Summary of Results for 100 year Return Period (+30%)

Half Drain Time : 1483 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	2.907	0.357	0.1	7.5	O K
30 min Summer	3.027	0.477	0.1	10.0	O K
60 min Summer	3.155	0.605	0.1	12.7	O K
120 min Summer	3.285	0.735	0.1	15.4	O K
180 min Summer	3.355	0.805	0.1	16.8	O K
240 min Summer	3.399	0.849	0.1	17.7	O K
360 min Summer	3.453	0.903	0.1	18.9	O K
480 min Summer	3.484	0.934	0.1	19.5	O K
600 min Summer	3.502	0.952	0.1	19.9	O K
720 min Summer	3.511	0.961	0.1	20.1	O K
960 min Summer	3.511	0.961	0.1	20.1	O K
1440 min Summer	3.479	0.929	0.1	19.4	O K
2160 min Summer	3.429	0.879	0.1	18.4	O K
2880 min Summer	3.383	0.833	0.1	17.4	O K
4320 min Summer	3.297	0.747	0.1	15.6	O K
5760 min Summer	3.213	0.663	0.1	13.9	O K
7200 min Summer	3.133	0.583	0.1	12.2	O K
8640 min Summer	3.060	0.510	0.1	10.6	O K
10080 min Summer	2.991	0.441	0.1	9.2	O K
15 min Winter	2.950	0.400	0.1	8.4	O K
30 min Winter	3.086	0.536	0.1	11.2	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	115.731	0.0	23
30 min Summer	77.804	0.0	37
60 min Summer	49.937	0.0	66
120 min Summer	30.956	0.0	126
180 min Summer	23.058	0.0	186
240 min Summer	18.577	0.0	246
360 min Summer	13.656	0.0	364
480 min Summer	10.974	0.0	484
600 min Summer	9.254	0.0	602
720 min Summer	8.046	0.0	722
960 min Summer	6.447	0.0	960
1440 min Summer	4.709	0.0	1256
2160 min Summer	3.432	0.0	1624
2880 min Summer	2.739	0.0	2020
4320 min Summer	1.989	0.0	2816
5760 min Summer	1.583	0.0	3632
7200 min Summer	1.325	0.0	4400
8640 min Summer	1.147	0.0	5192
10080 min Summer	1.015	0.0	5952
15 min Winter	115.731	0.0	22
30 min Winter	77.804	0.0	37

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Summary of Results for 100 year Return Period (+30%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
60 min Winter	3.231	0.681	0.1	14.2	O K
120 min Winter	3.379	0.829	0.1	17.3	O K
180 min Winter	3.461	0.911	0.1	19.0	O K
240 min Winter	3.512	0.962	0.1	20.1	O K
360 min Winter	3.578	1.028	0.1	21.5	O K
480 min Winter	3.619	1.069	0.1	22.4	O K
600 min Winter	3.645	1.095	0.1	22.9	O K
720 min Winter	3.660	1.110	0.1	23.2	O K
960 min Winter	3.672	1.122	0.1	23.4	O K
1440 min Winter	3.651	1.101	0.1	23.0	O K
2160 min Winter	3.583	1.033	0.1	21.6	O K
2880 min Winter	3.522	0.972	0.1	20.3	O K
4320 min Winter	3.393	0.843	0.1	17.6	O K
5760 min Winter	3.265	0.715	0.1	14.9	O K
7200 min Winter	3.142	0.592	0.1	12.4	O K
8640 min Winter	3.029	0.479	0.1	10.0	O K
10080 min Winter	2.927	0.377	0.1	7.9	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
60 min Winter	49.937	0.0	66
120 min Winter	30.956	0.0	124
180 min Winter	23.058	0.0	182
240 min Winter	18.577	0.0	242
360 min Winter	13.656	0.0	358
480 min Winter	10.974	0.0	476
600 min Winter	9.254	0.0	590
720 min Winter	8.046	0.0	706
960 min Winter	6.447	0.0	934
1440 min Winter	4.709	0.0	1372
2160 min Winter	3.432	0.0	1748
2880 min Winter	2.739	0.0	2192
4320 min Winter	1.989	0.0	3108
5760 min Winter	1.583	0.0	3976
7200 min Winter	1.325	0.0	4760
8640 min Winter	1.147	0.0	5536
10080 min Winter	1.015	0.0	6256

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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)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+30

Time Area Diagram

Total Area (ha) 0.035

Time From:	(mins) To:	Area (ha)	Time From:	(mins) To:	Area (ha)
0	4	0.020	4	8	0.015

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Model Details

Storage is Online Cover Level (m) 4.300

Cellular Storage Structure

Invert Level (m) 2.550 Safety Factor 1.0
Infiltration Coefficient Base (m/hr) 0.02160 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	22.0	22.0	1.300	0.0	53.2
1.200	22.0	53.2			

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