RD258193

COMPUTED BY:	GSBLELL	DATE:	3/29/2012
CHECKED BY:	AJFOSTER	DATE:	3/24/2014

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-2519B	3D-5

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & 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	SIDE DRAIN PIPE (RCP, CSP, CAAP, HDPE, or PVC) 12"	15"	18"	24"	30"	36"	42"	48"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
-L- STA. 95+70	RT	1002	1014		2518.22	2517.03			136'										
-Y10- STA. 11+00	RT	1003		2519.50															
-Y10- STA. 10+90	LT	1004		2519.82															
-Y10- STA. 10+81	CL	1003	1004		2516.70	2511.14													
-L- STA. 99+58	RT	1015		2517.16															
-L- STA. 99+11	RT	1004	1015		2511.14	2510.86													
-L- STA. 97+62	LT	1005							60'										
-L- STA. 98+92	LT																		
-L- STA. 99+60	LT	1016		2519.80															
-L- STA. 99+62	LT	1006		2492.88															
-L- STA. 99+60	CL	1015	1016		2510.86	2510.50													
-L- STA. 99+61	LT	1016	1006		2510.50	2487.48													
-L- STA. 99+61	LT	1006	1007		2485.30	2485.25													
-L- STA. 98+00	CL	1008		2524.20															
-L- STA. 100+70	CL	1009		2517.83															
-L- STA. 99+35	CL	1008	1009		2519.20	2514.00													
-L- STA. 100+70	RT	1010		2514.23															
-L- STA. 100+70	RT	1009	1010		2514.00	2511.48													
-L- STA. 103+50	RT	1011		2504.19															
-L- STA. 102+10	RT	1010	1011		2511.48	2501.39			276'										
-L- STA. 105+84	RT	1013		2495.81															
-L- STA. 104+67	RT	1011	1013		2501.39	2493.06			232'										
-L- STA. 105+84	RT	1012	1013		2504.87	2492.31													
-L- STA. 105+84	RT	1012		2509.87															
-L- STA. 105+84	LT	1017		2499.31															
-L- STA. 105+84	LT	1013	1017		2493.06	2494.31													
-L- STA. 105+84	LT	1018							36'										
-L- STA. 107+65	LT	1101							48'										
-L- STA. 107+24	CL	1125		2494.67															
-L- STA. 107+24	RT	1126		2493.03															
-L- STA. 107+24	RT	1125	1126		2490.43	2490.28													
-L- STA. 108+50	RT	1106		2486.59															
-L- STA. 106+52	RT	1013	1126		2492.31	2490.28				136'									
-L- STA. 107+85	RT	1126	1106		2490.28	2483.09				124'									
-L- STA. 109+73.78	RT	1107		2482.27															
-L- STA. 109+80.85	RT	1108		2481.93															
-L- STA. 109+12	RT	1106	1107		2482.59	2478.27					120'								
-L- STA. 109+78	RT	1107	1108		2478.27	2477.93					4'								
-Y12- STA. 14+29	RT	1108	1121		2477.93	2477.00					48'								
-Y12- STA. 14+54	RT	1121		2485.14															
-Y12- STA. 14+51.42	CL	1121	1124		2477.00	2474.27													
-Y12- STA. 14+51.4	LT	1124		2479.44															
-DR23- STA. 11+26	LT	1122		2467.00															
-DR23- STA. 10+67.84	LT	1124	1122		2472.66	2462.50					124'								
-DR23- STA. 10+67.84	LT	1122	1109		2462.50	2460.41													
-DR23- STA. 12+25	CL	1127							36'										
-Y11- STA. 12+40	LT	1103		2465.97															
-Y11- STA. 12+41	CL	1102	1103		2469.67	2463.80													
-Y11- STA. 12+43	LT	1103	1104		2463.80														
-L- STA. 109+40	CL																		
-L- STA. 110+43	CL																		
-DR4- 10+50	LT	1120		2485.60															
-DR4- 10+51	CL	1120	1121		2582.85	2482.39			16'										
-L- 110+43	CL																		
-L- STA. 112+67	LT	1105							76'										
-L- STA. 114+38.97	LT	1110		2471.12															
-L- STA. 115+10	LT	1111		2473.87															
-L- STA. 115+35	LT	1112		2473.92															
-L- STA. 114+75	LT	1110	1111		2468.32	2468.11			72'										
-L- STA. 115+22.5	LT	1111	1112		2468.11	2468.17													
-L- STA. 115+10	LT	1128		2475.11															
-L- STA. 115+10	LT	1111	1128		2468.11	2470.87													
-L- STA. 115+10	CL	1128	1113		2470.87	2459.13													
-L- STA. 117+50	LT	1114		2476.55															
-L- STA. 116+42.50	LT	1114	1112		2472.80	2468.17			212'										
-L- STA. 118+60	RT	1116		2478.04															
-L- STA. 118+60	RT	1116	1115		2474.29	2458.08													
-L- STA. 120+30	RT	1118		2479.28															
-L- STA. 119+45	RT	1118	1116		2475.30	2474.29			168'										
-L- STA. 119+25	RT	1119			2457.96	2456.87						52'							
SHEET TOTALS									1368'		260'	296'	52'						

