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

Half Drain Time : 1210 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	26.539	0.539	0.5	34.7	O K
30 min Summer	26.715	0.715	0.6	46.4	O K
60 min Summer	26.903	0.903	0.6	58.9	O K
120 min Summer	27.092	1.092	0.7	71.5	O K
180 min Summer	27.194	1.194	0.7	78.2	O K
240 min Summer	27.256	1.256	0.7	82.3	O K
360 min Summer	27.334	1.334	0.8	87.5	O K
480 min Summer	27.377	1.377	0.8	90.4	O K
600 min Summer	27.401	1.401	0.8	92.0	O K
720 min Summer	27.411	1.411	0.8	92.6	O K
960 min Summer	27.410	1.410	0.8	92.6	O K
1440 min Summer	27.393	1.393	0.8	91.5	O K
2160 min Summer	27.347	1.347	0.8	88.4	O K
2880 min Summer	27.290	1.290	0.8	84.6	O K
4320 min Summer	27.184	1.184	0.7	77.6	O K
5760 min Summer	27.090	1.090	0.7	71.3	O K
7200 min Summer	27.006	1.006	0.7	65.8	O K
8640 min Summer	26.932	0.932	0.6	60.8	O K
10080 min Summer	26.864	0.864	0.6	56.3	O K
15 min Winter	26.602	0.602	0.5	38.9	O K
30 min Winter	26.800	0.800	0.6	52.0	O K
60 min Winter	27.011	1.011	0.7	66.1	O K
120 min Winter	27.226	1.226	0.7	80.4	O K
180 min Winter	27.343	1.343	0.8	88.1	O K
240 min Winter	27.415	1.415	0.8	92.9	O K
360 min Winter	27.508	1.508	0.8	99.1	O K
480 min Winter	27.563	1.563	0.9	102.8	O K
600 min Winter	27.595	1.595	0.9	104.9	O K
720 min Winter	27.616	1.616	0.9	106.1	O K
960 min Winter	27.833	1.833	0.9	106.6	Flood Risk
1440 min Winter	27.595	1.595	0.9	104.9	O K
2160 min Winter	27.540	1.540	0.8	101.2	O K
2880 min Winter	27.465	1.465	0.8	96.3	O K
4320 min Winter	27.308	1.308	0.8	85.8	O K
5760 min Winter	27.172	1.172	0.7	76.8	O K
7200 min Winter	27.052	1.052	0.7	68.8	O K
8640 min Winter	26.946	0.946	0.6	61.8	O K
10080 min Winter	26.852	0.852	0.6	55.5	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	135.580	0.0	19
30 min Summer	91.216	0.0	34
60 min Summer	58.567	0.0	64
120 min Summer	36.294	0.0	124
180 min Summer	27.017	0.0	182
240 min Summer	21.749	0.0	242
360 min Summer	16.006	0.0	362
480 min Summer	12.864	0.0	482
600 min Summer	10.849	0.0	600
720 min Summer	9.435	0.0	720
960 min Summer	7.561	0.0	874
1440 min Summer	5.523	0.0	1110
2160 min Summer	4.026	0.0	1512
2880 min Summer	3.213	0.0	1928
4320 min Summer	2.333	0.0	2764
5760 min Summer	1.857	0.0	3576
7200 min Summer	1.555	0.0	4392
8640 min Summer	1.347	0.0	5184
10080 min Summer	1.192	0.0	5952
15 min Winter	135.580	0.0	19
30 min Winter	91.216	0.0	33
60 min Winter	58.567	0.0	62
120 min Winter	36.294	0.0	122
180 min Winter	27.017	0.0	180
240 min Winter	21.749	0.0	238
360 min Winter	16.006	0.0	356
480 min Winter	12.864	0.0	470
600 min Winter	10.849	0.0	584
720 min Winter	9.435	0.0	694
960 min Winter	7.561	0.0	912
1440 min Winter	5.523	0.0	1152
2160 min Winter	4.026	0.0	1604
2880 min Winter	3.213	0.0	2076
4320 min Winter	2.333	0.0	2980
5760 min Winter	1.857	0.0	3816
7200 min Winter	1.555	0.0	4680
8640 min Winter	1.347	0.0	5456
10080 min Winter	1.192	0.0	6256

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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) 0.138

Time (mins) From:	To:	Area (ha)
0	4	0.138

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Model Details

Storage is Online Cover Level (m) 28.000

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.16700	Invert Level (m)	26.000	Cap Volume Depth (m)	1.600
Infiltration Coefficient Side (m/hr)	0.16700	Trench Width (m)	2.0	Cap Infiltration Depth (m)	1.600
Safety Factor	10.0	Trench Length (m)	35.0		
Porosity	0.95	Slope (1:X)	1000.0		

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