9/16/02

COMPUTED BY: JBG DATE: 05-15-03
CHECKED BY: DWG DATE: 11/24/04

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO. U-3837 | SHEET NO. 3-D

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & 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	Class III R.C. Pipe (Unless Noted Otherwise) 12"	15"	18"	24"	30"	36"	42"	48"	Bituminous Coated C.S. Pipe Type B (Unless Noted Othrwise) 12" .064	15" .064	18" .064	24" .064	24"	30" .079	30"	36" .079	36"	42" .109	42"	48" .109	48"
-L- 44+80.00	LT.	47		786.50	783.75																							
-L- 44+80.00	LT.	47	48		783.75	782.65				12																		
-L- 44+80.00	LT.	48		786.65	782.65	779.70																						
-L- 44+80.00	LT.	48	OUT		779.70					20																		
-L- 46+55.00	LT.	49		778.50	769.10																							
-L- 46+55.00	LT.	IN	49		771.00	769.10									12													
-L- 48+80.00	LT.	51		786.10	783.10																							
-L- 48+80.00	LT.	51	52		783.10	780.96			164																			
-L- 50+47.00	LT.	52		783.96	780.96																							
-L- 50+47.00	LT.	52	55		780.96	778.00			20																			
-L- 51+64.00	LT.	IN	53			773.12					8																	
-L- 51+64.00	LT.	53		782.56	773.12																							
-L- 51+64.00	LT.	53	OUT		773.12						12																	
-L- 51+79.00	LT.	54		780.96	775.87																							
-L- 51+79.00	LT.	54	55		775.87	775.70			8																			
-L- 51+79.00	LT.	IN	55			778.00			4																			
-L- 51+79.00	LT.	55		781.75	775.35																							
-L- 51+79.00	LT.	54	56		775.87	776.76			128																			
		55	59		775.35	767.40																						
-L- 53+10.00	LT.	56		779.76	776.76																							
-L- 50+47.00	LT.	57		784.82	782.32																							
-L- 50+47.00	RT.	57	58		782.32	780.55			48																			
-L- 50+47.00	RT.	58		783.55	780.55																							
-L- 50+47.00	RT.	58	60		780.55	778.70			128																			
-L- 51+79.00	RT.	59		781.96	767.40																							
-L- 55+00.00	RT.	61		778.00	775.00																							
-L- 55+00.00	RT.	61	62		775.00	774.45			28																			
-L- 55+00.00	RT.	62		777.45	774.45																							
-L- 55+00.00	RT.	62	OUT		774.45	774.00				36																		
SHEET TOTAL									528		20				12													
										68																		
PROJ. TOTAL									2828		752						100		180									
										656					12													
SAY																												

Station / Structure	15" Side Drain Pipe	18" Side Drain Pipe	24" Side Drain Pipe	Endwalls Std. 838.01, Std. 838.11 or Std. 838.80 (Unless Noted Otherwise) Cu. Yds. 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. 840.04 or Std. 840.05	Frame, Grates and Hood Standard 840.03 Type of Grate E	F	G		D.I. Std. 840.14 or Std. 840.15	D.I. Frame & Grates Std. 840.16	M.D.I. Type "B" Std. 840.18 or 840.27	M.D.I. (NS) Frame with Two Grates Std. 840.24	J.B. Std. 840.31 or 840.32	M.H. Frame & Cover Std. 840.54	Performed Scour Hole	Conc. Apron for Drop Inlet		30" RCP, Class IV	T.B.J.B. Std. 840.34					
-L- 44+80.00 LT. 47						1										1	1												
-L- 44+80.00 LT. 48						1	.95		1		1																		
-L- 46+55.00 LT. 49						1	4.40											1											
-L- 46+55.00 LT. IN 49				8.0																									
-L- 48+80.00 LT. 51						1			1			1																	
-L- 50+47.00 LT. 52						1			1			1																	
-L- 51+64.00 LT. 53						1	4.44		1			1																	
-L- 51+79.00 LT. 54						1	.09		1			1																	
-L- 51+79.00 LT. 55						1	1.40												1					1					
-L- 53+10.00 LT. 56						1			1			1																	
-L- 50+47.00 LT. 57						1								1	1						1								
-L- 50+47.00 RT. 58						1			1		1																		
-L- 51+79.00 RT. 59						1	5	4.56											1					1					
-L- 55+00.00 RT. 61						1								1	1						1								
-L- 55+00.00 RT. 62						1			1		1																		
SHEET TOTAL				8.0		14		4.56	8		3	5		2	2	1	1	1	2		2			2					
							16.28																						
PROJ. TOTAL				8.0		57		21.91	39	4	18	17		5	5	6	6	5	5	1	5		64	2					
							38.61																						
SAY							39	*29																					

Station / Structure	Bit Coat CS Elbows No. & Size	Flowable Fill	Conc. Collars Cl. "B" C.Y. Std 840.72	Conc. & Brick Pipe Plug, C.Y. Std. 840.71	Pipe Removal Lin.Ft.	Remarks
-L- 44+80.00 LT. 48 OUT			.4465			
-L- 46+55.00 LT. IN 49						REM HEADWALL
-L- 48+80.00 LT. 51 52						REM FES, CB, & 15" RCP
-L- 50+47.00 LT. 52 55			.399			
-L- 51+64.00 LT. IN 53			.5526			REM 6'-24" RCP
-L- 51+64.00 LT. 53 OUT			.5526			REM CB & 9'-24" RCP
-L- 51+79.00 LT. IN 55			.399			
-L- 51+79.00 LT. 54 56				.09		REM CBs
-L- 51+79.00 RT. 59						REM DI
SHEET TOTAL			2.3497	.09		
PROJ. TOTAL	2@15"	26.5	3.405		672	
	2@24"			.119		
SAY		30	4.0	0.5		

ABBREVIATIONS

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