COMPUTED BY:	AMP/LAT	DATE:	05.12.03
CHECKED BY:	BDP	DATE:	05.15.03
	AMP	DATE:	1.05.04/4.12.04

PROJECT REFERENCE NO.	SHEET NO.
B-4010	3-A

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

STATION / SIZE / THICKNESS OR GAUGE	LOCATION (LT,RT, OR CL)	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION (H.S.B.)	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE) 12"	15"	18"	24"	30"	36"	42"	48"	BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE) * UNCOATED 12" .064	15" .064	18" .064	24" .064	30" .079	36" .079	42" .109	48" .109	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) * STD.838.02 CU. YDS. R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES * TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL. B) PER EACH (0' THRU 5.0')	LIN. *FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	M.D.I. TYPE "B" STD. 840.18 OR 840.27	M.D.I. (N.S.) FRAME WITH FLAT GRATE STD. 840.29	M.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	T.B.D.I. STD. 840.35	22" SLUICE GATE, STD. 838.02	PREFORMED SCOUR HOLE	CONC. & BRICK PIPE PLUG, CU. YDS. STD. 840.71	HAZARD SPILL BASIN	CORR. STEEL ELBOWS NO. & SIZE	PIPE REMOVAL LIN.FT.	REMARKS
-L- 13+48	CL	1			2796.0	2787.7						136																2.3																							
-L- 13+64	RT	2		2813.8																										1					1	1														
-L- 13+64	RT	2	3		2811.3	2804.7		144																																										
-L- 15+10	RT	3		2807.8																										1					1	1														
-L- 15+10	RT	3	4		2805.0	2804.1			36																																									
-L- 15+10	RT	3	3A		2805.3	2805.0											12																												0.09					TO BE PLUGGED UPON COMPLETION OF H.S.B. (SEE PLANS)
-L- 15+10	LT	4		2806.8																										1					1	1														
-L- 15+10	LT	4	5		2804.1	2796.8			204																																									
-L- 17+16	LT	5		2799.5																										1					1	1														
-L- 17+16	LT	5	6		2796.8	2790.1											56																																	
-L- 18+94	RT	8		2796.5																										1						1		1												
-L- 18+94	RT	8	9		2793.0	2787.7			56																																									
-L- 19+05	LT	10		H.S.B.																									*0.9									1	1		1								HAZ. SPILL BASIN
-L- 19+05	LT	10	11		2787.7	2773.9											*44																																2@15		
-L- 19+10	RT	12		2795.0																										1					1		1													
-L- 19+10	RT	12	13		2792.3	2773.9											108																																2@15		
-L- 22+60	LT	15		H.S.B.																									*0.9									1	1		1								HAZ. SPILL BASIN
-L- 22+60	LT	15	14		2787.3	2767.9											*68																																2@15		
-L- 23+06	RT	17		2792.4																										1						1		1												
-L- 23+06	RT	17	17A		2788.9	2764.0											60																												0.09					TO BE PLUGGED UPON COMPLETION OF H.S.B. (SEE PLANS)
-L- 23+06	RT	17	18		2788.9	2788.9			28																																									
-L- 23+06	LT	18		2792.4																										1						1		1												
-L- 23+06	LT	18	19		2788.9	2787.4			20																																									
-L- 24+00	RT	20		2791.7																										1						1		1												
-L- 24+00	RT	20	17		2789.2	2788.9		92																																										
-L- 25+45	RT	21		2785.0																										1					1		1												TEMPORARY
-L- 25+45	RT	21	16		2781.5	2764.0					252																																							
-L- 25+60	LT	22		2789.0																										1					1		1												TEMPORARY
-L- 25+60	LT	22	21		2786.3	2781.5											68																												0.09					TEMPORARY, PLUG BOTH ENDS
-L- 25+80	LT	23																									20																		0.09					PLUG BOTH ENDS EXIST. 15" CMP
-L- 25+90	RT	24	21		2785.5	2781.5					44																																							
-L- 27+50	RT	25																								16																							20	REMOVE EXIST. 15" RCP
-L- 28+00	LT																																																18	REMOVE EXIST. 15" CMP
GRAND TOTAL:								236	344		296	136					304									16	20		2.3	*1.8	10					7	8	3	4	2	2	0.36	2			6@15	38	
																	*112																																	

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
M.D.I.	MEDIAN DROP INLET
M.D.I. (N.S.)	MEDIAN DROP INLET (NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUCTION BOX
H.S.B.	HAZARDOUS SPILL BASIN

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.

GUARDRAIL SUMMARY

W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH STRAIGHT	SHOP CURVED	DOUBLE FACED	WARRANT POINT APPROACH END	TRAILING END	"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH APPROACH END	TRAILING END	W APPROACH END	TRAILING END	ANCHORS III MOD	III	GRAU 350	B-77	XIII	CAT-1	VI MOD	BIC	AT-1	IMPACT ATTENUATOR TYPE 350 EA	G	NG	SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS
-L-	11+62.05	19+30.80	RT.	768.75			12+50.00		5	8	150		3			1	1													
-L-	17+74.66	19+18.41	LT.	143.75				19+18.41	5	8		125		2.5		1	1													
-L-	22+56.41	25+25.16	LT.	268.75			22+56.41		5	8	150		3			1	1													
-L-	22+68.79	25+25.04	RT.	256.25				24+00.00	5	8		150		3		1	1													
			SUB-TOTALS:	1437.50												4	4													
LESS ANCHOR DEDUCTIONS:			GRAU 350 4 @ 50	200.00																										
			TYPE III 4 @ 18.75	75.00																										
			ANCHOR TOTAL DEDUCTION:	275.00																										
			GRAND TOTALS:	1162.50																										
			SAY:	1175.00		ADDITIONAL GUARDRAIL POSTS: 5										4	4													

6/21/00

04/12/2004
ft_pipes
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