

Cole Easdon Consultants		Page 1
York House, Edison Park Dorcan Way Swindon, SN3 3RB	Hayling Island Permeable Paving Area1	
Date June 2014 File PP Area 1.srcx	Designed By AD Checked By	
Elstree Computing Ltd	Source Control W.12.4	

Summary of Results for 100 year Return Period (+30%)

Half Drain Time : 154 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m ³)	Status
15 min Summer	4.819	0.419	0.0	6.3	6.3	69.2	O K
30 min Summer	4.950	0.550	0.0	7.3	7.3	91.0	O K
60 min Summer	5.068	0.668	0.0	8.1	8.1	110.4	O K
120 min Summer	5.139	0.739	0.0	8.6	8.6	122.3	O K
180 min Summer	5.159	0.759	0.0	8.7	8.7	125.6	O K
240 min Summer	5.161	0.761	0.0	8.7	8.7	125.9	O K
360 min Summer	5.147	0.747	0.0	8.6	8.6	123.6	O K
480 min Summer	5.123	0.723	0.0	8.5	8.5	119.5	O K
600 min Summer	5.094	0.694	0.0	8.3	8.3	114.8	O K
720 min Summer	5.065	0.665	0.0	8.1	8.1	110.0	O K
960 min Summer	5.009	0.609	0.0	7.7	7.7	100.7	O K
1440 min Summer	4.913	0.513	0.0	7.1	7.1	84.9	O K
2160 min Summer	4.809	0.409	0.0	6.3	6.3	67.5	O K
2880 min Summer	4.735	0.335	0.0	5.6	5.6	55.3	O K
4320 min Summer	4.641	0.241	0.0	4.6	4.6	39.7	O K
5760 min Summer	4.585	0.185	0.0	4.0	4.0	30.5	O K
7200 min Summer	4.549	0.149	0.0	3.5	3.5	24.5	O K
8640 min Summer	4.526	0.126	0.0	3.1	3.1	20.7	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
15 min Summer	115.731	18
30 min Summer	77.804	32
60 min Summer	49.937	62
120 min Summer	30.956	108
180 min Summer	23.058	138
240 min Summer	18.577	170
360 min Summer	13.656	240
480 min Summer	10.974	308
600 min Summer	9.254	376
720 min Summer	8.046	442
960 min Summer	6.447	576
1440 min Summer	4.709	834
2160 min Summer	3.432	1192
2880 min Summer	2.739	1560
4320 min Summer	1.989	2288
5760 min Summer	1.583	3000
7200 min Summer	1.325	3680
8640 min Summer	1.147	4408

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York House, Edison Park Dorcan Way Swindon, SN3 3RB	Hayling Island Permeable Paving Area1	
Date June 2014 File PP Area 1.srcx	Designed By AD Checked By	
Elstree Computing Ltd	Source Control W.12.4	

Summary of Results for 100 year Return Period (+30%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
10080 min Summer	4.510	0.110	0.0	2.8	2.8	18.0	O K
15 min Winter	4.872	0.472	0.0	6.8	6.8	78.0	O K
30 min Winter	5.021	0.621	0.0	7.8	7.8	102.8	O K
60 min Winter	5.157	0.757	0.0	8.7	8.7	125.2	O K
120 min Winter	5.244	0.844	0.0	9.2	9.2	139.6	Flood Risk
180 min Winter	5.259	0.859	0.0	9.3	9.3	142.1	Flood Risk
240 min Winter	5.257	0.857	0.0	9.3	9.3	141.8	Flood Risk
360 min Winter	5.228	0.828	0.0	9.1	9.1	136.9	Flood Risk
480 min Winter	5.187	0.787	0.0	8.9	8.9	130.2	Flood Risk
600 min Winter	5.143	0.743	0.0	8.6	8.6	122.8	O K
720 min Winter	5.098	0.698	0.0	8.3	8.3	115.5	O K
960 min Winter	5.017	0.617	0.0	7.8	7.8	102.0	O K
1440 min Winter	4.886	0.486	0.0	6.9	6.9	80.4	O K
2160 min Winter	4.755	0.355	0.0	5.8	5.8	58.6	O K
2880 min Winter	4.671	0.271	0.0	5.0	5.0	44.7	O K
4320 min Winter	4.577	0.177	0.0	3.9	3.9	29.2	O K
5760 min Winter	4.530	0.130	0.0	3.2	3.2	21.4	O K
7200 min Winter	4.504	0.104	0.0	2.7	2.7	17.0	O K
8640 min Winter	4.492	0.092	0.0	2.3	2.3	15.1	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
10080 min Summer	1.015	5144
15 min Winter	115.731	18
30 min Winter	77.804	32
60 min Winter	49.937	60
120 min Winter	30.956	116
180 min Winter	23.058	144
240 min Winter	18.577	182
360 min Winter	13.656	260
480 min Winter	10.974	334
600 min Winter	9.254	404
720 min Winter	8.046	476
960 min Winter	6.447	610
1440 min Winter	4.709	868
2160 min Winter	3.432	1236
2880 min Winter	2.739	1612
4320 min Winter	1.989	2296
5760 min Winter	1.583	3000
7200 min Winter	1.325	3680
8640 min Winter	1.147	4408

