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TGSZJR-LAPTOP

COMPUTED BY:	Zachary Richard, PE	DATE:	10/12/2022
CHECKED BY:	David Petty, PE	DATE:	2/20/2026

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
A-0009CD	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)

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

LINE & STATION	OFFSET	STRUCTURE NUMBER FROM	TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC) 15	18	24	30	36	42	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
Y2 111+92	20 LT	4606		1999.0													
Y2 113+73	20 LT	4608		1995.4													
		4608	4609		1992.2	1991.8		24							X	X	
Y2 113+82	40 LT	4609		1995.0													
		4609	4610		1991.8	1989.7											
Y2 115+00	40 LT	4610		1992.9													
		4610	4611		1989.7	1986.9	0.6										
Y2 115+91	39 LT	4611		1990.1													
		4611	4613		1986.6	1984.3	0.6										
Y2 116+89	20 LT	4612		1989.5													
Y2 115+50	20 RT	4615		1992.1													
		4615	4616		1988.9	1988.7		24							X	X	
Y2 118+00	20 RT	4617		1987.4													
		4617	4618		1984.2	1982.7		24							X	X	
Y2 119+50	20 LT	4619		1984.5													
		4619	4620		1981.3	1975.0		32						X			
Y2 121+00	20 RT	4621		1981.7													
		4621	4622		1978.5	1973.4		32						X			
Y2 123+25	20 LT	4623		1977.4													
		4623	4624		1974.2	1967.0		36						X			
Y2 124+00	20 RT	4625		1976.0													
		4625	4626		1971.0	1962.6		40						X			
Y2 117+20	47 LT	4627		1988.5													
Y2 126+50	20 LT	4701		1971.0													
		4701	4702		1967.8	1959.3		36						X			
Y2 126+89	20 RT	4703		1970.1													
		4703	4704		1966.9	1966.1											
Y2 127+29	20 RT	4704		1969.3													
		4704	4705		1966.1	1959.2		36						X			
Y2 128+62	20 LT	4706		1966.2													
		4706	4707		1963.0	1956.9		32						X			
Y2 131+00	18 LT	4708		1961.7													
		4708	4709		1958.5	1950.8		40						X			
Y2 132+06	17 LT	4710		1961.0													
		4710	4711		1957.8	1951.4		36						X			
Y2 132+89	58 RT	4712		1961.3													
		4712	4714		1958.8	1956.7											
Y2 132+42	57 RT	4713			1959.9	1959.4											
Y2 132+89	16 LT	4714		1961.0													
		4714	4716		1956.7	1951.0	0.6										
Y2 132+48	16 LT	4715		1961.0													
		4715	4710		1958.0	1957.8											
Y2 133+36	28 RT	4717		1962.9													
		4717	4718		1960.9	1960.8		12							X	X	
Y2 142+66	13 LT	4805			1994.8	1969.5											
Y2 149+80	96 RT	4806		2067.0													
		4806	4807		2065.5	2034.9			60					X			
Y2 149+55	42 RT	4807		2037.9													
		4807	4808		2034.9	2030.7	0.5		52						X	X	
Y2 149+00	39 RT	4808		2035.7													
SHEET TOTALS								404	112								

LINE & STATION	FROM	TO	C. S. PIPE 15 (.064)	18 (.064)	24 (.064)	30 (.079)	36 (.079)	42 (.109)	48 (.109)	R. C. PIPE CLASS III 18	24	30	36	42	48	R. C. PIPE CLASS IV 15	18	24	30	36	42	ENDWALLS STD. 838.01 OR STD. 838.11 (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
Y2 111+92	4606																												1
Y2 113+73	4608																						1			1			1
	4608	4609																											
Y2 113+82	4609																						1						
	4609	4610														116													
Y2 115+00	4610																						1						
	4610	4611														88													
Y2 115+91	4611																						1						
	4611	4613															112												
Y2 116+89	4612																												1
Y2 115+50	4615																						1			1		1	
	4615	4616																											
Y2 118+00	4617																						1			1		1	
	4617	4618																											
Y2 119+50	4619																						1			1			1
	4619	4620																											
Y2 121+00	4621																						1			1		1	
	4621	4622																											
Y2 123+25	4623																						1			1			1
	4623	4624																											
Y2 124+00	4625																						1			1		1	
	4625	4626																											
Y2 117+20	4627																										1		
Y2 126+50	4701																						1			1			1
	4701	4702																											
Y2 126+89	4703																						1			1		1	
	4703	4704														40													
Y2 127+29	4704																						1			1		1	
	4704	4705																											
Y2 128+62	4706																						1			1			1
	4706	4707																											
Y2 131+00	4708																						1			1			1
	4708	4709																											
Y2 132+06	4710																						1			1			1
	4710	4711																											
Y2 132+89	4712																												
	4712	4714																	76										
Y2 132+42	4713																76												
Y2 132+89	4714																						1			1		1	
	4714	4716				40																							
Y2 132+48	4715																						1			1	1		
	4715	4710														40													
Y2 133+36	4717																						1						
	4717	4718																											
Y2 142+66	4805			140																									
Y2 149+80	4806																												
	4806	4807																											
Y2 149+55	4807																						1						
	4807	4808																											
Y2 149+00	4808																						1						
SHEET TOTALS				140		40										284	188		76				21			15	2	7	9

