Summary of Results for 10 year Return Period

Half Drain Time : 511 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	23.900	0.200	0.2	6.9	O K
30 min Summer	23.955	0.255	0.3	8.9	O K
60 min Summer	24.011	0.311	0.3	11.1	O K
120 min Summer	24.064	0.364	0.3	13.1	O K
180 min Summer	24.090	0.390	0.3	14.1	O K
240 min Summer	24.104	0.404	0.3	14.6	O K
360 min Summer	24.115	0.415	0.3	15.0	O K
480 min Summer	24.118	0.418	0.3	15.1	O K
600 min Summer	24.118	0.418	0.3	15.1	O K
720 min Summer	24.116	0.416	0.3	15.1	O K
960 min Summer	24.110	0.410	0.3	14.8	O K
1440 min Summer	24.093	0.393	0.3	14.2	O K
2160 min Summer	24.066	0.366	0.3	13.1	O K
2880 min Summer	24.038	0.338	0.3	12.1	O K
4320 min Summer	23.988	0.288	0.3	10.2	O K
5760 min Summer	23.944	0.244	0.2	8.5	O K
7200 min Summer	23.907	0.207	0.2	7.1	O K
8640 min Summer	23.876	0.176	0.2	5.9	O K
10080 min Summer	23.849	0.149	0.2	4.9	O K
15 min Winter	23.922	0.222	0.2	7.7	O K
30 min Winter	23.984	0.284	0.3	10.0	O K
60 min Winter	24.048	0.348	0.3	12.5	O K
120 min Winter	24.109	0.409	0.3	14.8	O K
180 min Winter	24.141	0.441	0.3	16.0	O K
240 min Winter	24.158	0.458	0.3	16.7	O K
360 min Winter	24.175	0.475	0.3	17.3	O K
480 min Winter	24.179	0.479	0.3	17.5	O K
600 min Winter	24.178	0.478	0.3	17.4	O K
720 min Winter	24.176	0.476	0.3	17.3	O K
960 min Winter	24.168	0.468	0.3	17.0	O K
1440 min Winter	24.141	0.441	0.3	16.0	O K
2160 min Winter	24.097	0.397	0.3	14.3	O K
2880 min Winter	24.055	0.355	0.3	12.7	O K
4320 min Winter	23.980	0.280	0.3	9.9	O K
5760 min Winter	23.919	0.219	0.2	7.6	O K
7200 min Winter	23.869	0.169	0.2	5.7	O K
8640 min Winter	23.829	0.129	0.2	4.1	O K
10080 min Winter	23.796	0.096	0.2	2.9	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	55.216	0.0	19
30 min Summer	36.465	0.0	33
60 min Summer	23.155	0.0	62
120 min Summer	14.345	0.0	122
180 min Summer	10.753	0.0	182
240 min Summer	8.737	0.0	240
360 min Summer	6.512	0.0	352
480 min Summer	5.281	0.0	406
600 min Summer	4.487	0.0	470
720 min Summer	3.927	0.0	534
960 min Summer	3.180	0.0	672
1440 min Summer	2.360	0.0	950
2160 min Summer	1.750	0.0	1364
2880 min Summer	1.415	0.0	1760
4320 min Summer	1.048	0.0	2552
5760 min Summer	0.847	0.0	3336
7200 min Summer	0.718	0.0	4040
8640 min Summer	0.627	0.0	4760
10080 min Summer	0.559	0.0	5544
15 min Winter	55.216	0.0	19
30 min Winter	36.465	0.0	33
60 min Winter	23.155	0.0	62
120 min Winter	14.345	0.0	120
180 min Winter	10.753	0.0	178
240 min Winter	8.737	0.0	234
360 min Winter	6.512	0.0	346
480 min Winter	5.281	0.0	450
600 min Winter	4.487	0.0	490
720 min Winter	3.927	0.0	562
960 min Winter	3.180	0.0	720
1440 min Winter	2.360	0.0	1024
2160 min Winter	1.750	0.0	1468
2880 min Winter	1.415	0.0	1900
4320 min Winter	1.048	0.0	2720
5760 min Winter	0.847	0.0	3464
7200 min Winter	0.718	0.0	4248
8640 min Winter	0.627	0.0	4936
10080 min Winter	0.559	0.0	5648

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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 %	+0

Time Area Diagram

Total Area (ha) 0.068

Time (mins) From:	To:	Area (ha)
0	4	0.068

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Model Details

Storage is Online Cover Level (m) 25.850

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.15300	Invert Level (m)	23.700	Cap Volume Depth (m)	1.200
Infiltration Coefficient Side (m/hr)	0.15300	Trench Width (m)	1.0	Cap Infiltration Depth (m)	1.200
Safety Factor	10.0	Trench Length (m)	40.0		
Porosity	0.95	Slope (1:X)	1000.0		

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