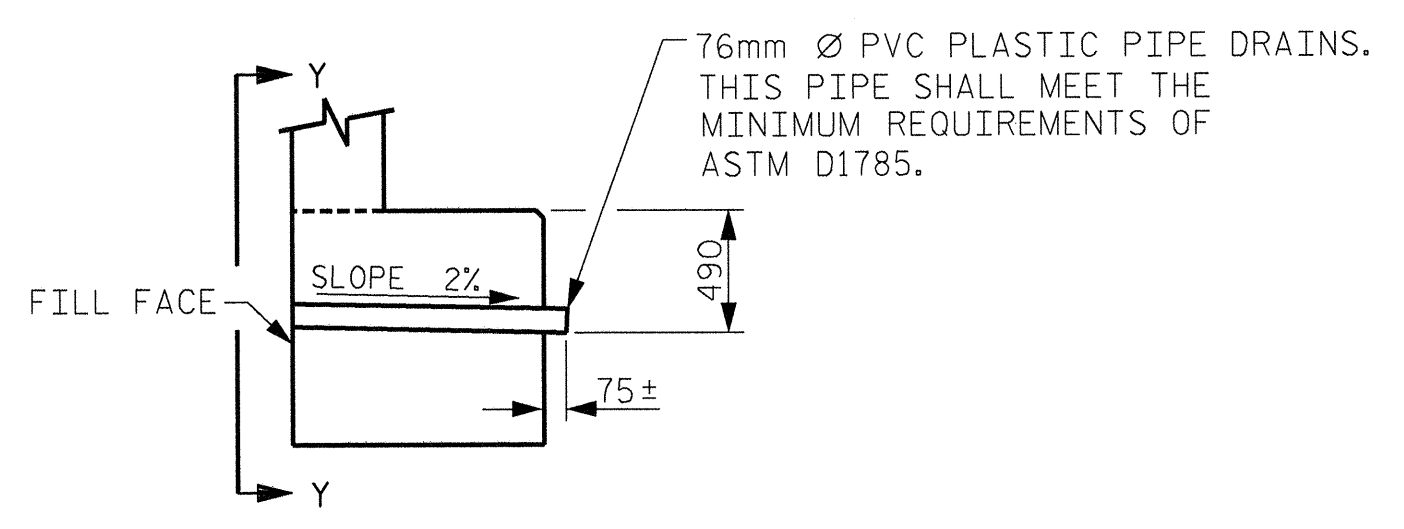
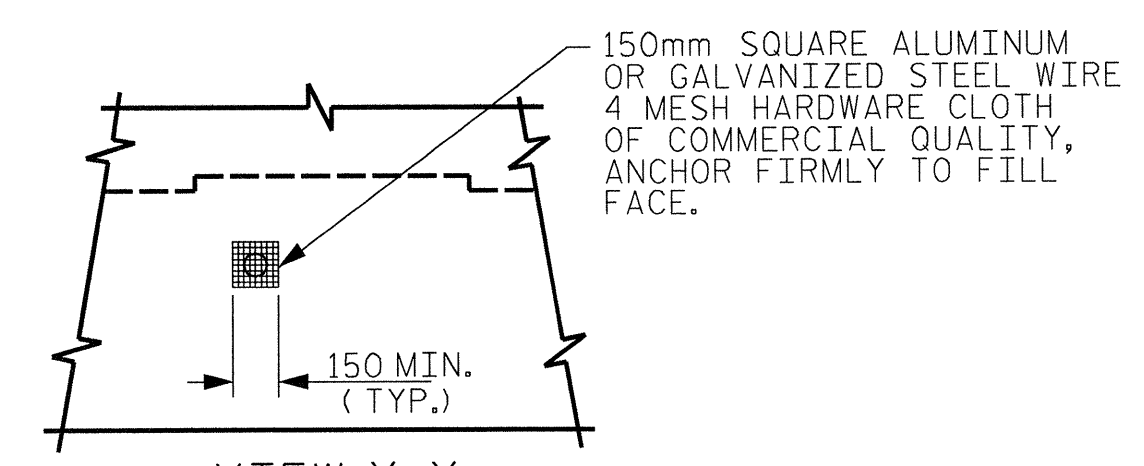


