

Polypipe Civils				Page 1																																																																																																																																																																																																																			
Charnwood Business Park		43576																																																																																																																																																																																																																					
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File T-MD-43576_TR_MD1 (4m x...		Checked by																																																																																																																																																																																																																					
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Summary of Results for 100 year Return Period (+40%) Half Drain Time : 1243 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>98.722</td><td>0.122</td><td>0.0</td><td>1.4</td><td>O K</td></tr><tr><td>30 min Summer</td><td>98.764</td><td>0.164</td><td>0.0</td><td>1.9</td><td>O K</td></tr><tr><td>60 min Summer</td><td>98.809</td><td>0.209</td><td>0.0</td><td>2.4</td><td>O K</td></tr><tr><td>120 min Summer</td><td>98.855</td><td>0.255</td><td>0.0</td><td>2.9</td><td>O K</td></tr><tr><td>180 min Summer</td><td>98.880</td><td>0.280</td><td>0.0</td><td>3.2</td><td>O K</td></tr><tr><td>240 min Summer</td><td>98.896</td><td>0.296</td><td>0.0</td><td>3.4</td><td>O K</td></tr><tr><td>360 min Summer</td><td>98.916</td><td>0.316</td><td>0.0</td><td>3.6</td><td>O K</td></tr><tr><td>480 min Summer</td><td>98.928</td><td>0.328</td><td>0.0</td><td>3.7</td><td>O K</td></tr><tr><td>600 min Summer</td><td>98.935</td><td>0.335</td><td>0.0</td><td>3.8</td><td>O K</td></tr><tr><td>720 min Summer</td><td>98.939</td><td>0.339</td><td>0.0</td><td>3.9</td><td>O K</td></tr><tr><td>960 min Summer</td><td>98.943</td><td>0.343</td><td>0.0</td><td>3.9</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>98.948</td><td>0.348</td><td>0.0</td><td>4.0</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>98.948</td><td>0.348</td><td>0.0</td><td>4.0</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>98.943</td><td>0.343</td><td>0.0</td><td>3.9</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>98.929</td><td>0.329</td><td>0.0</td><td>3.7</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>98.912</td><td>0.312</td><td>0.0</td><td>3.6</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>98.896</td><td>0.296</td><td>0.0</td><td>3.4</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>98.882</td><td>0.282</td><td>0.0</td><td>3.2</td><td>O 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Summer</td><td>8.665</td><td>0.0</td><td>718</td></tr><tr><td>960 min Summer</td><td>6.943</td><td>0.0</td><td>818</td></tr><tr><td>1440 min Summer</td><td>5.071</td><td>0.0</td><td>1056</td></tr><tr><td>2160 min Summer</td><td>3.696</td><td>0.0</td><td>1468</td></tr><tr><td>2880 min Summer</td><td>2.949</td><td>0.0</td><td>1872</td></tr><tr><td>4320 min Summer</td><td>2.142</td><td>0.0</td><td>2684</td></tr><tr><td>5760 min Summer</td><td>1.705</td><td>0.0</td><td>3512</td></tr><tr><td>7200 min Summer</td><td>1.427</td><td>0.0</td><td>4320</td></tr><tr><td>8640 min Summer</td><td>1.235</td><td>0.0</td><td>5096</td></tr><tr><td>10080 min Summer</td><td>1.093</td><td>0.0</td><td>5848</td></tr><tr><td>15 min Winter</td><td>124.633</td><td>0.0</td><td>19</td></tr></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	98.722	0.122	0.0	1.4	O K	30 min Summer	98.764	0.164	0.0	1.9	O K	60 min Summer	98.809	0.209	0.0	2.4	O K	120 min