

T.R. Collier & Associates Ltd		Page 29
Rochester House 275 Baddow Road Chelmsford CM2 7QA	Stonefield Close Ruislip Tank 2 Rev A	
Date 18/10/2019 15:46 File 4132 Tank 2 Rev A.SRCX	Designed by CE Checked by TRC	
Micro Drainage		Source Control 2019.1

Model Details

Storage is Online Cover Level (m) 36.825

Complex Structure

Pipe

Diameter (m) 1.100 Length (m) 56.100
Slope (1:X) 999.999 Invert Level (m) 35.175

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Hydro-Brake® Optimum Outflow Control

Unit Reference MD-SHE-0103-5000-1150-5000
Design Head (m) 1.150
Design Flow (l/s) 5.0
Flush-Flo™ Calculated
Objective Minimise upstream storage
Application Surface
Sump Available Yes
Diameter (mm) 103
Invert Level (m) 35.150
Minimum Outlet Pipe Diameter (mm) 150
Suggested Manhole Diameter (mm) 1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.150	5.0
Flush-Flo™	0.340	5.0
Kick-Flo®	0.717	4.0
Mean Flow over Head Range	-	4.4

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

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<u>Hydro-Brake® Optimum Outflow Control</u> <table><tr><th>Depth (m)</th><th>Flow (l/s)</th><th>Depth (m)</th><th>Flow (l/s)</th><th>Depth (m)</th><th>Flow (l/s)</th><th>Depth (m)</th><th>Flow (l/s)</th></tr><tr><td>0.100</td><td>3.5</td><td>1.200</td><td>5.1</td><td>3.000</td><td>7.8</td><td>7.000</td><td>11.7</td></tr><tr><td>0.200</td><td>4.7</td><td>1.400</td><td>5.5</td><td>3.500</td><td>8.4</td><td>7.500</td><td>12.1</td></tr><tr><td>0.300</td><td>5.0</td><td>1.600</td><td>5.8</td><td>4.000</td><td>9.0</td><td>8.000</td><td>12.5</td></tr><tr><td>0.400</td><td>5.0</td><td>1.800</td><td>6.2</td><td>4.500</td><td>9.5</td><td>8.500</td><td>12.8</td></tr><tr><td>0.500</td><td>4.8</td><td>2.000</td><td>6.5</td><td>5.000</td><td>10.0</td><td>9.000</td><td>13.2</td></tr><tr><td>0.600</td><td>4.6</td><td>2.200</td><td>6.8</td><td>5.500</td><td>10.4</td><td>9.500</td><td>13.5</td></tr><tr><td>0.800</td><td>4.2</td><td>2.400</td><td>7.1</td><td>6.000</td><td>10.9</td><td></td><td></td></tr><tr><td>1.000</td><td>4.7</td><td>2.600</td><td>7.3</td><td>6.500</td><td>11.3</td><td></td><td></td></tr></table>						Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	0.100	3.5	1.200	5.1	3.000	7.8	7.000	11.7	0.200	4.7	1.400	5.5	3.500	8.4	7.500	12.1	0.300	5.0	1.600	5.8	4.000	9.0	8.000	12.5	0.400	5.0	1.800	6.2	4.500	9.5	8.500	12.8	0.500	4.8	2.000	6.5	5.000	10.0	9.000	13.2	0.600	4.6	2.200	6.8	5.500	10.4	9.500	13.5	0.800	4.2	2.400	7.1	6.000	10.9			1.000	4.7	2.600	7.3	6.500	11.3		
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Event: 180 min Summer

