COMPUTED BY: Matthew Stratton, EI DATE: 6/25/2025
CHECKED BY: Richard Hinton, PE DATE: 6/25/2025

7S9M8H4

PROJECT NO.	SHEET NO.
R-5759	3D-4

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)

Quantities for Drainage Structures — NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)

LINE & STATION	OFFSET		STRUCTURE NUMBER FROM	TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC) 12	15	18	24	30	36	42	48	DO NOT USE PVC	C. S. PIPE 12 (.064)	15 (.064)	18 (.064)	24 (.064)	30 (.079)	36 (.079)	42 (.109)	48 (.109)	R. C. PIPE CLASS IV 12	15	18	24	30	36	42	48	R. C. PIPE CLASS V 12	15	18	24	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY CY	0' THRU 5' EACH	5' THRU 10' (A) LIN. FT.	10' AND ABOVE (B) 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. TYPE "D" STD. 840.19 OR STD. 840.28	G.D.I.(W.S. FLAT) FRAME WITH 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	ANGLED VANE GRATES AND FRAMES STD. 840.33	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	T.B.D.I. FOR STEEL GRATES STD. 840.36	STEEL FRAME WITH TWO GRATES STD. 840.37	TEMP STEEL PLATE COVER MASONRY DRAINAGE	M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING C.B. TO J.B.	CONVERT EXISTING C.B. TO D.I.	CONVERT EXISTING D.I. TO J.B.	CONVERT EXISTING J.B. TO D.I.	ADJUST C.B.	ADJUST D.I.	ADJUST M.H.	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 (PER EACH)	BERM DITCH OUTLET STD. 850.11 (PER EACH)	FLOWABLE FILL CY	PIPE REMOVAL LIN. FT.	REMARKS
L 53+97	8	LT	0712		1155.8																																				1							1														1				1			1																			
			0712	0704		1151.8	1150.6																				20																																																													
L 57+95	8	RT	0713		1170.6																																				1							1														1				1			1																			
			0713	0714		1167.4	1166.9																				20																																																													
L 57+95	31	RT	0714		1169.9																																				1			1			1																																										
			0714	0716		1166.9	1157.2																				284																																																													
L 49+36	54	RT	0715		1129.8																																				1									1	1																																						
			0715	0709		1126.8	1126.0																				28																																																													
L 55+09	31	RT	0716		1160.7																																				1	0.5		1			1																																									
			0716	0711		1155.2	1143.2																				216																																																													
L 58+75	31	RT	0717		1171.4																																				1	0.4		1			1																																									
			0717	0729		1166.0	1161.1	2.1			72						X																																																																										
L 59+95	7	LT	0718		1174.4																																				1							1														1				1			1																			
			0718	0801		1171.1	1170.7																				100																																																														
L 47+88	56	RT	0719		1122.2																																				1									1	1																																						
			0719	0708		1119.2	1118.5																				28																																																													
L 51+76	57	RT	0720		1143.5																																				1									1	1																																						
			0720	0710		1140.2	1139.0																				28																																																												
L 53+00	55	RT	0721		1147.0																																				1									1	1																																						
			0721	0711		1143.7	1143.2																				28																																																												
L 55+09	53	RT	0722		1159.0																																				1									1	1																																						
			0722	0716		1155.7	1155.2																				24																																																												
L 50+00	45	LT	0723		1133.0																																				1												1			1																																
			0723	0702		1129.0	1128.9																				16																																																												
L 59+00	51	LT	0724		1170.1																																				1												1			1																																
			0724	0707		1167.1	1166.9	0.4																			20																																																													
L 54+00	48	LT	0725		1154.1																																				1												1			1																																
			0725	0704		1151.1	1150.6																					20																																																											
L 48+50	30	LT	0726		1125.9																																				1			1		1																																											
			0726	0701		1120.9	1117.8																						104																																																										
L 47+05	28	LT	0728		1121.6																																				1			1		1																																											
			0728	0643		1116.6	1112.5																						76																																																										
L 50+74	49	RT	0730		1136.6																																				1	1.0																		1						1																						
			0730	0731		1130.6	1130.5																				24																																																													
L 50+60	31	RT	0731		1135.9																																				1	0.4		1			1																																									
			0731	0709		1130.5	1125.7																					108																																																											
L 60+95	8	LT	0801		1176.6	.																																			1	0.9						1														1				1			1																			
			0801	0802		1170.7	1170.5																				36																																																													
L 60+95	30	RT	0802		1175.6																																				1	0.1		1			1																																									
			0802	0717		1170.5	1166.0																				220																																																													
L 61+92	8	LT	0803		1178.4																																				1							1														1				1			1																			
			0803	0801		1175.1	1171.2																				96																																																													
L 63+71	49	LT	0804		1180.0																																				1							1					1									1																											
			0804	0805		1177.3	1175.9																				40																																																												
L 63+70	8	LT	0805		1181.8																																				1	0.9						1														1				1			1																			
			0805	0806		1175.9	1175.7																				48																																																													
L 64+15	8	RT	0806		1182.3																																				1	1.9						1														1				1			1																			
			0806	0807		1175.4	1175.2																					68																																																											
L 64+15	78	RT	0807		1180.6																																				1	0.4		1			1																																									
			0807	0808		1175.2	1160.1													48																																																															2								ROD & LUG W/ SLEEVE GASKETS
SHEET TOTALS											72									48							1276	196	180												25	6.5		8		2	6	8		5	5		4			3				1		8				8			7											2								

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