

sw attenuation
hallmark dexine/coldwall
new office block



Designed By ds
Checked By

Source Control W.10.4

Summary of Results for 30 year Return Period (+40%)

Storm Duration (mins)	Maximum Control (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m³)	Status
15 Summer	5.0	5.0	129.1488	0.1887	2.9	O K
30 Summer	5.0	5.0	129.1633	0.2032	3.1	O K
60 Summer	5.0	5.0	129.1363	0.1762	2.7	O K
120 Summer	5.0	5.0	129.0603	0.1003	1.6	O K
180 Summer	4.5	4.5	129.0128	0.0528	0.8	O K
240 Summer	4.1	4.1	128.9813	0.0212	0.3	O K
360 Summer	3.6	3.6	128.9600	0.0000	0.0	O K
480 Summer	3.0	3.0	128.9600	0.0000	0.0	O K
600 Summer	2.5	2.5	128.9600	0.0000	0.0	O K
720 Summer	2.2	2.2	128.9600	0.0000	0.0	O K
960 Summer	1.8	1.8	128.9600	0.0000	0.0	O K
1440 Summer	1.3	1.3	128.9600	0.0000	0.0	O K
2160 Summer	1.0	1.0	128.9600	0.0000	0.0	O K
2880 Summer	0.8	0.8	128.9600	0.0000	0.0	O K
4320 Summer	0.6	0.6	128.9600	0.0000	0.0	O K
5760 Summer	0.5	0.5	128.9600	0.0000	0.0	O K
7200 Summer	0.4	0.4	128.9600	0.0000	0.0	O K
8640 Summer	0.4	0.4	128.9600	0.0000	0.0	O K
10080 Summer	0.3	0.3	128.9600	0.0000	0.0	O K
15 Winter	5.0	5.0	129.1848	0.2247	3.5	O K
30 Winter	5.0	5.0	129.1913	0.2312	3.6	O K
60 Winter	5.0	5.0	129.1323	0.1722	2.7	O K
120 Winter	4.6	4.6	129.0263	0.0663	1.0	O K
180 Winter	4.0	4.0	128.9703	0.0103	0.2	O K
240 Winter	3.5	3.5	128.9600	0.0000	0.0	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	68.99	13
30 Summer	47.08	22
60 Summer	30.81	38
120 Summer	19.53	68
180 Summer	14.75	98
240 Summer	12.05	128
360 Summer	9.05	0
480 Summer	7.38	0
600 Summer	6.29	0
720 Summer	5.52	0
960 Summer	4.49	0
1440 Summer	3.35	0
2160 Summer	2.49	0
2880 Summer	2.02	0
4320 Summer	1.50	0
5760 Summer	1.21	0
7200 Summer	1.03	0
8640 Summer	0.90	0
10080 Summer	0.81	0
15 Winter	68.99	14
30 Winter	47.08	23
60 Winter	30.81	40
120 Winter	19.53	70
180 Winter	14.75	98
240 Winter	12.05	0

Summary of Results for 30 year Return Period (+40%)							
Storm Duration (mins)	Maximum Control (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m³)	Status	
360 Winter	2.6	2.6	128.9600	0.0000	0.0	O	K
480 Winter	2.1	2.1	128.9600	0.0000	0.0	O	K
600 Winter	1.8	1.8	128.9600	0.0000	0.0	O	K
720 Winter	1.6	1.6	128.9600	0.0000	0.0	O	K
960 Winter	1.3	1.3	128.9600	0.0000	0.0	O	K
1440 Winter	1.0	1.0	128.9600	0.0000	0.0	O	K
2160 Winter	0.7	0.7	128.9600	0.0000	0.0	O	K
2880 Winter	0.6	0.6	128.9600	0.0000	0.0	O	K
4320 Winter	0.4	0.4	128.9600	0.0000	0.0	O	K
5760 Winter	0.4	0.4	128.9600	0.0000	0.0	O	K
7200 Winter	0.3	0.3	128.9600	0.0000	0.0	O	K
8640 Winter	0.3	0.3	128.9600	0.0000	0.0	O	K
10080 Winter	0.2	0.2	128.9600	0.0000	0.0	O	K
Storm Duration (mins)	Rain (mm/hr)		Time-Peak (mins)				
360 Winter	9.05		0				
480 Winter	7.38		0				
600 Winter	6.29		0				
720 Winter	5.52		0				
960 Winter	4.49		0				
1440 Winter	3.35		0				
2160 Winter	2.49		0				
2880 Winter	2.02		0				
4320 Winter	1.50		0				
5760 Winter	1.21		0				
7200 Winter	1.03		0				
8640 Winter	0.90		0				
10080 Winter	0.81		0				

Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	30	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.300	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+40
Cv (Winter)	0.840		

Time / Area Diagram

Total Area (ha) = 0.035

Time	(mins)	Area
from:	to:	(ha)
0	4	0.035

Tank/Pond Details

Invert Level (m) 128.960 Ground Level (m) 130.400

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.00	15.5	0.50	15.5	1.00	15.5	1.50	15.5	2.00	15.5	2.50	15.5
0.10	15.5	0.60	15.5	1.10	15.5	1.60	15.5	2.10	15.5		
0.20	15.5	0.70	15.5	1.20	15.5	1.70	15.5	2.20	15.5		
0.30	15.5	0.80	15.5	1.30	15.5	1.80	15.5	2.30	15.5		
0.40	15.5	0.90	15.5	1.40	15.5	1.90	15.5	2.40	15.5		

Depth / Flow Outflow Control

Invert Level of Control 128.860

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.10	3.9	0.80	5.7	2.00	8.9	4.00	12.6	7.00	16.6
0.20	5.0	1.00	6.3	2.20	9.3	4.50	13.3	7.50	17.2
0.30	4.8	1.20	6.9	2.40	9.7	5.00	14.0	8.00	17.8
0.40	4.5	1.40	7.4	2.60	10.1	5.50	14.7	8.50	18.3
0.50	5.0	1.60	7.9	3.00	10.9	6.00	15.4	9.00	18.8
0.60	5.4	1.80	8.4	3.50	11.7	6.50	16.0	9.50	19.4