COMPUTED BY:
 MJB
 DATE:
 1/16/2023

 CHECKED BY:
 ASB
 DATE:
 11/7/2023

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PROJECT REFERENCE NO. SHEET NO. R-2577A 3D-9

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" & UNDER)

LINE & STATION		STRUCTURE NO.	NOI	ATION	ATION	RED SLOPE	SIDE DRAIN PIPE (RCP, CSP, CAAP, HDPE, PP or PVC)			Por	C.S. PIPE		R.C. PIPE CLASS III			R.C. PIPE CLASS IV		PIPE AS NOTED		STD. STD. (UN	STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE)		QUANTITIES FOR DRAINAGE STRUCTURES *TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B')		FF GR AND STA	RAME, RATES, D HOOD ANDARD 340.03	CRETE TRANSITIONAL SECTION			0.20	0.24 840.29									C.B. N.D.I. D.I. G.D.I. G.D.I.(N.S	NARRO\ INL DROP GRATED D	H BASIN DW DROP ILET P INLET			
SIZE	OFFSET		L TOP ELEVAT	INVERT ELEVA	VERT ELEV	IUM REQUIF	15" 18" 2	4" 30"		15	5" 18"	24" 30" 36	" 42" 48	15" 18	24" 30"	36" 42"	48" 15	5" 18" 24"	30" 36"	24" 24'	" 30" 30	" 48" 4				FT	В					27	28 TES STD. 84	TES STD. 84 ATES. STD.	J. 840.30		6. 4				J. 840.71		J.B. M.H. T.B.D.I.	JUNCTI MANI TRAFFIC	TION BOX NHOLE BEARING PINLET
THICKNESS OR GAUGE		FROM		N.	Ξ	NINIW %		DO NOT USE RCP	O NOT USE CSP	USE HDPE, PP, OR P	.064	.064 .079	109	501.						W.S. (IN SOIL)	တ် ≷ တွဲ	W.S. (IN SOIL)	M.S. (NOT IN SOIL) R.C.P.	C.S.P.	HRU 5.0')		Æ	1 OR STD. 840.02 B X	PE OF GRATE		OR STD. 840.15 D GRATE STD. 840.16	STD. 840.17 OR 840.2 STD. 840.18 OR 840.2	STD. 840.19 OR 840.2 IITH TWO FLAT GRAT	AME WITH TWO GRA WITH TWO FLAT GR	DP INLET LIN. FT. STI TD. 840.41 I OR 840.32		AND COVER STD. 840.54	NAGE OUTLET 840.04 OR 840.05	L (CY)	WS NO. & SIZE	K PIPE PLUG, C.Y. SI	LIN. FT.	T.B.J.B.	TRAFFIC	BEARING TON BOX
										DO NOT										Trenchless W	enchle	Trenchless	Trenchless W		PER EACH (0' T	5.0' THRU 10.0'	10.0' AND ABO\	C.B. STD. 840.0	F G	DROP INLET CATCH BASIN	D.I. STD. 840.14	G.D.I. TYPE "A" G.D.I. TYPE "B"	G.D.I. TYPE "D" G.D.I. FRAME W	G.D.I. (N.S.) FRA	DRIVEWAY DRC SPRING BOX, S' J.B. STD. 840.31	TBJB STD. 840.	M.H. FRAME AN ADJUST MH	BERM DRAINAC	FLOWABLEFIL	C.S. PIPE ELBO	CONC. & BRICK	PIPE REMOVAL		REMARKS	
SHEET 9 (cont.)		T 931 9	125	942.0	941.6	0.5%								16																		++-													
- L- 69+48.60 - L- 69+48.60 - L- 69+48.60	-38 L	T 931 9 T 935 9	945.6		938.2									140											1			1	1																
- L- 68+10.99 - L- 68+10.99	-67 L	T 932 T 932	941.5	938.3	038.2	0.4%				+				32											1						1 1														
- L- 68+10.99	- 	T 919	943.4		930.2	0.470								32											1	0.2		1	1																
- L- 68+10.99 - L- 66+88.67	-38 L	T 919 9	939.5	938.2	935.5	0.6%	+			++				124						++					1						1 1	++										30			
- L- 66+88.67	-54 L	T 933 !)12	935.5	935.5	0.4%								20																															
- L- 66+88.67 - L- 66+88.67	-38 L		941.3	935.2	934.7	0.5%								12	28										1	1.1		1	1											\Rightarrow		61			
