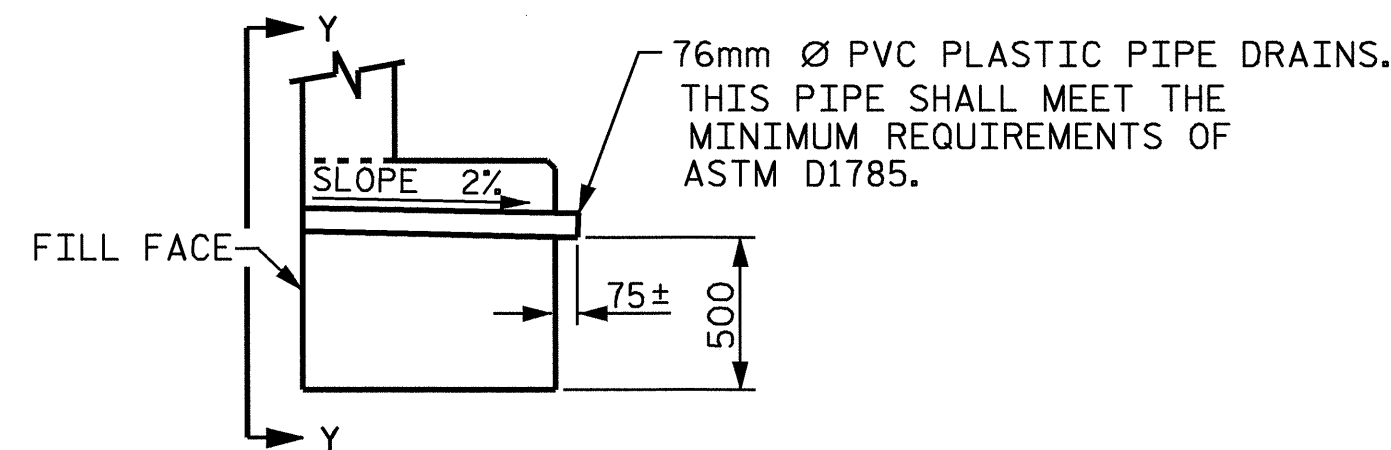


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

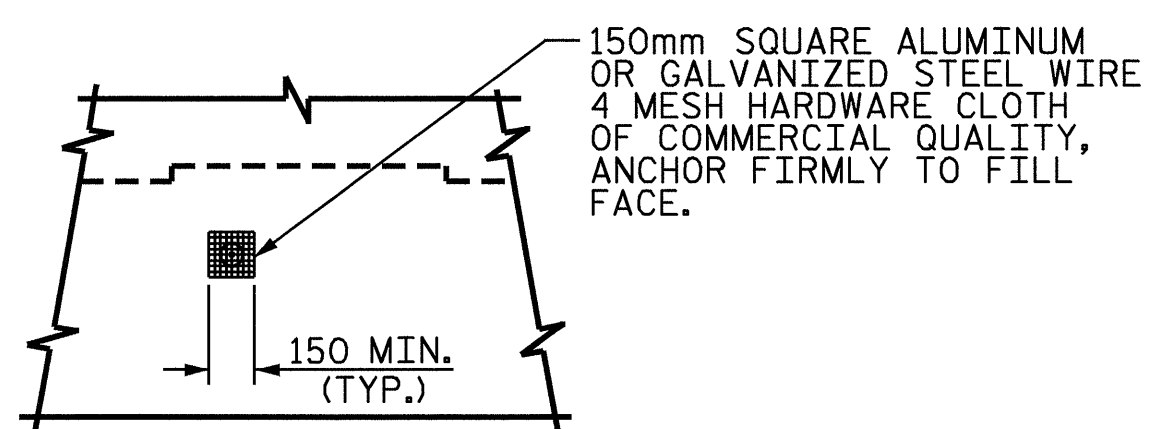
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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



