6/21/00

COMPUTED BY: AHF	DATE: 7-19-04
CHECKED BY: RVP	DATE: 8-2-04

PROJECT REFERENCE NO.	SHEET NO.
B-3700	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	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')	LIN. FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE	* TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. "A" + (1.3 X COL. B")	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME & GRATE STD. 840.16	M.D.I. TYPE "A" STD. 840.17 OR 840.26	M.D.I. TYPE "B" STD. 840.18 OR 840.27	M.D.I. (N.S.) FRAME WITH GRATE STD. 840.29	M.D.I. FRAME WITH GRATE STD. 840.22	M.D.I. FRAME WITH TWO GRATES STD. 840.22	M.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	M.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	J.B. STD. 840.31 OR 840.32	T.B.D.I. STD. 840.35	M.D.I. (N.S.) FRAME WITH TWO GRATES STD 840.29	CORR. STEEL ELBOWS NO. & SIZE	CONC. COLLARS CL. "B" C.Y. STD 840.72	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	PIPE REMOVAL LIN.FT.	REMARKS
14+37.00	RT	1		489.08																										1																		1	1							
14+37.00	RT	1	2		486.08	484.00												24																																			2@18"				
15+95.00	LT	3		490.56																										1																		1	1							
15+95.00	LT	3	4		487.81	486.95			56																																														
15+40.00	LT	4		489.70																										1																		1	1							
15+40.00	LT	4	5		486.95	482.00											28																																			2@15"				
18+85.00	LT	6		499.37																										1																		1	1							
18+85.00	LT	6	7		496.62	492.63			96																																														
17+90.00	LT	7		495.63																										1																		1	1							
17+90.00	LT	7	8		492.63	485.42											28																																			2@15"				
PROJECT TOTAL									152								56	24												5																		5	5						4@15" 2@18"				

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.
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

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

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH STRAIGHT	LENGTH SHOP CURVED	LENGTH DOUBLE FACED	WARRANT POINT APPROACH END	WARRANT POINT TRAILING END	"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH APPROACH END	FLARE LENGTH TRAILING END	W APPROACH END	W TRAILING END	ANCHORS XI MOD	XI	GRAU 350	M-350	XIII	CAT-1	VI MOD	III	AT-1	IMPACT ATTENUATOR TYPE 350 EA	G	NG	SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS
-L-	13+86.25	16+30.00	RT	243.75			16+30.00		3'	11'	225.00'		4.500'				1					1								
-L-	14+86.25	16+30.00	LT	143.75				16+30.00	3'	11'		125'		2.500'			1					1								
-L-	17+40.00	18+27.50	RT	87.5				17+40.00	3'	11'		68.75"		1.375'			1					1								
-L-	17+40.00	19+65.00	LT	225			17+40.00		3'	11'	206.25'		4.125'				1					1								
	SUB-TOTAL			700.00																										
	LESS ANCHORS			-275.00																										
	TOTAL			425.00																										
	SAY			425																										
	ADDITIONAL GUARDRAIL POSTS			5 EA.																										

ANCHOR DEDUCTIONS

TYPE III 4@18.75' =	75.00'
GRAU - 350 4@50' =	200.00'
TOTAL	275.00'

03-MAR-2005 10:02
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AHFisher AT:\B3700.sum