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R4L-WS077

COMPUTED BY:	Jim Davis	DATE:	03/05/19
CHECKED BY:	REO	DATE:	10/22/19

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-5797	3D-2

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 (RCP, CSP, CAAP, HDPE, or PVC) 12	15	18	24	30	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	C. S. PIPE 12	15	18
																		.064	.064	.064
Y1A_S 26+00	20 RT	0526		106.2																
		0526	0527		103.2	102.9														
Y1A_S 25+33	20 RT	0527		107.4																
		0527	0515		102.9	102.6														
Y1B 27+91	21 RT	0528		109.0																
		0528	0529		106.0	105.9														
Y1B 27+91	17 LT	0529		109.1																
		0529	0531		105.9	105.6														
Y1B 27+40	16 LT	0531		109.9																
		0531	0532		105.6	105.0														
RPA 28+20	22 RT	0532		109.2																
		0532	0533		105.0	104.5	0.3													
RPA 27+61	17 RT	0532A		108.2																
		0532A	0532		105.2	104.9														
RAB 14+30	2 RT	0533		108.7																
		0533	0534		104.5	104.2	0.4													
RAB 14+94	3 RT	0534		108.2																
		0534	0535		104.2	85.8	0.5		88				X							
RPB 21+81	0 CL	0539			85.3	84.7														
Y1B 29+23	0 CL	0540			84.6	83.9														
L 40+00	0 CL	0541		88.1																
		0541	0542		84.9	84.3														
L 43+20	0 CL	0543		88.9																
		0543	0545		86.1	85.2			276					X						
L 46+00	0 CL	0545		89.8																
		0545	0546		85.2	84.9														
Y1B 32+75	15 RT	0548		110.4																
		0548	0549		106.8	106.6														
Y1B 32+75	23 LT	0549		110.2																
		0549	0552		106.6	84.0	0.4		120				X							
Y1B 33+07	31 LT	0550		110.0																
		0550	0549		107.0	106.6														
Y1B 33+15	17 RT	0551		110.2																
		0551	0548		107.2	106.8														
Y1B 32+18	0 CL	0553			84.0	83.6														
RPC 25+34	15 RT	0554		109.1																
		0554	0555		106.1	84.6			128				X							
Y1C 38+20	18 LT	0556		102.0																
		0556	0558		99.0	98.2														
Y1C 37+90	18 RT	0557		103.5																
		0557	0558		99.8	98.2														
Y1C 38+20	18 RT	0558		102.2																
		0558	0559		98.2	81.9			92				X							
RPD 22+88	17 LT	0560		105.7																
		0560	0561		102.7	83.8			80				X							
L 51+70	0 CL	0562		88.6																
		0562	0601		85.5	85.0			320					X						
RPA 25+26	0 CL	0570			84.0	84.0														
RPA 21+59	0 CL	0571			82.5	82.5														
RPD 21+49	0 CL	0573			84.0	84.0														
				SHEET TOTALS					1104											

| LINE & STATION | R. C. PIPE CLASS III 12 | 15 | 18 | 24 | 30 | 36 | R. C. PIPE CLASS IV 12 | 15 | 18 | 24 | 30 | 36 | R. C. PIPE CLASS V 12 | 15 | 18 | 24 | 30 | 36 | 18" WELDED STEEL PIPE 0.50" THICK, GRADE B IN SOIL | 24" WELDED STEEL PIPE 0.50" 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 (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 | D.I. STD. 852.04 OR STD. 852.06 | C.B. STD. 852.05 | CONCRETE TRANSITIONAL SECTION | 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 | 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 | ### SPRING BOX PIPE | SPRING BOX STD. 840.41 | MODIFIED CONCRETE FLUME | M.H. STD. 840.51, STD. 840.52, OR STD. 840.53 | M.H. FRAME AND COVER STD. 840.54 | CONVERT DI TO JB | ADJUST C.B. | ADJUST D.I. | PIPE CLEANOUT (EACH) | 15" SIDE DRAIN PIPE ELBOW | 15" PARALLEL PIPE END SCTION | 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 |
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