

Cole Easdon Consultants				Page 1																																																																																																																																																																																																																			
York House Edison Park Dorcan Way Swindon SN3 3RB		Godbey House, Hayling Island. North Soakaway																																																																																																																																																																																																																					
Date January 2018 File 5550 NORTH SA.SRCX		Designed by RT Checked by RB																																																																																																																																																																																																																					
Elstree Computing Ltd		Source Control 2016.1																																																																																																																																																																																																																					
<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 1578 minutes. <table><thead><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></thead><tbody><tr><td>15 min Summer</td><td>4.122</td><td>0.122</td><td>0.1</td><td>4.4</td><td>0 K</td></tr><tr><td>30 min Summer</td><td>4.163</td><td>0.163</td><td>0.1</td><td>5.9</td><td>0 K</td></tr><tr><td>60 min Summer</td><td>4.207</td><td>0.207</td><td>0.1</td><td>7.5</td><td>0 K</td></tr><tr><td>120 min Summer</td><td>4.252</td><td>0.252</td><td>0.1</td><td>9.1</td><td>0 K</td></tr><tr><td>180 min Summer</td><td>4.277</td><td>0.277</td><td>0.1</td><td>10.0</td><td>0 K</td></tr><tr><td>240 min Summer</td><td>4.293</td><td>0.293</td><td>0.1</td><td>10.6</td><td>0 K</td></tr><tr><td>360 min Summer</td><td>4.314</td><td>0.314</td><td>0.1</td><td>11.3</td><td>0 K</td></tr><tr><td>480 min Summer</td><td>4.326</td><td>0.326</td><td>0.1</td><td>11.8</td><td>0 K</td></tr><tr><td>600 min Summer</td><td>4.335</td><td>0.335</td><td>0.1</td><td>12.1</td><td>0 K</td></tr><tr><td>720 min Summer</td><td>4.339</td><td>0.339</td><td>0.1</td><td>12.3</td><td>0 K</td></tr><tr><td>960 min Summer</td><td>4.343</td><td>0.343</td><td>0.1</td><td>12.4</td><td>0 K</td></tr><tr><td>1440 min Summer</td><td>4.340</td><td>0.340</td><td>0.1</td><td>12.3</td><td>0 K</td></tr><tr><td>2160 min Summer</td><td>4.330</td><td>0.330</td><td>0.1</td><td>11.9</td><td>0 K</td></tr><tr><td>2880 min Summer</td><td>4.318</td><td>0.318</td><td>0.1</td><td>11.5</td><td>0 K</td></tr><tr><td>4320 min Summer</td><td>4.293</td><td>0.293</td><td>0.1</td><td>10.6</td><td>0 K</td></tr><tr><td>5760 min Summer</td><td>4.268</td><td>0.268</td><td>0.1</td><td>9.7</td><td>0 K</td></tr><tr><td>7200 min Summer</td><td>4.245</td><td>0.245</td><td>0.1</td><td>8.8</td><td>0 K</td></tr><tr><td>8640 min 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Summer	4.163	0.163	0.1	5.9	0 K	60 min Summer	4.207	0.207	0.1	7.5	0 K	120 min Summer	4.252	0.252	0.1	9.1	0 K	180 min Summer	4.277	0.277	0.1	10.0	0 K	240 min Summer	4.293	0.293	0.1	10.6	0 K	360 min Summer	4.314	0.314	0.1	11.3	0 K	480 min Summer	4.326	0.326	0.1	11.8	0 K	600 min Summer	4.335	0.335	0.1	12.1	0 K	720 min Summer	4.339	0.339	0.1	12.3	0 K	960 min Summer	4.343	0.343	0.1	12.4	0 K	1440 min Summer	4.340	0.340	0.1	12.3	0 K	2160 min Summer	4.330	0.330	0.1	11.9	0 K	2880 min Summer	4.318	0.318	0.1	11.5	0 K	4320 min Summer	4.293	0.293	0.1	10.6	0 K	5760 min Summer	4.268	0.268	0.1	9.7	0 K	7200 min Summer	4.245	0.245	0.1	8.8	0 K	8640 min Summer	4.223	0.223	0.1	8.0	0 K	10080 min Summer	4.203	0.203	0.1	7.3	0 K	15 min Winter	4.136	0.136	0.1	4.9	0 K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	124.633	0.0	19	30 min Summer	83.789	0.0	34	60 min Summer	53.779	0.0	64	120 min Summer	33.337	0.0	124	180 min Summer	24.832	0.0	184	240 min Summer	20.006	0.0	242	360 min 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York House Edison Park Dorcan Way Swindon SN3 3RB			Godbey House, Hayling Island. North Soakaway			
Date January 2018 File 5550 NORTH SA.SRCX			Designed by RT Checked by RB			
Elstree Computing Ltd			Source Control 2016.1			
<u>Summary of Results for 100 year Return Period (+40%)</u>						
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	
30 min Winter	4.182	0.182	0.1	6.6	0 K	
60 min Winter	4.232	0.232	0.1	8.4	0 K	
120 min Winter	4.283	0.283	0.1	10.2	0 K	
180 min Winter	4.312	0.312	0.1	11.3	0 K	
240 min Winter	4.331	0.331	0.1	11.9	0 K	
360 min Winter	4.355	0.355	0.1	12.8	0 K	
480 min Winter	4.370	0.370	0.1	13.4	0 K	
600 min Winter	4.381	0.381	0.1	13.7	0 K	
720 min Winter	4.388	0.388	0.1	14.0	0 K	
960 min Winter	4.395	0.395	0.1	14.3	0 K	
1440 min Winter	4.395	0.395	0.1	14.2	0 K	
2160 min Winter	4.380	0.380	0.1	13.7	0 K	
2880 min Winter	4.365	0.365	0.1	13.2	0 K	
4320 min Winter	4.329	0.329	0.1	11.9	0 K	
5760 min Winter	4.292	0.292	0.1	10.5	0 K	
7200 min Winter	4.257	0.257	0.1	9.3	0 K	
8640 min Winter	4.224	0.224	0.1	8.1	0 K	
10080 min Winter	4.194	0.194	0.1	7.0	0 K	
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)			
30 min Winter	83.789	0.0	33			
60 min Winter	53.779	0.0	64			
120 min Winter	33.337	0.0	122			
180 min Winter	24.832	0.0	180			
240 min Winter	20.006	0.0	240			
360 min Winter	14.706	0.0	356			
480 min Winter	11.818	0.0	474			
600 min Winter	9.966	0.0	590			
720 min Winter	8.665	0.0	704			
960 min Winter	6.943	0.0	932			
1440 min Winter	5.071	0.0	1368			
2160 min Winter	3.696	0.0	1728			
2880 min Winter	2.949	0.0	2188			
4320 min Winter	2.142	0.0	3108			
5760 min Winter	1.705	0.0	3976			
7200 min Winter	1.427	0.0	4824			
8640 min Winter	1.235	0.0	5624			
10080 min Winter	1.093	0.0	6448			
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Elstree Computing Ltd		Source Control 2016.1

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)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	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) 5.200

Cellular Storage Structure

Invert Level (m) 4.000 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.01200 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.01200

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	38.0	38.0	0.401	0.0	47.9
0.400	38.0	47.9			