7S9M8H4

COMPUTED BY: Matthew Stratton, EI DATE: 6/25/2025

CHECKED BY: Richard Hinton, PE DATE: 6/25/2025

PROJECT NO.	SHEET NO.
R-5759	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)

Size / Thickness or Gauge — Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC); C. S. Pipe; R. C. Pipe Class IV; R. C. Pipe Class V

Line & Station	Offset	Structure No. From	To	Top Elevation (FT.)	Invert Elevation (FT.)	Invert Elevation (FT.)	Minimum Required Slope (%)	Drainage Pipe 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
L 81+85	9 LT	0911		1163.2																																
		0911	0909		1156.7	1154.0																					84									
L 77+12	30 RT	0912		1177.0																																
		0912	0938		1172.2	1168.4																					132									
L 79+90	30 RT	0913		1166.3																																
		0913	0920		1162.0	1159.3																					128									
L 81+95	30 RT	0914		1162.4																																
		0914	0911		1157.7	1156.7																					40									
L 82+33	4 RT	0915		1163.0																																
		0915	0911		1159.6	1156.7																				48										
L 82+30	96 LT	0916		1160.9																																
		0916	0934		1146.9	1142.1	0.8																					80								
L 83+45	77 RT	0917		1160.6																																
		0917	0924		1157.6	1140.5												68																		
L 81+20	30 RT	0920		1163.3																																
		0920	0914		1159.3	1157.7																					72									
L 86+00	31 LT	0921		1159.9																																
		0921	0941		1153.3	1152.0																				296										
L 86+00	7 RT	0922		1161.3																																
		0922	0921		1153.5	1153.3																				36										
L 74+56	67 RT	0925		1184.0																																
		0925	0903		1180.0	1179.6			28							X																				
Y7 11+04	29 RT	0926		1182.5																																
		0926	0929		1178.0	1176.2																				92										
Y7 11+75	16 RT	0927		1184.0																																
		0927	0926		1181.0	1178.0																				72										
Y7 11+77	35 RT	0928		1184.8																																
		0928	0927		1181.4	1181.0			20							X																				
L 75+79	68 RT	0929		1179.6																																
		0929	0937		1176.2	1175.4																				36										
L 81+20	53 RT	0930		1164.1																																
		0930	0920		1160.8	1159.3			20							X																				
L 79+84	52 RT	0931		1166.1																																
		0931	0913		1162.7	1162.0				20						X																				
L 77+12	53 RT	0932		1175.7																																
		0932	0912		1172.5	1172.2			20							X																				
DRW8 12+27	24 RT	0933		1150.6																																
		0933	0916		1147.1	1146.9																					40									
L 75+97	39 RT	0937		1180.0																																
		0937	0912		1175.4	1172.2																					116									
L 78+45	30 RT	0938		1171.6																																
		0938	0913		1168.4	1162.0																					144									
L 83+03	30 LT	0941		1161.8																																
		0941	0933		1152.0	1147.1			80							X																				
L 74+43	30 LT	0942		1183.9																																
		0942	0901		1175.0	1165.0	2.0												64																	
L 79+76	52 RT	0950		1166.1																																
		0950	0931		1163.0	1162.7			4							X																				
L 87+90	9 RT	1001		1160.4																																
		1001	1027		1154.5	1154.0																				88										
SHEET TOTALS									172	20								68	64							668	756	80								

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 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. 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
0911					1	1.5						1														
0912					1			1		1																
0913					1			1		1																
0914					1			1		1																
0915					1							1														
0916					1	5.0	4.0	1	1																	
0917					1			1	1																	
0920					1			1		1																
0921					1	1.6		1			1															
0922					1	2.8						1														
0925					1												1									1
0926					1			1			1															
0927					1			1			1															
0928					1																					
0929					1									1	1											
0930					1																					
0931					1																					
0932					1																					
0933					1												1							1		
0937					1			1		1																
0938					1			1		1																
0941					1	4.8		1			1															
0942					1	3.9		1		1																
0950					1																					
1001					1	0.9						1														
SHEET TOTALS					25	20.5	4.0	13	2	7	4	4		1	1		2							1		1

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

From	To	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
0911						1	1	1																			
0915						1	1	1																			
0917	0924																	2									ROD & LUG W/ SLEEVE GASKETS
0922						1	1	1																			
0928						1	1																				
0930						1	1																				
0931						1	1																				
0932						1	1																				
0942	0901																		2								ROD & LUG W/ SLEEVE GASKETS
0950						1	1																				
1001						1	1	1																			
SHEET TOTALS						9	9	4										2	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