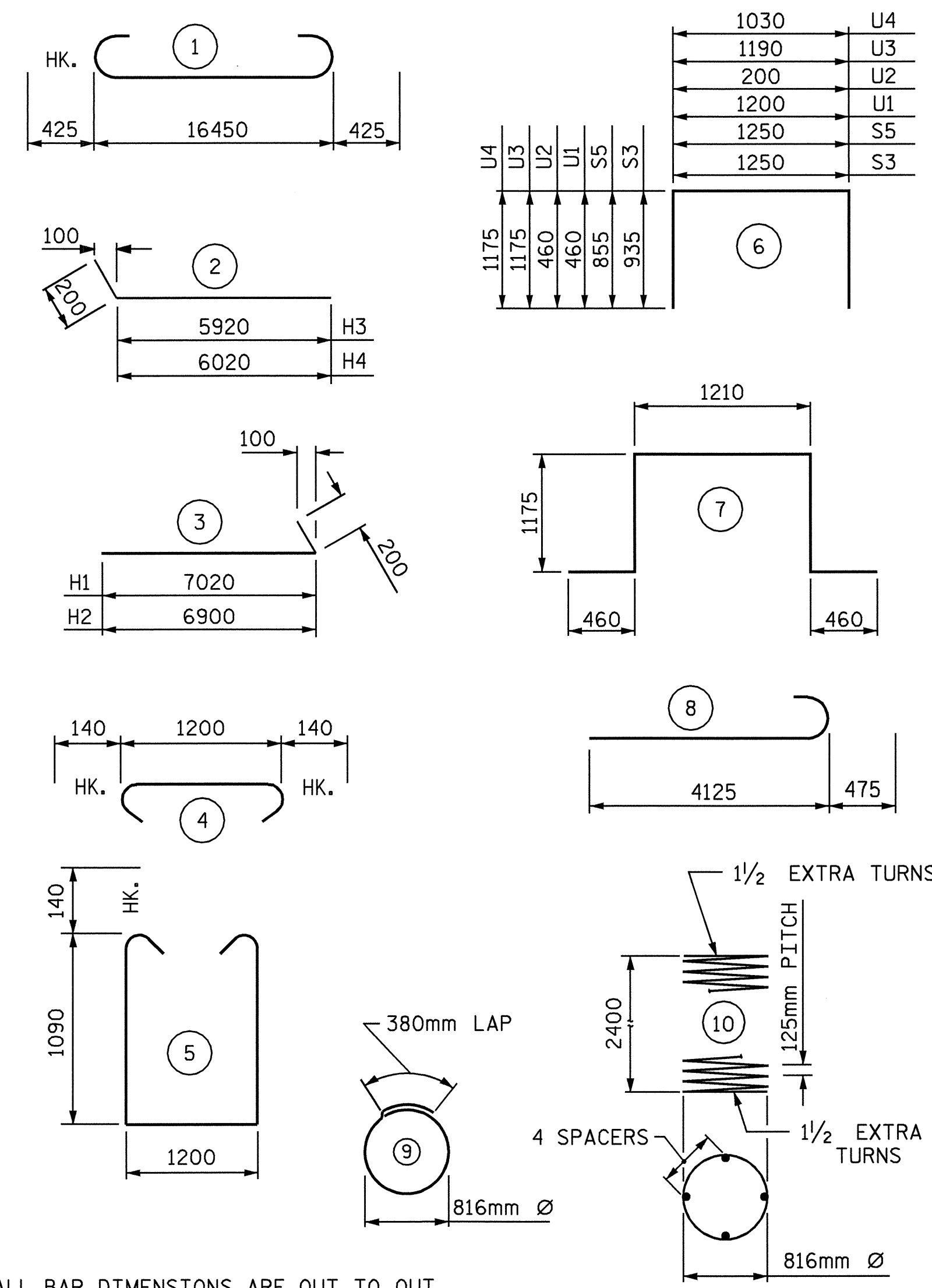
BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR EFFECTIVENESS.

NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

** THE SP-1 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #16 PLAIN OR DEFORMED BAR.

BILL OF MATERIAL					
END BENT 2					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	14	#32	1	17300	1551
B2	6	#19	STR	16540	221
B3	14	#13	STR	3940	55
H1	16	#16	3	7220	179
H2	16	#16	3	7100	176
H3	15	#16	2	6120	142
H4	15	#16	2	6220	145
H5	4	#16	STR	1000	6
K1	20	#16	STR	16500	512
M1	112	#36	8	4600	4074
S1	50	#16	5	3660	284
S2	50	#16	4	1480	115
S3	8	#16	6	3120	39
S4	9	#19	7	4480	90
S5	8	#16	6	2960	37
S6	25	#13	9	2960	74
U1	15	#13	6	2120	32
U2	49	#13	6	1120	55
U3	3	#16	6	3540	16
U4	3	#16	6	3380	16
V1	98	#16	STR	4140	630
V2	54	#19	STR	4720	570
V3	48	#19	STR	4560	489

