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

Half Drain Time : 752 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	28.967	0.267	0.1	3.5	O K
30 min Summer	29.048	0.348	0.1	4.6	O K
60 min Summer	29.133	0.433	0.1	5.7	O K
120 min Summer	29.218	0.518	0.1	6.8	O K
180 min Summer	29.265	0.565	0.1	7.5	O K
240 min Summer	29.293	0.593	0.1	7.8	O K
360 min Summer	29.325	0.625	0.1	8.3	O K
480 min Summer	29.339	0.639	0.1	8.5	O K
600 min Summer	29.344	0.644	0.1	8.5	O K
720 min Summer	29.346	0.646	0.1	8.5	O K
960 min Summer	29.345	0.645	0.1	8.5	O K
1440 min Summer	29.333	0.633	0.1	8.4	O K
2160 min Summer	29.305	0.605	0.1	8.0	O K
2880 min Summer	29.275	0.575	0.1	7.6	O K
4320 min Summer	29.215	0.515	0.1	6.8	O K
5760 min Summer	29.159	0.459	0.1	6.1	O K
7200 min Summer	29.108	0.408	0.1	5.4	O K
8640 min Summer	29.063	0.363	0.1	4.8	O K
10080 min Summer	29.022	0.322	0.1	4.2	O K
15 min Winter	28.999	0.299	0.1	3.9	O K
30 min Winter	29.091	0.391	0.1	5.1	O K
60 min Winter	29.187	0.487	0.1	6.4	O K
120 min Winter	29.285	0.585	0.1	7.7	O K
180 min Winter	29.339	0.639	0.1	8.4	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	122
180 min Summer	16.130	0.0	182
240 min Summer	13.106	0.0	242
360 min Summer	9.767	0.0	360
480 min Summer	7.922	0.0	480
600 min Summer	6.730	0.0	548
720 min Summer	5.890	0.0	606
960 min Summer	4.770	0.0	732
1440 min Summer	3.540	0.0	998
2160 min Summer	2.625	0.0	1424
2880 min Summer	2.123	0.0	1840
4320 min Summer	1.572	0.0	2640
5760 min Summer	1.270	0.0	3456
7200 min Summer	1.076	0.0	4184
8640 min Summer	0.940	0.0	4936
10080 min Summer	0.839	0.0	5744
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	120
180 min Winter	16.130	0.0	180

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

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
240 min Winter	29.373	0.673	0.1	8.9	O K
360 min Winter	29.414	0.714	0.1	9.4	O K
480 min Winter	29.434	0.734	0.1	9.7	O K
600 min Winter	29.443	0.743	0.1	9.8	O K
720 min Winter	29.445	0.745	0.1	9.9	O K
960 min Winter	29.442	0.742	0.1	9.8	O K
1440 min Winter	29.425	0.725	0.1	9.6	O K
2160 min Winter	29.381	0.681	0.1	9.0	O K
2880 min Winter	29.333	0.633	0.1	8.4	O K
4320 min Winter	29.240	0.540	0.1	7.1	O K
5760 min Winter	29.157	0.457	0.1	6.0	O K
7200 min Winter	29.084	0.384	0.1	5.1	O K
8640 min Winter	29.021	0.321	0.1	4.2	O K
10080 min Winter	28.966	0.266	0.1	3.5	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
240 min Winter	13.106	0.0	238
360 min Winter	9.767	0.0	352
480 min Winter	7.922	0.0	464
600 min Winter	6.730	0.0	572
720 min Winter	5.890	0.0	674
960 min Winter	4.770	0.0	764
1440 min Winter	3.540	0.0	1070
2160 min Winter	2.625	0.0	1536
2880 min Winter	2.123	0.0	1988
4320 min Winter	1.572	0.0	2848
5760 min Winter	1.270	0.0	3640
7200 min Winter	1.076	0.0	4464
8640 min Winter	0.940	0.0	5192
10080 min Winter	0.839	0.0	5952

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Rainfall Details

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

Time Area Diagram

Total Area (ha) 0.023

Time (mins) From:	To:	Area (ha)
0	4	0.023

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Model Details

Storage is Online Cover Level (m) 30.500

Complex Structure

Trench Soakaway

Infiltration Coefficient Base (m/hr)	0.16500	Trench Width (m)	2.0
Infiltration Coefficient Side (m/hr)	0.16500	Trench Length (m)	7.0
Safety Factor	10.0	Slope (1:X)	1000.0
Porosity	0.95	Cap Volume Depth (m)	1.600
Invert Level (m)	28.700	Cap Infiltration Depth (m)	1.600

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