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York House, Edison Park Dorcan Way Swindon, SN3 3RB	Hayling Island Permeable Paving Area1	
Date June 2014 File PP Area 1.srcx	Designed By AD Checked By	
Elstree Computing Ltd	Source Control W.12.4	

Summary of Results for 100 year Return Period (+30%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m ³)	Status
10080 min Winter	4.485	0.085	0.0	2.1	2.1	13.9	O K
	Storm Event		Rain (mm/hr)	Time-Peak (mins)			
	10080 min Winter		1.015	5136			

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York House, Edison Park Dorcan Way Swindon, SN3 3RB	Hayling Island Permeable Paving Area1	
Date June 2014 File PP Area 1.srcx	Designed By AD Checked By	
Elstree Computing Ltd	Source Control W.12.4	

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)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+30

Time / Area Diagram

Total Area (ha) 0.349

Time (mins)	Area (ha)
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0-4	0.349
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York House, Edison Park
Dorcan Way
Swindon, SN3 3RB

Hayling Island Permeable Paving Area1

Date June 2014
File PP Area 1.srcx

Designed By AD
Checked By

Elstree Computing Ltd

Source Control W.12.4



Model Details

Storage is Online Cover Level (m) 5.470

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	23.5
Membrane Percolation (mm/hr)	1000	Length (m)	23.5
Max Percolation (l/s)	153.4	Slope (1:X)	10000.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	4.400	Cap Volume Depth (m)	0.000

Orifice Outflow Control

Diameter (m)	0.070	Discharge Coefficient	0.600	Invert Level (m)	4.400
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York House, Edison Park Dorcan Way Swindon, SN3 3RB	Hayling Island Permeable Paving Area 2	
Date June 2014 File PP Area 2.srcx	Designed By AD Checked By	
Elstree Computing Ltd	Source Control W.12.4	

Summary of Results for 100 year Return Period (+30%)

Half Drain Time : 1214 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m ³)	Status
15 min Summer	4.590	0.220	0.0	0.9	0.9	59.0	O K
30 min Summer	4.669	0.299	0.0	1.0	1.0	80.4	O K
60 min Summer	4.755	0.385	0.0	1.1	1.1	103.4	O K
120 min Summer	4.841	0.471	0.0	1.3	1.3	126.8	O K
180 min Summer	4.889	0.519	0.0	1.3	1.3	139.7	O K
240 min Summer	4.919	0.549	0.0	1.4	1.4	147.7	O K
360 min Summer	4.956	0.586	0.0	1.4	1.4	157.8	O K
480 min Summer	4.978	0.608	0.0	1.4	1.4	163.7	O K
600 min Summer	4.990	0.620	0.0	1.5	1.5	167.1	O K
720 min Summer	4.997	0.627	0.0	1.5	1.5	168.9	O K
960 min Summer	5.001	0.631	0.0	1.5	1.5	170.0	O K
1440 min Summer	5.002	0.632	0.0	1.5	1.5	170.3	O K
2160 min Summer	4.992	0.622	0.0	1.5	1.5	167.5	O K
2880 min Summer	4.974	0.604	0.0	1.4	1.4	162.8	O K
4320 min Summer	4.932	0.562	0.0	1.4	1.4	151.3	O K
5760 min Summer	4.889	0.519	0.0	1.3	1.3	139.7	O K
7200 min Summer	4.850	0.480	0.0	1.3	1.3	129.1	O K
8640 min Summer	4.815	0.445	0.0	1.2	1.2	119.7	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
15 min Summer	115.731	19
30 min Summer	77.804	34
60 min Summer	49.937	64
120 min Summer	30.956	124
180 min Summer	23.058	182
240 min Summer	18.577	242
360 min Summer	13.656	362
480 min Summer	10.974	482
600 min Summer	9.254	600
720 min Summer	8.046	720
960 min Summer	6.447	840
1440 min Summer	4.709	1084
2160 min Summer	3.432	1492
2880 min Summer	2.739	1904
4320 min Summer	1.989	2724
5760 min Summer	1.583	3520
7200 min Summer	1.325	4320
8640 min Summer	1.147	5104