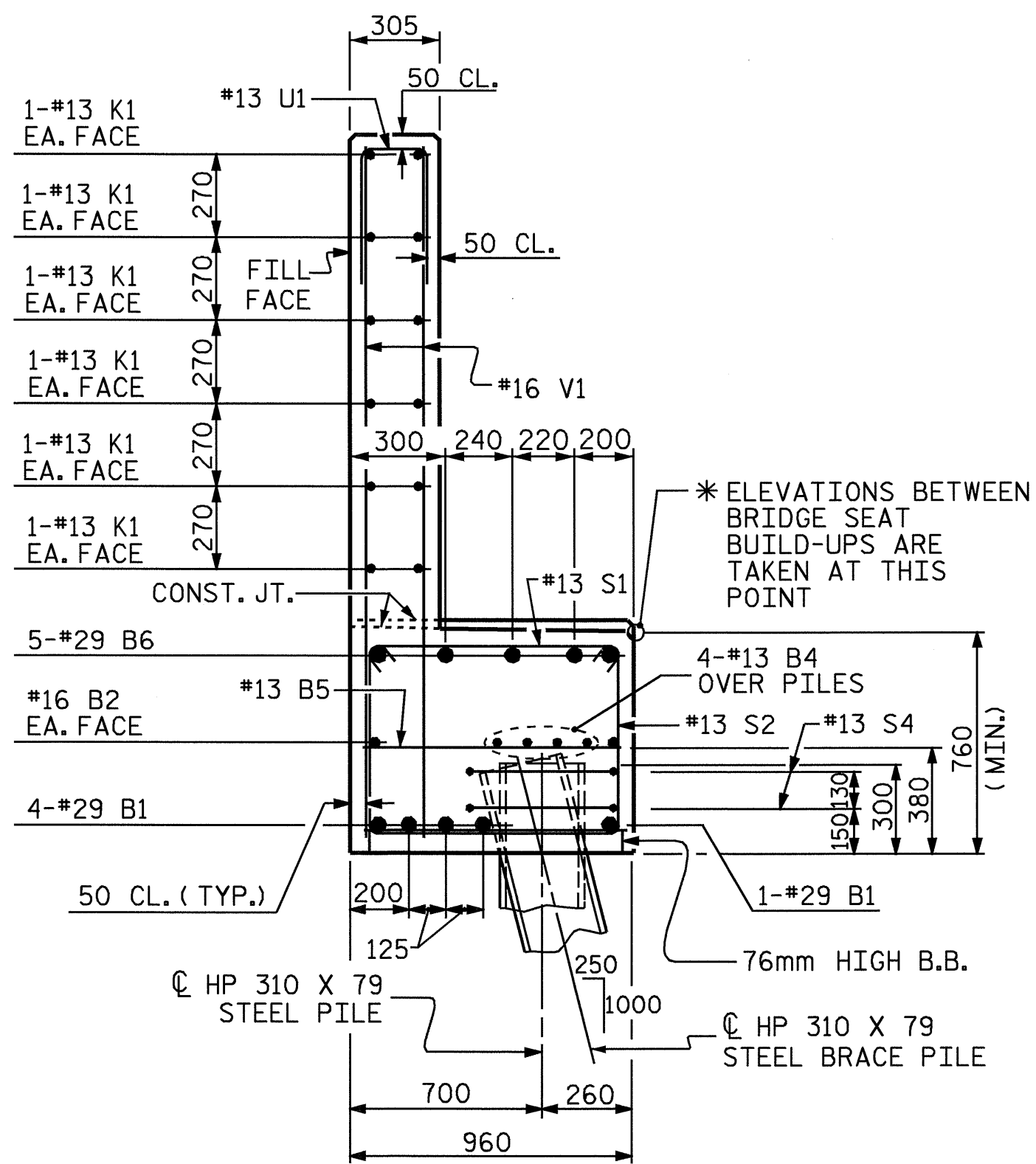
SECTION THRU CAP



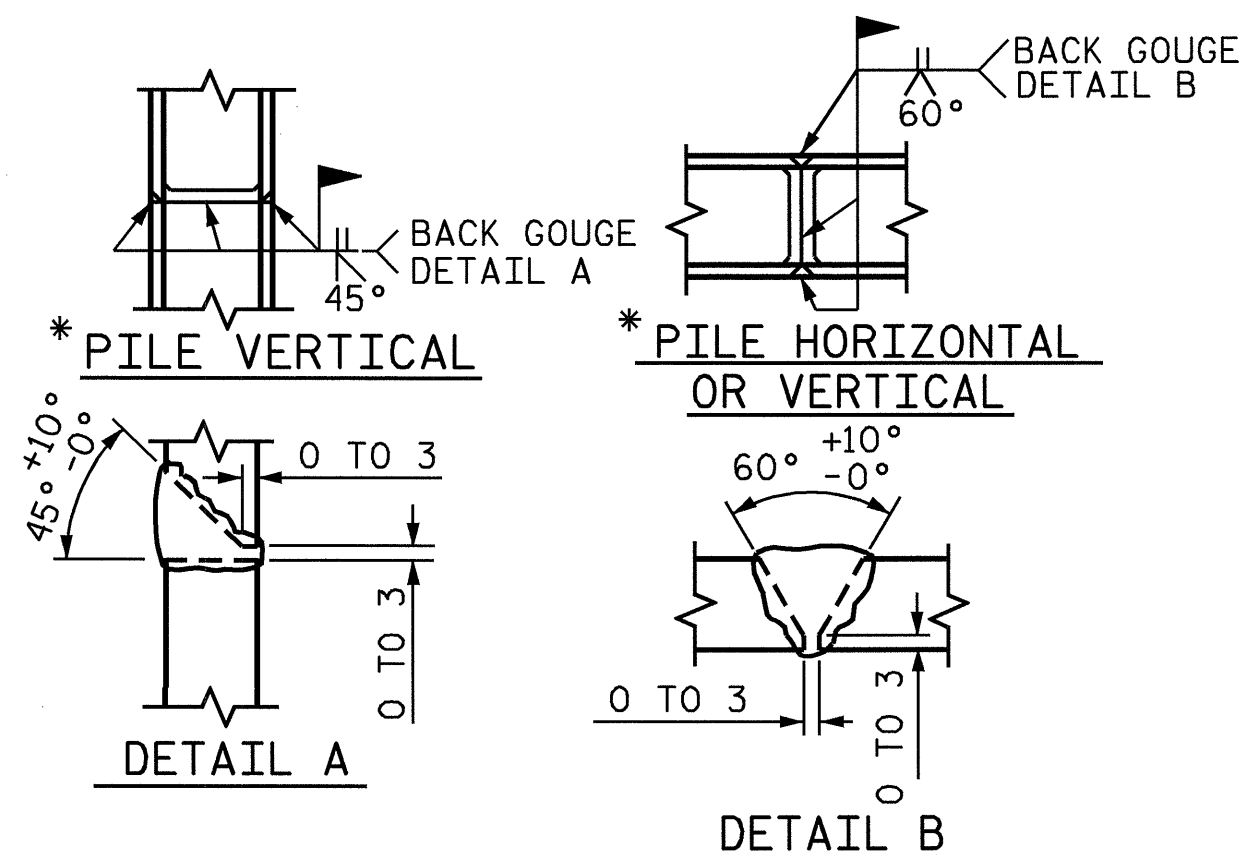
VIEW Y-Y

NOTE: 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



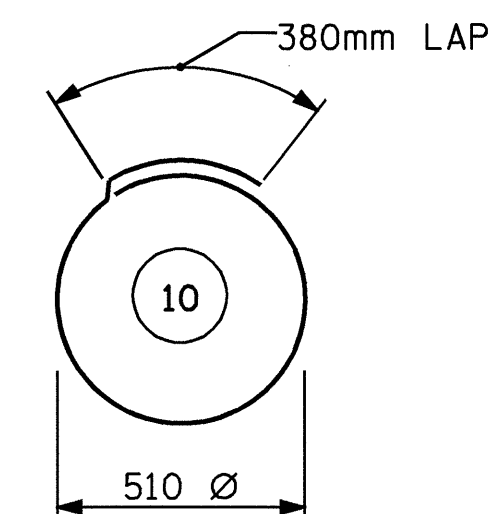