LINE & STATION	FROM	TO	CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATES STD. 840.16	G.D.I. TYPE "B" STD. 840.18, 840.27, OR 840.45	G.D.I. TYPE "D" STD. 840.19 OR STD. 840.28	G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20	G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29	J.B. STD. 840.31 OR STD. 840.32	ANGLED VANE GRATES AND FRAMES STD. 840.33	T.B.D.I. STD. 840.35	T.B.D.I. FOR STEEL GRATES STD. 840.36	TEMP STEEL PLATE COVER SEE SHEET 2D-1	M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	M.H. FRAME AND COVER STD. 840.54	TB PRECAST DRAINAGE STRUCTURE STD. 840.46
Y2 111+92	4606																		
Y2 113+73	4608																		
	4608	4609																	
Y2 113+82	4609				1	1													
	4609	4610																	
Y2 115+00	4610										1			1					
	4610	4611																	
Y2 115+91	4611										1			1					
	4611	4613																	
Y2 116+89	4612																		
Y2 115+50	4615																		
	4615	4616																	
Y2 118+00	4617																		
	4617	4618																	
Y2 119+50	4619																		
	4619	4620																	
Y2 121+00	4621																		
	4621	4622																	
Y2 123+25	4623																		
	4623	4624																	
Y2 124+00	4625																		
	4625	4626																	
Y2 117+20	4627																		
Y2 126+50	4701																		
	4701	4702																	
Y2 126+89	4703																		
	4703	4704																	
Y2 127+29	4704																		
	4704	4705																	
Y2 128+62	4706																		
	4706	4707																	
Y2 131+00	4708																		
	4708	4709																	
Y2 132+06	4710																		
	4710	4711																	
Y2 132+89	4712																		
	4712	4714																	
Y2 132+42	4713																		
Y2 132+89	4714																		
	4714	4716																	
Y2 132+48	4715																		
	4715	4710																	
Y2 133+36	4717								1					1					
	4717	4718																	
Y2 142+66	4805																		
Y2 149+80	4806																		
	4806	4807																	
Y2 149+55	4807						1			1									
	4807	4808																	
Y2 149+00	4808						1			1									
SHEET TOTALS					1	1	2		1	2	2			3					

LINE & STATION	FROM	TO	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 C.B. SEE SHT 2D-2	CONVERT EXISTING D.I. TO C.B. SEE SHT 2D-2	ADJUST D.I.	ADJUST M.H.	ADJUST C.B.	15" C.S. ELBOW, 0.064" THICK	18" C.S. ELBOW, 0.064" THICK	15" ELBOW	18" ELBOW	BERM DRAINAGE OUTLET STD. 850.10 (SY)	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
Y2 111+92	4606					1														Convert J.B. to CB-G See Sheet 2D-2
Y2 113+73	4608																			
	4608	4609																		
Y2 113+82	4609																			
	4609	4610																		
Y2 115+00	4610																			
	4610	4611																		
Y2 115+91	4611																			
	4611	4613																		
Y2 116+89	4612						1													Convert D.I. to CB-G See Sheet 2D-2
Y2 115+50	4615																			
	4615	4616																		
Y2 118+00	4617																			
	4617	4618																		
Y2 119+50	4619																			
	4619	4620																		
Y2 121+00	4621																			
	4621	4622																		
Y2 123+25	4623																			
	4623	4624																		
Y2 124+00	4625																			
	4625	4626																		
Y2 117+20	4627					1														Convert J.B. to CB-E See Sheet 2D-2
Y2 126+50	4701																			
	4701	4702																		
Y2 126+89	4703																			
	4703	4704																		
Y2 127+29	4704																			
	4704	4705																		
Y2 128+62	4706																			
	4706	4707																		
Y2 131+00	4708																			
	4708	4709																		
Y2 132+06	4710																			
	4710	4711																		
Y2 132+89	4712																			
	4712	4714																		
Y2 132+42	4713																			
Y2 132+89	4714																			
	4714	4716																		
Y2 132+48	4715																			
	4715	4710																		
Y2 133+36	4717																			
	4717	4718																		
Y2 142+66	4805											2								
Y2 149+80	4806														11					18" BDO
	4806	4807												1						
Y2 149+55	4807																			
	4807	4808																		
Y2 149+00	4808																			
SHEET TOTALS						2	1					2		1	11					