

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

Half Drain Time : 670 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	0.308	0.308	1.3	46.8	O K
30 min Summer	0.399	0.399	1.3	60.6	O K
60 min Summer	0.488	0.488	1.4	74.1	O K
120 min Summer	0.565	0.565	1.4	85.9	O K
180 min Summer	0.600	0.600	1.4	91.2	O K
240 min Summer	0.615	0.615	1.4	93.5	O K
360 min Summer	0.624	0.624	1.4	94.8	O K
480 min Summer	0.618	0.618	1.4	93.9	O K
600 min Summer	0.606	0.606	1.4	92.1	O K
720 min Summer	0.594	0.594	1.4	90.4	O K
960 min Summer	0.571	0.571	1.4	86.8	O K
1440 min Summer	0.527	0.527	1.4	80.2	O K
2160 min Summer	0.467	0.467	1.4	71.0	O K
2880 min Summer	0.412	0.412	1.3	62.6	O K
4320 min Summer	0.314	0.314	1.3	47.7	O K
5760 min Summer	0.234	0.234	1.3	35.5	O K
7200 min Summer	0.169	0.169	1.2	25.8	O K
8640 min Summer	0.121	0.121	1.2	18.3	O K
10080 min Summer	0.085	0.085	1.2	12.9	O K
15 min Winter	0.345	0.345	1.3	52.5	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
15 min Summer	138.754	0.0	19
30 min Summer	90.906	0.0	34
60 min Summer	56.713	0.0	64
120 min Summer	34.176	0.0	122
180 min Summer	25.072	0.0	182
240 min Summer	20.006	0.0	242
360 min Summer	14.514	0.0	360
480 min Summer	11.557	0.0	480
600 min Summer	9.678	0.0	526
720 min Summer	8.369	0.0	588
960 min Summer	6.648	0.0	712
1440 min Summer	4.799	0.0	982
2160 min Summer	3.459	0.0	1384
2880 min Summer	2.739	0.0	1788
4320 min Summer	1.968	0.0	2552
5760 min Summer	1.556	0.0	3288
7200 min Summer	1.295	0.0	4032
8640 min Summer	1.115	0.0	4672
10080 min Summer	0.982	0.0	5344
15 min Winter	138.754	0.0	19

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

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
30 min Winter	0.449	0.449	1.4	68.2	O K
60 min Winter	0.549	0.549	1.4	83.5	O K
120 min Winter	0.640	0.640	1.4	97.2	O K
180 min Winter	0.681	0.681	1.4	103.6	O K
240 min Winter	0.702	0.702	1.5	106.8	O K
360 min Winter	0.718	0.718	1.5	109.2	O K
480 min Winter	0.718	0.718	1.5	109.2	O K
600 min Winter	0.709	0.709	1.5	107.7	O K
720 min Winter	0.694	0.694	1.5	105.5	O K
960 min Winter	0.664	0.664	1.4	100.9	O K
1440 min Winter	0.605	0.605	1.4	92.0	O K
2160 min Winter	0.517	0.517	1.4	78.6	O K
2880 min Winter	0.434	0.434	1.3	66.0	O K
4320 min Winter	0.291	0.291	1.3	44.2	O K
5760 min Winter	0.178	0.178	1.2	27.0	O K
7200 min Winter	0.096	0.096	1.2	14.5	O K
8640 min Winter	0.051	0.051	1.2	7.8	O K
10080 min Winter	0.045	0.045	1.1	6.8	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
30 min Winter	90.906	0.0	33
60 min Winter	56.713	0.0	62
120 min Winter	34.176	0.0	120
180 min Winter	25.072	0.0	180
240 min Winter	20.006	0.0	238
360 min Winter	14.514	0.0	352
480 min Winter	11.557	0.0	462
600 min Winter	9.678	0.0	572
720 min Winter	8.369	0.0	672
960 min Winter	6.648	0.0	760
1440 min Winter	4.799	0.0	1066
2160 min Winter	3.459	0.0	1512
2880 min Winter	2.739	0.0	1932
4320 min Winter	1.968	0.0	2724
5760 min Winter	1.556	0.0	3456
7200 min Winter	1.295	0.0	4040
8640 min Winter	1.115	0.0	4488
10080 min Winter	0.982	0.0	5136

Unit 3 Sherwood Oaks Close
 Sherwood Oaks Business Park
 Mansfield Nottinghamshire ...



Date 09/01/2018 12:32
 File Soakaway 1.SRCX

Designed by Thomas.Nunn
 Checked by

XP Solutions Source Control 2017.1.2

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)	20.000	Shortest Storm (mins)	15
Ratio R	0.405	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.184

Time (mins)		Area
From:	To:	(ha)
0	4	0.184

Unit 3 Sherwood Oaks Close
 Sherwood Oaks Business Park
 Mansfield Nottinghamshire ...



Date 09/01/2018 12:32
 File Soakaway 1.SRCX

Designed by Thomas.Nunn
 Checked by

XP Solutions Source Control 2017.1.2

Model Details

Storage is Online Cover Level (m) 10.000

Cellular Storage Structure

Invert Level (m) 0.000 Safety Factor 1.0
 Infiltration Coefficient Base (m/hr) 0.02630 Porosity 0.95
 Infiltration Coefficient Side (m/hr) 0.02630

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	160.0	160.0	0.900	0.0	204.8
0.800	160.0	204.8			