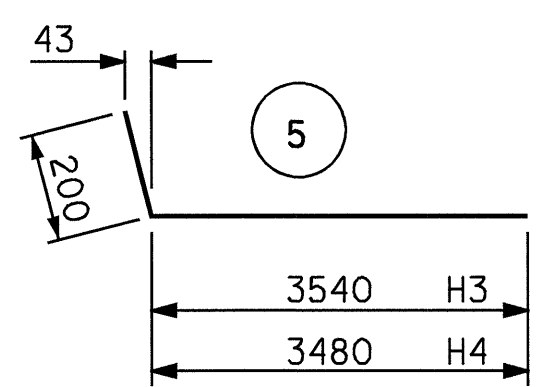
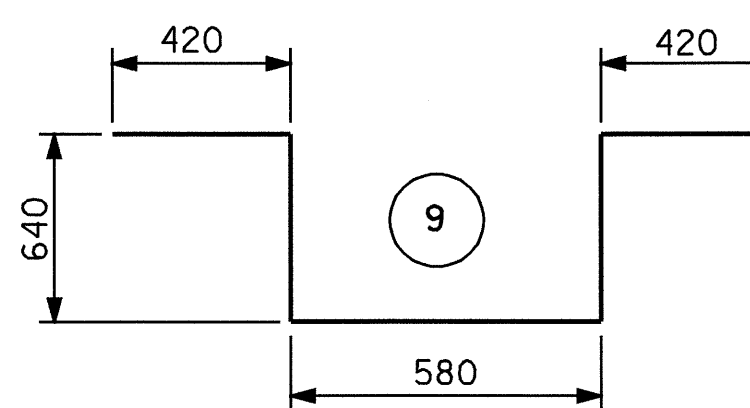
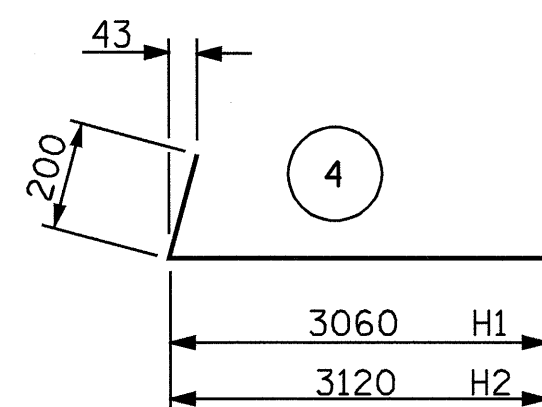
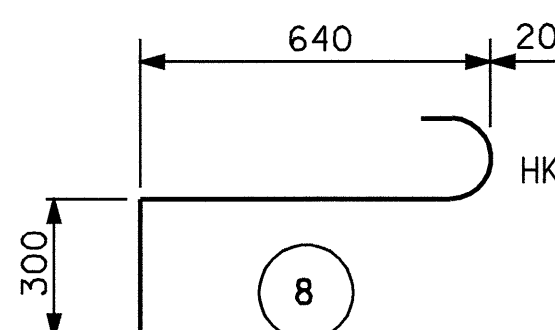
