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Lancaster Court 8 Barnes Wallis Road Fareham PO15 5TU	1:10+40%CC PLOT 8-10 SIDE INFILTRATION ONLY INFILTRATION CRATES	
Date 02.02.2022	Designed by RD	
File 108.5009 - Plot 8,9&10-rw-10....	Checked by RW	
XP Solutions	Source Control 2014.1	

Summary of Results for 10 year Return Period (+40%)

Half Drain Time : 329 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	15.233	0.188	0.1	2.7	O K
30 min Summer	15.292	0.247	0.1	3.5	O K
60 min Summer	15.354	0.309	0.2	4.4	O K
120 min Summer	15.410	0.365	0.2	5.2	O K
180 min Summer	15.434	0.389	0.2	5.5	O K
240 min Summer	15.447	0.402	0.2	5.7	O K
360 min Summer	15.464	0.419	0.2	6.0	O K
480 min Summer	15.474	0.429	0.2	6.1	O K
600 min Summer	15.479	0.434	0.2	6.2	O K
720 min Summer	15.480	0.435	0.2	6.2	O K
960 min Summer	15.479	0.434	0.2	6.2	O K
1440 min Summer	15.465	0.420	0.2	6.0	O K
2160 min Summer	15.437	0.392	0.2	5.6	O K
2880 min Summer	15.410	0.365	0.2	5.2	O K
4320 min Summer	15.366	0.321	0.2	4.6	O K
5760 min Summer	15.333	0.288	0.1	4.1	O K
7200 min Summer	15.307	0.262	0.1	3.7	O K
8640 min Summer	15.286	0.241	0.1	3.4	O K
10080 min Summer	15.268	0.223	0.1	3.2	O K
15 min Winter	15.255	0.210	0.1	3.0	O K
30 min Winter	15.322	0.277	0.1	3.9	O K
60 min Winter	15.391	0.346	0.2	4.9	O K
120 min Winter	15.455	0.410	0.2	5.8	O K
180 min Winter	15.484	0.439	0.2	6.3	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
15 min Summer	76.566	0.0	19
30 min Summer	51.183	0.0	33
60 min Summer	32.926	0.0	62
120 min Summer	20.664	0.0	122
180 min Summer	15.602	0.0	180
240 min Summer	12.744	0.0	208
360 min Summer	9.573	0.0	270
480 min Summer	7.806	0.0	336
600 min Summer	6.660	0.0	404
720 min Summer	5.849	0.0	472
960 min Summer	4.762	0.0	608
1440 min Summer	3.561	0.0	880
2160 min Summer	2.660	0.0	1276
2880 min Summer	2.162	0.0	1648
4320 min Summer	1.613	0.0	2416
5760 min Summer	1.311	0.0	3168
7200 min Summer	1.116	0.0	3888
8640 min Summer	0.978	0.0	4584
10080 min Summer	0.875	0.0	5344
15 min Winter	76.566	0.0	18
30 min Winter	51.183	0.0	33
60 min Winter	32.926	0.0	62
120 min Winter	20.664	0.0	118
180 min Winter	15.602	0.0	174

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Summary of Results for 10 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
240 min Winter	15.498	0.453	0.2	6.5	O K
360 min Winter	15.514	0.469	0.2	6.7	O K
480 min Winter	15.521	0.476	0.2	6.8	O K
600 min Winter	15.523	0.478	0.2	6.8	O K
720 min Winter	15.520	0.475	0.2	6.8	O K
960 min Winter	15.510	0.465	0.2	6.6	O K
1440 min Winter	15.482	0.437	0.2	6.2	O K
2160 min Winter	15.438	0.393	0.2	5.6	O K
2880 min Winter	15.400	0.355	0.2	5.1	O K
4320 min Winter	15.343	0.298	0.1	4.2	O K
5760 min Winter	15.303	0.258	0.1	3.7	O K
7200 min Winter	15.273	0.228	0.1	3.2	O K
8640 min Winter	15.249	0.204	0.1	2.9	O K
10080 min Winter	15.231	0.186	0.1	2.7	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
240 min Winter	12.744	0.0	226
360 min Winter	9.573	0.0	280
480 min Winter	7.806	0.0	356
600 min Winter	6.660	0.0	434
720 min Winter	5.849	0.0	506
960 min Winter	4.762	0.0	654
1440 min Winter	3.561	0.0	936
2160 min Winter	2.660	0.0	1340
2880 min Winter	2.162	0.0	1732
4320 min Winter	1.613	0.0	2504
5760 min Winter	1.311	0.0	3232
7200 min Winter	1.116	0.0	3968
8640 min Winter	0.978	0.0	4680
10080 min Winter	0.875	0.0	5448

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	10	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) 0.019

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

0	4	0.019
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Model Details

Storage is Online Cover Level (m) 16.900

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.00000	Trench Width (m)	1.5
Infiltration Coefficient Side (m/hr)	0.30852	Trench Length (m)	10.0
Safety Factor	4.0	Slope (1:X)	0.0
Porosity	0.95	Cap Volume Depth (m)	0.000
Invert Level (m)	15.045	Cap Infiltration Depth (m)	0.000