COMPUTED BY: F.M.M.	DATE: MAY 2005
CHECKED BY: K.M.D.	DATE: MAY 2005

PROJECT REFERENCE NO.	SHEET NO.
B-3857	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	30" .079	36"	42" .109	42"	48" .109	48"	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 STD. 838.11 OR STD. 838.80 UNLESS NOTED OTHERWISE) CU. YDS. R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES * TOTAL LF 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		C.B. STD. 840.04 OR 840.05	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. TYPE "D" STD. 840.19 OR 840.28	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	M.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	T.B.D.I. STD. 840.35						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
-L- 11+58	CL																																																														50'	REMOVE EXIST. 15" CMP PIPE
-L- 13+50	LT	1																									40'																																					
-L- 14+65	RT	2		2075.04																												1																											1	1						
		2	3		2072.29	2057.20											40'																																											2@15				
-DR1- 10+62	CL	3A							60'																																																						
-L- 17+57	RT	4		2064.30																												1																											1	1						
		4	5		2061.55	2057.48											16'																																											2@15				
-DR2- 10+40	CL	6																									20'																																					
TOTAL									60'								56'										60'					2																									2	2					4@15			50'	

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.
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

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 SHOULDER WIDTH	FLARE LENGTH APPROACH END	FLARE LENGTH TRAILING END	W APPROACH END	W TRAILING END	ANCHORS TYPE III	ANCHORS TYPE 350	ANCHORS AT-1	IMPACT ATTENUATOR TYPE 350 EA	G	NG	REMARKS
-L- /-DR1-	-L- 10+44.47	-DR1- 10+51.01	RT	425.00'	43.75'		11+25 (FILL)		8'/4'	11'/7'	50'	6.25'	1'	4'		1	1				
-DR1- /-L-	-DR1- 10+51.01	-L- 16+14.00	RT	81.25'	43.75'			BRIDGE	4'	7'	6.25'		4'		1		1				
-L-	13+95.25	16+14.00	LT	218.75'			BRIDGE		8'	11'		50'		1'	1	1					
-L-	17+04.00	20+47.75	LT	343.75'				BRIDGE	8'	11'	50'		1'		1	1					
-L-	17+04.00	18+97.75	RT	193.75'			BRIDGE		8'	11'		50'		1'	1	1					
SUBTOTAL				1262.50'	87.50'																
				-275.00'	-12.50'																
TOTAL				987.50'	75.00'										4	4	2				
SAY				1000.00'																	
						5 ADDITIONAL GUARDRAIL POSTS															

DEDUCTION FOR ANCHOR UNITS

AT-1	2 @ 6.25' =		12.50'
TYPE 350	4 @ 50' =	200.00'	
TYPE III	4 @ 18.75' =	75.00'	
	TOTAL	275.00'	12.50'

6/21/00
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