



Reuby & Stagg Ltd		Page 1
Dewey House 55 High Street Ringwood BH24 1AE	Chequersfield Soakaway 1	
Date 28.02.2019 File SA01 TESTED RESUL...	Designed By rbarclay Checked By	
Micro Drainage	Source Control W.12.4	

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

Half Drain Time : 70 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Overflow (l/s)	Max $\Sigma$ Outflow (l/s)	Max Volume (m <sup>3</sup> )	Status
15 min Summer	80.048	1.968	1.7	7.9	9.6	10.6	O K
30 min Summer	80.069	1.989	1.7	18.6	20.4	10.7	O K
60 min Summer	80.073	1.993	1.8	20.9	22.7	10.8	O K
120 min Summer	80.055	1.975	1.7	11.0	12.8	10.7	O K
180 min Summer	80.048	1.968	1.7	7.9	9.6	10.6	O K
240 min Summer	80.049	1.969	1.7	8.3	10.0	10.6	O K
360 min Summer	80.038	1.958	1.7	4.2	5.9	10.6	O K
480 min Summer	80.036	1.956	1.7	3.4	5.1	10.6	O K
600 min Summer	80.031	1.951	1.7	2.0	3.8	10.5	O K
720 min Summer	80.026	1.946	1.7	0.7	2.5	10.5	O K
960 min Summer	79.853	1.773	1.6	0.0	1.6	9.6	O K
1440 min Summer	79.449	1.369	1.4	0.0	1.4	7.4	O K
2160 min Summer	79.049	0.969	1.1	0.0	1.1	5.2	O K
2880 min Summer	78.786	0.706	0.9	0.0	0.9	3.8	O K
4320 min Summer	78.456	0.376	0.7	0.0	0.7	2.0	O K
5760 min Summer	78.261	0.181	0.6	0.0	0.6	1.0	O K
7200 min Summer	78.147	0.067	0.5	0.0	0.5	0.4	O K
8640 min Summer	78.125	0.045	0.5	0.0	0.5	0.2	O K

Storm Event	Rain (mm/hr)	Overflow Volume (m <sup>3</sup> )	Time-Peak (mins)
15 min Summer	138.153	1.4	17
30 min Summer	90.705	4.4	23
60 min Summer	56.713	6.6	38
120 min Summer	34.246	7.2	66
180 min Summer	25.149	6.8	98
240 min Summer	20.078	6.1	128
360 min Summer	14.585	4.5	190
480 min Summer	11.622	3.1	256
600 min Summer	9.738	1.8	324
720 min Summer	8.424	0.7	398
960 min Summer	6.697	0.0	548
1440 min Summer	4.839	0.0	796
2160 min Summer	3.490	0.0	1164
2880 min Summer	2.766	0.0	1528
4320 min Summer	1.989	0.0	2248
5760 min Summer	1.573	0.0	2944
7200 min Summer	1.311	0.0	3672
8640 min Summer	1.129	0.0	4392

Reuby & Stagg Ltd		Page 2
Dewey House 55 High Street Ringwood BH24 1AE	Chequersfield Soakaway 1	
Date 28.02.2019 File SA01 TESTED RESUL...	Designed By rbarclay Checked By	
Micro Drainage	Source Control W.12.4	

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

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Overflow (l/s)	Max Outflow (l/s)	Max Volume (m <sup>3</sup> )	Status
10080 min Summer	78.119	0.039	0.4	0.0	0.4	0.2	O K
15 min Winter	80.066	1.986	1.7	16.9	18.7	10.7	O K
<b>30 min Winter</b>	<b>80.080</b>	<b>2.000</b>	<b>1.8</b>	<b>24.9</b>	<b>26.6</b>	<b>10.8</b>	<b>O K</b>
60 min Winter	80.071	1.991	1.8	19.8	21.5	10.8	O K
120 min Winter	80.057	1.977	1.7	12.0	13.7	10.7	O K
180 min Winter	80.045	1.965	1.7	6.6	8.4	10.6	O K
240 min Winter	80.040	1.960	1.7	4.9	6.6	10.6	O K
360 min Winter	80.035	1.955	1.7	3.2	4.9	10.6	O K
480 min Winter	80.031	1.951	1.7	2.0	3.8	10.5	O K
600 min Winter	80.027	1.947	1.7	1.1	2.8	10.5	O K
720 min Winter	80.024	1.944	1.7	0.5	2.2	10.5	O K
960 min Winter	79.729	1.649	1.5	0.0	1.5	8.9	O K
1440 min Winter	79.242	1.162	1.2	0.0	1.2	6.3	O K
2160 min Winter	78.801	0.721	1.0	0.0	1.0	3.9	O K
2880 min Winter	78.530	0.450	0.8	0.0	0.8	2.4	O K
4320 min Winter	78.216	0.136	0.6	0.0	0.6	0.7	O K
5760 min Winter	78.125	0.045	0.5	0.0	0.5	0.2	O K
7200 min Winter	78.118	0.038	0.4	0.0	0.4	0.2	O K
8640 min Winter	78.112	0.032	0.3	0.0	0.3	0.2	O K

Storm Event	Rain (mm/hr)	Overflow Volume (m <sup>3</sup> )	Time-Peak (mins)
10080 min Summer	0.994	0.0	4968
15 min Winter	138.153	2.9	16
<b>30 min Winter</b>	<b>90.705</b>	<b>6.5</b>	<b>22</b>
60 min Winter	56.713	9.2	36
120 min Winter	34.246	9.9	64
180 min Winter	25.149	9.4	94
240 min Winter	20.078	8.4	124
360 min Winter	14.585	6.1	186
480 min Winter	11.622	3.9	254
600 min Winter	9.738	1.9	330
720 min Winter	8.424	0.4	416
960 min Winter	6.697	0.0	572
1440 min Winter	4.839	0.0	824
2160 min Winter	3.490	0.0	1192
2880 min Winter	2.766	0.0	1556
4320 min Winter	1.989	0.0	2252
5760 min Winter	1.573	0.0	2880
7200 min Winter	1.311	0.0	3656
8640 min Winter	1.129	0.0	4352

Dewey House  
55 High Street  
Ringwood BH24 1AE

Chequersfield  
Soakaway 1



Date 28.02.2019  
File SA01 TESTED RESUL...

Designed By rbarclay  
Checked By

Micro Drainage

Source Control W.12.4

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

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Overflow (l/s)	Max Outflow (l/s)	Max Volume (m <sup>3</sup> )	Status
10080 min Winter	78.109	0.029	0.3	0.0	0.3	0.2	O K
Storm Event	Rain (mm/hr)	Overflow Volume (m <sup>3</sup> )	Time-Peak (mins)				
10080 min Winter	0.994	0.0	5016				

Dewey House  
55 High Street  
Ringwood BH24 1AE

Chequersfield  
Soakaway 1



Date 28.02.2019  
File SA01 TESTED RESUL...

Designed By rbarclay  
Checked By

Micro Drainage

Source Control W.12.4

Model Details

Storage is Online Cover Level (m) 80.580

Lined Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.18000	Ring Diameter (m)	2.10
Infiltration Coefficient Side (m/hr)	0.18000	Pit Multiplier	1.5
Safety Factor	1.0	Number Required	1
Porosity	0.30	Cap Volume Depth (m)	0.000
Invert Level (m)	78.080	Cap Infiltration Depth (m)	0.000

Weir Overflow Control

Discharge Coef 0.544 Width (m) 1.000 Invert Level (m) 80.020