

Escher Silverman		Page 1
Lone Barn Studios Stanbridge Lane Romsey SO51 0HE	Hurst Road East Preston Trench Soakaway So1	
Date September 2017 File So1 New 10yr.SRC	Designed By KN Checked By	
Micro Drainage	Source Control W.11.2	

Summary of Results for 10 year Return Period

Half Drain Time : 247 minutes

Storm Duration (mins)	Maximum Filtration (1/s)	Maximum Outflow (1/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m ³)	Status
15 Summer	0.1	0.1	7.8387	0.3887	1.6	0 K
30 Summer	0.1	0.1	7.9532	0.5032	2.1	0 K
60 Summer	0.1	0.1	8.0633	0.6133	2.6	0 K
120 Summer	0.1	0.1	8.1508	0.7008	2.9	0 K
180 Summer	0.1	0.1	8.1813	0.7313	3.1	0 K
240 Summer	0.1	0.1	8.1998	0.7498	3.1	0 K
360 Summer	0.2	0.2	8.2203	0.7703	3.2	0 K
480 Summer	0.2	0.2	8.2263	0.7763	3.3	0 K
600 Summer	0.2	0.2	8.2248	0.7748	3.3	0 K
720 Summer	0.2	0.2	8.2188	0.7688	3.2	0 K
960 Summer	0.1	0.1	8.1993	0.7493	3.1	0 K
1440 Summer	0.1	0.1	8.1513	0.7013	2.9	0 K
15 Winter	0.1	0.1	7.8857	0.4357	1.8	0 K
30 Winter	0.1	0.1	8.0142	0.5642	2.4	0 K
60 Winter	0.1	0.1	8.1383	0.6883	2.9	0 K
120 Winter	0.2	0.2	8.2393	0.7893	3.3	0 K
180 Winter	0.2	0.2	8.2743	0.8243	3.5	0 K
240 Winter	0.2	0.2	8.2903	0.8403	3.5	0 K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	55.91	23
30 Summer	36.89	37
60 Summer	23.40	66
120 Summer	14.48	124
180 Summer	10.84	160
240 Summer	8.81	190
360 Summer	6.56	256
480 Summer	5.32	324
600 Summer	4.52	392
720 Summer	3.95	460
960 Summer	3.20	594
1440 Summer	2.37	858
15 Winter	55.91	22
30 Winter	36.89	36
60 Winter	23.40	64
120 Winter	14.48	122
180 Winter	10.84	174
240 Winter	8.81	196

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Summary of Results for 10 year Return Period

Storm Duration (mins)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m³)	Status
360 Winter	0.2	0.2	8.3058	0.8558	3.6	O K
480 Winter	0.2	0.2	8.3023	0.8523	3.6	O K
600 Winter	0.2	0.2	8.2908	0.8408	3.5	O K
720 Winter	0.2	0.2	8.2743	0.8243	3.5	O K
960 Winter	0.2	0.2	8.2368	0.7868	3.3	O K
1440 Winter	0.1	0.1	8.1608	0.7108	3.0	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
360 Winter	6.56	272
480 Winter	5.32	348
600 Winter	4.52	420
720 Winter	3.95	494
960 Winter	3.20	636
1440 Winter	2.37	912

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Rainfall Details

Region	ENG+WAL	Cv (Summer)	0.750	Summer Storms	Yes
Return Period (years)	10	Cv (Winter)	0.840	Winter Storms	Yes
M5-60 (mm)	19.500	Shortest Storm (mins)	15	Climate Change %	+0
Ratio-R	0.350	Longest Storm (mins)	1440		

Time / Area Diagram

Total Area (ha) = 0.016

Time from:	(mins) to:	Area (ha)	Time from:	(mins) to:	Area (ha)
0	4	0.000	4	8	0.016

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Trench Soakaway Details

Infil Coef - Base (m/hr)	0.000000	Length (m)	7.0
Infil Coef - Sides (m/hr)	0.041400	Invert Level (m)	7.450
Safety Factor	1.0	Cover Level (m)	8.650
Porosity	0.40	Slope (1:x)	0.0
Width (m)	1.5		