COMPUTED BY: MQCN DATE: 9/3/2015

CHECKED BY: DJC DATE: 9/3/2015

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
W-5206AM	3D-1

DL-2KYBD21

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) SIZE 12"	15"	18"	24"	30"	36"	42"	48"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
								THICKNESS OR GAUGE											
41+63	CL	605		147.08															
41+63	CL	605	601		143.91	142.93	0.01												
41+17	CL	601		147.1															
41+17	CL	601	602		142.93	140.23	0.02												
40+31	CL	602		147.87															
41+75	LT	606		146.07															
41+75	LT	606	603		142.60	142.25													
41+48	LT	603		145.25															
41+48	LT	603	604		142.25	141.98	0.003												
40+30	LT	604		147.45															
40+30	CL	607	602		140.24	140.23													
40+30	CL	607																	
59+50	CL	703		167.62															
59+50	CL	703	704		164.45	160.9	0.036												
60+50	CL	704		164.07															
60+50	CL	704	705		160.9	156.17	0.038												
61+75	CL	705		159.34															
61+75	CL	705	706		156.17	155.16	0.092												
61+75	CL	706		158.68															
61+75	CL	706	707		155.16	152.85	0.062												
61+65	RT	707		157.25															
63+00	CL	708		154.25															
63+00	CL	708	709		151.08	148.3	0.076												
63+50	CL	709		151.47															
63+50	CL	709	710		148.3	141.91	0.044												
65+00	CL	710		145.08															
65+00	CL	710	801		141.91	137.5	0.038												
67+00	CL	803		141.54															
67+00	CL	803	802		138.37	138	0.012												
66+69	CL	802		141.46															
66+69	CL	802	801		138	137.5	0.012												
66+20	CL	801		141.79															
66+20	CL	801	804		137.5	134.81	0.071												
66+20	RT	804		140.21															
73+00	CL	805		165.95															
73+00	CL	805	810		162.78	161	0.05												
73+00	LT	810		165															
73+00	LT	810	809		161	160.79	0.003												
73+00	LT	809		164.31															
75+20	CL	806		172.85															
75+20	CL	806	807		169.68	168.56	0.03												
75+25	RT	807		172.37															
75+25	RT	807	808		168.56	167.51	0.044												
74+85	RT	808		170.91															
99+85	RT	1001		127.11															
99+85	RT	1001	1002		124.11	123.2	0.021												
99+37	RT	1002		127.28															
107+80	LT	1101		127.67															
PROJECT TOTALS																			

STATION	C.S. PIPE SIZE 12"	15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS III SIZE 12"	15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS IV SIZE 12"	15"	18"	24"	30"	36"	42"	48"
	THICKNESS OR GAUGE .064	.064	.064	.064	.079	.079	.109	.109																
41+63																								
41+63																		52						
41+17																								
41+17																		80						
40+31																								
41+75																								
41+75																		24						
41+48																								
41+48																		108						
40+30																								
40+30																								8
40+30																								
59+50																								
59+50																		100						
60+50																								
60+50																		124						
61+75																								
61+75																		12						
61+75																								
61+75																		32						
61+65																								
63+00																								
63+00																		48						
63+50																								
63+50																		148						
65+00																								
65+00																		120						
67+00																								
67+00																		32						
66+69																								
66+69																		44						
66+20																								
66+20																		40						
66+20																								
73+00																								
73+00																		36						
73+00																								
73+00																		8						
73+00																								
75+20																								
75+20																		40						
75+25																								
75+25																		36						
74+85																								
99+85																								
99+85																		44						
99+37																								
107+80																								
PROJECT TOTALS																		1128						8

STATION	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 OR STD. 838.11 (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 (0' 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 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. FRAME WITH GRATE STD. 840.20	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	CONVERT EXISTING CB to TB JB W/MH	J.B. STD. 840.31 OR 840.32	J.B. M.H. COVER & FRAME STD. NO. 840.54	DI STD. 832D03 DI in ISLANDS 2C-8	DI STD 840D13 NARROW DI FRAME & GRATE 2C-8	DI STD 840D11 & 840D12 CONC NARROW DI 2C-7	FLOWABLE FILL CY	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	CONC. COLLARS CL. "B" C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.	REMARKS
41+63								1								1																						NARROW DI in ISLANDS
41+63																								1	1	1												
41+17								1								1								1	1	1												NARROW DI in ISLANDS
41+17																																						
40+31								1								1			1	1																		DI
41+75																																	6					EXIST CB/FILL AND PLUG EXISTING 15" RCP
41+75																																						
41+48								1				1	1																									CB @ SAG
41+48																																						
40+30																																						EXIST CB
40+30																																						
40+30																																			1.0126			48" COLLAR
59+50								1											1	1																		DI
59+50																																						
60+50								1								1								1	1	1												NARROW DI in ISLANDS
60+50																																						
61+75								1								1								1	1	1												NARROW DI in ISLANDS
61+75																																						
61+75								1								1								1	1	1												NARROW DI in ISLANDS
61+75																																						
61+65																																						EXIST CB
63+00								1								1								1	1	1												NARROW DI in ISLANDS
63+00																																						
63+50								1								1								1	1	1												NARROW DI in ISLANDS
63+50																																						
65+00								1								1			1	1																		DI
65+00																																						
67+00								1				1			1		1																					CB
67+00																																						
66+69								1				1	1				1																					CB
66+69																																						
66+20								1				1		1			1																					CB
66+20																																						
66+20																																						EXIST CB
73+00								1								1								1	1	1												NARROW DI in ISLANDS
73+00																																						
73+00								1											1	1																		
73+00																																						EXIST DI
73+00																																						EXIST DI
75+20								1								1								1	1	1												NARROW DI in ISLANDS
75+20																																						
75+25																							1		1													T.B.J.B. M.H.
75+25																																						
74+85								1				1			1																					38	
99+85								1				1	1																									CB @ SAG
99+85																																						
99+37																																						
107+80								1				1			1																							CONNECT CB TO EXIST. PIPE
PROJECT TOTALS								20				7	3	1	3	12	3	4	4					1		1	9	9	9	6		1.0126	38					

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