COMPUTED BY: AMP DATE: 10.10.04
CHECKED BY: MTM DATE: 10.10.04

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
B-3714	3-A

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	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 OTHRWISE) 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) CU. YDS. R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	* TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') 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. TYPE "D" STD. 840.19 OR 840.28	T.B.D.I. STD. 840.35	M.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	M.D.I. FRAME WITH TWO GRATES STD. 840.24	PRE-FORMED SCOUR HOLE	CORR. STEEL ELBOWS NO. & SIZE	PIPE REMOVAL LIN.FT.	REMARKS
-L- 11+00	LT	1																																										
-L- 11+00	LT	1	2		1006.1	1005.3					84																																82	REMOVE EXIST. 24" CMP
-L- 11+20	RT	2		1008.8																									1							1				1				
-L- 11+20	RT	2	4		1005.3	1002.3					36																																28	REMOVE EXIST. 24" CMP
-L- 11+20	RT	3																																										
-L- 11+20	RT	3	2		1007.0	1005.3												8																								2@18		
-L- 16+00	RT	5		997.1																									1							1				1				
-L- 16+00	RT	5	6		994.3	990.7			68																																1			PREFORMED SCOUR HOLE
-L- 18+13	RT	7		994.3																									1								1			1				
-L- 18+13	RT	7	8		992.4	992.1			56																																			
-L- 18+13	LT	8		998.7																									1	1.64								1	1					
-L- 18+13	LT	8	9		992.1	992.0			16																																1			PREFORMED SCOUR HOLE
SHEET TOTAL:									140		120							8											4	1.64						2	1	1	1	3	2	2@18	110	
GRAND TOTAL:									140		120							8											4	1.64						2	1	1	1	3	2	2@18	110	

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

"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	TEMP. W-BEAM	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-	15+25.75	16+19.50	LT	93.75				16+19.50	7	8		25		0.5		1	1													
-L-	14+00.75	16+19.50	RT	218.75			16+19.50		3	8	150		3			1	1													
-L-	17+91.50	20+10.25	LT	218.75				17+91.50	7	8	150		3			1	1													
-L-	17+91.50	18+85.25	RT	93.75			17+91.50		3	8		25		0.5		1	1													
			SUB-TOTALS:	625.00												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:	350.00																										
			SAY:	362.5 LF	ADDITIONAL GUARDRAIL POSTS: 5											4	4													
TEMPORARY GUARDRAIL:																														
-L-	16+20.00	16+45.00	RT	25.00														1												
-L-	17+78.00	18+03.00	RT	25.00														1												
			SUB-TOTALS:	50.00														2												
LESS ANCHOR DEDUCTIONS:		W-BEAM 2 @ 25		50.00																										
			ANCHOR TOTAL DEDUCTION:	-50.00																										
			GRAND TOTALS:	0.00														2												

6/21/00
12/17/2004
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