RA-1553

COMPUTED BY:	T.A.HARRIS	DATE:	6/6/13
CHECKED BY:	VBARODAWALA	DATE:	5/12/14

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-2514C	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)

LINE & STATION	OFFSET		STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %
			0905	0906		43.6	38.1	
L 80+10	0	CL						
DRV2 11+17	1	RT	0908	0909		38.1	38.1	
L 81+50	2	LT	0910	0911		38.0	37.5	
L 85+75	110	LT	0912			39.5		
			0912	0916		39.5	39.3	
L 85+75	4	LT	0916		51.9	39.3		
			0916	0913		39.3	39.1	
L 86+36	19	RT	0914		52.7	49.4		
L 82+23	100	LT	0915	0917				
L 99+50	0	CL	1001		55.1	52.1		
			1001	1002		52.1	51.9	
			1001	1003		52.1	53.0	
L 99+50	58	RT	1002		57.0	51.9		
			1002	1004		51.9	41.0	0.4
			1002	1107		51.9	53.6	
L 99+50	58	LT	1003		56.0	53.0		
L 103+88 / L 105+14	1	LT						
L 101+06	56	RT	1107		56.3	53.6		
L 92+92	58	LT	1005		53.1	48.5		
			1005	1009		48.5	39.2	1.3
			1005	1007		48.5	48.7	
L 92+92	0	CL	1007		51.7	48.7		
L 95+20	57	LT	1006		53.9	50.9		
			1006	1008		50.9	38.5	
L 89+75	96	LT	1010			40.2		
			1010	1017		40.2	40.2	
L 89+75	94	RT	1011			40.3		
			1011	1017		40.3	40.2	
L 89+75	0	CL	1017		45.5	40.2		
			1017	1016		40.2	48.1	
L 90+00	0	CL	1016		50.8	48.1		
L 112+55	58	RT	1101		53.5	50.5		
			1101	1108		50.5	39.5	
L 108+55	58	RT	1102		54.8	49.6		
			1102	1106		49.6	40.8	1.3
			1102	1116		49.9	50.0	
L 108+55	0	CL	1116		52.8	50.0		
L 108+55	58	LT	1103		54.8	51.8		
			1103	1105		51.8	38.3	0.4
L 112+55	58	LT	1104		53.5	50.5		
			1104	1109		50.5	37.4	
L 114+35	42	LT	1114			39.2		
			1114	1119	39.2	38.9		
L 114+35	58	RT	1115			38.5		
			1115	1119	38.5	38.9		
L 114+35	15	RT	1119		53.4	38.9		
L 116+23	58	LT	1201		52.3	49.3		
			1201	1202		49.3	36.9	
			1201	1205		49.3	49.9	

Pipes (SIZE / THICKNESS OR GAUGE)

LINE & STATION	FROM	TO	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	DO NOT USE PVC	C. A. A. PIPE 12 (.064)	15 (.064)	18 (.064)	24 (.064)	30 (.079)	36 (.079)	42 (.109)	48 (.109)	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 12	15	18	24	30	36	42	48
	0905	0906																								104																					
L 80+10					100																																										
DRV2 11+17	0908	0909																								56																					
L 81+50	0910	0911																										196																			
L 85+75	0912																																														
	0912	0916																													108																
L 85+75	0916																																														
	0916	0913																													100																
L 86+36	0914																																														
L 82+23	0915	0917																								100																					
L 99+50	1001																																														
	1001	1002																								60																					
	1001	1003																																								60					
L 99+50	1002																																														
	1002	1004																56																													
	1002	1107																								160																						
L 99+50	1003																																														
L 103+88 / L 105+14																																															
L 101+06	1107																																														
L 92+92	1005																																														
	1005	1009																52																													
	1005	1007																								60																					
L 92+92	1007																																														
L 95+20	1006																																														
	1006	1008																48																													
L 89+75	1010																																														
	1010	1017																													100																
L 89+75	1011																																														
	1011	1017																													96																
L 89+75	1017																																														
	1017	1016																								28																						
L 90+00	1016																																														
L 112+55	1101																																														
	1101	1108																48																													
L 108+55	1102																																														
	1102	1106																48																													
	1102	1116																								60																						
L 108+55	1116																																														
L 108+55	1103																																														
	1103	1105																60																													
L 112+55	1104																																														
	1104	1109																60																													
L 114+35	1114																																														
	1114	1119																													116																
L 114+35	1115																																														
	1115	1119																													92																
L 114+35	1119																																														
L 116+23	1201																																														
	1201	1202																56																													
	1201	1205																								100																						
SHEET TOTALS					100													428								348	380		196			612											60					

