

Ground Management Ltd		Page 1
Robin Hill Farm Clay Lane Fishbourne Chichester PO18 8AB	Field Place Aldingbourne South East Soakaway Cellular Trench	
Date 25/4/22 File P1-3.SRC	Designed By AT Checked By	
Micro Drainage	Source Control W.11.2	

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

Half Drain Time : 35 minutes

Storm Duration (mins)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m ³)	Status
15 Summer	0.5	0.5	9.3572	0.2572	1.5	O K
30 Summer	0.6	0.6	9.4067	0.3067	1.7	O K
60 Summer	0.7	0.7	9.4377	0.3377	1.9	O K
120 Summer	0.7	0.7	9.4372	0.3372	1.9	O K
180 Summer	0.6	0.6	9.4177	0.3177	1.8	O K
240 Summer	0.6	0.6	9.3957	0.2957	1.7	O K
360 Summer	0.5	0.5	9.3602	0.2602	1.5	O K
480 Summer	0.5	0.5	9.3327	0.2327	1.3	O K
600 Summer	0.4	0.4	9.3107	0.2107	1.2	O K
720 Summer	0.4	0.4	9.2933	0.1932	1.1	O K
960 Summer	0.3	0.3	9.2663	0.1662	0.9	O K
1440 Summer	0.3	0.3	9.2313	0.1313	0.7	O K
2160 Summer	0.2	0.2	9.2008	0.1008	0.6	O K
2880 Summer	0.2	0.2	9.1833	0.0833	0.5	O K
4320 Summer	0.1	0.1	9.1623	0.0623	0.4	O K
5760 Summer	0.1	0.1	9.1503	0.0502	0.3	O K
7200 Summer	0.1	0.1	9.1423	0.0422	0.2	O K
8640 Summer	0.1	0.1	9.1368	0.0367	0.2	O K
10080 Summer	0.1	0.1	9.1328	0.0327	0.2	O K
15 Winter	0.6	0.6	9.3887	0.2887	1.6	O K
30 Winter	0.7	0.7	9.4442	0.3442	2.0	O K
60 Winter	0.7	0.7	9.4717	0.3717	2.1	O K
120 Winter	0.7	0.7	9.4557	0.3557	2.0	O K
180 Winter	0.6	0.6	9.4237	0.3237	1.8	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	131.85	20
30 Summer	88.57	30
60 Summer	56.71	46
120 Summer	35.00	80
180 Summer	25.97	114
240 Summer	20.88	146
360 Summer	15.37	208
480 Summer	12.34	270
600 Summer	10.40	332
720 Summer	9.04	394
960 Summer	7.24	514
1440 Summer	5.28	756
2160 Summer	3.85	1112
2880 Summer	3.07	1476
4320 Summer	2.23	2208
5760 Summer	1.77	2936
7200 Summer	1.48	3672
8640 Summer	1.28	4400
10080 Summer	1.14	5120
15 Winter	131.85	20
30 Winter	88.57	31
60 Winter	56.71	50
120 Winter	35.00	86
180 Winter	25.97	120

Ground Management Ltd		Page 2
Robin Hill Farm Clay Lane Fishbourne Chichester PO18 8AB	Field Place Aldingbourne South East Soakaway Cellular Trench	
Date 25/4/22 File P1-3.SRC	Designed By AT Checked By	
Micro Drainage	Source Control W.11.2	

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

Storm Duration (mins)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m ³)	Status
240 Winter	0.6	0.6	9.3932	0.2932	1.7	O K
360 Winter	0.5	0.5	9.3467	0.2467	1.4	O K
480 Winter	0.4	0.4	9.3128	0.2127	1.2	O K
600 Winter	0.4	0.4	9.2873	0.1872	1.1	O K
720 Winter	0.3	0.3	9.2678	0.1677	1.0	O K
960 Winter	0.3	0.3	9.2393	0.1393	0.8	O K
1440 Winter	0.2	0.2	9.2053	0.1053	0.6	O K
2160 Winter	0.2	0.2	9.1778	0.0778	0.4	O K
2880 Winter	0.1	0.1	9.1628	0.0628	0.4	O K
4320 Winter	0.1	0.1	9.1458	0.0457	0.3	O K
5760 Winter	0.1	0.1	9.1368	0.0367	0.2	O K
7200 Winter	0.1	0.1	9.1308	0.0307	0.2	O K
8640 Winter	0.1	0.1	9.1268	0.0267	0.2	O K
10080 Winter	0.0	0.0	9.1238	0.0237	0.1	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
240 Winter	20.88	152
360 Winter	15.37	216
480 Winter	12.34	280
600 Winter	10.40	342
720 Winter	9.04	402
960 Winter	7.24	524
1440 Winter	5.28	768
2160 Winter	3.85	1128
2880 Winter	3.07	1476
4320 Winter	2.23	2208
5760 Winter	1.77	2928
7200 Winter	1.48	3656
8640 Winter	1.28	4352
10080 Winter	1.14	5040

Ground Management Ltd		Page 3
Robin Hill Farm Clay Lane Fishbourne Chichester PO18 8AB	Field Place Aldingbourne South East Soakaway Cellular Trench	
Date 25/4/22 File P1-3.SRC	Designed By AT Checked By	
Micro Drainage	Source Control W.11.2	

Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.350	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+40
Cv (Winter)	0.840		

Time / Area Diagram

Total Area (ha) = 0.007

Time from:	(mins) to:	Area (ha)	Time from:	(mins) to:	Area (ha)
0	4	0.000	4	8	0.007

Ground Management Ltd		Page 4
Robin Hill Farm Clay Lane Fishbourne Chichester PO18 8AB	Field Place Aldingbourne South East Soakaway Cellular Trench	
Date 25/4/22 File P1-3.SRC	Designed By AT Checked By	
Micro Drainage	Source Control W.11.2	

Infiltration Trench Details

Infil Coef - Base (m/hr)	0.000000	Length (m)	3.0
Infil Coef - Sides (m/hr)	1.440000	Invert Level (m)	9.100
Safety Factor	2.0	Cover Level (m)	10.000
Porosity	0.95	Slope (1:x)	0.0
Width (m)	2.0	Cap Volume (m)	9.500