COMPUTED BY: MMK	DATE: 02/22/2022	PROJECT NO. U-5748	SHEET NO. 3D-2
CHECKED BY: MDB	DATE: 02/01/2023		

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 / SIZE / THICKNESS OR GAUGE	OFFSET	STRUCTURE NUMBER FROM	TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	C. S. PIPE 15 .064	C. S. PIPE 18 .064	C. S. PIPE 24 .064	C. S. PIPE 30 .079	C. S. PIPE 36 .079	C. S. PIPE 48 .109	R. C. PIPE CLASS IV 15	R. C. PIPE CLASS IV 18	R. C. PIPE CLASS IV 24	R. C. PIPE CLASS IV 30	R. C. PIPE CLASS IV 36	R. C. PIPE CLASS IV 48	R. C. PIPE CLASS V 15	R. C. PIPE CLASS V 18	R. C. PIPE CLASS V 24	R. C. PIPE CLASS V 30	R. C. PIPE CLASS V 36	R. C. PIPE CLASS V 48	30" x 19" RCP-V Elliptical	48" WELDED STEEL PIPE 0.5" THICK, GRADE B IN SOIL	48" WELDED STEEL PIPE 0.5" THICK, GRADE B NOT IN SOIL	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
L 29+00	17 RT	0433		202.9																												1			1		1	
		0433	0435		199.7	198.4														76																		
L 29+54	94 RT	0434		201.5																												1			1			1
		0434	0435		197.8	197.5	0.3														68																	
L 28+85	93 RT	0435		201.4																												1			1			1
		0435	0436		197.5	197.1	0.5														68																	
L 28+15	84 RT	0436		201.2																												1			1			1
		0436	0438		196.6	196.3																64																
L 26+57	67 RT	0437		200.8																												1			1			1
		0437	0438		197.8	197.4														92																		
L 27+50	75 RT	0438		201.1																												1			1			1
		0438	0439		196.3	184.1	0.7			48																												
L 27+50	122 RT	0439		187.6																												1						
		0439	0441		183.2	182.7																100																
L 26+57	67 LT	0440		200.8																												1			1		1	
		0440	0430		197.8	197.8														12																		
L 23+71	101 RT	0442		187.2																																		
		0442	0443		185.7	185.3	###																			100												
L 30+75	21 LT	0501		203.1																												1			1			1
		0501	0502		200.1	199.7														68																		
L 30+05	20 LT	0502		202.8																												1			1			1
		0502	0425		199.7	199.2														104																		
L 31+00	73 LT	0503		202.8																												1			1		1	
		0503	0426		199.8	199.0														124																		
L 30+50	20 RT	0504		203.5																												1			1		1	
		0504	0432		200.5	200.2														48																		
L 31+62	97 RT	0505		202.6																												1			1			1
		0505	0506		199.6	199.3														60																		
L 31+00	97 RT	0506		202.5																												1			1			1
		0506	0508		199.3	198.9														72																		
L 30+00	136 RT	0507		201.4																												1						
		0507	0508		198.7	198.4														48																		
L 30+27	96 RT	0508		202.0																												1			1			1
		0508	0434		198.2	197.8															72																	
Y1 12+00	9 RT	0509		206.7																												1						
		0509	0511		203.6	200.6														80																		
Y1 12+89	58 LT	0510		208.6																												1			1		1	
		0510	0569		204.9	204.0	0.3															12																
Y1 12+00	70 LT	0511		203.6																												1			1		1	
		0511	0512		199.8	199.5	0.4															8																
Y1 11+91	73 LT	0512		203.3																												1			1	1		
		0512	0526		199.5	197.1	0.5															72																
L 32+75	114 RT	0513		202.1																												1			1	1		
		0513	0514		199.1	198.4														132																		
Y1 11+33	39 LT	0514		203.2																												1						
		0514	0525		198.4	197.9														92																		
L 35+90	73 RT	0515		202.4																												1			1			1
		0515	0523		199.4	199.0														12																		
L 35+26	73 RT	0516		202.2																												1			1			1
		0516	0517		199.2	199.1														8																		
						SHEET TOTALS				48										1028	208	256				100						24			20	2	6	12

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

STRUCTURE NUMBER FROM	TO	CONCRETE TRANSITIONAL SECTION: D.I. STD. 852.04 OR STD. 852.06	CONCRETE TRANSITIONAL SECTION: C.B. STD. 852.05	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	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	DRIVEWAY D.I. STD. 840.30	FRAME W/ GRATE FOR DRIVEWAY STD. 840.30	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		G.D.I EXTRA DEPTH TYPE "A" , SHT. 2C-2	G.D.I MIN. DEPTH TYPE "A" STD.840D17 , SHT. 2C-14	O.T.C.B. DETAIL 840D04, SHT. 2C-15		CONVERT EXISTING C.B. TO J.B. SHT. 2C-18	CONVERT EXISTING C.B. TO D.I.	CONVERT EXISTING D.I. TO J.B. SHT. 2C-18	CONVERT EXISTING J.B. TO D.I.	ADJUST C.B.	ADJUST D.I.		15" C.S. ELBOW	24" C.S. ELBOW	30" C.S. ELBOW		PREFORMED SCOUR HOLE (PER EACH)	ENERGY DISSIPATION 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
0433																																																				See Detail for CB in 2'-9" C & G, Sheet 2C-12
0433	0435																																																			
0434																																																				See Detail for CB in 2'-9" C & G, Sheet 2C-12
0434	0435																																																		
0435																																																			
0435	0436																																																		
0436																																																			
0436	0438																																																		
0437																																																			
0437	0438																																																		
0438																																																			
0438	0439																																									2									
0439															1																	1																				See Min. Depth Type A 2GI Detail 840D17, Sheet 2C-14
0439	0441																																																		
0440																																																			
0440	0430																																																		
0442																																																			
0442	0443																																																		
0501																																																			See Detail for CB in 2'-9" C & G, Sheet 2C-12
0501	0502																																																		
0502																																																			See Detail for CB in 2'-9" C & G, Sheet 2C-12
0502	0425																																																		
0503																																																			
0503	0426																																																		
0504																																																			See Detail for CB in 2'-9" C & G, Sheet 2C-12
0504	0432																																																		
0505																																																			
0505	0506																																																		
0506																																																			
0506	0508																																																		
0507																																	1																			See OTCB Detail 840D04, Sheet 2C-14 & 2C-15
0507	0508																																																		
0508																																																			
0508	0434																																																		
0509					1	1																																													
0509	0511																																																		
0510																																																			
0510	0569																																																		
0511																																																			
0511	0512																																																		
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0512	0526																																																		
0513																																																			
0513	0514																																																		
0514		1			1	1																																													
0514	0525																																																		
0515																																																			
0515	0523																																																		
0516																																																			
0516	0517																																																		
SHEET TOTALS		1			2	2									1																	1	1									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