RD248621

COMPUTED BY:	B. HOUGH	DATE:	6/28/2013
CHECKED BY:	B. SMITH	DATE:	7/2/2013

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-2915D	3D-3

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	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)								DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	C.S. PIPE							
SIZE								12"	15"	18"	24"	30"	36"	42"	48"					12"	15"	18"	24"	30"	36"	42"	48"
THICKNESS OR GAUGE																				.064	.064	.064	.064	.079	.079	.109	.109
	LT	1004	1005		3206.3	3202.2																					
-L- 522+24	CL	1005		3212.8	3202.2																						
-L- 532+00	LT	1006		3247.5	3244.5																						
	LT	1006	1007		3244.5	3244.3																					
-L- 532+00	CL	1007		3251.0	3244.3																						
	CL	1007	1010		3244.3	3231.5																					
	LT	1008	1009		3251.4	3231.0						48				X											
-L- 529+13	LT	1009		3235.0	3231.0																						
	LT	1009	1010		3231.0	3230.5																					
-L- 528+23	LT	1010		3236.1	3230.5																						
	RT	1010	1011		3230.5	3224.0																					
	RT	1012	1013		3208.0	3185.0							52			X											
-L- 522+93	RT	1013		3192.5	3184.5																						
	RT	1013	1014		3184.5	3184.5								12													
-L- 536+10	LT	1116		3265.5	3261.6																						
	LT	1116	1101		3261.6	3261.2			12																		
-L- 536+00	LT	1101		3265.2	3261.2																						
	LT	1101	1102		3261.2	3246.4			44							X											
	LT	1103	1118		3239.9	3235.6																		84			
-L- 540+10	LT	1117		3281.2	3277.3																						
	LT	1117	1104		3277.3	3276.9			12																		
-L- 540+00	LT	1104		3280.8	3276.9																						
	LT	1104	1105		3276.9	3261.4			44							X											
	LT	1106	1119		3257.5	3255.7																		80			
-L- 544+52	RT	1107		3299.0	3295.0																						
	RT	1107	1108		3295.0	3292.9																					
-L- 543+97	RT	1108		3296.8	3292.9																						
	CL	1108	1109		3292.9	3291.8																					
-L- 543+97	LT	1109		3295.7	3291.8																						
	LT	1109	1110		3291.8	3282.0			32							X											
-L- 546+00	LT	1111		3299.9	3297.2																						
	LT	1111	1112		3297.2	3293.0			44																		
-L- 555+00	RT	1201		3335.9	3332.0																						
	RT	1201	1205		3332.0	3321.7																					
	LT	1209	1202		3342.0	3321.2					48					X											
-L- 552+68	LT	1202		3324.7	3321.2																						
	CL	1202	1205		3321.2	3320.9																					
	RT	1203	1204		3338.5	3326.7						36				X											
-L- 552+71	RT	1204		3330.7	3326.7																						
	RT	1204	1205		3326.7	3320.4																					
-L- 552+47	RT	1205		3330.5	3320.4																						
	RT	1205	1208		3320.4	3313.6																					
	RT	1206	1207		3327.0	3314.9					32					X											
-L- 549+24	RT	1207		3318.4	3314.9																						
	RT	1207	1208		3314.9	3314.1																					
-L- 549+24	RT	1208		3318.8	3313.6																						
	RT	1208	1113		3313.6	3299.5																					
-L- 546+00	RT	1113		3304.7	3299.5																						
	RT	1113	1114		3299.5	3298.9																					
-L- 546+00	RT	1114		3304.2	3298.9																						
SHEET TOTALS									188		80	84	52	12										164			