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York House, Edison Park Dorcan Way Swindon, SN3 3RB	Hayling Island Permeable Paving Area 2	
Date June 2014 File PP Area 2.srcx	Designed By AD Checked By	
Elstree Computing Ltd	Source Control W.12.4	

Summary of Results for 100 year Return Period (+30%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
10080 min Summer	4.784	0.414	0.0	1.2	1.2	111.4	O K
15 min Winter	4.618	0.248	0.0	0.9	0.9	66.6	O K
30 min Winter	4.707	0.337	0.0	1.1	1.1	90.6	O K
60 min Winter	4.803	0.433	0.0	1.2	1.2	116.5	O K
120 min Winter	4.901	0.531	0.0	1.3	1.3	143.0	O K
180 min Winter	4.955	0.585	0.0	1.4	1.4	157.6	O K
240 min Winter	4.989	0.619	0.0	1.5	1.5	166.8	O K
360 min Winter	5.033	0.663	0.0	1.5	1.5	178.5	Flood Risk
480 min Winter	5.059	0.689	0.0	1.5	1.5	185.7	Flood Risk
600 min Winter	5.076	0.706	0.0	1.6	1.6	190.1	Flood Risk
720 min Winter	5.086	0.716	0.0	1.6	1.6	192.8	Flood Risk
960 min Winter	5.093	0.723	0.0	1.6	1.6	194.7	Flood Risk
1440 min Winter	5.088	0.718	0.0	1.6	1.6	193.3	Flood Risk
2160 min Winter	5.070	0.700	0.0	1.6	1.6	188.6	Flood Risk
2880 min Winter	5.042	0.672	0.0	1.5	1.5	181.0	Flood Risk
4320 min Winter	4.978	0.608	0.0	1.4	1.4	163.7	O K
5760 min Winter	4.916	0.546	0.0	1.4	1.4	146.9	O K
7200 min Winter	4.860	0.490	0.0	1.3	1.3	131.9	O K
8640 min Winter	4.812	0.442	0.0	1.2	1.2	118.8	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
10080 min Summer	1.015	5856
15 min Winter	115.731	19
30 min Winter	77.804	33
60 min Winter	49.937	62
120 min Winter	30.956	122
180 min Winter	23.058	180
240 min Winter	18.577	238
360 min Winter	13.656	354
480 min Winter	10.974	470
600 min Winter	9.254	584
720 min Winter	8.046	694
960 min Winter	6.447	908
1440 min Winter	4.709	1140
2160 min Winter	3.432	1600
2880 min Winter	2.739	2048
4320 min Winter	1.989	2940
5760 min Winter	1.583	3800
7200 min Winter	1.325	4608
8640 min Winter	1.147	5368

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York House, Edison Park Dorcan Way Swindon, SN3 3RB	Hayling Island Permeable Paving Area 2	
Date June 2014 File PP Area 2.srcx	Designed By AD Checked By	
Elstree Computing Ltd	Source Control W.12.4	

Summary of Results for 100 year Return Period (+30%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m ³)	Status
10080 min Winter	4.770	0.400	0.0	1.2	1.2	107.6	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
10080 min Winter	1.015	6152

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York House, Edison Park Dorcan Way Swindon, SN3 3RB	Hayling Island Permeable Paving Area 2	
Date June 2014 File PP Area 2.srcx	Designed By AD Checked By	
Elstree Computing Ltd	Source Control W.12.4	

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)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+30

Time / Area Diagram

Total Area (ha) 0.295

Time	Area
(mins)	(ha)

