

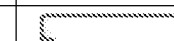
Paul Basham Associates		Page 1
Lancaster Court 8 Barnes Wallis Road Fareham PO15 5TU	PLOTS 40-42 SIDE INFILTRATION ONLY INFILTRATION CRATES	
Date 09.07.2021 File 108.5009 - PLOT 40-42.SRCX	Designed by RD Checked by RW	
XP Solutions	Source Control 2014.1	

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

Half Drain Time : 560 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (mE)	Status
15 min Summer	15.644	0.244	0.1	4.6	O K
30 min Summer	15.730	0.330	0.1	6.3	O K
60 min Summer	15.821	0.421	0.2	8.0	O K
120 min Summer	15.910	0.510	0.2	9.7	O K
180 min Summer	15.952	0.552	0.2	10.5	O K
240 min Summer	15.975	0.575	0.2	10.9	O K
360 min Summer	15.997	0.597	0.2	11.3	O K
480 min Summer	16.009	0.609	0.2	11.6	O K
600 min Summer	16.017	0.617	0.2	11.7	O K
720 min Summer	16.022	0.622	0.2	11.8	O K
960 min Summer	16.025	0.625	0.2	11.9	O K
1440 min Summer	16.017	0.617	0.2	11.7	O K
2160 min Summer	15.991	0.591	0.2	11.2	O K
2880 min Summer	15.961	0.561	0.2	10.7	O K
4320 min Summer	15.905	0.505	0.2	9.6	O K
5760 min Summer	15.859	0.459	0.2	8.7	O K
7200 min Summer	15.822	0.422	0.2	8.0	O K
8640 min Summer	15.791	0.391	0.1	7.4	O K
10080 min Summer	15.765	0.365	0.1	6.9	O K
15 min Winter	15.673	0.273	0.1	5.2	O K
30 min Winter	15.769	0.369	0.1	7.0	O K
60 min Winter	15.872	0.472	0.2	9.0	O K
120 min Winter	15.973	0.573	0.2	10.9	O K
180 min Winter	16.021	0.621	0.2	11.8	O K

Storm Event	Rain (mm/hr)	Flooded Volume (mE)	Time-Peak (mins)
15 min Summer	125.250	0.0	23
30 min Summer	85.368	0.0	37
60 min Summer	55.544	0.0	66
120 min Summer	34.816	0.0	124
180 min Summer	26.038	0.0	184
240 min Summer	21.042	0.0	242
360 min Summer	15.601	0.0	342
480 min Summer	12.593	0.0	392
600 min Summer	10.656	0.0	454
720 min Summer	9.290	0.0	518
960 min Summer	7.475	0.0	654
1440 min Summer	5.489	0.0	926
2160 min Summer	4.021	0.0	1340
2880 min Summer	3.220	0.0	1732
4320 min Summer	2.348	0.0	2508
5760 min Summer	1.878	0.0	3280
7200 min Summer	1.581	0.0	4032
8640 min Summer	1.373	0.0	4760
10080 min Summer	1.219	0.0	5456
15 min Winter	125.250	0.0	22
30 min Winter	85.368	0.0	37
60 min Winter	55.544	0.0	66
120 min Winter	34.816	0.0	122
180 min Winter	26.038	0.0	180

Paul Basham Associates		Page 2
Lancaster Court 8 Barnes Wallis Road Fareham PO15 5TU	PLOTS 40-42 SIDE INFILTRATION ONLY INFILTRATION CRATES	
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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 (mE)	Status
240 min Winter	16.047	0.647	0.2	12.3	O K
360 min Winter	16.075	0.675	0.3	12.8	O K
480 min Winter	16.083	0.683	0.3	13.0	O K
600 min Winter	16.091	0.691	0.3	13.1	O K
720 min Winter	16.094	0.694	0.3	13.2	O K
960 min Winter	16.091	0.691	0.3	13.1	O K
1440 min Winter	16.068	0.668	0.3	12.7	O K
2160 min Winter	16.022	0.622	0.2	11.8	O K
2880 min Winter	15.977	0.577	0.2	11.0	O K
4320 min Winter	15.899	0.499	0.2	9.5	O K
5760 min Winter	15.839	0.439	0.2	8.3	O K
7200 min Winter	15.793	0.393	0.2	7.5	O K
8640 min Winter	15.756	0.356	0.1	6.8	O K
10080 min Winter	15.726	0.326	0.1	6.2	O K

Storm Event	Rain (mm/hr)	Flooded Volume (mE)	Time-Peak (mins)
240 min Winter	21.042	0.0	236
360 min Winter	15.601	0.0	344
480 min Winter	12.593	0.0	410
600 min Winter	10.656	0.0	470
720 min Winter	9.290	0.0	546
960 min Winter	7.475	0.0	698
1440 min Winter	5.489	0.0	996
2160 min Winter	4.021	0.0	1428
2880 min Winter	3.220	0.0	1844
4320 min Winter	2.348	0.0	2640
5760 min Winter	1.878	0.0	3400
7200 min Winter	1.581	0.0	4176
8640 min Winter	1.373	0.0	4928
10080 min Winter	1.219	0.0	5648

Paul Basham Associates		Page 3
Lancaster Court 8 Barnes Wallis Road Fareham PO15 5TU	PLOTS 40-42 SIDE INFILTRATION ONLY INFILTRATION CRATES	
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Rai nf al l Det ai l s

Rainfall Model	FSR	W nter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.600	Shortest Storm (mins)	15
Ratio R	0.322	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Ti me Area Di agram

Total Area (ha) 0.020

Ti me (m ns)			Ti me (m ns)		
From	To:	Area (ha)	From	To:	Area (ha)
0	4	0.010	4	8	0.010

Paul Basham Associates		Page 4
Lancaster Court 8 Barnes Wallis Road Fareham PO15 5TU	PLOTS 40-42 SIDE INFILTRATION ONLY INFILTRATION CRATES	
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Model Details

Storage is Online Cover Level (m) 17.500

Cellular Storage Structure

Invert Level (m) 15.400 Safety Factor 4.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.30852

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	20.0	20.0	0.800	20.0	34.3	0.801	0.0	34.3