RD104,10/13/00,G:\Admin\DataMasters\Excel_sheets\Drainage_Summaries.xls

COMPUTED BY: RWZ DATE: MARCH 2004

CHECKED BY: WCP DATE: APRIL 2004

METRIC	PROJECT NO.	SHEET NO.
	R-513C	3-H

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 1200mm & UNDER)

STATION	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) 300	375	450	600	750	900	1050	1200	BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE) 300 (1.63)	400 (1.63)	450 (1.63)	600 (1.63)	800 (2.01)	900 (2.01)	1000 (2.01)	1200 (2.01)
17+00 -Y2-	CL	212		39.23																			
		212	210		38.67	38.57			60.0														
19+65 -Y2-	LT	213		40.4	38.59																		
19+65 -Y2-	CL	214		39.65	38.65																		
19+65 -Y2-	RT	215		40.4	38.66																		
19+65 -Y2-	RT	216			38.9	EXIST.				14.4													
19+65 -Y2-	LT	217		39.58	38.39	38.3					24.0												
20+42 -Y2-	CL	218		39.57																			
		218	214		38.39	38.65			76.8														
16+90 -Y3-	LT	219		47.16																			
		219	220		46.35	46.27			13.2														
16+90 -Y3-	RT	220		47.16	46.27	39											27.6						
22+43 -Y2-	LT	221		40.37	39.33																		
22+43 -Y2-	LT	222		40.61	39.12																		
22+43 -Y2-	RT	223		40.72	39.05																		
		223	224		EXIST.	39.2					14.4												
22+43 -Y2-	RT	224		40.3	39.2	38.7					15.6												
24+16 -Y2-	LT	225A	225		42.5	41.59			61.2														
24+16 -Y2-	LT	225		42.4																			
		225	226		41.59	40.87			9.6														
24+16 -Y2-	LT	226		41.87	40.87																		
24+16 -Y2-	LT	227		41.66	40.75																		
24+16 -Y2-	LT	228		43.34	41.61																		
24+16 -Y2-	CL	228A																					
24+16 -Y2-	RT	229		43.15																			
24+16 -Y2-		229	230		41.96	41.98			25.2														
24+16 -Y2-	RT	230		42.5																			
26+00 -Y2-	CL	231		43.91																			
		231	228A		43.1	41.9			182.4														
26+00 -Y2-	LT	232		44.4	43.59	43			21.6														
27+05 -COBC-	CL	233			43.4	EXIST.				16.8													
4+88 -LPA-	CL	234			EXIST.	42.6				19.2													
+38 -COBC-	LT	235		43.95																			
		235	236		43.14	43.03			18.0														
25+38 -COBC-	RT	236		43.84																			
		236	237		43.03	41.86			19.2														
13+44 -Y5-	LT	237		42.67																			
		237	238		41.86	41.72	*		26.4														
		238																					
SHEET TOTALS									513.6	50.4	54.0						27.6						

SIZE / THICKNESS OR GAUGE

STATION	FROM	TO	375mm SIDE DRAIN PIPE	450mm SIDE DRAIN PIPE	600mm SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CU. METERS R.C.P.	C.S.P.	QUANITIES FOR DRAINAGE STRUCTURES PER EACH (0 THRU 1.50)	*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') METERS A 1.5 THRU 3.00	B 3.00 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. TYPE "B" STD. 840.18 OR 840.27	M.D.I. TYPE "D" STD. 840.19 OR 840.28	M.D.I. FRAME WITH TWO GRATES STD. 840.20	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	MANHOLE STD. 840.51	M.H. STD. 840.51 OR 840.53	M.H. FRAME AND COVER STD. 840.54	CONVERT D.I. TO J.B.	ADJUST D.I.	T.B.J.B. STD. 840.34	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 (METERS)	REMARKS
17+00 -Y2-	212							1											1		1														
	212	210																																	
19+65 -Y2-	213							1										1			1														
19+65 -Y2-	214																											1							SEE DETAIL SHEET 2K
19+65 -Y2-	215							1										1			1														
19+65 -Y2-	216																															0.33			REMOVE FES
19+65 -Y2-	217							1										1			1														REMOVE FES
20+42 -Y2-	218							1										1			1														
	218	214																																	
16+90 -Y3-	219							1										1		1															
	219	220																																	
16+90 -Y3-	220							1										1		1											2 @ 400				
22+43 -Y2-	221							1										1			1														
22+43 -Y2-	222							1																						1					
22+43 -Y2-	223							1										1			1											0.4			
	223	224																																	
22+43 -Y2-	224							1										1			1														
24+16 -Y2-	225A	225																																	
24+16 -Y2-	225							1										1			1														
	225	226																																	
24+16 -Y2-	226																											1							SEE DETAIL SHEET 2K
24+16 -Y2-	227																											1							
24+16 -Y2-	228																												1						
24+16 -Y2-	228A																												1						ADJUST 2GI
24+16 -Y2-	229																												1						
24+16 -Y2-	229	230																																	
24+16 -Y2-	230							1											1		1														
26+00 -Y2-	231							1										1			1														
	231	228A																																	
26+00 -Y2-	232							1										1			1														
27+05 -COBC-	233																															0.33			
4+88 -LPA-	234																															0.33			
+38 -COBC-	235							1										1			1														
	235	236																																	
25+38 -COBC-	236							1										1			1														
	236	237																																	
13+44 -Y5-	237							1										1			1														
	237	238																																	
	238							1										1					1												
SHEET TOTALS								19										16	2	2	15		1					3	3	1	2 @ 400	1.39			

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