Summary of Results for 30 year Return Period

Half Drain Time : 1240 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	135.095	0.395	0.3	16.9	O K
30 min Summer	135.221	0.521	0.3	22.3	O K
60 min Summer	135.355	0.655	0.3	28.0	O K
120 min Summer	135.492	0.792	0.3	33.9	O K
180 min Summer	135.569	0.869	0.3	37.1	O K
240 min Summer	135.618	0.918	0.4	39.3	O K
360 min Summer	135.679	0.979	0.4	41.9	O K
480 min Summer	135.715	1.015	0.4	43.4	O K
600 min Summer	135.735	1.035	0.4	44.2	O K
720 min Summer	135.745	1.045	0.4	44.7	O K
960 min Summer	135.746	1.046	0.4	44.7	O K
1440 min Summer	135.732	1.032	0.4	44.1	O K
2160 min Summer	135.696	0.996	0.4	42.6	O K
2880 min Summer	135.657	0.957	0.4	40.9	O K
4320 min Summer	135.581	0.881	0.3	37.7	O K
5760 min Summer	135.509	0.809	0.3	34.6	O K
7200 min Summer	135.441	0.741	0.3	31.7	O K
8640 min Summer	135.377	0.677	0.3	29.0	O K
10080 min Summer	135.318	0.618	0.3	26.4	O K
15 min Winter	135.143	0.443	0.3	18.9	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	69.101	0.0	19
30 min Summer	45.919	0.0	34
60 min Summer	29.238	0.0	64
120 min Summer	18.077	0.0	124
180 min Summer	13.494	0.0	182
240 min Summer	10.913	0.0	242
360 min Summer	8.067	0.0	362
480 min Summer	6.508	0.0	482
600 min Summer	5.506	0.0	600
720 min Summer	4.801	0.0	720
960 min Summer	3.864	0.0	912
1440 min Summer	2.843	0.0	1140
2160 min Summer	2.088	0.0	1532
2880 min Summer	1.676	0.0	1956
4320 min Summer	1.229	0.0	2768
5760 min Summer	0.985	0.0	3584
7200 min Summer	0.829	0.0	4392
8640 min Summer	0.721	0.0	5184
10080 min Summer	0.640	0.0	5952
15 min Winter	69.101	0.0	19

Summary of Results for 30 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	135.285	0.585	0.3	25.0	O K
60 min Winter	135.436	0.736	0.3	31.5	O K
120 min Winter	135.592	0.892	0.3	38.2	O K
180 min Winter	135.681	0.981	0.4	41.9	O K
240 min Winter	135.738	1.038	0.4	44.4	O K
360 min Winter	135.812	1.112	0.4	47.5	O K
480 min Winter	135.857	1.157	0.4	49.5	O K
600 min Winter	135.885	1.185	0.4	50.7	O K
720 min Winter	135.901	1.201	0.4	51.4	O K
960 min Winter	135.916	1.216	0.4	51.9	O K
1440 min Winter	135.894	1.194	0.4	51.0	O K
2160 min Winter	135.851	1.151	0.4	49.2	O K
2880 min Winter	135.795	1.095	0.4	46.8	O K
4320 min Winter	135.681	0.981	0.4	41.9	O K
5760 min Winter	135.571	0.871	0.3	37.3	O K
7200 min Winter	135.469	0.769	0.3	32.9	O K
8640 min Winter	135.376	0.676	0.3	28.9	O K
10080 min Winter	135.291	0.591	0.3	25.3	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
30 min Winter	45.919	0.0	33
60 min Winter	29.238	0.0	62
120 min Winter	18.077	0.0	122
180 min Winter	13.494	0.0	180
240 min Winter	10.913	0.0	238
360 min Winter	8.067	0.0	356
480 min Winter	6.508	0.0	470
600 min Winter	5.506	0.0	584
720 min Winter	4.801	0.0	698
960 min Winter	3.864	0.0	916
1440 min Winter	2.843	0.0	1198
2160 min Winter	2.088	0.0	1640
2880 min Winter	1.676	0.0	2104
4320 min Winter	1.229	0.0	2988
5760 min Winter	0.985	0.0	3864
7200 min Winter	0.829	0.0	4688
8640 min Winter	0.721	0.0	5536
10080 min Winter	0.640	0.0	6352

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)	19.000	Shortest Storm (mins)	15
Ratio R	0.354	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.132

Time (mins) From:	To:	Area (ha)
0	4	0.132

Model Details

Storage is Online Cover Level (m) 136.500

Cellular Storage Structure

Invert Level (m) 134.700 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.03600 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.03600

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	45.0	45.0	1.300	0.0	78.6
1.200	45.0	78.6			