SURVEYED BY
SUPERVISED BY AAA
DESIGNED BY Dewberry (703) 849-0607

IN PROGRESS 10/22/08
NOT FOR CONSTRUCTION

DRAINAGE SUMMARY

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED		STATE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
7/17/08		VA.		7		2C(4)

LOCATION		PIPE																									RADIAL PIPE	RADIAL PIPE
STRUCTURE NO. TO STRUCTURE NO.	STATION OF UPSTREAM STRUCTURE	CONCRETE PIPE											ELIPTICAL PIPE					BOX CULVERT (see sheet 2C(16))		END SECTIONS ES-1		END SECTION ES-1 or ES-2						
		DIAMETER (INCHES)																		DIAMETER (INCHES)								
		15	18	24	30	36	42	48	54	60	72		23x14	30x19	45x29	68x43	76x48	6x4	24x6.67	15	18	15	18	24	30	36	15	60
		LINEAR FEET																										
3-1 to 3-3				273																								
3-2																												
3-2 to 3-1				40																								
3-3 to 3(1)-4				278																								
3-4 to 3-5		150																										
3-5 to 3-6		150																										
3-6 to 3(1)-7		150																										
3(1)-1 to 3(1)-2				172																								
3(1)-2 to 3(1)-3				161																								
3(1) to 4-1				152																								
3(1)-4 to 3(1)-1				290																								
3(1)-5				142																				2				
3(1)-6 to 3(1)-9			148																									
3(1)-7 to 3(1)-6			148																									
3(1)-9 to 3(1)-8			16																									
3(1)-10															172													
SUBTOTAL		450	312	1508											172									2				

STRUCTURE NO. TO STRUCTURE NO.	COVER	MINOR STRUCTURE EXCAVATION		EROSION CONTROL TREATMENT: EC-3 TYPE B	EC-1 CLASS AI TYPE A	EC-1 CLASS I TYPE B	EC-1 CLASS I	MISC. STRUCTURES AND MATERIALS: MANHOLE MH-1 OR 2	MOD. SWM-1	HDPE PIPE	LEVEL SPREADER	JB-1	SPECIAL DESIGN JB	PRECAST ARCH	EC-2	EC-3 TYPE A	CAST IN PLACE PIPE CULV. CON.: CLASS A-3 CONCRETE	REINFORCED STEEL	GEOTEXTILE FABRIC	CONC. CRADLE: CLASS A3 CONC	ENDWALLS: CLASS A-3 CONCRETE	REINFORCED STEEL	HDPE PIPE	SPECIAL DESIGN EW	CLASS A3 CONCRETE FOR JB	REINF. STEEL FOR JB	BEDDING MATERIAL AGGREGATE No.57	CLASS I BACKFILL MATERIAL	CLASS II BACKFILL MATERIAL	REMARKS
	FT.	C.Y.	%	SQY.				L.F.	EA	42"	EA	EA	EA	LF	SY	SY	CY	LB	SY	CY	CY	LB	30"	EA	CY	LB	TON	TON	TON	
3-1 to 3-3	3.0																													
3-2								4.16																						
3-2 to 3-1	2.7																													
3-3 to 3(1)-4	2.9																													
3-4 to 3-5	2.5																													
3-5 to 3-6	2.8																													
3-6 to 3(1)-7	2.8																													
3(1)-1 to 3(1)-2	2.9																													
3(1)-2 to 3(1)-3	3.2																													
3(1) to 4-1	3.1																													
3(1)-4 to 3(1)-1	2.8																													
3(1)-5				6.67																										
3(1)-6 to 3(1)-9	2.8																													
3(1)-7 to 3(1)-6	2.7																													
3(1)-9 to 3(1)-8	2.8																													
3(1)-10							15.1														7.75									
SUBTOTAL				6.7			15.1	4.16													7.75									

LOCATION		DROP INLETS																																														REMARKS
STRUCTURE NO.	STATION OF STRUCTURE	STD. DI-3B								STD. DI-3BB								STD. T-DI-3C		STD. DI-3C			STD. DI-4B			MOD. DI-4BB			DI-7	DI-3A		HEIGHT OF DROP INLET	STD. DI-3E		MOD. DI-4E	MOD. EXIST. STR.		STD. T-DI-3B		STD. T-DI-4B			MOD. DI-3B		MOD. DI-3C		SLOT LENGTH IN FEET	
		4	6	8	10	12	14	16	18	4	6	8	10	12	14	16	18	12	18	6	8	10	6	8	10	6	8	10	EA	EA			4	8	8	EA		14		4	6		4	6	6	10		
		EACH																																														
3-1		1																														5.05																
3-3																																5.11		1														
3-4				1																												3.92																
3-5			1																													4.22																
3-6			1																													4.22																
3(1)-1																																4.99		1														
3(1)-2			1																													5.46																
3(1)-3			1																													5.35																
3(1)-4																																5.02		1														
3(1)-6			1																													4.48																
3(1)-7			1																													4.37																
3(1)-9			1																													4.47																
3(2)-1																																				1												
4-1			1																													5.33																
4-2			1																													5.28																
4-4			1																																													
SUBTOTAL		1	10	1																														3		1												

COMMONWEALTH OF VIRGINIA
DAVID JOHN MAHONEY
Lic. No. 020798
PROFESSIONAL ENGINEER

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
A			2C(4)