Summary of Results for 100 year Return Period (+50%)

Half Drain Time : 252 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	24.160	0.660	0.9	15.4	O K
30 min Summer	24.365	0.865	1.0	20.2	O K
60 min Summer	24.560	1.060	1.2	24.9	O K
120 min Summer	24.705	1.205	1.3	28.3	O K
180 min Summer	24.741	1.241	1.3	29.2	O K
240 min Summer	24.749	1.249	1.3	29.4	O K
360 min Summer	24.746	1.246	1.3	29.3	O K
480 min Summer	24.727	1.227	1.3	28.9	O K
600 min Summer	24.700	1.200	1.3	28.2	O K
720 min Summer	24.669	1.169	1.2	27.5	O K
960 min Summer	24.606	1.106	1.2	26.0	O K
1440 min Summer	24.490	0.990	1.1	23.2	O K
2160 min Summer	24.349	0.849	1.0	19.9	O K
2880 min Summer	24.235	0.735	0.9	17.2	O K
4320 min Summer	24.063	0.563	0.8	13.1	O K
5760 min Summer	23.938	0.438	0.7	10.1	O K
7200 min Summer	23.843	0.343	0.6	7.9	O K
8640 min Summer	23.771	0.271	0.6	6.1	O K
10080 min Summer	23.712	0.212	0.5	4.7	O K
15 min Winter	24.240	0.740	0.9	17.3	O K
30 min Winter	24.472	0.972	1.1	22.8	O K
60 min Winter	24.694	1.194	1.3	28.1	O K
120 min Winter	24.869	1.369	1.4	32.2	O K
180 min Winter	24.918	1.418	1.4	33.4	O K
240 min Winter	24.919	1.419	1.4	33.4	O K
360 min Winter	24.912	1.412	1.4	33.2	O K
480 min Winter	24.883	1.383	1.4	32.5	O K
600 min Winter	24.842	1.342	1.4	31.6	O K
720 min Winter	24.796	1.296	1.3	30.5	O K
960 min Winter	24.703	1.203	1.3	28.3	O K
1440 min Winter	24.534	1.034	1.1	24.3	O K
2160 min Winter	24.339	0.839	1.0	19.6	O K
2880 min Winter	24.189	0.689	0.9	16.1	O K
4320 min Winter	23.975	0.475	0.7	11.0	O K
5760 min Winter	23.831	0.331	0.6	7.6	O K
7200 min Winter	23.728	0.228	0.5	5.1	O K
8640 min Winter	23.652	0.152	0.5	3.3	O K
10080 min Winter	23.594	0.094	0.4	1.9	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	135.580	0.0	18
30 min Summer	91.216	0.0	33
60 min Summer	58.567	0.0	62
120 min Summer	36.294	0.0	120
180 min Summer	27.017	0.0	166
240 min Summer	21.749	0.0	194
360 min Summer	16.006	0.0	258
480 min Summer	12.864	0.0	328
600 min Summer	10.849	0.0	398
720 min Summer	9.435	0.0	466
960 min Summer	7.561	0.0	606
1440 min Summer	5.523	0.0	878
2160 min Summer	4.026	0.0	1272
2880 min Summer	3.213	0.0	1644
4320 min Summer	2.333	0.0	2380
5760 min Summer	1.857	0.0	3120
7200 min Summer	1.555	0.0	3888
8640 min Summer	1.347	0.0	4584
10080 min Summer	1.192	0.0	5336
15 min Winter	135.580	0.0	18
30 min Winter	91.216	0.0	32
60 min Winter	58.567	0.0	62
120 min Winter	36.294	0.0	118
180 min Winter	27.017	0.0	172
240 min Winter	21.749	0.0	214
360 min Winter	16.006	0.0	274
480 min Winter	12.864	0.0	352
600 min Winter	10.849	0.0	428
720 min Winter	9.435	0.0	502
960 min Winter	7.561	0.0	646
1440 min Winter	5.523	0.0	926
2160 min Winter	4.026	0.0	1340
2880 min Winter	3.213	0.0	1728
4320 min Winter	2.333	0.0	2468
5760 min Winter	1.857	0.0	3232
7200 min Winter	1.555	0.0	3960
8640 min Winter	1.347	0.0	4664
10080 min Winter	1.192	0.0	5344

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Rainfall Details

Rainfall Model	FSR	Ratio R	0.348	Cv (Winter)	0.840
Return Period (years)	100	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) 0.063

Time (mins) From:	To:	Area (ha)
0	4	0.063

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Model Details

Storage is Online Cover Level (m) 25.850

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.52200	Invert Level (m)	23.500	Cap Volume Depth (m)	1.600
Infiltration Coefficient Side (m/hr)	0.52200	Trench Width (m)	1.0	Cap Infiltration Depth (m)	1.600
Safety Factor	10.0	Trench Length (m)	25.0		
Porosity	0.95	Slope (1:X)	1000.0		

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