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

Half Drain Time : 63 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	23.700	0.400	5.2	25.9	O K
30 min Summer	23.789	0.489	5.7	31.6	O K
60 min Summer	23.839	0.539	6.0	34.8	O K
120 min Summer	23.852	0.552	6.1	35.7	O K
180 min Summer	23.836	0.536	6.0	34.6	O K
240 min Summer	23.814	0.514	5.9	33.2	O K
360 min Summer	23.768	0.468	5.6	30.2	O K
480 min Summer	23.723	0.423	5.3	27.3	O K
600 min Summer	23.683	0.383	5.1	24.7	O K
720 min Summer	23.646	0.346	4.9	22.4	O K
960 min Summer	23.583	0.283	4.5	18.3	O K
1440 min Summer	23.489	0.189	4.0	12.2	O K
2160 min Summer	23.400	0.100	3.4	6.4	O K
2880 min Summer	23.355	0.055	3.2	3.5	O K
4320 min Summer	23.339	0.039	2.4	2.5	O K
5760 min Summer	23.331	0.031	2.0	2.0	O K
7200 min Summer	23.327	0.027	1.7	1.7	O K
8640 min Summer	23.323	0.023	1.5	1.5	O K
10080 min Summer	23.321	0.021	1.3	1.3	O K
15 min Winter	23.753	0.453	5.5	29.3	O K
30 min Winter	23.858	0.558	6.1	36.0	O K
60 min Winter	23.918	0.618	6.5	39.9	O K
120 min Winter	23.927	0.627	6.5	40.5	O K
180 min Winter	23.900	0.600	6.4	38.7	O K
240 min Winter	23.863	0.563	6.1	36.4	O K
360 min Winter	23.790	0.490	5.7	31.6	O K
480 min Winter	23.724	0.424	5.3	27.4	O K
600 min Winter	23.665	0.365	5.0	23.6	O K
720 min Winter	23.615	0.315	4.7	20.3	O K
960 min Winter	23.531	0.231	4.2	14.9	O K
1440 min Winter	23.415	0.115	3.5	7.5	O K
2160 min Winter	23.347	0.047	2.9	3.0	O K
2880 min Winter	23.338	0.038	2.4	2.4	O K
4320 min Winter	23.328	0.028	1.8	1.8	O K
5760 min Winter	23.323	0.023	1.4	1.5	O K
7200 min Winter	23.319	0.019	1.2	1.2	O K
8640 min Winter	23.317	0.017	1.1	1.1	O K
10080 min Winter	23.315	0.015	1.0	1.0	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	82.824	0.0	17
30 min Summer	54.698	0.0	31
60 min Summer	34.733	0.0	52
120 min Summer	21.518	0.0	84
180 min Summer	16.130	0.0	120
240 min Summer	13.106	0.0	154
360 min Summer	9.767	0.0	222
480 min Summer	7.922	0.0	288
600 min Summer	6.730	0.0	352
720 min Summer	5.890	0.0	414
960 min Summer	4.770	0.0	540
1440 min Summer	3.540	0.0	780
2160 min Summer	2.625	0.0	1128
2880 min Summer	2.123	0.0	1468
4320 min Summer	1.572	0.0	2200
5760 min Summer	1.270	0.0	2936
7200 min Summer	1.076	0.0	3584
8640 min Summer	0.940	0.0	4288
10080 min Summer	0.839	0.0	5072
15 min Winter	82.824	0.0	17
30 min Winter	54.698	0.0	31
60 min Winter	34.733	0.0	56
120 min Winter	21.518	0.0	90
180 min Winter	16.130	0.0	128
240 min Winter	13.106	0.0	166
360 min Winter	9.767	0.0	236
480 min Winter	7.922	0.0	304
600 min Winter	6.730	0.0	372
720 min Winter	5.890	0.0	436
960 min Winter	4.770	0.0	560
1440 min Winter	3.540	0.0	796
2160 min Winter	2.625	0.0	1100
2880 min Winter	2.123	0.0	1476
4320 min Winter	1.572	0.0	2196
5760 min Winter	1.270	0.0	2928
7200 min Winter	1.076	0.0	3664
8640 min Winter	0.940	0.0	4400
10080 min Winter	0.839	0.0	5128

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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) 0.190

Time (mins) From:	To:	Area (ha)
0	4	0.190

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Model Details

Storage is Online Cover Level (m) 25.200

Complex Structure

Cellular Storage

Invert Level (m) 23.300 Infiltration Coefficient Side (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Base (m/hr) 0.00000 Safety Factor 10.0

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	11.0	0.0	1.600	11.0	0.0	1.601	0.0	0.0

Trench Soakaway

Infiltration Coefficient Base (m/hr) 1.80700 Invert Level (m) 23.300 Cap Volume Depth (m) 1.600
Infiltration Coefficient Side (m/hr) 1.80700 Trench Width (m) 1.0 Cap Infiltration Depth (m) 1.600
Safety Factor 10.0 Trench Length (m) 57.0
Porosity 0.95 Slope (1:X) 0.0

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