USRAL3LT17006

COMPUTED BY: MDB DATE: 01/24/2022

CHECKED BY: GRC DATE: 01/24/2022

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
B-5717	3D-1

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 %	C. S. PIPE					R. C. PIPE CLASS IV							R. C. PIPE CLASS V			
SIZE									12	15	18	24		12	15	18	24	30	36		12	15	18	
THICKNESS OR GAUGE									.064	.064	.064	.064												
L 13+61	50	LT	0403		716.4																			
			0403	0401		707.9	707.0								36									
L 15+00	49	LT	0406		716.8																			
			0406	0405		711.2	706.7			36														
L 15+10	3	LT	0407		716.7																			
			0407	0406		711.4	711.2								44									
L 16+18	48	LT	0409		717.3																			
			0409	0408		710.6	706.0			36														
L 16+15	2	LT	0410		718.4																			
			0410	0409		711.3	711.1								44									
L 16+15	13	RT	0411		717.0																			
			0411	0410		711.4	711.3								16									
L 16+90	13	RT	0414		717.4																			
			0414	0411		714.4	714.0								76									
L 15+75	13	RT	0412		716.8																			
			0412	0411		711.6	711.4								40									
L 15+75	46	RT	0413		717.9																			
			0413	0412		712.7	711.6								32									
L 17+65	13	RT	0501		718.1																			
			0501	0503		715.1	713.2								28									
L 17+82	46	LT	0502		717.9																			
			0502	0502A		712.6	712.3								76									
L 17+82	7	LT	0503		718.5																			
			0503	0502		713.2	712.6								36									
L 18+70	46	RT	0505		718.4																			
			0505	0504		715.0	707.7	0.3		32														
L 18+30	46	RT	0506		718.4																			
			0506	0505		715.4	715.2								44									
L 19+43	46	RT	0507		718.3																			
			0507	0505		715.3	715.0								72									
L 18+60	46	LT	0502A		718.1																			
			0502A	0509		712.3	711.5								140									
L 20+03	46	LT	0509		718.6																			
			0509	0508		711.5	707.0	1.0		32														
L 22+38	46	RT	0511		719.8																			
			0511	0510		716.8	712.9			36														
L 24+68	54	LT	0513		719.7																			
			0513	0512		716.4	716.1								28									
L 22+86	5	LT	0516		721.6																			
			0516	0514		711.4	709.5								72									
L 24+30	3	LT	0517		721.0																			
L 24+66	1	RT	0518		720.0																			
			0518	0517		716.7	716.5								36									
L 24+72	1	RT	0519		720.0																			
			0519	0518		716.7	716.7								4									
L 24+69	13	LT	0520		720.1																			
			0520	0519		716.8	716.7								16									
L 25+95	1	LT	0521		720.6																			
			0521	0519		717.4	716.8								124									
L 25+95	13	RT	0522		720.9																			
							SHEET TOTALS			172					964									

LINE & STATION	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 (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
L 13+61	0403					1	3.5		1	1					
	0403	0401													
L 15+00	0406					1	0.6		1		1				
	0406	0405													
L 15+10	0407					1	0.3		1			1			1
	0407	0406													
L 16+18	0409					1	1.7		1		1				
	0409	0408													
L 16+15	0410					1	2.1		1			1			1
	0410	0409													
L 16+15	0411					1	0.6		1		1				1
	0411	0410													
L 16+90	0414					1			1		1				1
	0414	0411													
L 15+75	0412					1	0.2		1	1					1
	0412	0411													
L 15+75	0413					1	0.2		1	1					
	0413	0412													
L 17+65	0501					1			1		1				1
	0501	0503													
L 17+82	0502					1	0.3		1	1					
	0502	0502A													
L 17+82	0503					1	0.3		1	1					1
	0503	0502													
L 18+70	0505					1			1			1			
	0505	0504													
L 18+30	0506					1			1			1			
	0506	0505													
L 19+43	0507					1			1			1			
	0507	0505													
L 18+60	0502A					1	0.8		1		1				
	0502A	0509													
L 20+03	0509					1	2.1		1		1				
	0509	0508													
L 22+38	0511					1			1			1			
	0511	0510													
L 24+68	0513					1			1	1					
	0513	0512													
L 22+86	0516					1									
	0516	0514													
L 24+30	0517					1									
L 24+66	0518					1			1	1					1
	0518	0517													
L 24+72	0519					1			1	1					1
	0519	0518													
L 24+69	0520					1			1	1					1
	0520	0519													
L 25+95	0521					1			1			1			
	0521	0519													
L 25+95	0522					1			1		1				
SHEET TOTALS						26	12.7		24	9	8	7			10

LINE & STATION	FROM	TO	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	CONCRETE BRIDGE APPROACH D.I. STD. 840.13	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
L 13+61	0403																									
	0403	0401																								
L 15+00	0406																									
	0406	0405																								
L 15+10	0407																									
	0407	0406																								
L 16+18	0409																									
	0409	0408																								
L 16+15	0410																									
	0410	0409																								
L 16+15	0411																									
	0411	0410																								
L 16+90	0414																									
	0414	0411																								
L 15+75	0412																									
	0412	0411																								
L 15+75	0413																									
	0413	0412																								
L 17+65	0501																									
	0501	0503																								
L 17+82	0502																									
	0502	0502A																								
L 17+82	0503																									
	0503	0502																								
L 18+70	0505																									
	0505	0504																								
L 18+30	0506																									
	0506	0505																								
L 19+43	0507																									
	0507	0505																								
L 18+60	0502A																									
	0502A	0509																								
L 20+03	0509																									
	0509	0508																								
L 22+38	0511																									
	0511	0510																								
L 24+68	0513																									
	0513	0512																								
L 22+86	0516																									
	0516	0514																								
L 24+30	0517																									
L 24+66	0518																									
	0518	0517																								
L 24+72	0519																									
	0519	0518																								
L 24+69	0520																									
	0520	0519																								
L 25+95	0521																									
	0521	0519																								
L 25+95	0522																									
SHEET TOTALS																										

LINE & STATION	FROM	TO	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.	15" C.S. ELBOW	18" C.S. ELBOW	24" C.S. ELBOW	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
L 13+61	0403																	
	0403	0401																
L 15+00	0406																	
	0406	0405									2							
L 15+10	0407																	
	0407	0406																
L 16+18	0409																	
	0409	0408									2							
L 16+15	0410																	
	0410	0409																
L 16+15	0411																	
	0411	0410																
L 16+90	0414																	
	0414	0411																
L 15+75	0412																	
	0412	0411																
L 15+75	0413																	
	0413	0412																
L 17+65	0501																	
	0501	0503																
L 17+82	0502																	
	0502	0502A																
L 17+82	0503																	
	0503	0502																
L 18+70	0505																	
	0505	0504									2							
L 18+30	0506																	
	0506	0505																
L 19+43	0507																	
	0507	0505																
L 18+60	0502A																	
	0502A	0509																
L 20+03	0509																	
	0509	0508									2							
L 22+38	0511																	
	0511	0510									2							
L 24+68	0513																	
	0513	0512																
L 22+86	0516			1			1											See special detail 2C-1
	0516	0514																
L 24+30	0517			1			1											See special detail 2C-1
L 24+66	0518																	Alter standard detail 852.05 to incorporate 0519
	0518	0517																
L 24+72	0519																	Alter standard detail 852.05 to incorporate 0518
	0519	0518																
L 24+69	0520																	
	0520	0519																
L 25+95	0521																	
	0521	0519																
L 25+95	0522																	
SHEET TOTALS				2			2				10							

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