- L- 65+60.51 - L- 65+60.51	-38 L	T 925 T 925	939.2		932.8	0.5%	+			++				18	80					+					1		+	1	1			++								+					
- L- 63+77.77	- 1 - 1	T 934	936.2	 	022.4	0.50/								40											1			1 1																	
- L- 63+77.77 - L- 63+77.77	-51 L -38 L	T 934 9	937.5	_	933.1	0.5%								16											1	0.2		1	1																
- L- 63+77.77 - L- 62+74.00			937.2	932.3	931.3	0.4%				++				+	104										1	1.8		1	1			++										52			
- L- 62+74.00			937.2	930.3	930.2	0.5%										28										1.0		'	1																
- L- 65+61.25	-50 L	T 964 T 964	939.5	935.5	025.0	0.50/								12											1						1 1														
- L- 65+61.25 -L- 57+42.00	51 R	T 945	120	935.5	935.0	0.5%	20							12																															
-L- 58+03.00	50 R	T 946					20																																						
-L- 60+81.00 -L- 62+22.00	69 R	T 947 T 948					20										+																												
-L- 63+74.00	66 R	T 929					20																																						
-L- 65+70.00	12 R	T 949					20																																						
OUEET 40	+	$+$ $\overline{-}$								+ -																						+													
SHEET 10 - L- 71+50.00	38 R	T 1001	949.0																						1			1	1													25			
- L- 71+50.00	38 R		949.2	945.0	941.6	0.4%	+			$+\overline{1}$				208						+	 				1			1	1			$+ \overline{+}$								<u> </u>		21			
- L- 76+40.00 - L- 76+40.00	38 R 38 R	T 1002 T 1002 10	949.2	1	934.2	0.4%								26	60													1	1																
- L- 79+00.00 - L- 79+00.00	38 R	T 1003	938.5	 	922.8	O 40/									48										1		$\overline{}$	1	1			+													
- L- 79+00.00 - L- 81+50.00	38 R 46 R	T 1003 10	927.0		<i>3</i> ∠∠.0	0.470								24											1_			1	1																
- L- 81+50.00 - L- 81+87.00	46 R		925.7		921.5	0.4%									36										1	3.7		1	1																
- L- 81+87.00 - L- 81+87.00		T 1006 10	_	917.0	913.7	0.4%									36											5.1		1	1																
- L- 76+70.00 - L- 76+70.00	-38 L	T 1014	948.3	_	942.2	U 10/	$+ \overline{+}$			$+ \overline{+}$		+	 		56						 				1		<u> </u>	1	1			+								$\overline{+}$					
- L- 77+25.00	-38 L	T 1015	946.5																						1			1	1											\pm					
- L- 77+25.00 - Y5- 23+50.00	- i - i -	T 1015 10 T 1046	937.5	942.2	933.5	0.4%	- -			+ +				1 1	16		_						_					1	1			+								——		 			
- Y5- 23+50.00		-)16	933.5	933.3	0.4%								(60													<u> </u>	1																
- Y5- 23+00.00 - Y5- 23+00.00		T 1070	937.1	934.3	933.6	0 5%				++				40			_								1							1 1		1 1											
0		. 1070 10	, 10	JU4.J	555.0									40																										$\equiv \pm$					
3D-9 SHEET TOTAL	LS					1	100 20		<u> </u>					608 112	20 104	28									19	7.0		15 1	10 4		3	3 1		1					<u> </u>			189			

24 Way\Proj\R-2577A_rdy_psh*R*

P: (919) 878-9560 8601 Six Forks Road, Forum 1,Suite 700 Raleigh, North Carolina 27615-3960 NC License No. F-0112

NC License No. F-0112

Engineers | Construction Managers | Planners | Scientists www.rkk.com

Responsive People | Creative Solutions