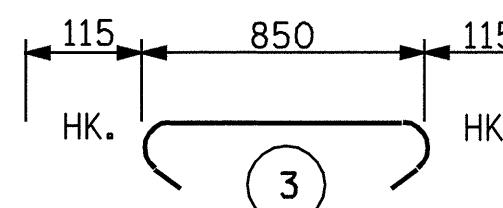
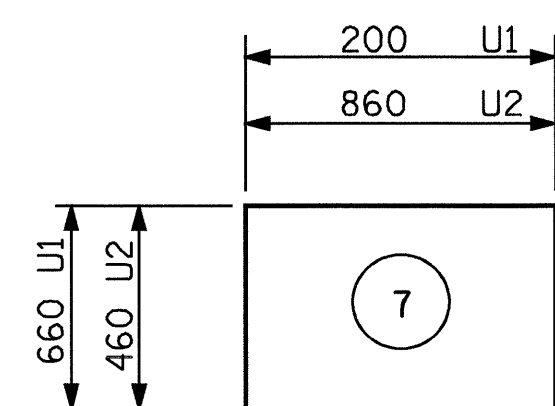
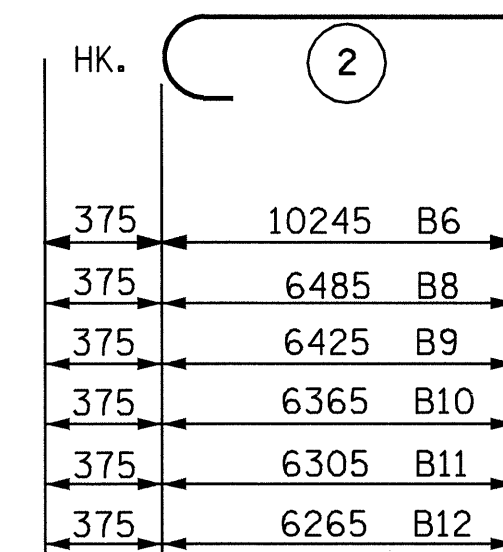
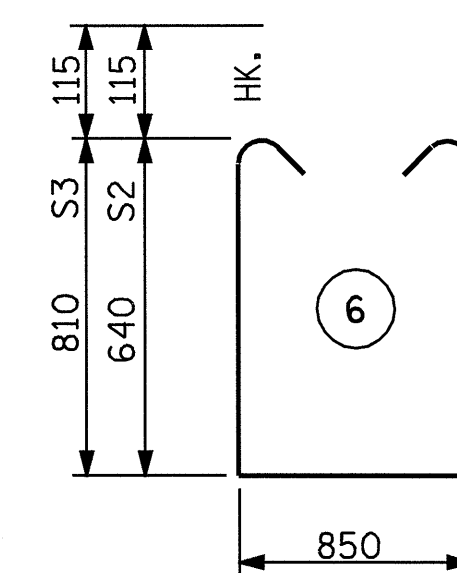
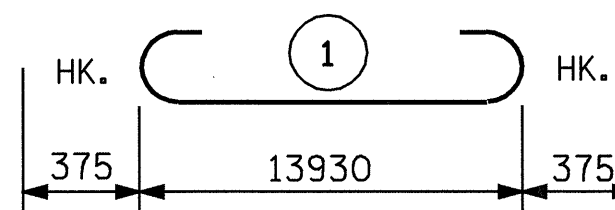
SECTION A-A