STATION / SIZE / THICKNESS OR GAUGE	C.S. PIPE 12"	15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS III 12"	15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS IV 12"	15"	18"	24"	30"	36"	42"	48"
	.064	.064	.064	.064	.079	.079	.109	.109																
-L- STA. 95+70																								
-Y10- STA. 11+00																								
-Y10- STA. 10+90																								
-Y10- STA. 10+81																	56'							
-L- STA. 99+58																								
-L- STA. 99+11														92'										
-L- STA. 97+62																								
-L- STA. 98+92																								
-L- STA. 99+60																								
-L- STA. 99+62																								
-L- STA. 99+60																								
-L- STA. 99+61														108'										
-L- STA. 99+61							48'							12'										
-L- STA. 98+00																								
-L- STA. 100+70																								
-L- STA. 99+35																	268'							
-L- STA. 100+70																								
-L- STA. 100+70																	68'							
-L- STA. 103+50																								
-L- STA. 102+10																								
-L- STA. 105+84																								
-L- STA. 104+67																								
-L- STA. 105+84				36'																				
-L- STA. 105+84																								
-L- STA. 105+84																								
-L- STA. 105+84																	64'							
-L- STA. 105+84																								
-L- STA. 107+65																								
-L- STA. 107+24																								
-L- STA. 107+24																								
-L- STA. 107+24																	64'							
-L- STA. 108+50																								
-L- STA. 106+52																								
-L- STA. 107+85																								
-L- STA. 109+73.78																								
-L- STA. 109+80.85																								
-L- STA. 109+12																								
-L- STA. 109+78																								
-Y12- STA. 14+29																								
-Y12- STA. 14+54																								
-Y12- STA. 14+51.42													92'											
-Y12- STA. 14+51.4																								
-DR23- STA. 11+26																								
-DR23- STA. 10+67.84																								
-DR23- STA. 10+67.84													12'											
-DR23- STA. 12+25																								
-Y11- STA. 12+40																								
-Y11- STA. 12+41																		60'						
-Y11- STA. 12+43																		8'						
-L- STA. 109+40																								
-L- STA. 110+43																								
-DR4- 10+50																								
-DR4- 10+51																								
-L- 110+43																								
-L- STA. 112+67																								
-L- STA. 114+38.97																								
-L- STA. 115+10																								
-L- STA. 115+35																								
-L- STA. 114+75																								
-L- STA. 115+22.5										24'														
-L- STA. 115+10																								
-L- STA. 115+10						40'																		
-L- STA. 115+10						104'																		
-L- STA. 117+50																								
-L- STA. 116+42.50																								
-L- STA. 118+60																								
-L- STA. 118+60					80'																			
-L- STA. 120+30																								
-L- STA. 119+45																								
-L- STA. 119+25																								
SHEET TOTALS					80'	144'	36'		48'			24'			104'	212'		520'	68'					

