COMPUTED BY: JCL DATE: 12/30/14
CHECKED BY: PHS DATE: 1/8/15

PROJECT REFERENCE NO.	SHEET NO.
R-3622B	3D-4

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

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

SUB–REGIONAL & REGIONAL
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	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) 4"	6"	8"	12"	15"	18"	24"	30"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	C.S. PIPE 12" .064	C.S. PIPE 15" .064	C.S. PIPE 18" .064	C.S. PIPE 24" .064	C.S. PIPE 30" .079	C.S. PIPE 36" .109	C.S. PIPE 42" .109	R.C. PIPE (CLASS III) 15"	18"	24"	30"	36"	42"	WELDED STEEL PIPE 36" 0.5"	R.C. PIPE (CLASS IV) 36"	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01, STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YDS. R.C.P.	ENDWALLS C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES * TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') PER EACH (0' THRU 5.0')	LIN. *FT. A 5.0' THRU 10.0'	LIN. *FT. B 10.0' AND ABOVE	T.B.D.I. STD. 840.35	SPECIAL T.B.D.I. (SEE SHEET 2C–1 FOR DETAIL)	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. TYPE "D" STD. 840.19 OR STD 840.28	G.D.I. (W.X. 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	G.D.I. (N.S. SAG) FRAME W/2 GRATES STD 840.24	G.D.I. (N.S. SAG) FRAME W/GRATE STD 840.29	G.D.I. (N.S. FLAT) FRAME W/2 GRATES STD. 840.29	G.D.I. (N.S.) WITH GRATE FOR DRIVEWAY STD 840.30	J.B. STD. 840.31 OR 840.32	T.B.J.B STD. 840.34	SPRING BOX STD 840.41	M.H. FRAME AND COVER STD. 840.54	18" CS SLOTTED DRAIN –SEE SHEET 2C–5 FOR DETAIL	8"X8"X15" HDPE TEE	15"X15"X15" HDPE TEE	##" DRAINAGE PIPE ELBOW	12" C.S. ELBOW	15" C.S. ELBOW	18" C.S. ELBOW	24" C.S. ELBOW	30" C.S. ELBOW	36" C.S. ELBOW	BERM DITCH OUTLET STD. 850.10 OR 850.11 (SY)	SPECIAL BERM DITCH OUTLET (SEE SHEET 2C–2)	CONC. COLLARS CL. "B" C.Y. (SEE SHEET 2C–3)	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	PIPE REMOVAL LIN.FT.	REMARKS
	RT	0910	0912		1753.2'	1745.5'																								140'																																													
87+85 -L-	RT	0913										40'				X	X	X		X																																										3	1													
87+85 -L-	RT	0913	0912									4'				X	X	X		X																																																								
88+25 -L-	RT	1001		1749.0'	1745.1'																																				1																	1		1																
88+25 -L-	RT	1002	1001																		20'																																												2								.353			Collar Exist. 12" RCP
	RT	0912	1001		1745.5'	1745.1'																								12'																																													
88+69 -L-	C/L																																																																									40'	Remove Exist. 24" CMP
88+70 -L-	RT	1004		1747.6'	1742.6'																																				1				1									1																						Special TB 2GI
		1001	1004		1745.1'	1742.6'																								44'																																													
88+75 -L-	RT	1004A	1004							32'						X	X	X		X																																																				.263			See Sheet 2C–3
88+78 -L-	C/L	1004	1005		1742.6'	1736.4'																		60'															1.4																																					Endwall on Outlet of 24" CSP
89+58 -L-	RT	1006		1744.9'	1739.9'																																				1			1										1																						
89+48 -L-	RT	1005A	1006		1739.9'						20'					X	X	X		X																																																					.353			See Sheet 2C–3
89+56 -L-	RT	1005B	1006		1742.2'					28'						X	X	X		X																																																				.263			See Sheet 2C–3
91+00 -L-	RT	1006A		1738.6'	1734.6'																																				1			1										1																						
91+00 -L-	RT	1006A	1006B		1734.6'																	12'																																												2					11					15" BDO
	RT	1006	1006A		1739.9'	1734.6'																						140'																																															
92+60 -L-	RT	1007		1729.9'	1726.7'																																				1			1										1																						
	RT	1006A	1007		1734.6'	1726.7'																						156'																																															
91+80 -L-	RT	1007A		1728.4'	1725.6'																																				1							1				1																								
91+80 -L-	RT	1007	1007A		1726.7'	1725.6'																12'																																																						
95+00 -L-	RT	1008		1712.0'	1710.8'																																				1						1							1																						
	RT	1007A	1008		1725.6'	1710.8'																						240'																																															
95+00 -L-	RT	1008A	1008			1710.8'																12'																																												2					11					
	RT	1008	1008B		1710.8'	1708.3'																						64'																																															
95+75 -L-	RT																																																																									100'	Remove Exist. 18" CMP
96+40 -L-	C/L	1009			1703.0'	1698.4'			88'							X	X	X		X																																																								Fill Dual 60" CSP With Flowable Fill –See EC Plans
96+50 -L-	RT	1010		1701.2'	1697.8'																																				1							1				1																								
	RT	1010	1011		1697.8'	1697.6'																							32'																																															
99+75 -L-	LT																																																																										18'	Remove Exist. 12" CMP
101+00 -L-	LT	1012		1696.0'	1692.1'																																				1							1				1																								
101+00 -L-	LT	1012A	1012		1699.5'	1692.1'																		12'																																												2								
101+00 -L-	C/L	1012	1013		1692.1'	1691.7'																								64'									1.4																																					Endwall on Outlet End
102+55 -L-	LT	1101			1695.4'	1695.3'																														28'																																								
102+55 -L-	LT																																																																										28'	Remove Exist. 15" CMP
104+73 -L-	RT	1102			1690.9'	1690.8'																														28'																																								
104+75 -L-	RT																																																																										20'	Remove Exist. 8" CMP
106+00 -L-	LT	1103		1694.0'	1689.0'																																				1						1					1																								
106+00 -L-	LT	1103A	1103		1697.4'	1689.0'																			8'																																													2		31					30" BDO
106+00 -L-	C/L	1103	1104		1689.0'	1688.7'																									64'																																													
106+05 -L-	C/L																																																																										36'	Remove Exist. 18" CMP
108+00 -L-	LT	1104A	1104B		1698.8'	1689.0'																		12'																																												2			31					24" BDO
108+00 -L-	LT	1104B		1694.0'	1689.0'																																				1						1					1																								
108+04 -L-	C/L	1104B	1104C		1689.0'	1688.7'																								72'																																															Preformed Scour Hole at Outlet
110+13 -L-	C/L	1105	1106		1690.4'	1682.3'																									92'																																														Preformed Scour Hole at Outlet
109+89 -L-	C/L																																																																										45'	Remove Exist. 24" CMP
PAGE TOTAL									88'	60'	20'	44'									20'	36'		84'	8'			600'	32'	332'	156'					56'			2.8		11			3	1		3	3				5		5			1		1		3	1		2	4		4	2		84		1.232		287'	

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.) GRATED 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