* POSITION OF PILE DURING WELDING.

PILE SPLICE DETAILS

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

END BENT #2					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	5	#29		14680	371
B2	2	#16	STR	13980	43
B3	2	#16	STR	4960	15
B4	8	#13	STR	7360	59
B5	10	#13	STR	860	9
B6	5	#29	2	10620	269
B7	10	#13	STR	740	7
B8	1	#29	2	6860	35
B9	1	#29	2	6800	34
B10	1	#29	2	6740	34
B11	1	#29	2	6680	34
B12	1	#29	2	6640	34

H1	11	#16	4	3260	56
H2	11	#16	4	3320	57
H3	12	#16	5	3740	70
H4	12	#16	5	3680	69

K1	24	#13	STR	7360	176
K2	8	#13	STR	860	7

S1	50	#13	3	1080	54
S2	27	#13	6	2360	63
S3	23	#13	6	2700	62
S4	18	#13	10	1980	35
S5	3	#19	8	1140	8
S6	1	#19	9	2700	6

U1	40	#13	7	1520	60
U2	8	#13	7	1780	14

V1	80	#16	STR	2160	268
V2	30	#16	STR	2500	116
V3	32	#16	STR	2680	133

REINFORCING STEEL = 2198 kg

CLASS A CONCRETE BREAKDOWN

POUR #1: CAP & LOWER WINGS & BRACE PILE BLOCK 13.4 CU. METERS

POUR #2: BACKWALL & UPPER WINGS 10.4 CU. METERS

TOTAL CLASS A CONCRETE 23.8 CU. METERS

HP 310 X 79 STEEL PILES NO.10 250.0 METERS

PROJECT NO. R-2911A
IREDELL COUNTY
 STATION: 39+62.402 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
 END BENT #2
 LEFT LANE



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-25
1			3			TOTAL SHEETS 106
2			4			

DRAWN BY: QT NGUYEN DATE: 2-04
 CHECKED BY: L.L. MURPHY DATE: 3-04