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Lancaster Court 8 Barnes Wallis Road Fareham PO15 5TU	PLOTS 24-25 SIDE INFILTRATION ONLY INFILTRATION CRATES	
Date 09.07.2021 File 108.5009 - PLOT 24&25.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 (m³)	Status
15 min Summer	16.259	0.159	0.1	3.0	O K
30 min Summer	16.315	0.215	0.1	4.1	O K
60 min Summer	16.374	0.274	0.1	5.2	O K
120 min Summer	16.432	0.332	0.1	6.3	O K
180 min Summer	16.459	0.359	0.1	6.8	O K
240 min Summer	16.474	0.374	0.1	7.1	O K
360 min Summer	16.488	0.388	0.1	7.4	O K
480 min Summer	16.496	0.396	0.2	7.5	O K
600 min Summer	16.501	0.401	0.2	7.6	O K
720 min Summer	16.504	0.404	0.2	7.7	O K
960 min Summer	16.506	0.406	0.2	7.7	O K
1440 min Summer	16.501	0.401	0.2	7.6	O K
2160 min Summer	16.484	0.384	0.1	7.3	O K
2880 min Summer	16.465	0.365	0.1	6.9	O K
4320 min Summer	16.428	0.328	0.1	6.2	O K
5760 min Summer	16.398	0.298	0.1	5.7	O K
7200 min Summer	16.374	0.274	0.1	5.2	O K
8640 min Summer	16.354	0.254	0.1	4.8	O K
10080 min Summer	16.337	0.237	0.1	4.5	O K
15 min Winter	16.278	0.178	0.1	3.4	O K
30 min Winter	16.340	0.240	0.1	4.6	O K
60 min Winter	16.408	0.308	0.1	5.8	O K
120 min Winter	16.473	0.373	0.1	7.1	O K
180 min Winter	16.504	0.404	0.2	7.7	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	125.250	0.0	19
30 min Summer	85.368	0.0	34
60 min Summer	55.544	0.0	64
120 min Summer	34.816	0.0	122
180 min Summer	26.038	0.0	182
240 min Summer	21.042	0.0	240
360 min Summer	15.601	0.0	338
480 min Summer	12.593	0.0	390
600 min Summer	10.656	0.0	452
720 min Summer	9.290	0.0	514
960 min Summer	7.475	0.0	654
1440 min Summer	5.489	0.0	924
2160 min Summer	4.021	0.0	1336
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	4752
10080 min Summer	1.219	0.0	5456
15 min Winter	125.250	0.0	19
30 min Winter	85.368	0.0	33
60 min Winter	55.544	0.0	62
120 min Winter	34.816	0.0	120
180 min Winter	26.038	0.0	178

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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
240 min Winter	16.521	0.421	0.2	8.0	O K
360 min Winter	16.539	0.439	0.2	8.3	O K
480 min Winter	16.544	0.444	0.2	8.4	O K
600 min Winter	16.549	0.449	0.2	8.5	O K
720 min Winter	16.551	0.451	0.2	8.6	O K
960 min Winter	16.549	0.449	0.2	8.5	O K
1440 min Winter	16.534	0.434	0.2	8.3	O K
2160 min Winter	16.504	0.404	0.2	7.7	O K
2880 min Winter	16.475	0.375	0.1	7.1	O K
4320 min Winter	16.424	0.324	0.1	6.2	O K
5760 min Winter	16.385	0.285	0.1	5.4	O K
7200 min Winter	16.355	0.255	0.1	4.8	O K
8640 min Winter	16.331	0.231	0.1	4.4	O K
10080 min Winter	16.312	0.212	0.1	4.0	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
240 min Winter	21.042	0.0	234
360 min Winter	15.601	0.0	342
480 min Winter	12.593	0.0	406
600 min Winter	10.656	0.0	468
720 min Winter	9.290	0.0	544
960 min Winter	7.475	0.0	696
1440 min Winter	5.489	0.0	996
2160 min Winter	4.021	0.0	1424
2880 min Winter	3.220	0.0	1844
4320 min Winter	2.348	0.0	2636
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

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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)	19.600	Shortest Storm (mins)	15
Ratio R	0.322	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.013

Time (mins)	Area
From:	To: (ha)

0	4	0.013
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Model Details

Storage is Online Cover Level (m) 17.200

Cellular Storage Structure

Invert Level (m) 16.100 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