



Total Site Area : 0.01  
 Equivalent Impermeable Site Area : 32 m2  
 Allowable Storm Runoff Rate : 2.5 l/s per hA of Total site Area  
 Allowable Site Runoff : 0.0 l/s

Extreme Rainfall Event "M10-0"				Runoff		Attenuation
Duration	Duration	depth	rate	Total	Excess	Volume
minutes	hrs	mm	mm/hr	l/s	l/s	m3
5	0.08	7.90	94.80	0.84	0.82	0.25
10	0.17	11.70	70.20	0.62	0.60	0.36
15	0.25	14.00	56.00	0.50	0.47	0.43
30	0.50	18.50	37.00	0.33	0.30	0.55
	1	23.80	23.80	0.21	0.19	0.67
	2	29.50	14.75	0.13	0.11	0.76
	4	37.00	9.25	0.08	0.06	0.82
	6	42.00	7.00	0.06	0.04	0.80
	10	49.60	4.96	0.04	0.02	0.69
	24	65.90	2.75	0.02	0.00	0.00

Required Attenuation Volume for extreme Storm Event :

1 m3

Storm Table 2alt. Calculation of 10 year attenuation volume requirement - M10 Storm.

Total Site Area : 0.01  
 Equivalent Impermeable Site Area : 32 m2  
 Allowable Storm Runoff Rate : 2.5 l/s per hA of Total site Area  
 Allowable Site Runoff : 0.0 l/s

Return Period : 10 years

Extreme Rainfall Event				Runoff		Attenuation
Duration	Duration	depth	rate	Total	Excess	Volume
minutes	hrs	mm	mm/hr	l/s	l/s	m3
1	0.02	2.20	132.00	1.17	1.15	0.07
2	0.03	3.80	114.00	1.01	0.99	0.12
5	0.08	6.90	82.80	0.74	0.71	0.21
10	0.17	9.90	59.40	0.53	0.50	0.30
15	0.25	12.50	50.00	0.44	0.42	0.38
30	0.50	16.30	32.60	0.29	0.26	0.48
	1	20.70	20.70	0.18	0.16	0.57
	2	26.00	13.00	0.12	0.09	0.65
	4	32.00	8.00	0.07	0.05	0.66
	6	38.00	6.33	0.06	0.03	0.68
	12	48.00	4.00	0.04	0.01	0.46
	24	57.00	2.38	0.02	0.00	0.00
	48	68.00	1.42	0.01	-0.01	0.00

Required Attenuation Volume for extreme 10 year Storm Event :

1 m3

**Storm Table 2. Calculation of 10 year attenuation volume requirement**



Total Site Area : 0.01  
 Equivalent Impermeable Site Area : 32 m<sup>2</sup>  
 Allowable Storm Runoff Rate : 2.5 l/s per hA of Total site Area  
 Allowable Site Runoff : 0.0 l/s

Return Period : 20 years

Extreme Rainfall Event				Runoff	Attenuation	
Duration	Duration	depth	rate	Total	Excess	Volume
minutes	hrs	mm	mm/hr	l/s	l/s	m <sup>3</sup>
1	0.02	2.70	162.00	1.44	1.42	0.08
2	0.03	4.60	138.00	1.23	1.20	0.14
5	0.08	8.30	99.60	0.89	0.86	0.26
10	0.17	12.10	72.60	0.65	0.62	0.37
15	0.25	15.40	61.60	0.55	0.52	0.47
30	0.50	19.90	39.80	0.35	0.33	0.59
	1	25.00	25.00	0.22	0.20	0.71
	2	31.00	15.50	0.14	0.11	0.81
	4	38.00	9.50	0.08	0.06	0.86
	6	44.00	7.33	0.07	0.04	0.87
	12	55.00	4.58	0.04	0.02	0.68
	24	66.00	2.75	0.02	0.00	-0.05
	48	78.00	1.63	0.01	-0.01	0.00

Required Attenuation Volume for extreme 30 year Storm Event :

**1 m<sup>3</sup>**

**Storm Table 3. Calculation of 30 year attenuation volume requirement**

Total Site Area :		<b>0.01</b>			
Equivalent Impermeable Site Area :		<b>32</b>	m2		
Allowable Storm Runoff Rate :		<b>2.5</b>	l/s per hA of Total site Area		
Allowable Site Runoff :		<b>0.0</b>	l/s		

Return Period : **100 years**

Extreme Rainfall Event				Runoff		Attenuation
Duration	Duration	depth	rate	Total	Excess	Volume
minutes	hrs	mm	mm/hr	l/s	l/s	m3
1	0.02	3.30	198.00	1.76	1.74	0.10
2	0.03	5.80	174.00	1.55	1.52	0.18
5	0.08	10.50	126.00	1.12	1.10	0.33
10	0.17	15.50	93.00	0.83	0.80	0.48
15	0.25	19.90	79.60	0.71	0.68	0.61
30	0.50	26.00	52.00	0.46	0.44	0.79
	1	32.00	32.00	0.28	0.26	0.93
	2	38.00	19.00	0.17	0.14	1.04
	4	46.00	11.50	0.10	0.08	1.11
	6	54.00	9.00	0.08	0.06	1.19
	12	67.00	5.58	0.05	0.02	1.06
	24	79.00	3.29	0.03	0.00	0.37
	48	92.00	1.92	0.02	-0.01	0.00

Required Attenuation Volume for extreme 100 year Storm Event : **1 m3**

**Storm Table 6. Calculation of 100 year attenuation volume requirement.**



