CARYLAPHILLIPS

COMPUTED BY:	William M. Hines	DATE:	2/15/16
CHECKED BY:	Susan Lancaster	DATE:	01/18/17

PROJECT NO.	SHEET NO.
U-3109A	3D-6

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

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 %	Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC) 15	18	24	30	36	42	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC
L 76+00	0 CL	0819		626.2														
		0819	0820		622.3	621.5												
L 77+75	6 LT	0820		625.3														
		0820	0821		621.5	621.2												
L 78+22	0 CL	0822			619.6	604.2												
L 80+50	14 LT	0823		624.0														
		0823	0824		620.1	619.5												
L 79+48	47 RT	0825		623.4														
		0825	0826		619.6	619.1												
L 78+40	47 RT	0826		624.1														
		0826	0827		619.1	606.2		44						X			X	X
L 83+00	14 LT	0901		620.1														
		0901	0902		616.2	614.8												
L 83+50	14 LT	0902		618.6														
		0902	0903		614.8	611.3												
L 84+00	67 LT	0903		614.1														
		0903	0904		611.3	606.1		56									X	X
L 85+00	67 RT	0905		611.7														
		0905	0906		607.9	605.3		52									X	X
L 87+55	67 LT	0908		602.6														
		0908	0909		599.8	597.3												
L 88+60	63 LT	0909		601.0														
		0909	0912		597.3	584.2	0.4	364									X	X
DWY3 11+56	20 LT	0910		602.3														
		0910	0909		599.3	597.3		84									X	X
L 92+25	68 RT	0911		588.5														
		0911	0912		585.8	584.9												
L 92+25	79 LT	0912		588.9														
		0912	0913		584.2	582.6				112							X	X
L 93+35	79 LT	0913		587.4														
		0913	0914		582.6	580.4				68							X	X
DWY3 11+50	18 RT	0915		602.4														
		0915	0910		599.4	599.3												
L 97+96	48 LT	1001		586.2														
		1001	1017		582.3	579.5												
L 97+98	14 RT	1002		586.7														
		1002	1003		582.8	581.4												
L 97+98	67 RT	1003		584.1														
		1003	1018		581.4	581.0		76									X	X
L 98+50	14 RT	1004		586.8														
		1004	1002		583.0	582.8												
L 100+70	67 RT	1005		586.7														
		1005	1006		584.0	583.8												
L 100+70	14 RT	1006		589.3														
		1006	1007		582.6	580.8												
		1008	1009		590.3	585.2	0.4											
L 101+67	67 RT	1009		587.9														
		1009	1005		585.2	584.0	0.7	100									X	X
L 102+35	14 RT	1010		591.3														
							SHEET TOTALS	776		180								

LINE & STATION	FROM	TO	C. S. PIPE 12 (.064)	15 (.064)	18 (.064)	24 (.064)	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	30	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY
L 76+00	0819																												
	0819	0820														176													
L 77+75	0820																												
	0820	0821														64													
L 78+22	0822										480																		
L 80+50	0823																												
	0823	0824														60													
L 79+48	0825																												
	0825	0826														104													
L 78+40	0826																												
	0826	0827																											
L 83+00	0901																												
	0901	0902														52													
L 83+50	0902																												
	0902	0903														76													
L 84+00	0903																												
	0903	0904																											
L 85+00	0905																												
	0905	0906																											
L 87+55	0908																												
	0908	0909						104																					
L 88+60	0909																												
	0909	0912																											
DWY3 11+56	0910																												
	0910	0909																											
L 92+25	0911																												
	0911	0912						148																					
L 92+25	0912																												
	0912	0913																											
L 93+35	0913																												
	0913	0914																											
DWY3 11+50	0915																												
	0915	0910														36													
L 97+96	1001																												
	1001	1017		28																									
L 97+98	1002																												
	1002	1003														56													
L 97+98	1003																												
	1003	1018																											
L 98+50	1004																												
	1004	1002														56													
L 100+70	1005																												
	1005	1006						56																					
L 100+70	1006																												
	1006	1007									92																		
	1008	1009		24																									
L 101+67	1009																												
	1009	1005																											
L 102+35	1010																												
SHEET TOTALS				52				308			572					680													

QUANTITIES FOR DRAINAGE STRUCTURES — NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)

FRAME, GRATES, AND HOOD STD. 840.03 — GRATE TYPE E, F, G

CONCRETE TRANSITIONAL SECTION

LINE & STATION	FROM	TO	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	GRATE TYPE E	F	G	D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05	4" CONCRETE PAVED DITCH, S.Y. STD 850.01	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. TYPE "D" STD. 840.19 OR STD. 840.28	G.D.I. (W.S. FLAT) FRAME W/ GRATE STD. 840.20	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	G.D.I. (N.S. SAG) FRAME W/ GRATE STD. 840.24	G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24	G.D.I. (N.S. FLAT) FRAME W/ GRATE STD. 840.29	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34	M.H. FRAME AND COVER STD. 840.54	15" C.S. ELBOW	18" C.S. ELBOW	24" C.S. ELBOW	30" C.S. ELBOW	BERM DITCH OUTLET STD. 850.10 (PER EACH)	BERM DITCH OUTLET STD. 850.11 (PER EACH)	15" SLUICE GATE	18" SLUICE GATE	30" SLUICE GATE	PIPE CLEAN-OUT (PER EACH)	PREFORMED SCOUR HOLE (PER EACH)	ENERGY DISSIPATOR BASIN	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	CONCRETE AND BRICK PIPE PLUG STD. 840.71 CY	PIPE REMOVAL LIN. FT.	REMARKS
L 76+00	0819		1													1			1																										
	0819	0820																																											
L 77+75	0820		1													1			1																										
	0820	0821																																										
L 78+22	0822																																											3 @ 30", 160'
L 80+50	0823		1													1			1																										
	0823	0824																																										
L 79+48	0825		1													1									1																				
	0825	0826																																										
L 78+40	0826		1													1									1																				
	0826	0827																																										
L 83+00	0901		1													1			1																										
	0901	0902																																										
L 83+50	0902		1													1			1																										
	0902	0903																																										
L 84+00	0903		1													1							1																						
	0903	0904																																										
L 85+00	0905		1													1							1																						
	0905	0906																																										
L 87+55	0908		1													1							1																						
	0908	0909																																										
L 88+60	0909		1																							1		1																	
	0909	0912																																										
DWY3 11+56	0910		1			1	1																																						
	0910	0909																																										
L 92+25	0911		1													1							1																						
	0911	0912																																										
L 92+25	0912		1												1								1																						
	0912	0913																																										
L 93+35	0913		1												1								1																						
	0913	0914																																										
DWY3 11+50	0915		1			1	1																																						
	0915	0910																																										
L 97+96	1001		1													1									1																				
	1001	1017																											2																
L 97+98	1002		1													1			1																										
	1002	1003																																										
L 97+98	1003		1													1							1																						
	1003	1018																																										
L 98+50	1004		1													1			1																										
	1004	1002																																										
L 100+70	1005		1													1							1																						
	1005	1006																																										
L 100+70	1006		1	1.7											1				1																										
	1006	1007																																										
	1008	1009										11																	1				1												
L 101+67	1009		1													1							1																						
	1009	1005																																										
L 102+35	1010		1	3.1											1				1																										
SHEET TOTALS			24	4.8		2	2					11			4	17			9				9		3	1		1	3				1												

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