Summary of Results for 100 year Return Period (+50%)

Half Drain Time : 1004 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	29.137	0.437	0.1	5.8	O K
30 min Summer	29.283	0.583	0.1	7.7	O K
60 min Summer	29.438	0.738	0.1	9.8	O K
120 min Summer	29.591	0.891	0.1	11.8	O K
180 min Summer	29.672	0.972	0.1	12.9	O K
240 min Summer	29.719	1.019	0.1	13.5	O K
360 min Summer	29.776	1.076	0.2	14.3	O K
480 min Summer	29.804	1.104	0.2	14.6	O K
600 min Summer	29.815	1.115	0.2	14.8	O K
720 min Summer	29.816	1.116	0.2	14.8	O K
960 min Summer	29.812	1.112	0.2	14.7	O K
1440 min Summer	29.792	1.092	0.2	14.5	O K
2160 min Summer	29.744	1.044	0.1	13.8	O K
2880 min Summer	29.691	0.991	0.1	13.1	O K
4320 min Summer	29.595	0.895	0.1	11.9	O K
5760 min Summer	29.511	0.811	0.1	10.7	O K
7200 min Summer	29.436	0.736	0.1	9.7	O K
8640 min Summer	29.370	0.670	0.1	8.9	O K
10080 min Summer	29.311	0.611	0.1	8.1	O K
15 min Winter	29.190	0.490	0.1	6.5	O K
30 min Winter	29.354	0.654	0.1	8.6	O K
60 min Winter	29.528	0.828	0.1	11.0	O K
120 min Winter	29.703	1.003	0.1	13.3	O K
180 min Winter	29.796	1.096	0.2	14.5	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	135.580	0.0	19
30 min Summer	91.216	0.0	34
60 min Summer	58.567	0.0	64
120 min Summer	36.294	0.0	124
180 min Summer	27.017	0.0	182
240 min Summer	21.749	0.0	242
360 min Summer	16.006	0.0	362
480 min Summer	12.864	0.0	480
600 min Summer	10.849	0.0	600
720 min Summer	9.435	0.0	686
960 min Summer	7.561	0.0	796
1440 min Summer	5.523	0.0	1042
2160 min Summer	4.026	0.0	1468
2880 min Summer	3.213	0.0	1876
4320 min Summer	2.333	0.0	2684
5760 min Summer	1.857	0.0	3512
7200 min Summer	1.555	0.0	4320
8640 min Summer	1.347	0.0	5096
10080 min Summer	1.192	0.0	5848
15 min Winter	135.580	0.0	19
30 min Winter	91.216	0.0	33
60 min Winter	58.567	0.0	62
120 min Winter	36.294	0.0	122
180 min Winter	27.017	0.0	180

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Summary of Results for 100 year Return Period (+50%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
240 min Winter	29.851	1.151	0.2	15.3	O K
360 min Winter	29.920	1.220	0.2	16.2	O K
480 min Winter	29.957	1.257	0.2	16.7	O K
600 min Winter	29.976	1.276	0.2	16.9	O K
720 min Winter	29.983	1.283	0.2	17.0	O K
960 min Winter	29.976	1.276	0.2	16.9	O K
1440 min Winter	29.950	1.250	0.2	16.6	O K
2160 min Winter	29.886	1.186	0.2	15.7	O K
2880 min Winter	29.811	1.111	0.2	14.7	O K
4320 min Winter	29.671	0.971	0.1	12.9	O K
5760 min Winter	29.549	0.849	0.1	11.2	O K
7200 min Winter	29.443	0.743	0.1	9.8	O K
8640 min Winter	29.352	0.652	0.1	8.6	O K
10080 min Winter	29.272	0.572	0.1	7.6	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
240 min Winter	21.749	0.0	238
360 min Winter	16.006	0.0	354
480 min Winter	12.864	0.0	468
600 min Winter	10.849	0.0	578
720 min Winter	9.435	0.0	686
960 min Winter	7.561	0.0	886
1440 min Winter	5.523	0.0	1108
2160 min Winter	4.026	0.0	1576
2880 min Winter	3.213	0.0	2020
4320 min Winter	2.333	0.0	2896
5760 min Winter	1.857	0.0	3744
7200 min Winter	1.555	0.0	4544
8640 min Winter	1.347	0.0	5360
10080 min Winter	1.192	0.0	6152

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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)	19.300	Shortest Storm (mins)	15
Ratio R	0.348	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+50

Time Area Diagram

Total Area (ha) 0.023

Time (mins) From:	To:	Area (ha)
0	4	0.023

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Model Details

Storage is Online Cover Level (m) 30.500

Complex Structure

Trench Soakaway

Infiltration Coefficient Base (m/hr)	0.16500	Trench Width (m)	2.0
Infiltration Coefficient Side (m/hr)	0.16500	Trench Length (m)	7.0
Safety Factor	10.0	Slope (1:X)	1000.0
Porosity	0.95	Cap Volume Depth (m)	1.600
Invert Level (m)	28.700	Cap Infiltration Depth (m)	1.600

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