

GTA Civils Ltd				Page 1	
66a Church Walk Burgess Hill West Sussex RH15 9AS		COURTWICK LANE SWALE + Cottage Site 1 in 100yr + 30%			
Date 07.09.17 File Swale.srcx		Designed by DMS Checked by			
Micro Drainage		Source Control 2015.1			
Summary of Results for 100 year Return Period (+30%)					
Half Drain Time : 222 minutes.					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	3.749	0.749	24.7	371.0	0 K
30 min Summer	3.899	0.899	28.1	489.3	0 K
60 min Summer	4.025	1.025	30.9	600.5	0 K
120 min Summer	4.109	1.109	32.8	680.8	0 K
180 min Summer	4.128	1.128	33.3	699.1	0 K
240 min Summer	4.130	1.130	33.3	701.2	0 K
360 min Summer	4.121	1.121	33.1	692.2	0 K
480 min Summer	4.104	1.104	32.7	675.8	0 K
600 min Summer	4.083	1.083	32.2	655.2	0 K
720 min Summer	4.060	1.060	31.7	633.3	0 K
960 min Summer	4.014	1.014	30.7	590.2	0 K
1440 min Summer	3.929	0.929	28.7	514.9	0 K
2160 min Summer	3.818	0.818	26.2	423.6	0 K
2880 min Summer	3.723	0.723	24.2	351.9	0 K
4320 min Summer	3.570	0.570	20.8	249.7	0 K
5760 min Summer	3.453	0.453	18.3	181.9	0 K
7200 min Summer	3.361	0.361	16.4	134.1	0 K
8640 min Summer	3.288	0.288	14.9	100.4	0 K
10080 min Summer	3.227	0.227	13.6	74.9	0 K
15 min Winter	3.809	0.809	26.0	417.1	0 K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
15 min Summer	115.731	0.0	24		
30 min Summer	77.804	0.0	38		
60 min Summer	49.937	0.0	66		
120 min Summer	30.956	0.0	124		
180 min Summer	23.058	0.0	164		
240 min Summer	18.577	0.0	196		
360 min Summer	13.656	0.0	260		
480 min Summer	10.974	0.0	330		
600 min Summer	9.254	0.0	398		
720 min Summer	8.046	0.0	468		
960 min Summer	6.447	0.0	604		
1440 min Summer	4.709	0.0	870		
2160 min Summer	3.432	0.0	1256		
2880 min Summer	2.739	0.0	1620		
4320 min Summer	1.989	0.0	2344		
5760 min Summer	1.583	0.0	3064		
7200 min Summer	1.325	0.0	3816		
8640 min Summer	1.147	0.0	4496		
10080 min Summer	1.015	0.0	5240		
15 min Winter	115.731	0.0	24		
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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 Volume (m³)	Status
30 min Winter	3.971	0.971	29.7	551.3	0 K
60 min Winter	4.108	1.108	32.8	679.6	0 K
120 min Winter	4.205	1.205	35.0	777.7	0 K
180 min Winter	4.229	1.229	35.6	803.7	0 K
240 min Winter	4.227	1.227	35.5	801.7	0 K
360 min Winter	4.216	1.216	35.3	789.3	0 K
480 min Winter	4.193	1.193	34.7	764.9	0 K
600 min Winter	4.163	1.163	34.1	734.7	0 K
720 min Winter	4.131	1.131	33.3	702.5	0 K
960 min Winter	4.066	1.066	31.8	638.5	0 K
1440 min Winter	3.943	0.943	29.1	527.4	0 K
2160 min Winter	3.789	0.789	25.6	401.6	0 K
2880 min Winter	3.662	0.662	22.8	309.2	0 K
4320 min Winter	3.467	0.467	18.6	189.6	0 K
5760 min Winter	3.328	0.328	15.7	118.5	0 K
7200 min Winter	3.226	0.226	13.6	74.2	0 K
8640 min Winter	3.148	0.148	11.9	45.3	0 K
10080 min Winter	3.088	0.088	10.7	25.6	0 K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	77.804	0.0	37		
60 min Winter	49.937	0.0	66		
120 min Winter	30.956	0.0	122		
180 min Winter	23.058	0.0	176		
240 min Winter	18.577	0.0	206		
360 min Winter	13.656	0.0	278		
480 min Winter	10.974	0.0	354		
600 min Winter	9.254	0.0	430		
720 min Winter	8.046	0.0	504		
960 min Winter	6.447	0.0	648		
1440 min Winter	4.709	0.0	926		
2160 min Winter	3.432	0.0	1320		
2880 min Winter	2.739	0.0	1700		
4320 min Winter	1.989	0.0	2424		
5760 min Winter	1.583	0.0	3120		
7200 min Winter	1.325	0.0	3824		
8640 min Winter	1.147	0.0	4504		
10080 min Winter	1.015	0.0	5240		
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<u>Model Details</u> Storage is Online Cover Level (m) 5.800 <u>Infiltration Basin Structure</u> Invert Level (m) 3.000 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.24000 Porosity 1.00 Infiltration Coefficient Side (m/hr) 0.00000 <table border="1"> <thead> <tr> <th>Depth (m)</th> <th>Area (m²)</th> <th>Depth (m)</th> <th>Area (m²)</th> <th>Depth (m)</th> <th>Area (m²)</th> <th>Depth (m)</th> <th>Area (m²)</th> </tr> </thead> <tbody> <tr> <td>0.000</td> <td>266.1</td> <td>2.800</td> <td>2274.8</td> <td>5.600</td> <td>0.0</td> <td>8.400</td> <td>0.0</td> </tr> <tr> <td>0.400</td> <td>515.3</td> <td>3.200</td> <td>0.0</td> <td>6.000</td> <td>0.0</td> <td>8.800</td> <td>0.0</td> </tr> <tr> <td>0.800</td> <td>774.6</td> <td>3.600</td> <td>0.0</td> <td>6.400</td> <td>0.0</td> <td>9.200</td> <td>0.0</td> </tr> <tr> <td>1.200</td> <td>1046.8</td> <td>4.000</td> <td>0.0</td> <td>6.800</td> <td>0.0</td> <td>9.600</td> <td>0.0</td> </tr> <tr> <td>1.600</td> <td>1331.9</td> <td>4.400</td> <td>0.0</td> <td>7.200</td> <td>0.0</td> <td>10.000</td> <td>0.0</td> </tr> <tr> <td>2.000</td> <td>1630.0</td> <td>4.800</td> <td>0.0</td> <td>7.600</td> <td>0.0</td> <td></td> <td></td> </tr> <tr> <td>2.400</td> <td>1941.1</td> <td>5.200</td> <td>0.0</td> <td>8.000</td> <td>0.0</td> <td></td> <td></td> </tr> </tbody> </table>			Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	266.1	2.800	2274.8	5.600	0.0	8.400	0.0	0.400	515.3	3.200	0.0	6.000	0.0	8.800	0.0	0.800	774.6	3.600	0.0	6.400	0.0	9.200	0.0	1.200	1046.8	4.000	0.0	6.800	0.0	9.600	0.0	1.600	1331.9	4.400	0.0	7.200	0.0	10.000	0.0	2.000	1630.0	4.800	0.0	7.600	0.0			2.400	1941.1	5.200	0.0	8.000	0.0		
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