Summary of Results for 100 year Return Period

Half Drain Time : 684 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	24.018	0.318	0.3	11.3	O K
30 min Summer	24.116	0.416	0.3	15.1	O K
60 min Summer	24.220	0.520	0.3	19.0	O K
120 min Summer	24.318	0.618	0.4	22.7	O K
180 min Summer	24.366	0.666	0.4	24.6	O K
240 min Summer	24.391	0.691	0.4	25.5	O K
360 min Summer	24.415	0.715	0.4	26.4	O K
480 min Summer	24.420	0.720	0.4	26.6	O K
600 min Summer	24.420	0.720	0.4	26.6	O K
720 min Summer	24.418	0.718	0.4	26.5	O K
960 min Summer	24.408	0.708	0.4	26.2	O K
1440 min Summer	24.381	0.681	0.4	25.1	O K
2160 min Summer	24.334	0.634	0.4	23.3	O K
2880 min Summer	24.291	0.591	0.4	21.7	O K
4320 min Summer	24.215	0.515	0.3	18.8	O K
5760 min Summer	24.150	0.450	0.3	16.3	O K
7200 min Summer	24.095	0.395	0.3	14.2	O K
8640 min Summer	24.047	0.347	0.3	12.4	O K
10080 min Summer	24.006	0.306	0.3	10.9	O K
15 min Winter	24.054	0.354	0.3	12.7	O K
30 min Winter	24.165	0.465	0.3	16.9	O K
60 min Winter	24.282	0.582	0.4	21.4	O K
120 min Winter	24.395	0.695	0.4	25.6	O K
180 min Winter	24.451	0.751	0.4	27.8	O K
240 min Winter	24.481	0.781	0.4	28.9	O K
360 min Winter	24.514	0.814	0.4	30.2	O K
480 min Winter	24.525	0.825	0.5	30.6	O K
600 min Winter	24.525	0.825	0.5	30.6	O K
720 min Winter	24.519	0.819	0.4	30.4	O K
960 min Winter	24.509	0.809	0.4	30.0	O K
1440 min Winter	24.472	0.772	0.4	28.6	O K
2160 min Winter	24.404	0.704	0.4	26.0	O K
2880 min Winter	24.340	0.640	0.4	23.6	O K
4320 min Winter	24.231	0.531	0.3	19.4	O K
5760 min Winter	24.141	0.441	0.3	16.0	O K
7200 min Winter	24.067	0.367	0.3	13.2	O K
8640 min Winter	24.005	0.305	0.3	10.8	O K
10080 min Winter	23.953	0.253	0.3	8.9	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	90.386	0.0	19
30 min Summer	60.811	0.0	34
60 min Summer	39.045	0.0	64
120 min Summer	24.196	0.0	122
180 min Summer	18.011	0.0	182
240 min Summer	14.499	0.0	242
360 min Summer	10.670	0.0	360
480 min Summer	8.576	0.0	460
600 min Summer	7.233	0.0	512
720 min Summer	6.290	0.0	572
960 min Summer	5.040	0.0	702
1440 min Summer	3.682	0.0	980
2160 min Summer	2.684	0.0	1388
2880 min Summer	2.142	0.0	1812
4320 min Summer	1.555	0.0	2596
5760 min Summer	1.238	0.0	3400
7200 min Summer	1.037	0.0	4176
8640 min Summer	0.898	0.0	4928
10080 min Summer	0.795	0.0	5648
15 min Winter	90.386	0.0	19
30 min Winter	60.811	0.0	33
60 min Winter	39.045	0.0	62
120 min Winter	24.196	0.0	120
180 min Winter	18.011	0.0	178
240 min Winter	14.499	0.0	236
360 min Winter	10.670	0.0	350
480 min Winter	8.576	0.0	460
600 min Winter	7.233	0.0	564
720 min Winter	6.290	0.0	600
960 min Winter	5.040	0.0	740
1440 min Winter	3.682	0.0	1052
2160 min Winter	2.684	0.0	1496
2880 min Winter	2.142	0.0	1932
4320 min Winter	1.555	0.0	2768
5760 min Winter	1.238	0.0	3576
7200 min Winter	1.037	0.0	4392
8640 min Winter	0.898	0.0	5104
10080 min Winter	0.795	0.0	5856

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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 %	+0

Time Area Diagram

Total Area (ha) 0.068

Time (mins) From:	To:	Area (ha)
0	4	0.068

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Model Details

Storage is Online Cover Level (m) 25.850

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.15300	Invert Level (m)	23.700	Cap Volume Depth (m)	1.200
Infiltration Coefficient Side (m/hr)	0.15300	Trench Width (m)	1.0	Cap Infiltration Depth (m)	1.200
Safety Factor	10.0	Trench Length (m)	40.0		
Porosity	0.95	Slope (1:X)	1000.0		

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