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-9

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) SIZE 12	15	18	24	30	36	42	48	DO NOT USE PVC
			1129	1124		1166.0	1160.0										
L 105+50	30	LT	1130		1171.2												
			1130	1129		1167.8	1166.0										
Y11 10+40	30	LT	1131		1168.2												
			1131	1132		1162.5	1161.9										
Y11 10+93	22	LT	1132		1165.6												
			1132	1133		1161.9	1161.8										
C4 12+84	16	RT	1134		1169.4												
			1134	1131		1162.8	1162.5										
L 114+42	30	RT	1201		1150.3												
			1201	1204		1147.3	1143.1	0.6									
L 114+45	54	RT	1202		1150.0												
			1202	1201		1147.8	1147.3			24							X
L 116+14	31	LT	1203		1144.1												
			1203	1209		1132.4	1118.2	4.2									
L 115+60	30	RT	1204		1146.1												
			1204	1206		1135.1	1134.8	0.5									
L 115+60	59	RT	1205		1137.7												
			1205	1204		1135.5	1135.3			28							X
L 116+14	30	RT	1206		1144.1												
			1206	1203		1134.8	1134.0	0.5									
L 117+79	31	LT	1207		1138.3												
			1207	1203		1133.4	1132.6										
L 117+79	8	LT	1208		1139.0												
			1208	1207		1134.0	1133.4										
L 119+20	30	RT	1210		1133.2												
			1210	1211		1130.2	1124.9										
L 120+69	30	RT	1211		1127.9												
			1211	1212		1124.9	1120.9	0.4									
L 121+81	30	RT	1212		1123.9												
			1212	1216		1120.9	1117.5	0.8									
L 121+06	8	LT	1213		1127.3												
			1213	1214		1124.2	1122.7										
L 121+48	5	RT	1214		1125.9												
			1214	1215		1122.7	1120.9										
L 121+81	30	LT	1215		1123.9												
			1215	1218		1120.9	1116.8										
L 122+50	80	RT	1216		1120.5												
			1216	1219		1117.5	1111.7	0.9									
L 122+93	8	LT	1217		1120.6												
			1217	1218		1117.4	1116.8										
L 122+93	30	LT	1218		1119.8												
			1218	1227		1116.8	1108.8										
L 124+00	38	RT	1219		1114.7												
			1219	1222		1111.4	1108.7	0.5									
L 124+78	8	RT	1220		1111.0												
			1220	1225		1107.8	1107.3										
L 126+94	8	RT	1221		1095.8												
			1221	1226		1092.7	1092.1										
Y12 10+55	15	LT	1222		1112.0												
								SHEET TOTALS		52							

FROM	TO	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
1129	1124										116													
1130																								
1130	1129										64													
1131																								
1131	1132										52													
1132																								
1132	1133										32													
1134																								
1134	1131										32													
1201																								
1201	1204										116													
1202																								
1202	1201																							
1203																								
1203	1209			64																				
1204																								
1204	1206											52												
1205																								
1205	1204																							
1206																								
1206	1203											60												
1207																								
1207	1203										164													
1208																								
1208	1207										20													
1210																								
1210	1211										148													
1211																								
1211	1212										112													
1212																								
1212	1216										84													
1213																								
1213	1214										44													
1214																								
1214	1215										48													
1215																								
1215	1218										112													
1216																								
1216	1219										156													
1217																								
1217	1218										20													
1218																								
1218	1227										160													
1219																								
1219	1222											52												
1220																								
1220	1225										20													
1221																								
1221	1226										20													
1222																								
SHEET TOTALS				64							1520	164												

FROM	TO	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
1129	1124																						
1130		1			1		1																
1130	1129																						
1131		1	0.7		1			1															
1131	1132																						
1132		1			1			1															
1132	1133																						
1134		1	1.6		1			1															
1134	1131																						
1201		1			1		1																
1201	1204																						
1202		1									1	1											
1202	1201																						
1203		1	5.0	1.7	1			1															
1203	1209																						
1204		1	5.0	1.0	1		1																
1204	1206																						
1205		1									1	1											
1205	1204																						
1206		1	4.3		1		1																
1206	1203																						
1207		1			1			1															
1207	1203																						
1208		1							1												1		
1208	1207																						
1210		1			1		1																
1210	1211																						
1211		1			1		1																
1211	1212																						
1212		1			1		1																
1212	1216																						
1213		1							1														1
1213	1214																						
1214		1							1														1
1214	1215																						
1215		1			1			1															
1215	1218																						
1216		1			1		1																
1216	1219																						
1217		1							1														1
1217	1218																						
1218		1			1			1															
1218	1227																						
1219		1			1		1																
1219	1222																						
1220		1							1														1
1220	1225																						
1221		1							1														1
1221	1226																						
1222		1			1	1																	
SHEET TOTALS		25	16.6	2.7	17	1	9	7	6		2	2										1		5

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
1129	1124																										
1130																											
1130	1129																										
1131																											
1131	1132																										
1132																											
1132	1133																										
1134																											
1134	1131																										
1201																											
1201	1204																										
1202																											
1202	1201																										
1203																											
1203	1209																		2								ROD & LUG W/ SLEEVE GASKETS
1204																											
1204	1206																										
1205																											
1205	1204																										
1206																											
1206	1203																										
1207																											
1207	1203																										
1208					1			1																			
1208	1207																										
1210																											
1210	1211																										
1211																											
1211	1212																										
1212																											
1212	1216																										
1213					1			1																			
1213	1214																										
1214					1			1																			
1214	1215																										
1215																											
1215	1218																										
1216																											
1216	1219																										
1217					1			1																			
1217	1218																										
1218																											
1218	1227																										
1219																											
1219	1222																										
1220					1			1																			
1220	1225																										
1221					1			1																			
1221	1226																										
1222																											
SHEET TOTALS					6			6											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