REINFORCING STEEL kg 9508

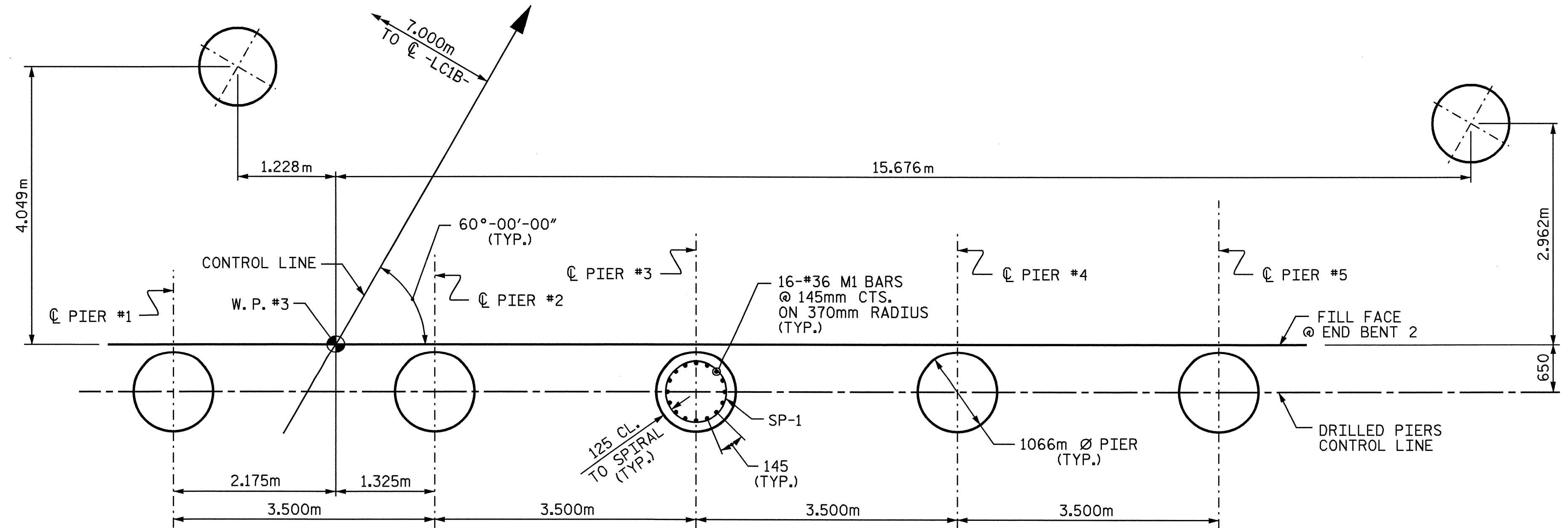
SP-1 7 *** 10 55,880 607

SPIRAL COLUMN REINFORCING STEEL kg 607

CLASS A CONCRETE BREAKDOWN		
POUR #2: (CAP AND LOWER PORTION OF WINGS)	C.M.	36.6
POUR #3: (BACKWALL AND UPPER PORTION OF WINGS)	C.M.	29.3
TOTAL CONCRETE	C.M.	65.9

DRILLED PIER QUANTITIES

DRILLED PIER CONCRETE POUR #1 (DRILLED PIERS)	C.M.	15.6
1066mm Ø DRILLED PIERS IN SOIL	METERS	12.5
1066mm Ø DRILLED PIERS NOT IN SOIL	METERS	5.0
SPT TESTING	EA.	5
CROSSHOLE SONIC LOGGING	EA.	1
CSL TUBES	METERS	91.0



PLAN OF DRILLED PIERS

REINFORCING STEEL IS TYPICAL FOR EACH PIER

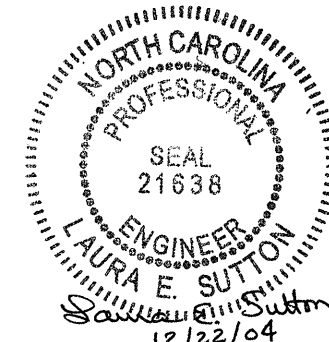
PROJECT NO. R-0977A
CHEROKEE COUNTY
STATION: 24+60.500-LC1B-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
END BENT #2

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-116
1			3			TOTAL SHEETS 230
2			4			



DRAWN BY: B.N.BARODAWALA DATE: 11-12-04
CHECKED BY: J. D. HAWK DATE: 11-16-04