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COMPUTED BY: WNK DATE: 12/30/19
CHECKED BY: EPA DATE: 01/06/20

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
BR-0118	3D-1

PREPARED IN THE OFFICE OF: KCA KISINGER CAMPO & ASSOCIATES — NC FIRM LICENSE No: C-1506, 301 Fayetteville St., Suite 1500, Raleigh, NC 27601, (919)882-7839

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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.

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

STATION / SIZE / THICKNESS OR GAUGE	LOCATION (LT, RT, OR CL)'	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) 12"	15"	18"	24"	30"	36"	42"	48"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
L 13+37	13 LT	400		96.9															
		400	401		94.1	92.50			12							X			
L 13+37	13 RT	402		96.9															
		402	403		94.1	91.7			16							X			
L 14+47	13 LT	404		96.9															
		404	405		94.1	94													
L 14+47	13 RT	405		96.9															
		405	406		94	92.1			12							X			
TL 13+51	8 LT	500																	
TL 14+46	8 LT	501																	
SHEET TOTALS									40										

STATION	FROM	TO	C.S. PIPE 12" .064	15" .064	18" .064	24" .064	30" .079	36" .079	42" .109	48" .109	R.C. PIPE CLASS III 12"	15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS IV 12"	15"	18"	24"	30"	36"	42"	48"
L 13+37	400																									
	400	401																								
L 13+37	402																									
	402	403																								
L 14+47	404																									
	404	405																		24						
L 14+47	405																									
	405	406																								
TL 13+51	500																									
TL 14+46	501																									
SHEET TOTALS																				24						

STATION	FROM	TO	** " R.C. PIPE (CLASS V)	***" RC PIPE CULVERTS, CONTRACTOR DESIGN	***" RC PIPE CULVERTS, CONTRACTOR DESIGN	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') LIN. FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	CONCRETE TRANSITIONAL SECTION DROP INLET	CATCH BASIN	G.D.I. (N.S.) FRAME WITH TWO GRATES STD 840.29	T.B.D.I. STD. 840.35		MODIFIED CONCRETE FLUME		15" DRAINAGE PIPE ELBOW	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	CONC. COLLARS CL. "B" C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.	REMARKS
L 13+37	400									1									1	1								
	400	401																						1				
L 13+37	402									1									1	1								
	402	403																						1				
L 14+47	404									1									1	1								
	404	405																										
L 14+47	405									1									1	1								
	405	406																						1				
TL 13+51	500																					1						REMOVE WITH DETOUR
TL 14+46	501																					1						REMOVE WITH DETOUR
SHEET TOTALS										4									4	4		2		3				

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I.(N.S.)	(NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

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