0-4	0.295
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York House, Edison Park Dorcan Way Swindon, SN3 3RB	Hayling Island Permeable Paving Area 2	
Date June 2014 File PP Area 2.srcx	Designed By AD Checked By	
Elstree Computing Ltd	Source Control W.12.4	

Model Details

Storage is Online Cover Level (m) 5.310

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	30.0
Membrane Percolation (mm/hr)	1000	Length (m)	30.0
Max Percolation (l/s)	250.0	Slope (1:X)	10000.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	4.370	Cap Volume Depth (m)	0.000

Orifice Outflow Control

Diameter (m) 0.030 Discharge Coefficient 0.600 Invert Level (m) 4.370

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York House, Edison Park Dorcan Way Swindon, SN3 3RB	Hayling Island Permeable Paving Area 3	
Date June 2014 File PP Area 3.srcx	Designed By AD Checked By	
Elstree Computing Ltd	Source Control W.12.4	

Summary of Results for 100 year Return Period (+30%)

Half Drain Time : 202 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m ³)	Status
15 min Summer	4.543	0.453	0.0	1.3	1.3	18.0	O K
30 min Summer	4.689	0.599	0.0	1.5	1.5	23.7	O K
60 min Summer	4.825	0.735	0.0	1.6	1.6	29.1	O K
120 min Summer	4.919	0.829	0.0	1.7	1.7	32.9	O K
180 min Summer	4.941	0.851	0.0	1.8	1.8	33.7	O K
240 min Summer	4.945	0.855	0.0	1.8	1.8	33.9	O K
360 min Summer	4.936	0.846	0.0	1.8	1.8	33.5	O K
480 min Summer	4.916	0.826	0.0	1.7	1.7	32.7	O K
600 min Summer	4.891	0.801	0.0	1.7	1.7	31.8	O K
720 min Summer	4.864	0.774	0.0	1.7	1.7	30.7	O K
960 min Summer	4.810	0.720	0.0	1.6	1.6	28.5	O K
1440 min Summer	4.713	0.623	0.0	1.5	1.5	24.7	O K
2160 min Summer	4.598	0.508	0.0	1.4	1.4	20.1	O K
2880 min Summer	4.511	0.421	0.0	1.3	1.3	16.7	O K
4320 min Summer	4.391	0.301	0.0	1.1	1.1	11.9	O K
5760 min Summer	4.314	0.224	0.0	0.9	0.9	8.8	O K
7200 min Summer	4.261	0.171	0.0	0.8	0.8	6.8	O K
8640 min Summer	4.224	0.134	0.0	0.7	0.7	5.3	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
15 min Summer	115.731	18
30 min Summer	77.804	33
60 min Summer	49.937	62
120 min Summer	30.956	120
180 min Summer	23.058	154
240 min Summer	18.577	186
360 min Summer	13.656	252
480 min Summer	10.974	320
600 min Summer	9.254	390
720 min Summer	8.046	458
960 min Summer	6.447	596
1440 min Summer	4.709	854
2160 min Summer	3.432	1236
2880 min Summer	2.739	1612
4320 min Summer	1.989	2336
5760 min Summer	1.583	3056
7200 min Summer	1.325	3752
8640 min Summer	1.147	4496

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York House, Edison Park	Hayling Island	
Dorcan Way	Permeable Paving	
Swindon, SN3 3RB	Area 3	
Date June 2014	Designed By AD	
File PP Area 3.srcx	Checked By	
Elstree Computing Ltd	Source Control W.12.4	

Summary of Results for 100 year Return Period (+30%)

	Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
10080 min	Summer	4.196	0.106	0.0	0.7	0.7	4.2	O K
15 min	Winter	4.602	0.512	0.0	1.4	1.4	20.3	O K
30 min	Winter	4.767	0.677	0.0	1.6	1.6	26.8	O K
60 min	Winter	4.922	0.832	0.0	1.7	1.7	33.0	O K
120 min	Winter	5.039	0.949	0.0	1.9	1.9	37.6	Flood Risk
180 min	Winter	5.066	0.976	0.0	1.9	1.9	38.7	Flood Risk
240 min	Winter	5.065	0.975	0.0	1.9	1.9	38.7	Flood Risk
360 min	Winter	5.049	0.959	0.0	1.9	1.9	38.0	Flood Risk
480 min	Winter	5.017	0.927	0.0	1.8	1.8	36.8	Flood Risk
600 min	Winter	4.978	0.888	0.0	1.8	1.8	35.2	O K
720 min	Winter	4.937	0.847	0.0	1.8	1.8	33.6	O K
960 min	Winter	4.857	0.767	0.0	1.7	1.7	30.4	O K
1440 min	Winter	4.717	0.627	0.0	1.5	1.5	24.9	O K
2160 min	Winter	4.562	0.472	0.0	1.3	1.3	18.7	O K
2880 min	Winter	4.453	0.363	0.0	1.2	1.2	14.4	O K
4320 min	Winter	4.317	0.227	0.0	0.9	0.9	9.0	O K
5760 min	Winter	4.240	0.150	0.0	0.8	0.8	5.9	O K
7200 min	Winter	4.194	0.104	0.0	0.7	0.7	4.1	O K
8640 min	Winter	4.164	0.074	0.0	0.6	0.6	2.9	O K

	Storm Event	Rain (mm/hr)	Time-Peak (mins)
10080 min	Summer	1.015	5152
15 min	Winter	115.731	18
30 min	Winter	77.804	32
60 min	Winter	49.937	60
120 min	Winter	30.956	118
180 min	Winter	23.058	170
240 min	Winter	18.577	194
360 min	Winter	13.656	270
480 min	Winter	10.974	346
600 min	Winter	9.254	422
720 min	Winter	8.046	494
960 min	Winter	6.447	636
1440 min	Winter	4.709	908
2160 min	Winter	3.432	1296
2880 min	Winter	2.739	1672
4320 min	Winter	1.989	2380
5760 min	Winter	1.583	3112
7200 min	Winter	1.325	3816
8640 min	Winter	1.147	4496

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York House, Edison Park Dorcan Way Swindon, SN3 3RB	Hayling Island Permeable Paving Area 3	
Date June 2014 File PP Area 3.srcx	Designed By AD Checked By	
Elstree Computing Ltd	Source Control W.12.4	

Summary of Results for 100 year Return Period (+30%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m ³)	Status
10080 min Winter	4.144	0.054	0.0	0.5	0.5	2.1	O K
		Storm Event	Rain (mm/hr)	Time-Peak (mins)			
		10080 min Winter	1.015	5240			

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Date June 2014 File PP Area 3.srcx	Designed By AD Checked By	
Elstree Computing Ltd	Source Control W.12.4	

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)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+30

Time / Area Diagram

Total Area (ha) 0.090

Time	Area
(mins)	(ha)

0-4	0.090
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York House, Edison Park Dorcan Way Swindon, SN3 3RB	Hayling Island Permeable Paving Area 3	
Date June 2014 File PP Area 3.srcx	Designed By AD Checked By	
Elstree Computing Ltd	Source Control W.12.4	

Model Details

Storage is Online Cover Level (m) 5.300

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	11.5
Membrane Percolation (mm/hr)	1000	Length (m)	11.5
Max Percolation (l/s)	36.7	Slope (1:X)	10000.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	4.090	Cap Volume Depth (m)	0.000

Orifice Outflow Control

Diameter (m) 0.030 Discharge Coefficient 0.600 Invert Level (m) 4.050

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Summary of Results for 100 year Return Period (+30%)

