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33 The Point Rockingham Road Market Harborough Leicestershire LE16 7QU	957 White Post Road, Bodicote	
Date 20/10/2020 File SACP SEPT 20.SRCX	Designed by RH Checked by	
Micro Drainage	Source Control 2017.1.2	

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

Half Drain Time : 29 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	120.306	0.306	8.6	20.9	O K
30 min Summer	120.347	0.347	8.8	23.7	O K
60 min Summer	120.349	0.349	8.8	23.9	O K
120 min Summer	120.305	0.305	8.6	20.8	O K
180 min Summer	120.254	0.254	8.5	17.3	O K
240 min Summer	120.205	0.205	8.3	14.0	O K
360 min Summer	120.129	0.129	8.0	8.8	O K
480 min Summer	120.079	0.079	7.8	5.4	O K
600 min Summer	120.053	0.053	7.7	3.6	O K
720 min Summer	120.045	0.045	7.0	3.1	O K
960 min Summer	120.036	0.036	5.6	2.5	O K
1440 min Summer	120.027	0.027	4.1	1.8	O K
2160 min Summer	120.019	0.019	3.0	1.3	O K
2880 min Summer	120.015	0.015	2.4	1.0	O K
4320 min Summer	120.011	0.011	1.7	0.8	O K
5760 min Summer	120.009	0.009	1.4	0.6	O K
7200 min Summer	120.007	0.007	1.1	0.5	O K
8640 min Summer	120.006	0.006	1.0	0.4	O K


Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
15 min Summer	137.234	0.0	16
30 min Summer	89.929	0.0	27
60 min Summer	56.129	0.0	44
120 min Summer	33.850	0.0	78
180 min Summer	24.849	0.0	110
240 min Summer	19.839	0.0	142
360 min Summer	14.389	0.0	202
480 min Summer	11.459	0.0	256
600 min Summer	9.597	0.0	310
720 min Summer	8.298	0.0	368
960 min Summer	6.593	0.0	490
1440 min Summer	4.760	0.0	730
2160 min Summer	3.431	0.0	1080
2880 min Summer	2.717	0.0	1460
4320 min Summer	1.953	0.0	2196
5760 min Summer	1.544	0.0	2880
7200 min Summer	1.286	0.0	3640
8640 min Summer	1.107	0.0	4384

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Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status	
10080 min Summer	120.006	0.006		0.9	0.4	O K
15 min Winter	120.351	0.351		8.8	24.0	O K
30 min Winter	120.403	0.403		9.0	27.5	O K
60 min Winter	120.400	0.400		9.0	27.3	O K
120 min Winter	120.329	0.329		8.7	22.5	O K
180 min Winter	120.250	0.250		8.5	17.1	O K
240 min Winter	120.179	0.179		8.2	12.2	O K
360 min Winter	120.077	0.077		7.8	5.3	O K
480 min Winter	120.046	0.046		7.1	3.1	O K
600 min Winter	120.039	0.039		6.0	2.6	O K
720 min Winter	120.033	0.033		5.1	2.3	O K
960 min Winter	120.027	0.027		4.1	1.8	O K
1440 min Winter	120.019	0.019		3.0	1.3	O K
2160 min Winter	120.014	0.014		2.2	1.0	O K
2880 min Winter	120.011	0.011		1.7	0.8	O K
4320 min Winter	120.008	0.008		1.3	0.6	O K
5760 min Winter	120.006	0.006		1.0	0.4	O K
7200 min Winter	120.005	0.005		0.8	0.4	O K
8640 min Winter	120.005	0.005		0.7	0.3	O K


Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
10080 min Summer	0.975	0.0	4960
15 min Winter	137.234	0.0	16
30 min Winter	89.929	0.0	29
60 min Winter	56.129	0.0	46
120 min Winter	33.850	0.0	84
180 min Winter	24.849	0.0	118
240 min Winter	19.839	0.0	150
360 min Winter	14.389	0.0	204
480 min Winter	11.459	0.0	248
600 min Winter	9.597	0.0	308
720 min Winter	8.298	0.0	370
960 min Winter	6.593	0.0	484
1440 min Winter	4.760	0.0	738
2160 min Winter	3.431	0.0	1088
2880 min Winter	2.717	0.0	1424
4320 min Winter	1.953	0.0	2236
5760 min Winter	1.544	0.0	2848
7200 min Winter	1.286	0.0	3648
8640 min Winter	1.107	0.0	4568

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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
10080 min Winter	120.004	0.004	0.7	0.3	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
10080 min Winter	0.975	0.0	5032

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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	0.405	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.106

Time (mins)		Area
From:	To:	(ha)
0	4	0.106

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Model Details

Storage is Online Cover Level (m) 121.700

Cellular Storage Structure

Invert Level (m) 120.000 Safety Factor 3.0
 Infiltration Coefficient Base (m/hr) 1.13400 Porosity 0.95
 Infiltration Coefficient Side (m/hr) 1.13400

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	72.0	72.0	0.400	72.0	85.6