Summary of Results for 100 year Return Period (+40%)

Half Drain Time exceeds 7 days.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	0.147	0.147	0.0	14.0	O K
30 min Summer	0.192	0.192	0.0	18.2	O K
60 min Summer	0.238	0.238	0.0	22.6	O K
120 min Summer	0.285	0.285	0.0	27.1	O K
180 min Summer	0.312	0.312	0.0	29.7	O K
240 min Summer	0.331	0.331	0.0	31.5	O K
360 min Summer	0.357	0.357	0.0	33.9	O K
480 min Summer	0.377	0.377	0.0	35.8	O K
600 min Summer	0.392	0.392	0.0	37.2	O K
720 min Summer	0.404	0.404	0.0	38.4	O K
960 min Summer	0.424	0.424	0.0	40.3	O K
1440 min Summer	0.450	0.450	0.0	42.7	O K
2160 min Summer	0.473	0.473	0.0	44.9	O K
2880 min Summer	0.486	0.486	0.0	46.2	O K
4320 min Summer	0.498	0.498	0.0	47.3	O K
5760 min Summer	0.499	0.499	0.0	47.4	O K
7200 min Summer	0.494	0.494	0.0	46.9	O K
8640 min Summer	0.486	0.486	0.0	46.1	O K
10080 min Summer	0.476	0.476	0.0	45.2	O K
15 min Winter	0.165	0.165	0.0	15.7	O K
30 min Winter	0.215	0.215	0.0	20.4	O K
60 min Winter	0.267	0.267	0.0	25.3	O K
120 min Winter	0.319	0.319	0.0	30.4	O K
180 min Winter	0.350	0.350	0.0	33.3	O K
240 min Winter	0.371	0.371	0.0	35.3	O K
360 min Winter	0.401	0.401	0.0	38.1	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	138.409	0.0	27
30 min Summer	90.322	0.0	42
60 min Summer	56.129	0.0	72
120 min Summer	33.713	0.0	132
180 min Summer	24.699	0.0	192
240 min Summer	19.696	0.0	252
360 min Summer	14.252	0.0	372
480 min Summer	11.333	0.0	490
600 min Summer	9.481	0.0	610
720 min Summer	8.191	0.0	730
960 min Summer	6.498	0.0	970
1440 min Summer	4.683	0.0	1450
2160 min Summer	3.369	0.0	2168
2880 min Summer	2.665	0.0	2888
4320 min Summer	1.912	0.0	4324
5760 min Summer	1.510	0.0	5760
7200 min Summer	1.256	0.0	7200
8640 min Summer	1.081	0.0	8640
10080 min Summer	0.952	0.0	9384
15 min Winter	138.409	0.0	27
30 min Winter	90.322	0.0	42
60 min Winter	56.129	0.0	72
120 min Winter	33.713	0.0	130
180 min Winter	24.699	0.0	190
240 min Winter	19.696	0.0	248
360 min Winter	14.252	0.0	368

Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
480 min Winter	0.423	0.423	0.0	40.2	O K
600 min Winter	0.441	0.441	0.0	41.8	O K
720 min Winter	0.455	0.455	0.0	43.2	O K
960 min Winter	0.477	0.477	0.0	45.3	O K
1440 min Winter	0.507	0.507	0.0	48.2	O K
2160 min Winter	0.535	0.535	0.0	50.8	O K
2880 min Winter	0.551	0.551	0.0	52.4	O K
4320 min Winter	0.568	0.568	0.0	54.0	O K
5760 min Winter	0.573	0.573	0.0	54.5	O K
7200 min Winter	0.572	0.572	0.0	54.3	O K
8640 min Winter	0.567	0.567	0.0	53.8	O K
10080 min Winter	0.558	0.558	0.0	53.0	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
480 min Winter	11.333	0.0	486
600 min Winter	9.481	0.0	604
720 min Winter	8.191	0.0	724
960 min Winter	6.498	0.0	960
1440 min Winter	4.683	0.0	1434
2160 min Winter	3.369	0.0	2144
2880 min Winter	2.665	0.0	2852
4320 min Winter	1.912	0.0	4240
5760 min Winter	1.510	0.0	5640
7200 min Winter	1.256	0.0	6992
8640 min Winter	1.081	0.0	8304
10080 min Winter	0.952	0.0	9672

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)	19.800	Shortest Storm (mins)	15
Ratio R	0.415	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.054

Time From: (mins)	To:	Area (ha)	Time From: (mins)	To:	Area (ha)	Time From: (mins)	To:	Area (ha)
0	4	0.018	4	8	0.018	8	12	0.018

Model Details

Storage is Offline Cover Level (m) 1.500 Dividing Weir Level (m) 0.000

Cellular Storage Structure

Invert Level (m) 0.000 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00273 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00273

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	100.0	100.0	0.800	100.0	100.0