Half Drain Time : 656 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m ³)	Status
15 min Summer	4.192	0.292	0.0	1.0	1.0	40.4	O K
30 min Summer	4.294	0.394	0.0	1.2	1.2	54.5	O K
60 min Summer	4.401	0.501	0.0	1.3	1.3	69.4	O K
120 min Summer	4.505	0.605	0.0	1.5	1.5	83.7	O K
180 min Summer	4.556	0.656	0.0	1.5	1.5	90.8	O K
240 min Summer	4.583	0.683	0.0	1.6	1.6	94.6	O K
360 min Summer	4.609	0.709	0.0	1.6	1.6	98.2	O K
480 min Summer	4.617	0.717	0.0	1.6	1.6	99.2	O K
600 min Summer	4.620	0.720	0.0	1.6	1.6	99.6	O K
720 min Summer	4.620	0.720	0.0	1.6	1.6	99.7	O K
960 min Summer	4.615	0.715	0.0	1.6	1.6	99.1	O K
1440 min Summer	4.594	0.694	0.0	1.6	1.6	96.1	O K
2160 min Summer	4.550	0.650	0.0	1.5	1.5	90.1	O K
2880 min Summer	4.505	0.605	0.0	1.5	1.5	83.8	O K
4320 min Summer	4.424	0.524	0.0	1.4	1.4	72.5	O K
5760 min Summer	4.357	0.457	0.0	1.3	1.3	63.2	O K
7200 min Summer	4.301	0.401	0.0	1.2	1.2	55.5	O K
8640 min Summer	4.256	0.356	0.0	1.1	1.1	49.2	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
15 min Summer	115.731	19
30 min Summer	77.804	34
60 min Summer	49.937	64
120 min Summer	30.956	122
180 min Summer	23.058	182
240 min Summer	18.577	242
360 min Summer	13.656	360
480 min Summer	10.974	448
600 min Summer	9.254	502
720 min Summer	8.046	564
960 min Summer	6.447	692
1440 min Summer	4.709	966
2160 min Summer	3.432	1380
2880 min Summer	2.739	1788
4320 min Summer	1.989	2592
5760 min Summer	1.583	3344
7200 min Summer	1.325	4104
8640 min Summer	1.147	4840

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Summary of Results for 100 year Return Period (+30%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m ³)	Status
10080 min Summer	4.218	0.318	0.0	1.1	1.1	44.0	O K
15 min Winter	4.229	0.329	0.0	1.1	1.1	45.5	O K
30 min Winter	4.345	0.445	0.0	1.3	1.3	61.5	O K
60 min Winter	4.465	0.565	0.0	1.4	1.4	78.2	O K
120 min Winter	4.583	0.683	0.0	1.6	1.6	94.6	O K
180 min Winter	4.642	0.742	0.0	1.6	1.6	102.8	O K
240 min Winter	4.675	0.775	0.0	1.7	1.7	107.4	O K
360 min Winter	4.710	0.810	0.0	1.7	1.7	112.1	O K
480 min Winter	4.723	0.823	0.0	1.7	1.7	113.9	O K
600 min Winter	4.724	0.824	0.0	1.7	1.7	114.1	O K
720 min Winter	4.720	0.820	0.0	1.7	1.7	113.6	O K
960 min Winter	4.713	0.813	0.0	1.7	1.7	112.6	O K
1440 min Winter	4.679	0.779	0.0	1.7	1.7	107.9	O K
2160 min Winter	4.613	0.713	0.0	1.6	1.6	98.8	O K
2880 min Winter	4.547	0.647	0.0	1.5	1.5	89.5	O K
4320 min Winter	4.430	0.530	0.0	1.4	1.4	73.4	O K
5760 min Winter	4.339	0.439	0.0	1.3	1.3	60.7	O K
7200 min Winter	4.267	0.367	0.0	1.2	1.2	50.7	O K
8640 min Winter	4.211	0.311	0.0	1.1	1.1	42.9	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
10080 min Summer	1.015	5552
15 min Winter	115.731	19
30 min Winter	77.804	33
60 min Winter	49.937	62
120 min Winter	30.956	120
180 min Winter	23.058	178
240 min Winter	18.577	236
360 min Winter	13.656	350
480 min Winter	10.974	458
600 min Winter	9.254	560
720 min Winter	8.046	588
960 min Winter	6.447	734
1440 min Winter	4.709	1040
2160 min Winter	3.432	1492
2880 min Winter	2.739	1908
4320 min Winter	1.989	2724
5760 min Winter	1.583	3520
7200 min Winter	1.325	4256
8640 min Winter	1.147	5016

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Summary of Results for 100 year Return Period (+30%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m ³)	Status
10080 min Winter	4.166	0.266	0.0	1.0	1.0	36.7	O K
		Storm Event	Rain (mm/hr)	Time-Peak (mins)			
		10080 min Winter	1.015	5752			

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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)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+30

Time / Area Diagram

Total Area (ha) 0.200

Time (mins)	Area (ha)
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0-4	0.200
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Model Details

Storage is Online Cover Level (m) 5.200

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	21.5
Membrane Percolation (mm/hr)	1000	Length (m)	21.5
Max Percolation (l/s)	128.4	Slope (1:X)	10000.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	3.900	Cap Volume Depth (m)	0.000

Orifice Outflow Control

Diameter (m) 0.030 Discharge Coefficient 0.600 Invert Level (m) 3.875