

RGP Design Limited				Page 1																																																																																																																																																																																																																			
Metro House Northgate Chichester P019 1BE		1-3 Castle Crescent Reading, RG1 6AQ Rev A																																																																																																																																																																																																																					
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Summary of Results for 100 year Return Period (+40%) Half Drain Time : 484 minutes. <table><tr><th>Storm Event</th><th>Max Level (m)</th><th>Max Depth (m)</th><th>Max Infiltration (l/s)</th><th>Max Volume (m³)</th><th>Status</th></tr><tr><td>15 min Summer</td><td>59.061</td><td>1.561</td><td>0.6</td><td>12.4</td><td>0 K</td></tr><tr><td>30 min Summer</td><td>59.084</td><td>1.584</td><td>0.6</td><td>17.3</td><td>0 K</td></tr><tr><td>60 min Summer</td><td>59.107</td><td>1.607</td><td>0.6</td><td>22.0</td><td>0 K</td></tr><tr><td>120 min Summer</td><td>59.127</td><td>1.627</td><td>0.6</td><td>26.2</td><td>0 K</td></tr><tr><td>180 min Summer</td><td>59.136</td><td>1.636</td><td>0.6</td><td>28.1</td><td>0 K</td></tr><tr><td>240 min Summer</td><td>59.140</td><td>1.640</td><td>0.6</td><td>28.9</td><td>0 K</td></tr><tr><td>360 min Summer</td><td>59.140</td><td>1.640</td><td>0.6</td><td>29.0</td><td>0 K</td></tr><tr><td>480 min 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Summer	59.084	1.584	0.6	17.3	0 K	60 min Summer	59.107	1.607	0.6	22.0	0 K	120 min Summer	59.127	1.627	0.6	26.2	0 K	180 min Summer	59.136	1.636	0.6	28.1	0 K	240 min Summer	59.140	1.640	0.6	28.9	0 K	360 min Summer	59.140	1.640	0.6	29.0	0 K	480 min Summer	59.138	1.638	0.6	28.5	0 K	600 min Summer	59.135	1.635	0.6	28.0	0 K	720 min Summer	59.132	1.632	0.6	27.3	0 K	960 min Summer	59.125	1.625	0.6	25.9	0 K	1440 min Summer	59.112	1.612	0.6	23.0	0 K	2160 min Summer	59.092	1.592	0.6	19.0	0 K	2880 min Summer	59.075	1.575	0.6	15.4	0 K	4320 min Summer	58.974	1.474	0.6	9.6	0 K	5760 min Summer	58.366	0.866	0.6	5.6	0 K	7200 min Summer	58.021	0.521	0.6	3.4	0 K	8640 min Summer	57.883	0.383	0.5	2.5	0 K	10080 min Summer	57.783	0.283	0.5	1.8	0 K	15 min Winter	59.071	1.571	0.6	14.4	0 K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	129.089	0.0	25	30 min Summer	84.848	0.0	38	60 min Summer	53.188	0.0	66	120 min Summer	32.259	0.0	124	180 min Summer	23.779	0.0	182	240 min 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Date 17/11/2017 File Porous Paving A.SRCX		Designed by SPB Checked by LDF			
XP Solutions		Source Control 2018.1			
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
30 min Winter	59.096	1.596	0.6	19.8	0 K
60 min Winter	59.122	1.622	0.6	25.2	0 K
120 min Winter	59.145	1.645	0.6	30.1	0 K
180 min Winter	59.156	1.656	0.6	32.3	0 K
240 min Winter	59.161	1.661	0.6	33.4	0 K
360 min Winter	59.164	1.664	0.6	33.9	0 K
480 min Winter	59.162	1.662	0.6	33.6	0 K
600 min Winter	59.158	1.658	0.6	32.8	0 K
720 min Winter	59.154	1.654	0.6	31.9	0 K
960 min Winter	59.145	1.645	0.6	30.0	0 K
1440 min Winter	59.125	1.625	0.6	25.9	0 K
2160 min Winter	59.096	1.596	0.6	19.8	0 K
2880 min Winter	59.070	1.570	0.6	14.3	0 K
4320 min Winter	58.447	0.947	0.6	6.1	0 K
5760 min Winter	57.935	0.435	0.6	2.8	0 K
7200 min Winter	57.772	0.272	0.5	1.8	0 K
8640 min Winter	57.657	0.157	0.4	1.0	0 K
10080 min Winter	57.572	0.072	0.4	0.5	0 K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	84.848	0.0	38		
60 min Winter	53.188	0.0	66		
120 min Winter	32.259	0.0	122		
180 min Winter	23.779	0.0	180		
240 min Winter	19.047	0.0	238		
360 min Winter	13.827	0.0	350		
480 min Winter	11.024	0.0	458		
600 min Winter	9.241	0.0	556		
720 min Winter	7.997	0.0	578		
960 min Winter	6.361	0.0	728		
1440 min Winter	4.600	0.0	1026		
2160 min Winter	3.321	0.0	1448		
2880 min Winter	2.633	0.0	1844		
4320 min Winter	1.896	0.0	2508		
5760 min Winter	1.500	0.0	3056		
7200 min Winter	1.251	0.0	3752		
8640 min Winter	1.077	0.0	4496		
10080 min Winter	0.949	0.0	5152		
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XP Solutions		Source Control 2018.1

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)	18.800	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.068

Time (mins)	Area	Time (mins)	Area	Time (mins)	Area
From: To:	(ha)	From: To:	(ha)	From: To:	(ha)
0 4	0.048	4 8	0.010	8 12	0.010

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Model Details

Storage is Online Cover Level (m) 59.500

Complex Structure

Trench Soakaway

Infiltration Coefficient Base (m/hr)	0.10440	Trench Width (m)	1.2
Infiltration Coefficient Side (m/hr)	0.10440	Trench Length (m)	18.0
Safety Factor	2.0	Slope (1:X)	0.0
Porosity	0.30	Cap Volume Depth (m)	0.000
Invert Level (m)	57.500	Cap Infiltration Depth (m)	0.500

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	10.0
Membrane Percolation (mm/hr)	1000	Length (m)	68.0
Max Percolation (l/s)	188.9	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	59.050	Membrane Depth (m)	0