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York House, Edison Park Dorcan Way Swindon, SN3 3RB	Secondary St Soakaway Whitelands Farm Bicester	
Date Feb 2011 File EASTERN HIGHWAY S...	Designed By TGL Checked By	
Elstree Computing Ltd	Source Control W.12.4	

Summary of Results for 100 year Return Period

Half Drain Time : 247 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	99.232	0.232	0.8	11.7	O K
30 min Summer	99.302	0.302	0.8	15.2	O K
60 min Summer	99.365	0.365	0.8	18.4	O K
120 min Summer	99.406	0.406	0.8	20.4	O K
180 min Summer	99.410	0.410	0.8	20.7	O K
240 min Summer	99.403	0.403	0.8	20.3	O K
360 min Summer	99.386	0.386	0.8	19.4	O K
480 min Summer	99.367	0.367	0.8	18.5	O K
600 min Summer	99.348	0.348	0.8	17.5	O K
720 min Summer	99.329	0.329	0.8	16.6	O K
960 min Summer	99.292	0.292	0.8	14.7	O K
1440 min Summer	99.225	0.225	0.8	11.3	O K
2160 min Summer	99.145	0.145	0.8	7.3	O K
2880 min Summer	99.090	0.090	0.8	4.5	O K
4320 min Summer	99.047	0.047	0.8	2.4	O K
5760 min Summer	99.038	0.038	0.6	1.9	O K
7200 min Summer	99.032	0.032	0.5	1.6	O K
8640 min Summer	99.027	0.027	0.5	1.4	O K
10080 min Summer	99.024	0.024	0.4	1.2	O K
15 min Winter	99.263	0.263	0.8	13.2	O K
30 min Winter	99.343	0.343	0.8	17.3	O K
60 min Winter	99.415	0.415	0.8	20.9	O K


Storm Event	Rain (mm/hr)	Time-Peak (mins)
15 min Summer	98.681	18
30 min Summer	64.789	33
60 min Summer	40.510	62
120 min Summer	24.461	122
180 min Summer	17.964	180
240 min Summer	14.342	208
360 min Summer	10.418	268
480 min Summer	8.302	334
600 min Summer	6.956	404
720 min Summer	6.017	470
960 min Summer	4.784	606
1440 min Summer	3.456	866
2160 min Summer	2.493	1216
2880 min Summer	1.975	1556
4320 min Summer	1.421	2204
5760 min Summer	1.124	2936
7200 min Summer	0.936	3672
8640 min Summer	0.806	4400
10080 min Summer	0.710	5072
15 min Winter	98.681	18
30 min Winter	64.789	32
60 min Winter	40.510	62

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Summary of Results for 100 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
120 min Winter	99.467	0.467	0.8	23.5	O K
180 min Winter	99.478	0.478	0.8	24.1	O K
240 min Winter	99.472	0.472	0.8	23.8	O K
360 min Winter	99.448	0.448	0.8	22.6	O K
480 min Winter	99.423	0.423	0.8	21.3	O K
600 min Winter	99.395	0.395	0.8	19.9	O K
720 min Winter	99.367	0.367	0.8	18.5	O K
960 min Winter	99.310	0.310	0.8	15.6	O K
1440 min Winter	99.209	0.209	0.8	10.5	O K
2160 min Winter	99.095	0.095	0.8	4.8	O K
2880 min Winter	99.048	0.048	0.8	2.4	O K
4320 min Winter	99.035	0.035	0.6	1.8	O K
5760 min Winter	99.028	0.028	0.5	1.4	O K
7200 min Winter	99.023	0.023	0.4	1.2	O K
8640 min Winter	99.020	0.020	0.3	1.0	O K
10080 min Winter	99.017	0.017	0.3	0.9	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
120 min Winter	24.461	118
180 min Winter	17.964	176
240 min Winter	14.342	230
360 min Winter	10.418	288
480 min Winter	8.302	364
600 min Winter	6.956	440
720 min Winter	6.017	514
960 min Winter	4.784	656
1440 min Winter	3.456	922
2160 min Winter	2.493	1252
2880 min Winter	1.975	1476
4320 min Winter	1.421	2208
5760 min Winter	1.124	2904
7200 min Winter	0.936	3680
8640 min Winter	0.806	4400
10080 min Winter	0.710	5144

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Model Details

Storage is Online Cover Level (m) 100.000

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.03600	Width (m)	6.0
Membrane Percolation (mm/hr)	1000	Length (m)	28.0
Max Percolation (l/s)	46.7	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	99.000	Cap Volume Depth (m)	0.000