RAL-2UA2440BPJ

COMPUTED BY: CGM DATE: 3/06/14

CHECKED BY: JRR DATE:

PROJECT NO.	SHEET NO.
U-2579B	3D-13

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 %
653+10 -L-	LT	0250		916.2	911.3		
		0250	0251		911.3	909.1	
653+46 -L-	LT	0251		913.8	909.1		
		0251	0252		909.1	906.0	
653+45 -L-	RT	0255		913.4	906.8		
		0255	0252		906.8	906.5	
653+45 -L-	RT	0254		909.8	907.1		
		0254	0255		907.1	907.0	
652+50 -L-	RT	0253		914.2	911.5		
		0253	0255		911.5	907.0	
653+45 -L-	CL	0252		914.3	906.0		
		0252	0259		906.0	895.3	
657+00 -L-	RT	0256		899.1	896.1		
		0256	0259		896.1	895.8	
657+00 -L-	LT	0258		901.8	897.8		
		0258	0259		897.8	895.0	
657+00 -L-	LT	0257		900.8	898.1		
		0257	0258		898.1	897.8	
657+00-L-	CL	0259		902.6	894.8		
		0259	0262		894.8	879.5	
661+49 -L-	LT	0261		886.2	883.4		
		0261	0262		883.4	880.8	
661+49 -L-	LT	0260		887.5	884.7		
		0260	0261		884.7	883.4	
661+50 -L-	CL	0262		884.8	879.5		
		0262	0264		879.5	862.7	
664+49 -L-	LT	0263		874.8	872.0		
		0263	0264		872.0	863.9	
665+00 -L-	RT	0265		867.0	864.2		
		0265	0264		864.2	863.9	
665+00 -L-	CL	0264		871.1	862.7		
		0264	0267		862.7	856.7	
667+49 -L-	LT	0266		864.4	861.6		
		0266	0267		861.6	857.9	
667+50 -L-	CL	0267		861.9	856.7		
		0267	0278		856.7	843.5	
669+65 -L-	LT	0277		858.6	855.9		
		0277	0278		855.9	847.7	
669+65 -L-	CL	0278		856.5	841.8		
		0278	0279		841.8	841.5	
669 +65 -L-	RT	0279		847.9	841.5		
		0279	OUT		841.5	841.0	
672+01 -L-	CL	0283		853.4	843.0		
		0283	0278		843.0	842.3	
672+00 -L-	LT	0282		855.6	850.3		
		0282	0283		850.3	844.0	
672+00 -L-	LT	0281		854.6	850.6		
		0281	0282		850.6	850.3	
SHEET TOTALS							

FROM	TO	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 .064	18 .064	24 .064	30 .064	36 .079	42 .109	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
0250																															
0250	0251			40																											
0251																															
0251	0252																	84													
0255																															
0255	0252																88														
0254																															
0254	0255	24																													
0253																															
0253	0255															96															
0252																															
0252	0259			356																											
0256																															
0256	0259																108														
0258																															
0258	0259															84															
0257																															
0257	0258															72															
0259																															
0259	0262				452																										
0261																															
0261	0262															88															
0260																															
0260	0261															60															
0262																															
0262	0264				352																										
0263																															
0263	0264															100															
0265																															
0265	0264															108															
0264																															
0264	0267				252																										
0266																															
0266	0267															88															
0267																															
0267	0278				216																										
0277																															
0277	0278															84															
0278																															
0278	0279																					124									
0279																															
0279	OUT							52																							
0283																															
0283	0278						236																								
0282																															
0282	0283																		84												
0281																															
0281	0282																		80												
SHEET TOTALS		24		396	1272		236	52								780	196	84	164			124									

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

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 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	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
0250												1											
0250	0251																						
0251												1											
0251	0252																						
0255												1	1.6										
0255	0252																						
0254												1											
0254	0255																						
0253												1											
0253	0255																						
0252												1	3.3										
0252	0259																						
0256												1											
0256	0259																						
0258												1											
0258	0259																						
0257												1											
0257	0258																						
0259												1	2.8										
0259	0262																						
0261												1											
0261	0262																						
0260												1											
0260	0261																						
0262												1	0.3										
0262	0264																						
0263												1											
0263	0264																						
0265												1											
0265	0264																						
0264												1	3.4										
0264	0267																						
0266												1											
0266	0267																						
0267												1	0.2										
0267	0278																						
0277												1											
0277	0278																						
0278												1	5.0	4.7									
0278	0279																						
0279												1	1.4										
0279	OUT																						
0283												1	5.0	0.4									
0283	0278																						
0282												1	0.3										
0282	0283																						
0281												1											
0281	0282																						
SHEET TOTALS												24	23.3	5.1									

FROM	TO	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
0250									1				1																			40	
0250	0251																																
0251		1				1																											
0251	0252																																
0255									1				1																				
0255	0252																															23	
0254			1			1																											
0254	0255																																
0253			1			1																											
0253	0255																																
0252		1				1																											
0252	0259																																
0256			1			1																											
0256	0259																																
0258			1			1																											
0258	0259																																
0257			1			1																											
0257	0258																																
0259		1				1																											
0259	0262																																
0261			1			1																											
0261	0262																																
0260			1			1																											
0260	0261																																
0262		1				1																											
0262	0264																																
0263			1			1																											
0263	0264																																
0265			1			1																											
0265	0264																																
0264		1				1																											
0264	0267																																
0266			1			1																											
0266	0267																																
0267		1				1																											
0267	0278																																
0277			1			1																											
0277	0278																																
0278		1				1																											SHOULDER DRAIN OUTLET
0278	0279																																
0279		1				1																											
0279	OUT																																
0283		1				1																											SHOULDER DRAIN OUTLET
0283	0278																																
0282			1			1																											
0282	0283																																
0281			1			1																											
0281	0282																																
SHEET TOTALS		9	13			22			2				2																			63	

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