SECTION A-A



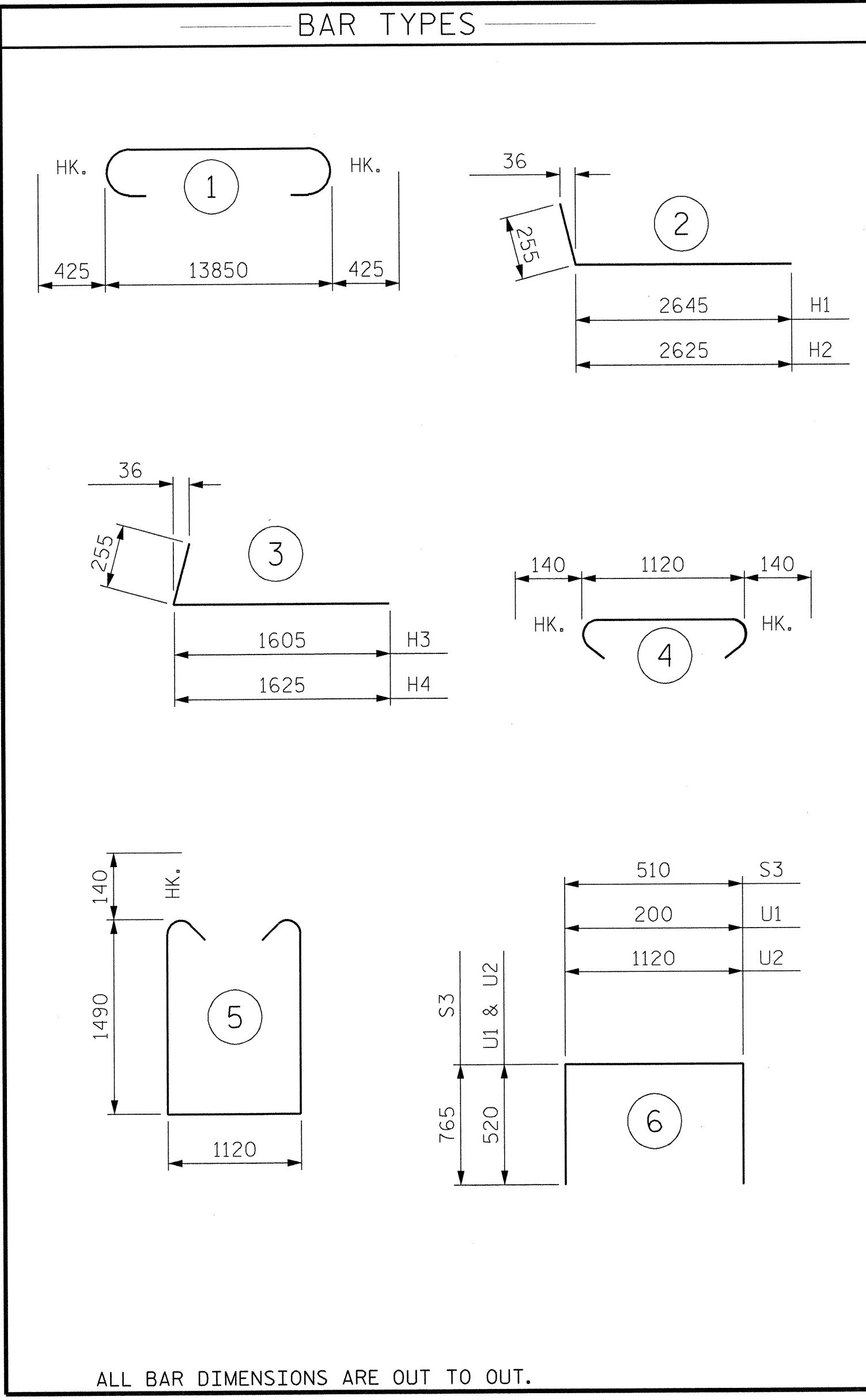
SECTION THRU CAP



VIEW Y-Y

NO SEPARATE PAYMENT WILL BE MADE FOR FURNISHING AND INSTALLING THE PVC PLASTIC PIPE DRAINS, HARDWARE CLOTH AND FASTENERS. THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

