

Summary of Results for 30 year Return Period

Half Drain Time : 711 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	14.529	0.288	5.5	334.3	O K
30 min Summer	14.619	0.378	7.3	446.7	O K
60 min Summer	14.713	0.472	9.1	568.1	O K
120 min Summer	14.805	0.564	11.0	691.3	O K
180 min Summer	14.852	0.611	12.0	757.3	O K
240 min Summer	14.881	0.640	12.6	797.5	O K
360 min Summer	14.914	0.673	13.3	844.5	O K
480 min Summer	14.929	0.688	13.6	866.3	O K
600 min Summer	14.940	0.699	13.9	881.8	O K
720 min Summer	14.948	0.707	14.0	893.3	O K
960 min Summer	14.958	0.717	14.2	907.9	O K
1440 min Summer	14.963	0.722	14.3	914.8	O K
2160 min Summer	14.952	0.711	14.1	898.6	O K
2880 min Summer	14.932	0.691	13.7	870.0	O K
4320 min Summer	14.887	0.646	12.7	806.1	O K
5760 min Summer	14.845	0.604	11.9	746.8	O K
7200 min Summer	14.808	0.567	11.1	695.6	O K
8640 min Summer	14.775	0.534	10.4	651.6	O K
10080 min Summer	14.747	0.506	9.8	613.2	O K
15 min Winter	14.562	0.321	6.1	374.5	O K
30 min Winter	14.661	0.420	8.1	500.5	O K
60 min Winter	14.764	0.523	10.2	636.8	O K
120 min Winter	14.866	0.625	12.3	776.0	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	69.222	0.0	26
30 min Summer	46.566	0.0	41
60 min Summer	30.026	0.0	70
120 min Summer	18.780	0.0	128
180 min Summer	14.097	0.0	186
240 min Summer	11.441	0.0	244
360 min Summer	8.527	0.0	362
480 min Summer	6.912	0.0	446
600 min Summer	5.868	0.0	498
720 min Summer	5.132	0.0	558
960 min Summer	4.150	0.0	686
1440 min Summer	3.072	0.0	960
2160 min Summer	2.270	0.0	1368
2880 min Summer	1.830	0.0	1768
4320 min Summer	1.349	0.0	2560
5760 min Summer	1.086	0.0	3344
7200 min Summer	0.919	0.0	4104
8640 min Summer	0.801	0.0	4848
10080 min Summer	0.714	0.0	5560
15 min Winter	69.222	0.0	26
30 min Winter	46.566	0.0	40
60 min Winter	30.026	0.0	68
120 min Winter	18.780	0.0	126

Summary of Results for 30 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
180 min Winter	14.919	0.678	13.4	851.1	O K
240 min Winter	14.951	0.710	14.1	897.3	O K
360 min Winter	14.989	0.748	14.9	952.8	O K
480 min Winter	15.007	0.766	15.3	979.6	O K
600 min Winter	15.015	0.774	15.5	991.6	O K
720 min Winter	15.022	0.781	15.6	1001.9	O K
960 min Winter	15.030	0.789	15.8	1012.9	O K
1440 min Winter	15.024	0.783	15.7	1005.1	O K
2160 min Winter	14.997	0.756	15.1	964.0	O K
2880 min Winter	14.962	0.721	14.3	913.6	O K
4320 min Winter	14.894	0.653	12.9	816.0	O K
5760 min Winter	14.835	0.594	11.7	733.4	O K
7200 min Winter	14.786	0.545	10.6	665.7	O K
8640 min Winter	14.744	0.503	9.8	609.5	O K
10080 min Winter	14.709	0.468	9.1	562.3	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
180 min Winter	14.097	0.0	182
240 min Winter	11.441	0.0	240
360 min Winter	8.527	0.0	352
480 min Winter	6.912	0.0	460
600 min Winter	5.868	0.0	552
720 min Winter	5.132	0.0	574
960 min Winter	4.150	0.0	726
1440 min Winter	3.072	0.0	1030
2160 min Winter	2.270	0.0	1472
2880 min Winter	1.830	0.0	1900
4320 min Winter	1.349	0.0	2724
5760 min Winter	1.086	0.0	3512
7200 min Winter	0.919	0.0	4256
8640 min Winter	0.801	0.0	5024
10080 min Winter	0.714	0.0	5760

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	30	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.500	Shortest Storm (mins)	15
Ratio R	0.328	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 2.610

Time (mins)	Area	Time (mins)	Area	Time (mins)	Area
From: To: (ha)		From: To: (ha)		From: To: (ha)	
0 4 0.870		4 8 0.870		8 12 0.870	

Time Area Diagram

Total Area (ha) 0.000

Time (mins)	Area
From: To: (ha)	
0 4 0.000	

Model Details

Storage is Online Cover Level (m) 16.700

Infiltration Basin Structure

Invert Level (m) 14.241 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 1.00
Infiltration Coefficient Side (m/hr) 0.27600

Depth (m) Area (m²)		Depth (m) Area (m²)	
0.000	1090.0	2.459	2540.0