Summer	98.855	0.255	0.0	2.9	O K	180 min Summer	98.880	0.280	0.0	3.2	O K	240 min Summer	98.896	0.296	0.0	3.4	O K	360 min Summer	98.916	0.316	0.0	3.6	O K	480 min Summer	98.928	0.328	0.0	3.7	O K	600 min Summer	98.935	0.335	0.0	3.8	O K	720 min Summer	98.939	0.339	0.0	3.9	O K	960 min Summer	98.943	0.343	0.0	3.9	O K	1440 min Summer	98.948	0.348	0.0	4.0	O K	2160 min Summer	98.948	0.348	0.0	4.0	O K	2880 min Summer	98.943	0.343	0.0	3.9	O K	4320 min Summer	98.929	0.329	0.0	3.7	O K	5760 min Summer	98.912	0.312	0.0	3.6	O K	7200 min Summer	98.896	0.296	0.0	3.4	O K	8640 min Summer	98.882	0.282	0.0	3.2	O K	10080 min Summer	98.869	0.269	0.0	3.1	O K	15 min Winter	98.737	0.137	0.0	1.6	O 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	182	240 min Summer	20.006	0.0	242	360 min Summer	14.706	0.0	362	480 min Summer	11.818	0.0	482	600 min Summer	9.966	0.0	600	720 min Summer	8.665	0.0	718	960 min Summer	6.943	0.0	818	1440 min Summer	5.071	0.0	1056	2160 min Summer	3.696	0.0	1468	2880 min Summer	2.949	0.0	1872	4320 min Summer	2.142	0.0	2684	5760 min Summer	1.705	0.0	3512	7200 min Summer	1.427	0.0	4320	8640 min Summer	1.235	0.0	5096	10080 min Summer	1.093	0.0	5848	15 min Winter	124.633	0.0	19
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Polypipe Civils				Page 2	
Charnwood Business Park		43576			
Loughborough		Orchard End, Barnham			
Leicestershire LE11 1LE		4m x 3m x 0.4m			
Date 12/02/20		Designed by TR			
File T-MD-43576_TR_MD1 (4m x...		Checked by			
Micro Drainage		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	98.784	0.184	0.0	2.1	O K
60 min Winter	98.834	0.234	0.0	2.7	O K
120 min Winter	98.885	0.285	0.0	3.3	O K
180 min Winter	98.914	0.314	0.0	3.6	O K
240 min Winter	98.932	0.332	0.0	3.8	O K
360 min Winter	98.955	0.355	0.0	4.0	O K
480 min Winter	98.969	0.369	0.0	4.2	O K
600 min Winter	98.978	0.378	0.0	4.3	O K
720 min Winter	98.983	0.383	0.0	4.4	O K
960 min Winter	98.987	0.387	0.0	4.4	O K
1440 min Winter	98.989	0.389	0.0	4.4	O K
2160 min Winter	98.984	0.384	0.0	4.4	O K
2880 min Winter	98.974	0.374	0.0	4.3	O K
4320 min Winter	98.949	0.349	0.0	4.0	O K
5760 min Winter	98.924	0.324	0.0	3.7	O K
7200 min Winter	98.902	0.302	0.0	3.4	O K
8640 min Winter	98.882	0.282	0.0	3.2	O K
10080 min Winter	98.865	0.265	0.0	3.0	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	83.789	0.0	34		
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	238		
360 min Winter	14.706	0.0	354		
480 min Winter	11.818	0.0	468		
600 min Winter	9.966	0.0	580		
720 min Winter	8.665	0.0	690		
960 min Winter	6.943	0.0	894		
1440 min Winter	5.071	0.0	1110		
2160 min Winter	3.696	0.0	1560		
2880 min Winter	2.949	0.0	2016		
4320 min Winter	2.142	0.0	2892		
5760 min Winter	1.705	0.0	3696		
7200 min Winter	1.427	0.0	4536		
8640 min Winter	1.235	0.0	5352		
10080 min Winter	1.093	0.0	6144		
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Polypipe Civils		Page 3
Charnwood Business Park	43576	
Loughborough	Orchard End, Barnham	
Leicestershire LE11 1LE	4m x 3m x 0.4m	
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Micro Drainage	Source Control 2016.1	
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Polypipe Civils		Page 4
Charnwood Business Park Loughborough Leicestershire LE11 1LE	43576 Orchard End, Barnham 4m x 3m x 0.4m	
Date 12/02/20 File T-MD-43576_TR_MD1 (4m x...	Designed by TR Checked by	
Micro Drainage Source Control 2016.1		

Model Details

Storage is Online Cover Level (m) 100.000

Cellular Storage Structure

Invert Level (m) 98.600 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.05256

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	12.0	12.0	0.500	0.0	17.6
0.400	12.0	17.6			

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