PIPE DRAIN DETAILS



BILL OF MATERIAL

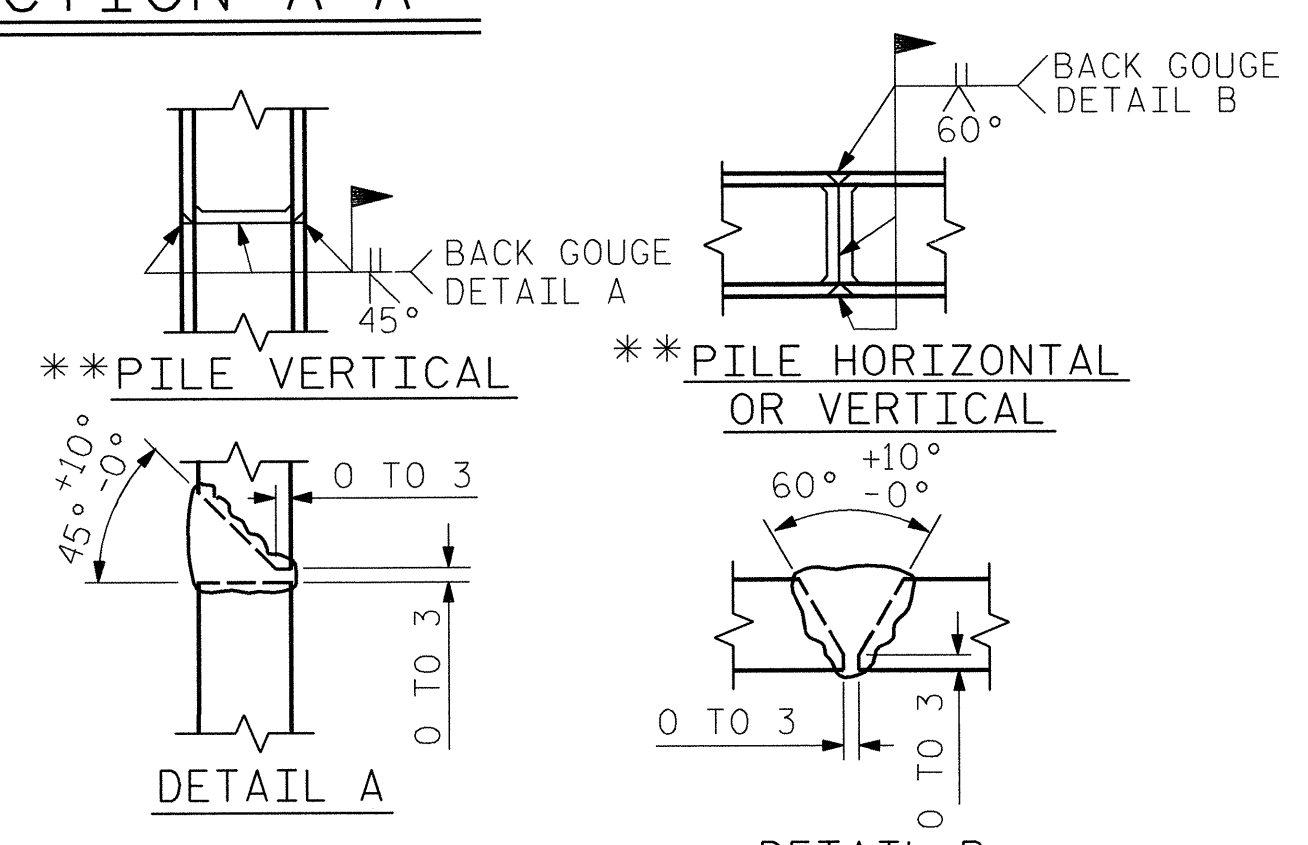
END BENT 1					
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT	
B1	10	#32	1	14700	941
B2	8	#16	STR	13880	172
B3	12	#13	STR	1120	13
B4	16	#13	STR	7360	117
B5	20	#13	STR	1300	26
B6	5	#13	STR	2580	13
H1	13	#16	2	2900	59
H2	13	#16	2	2880	58
H3	14	#16	3	1860	40
H4	14	#16	3	1880	41
K1	20	#13	STR	7360	146
K2	8	#13	STR	900	7
S1	69	#16	4	1400	150
S2	69	#16	5	4380	469
S3	36	#13	6	2040	73
U1	40	#13	6	1240	49
U2	22	#13	6	2160	47
V1	80	#13	STR	2760	219
V2	28	#16	STR	3060	133
V3	20	#16	STR	3200	99

