Summary of Results for 100 year Return Period

Half Drain Time : 6157 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	97.988	0.378	0.0	7.9	O K
30 min Summer	98.105	0.495	0.0	10.4	O K
60 min Summer	98.228	0.618	0.0	12.9	O K
120 min Summer	98.353	0.743	0.0	15.5	O K
180 min Summer	98.425	0.815	0.0	17.0	O K
240 min Summer	98.474	0.864	0.0	18.1	O K
360 min Summer	98.543	0.933	0.0	19.5	O K
480 min Summer	98.594	0.984	0.0	20.6	O K
600 min Summer	98.632	1.022	0.0	21.4	O K
720 min Summer	98.663	1.053	0.0	22.0	O K
960 min Summer	98.709	1.099	0.0	23.0	O K
1440 min Summer	98.766	1.156	0.0	24.2	O K
2160 min Summer	98.807	1.197	0.0	25.0	O K
2880 min Summer	98.821	1.211	0.0	25.3	O K
4320 min Summer	98.811	1.201	0.0	25.1	O K
5760 min Summer	98.790	1.180	0.0	24.7	O K
7200 min Summer	98.767	1.157	0.0	24.2	O K
8640 min Summer	98.744	1.134	0.0	23.7	O K
10080 min Summer	98.720	1.110	0.0	23.2	O K
15 min Winter	98.033	0.423	0.0	8.8	O K
30 min Winter	98.165	0.555	0.0	11.6	O K
60 min Winter	98.302	0.692	0.0	14.5	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	98.140	0.0	19
30 min Summer	64.441	0.0	34
60 min Summer	40.301	0.0	64
120 min Summer	24.345	0.0	124
180 min Summer	17.884	0.0	184
240 min Summer	14.282	0.0	244
360 min Summer	10.373	0.0	364
480 min Summer	8.266	0.0	484
600 min Summer	6.927	0.0	604
720 min Summer	5.992	0.0	724
960 min Summer	4.764	0.0	962
1440 min Summer	3.442	0.0	1442
2160 min Summer	2.483	0.0	2160
2880 min Summer	1.968	0.0	2880
4320 min Summer	1.415	0.0	4192
5760 min Summer	1.119	0.0	4792
7200 min Summer	0.933	0.0	5552
8640 min Summer	0.803	0.0	6312
10080 min Summer	0.708	0.0	7064
15 min Winter	98.140	0.0	19
30 min Winter	64.441	0.0	34
60 min Winter	40.301	0.0	64

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Summary of Results for 100 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
120 min Winter	98.443	0.833	0.0	17.4	O K
180 min Winter	98.524	0.914	0.0	19.1	O K
240 min Winter	98.579	0.969	0.0	20.3	O K
360 min Winter	98.658	1.048	0.0	21.9	O K
480 min Winter	98.715	1.105	0.0	23.1	O K
600 min Winter	98.759	1.149	0.0	24.0	O K
720 min Winter	98.794	1.184	0.0	24.7	O K
960 min Winter	98.847	1.237	0.0	25.9	O K
1440 min Winter	98.914	1.304	0.0	27.3	O K
2160 min Winter	98.966	1.356	0.0	28.3	O K
2880 min Winter	98.989	1.379	0.0	28.8	O K
4320 min Winter	98.991	1.381	0.0	28.9	O K
5760 min Winter	98.965	1.355	0.0	28.3	O K
7200 min Winter	98.936	1.326	0.0	27.7	O K
8640 min Winter	98.909	1.299	0.0	27.2	O K
10080 min Winter	98.880	1.270	0.0	26.5	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
120 min Winter	24.345	0.0	124
180 min Winter	17.884	0.0	182
240 min Winter	14.282	0.0	242
360 min Winter	10.373	0.0	360
480 min Winter	8.266	0.0	478
600 min Winter	6.927	0.0	596
720 min Winter	5.992	0.0	716
960 min Winter	4.764	0.0	952
1440 min Winter	3.442	0.0	1416
2160 min Winter	2.483	0.0	2116
2880 min Winter	1.968	0.0	2796
4320 min Winter	1.415	0.0	4108
5760 min Winter	1.119	0.0	5360
7200 min Winter	0.933	0.0	5760
8640 min Winter	0.803	0.0	6656
10080 min Winter	0.708	0.0	7568

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.900	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.043

Time (mins) From:	To:	Area (ha)
0	4	0.043

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Model Details

Storage is Online Cover Level (m) 99.620

Cellular Storage Structure

Invert Level (m) 97.610 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00576 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00576

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	22.0	22.0	1.700	0.0	63.6
1.600	22.0	63.6			

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