STRUCTURE NO. FROM	STRUCTURE NO. TO	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"	** " R.C. PIPE (CLASS V)	***" RC PIPE CULVERTS, CONTRACTOR DESIGN	***" RC PIPE CULVERTS, CONTRACTOR DESIGN	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	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 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
1004	1005			56																								
1005																									1	5	0.6	
1006																									1			
1006	1007			56																								
1007																									1	1.7		
1007	1010											380																
1008	1009																											
1009																									1			
1009	1010					140																						
1010																									1	0.6		
1010	1011													112														
1012	1013																											
1013																									1	3		
1013	1014																											
1116																									1			
1116	1101																											
1101																									1			
1101	1102																											
1103	1118																											
1117																									1			
1117	1104																											
1104																									1			
1104	1105																											
1106	1119																											
1107																									1			
1107	1108										52																	
1108																									1			
1108	1109										52																	
1109																									1			
1109	1110																											
1111																									1			
1111	1112																											
1201																									1			
1201	1205										256																	
1209	1202																											
1202																									1			
1202	1205				72																							
1203	1204																											
1204																									1			
1204	1205													52														
1205																									1	5	0.1	
1205	1208													320														
1206	1207																											
1207																									1			
1207	1208												48															
1208																									1	0.2		
1208	1113													324														
1113																									1	0.2		
1113	1114													44														
1114																									1	0.3		
SHEET TOTALS				112	72	140					360	380	48	852											22	16	0.7	

STRUCTURE NO. FROM	STRUCTURE NO. TO	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	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	G.D.I. (W.S) FRAME WITH TWO FLAT GRATES STD. 840.20	G.D.I. (W.S) FRAME WITH TWO SAG GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO FLAT GRATES STD. 840.29	T.B.D.I UP TO 36" RCP SEE SPECIAL DETAIL SHEET 2C-6	T.B.J.B. STD 840.34	T.B.D.I. STD 840.35	J.B. STD. 840.31 OR 840.32	M.H. FRAME AND COVER STD. 840.54	SPECIAL J.B. SEE SPECIAL DETAIL 2C-9	CONVERT EXIST. D.I. TO J.B. WITH M.H.	BERM DRAINAGE OUTLET (STD 850.10, STD 850.11, OR 36" PIPE)	15" C.S. ELBOW	18" C.S. ELBOW	OPEN THROAT CATCH BASIN, STD 840.04	PREFORMED SCOUR HOLE, EA	SIDE DRAIN PIPE ELBOWS NO. & SIZE	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	CONC. COLLARS CL. "B" C.Y., SEE SHEET 2C-2	PIPE CLEAN-OUT	PIPE REMOVAL LIN. FT.	REMARKS
1004	1005																																54	18" CMP REMOVAL
1005																				1	1													D.I. REMOVAL
1006										1			1																					
1006	1007																																	
1007																				1	1													
1007	1010																																	
1008	1009																							1					1-30"					
1009										1			1																					
1009	1010																																	HW REMOVAL
1010																		1			1													
1010	1011																													0.232				24" CMP & FES REMOVAL
1012	1013																							1					1-36"					SEE SPECIAL DETAIL 2C-4 FOR BDO
1013																				1	1												61	12" CMP REMOVAL
1013	1014																																	
1116										1		1																						
1116	1101																																	
1101										1		1																						
1101	1102																												1-15"					
1103	1118																														0.656			HW REMOVAL
1117										1		1																						
1117	1104																																	
1104										1		1																						
1104	1105																												1-15"					
1106	1119																														0.656			HW REMOVAL
1107					1							1							1															
1107	1108																																	
1108					1							1							1															
1108	1109																																	
1109										1		1																						
1109	1110																												1-15"					
1111										1			1																					
1111	1112																																	
1201					1							1							1															
1201	1205																																	
1209	1202																							1					1-24"					
1202										1			1																					D.I. & APRON REMOVAL
1202	1205																																	15" CMP REMOVAL
1203	1204																							1					1-30"					
1204										1			1																					
1204	1205																																53	24" CMP REMOVAL
1205					1							1					1																	TYPE A ; D.I. & PAVED DITCH REMOVAL, SEE SHEET 2C-6
1205	1208																																338	30" CMP REMOVAL
1206	1207																							1					1-24"					
1207										1			1																					
1207	1208																																48	D.I., PAVED DITCH, & 18" CMP REMOVAL
1208					1							1					1																	TYPE A, SEE SHEET 2C-6
1208	1113																																395	30" CMP REMOVAL
1113					1							1					1																	TYPE A, SEE SHEET 2C-6
1113	1114																																	
1114									1				1																					
SHEET TOTALS					6				1	11		11	7				3	1	3	3	4			5					3-15", 2-24", 2-30", 1-36"	0.232	1.312		949	

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