Structures

LINE & STATION	FROM	TO	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY CY	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) 0' THRU 5' EACH	A: 5' THRU 10' LIN. FT.	B: 10' AND ABOVE LIN. FT.	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STD. 840.03 GRATE TYPE E	F	G	CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATES STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR STD. 840.26	G.D.I. TYPE "B" STD. 840.18 OR STD. 840.27	G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20	G.D.I. (W.S. SAG) FRAME W/ GRATE STD. 840.22	G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22	SPECIAL JB (SEE SPECIAL DETAIL 2C-3)	18" CAAP PIPE ELBOW	JB STD. 840.31 or 840.32	TB G.D.I. STD. 840.36	STEEL GRATE AND FRAME STD. 840.37	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	PIPE REMOVAL LIN. FT.	REMARKS
	0905	0906																												
L 80+10																													100	TEMPORARY DRAINAGE, SEE SHEET TMP-24
DRV2 11+17	0908	0909																												
L 81+50	0910	0911																											59	REMOVE 30" RCP
L 85+75	0912		6.000																											
	0912	0916																												
L 85+75	0916					1	5.0	2.6											1			1								WILDLIFE CROSSING ACCESS STRUCTURE
	0916	0913	6.000																											
L 86+36	0914					1							1		1	1														
L 82+23	0915	0917																												
L 99+50	1001					1												1			1									
	1001	1002																												
	1001	1003																												
L 99+50	1002					1	0.1											1	1											
	1002	1004																					2							ROD & LUG W/ SLEEVE GASKET
	1002	1107																												
L 99+50	1003					1												1	1											
L 103+88 / L 105+14																													110	REMOVE 30" RCP / REMOVE 15" CMP
L 101+06	1107					1												1	1											
L 92+92	1005					1												1	1										23	REMOVE 15" RCP
	1005	1009																					2							ROD & LUG W/ SLEEVE GASKET
	1005	1007																												
L 92+92	1007					1												1			1									
L 95+20	1006					1												1	1										34	REMOVE 15" CMP
	1006	1008																					2							ROD & LUG W/ SLEEVE GASKET
L 89+75	1010		6.000																											
	1010	1017																												
L 89+75	1011		6.000																											
	1011	1017																												
L 89+75	1017					1	0.3																	1						SLAB LID
	1017	1016																												
L 90+00	1016					1												1			1									
L 112+55	1101					1												1	1											
	1101	1108																					2							ROD & LUG W/ SLEEVE GASKET
L 108+55	1102					1	0.2											1	1											
	1102	1106																					2							ROD & LUG W/ SLEEVE GASKET
	1102	1116																												
L 108+55	1116					1												1			1									
L 108+55	1103					1												1	1											
	1103	1105																					2							ROD & LUG W/ SLEEVE GASKET
L 112+55	1104					1												1	1											
	1104	1109																					2							ROD & LUG W/ SLEEVE GASKET
L 114+35	1114		6.000																											
	1114	1119																												
L 114+35	1115		6.000																											
	1115	1119																												
L 114+35	1119					1	5.0	4.5											1			1							51	REMOVE 15" CMP/WILDLIFE CROSSING ACCESS STR
L 116+23	1201					1												1	1											
	1201	1202																					2							ROD & LUG W/ SLEEVE GASKET
	1201	1205																												
SHEET TOTALS			36.000			18	10.6	7.1					1		1	1		14	12		4	2	16	1					377	

ABBREVIATIONS

C.A.A.	CORRUGATED ALUMINIUM ALLOY
C.B.	CATCH BASIN
C.S.	CORRUGATED STEEL
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
H.D.P.E.	HIGH DENSITY POLYETHYLENE
J.B.	JUNCTION BOX
M.H.	MANHOLE
N.S.	NARROW SLOT
P.V.C.	POLYVINYL CHLORIDE
R.C.	REINFORCED CONCRETE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX
W.S.	WIDE SLOT