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

Half Drain Time : 80 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	23.974	0.674	6.8	43.6	O K
30 min Summer	24.154	0.854	7.8	55.2	O K
60 min Summer	24.275	0.975	8.5	63.0	O K
120 min Summer	24.325	1.025	8.8	66.2	O K
180 min Summer	24.311	1.011	8.7	65.3	O K
240 min Summer	24.275	0.975	8.5	63.0	O K
360 min Summer	24.200	0.900	8.1	58.1	O K
480 min Summer	24.131	0.831	7.7	53.7	O K
600 min Summer	24.069	0.769	7.3	49.7	O K
720 min Summer	24.012	0.712	7.0	46.0	O K
960 min Summer	23.914	0.614	6.4	39.7	O K
1440 min Summer	23.764	0.464	5.6	30.0	O K
2160 min Summer	23.609	0.309	4.7	20.0	O K
2880 min Summer	23.506	0.206	4.1	13.3	O K
4320 min Summer	23.383	0.083	3.3	5.3	O K
5760 min Summer	23.346	0.046	2.9	2.9	O K
7200 min Summer	23.338	0.038	2.4	2.5	O K
8640 min Summer	23.333	0.033	2.1	2.1	O K
10080 min Summer	23.330	0.030	1.9	1.9	O K
15 min Winter	24.061	0.761	7.3	49.1	O K
30 min Winter	24.269	0.969	8.5	62.6	O K
60 min Winter	24.415	1.115	9.4	72.1	O K
120 min Winter	24.464	1.164	9.6	75.2	O K
180 min Winter	24.438	1.138	9.5	73.5	O K
240 min Winter	24.383	1.083	9.2	69.9	O K
360 min Winter	24.269	0.969	8.5	62.6	O K
480 min Winter	24.168	0.868	7.9	56.1	O K
600 min Winter	24.079	0.779	7.4	50.3	O K
720 min Winter	24.001	0.701	6.9	45.3	O K
960 min Winter	23.870	0.570	6.2	36.8	O K
1440 min Winter	23.681	0.381	5.1	24.6	O K
2160 min Winter	23.504	0.204	4.0	13.2	O K
2880 min Winter	23.395	0.095	3.4	6.1	O K
4320 min Winter	23.342	0.042	2.6	2.7	O K
5760 min Winter	23.333	0.033	2.1	2.1	O K
7200 min Winter	23.328	0.028	1.7	1.8	O K
8640 min Winter	23.324	0.024	1.5	1.6	O K
10080 min Winter	23.321	0.021	1.3	1.4	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	135.580	0.0	18
30 min Summer	91.216	0.0	31
60 min Summer	58.567	0.0	56
120 min Summer	36.294	0.0	88
180 min Summer	27.017	0.0	122
240 min Summer	21.749	0.0	158
360 min Summer	16.006	0.0	226
480 min Summer	12.864	0.0	292
600 min Summer	10.849	0.0	358
720 min Summer	9.435	0.0	424
960 min Summer	7.561	0.0	550
1440 min Summer	5.523	0.0	796
2160 min Summer	4.026	0.0	1168
2880 min Summer	3.213	0.0	1528
4320 min Summer	2.333	0.0	2208
5760 min Summer	1.857	0.0	2880
7200 min Summer	1.555	0.0	3672
8640 min Summer	1.347	0.0	4312
10080 min Summer	1.192	0.0	5072
15 min Winter	135.580	0.0	17
30 min Winter	91.216	0.0	31
60 min Winter	58.567	0.0	58
120 min Winter	36.294	0.0	92
180 min Winter	27.017	0.0	132
240 min Winter	21.749	0.0	170
360 min Winter	16.006	0.0	242
480 min Winter	12.864	0.0	312
600 min Winter	10.849	0.0	380
720 min Winter	9.435	0.0	448
960 min Winter	7.561	0.0	578
1440 min Winter	5.523	0.0	826
2160 min Winter	4.026	0.0	1192
2880 min Winter	3.213	0.0	1532
4320 min Winter	2.333	0.0	2156
5760 min Winter	1.857	0.0	2920
7200 min Winter	1.555	0.0	3632
8640 min Winter	1.347	0.0	4400
10080 min Winter	1.192	0.0	4960

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Rainfall Details

Rainfall Model	FSR	Ratio R	0.348	Cv (Winter)	0.840
Return Period (years)	100	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 %	+50

Time Area Diagram

Total Area (ha) 0.190

Time (mins) From:	To:	Area (ha)
0	4	0.190

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Model Details

Storage is Online Cover Level (m) 25.200

Complex Structure

Trench Soakaway

Infiltration Coefficient Base (m/hr)	1.80700	Invert Level (m)	23.300	Cap Volume Depth (m)	1.600
Infiltration Coefficient Side (m/hr)	1.80700	Trench Width (m)	1.0	Cap Infiltration Depth (m)	1.600
Safety Factor	10.0	Trench Length (m)	57.0		
Porosity	0.95	Slope (1:X)	0.0		

Cellular Storage

Invert Level (m)	23.300	Infiltration Coefficient Side (m/hr)	0.00000
Porosity	0.95		
Infiltration Coefficient Base (m/hr)	0.00000	Safety Factor	10.0

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	11.0	0.0	1.600	11.0	0.0	1.601	0.0	0.0

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