

Stormwater Detention Calculations

I. GENERAL SITE DATA

A. Contributing Watershed: A= 0.03923324 acres
or 1,709 SF

B. Existing Site Conditions

Existing Roof:	715 SF	C=	0.95
Existing Pavement:	0 SF	C=	0.95
Lawn/Rain Garden Area:	994 SF	C=	0.15

C. Proposed Average Coefficient of Imperviousness (C)

Existing Building Footprint:	715	x	0.95	=	679.25	
Existing Pavement:	-	x	0.95	=	0	
Lawn/Rain Garden Area	994	x	0.15	=	149.1	
					<u>828</u>	/ 1709
(Soils: FOX < 4% slope, Type B)						0.48

D. Allowable Outflow (Qa) (for detention sizing- 100 yr. Storm event)

Qa=.15 cfs x 0.03923324 acres = 0.005885 cfs

III FIRST FLUSH COMPUTATIONS(.5 " over site) (to satisfy Washtenaw County Drain Commissioner's req.)

V= 1815.0 x 0.03923324 x 0.48 = 34.5145833 cu.ft.

V VOLUME CALCULATIONS:

Elevation	Surface Area	(Surface Area + Surface Area) x Depth 2	Accum. Volume
929.00 bottom el (0")	18 SF	11 CF	11 CF
929.25 bottom el (3")	70 SF	26 CF	37 CF
929.50 top el (6")	136 SF		
limit of disturbance (6")			