STATION / SIZE / THICKNESS OR GAUGE	36" R.C. PIPE (CLASS V)	42" R.C. PIPE (CLASS V)	30" WELDED PIPE, .500" THICK, GRADE B	36" WELDED PIPE, .500" THICK, GRADE B	42" WELDED PIPE, .625" THICK, GRADE B	48" WELDED PIPE, .625" THICK, GRADE B	ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES "TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. "A" + (1.3 X COL. "B") PER EACH (9" 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				CONCRETE TRANSITIONAL SECTION DROP INLET	CATCH BASIN	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR 840.26	G.D.I. TYPE "B" STD. 840.18 OR 840.27	G.D.I. TYPE "D" STD. 840.19 OR 840.28	SPRING BOX STD. 840.41	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	T.B.G.D.I. STD. 840.35	T.B.J.B. STD. 840.34	J.B. STD. 840.31 OR 840.32	PARALLEL PIPE END SECTION STD. 310.02 OR 310.04	M. H. FRAME AND COVER STD. 840.54	OT CATCH BASIN OR STD. 840.04 (SHEET 2C-10)	PREFORMED SCOUR HOLE	FLOWABLE FILL	J.B. STD. 840.32	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	CS PIPE ELBOWS NO. & SIZE	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	CONC. COLLARS CL. "B" C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.	
-L- STA. 95+70																																											
-Y10- STA. 11+00									1																																		
-Y10- STA. 10+90									1	3.68									1	1																						REMO EXIST. DI & REPLACE
-Y10- STA. 10+81																																									42'	REMOVE EXIST. 18" CM PIPE
-L- STA. 99+58									1	1.3											1			1																		
-L- STA. 99+11																																										
-L- STA. 97+62																																		1								
-L- STA. 98+92																																									59'	REMOVE EXIST. 6" HDPE PIPE
-L- STA. 99+60									1	4.3																						1		1								
-L- STA. 99+62									1	2.58																						1		1								
-L- STA. 99+60																																										
-L- STA. 99+61																																								2@36"		
-L- STA. 99+61																																					70					PLUG & FILL EXIST. 42" CM PIPE
-L- STA. 98+00									1			1			1																											
-L- STA. 100+70									1			1			1																											
-L- STA. 99+35																																										
-L- STA. 100+70									1													1			1																	
-L- STA. 100+70																																										
-L- STA. 103+50									1													1			1																	
-L- STA. 102+10																																										
-L- STA. 105+84									1													1			1																	
-L- STA. 104+67																																										
-L- STA. 105+84																																								2@24"		REMOVE EXIST.HW & 24" CM PIPE
-L- STA. 105+84									1													1			1																	
-L- STA. 105+84									1																							1		1								
-L- STA. 105+84																																					8					
-L- STA. 105+84																																										
-L- STA. 107+65																																									24'	REMOVE EXIST. 15" CM PIPE
-L- STA. 107+24									1																							1		1								
-L- STA. 107+24									1													1			1																	
-L- STA. 107+24																																										
-L- STA. 108+50									1	0.25												1			1																	
-L- STA. 106+52																																										
-L- STA. 107+85																																										
-L- STA. 109+73.78									1	0.25												1			1																	
-L- STA. 109+80.85									1	0.25												1			1																	
-L- STA. 109+12																																										
-L- STA. 109+78																																										
-Y12- STA. 14+29																																										
-Y12- STA. 14+54									1	3.14												1			1																	
-Y12- STA. 14+51.42																																										
-Y12- STA. 14+51.4									1	1.78												1			1																	
-DR23- STA. 11+26									1																							1		1								
-DR23- STA. 10+67.84																																										
-DR23- STA. 10+67.84																																										
-DR23- STA. 12+25																																										
-Y11- STA. 12+40									1														1		1																53'	REMOVE EXIST. 12" CM PIPE
-Y11- STA. 12+41																																										
-Y11- STA. 12+43																																									0.446	
-L- STA. 109+40																																					1				30'	REMOVE EXIST. 15" CM PIPE
-L- STA. 110+43																																					1				77'	REMOVE EXIST. 12" CM PIPE
-DR4- 10+50									1														1		1																	
-DR4- 10+51																																										
-L- 110+43																																					3				51'	REMOVE EXIST. HW & 18" CM PIPE
-L- STA. 112+67																																		1			6					
-L- STA. 114+38.97									1														1		1																	
-L- STA. 115+10									1	0.76													1			1																
-L- STA. 115+35									1	0.75													1			1																
-L- STA. 114+75																																										
-L- STA. 115+22.5																																										
-L- STA. 115+10									1																							1		1								
-L- STA. 115+10																																										
-L- STA. 115+10																																										
-L- STA. 117+50									1														1			1																
-L- STA. 116+42.50																																										
-L- STA. 118+60									1														1			1																
-L- STA. 118+60																																										
-L- STA. 120+30									1														1			1																
-L- STA. 119+45																																										
-L- STA. 119+25																	3.4																									SLUICE GATE W/ HDWL
SHEET TOTALS									29	19.04		2		2			3.4'		1	1	8	11	1		15	5		6	2	6		89		2@24" 2@36"		0.446	336'	

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I.(N.S.)	(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