RAL-2UA2440BPJ

COMPUTED BY: CGM DATE: 3/06/14

CHECKED BY: JRR DATE:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U-2579B	3D-14

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	STRUCTURE NUMBER TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	SIDE DRAIN PIPE (STATEWIDE TIER) (RCP, CSP, CAAP, HDPE, or PVC) 15	18	24	30	36	42	48	DO NOT USE RCP	C. S. PIPE (SE: SHOP ELONGATED) 15	18	24	30	36	42	R. C. PIPE CLASS III 15	18	24	30	36	42	48	R. C. PIPE CLASS IV 15	18	24	30	42	48	R. C. PIPE CLASS V 24	30	36
																.064	.064	.064	.064	.079	.109																
672+75 -L-	LT	0457		881.5																																	
		0457	0280		881.5	871.6					92																										
672+00 -L-	LT	0280		876.0	871.6																																
		0280	0281		871.6	850.6					64				X																						
673+23 -L-	CL	0285		853.1	843.9																																
		0285	0283		843.9	843.5						124																									
673+23 -L-	LT	0284		855.2	852.4																																
		0284	0285		852.4	845.6																84															
673+24 -L-	RT	0286		848.9	846.2																																
		0286	0285		846.2	845.6																108															
676+00 -L-	CL	0289		855.1	846.7																																
		0289	0285		846.7	844.4					280																										
676+00 -L-	LT	0288		856.9	853.4																																
		0288	0289		853.4	847.9																88															
676+00 -L-	LT	0287		856.4	853.6																																
		0287	0288		853.6	853.4																68															
676+00 -L-	RT	0290		851.1	848.3																																
		0290	0289		848.3	847.9																104															
679+00 -L-	CL	0293		860.8	854.7																																
		0293	0289		854.7	847.2				300																											
679+00 -L-	LT	0292		861.5	858.1																																
		0292	0293		858.1	855.5																84															
679+00 -L-	LT	0291		861.1	858.3																																
		0291	0292		858.3	858.1																68															
679+00 -L-	RT	0294		858.6	855.8																																
		0294	0293		855.8	855.5																104															
682+00 -L-	CL	0296		867.1	861.4																																
		0296	0293		861.4	855.2			300																												
682+00 -L-	LT	0295		864.8	861.8																																
		0295	0296		861.8	861.4																	140														
682+00 -L-	RT	0297		864.9	861.9																																
		0297	0296		861.9	861.4																	104														
18+65 -Y4RPD-	CL	0271			901.5	896.0																	112														
658+97 -L-	RT	0268																																			
		0268	0270																																		
660+45 -L-	RT	0269																																			
		0269	0270																																		
660+87 -L-	RT	0270		875.6	862.0																																
		0270	OUT		862.0	857.0																										468					
		IN	0270		863.4	862.0					60																										
669+00 -L-	RT	0275		856.9	854.2																																
		0275	0276		854.2	854.0		52																													
668+50 -L-	RT	0276		858.2	854.0																																
		0276	OUT		854.0	840.3		44							X																						
SHEET TOTALS								96	300	300	496	124										708	356									468					

STRUCTURE NUMBER FROM	TO	8" DIP (DUCTILE IRON PIPE)	42" R.C. PIPE CULVERTS, CONTRACTOR DESIGN	48" R.C. PIPE CULVERTS, CONTRACTOR DESIGN	36" R.C. PIPE CULVERTS, CONTRACTOR DESIGN	18" R.C. PIPE CULVERTS, CONTRACTOR DESIGN	30" WELDED STEEL PIPE, 0.500, TRENCLESS INSTALLATION	36" WELDED STEEL PIPE, 0.500, TRENCLESS INSTALLATION	42" WELDED STEEL PIPE, 0.625, TRENCLESS INSTALLATION	48" WELDED STEEL PIPE, 0.625, TRENCLESS INSTALLATION	ENDWALLS STD. 838.01 OR STD. 838.11 OR 838.80 (UNLESS NOTED OTHERWISE) CY	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) 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
0457																				
0457	0280																			
0280												1								
0280	0281																			
0285												1	4.2							
0285	0283																			
0284												1								
0284	0285																			
0286												1								
0286	0285																			
0289												1	3.4							
0289	0285																			
0288												1								
0288	0289																			
0287												1								
0287	0288																			
0290												1								
0290	0289																			
0293												1	1.1							
0293	0289																			
0292												1								
0292	0293																			
0291												1								
0291	0292																			
0294												1								
0294	0293																			
0296												1	0.7							
0296	0293																			
0295												1								
0295	0296																			
0297												1								
0297	0296																			
0271																				
0268												1								
0268	0270	204																		
0269												1								
0269	0270	48																		
0270												1	5.0	3.6						
0270	OUT																			
IN	0270																			
0275												1								
0275	0276																			
0276												1								
0276	OUT																			
SHEET TOTALS		252										20	14.4	3.6						

STRUCTURE NUMBER FROM	TO	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. (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/ 2 GRATES STD. 840.24	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29	J.B. STD. 840.31 OR STD. 840.32	T.B.D.I. STD. 840.36	STEEL GRATE AND FRAME STD. 840.37	SPRING BOX STD. 840.41	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING C.B. TO J.B.	CONVERT EXISTING O.T.C.B. TO 2GI	15" SIDE DRAIN PIPE ELBOW	18" SIDE DRAIN PIPE ELBOW	24" SIDE DRAIN PIPE ELBOW	30" SIDE DRAIN PIPE ELBOW	36" SIDE DRAIN PIPE ELBOW	15" C.S. PIPE ELBOW	18" C.S. PIPE ELBOW	24" C.S. PIPE ELBOW	42" C.S. PIPE ELBOW	BERM DITCH OUTLET STD. 850.10	MODIFIED CONC. FLUME	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
0457																																				OPEN END
0457	0280																																			
0280		1																																		2 OTCB
0280	0281																					1														
0285					1				1																											SHOULDER DRAIN OUTLET
0285	0283																																			
0284						1			1																											
0284	0285																																			
0286						1			1																											SHOULDER DRAIN OUTLET
0286	0285																																			
0289					1				1																											SHOULDER DRAIN OUTLET
0289	0285																																			
0288						1			1																											
0288	0289																																			
0287						1			1																											
0287	0288																																			
0290						1			1																											SHOULDER DRAIN OUTLET
0290	0289																																			
0293					1				1																											
0293	0289																																			
0292						1			1																											
0292	0293																																			
0291						1			1																											
0291	0292																																			
0294						1			1																											
0294	0293																																			
0296						1			1																											
0296	0293																																			
0295						1			1																											
0295	0296																																			
0297						1			1																											
0297	0296																																			
0271																																				
0268															1																					
0268	0270																																			
0269															1																					
0269	0270																																			
0270												1				1																				
0270	OUT																																			
IN	0270																																			
0275						1	1																													
0275	0276																																			
0276						1	1																													
0276	OUT																		2																	
SHEET TOTALS		1			3	13	2		14			1			2	1			2			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