RA1-D6HNJ01,7/24/2003,R:\Roadway\Estimate\Final\Drainage_Summary.xls

COMPUTED BY: CLB DATE: 7/22/2003

CHECKED BY: RDH DATE: 7/22/2003

RA1-FLD8501

PROJECT NO.	SHEET NO.
U-0620	3-K

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) SHADED BLOCK = CLASS IV R.C. PIPE 12	15	18	24	30	36	42	48	BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE) 12 .064	15 .064	18 .064	24" .064	30" .079	36" .079	42" .109	48" .109	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	36" SIDE DRAIN PIPE
SHEET 16																										
-L- 170+58	CL	226			187.20	182.50								192												
-L- 171+25	CL	227		203.68																						
-L- 171+25	CL	227	228		200.58	199.18			44																	
-L- 171+25	RT	228		202.13																						
-L- 171+25	RT	228	229		199.03	193.00			276																	
-L- 174+00	RT	229		196.32																						
-L- 174+50	CL	230		196.12																						
-L- 174+50	CL	230	229		193.62	193.00			60																	
-L- 174+00	RT	229	OUT		193.00	192.50			32																	
-L- 178+00	RT	231		178.10																						
-L- 178+00	RT	231	232		175.60	175.38			32																	
-L- 178+00	CL	232		179.24																						
-L- 178+00	CL	232	233		175.23	160.65			248																	
-L- 180+50	CL	233		163.60																						
-L- 180+50	CL	233	234		160.50	151.80	X		152																	
-L- 182+00	CL	234		156.03																						
-L- 182+00	RT	235		154.50																						
-L- 182+00	RT	235	234		152.00	151.80			40																	
-L- 182+00	CL	234	236		151.55	145.29	X			200																
SHEET 17																										
-L- 184+00	CL	236		149.70																						
-L- 184+00	CL	236	237		145.14	144.94					40															
-L- 184+40	CL	237		148.78																						
-L- 184+50	CL	238			136.25	133.05							160													
-L- 184+40	CL	237	239		144.79	144.51					56															
-L- 184+75	RT	239		148.37																						
-L- 184+75	RT	239	240		144.36	142.68					116															
-L- 185+90	RT	240		146.43																						
-L- 186+03	LT	241		146.45																						
-L- 186+03	LT	241	240		143.35	142.68			84																	
-L- 185+90	RT	240	OUT		142.53	139.60					32															
-Y14- 10+00	RT	244		154.02																						
-Y14- 10+00	RT	244	245		150.93	150.79			28																	
-Y14- 10+00	LT	245		154.02																						
-Y14- 10+00	LT	245	243		150.64	142.52			104																	
-Y14- 11+20	LT	243		147.75																						
-Y14- 11+20	LT	243	243A		142.37	142.33				4																
-Y14- 11+25	LT	242A	242		141.14	141.10				4																
-Y14- 11+35	RT	242		147.38																						
-Y14- 11+35	RT	242A																								
-Y14- 11+25	LT	243A																								
SHEET TOTALS									1100	208	244		160	192												

STATION	STRUCTURE NO. FROM	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	C.S.P.	QUANITIES 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	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE STD. 840.16	M.D.I. TYPE "A" STD. 840.17 OR 840.26	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 OR 840.32	T.B.J.B. STD. 840.34	J.B. STD. 840.31 OR 840.32	MANHOLE STD. 840.51	M.H. STD. 840.51 OR 840.53	M.H. FRAME AND COVER STD. 840.54	BERM DRAINAGE OUTLET STD 850.10	24x24x15 RC PIPE TEES, CLASS III	15x15x15 RC PIPE TEES, CLASS III	18x18x18 RC PIPE TEES, CLASS III	CONVERT EXISTING DROP INLET TO JUNCTION BOX	CONVERT EXISTING DROP INLET TO CATCH BASIN	CONCRETE APRON FOR CATCH BASIN STD. 852.05	CONCRETE APRON FOR DROP INLET STD. 852.06	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- 170+58	226	4.5																																		
-L- 171+25	227			1			1		1																				1							
-L- 171+25	228			1			1		1																											
-L- 174+00	229			1			1		1																											
-L- 174+50	230			1							1	1																		1						
-L- 178+00	231			1			1		1																											
-L- 178+00	232			1							1	1																		1						
-L- 180+50	233			1			1		1																				1							
-L- 182+00	234			1			1		1																				1							
-L- 182+00	235			1			1		1																											
-L- 184+00	236			1							1	1																		1						
-L- 184+40	237			1							1	1																		1						
-L- 184+50	238	3.4																																		
-L- 184+75	239			1			1		1																											
-L- 185+90	240			1			1	1																												
-L- 186+03	241			1			1	1																												
-Y14- 10+00	244			1			1		1																											
-Y14- 10+00	245			1			1			1																										
-Y14- 11+20	243			1	0.17		1	1																												
-Y14- 11+35	242			1	1.28		1	1																										172	REMOVE 4 CB
-Y14- 11+35	242A																															0.447			
-Y14- 11+25	243A																															0.447			
SHEET TOTALS		7.9		18	1.45		14	4	9	1	4	4																	3	4		0.894		172	

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 JUNCTION BOX