Summary of Results for 10 year Return Period (+50%)

Half Drain Time : 1141 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	25.592	0.342	0.2	12.0	O K
30 min Summer	25.696	0.446	0.2	15.7	O K
60 min Summer	25.807	0.557	0.2	19.7	O K
120 min Summer	25.923	0.673	0.3	23.9	O K
180 min Summer	25.990	0.740	0.3	26.4	O K
240 min Summer	26.036	0.786	0.3	28.0	O K
360 min Summer	26.094	0.844	0.3	30.1	O K
480 min Summer	26.129	0.879	0.3	31.4	O K
600 min Summer	26.149	0.899	0.3	32.1	O K
720 min Summer	26.161	0.911	0.3	32.5	O K
960 min Summer	26.172	0.922	0.3	32.9	O K
1440 min Summer	26.181	0.931	0.3	33.2	O K
2160 min Summer	26.173	0.923	0.3	32.9	O K
2880 min Summer	26.152	0.902	0.3	32.2	O K
4320 min Summer	26.101	0.851	0.3	30.4	O K
5760 min Summer	26.051	0.801	0.3	28.5	O K
7200 min Summer	26.004	0.754	0.3	26.9	O K
8640 min Summer	25.961	0.711	0.3	25.3	O K
10080 min Summer	25.921	0.671	0.2	23.9	O K
15 min Winter	25.632	0.382	0.2	13.4	O K
30 min Winter	25.749	0.499	0.2	17.6	O K
60 min Winter	25.874	0.624	0.2	22.1	O K
120 min Winter	26.006	0.756	0.3	26.9	O K
180 min Winter	26.083	0.833	0.3	29.7	O K
240 min Winter	26.135	0.885	0.3	31.6	O K
360 min Winter	26.204	0.954	0.3	34.1	O K
480 min Winter	26.246	0.996	0.3	35.6	O K
600 min Winter	26.273	1.023	0.3	36.6	O K
720 min Winter	26.290	1.040	0.3	37.2	O K
960 min Winter	26.306	1.056	0.3	37.7	O K
1440 min Winter	26.310	1.060	0.3	37.9	O K
2160 min Winter	26.296	1.046	0.3	37.4	O K
2880 min Winter	26.263	1.013	0.3	36.2	O K
4320 min Winter	26.183	0.933	0.3	33.3	O K
5760 min Winter	26.105	0.855	0.3	30.5	O K
7200 min Winter	26.035	0.785	0.3	28.0	O K
8640 min Winter	25.972	0.722	0.3	25.7	O K
10080 min Winter	25.915	0.665	0.2	23.6	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	82.824	0.0	19
30 min Summer	54.698	0.0	34
60 min Summer	34.733	0.0	64
120 min Summer	21.518	0.0	124
180 min Summer	16.130	0.0	182
240 min Summer	13.106	0.0	242
360 min Summer	9.767	0.0	362
480 min Summer	7.922	0.0	482
600 min Summer	6.730	0.0	600
720 min Summer	5.890	0.0	720
960 min Summer	4.770	0.0	828
1440 min Summer	3.540	0.0	1082
2160 min Summer	2.625	0.0	1488
2880 min Summer	2.123	0.0	1904
4320 min Summer	1.572	0.0	2724
5760 min Summer	1.270	0.0	3568
7200 min Summer	1.076	0.0	4328
8640 min Summer	0.940	0.0	5184
10080 min Summer	0.839	0.0	5944
15 min Winter	82.824	0.0	19
30 min Winter	54.698	0.0	33
60 min Winter	34.733	0.0	62
120 min Winter	21.518	0.0	122
180 min Winter	16.130	0.0	180
240 min Winter	13.106	0.0	238
360 min Winter	9.767	0.0	354
480 min Winter	7.922	0.0	468
600 min Winter	6.730	0.0	582
720 min Winter	5.890	0.0	692
960 min Winter	4.770	0.0	904
1440 min Winter	3.540	0.0	1126
2160 min Winter	2.625	0.0	1596
2880 min Winter	2.123	0.0	2048
4320 min Winter	1.572	0.0	2940
5760 min Winter	1.270	0.0	3808
7200 min Winter	1.076	0.0	4616
8640 min Winter	0.940	0.0	5448
10080 min Winter	0.839	0.0	6256

©1982-2017 XP Solutions

Rainfall Details

Rainfall Model	FSR	Ratio R	0.348	Cv (Winter)	0.840
Return Period (years)	10	Summer Storms	Yes	Shortest Storm (mins)	15
Region	England and Wales	Winter Storms	Yes	Longest Storm (mins)	10080
M5-60 (mm)	19.300	Cv (Summer)	0.750	Climate Change %	+50

Time Area Diagram

Total Area (ha) 0.078

Time (mins) From:	To:	Area (ha)
0	4	0.078

©1982-2017 XP Solutions

Model Details

Storage is Online Cover Level (m) 27.500

Complex Structure

Trench Soakaway

Infiltration Coefficient Base (m/hr) 0.13600 Invert Level (m) 25.250 Cap Volume Depth (m) 1.600
Infiltration Coefficient Side (m/hr) 0.13600 Trench Width (m) 1.0 Cap Infiltration Depth (m) 1.600
Safety Factor 10.0 Trench Length (m) 28.0
Porosity 0.95 Slope (1:X) 1000.0

Cellular Storage

Invert Level (m) 25.250 Infiltration Coefficient Side (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Base (m/hr) 0.00000 Safety Factor 2.0

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	10.0	0.0	1.600	10.0	0.0

©1982-2017 XP Solutions