Summary of Results for 100 year Return Period

Half Drain Time : 2824 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	97.803	0.193	0.0	0.7	O K
30 min Summer	97.863	0.253	0.0	1.0	O K
60 min Summer	97.924	0.314	0.0	1.2	O K
120 min Summer	97.986	0.376	0.0	1.4	O K
180 min Summer	98.021	0.411	0.0	1.6	O K
240 min Summer	98.044	0.434	0.0	1.6	O K
360 min Summer	98.075	0.465	0.0	1.8	O K
480 min Summer	98.096	0.486	0.0	1.8	O K
600 min Summer	98.111	0.501	0.0	1.9	O K
720 min Summer	98.122	0.512	0.0	1.9	O K
960 min Summer	98.136	0.526	0.0	2.0	O K
1440 min Summer	98.147	0.537	0.0	2.0	O K
2160 min Summer	98.142	0.532	0.0	2.0	O K
2880 min Summer	98.134	0.524	0.0	2.0	O K
4320 min Summer	98.116	0.506	0.0	1.9	O K
5760 min Summer	98.095	0.485	0.0	1.8	O K
7200 min Summer	98.075	0.465	0.0	1.8	O K
8640 min Summer	98.055	0.445	0.0	1.7	O K
10080 min Summer	98.036	0.426	0.0	1.6	O K
15 min Winter	97.826	0.216	0.0	0.8	O K
30 min Winter	97.893	0.283	0.0	1.1	O K
60 min Winter	97.962	0.352	0.0	1.3	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	362
480 min Summer	8.266	0.0	482
600 min Summer	6.927	0.0	602
720 min Summer	5.992	0.0	722
960 min Summer	4.764	0.0	962
1440 min Summer	3.442	0.0	1440
2160 min Summer	2.483	0.0	1972
2880 min Summer	1.968	0.0	2308
4320 min Summer	1.415	0.0	3072
5760 min Summer	1.119	0.0	3920
7200 min Summer	0.933	0.0	4752
8640 min Summer	0.803	0.0	5536
10080 min Summer	0.708	0.0	6360
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	98.032	0.422	0.0	1.6	O K
180 min Winter	98.071	0.461	0.0	1.8	O K
240 min Winter	98.097	0.487	0.0	1.9	O K
360 min Winter	98.133	0.523	0.0	2.0	O K
480 min Winter	98.157	0.547	0.0	2.1	O K
600 min Winter	98.175	0.565	0.0	2.1	O K
720 min Winter	98.188	0.578	0.0	2.2	O K
960 min Winter	98.205	0.595	0.0	2.3	O K
1440 min Winter	98.221	0.611	0.0	2.3	O K
2160 min Winter	98.221	0.611	0.0	2.3	O K
2880 min Winter	98.209	0.599	0.0	2.3	O K
4320 min Winter	98.186	0.576	0.0	2.2	O K
5760 min Winter	98.159	0.549	0.0	2.1	O K
7200 min Winter	98.130	0.520	0.0	2.0	O K
8640 min Winter	98.102	0.492	0.0	1.9	O K
10080 min Winter	98.076	0.466	0.0	1.8	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
120 min Winter	24.345	0.0	122
180 min Winter	17.884	0.0	182
240 min Winter	14.282	0.0	240
360 min Winter	10.373	0.0	358
480 min Winter	8.266	0.0	476
600 min Winter	6.927	0.0	594
720 min Winter	5.992	0.0	710
960 min Winter	4.764	0.0	942
1440 min Winter	3.442	0.0	1398
2160 min Winter	2.483	0.0	2052
2880 min Winter	1.968	0.0	2620
4320 min Winter	1.415	0.0	3284
5760 min Winter	1.119	0.0	4208
7200 min Winter	0.933	0.0	5120
8640 min Winter	0.803	0.0	6048
10080 min Winter	0.708	0.0	6864

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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) 0.004

Time (mins) From:	To:	Area (ha)
0	4	0.004

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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	4.0	4.0	0.900	0.0	12.0
0.800	4.0	12.0			

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