REINFORCING STEEL = 2,872 kg

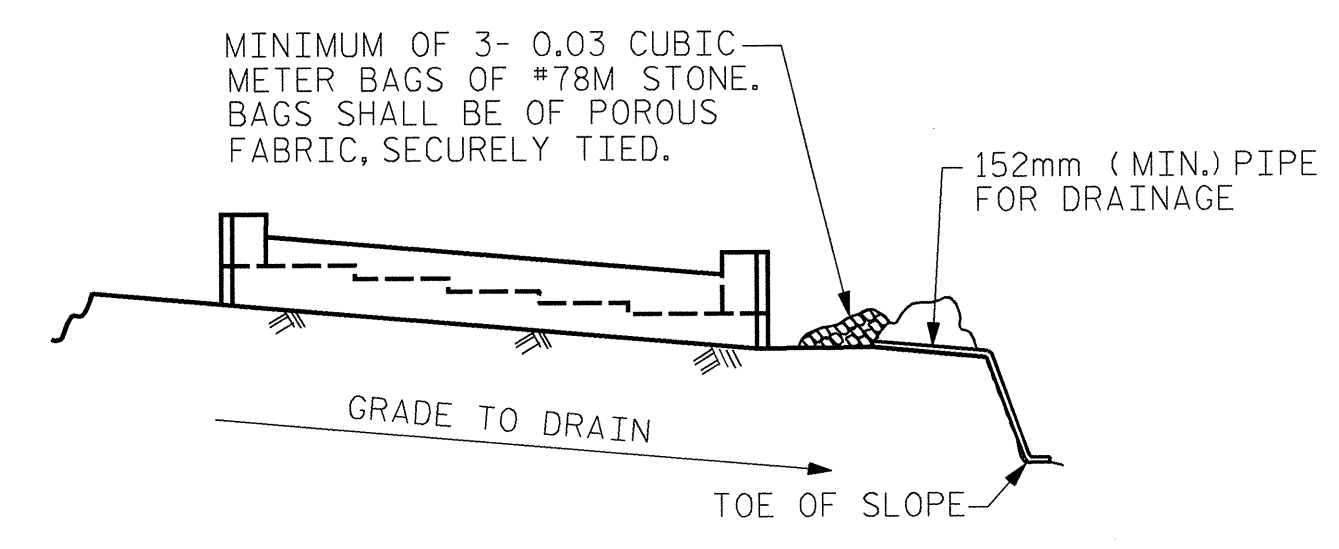
CLASS A CONCRETE BREAKDOWN

POUR #	DESCRIPTION	UNIT	QUANTITY
POUR #1	CAP & BOTTOM OF WING	m ³	30.5
POUR #2	BACKWALL & TOP OF WING	m ³	7.1
TOTAL CLASS A CONCRETE		m³	37.6

HP 310 X 79 STEEL PILES
 NO. = 12 204.0 METERS



PILE SPLICE DETAILS



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.

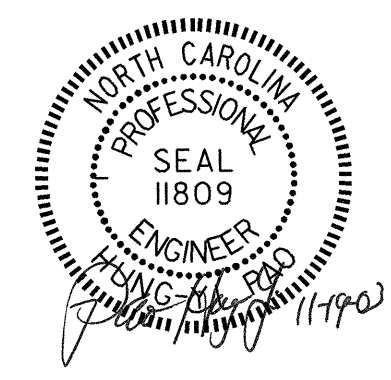
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

PROJECT NO. R-2610A
 CHATHAM COUNTY
 STATION: 18+04.666 -L-

SHEET 3 OF 3



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE
 END BENT 1
 (LEFT LANE BRIDGE)

REVISIONS						SHEET NO. S-23
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS
2			4			82

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 Fax. 919.851.7024
 www.stantec.com

DRAWN BY: M. J. OSTRISHKO DATE: 10-3-03
 CHECKED BY: H. PAO DATE: 10-10-03